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Protection and Reuse of Industrial Heritage: Dilemmas, Problems, Examples



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**Protection and Reuse of Industrial Heritage:
Dilemmas, Problems, Examples**

edited by Sonja Ifko and Marko Stokin

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Editorial

It gives us a great pleasure to present the second edition of our publication of ICOMOS Slovenia with selected articles they were presented at the 2th International Symposium on Cultural Heritage and Legal Issues, Protection and reuse of industrial heritage: Dilemmas, Problems, Examples, in Bled between the 1st and 3th October 2015.

The Council of Europe's early positions towards industrial heritage were a reaction to the consequences of the industrial decline in western Europe, and the principles were further developed in Recommendations of the Committee of Ministers of the Council of Europe in 1987 and 1990 [R(87)24 and R(90)20]. In 2013, the Parliamentary Assembly of the Council of Europe adopted the Resolution 1924 (2013) on Industrial Heritage in Europe, which draws attention to the most recent issues relevant for the integrated conservation, intelligent rehabilitation and sustainable revitalisation of industrial heritage sites and landscapes of Europe. One should also mention the constant alerts coming from the side of the Congress of Local and Regional Authorities of Europe to strengthen the local authorities' role in the preservation of industrial heritage "in situ". Lately, the initiative about European Industrial and Technical Heritage to be used as one of the central themes of European Heritage Days 2015 was put forward and actually implemented in many European countries. On the other side, ICOMOS Slovenia as an active member of ICOMOS International and ICOMOS Europe has dedicated an important part of its efforts towards international cooperation and pooling forces in the field of industrial heritage protection. Joining forces with the Council of Europe build synergies in following-up the Council of Europe conventions with revisiting these references and taking stock of the new challenges and issues at stake. Our common goal is to integrate innovative ideas, define new positions and open new perspectives with the aim to give this important dimension of our common heritage of Europe the role it deserves in the future multilateral and trans-frontier co-operation.

The present publication brings eleven new articles from different countries, especially focused on south-east Europe industrial heritage, were after the fall of Yugoslavia the new economic order led the collapse of many industrial factories and towns from socialist period and they are now in the process of decline. The nature of economic and political circumstances in south-east Europe are constantly and increasingly challenging the survival of industrial heritage - even "listed" monuments. Public interest is not always sufficiently expressed in decision-making process. The same is true about expectations of heritage communities associated with industrial heritage which still have little means of being expressed and taken on board. There has been an increasing trend of exploitation industrial heritage from which the traditional professional institutions are excluded because they are self-limited to their classical "protection" role instead of developing management approach. The fact is that changes affecting industrial heritage and its role in society require new responses and innovative solutions.

Sonja Ifko, Marko Stokin

Review

The book 'Protection and reuse of industrial heritage: Dilemmas, problems, examples' raises one of the most significant questions of heritage protection that came into the international public eye at the turn of the 20th and 21st centuries. In this period, many international organisations and bodies involved in heritage management have been engaged in various aspects of industrial heritage. Since UNESCO and Council of Europe are the most prominent international governmental organisations, the publication attempts to put stock in standards developed in the framework of UNESCO World Heritage Programme and Council of Europe's activities and confronts them with efforts of major universal non-governmental organisations, such as ICOMOS and TICCIH. The aim of giving an overview of international standards is itself worthy. The book combines them with a selection of analytical articles about the state of statutory protection, public perception, conservation and reuse by analysing cases from Western and South-Eastern Europe. The state-of-the-art comparison between the situation in both groups of countries shows that the South-Eastern countries lag behind the Western ones in every aspect of industrial heritage protection but the academic historical knowledge, the efforts of museum and conservation service experts and civil society activities, mainly organised at local levels.

The articles collected in the publication offer over 140 pages of intensive reading of well-documented overview of the industrial heritage history in selected countries, discuss problems and to some extent also exemplify good practice. The authors are renowned authorities in the field of industrial heritage research and the topics of their presentations cover well the purpose of the book. There are some discrepancies in technical format of individual articles, one could also come across some translation insufficiencies but such minor imperfections cannot override the prevailing positive impression.

The overall evaluation of the publication could be summed up as follows: it is of great value for readers interested in the issues of industrial heritage and also for heritage experts in general. One could only hope that the message of the book reaches decision makers, as well. The tone of some articles is somehow pessimistic but on the other hand authors share the conviction that education, awareness-raising and international cooperation can make headway in improving the situation.

Dr. Jelka Pirkovič



Gunpowder factory KIK Kamnik. Photo: Sonja Ifko.

The Council of Europe and the Industrial Heritage: A UK exemplar of the rehabilitated industrial heritage as a resource for society

Summary

This paper commences with a background of Council of Europe initiatives concerning the industrial heritage with particular reference to Western European countries from the mid 1980s to 1990, including an intergovernmental work programme and recommendations of the Committee of Ministers on industrial towns and on industrial heritage, and an international conference on heritage-led town regeneration. These highlighted the potential of industrial buildings for rehabilitation, as assets for reuse and development, as well as policy guidelines proposed for the regeneration of industrial environments. A number of UK examples were cited in this context including Dean Clough Mills, Gloucester Dock Warehouses, Ebley Mill and Battersea Power Station, which will be identified.

Since the mid 1980s much has been achieved in terms of the safeguarding and rehabilitating the industrial heritage in Western Europe. Parliamentary Assembly (PACE) documents of 2011 and 2013 cited good practice in Germany Austria, Belgium, Netherlands and the UK. However, a PACE report and resolution on the Industrial Heritage in Europe of 2013 identified a different situation in the former communist countries and called for action to conserve this heritage by conversion to new sustainable uses, drawing on case studies and examples from elsewhere.

The paper uses the UK as an exemplar by examining the situation and policy on the industrial heritage at risk, including marketing and awareness issues; the protection industrial sites; redundant (vacant) industrial buildings and how to protect or use them on temporary basis; constructive conservation (the protection and adaptation of historic buildings and places through actively managing change by working collaboratively with owners, architects and developers to develop proposals for sustainable and creative uses); guidance for developers; the role of non-profit organisations (where there is no apparent commercial solution); and outstanding problems. Different types of industrial buildings converted to commercial, residential and cultural uses will be examined.

1 Introduction: Council of Europe initiatives

A number of Council of Europe documents have highlighted the industrial heritage as a potential resource for society.

Within the 1981 – 1986 Medium Term Plan of the Council of Europe, one objectives of the intergovernmental work programme was devoted to the protection and enhancement of the industrial heritage. In this context, two studies were commenced in 1983 (the first, relating to northern Europe was published in a report of 1985) with the aim of drawing a compendium on the industrial heritage situation in Europe and proposals for future action in this field¹. In this report the concept of “industrial archaeology” was examined referring to the need to research and preserve the industrial heritage, including through on-site

¹ Council of Europe (1985) Situation of the technical and industrial built heritage in Europe, Architectural Heritage: Reports and Studies 3. Available online: http://www.coe.int/t/dg4/cultureheritage/heritage/resources/Publications/Pat_PA_03_en.pdf

preservation as an archaeological resource and also through adaptive reuse of industrial buildings through conversion of an existing industrial building into a new function. The distinction between the archaeological and architectural nature of the industrial heritage was highlighted in the second Conference on Ministers, following on from the opening for signature of the Convention for the Protection of the Architectural Heritage of Europe² in Granada, which referred to the need to extend the categories of architectural heritage assets for protection, including the industrial heritage, in its second resolution³.

In 1987, a Recommendation No. R (87) 24 on *European industrial towns*⁴ highlighted the fact that industrial towns have been the cradle of economic growth from which all of Europe has benefitted and called for public authorities to regenerate them in order to create new reasons for their citizens and enterprises to want to live and work in them, as well as to invest in and demonstrate a commitment to locality. It recommended, amongst other matters, that the historic and architectural heritage of industrial towns – particularly from the 19th and 20th century – should be rehabilitated, turning them into assets for reuse and development. In addition, a number of policy guidelines were proposed including the regeneration of industrial environments and improved policy co-ordination, public sector management and integrated approaches to urban regeneration including new forms of partnership between public and private sectors, innovators and entrepreneurs to encourage initiatives in industrial and commercial development and social and cultural fields by reuse of existing resources (derelict land and the conservation and revitalisation of existing buildings facilities and amenities).

Following on from this an international conference on “Heritage and successful town regeneration” organised by the Council of Europe and others and held in the industrial town of Halifax (UK) in 1988 referred to examples on the industrial heritage in Western Europe (Belgium, France, Germany, Italy, Norway, Portugal, Spain, Switzerland and the UK)⁵. The paper by Richard Butt⁶ brought attention to need to recognise the cultural and symbolic importance of certain buildings or groups of buildings which may transcend their architectural or historic value. He compared the situation of many older settlements where a church building provides a visual focus as well as a sense of identity, even for residents who do not worship in it, with industrial towns of more recent origin where civic and industrial buildings provided equivalent beacons, but were under-valued and disappearing following changes in traditional industries making such buildings redundant.

A second key point made by Butt, in line with the resolution of the Conference of Ministers in 1985, was that perceptions of what constitutes heritage were changing at the time, with nineteenth century buildings starting to become more appreciated. Although for many industrial buildings with unhappy historical associations the phrase “dark satanic mills” captured the attitude which many people had. Until the 1980s the demolition of such structures was often seen as the simplest way of making a break with the hard times for people working and living in towns developed from the industrial revolution. However,

2 Council of Europe (1985) Convention for the Protection of the Architectural Heritage of Europe, Granada, 3 October 1985, CETS 121. Available online: <http://conventions.coe.int/Treaty/en/Treaties/Html/121.htm>. The Explanatory Report highlights in relation to article 1 that the concept of architectural heritage had been enlarged to include civil engineering works, certain iron constructions and the industrial heritage in its various forms.

3 Council of Europe (1985) Second European Conference of Ministers responsible for the Architectural Heritage (Granada, 3-4 October 1985): Resolution No. 2 on the promotion of the architectural heritage in socio-cultural life and as a factor in the quality of life, part A i: http://www.coe.int/t/dg4/cultureheritage/heritage/Resources/Texts/Conf2_EN.pdf

4 Council of Europe (1987) Recommendation No. R (87) 24 20 of the Committee of Ministers to Member States on European Industrial Towns (Adopted by the Committee of Ministers on 22 October 1987 at the 411th meeting of the Ministers’ Deputies). Available online: <https://wcd.coe.int/ViewDoc.jsp?id=705473>

5 Council of Europe (1989) Heritage and successful town regeneration. International conference organised by the Council of Europe, the Department of the Environment of the United Kingdom and English Heritage, Halifax (United Kingdom), 24-27 October 1988, Architectural heritage Reports and Studies, No. 14. Available online: http://www.coe.int/t/dg4/cultureheritage/heritage/resources/Publications/Pat_PA_14_en.pdf

6 Butt, R. (1989) Auditing Your Heritage Assets, *Ibid.* pp. 38 – 42.

many mill and factory buildings were starting to be recognised in a new light as handsome structures and their restoration and reuse a much more satisfactory and symbolic way of launching the economic regeneration of an area. Indeed Recommendation No. R (90)20 *on the protection and conservation of the industrial, technical and civil engineering heritage in Europe*⁷ re-emphasised the need for measures to secure its protection and conservation, taking into consideration a series of colloquies organised by the Council of Europe⁸, including measures for identification, survey and scientific analysis, to raise public awareness and promote training of specialists and to promote co-operation and intervention at the European level.

Richard Butt also referred to mills, warehouses and all manner of factories as a major heritage “asset” then (mid 1980s) relatively unexploited, which is very much the terminology that Historic England uses today i.e. regarding vacant/redundant heritage property “Heritage Assets” with potential for new or reuse. He highlighted that such buildings are frequently prestigious by virtue of their design and location, relatively cheap to acquire and maintain and, because of the open plan floors in many of them, highly adaptable. Reference was made to four sites in the UK: Dean Clough Mills in Halifax (Fig. 1), Battersea Power Station, London, Gloucester Dock warehouses (Fig. 3) and Ebley Mill in Stroud (Fig. 4) and as being good examples of industrial buildings offering the possibility of being converted to offices, starter units for small businesses, housing, shopping, hotels, and so on.

Since the mid 1980s much has been achieved in terms of the safeguarding and rehabilitating the industrial heritage in Western Europe. A Parliamentary Assembly of the Council of Europe (PACE) document of 2011 cited good practice in Germany Austria, Belgium, Netherlands⁹. A PACE report and resolution on the *Industrial Heritage in Europe* of 2013¹⁰ made further reference to the significance of the industrial heritage being officially recognised by governments from the late 1950s onwards, for example, in the United Kingdom where thousands of sites have been statutorily protected, many hundreds preserved and made accessible to the public, and many more converted sympathetically to other uses. Reference was also made actions taken in the 1970s and 1980s in northern European countries, especially Germany, France, Sweden, Belgium and the Netherlands. Furthermore, in recent years, the successful and continuing expansion of initiatives, such as the European Route of Industrial Heritage (ERIH) has demonstrated the potency of the message.

However, the PACE report identified a different situation in the former communist countries and called for action to conserve this heritage by conversion to new sustainable uses, drawing on case studies and examples from elsewhere. Arising from this the PACE resolution promoted the protection of European industrial heritage, supporting the campaign started by the European Federation of Associations of Industrial and Technical Heritage (E-FAITH) for 2015 to be declared ‘European Industrial Heritage Year’, which has been given support

7 Council of Europe (1990) Recommendation No. R (90) 20 of the Committee of Ministers to Member States on the Protection and Conservation of the Industrial, Technical and Civil Engineering Heritage in Europe (Adopted by the Committee of Ministers on 13 September 1990 at the 443rd meeting of the Ministers’ Deputies). Available online: <https://wcd.coe.int/ViewDoc.jsp?id=603209>

8 Council of Europe (1987) The industrial heritage: what policies? Architectural Heritage: Reports and Studies 6. Available online: http://www.coe.int/t/dg4/cultureheritage/heritage/resources/Publications/Pat_PA_06_en.pdf; Council of Europe (1988) Mining engineering monuments as a cultural heritage. Architectural Heritage: Reports and Studies 15. Available online: http://www.coe.int/t/dg4/cultureheritage/heritage/resources/Publications/Pat_PA_15_en.pdf; See also reference to ‘Recording the Industrial heritage’ (Durham, UK).

9 Council of Europe (2011) Destruction or restoration of industrial heritage, Doc. 12677, 30 June 2011, Motion for a resolution presented by Ms Rihter and others

10 Council of Europe (2013): Industrial heritage in Europe, Report: Doc. 13134, 15 February 2013, Committee on Culture, Science, Education and Media, Rapporteur : Ms Ismeta Dervoz, Bosnia and Herzegovina, Group of the European People’s Party and Resolution 1924 (2013) Text adopted by the Standing Committee, acting on behalf of the Assembly, on 8 March 2013. Available online: <http://assembly.coe.int/nw/xml/XRef/Xref-DocDetails-EN.asp?FileID=19512&lang=EN>

by 19 countries and over 130 associations¹¹ and has recently been spotlighted through the Council of Europe European Heritage Days 2015 initiative¹².



Fig. 1: Dean Clough Mills (Halifax) is a complex of 7 factory buildings (some up to 9 levels high) and ancillary buildings which were built in the mid 19 C which became one of the largest carpet factories in the world (one km long with 116,000 m² of internal space). After years of declining production it closed in 1983. It was then bought by a consortium, led by the entrepreneurs Ernest Hall and Jonathan Silver, who had a visionary idea to develop the Grade II listed site as a centre for business and arts. The complex has business space, including workshop, printing, office, warehousing and distribution space, an 'enterprise campus' with IT services, a conference centre, art galleries and space for 20 working artists, a music venue, a theatre, a restaurant, a hotel, a retail outlet and a day nursery. Overall there are more than 150 businesses employing over 4000 people. This conversion is regarded as a good example of successful urban regeneration. The refurbishment of some of the mills has taken over 20 years, working floor by floor. Industrial blackening has been cleaned from the stone facades (which affected all of the area's older buildings), and exterior changes have been kept to a minimum, while interiors have been adapted to new uses. This has sometimes involved removing floors and cast iron pillars and installing lifts, but the essential character of the buildings has been maintained.



Fig. 2: Battersea Power Station (London) is a decommissioned coal-fired power station located on the south bank of the River Thames in London comprising two individual power stations (built in the 1930s and 1950s to an identical design, providing the well known four-chimney iconic structure, in the brick-cathedral style of power station design like Bankside). The station ceased generating electricity in 1983, but has become one of the best known landmarks in the UK and was listed as a heritage site in 1980 and to a higher II* grade in 2007. There have been numerous proposals and attempts to redevelop the site since, and eventually one is now in progress (since 2012), using the Power Station as the central focus of the regenerated 40-acre site, which will include shops, cafes, restaurants, art and leisure facilities, office space and residential accommodation (over 800 homes). The plan includes the restoration of the historic Power Station itself, the creation of a new riverside park and walk and the creation of a new High Street to link to new underground stations. Work commenced on the power station itself in 2013 including the restoration of the art deco structure internally and externally, reconstruction of the chimneys, and refurbishment of the historic cranes and jetty as a new river taxi stop.

11 See: <http://www.e-faith.org/home/?q=content/endorsements>

12 Council of Europe (2015): Press release - DC112(20015), Directorate of Communications: <https://wcd.coe.int/ViewDoc.jsp?id=2352475&Site=DC> (Accessed 21.09.2015)

2 The situation in the UK since the 1980s

This paper now turns to the situation in the United Kingdom as an exemplar of practice on protection, preservation and re-use of the industrial heritage. The UK, where the industrial revolution commenced in the 18th century, provides a good example of what can be achieved through examples, policies and initiatives. There are now many good examples of rehabilitated and adapted industrial buildings.



Fig. 3: Gloucester Docks Warehouses and Mills. The warehouses and mills at Gloucester were mainly built in the period 1840 – 1870 for the storage and processing of imported grain. After a long period of stagnation, in which many of the buildings were threatened with demolition, a period of rehabilitation and regeneration of the warehouses and dock area commenced about 12 years ago and continues today. Many of the former warehouses and mills have now been converted to other uses, including residential apartments and a mix of waterside museums, bars, cafes, restaurants and shopping plus new communal squares, walkways and public art.



Fig. 4: Ebley Mill (Stroud, Gloucestershire) is textile mill built between c. 1818 - 1820 to replace an old mill dating from the 14th C. A shortage of capital for investment, competition and the depression in the textile industry caused the mill to close in 1981. In 1986 the local government (Stroud District Council) bought the mill for conversion into new, centralised offices, which opened in 1990. Apart the creation of new offices, one of the key reasons for undertaking this project was to ensure the survival of the most prominent landmark in the district and also to provide an exemplar to show that mills, of which there are many in the area, were capable of conversion to modern use, and could act as a catalyst for other activities.

3 Policy for the industrial heritage in the UK

The UK was the first industrial nation and the location of many pioneering industries including iron and textile manufacture, the introduction of the steam engine, and the

construction of canals and railways. This led to enormous social and economic change, the growth of towns and cities. The protected industrial heritage in the UK includes:

- Mines and quarries - coal, lead, tin, copper, stone, etc.
- Power and utilities - gas works, electricity production sites (Fig. 2 and 5), and water and sewage works.
- Processing and manufacture - metal industries, textile mills, glassworks, potteries, factories of all kinds (Fig. 6), chemical production, food (Fig. 7) and drink production (including wind and watermills).
- Transport and communications - roads, bridges, canals and waterways, railways, ports, docks and harbours.



Fig. 5: Bankside Power Station (London) was commissioned following a power shortage in 1947 and completed in two phases in 1952 and 1961, but rising fuel prices made the station uneconomic, resulting in its closure in 1981. For many years it was at great risk of being demolished by developers, despite campaigns for the building to be saved and reused. In April 1994 the Tate Gallery in London announced it would be the home for the new Tate Modern gallery. Conversion started in 1995 following the removal of redundant plant and was completed 2000. The main external change is the block two-story glass extension on one half of the roof. Much of the internal structure remains, including the cavernous main turbine hall, which retains the overhead travelling crane. An electrical substation comprising one third of the site remained, but was partly released to the gallery in 2006, allowing the structure to be replaced by a tower extension to the museum, built over the old oil storage tanks, now converted to a performance art space, to be completed in 2015.

The industrial heritage is protected in a number of ways. The two main methods of protection at the national level are through the listing of buildings (of special architectural or historic interest) (LB) or through classifying as scheduled ancient monuments (SAM). There is a preference to list industrial buildings, which can be easier for allowing rehabilitation for new uses (consent can be given by local authorities in most circumstances), whilst scheduling may be more appropriate where revealing the archaeological potential of the site is the desired course of action rather than reuse (consent for change has more scrutiny and is made at the national level). At a local level, conservation area designation and local listing can offer level of protection by safeguarding against demolition and development activity which could be detrimental to industrial sites.



Fig. 6: The Wills Building (Newcastle upon Tyne) was a former cigarette factory built in the Art Deco style in the late 1940s for WD & OH Wills. After the factory closed in 1986 it was listed, but stood empty for a number of years and was in a semi-derelict state at the time of purchase. Various schemes were put forward after many people had called for its reuse, including conversion into a hotel, but its 10 minute location from the city centre meant there was scope for residential use. The rear section of the factory complex was demolished as the buildings were too impregnated with nicotine to be cost-effectively restored. The main building was converted into luxury residential apartments with its exterior carefully restored, it re-opened in 1999. Modern housing was built on the “brownfield” land to the rear, which helped fund the works.



Fig. 7: Baltic Flour Mill (Gateshead near Newcastle upon Tyne) is prominent local landmark on the River Tyne. It was built to a late 1930s design and completed in 1950, but closed in 1981. An architectural design competition in the mid-1990s led to a scheme to convert the building into international centre for contemporary art. After ten years in the planning and a capital investment of £50 million (GBP), including £33.4 million from the Arts Council Lottery Fund. BALTIC opened to the public in 2002. The building still contains the grain hoppers which are individually numbered and run almost the whole height of the building.

Of the UK's 23 cultural world heritage sites, 8 are industrial sites protected through a combination of the national and local mechanisms, which reveals the significance of the industrial heritage to the UK. These include: Blaenavon Industrial Landscape (coal and ore mines, quarries, railway system, furnaces, workers' houses from the 19thc); Cornwall and West Devon Mining Landscape (copper mines, engine houses, foundries, new towns, smallholdings, ports and harbours, and ancillary industries 18/19th c.); Derwent Valley Mills (cotton mills from the 18/19th c. and associated workers housing); Ironbridge Gorge (industrial region of the 18th c. including mines, railway lines, blast furnace, and the

world's first bridge constructed of iron); Liverpool – Maritime Mercantile City (pioneering in modern dock technology, transport systems and port management as a major trading centre in the 18/19th c.) (Fig. 8); New Lanark (a model industrial community of early 19th c. including cotton mill buildings, the workers' housing, an educational institute and school); Pontcysyllte Aqueduct and Canal (18 km long feat of civil engineering, completed early 19th c.); and Saltaire (Fig. 9) (industrial village of the second half of the 19th c. with textile mills, public buildings and workers' housing built in a harmonious architectural style).

The National Heritage Protection Plan 2011 - 15 identifies that Industry has had a profound effect on the environment and that historic industrial sites are a vital element the UK's tourist industry, as well as featuring strongly in most urban regeneration and rural land use programmes. It is stated that they offer opportunities for sympathetic new use, but also present challenges in achieving this. There are large numbers of surviving industrial buildings and sites in the UK, but it is nevertheless regarded as important to fully understand the vast range of industrial activities, and to identify what structures and processes are of most significance in the UK's history so that the examples can be recorded, protected and properly managed.



Fig. 8: Albert Dock Warehouses (Liverpool) opened for storage of imported goods brought by ships in 1846. It was the first structure in the UK to be built entirely of cast iron, brick and stone. By the turn of the twentieth century only 7% of ships using the Liverpool port were sailing ships and Albert Dock was eventually closed in 1972. The dock's silted up and the warehouses fell derelict. Planning for the dock's regeneration began in 1982 and was completed by 1988. The complex forms part of the Liverpool Maritime Mercantile City world heritage property and the UNESCO inscription details identify the skilful adaptation of the warehouses to new uses, including the Tate Liverpool Art Gallery, Maritime Museum, International Slavery Museum, Beatles Story Museum and bars, restaurants, shops, offices and hotels. Repairs and alterations required to convert the warehouses to the new uses were kept to a minimum and have not significantly affected their authenticity and integrity. It is the largest group of Grade I (highest quality) listed buildings in the UK and is the most visited multi-use attraction in the UK outside of London.

In recent years the programme has focussed annually on different themes, with the industrial heritage being the theme for 2011. The results from this research found that 11% of the listed industrial buildings (grade I and II*) were at risk compared to 3% of listed buildings generally. The research highlighted that only 40% of listed industrial buildings could be put to new sustainable and economic uses, the problem being that many industrial sites contain historic machinery or are redundant engineering structures or mining remains which are difficult to adapt, although many such sites have been saved by local groups as conserved sites in the landscape often with public access or as visitor attractions¹³.

13 Milne, R. (2011) Industrial heritage at risk, says new research. Available online: http://www.planningportal.gov.uk/general/news/stories/2011/oct11/201011/201011_5

4 Industrial heritage at risk

Heritage at Risk is a national project which commenced 2008¹⁴. The 'at Risk' strategy commenced in the 1980s by looking at listed buildings at risk - through various threats such as vacancy, partial occupation and disrepair - as a means to focus action (including funding assistance). Since then the current at risk programme has been extended in terms of repairing issues and now covers listed buildings grade I and II* (the top two categories), listed wreck sites (ships etc.), scheduled monuments (relating to the archaeological heritage including some standing industrial sites), registered parks and gardens of historic interest, registered battlefields and conservation areas.

In recent years the programme has focussed annually on different themes, with the industrial heritage being the theme for 2011. The results from this research found that 11% of the listed industrial buildings (grade I and II*) were at risk compared to 3% of listed buildings generally. The research highlighted that only 40% of listed industrial buildings could be put to new sustainable and economic uses, the problem being that many industrial sites contain historic machinery or are redundant engineering structures or mining remains which are difficult to adapt, although many such sites have been saved by local groups as conserved sites in the landscape often with public access or as visitor attractions¹⁵.



Fig. 9: Salts Mill (Saltaire, West Yorkshire) is a complete and well-preserved industrial village of the second half of the 19th century built by the philanthropist Titus Salt and was inscribed as a UNESCO world heritage property in 2001. Salts Mill, a textile mill and the largest structure opened in 1853 and was then the largest industrial building in the world by total floor area. It continued in operation until after World War 2, but then progressively declined, finally closing down in 1986. Many of the major buildings became semi-redundant and fell into disrepair, and this had an adverse effect on the entire village. With the formation of the Saltaire Village Society in 1984 serious efforts began to regenerate the entire area. The Mill itself was purchased in 1987 by Jonathan Silver, whose enthusiasm and imagination turned it into a major cultural centre, including an art gallery displaying work by the famous contemporary British artist David Hockney, and a shopping and restaurant complex, maintaining the large open spaces. Some of the original machinery is displayed in the gallery area.

A further research study by Colliers International for English Heritage¹⁶ in 2011¹⁷ identified a

¹⁴ What is the Heritage at Risk Programme, Historic England, available online: <http://www.historicengland.org.uk/advice/heritage-at-risk/types/>

¹⁵ Milne, R. (2011) Industrial heritage at risk, says new research. Available online: http://www.planningportal.gov.uk/general/news/stories/2011/oct11/201011/201011_5

¹⁶ On 1 April 2015, the Historic Buildings and Monuments Commission for England changed its common name from English Heritage to Historic England and various English Heritage documents referred to in this paper will be re-branded as Historic England in due course.

¹⁷ Colliers International (2011) Encouraging Investment in Industrial Heritage at Risk, Summary Report (1 of 3) October 2011, Prepared for English Heritage, available online: <http://content.historicengland.org.uk/content/docs/research/encouraging-investment-industrial-heritage-at-risk-summary.pdf>

number of issues that particularly affected industrial buildings at risk:

- Location

The potential for sustainable development of any heritage asset is determined largely by the economic conditions of its location. Industrial structures tend to be concentrated in urban areas where property values are relatively low because the industries that generated them have declined. With industrial buildings there are particular risks such as the fear of contamination, which make it more difficult for developers to secure funding for developing them. Moreover, in general terms major property companies and institutions that invest in property do not tend to invest in former industrial buildings.

- Image

Historic industrial buildings often do not have “market appeal” and can often be regarded negatively by developers. As with other historic buildings, they may be perceived as carrying greater risk compared to new buildings because of uncertainty about hidden or unfamiliar defects, which creates a barrier to investment. Moreover, development projects involving historic industrial buildings tend to encounter unexpected costs and/or delays.

- Adaptability

While many former industrial buildings are flexible, they tend to be less easily adaptable to new uses if they were built to a special form, for a specific purpose which is no longer needed; contain machinery or other fittings which are central to what gives them special interest; or are ruins, beyond repair but protected heritage because they provide important evidence of past activity.

Textile mills (see Figs. 1, 4, 9 and 12) and warehouses (see Figs. 3 and 8) therefore tend to be more easily adapted whereas sites associated with the extractive and chemical industries are particularly problematic because the structures are essentially an envelope to contain the process plant and machinery. Sub-division of mills and warehouses tends to detract from their spatial qualities. Open plan uses, such as offices and studios, are normally preferable, in terms of maintaining their character, to uses that subdivide, notably residential, although sub-division is reversible in the long term and is generally acceptable unless the exposed structure is outstandingly important.

- Entrepreneurial Activity

The most “successful” commercial developments of industrial buildings tend to be by entrepreneurs who have a “vision” for the future use of the buildings. There are many examples in the UK of “creative entrepreneurs” who were driven not just by financial concerns but by a vision of how their industrial buildings could be adapted and used with vitality. Two examples illustrated in this paper are the conversion of Dean Clough Mills by Ernest Hall and Jonathan Silver and Salts Mill by Jonathan Silver (Figs. 1 and 9).

- Historic Industrial Environments

Industrial heritage assets will often form the nucleus of an industrial settlement. The future of the site often depends on the settlement, (although sometimes the building/complex is so large and dominant that the reverse is true). It can sometimes be difficult to find sustainable development for concentrations of former industrial buildings (particularly when market conditions are weak), but such buildings may be important factors in the sustainable future for the place. In such circumstances temporary use and mothballing of redundant industrial buildings may be the best course of action. Indeed, Historic England state the best way to protect a building is to keep it occupied even if the use is on a temporary or partial basis. To help reduce the risks facing empty buildings it has produced

guidance for owners¹⁸.

Another important aspect of the annually updated Heritage at Risk registers, apart from identifying buildings in need of action, is that they provide information for prospective buyers that may be interested in taking action to re-use industrial sites. While very few buildings on the register are for sale, if there is someone particularly interested in a building at risk and would like to find out more, Historic England will provide a contact for each entry on the register. Other organisations also do this in the UK, for example: local authorities, SAVE Britain's Heritage, the Society for the Protection of Ancient Buildings, Historic Environment Scotland and the Ulster Architectural Heritage Society.

5 Owning and developing an industrial heritage site

Historic England provides advice to owners and potential developers of industrial sites, whether it be for safeguarding the structure as an standing archaeological remain or if reuse of a redundant industrial building is being contemplated, including how emerging proposals can be taken forward with certainty and the minimum of risk. In this respect, the first advice is to “understand the site” by researching its history as revealed from the fabric of the place, as well as from relevant historic sources, in order to fully understand which parts of the site may or may not be of significance.

For protected sites, relevant consents must be obtained. For those seeking to gain consent for works to listed buildings, they are strongly recommended to seek advice from the relevant local authority conservation officer. Once an understanding has been reached, including by considering aspects of significance, potential new uses can be explored.

Help may also be given to those local authority officials that may deal with the consent applications including through the provision of advice to heritage specialists in the local authority (usually part of the planning department) including guidance on understanding historic buildings, policies and recording practice¹⁹.

Research has shown that many developers are often unaware of the advice and information that is already available from Historic England. It has therefore created a dedicated web section for developers, covering all types of historic sites, including industrial buildings²⁰. Moreover, there is an adopted approach of “Constructive Conservation”, which is a positive, well-informed and collaborative approach to conservation, using a flexible process of helping people understand their historic environment and using that understanding to manage change. It is based on the principle that protected buildings are “heritage assets”, which should be capable of beneficial use. In this context Historic England generally has a supportive view to innovative schemes that protect and enhance the significance of buildings and historic places and will work collaboratively with owners, architects and developers to help them develop proposals for creative uses of historic places. A publication on this theme provides a number of useful and innovative examples that look at the reuse of industrial buildings among other categories²¹. Further information is provided on grant funding possibilities for owners and developers, although there are limited circumstances in which funding is given directly for commercial schemes, with a greater likelihood of support if a building is listed on the Heritage at Risk register. The Heritage Lottery Fund (derived

18 English Heritage (2011): Vacant Historic Buildings: An owner's guide to temporary uses, maintenance and mothballing: <http://historicengland.org.uk/images-books/publications/vacanthistoricbuildings/>

19 See for example: English Heritage (2008) Understanding Historic Buildings: Policy and Guidance for Local Planning Authorities, <http://historicengland.org.uk/images-books/publications/understanding-historic-buildings-policy-and-guidance/>; English Heritage (2006) Understanding Historic Buildings, <http://historicengland.org.uk/images-books/publications/understanding-historic-buildings/>

20 See: <http://historicengland.org.uk/services-skills/our-planning-services/support/>

21 Christopher Catling (2013) Constructive Conservation: Sustainable Growth for Historic Places, English Heritage, March 2013. Available online: https://content.historicengland.org.uk/images-books/publications/constructive-conservation-sustainable-growth-historic-places/Acc_ConConservation.pdf/

from the national lottery) can support publicly owned buildings or rehabilitation projects to be carried out by charitable organisations (such as a Building Preservation Trust - set up for the good cause of saving heritage resources in the public interest).

6 The role of non-profit organisations including building preservation trusts as charitable trusts

For redundant industrial buildings which do not have an apparent and commercially viable solution for re-use, a Building Preservation Trust (BPT) may provide the answer²².

There are over 200 BPT organisations in the UK, which are specifically dedicated to rescuing historic buildings (a charitable cause in the public interest). As registered charities they are non-profit organisations with tax advantages, and may receive preferential treatment in terms of grant aid funding. They exist in many situations, sometimes set up to rescue a small local building, but more usually operating in a town, county or regional context, with a few larger organisations that will consider buildings across the country. They may have a different approach to a commercial developer, as with tax and funding, they may not need to find a commercially viable solution, particularly if the scheme is to create a working museum. However, in many instances a commercially viable solution is sought by a BPT, but perhaps with a greater chance of original features remaining in tact. Some BPTs sell their rehabilitated projects in order to fund the next project, whilst some may retain ownership and lease the building to create an income to support works on other projects.



Fig. 10: Richmond Station (North Yorkshire) The station closed in 1969 (but listed before it closed). The remaining track was lifted and the building lay derelict until the whole site was acquired by the Richmondshire District Council. In 2003 a community-based project to regenerate Richmond Station was approved and led by **Richmondshire Building Preservation Trust**. It was re-opened in 2007, having been successfully converted into a restaurant & café-bar, two screen cinema, art gallery, heritage centre, rooms for public use, food manufacturing, retaining much of its character.

Most BPTs will rely on funding from grants schemes and, in particular the Architectural Heritage Fund, which was set up as a part of the UK's commitment to the European Architectural Heritage year campaign in 1975, provides various grants including Project Viability Grants (up to £3,000 GBP to fund short studies to look at potential uses for a building and at its current condition.), Project Development Grants (up to £25,000 GBP to assist an organisation to cover some of the costs of developing and co-ordinating a project

²² Gould, S (2011) 'Industrial Heritage at Risk', in English Heritage (2011): Saving the Age of Industry, Conservation Bulletin, Issue 67, 19 October 2011, English Heritage: <https://content.historicengland.org.uk/images-books/publications/conservation-bulletin-67/cb-67.pdf/>

and taking it towards the start of work on site) and “Cold Spot Grants” (up to £5,000 GBP to help with the initial development costs for the repair and reuse of a historic building at risk) and low-interest loans (usually to help buy a property, with the loan being returned after the project has been completed). The Cold Spot Grant is limited to certain parts of the UK and has a particular focus on industrial heritage buildings anywhere in England. Eligible expenditure may include site surveys (such as structural, archaeological or contamination surveys), specialist advice (e.g. legal, financial), business planning, mentoring by an experienced project manager, project co-ordinator costs and specialist consultants (e.g. economic, tourism, energy efficiency)²³. BPTs may be able to obtain funding from other sources including other charitable trusts that support “good causes”²⁴, particularly where training in heritage skills are to be provided through the rehabilitation scheme, and through the Heritage Lottery Fund²⁵ which support all kinds of projects, as long as they make “a lasting difference for heritage, people and communities”.

Some examples of industrial sites which have been rescued by BPTs in recent years include Richmond Station as a community facility for the town of Richmond (Fig.10), Dewars Lane Granary in the border town of Berwick upon Tweed (Fig. 11) and two projects (Figs. 12 and 13) by the North of England Civic Trust, a civic organisation for public involvement, training and conservation consultancy and building preservation trust.



Fig. 11: Dewars Lane Granary (Berwick upon Tweed) an 18th century (1769) granary in use for storing and conditioning grain and, more recently, linseed and grass seed, until 1985. Berwick-upon-Tweed Preservation Trust led a £5 million (GBP) project to restore the building and secure its future as a multi-use facility incorporating exhibition space, a heritage interpretation centre, a bistro, youth hostel and meeting rooms. It opened in 2011. This scheme was cited in the English Heritage Publication entitled “Constructive Conservation”.

7 Conclusions: Key lessons

History England has highlighted a number of key lessons for the rehabilitation of industrial heritage sites from case studies. The general consensus is that re-using historic industrial buildings is not without problems. They are often in areas where economic conditions are not favourable and their physical form, which sometimes includes important fixtures and fittings (including plant and machinery), and the situation of their internal spaces, can make

23 See: <http://www.ahfund.org.uk/grants.php>

24 The Architectural Heritage Fund provides a web search facility for Funds for Historic Buildings: <http://www.ffhb.org.uk/>

25 See: <http://www.hlf.org.uk/looking-funding>

them difficult to adapt to new uses. The following key points have been identified:

- There may be a high cost of conversion and decontamination of industrial sites
- Many of the schemes are led by determined individuals with vision
- Mixed use developments are relatively successful
- Industrial buildings are often suitable for small businesses especially creative industries
- The adoption of a minimalist approach often respects the original structure and helps to retain its industrial character and significant features



Fig. 12: Gayle Mill (North Yorkshire - rural location) is a 19th century sawmill which has been restored by the North of England Civic Trust and is now open to the public. Gayle Mill, in the Yorkshire Dales National Park, was successively used as a water-powered cotton mill, woollen mill, sawmill and hydroelectric power station. It was eventually rescued and restored by the North of England Civic Trust (NECT) with funding from Heritage Lottery Fund, English Heritage and the Yorkshire Dales National Park Authority. In 2004 the mill won second place in the UK BBC2 television series 'Restoration' and is now managed by the volunteer-led Gayle Mill Trust, but its ownership is retained by NECT.

- Phasing and taking a long view can be important. Some developments take many years to complete
- A change in the wider area may be necessary before a site becomes commercially viable, particularly where an industrial area has suffered economic decline
- A clustering of activities can build up a critical mass which may involve development over a long period of time
- The presence of public sector funding can help to kick start a solution.

Having in mind that industrial heritage is at risk, particularly in the area of South Eastern Europe, and taking into account the relevance of Parliamentary Assembly of the Council of Europe Resolution 1924 (2013) on industrial heritage in Europe and the 10th anniversary of the Faro Convention on the Value of Cultural Heritage for Society (2005), this paper has been directed at examining challenges, dilemmas and examples related to the protection of industrial heritage in the United Kingdom, as an exemplar to promote increased awareness about the values of industrial heritage in contemporary society, including its potential for rehabilitation and reuse, as a contribution to this symposium.



Fig. 13: Warwick Bridge Corn Mill (Cumbria) an early 19th C water powered corn mill, significant for its intact machinery and waterwheel (dated 1843) remained in operation until 1989, but has been on the Heritage at Risk Register since 1999 (15 years). The roof has been repaired by the owner but the overall condition is poor. Options for a more comprehensive restoration to secure a sustainable use by the North of England Civic Trust (NECT) are under discussion at the present time. NECT was awarded a grant of £1,379,300 (GBP) from the Heritage Lottery Fund (HLF) in June 2015 towards its ambitious £2 million (GBP) project to bring the building back into operation as a working mill and artisan bakery providing specialist courses in bread-making with associated crafts, and as a resource for learning in connection with the national school curriculum and accredited conservation courses. The building has been bought by NECT for this working project with the assistance of a low interest loan from the Architectural Heritage Fund (set up as part of the UK's contribution to the European Architectural Heritage Year campaign 1975 to assist such rescue projects). Work should commence in late 2015. Had this option not been realised the property has had the benefit of planning permission to convert the building to residential use, but this would have resulted in the loss of the machinery.