



THE INTERNATIONAL  
COMMITTEE FOR THE  
CONSERVATION  
OF THE INDUSTRIAL  
HERITAGE

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Professor Michael Mende in 2006 at the last  
TICCIH Congress in Terni, Italy.  
Photo: Miles Oglethorpe

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### Inside:

Recovery of historic  
engineering  
technologies with  
computer-aided  
design.

**Plus:** reports from the  
ICOMOS General Assembly  
in Quebec

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■ We have the regrettable and sad duty to inform the world of Industrial Archaeology of Professor Dr. Michael Mende's untimely death in July of this year. It is definitely no understatement to put it like that, since Michael Mende's activities comprised wide parts of the globe.

Born in 1945 from war-fugitive parents in Northern Germany, he studied history of art after a full-time pedagogical training at Bremen University. In the early 1980's he became Professor of Professional Instruction at the Brunswick University of the Performing Arts. He very soon started from this base to investigate scientifically the history of technology in a very profound sense as cultural history. In 1990, I had the privilege to be the editor of a book of his on the Industrial Archaeology of Niedersachsen, the Federal German state he spent all his life in. A great number of publications followed, the last of which "Historical Market Halls in Europe" appeared a few weeks after his death this September.

As a longstanding member of the VDI's (Association of German Engineers) history group he was a regular guest at their annual meeting. In "Gesellschaft für Technikgeschichte", founded in 1991, he also played a leading role. Internationally, he was a regular contributor to the "SHOT" meetings wherever they took place and since 1997 he served as National Representative for Germany in TICCIH. As head of the nationwide working group of the preservation of Industrial Monuments I can also speak in the name of all our members in the state offices for historic monuments, when I state our sense of loss in the face of the fact that he will no longer be a stimulating and knowledgeable participant of our semi-yearly meetings.

The shock from his sudden death from a heart attack at the age of only 63 is the more shattering as most of us can call him a friend as much as a colleague. It was in his nature to convey the enthusiasm he felt for the objects of his wide spanned professional interest to others. He was a human being that had conserved a youthful rapture for everything he got occupied with. It was a pleasure to travel with him to exhibitions or conferences, benefiting from his encyclopaedic memory that covered nearly everything from data of world history to song texts from the 1950's.

He had a pronounced sense of humour that was able to see the grotesque or amusing side of things.

We all remember well his devotion to picture postcards which he collected in the thousands. There also was a characteristic use he made of them: he was the world's last letter-writer. From everywhere he would send post-cards consuming the entire space with his typical tiny but meticulous handwriting. Another special trait of Michael's were the hour-long telephone conversation one could hold with him, covering a wide spectrum of news and interesting items and insights – not always to the delight of his psychologist wife Marlies who would have to remind him that the evening meal was ready while he forgetfully exchanged views of a new book or conference contribution with his partner on the telephone.

It is because of all that that a great number of friends, many of whom gathered at the sad occasion of his funeral in Hanover, still not have over-come the suddenness of his untimely death and find themselves again and again startled with the unfamiliar realization that he will not be with us any more. It is therefore that we stand in heartfelt mourning with Marlies, his wife of many years, trying to get used to a world that has no Michael Mende in it any more.

Axel Föhl  
September 2008

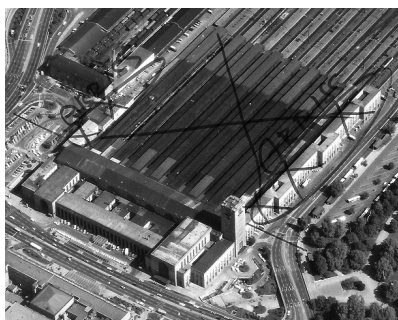
### Obituary

## Professor Michael Mende

## ■ Stuttgart main railway station

Many of us have found an appeal amongst the incoming e-mails to help conserve the great Stuttgart *hauptbahnhof*. Designed by Paul Bonatz, work began on the station in 1914 but was not completed until 1927, the glass shed roof across the 17 platforms being abandoned in the process.

The city council plans to convert the terminal into a through station, rebuilding the sides and the shed. The campaign opposing the project, Stuttgart21, highlighted some of the modern techniques that are used to gather wide support for a conservation initiative through the internet (see [www.hauptbahnhof-stuttgart.eu](http://www.hauptbahnhof-stuttgart.eu)) and e-mail. Robert Meier, Ricardo Bofil and other international architects figure among its supporters.



Aerial view of the rail station.  
Plans would see the side ranges demolished and the roof rebuilt.

## ■ ICOMOS elections

As reported inside, the elections at ICOMOS' 16th General Assembly resulted in a victory for the US ICOMOS Gustavo Araoz. The new Secretary General is Benedicte Selfslagh. News from this and other international organisations can now be read on the UNESCO ICOMOS 'blog' <http://icomosdocumentationcentre.blogspot.com/>

## ■ AIPAI sign national society agreements

Renato Covino, president of the Associazione Italiana per il Patrimonio Archeologico (AIPAI), signed the agreement of cooperation and mutual recognition with TICCIH on 12 September, 2008.

## ■ Paying by debit or credit card

TICCIH's Paypal account is now working, making payment of the annual membership fee much simpler using a debit or credit card. There is a link to the payment options from the home page, while new members who complete the joining form are offered a choice between one or three years or corporate membership. Once the payment has been made, Paypal automatically sends out an e-mail receipt with the details.

## ■ TICCIH Ukraine

A group of industrial archaeologists and historians have formed the new Ukrainian national TICCIH committee. Dr Yulian Gennadievich Tyutyunnik is the representative. They have already held their third conference on the 'conservation of the industrial heritage, culture and landscape' at the Universidad Pedagógica Estatal in the city of Krivói Rog ([institut@paradise.net.ua](mailto:institut@paradise.net.ua)).

## ■ World heritage experts

In July, TICCIH sent the names of various experts to ICOMOS to carry out site assessments and desk-based evaluations of industrial sites nominated for the World Heritage List.

The four nominations were for the Mercury and Silver Binomial on the Intercontinental Camino Real: Almadén (Spain), Idrija (Slovenia) and San Luis Potosí, Mexico; the watch-making landscape of the Swiss town of Chaux-de-Fonds / Le Locle; the ancient Shushtar Hydraulic System of bridges, dams, canals, buildings and watermills in Iran; and the whole ensemble of the Saline Royale d'Arc-et-Senans in Saline-les-Bains in France – already partly inscribed, this is a

belated extension to include the whole site. As a result technical missions (as ICOMOS calls them) have or will be carried out by Nikos Belavilas, Jaime Migone and Axel Föhl, while Francesco Calzolaio, Peter Claughton, John Morris and Pierre Lamard were all asked to write desk reviews of the importance of the sites.

At the beginning of October another request was received to assess the Gold Route in Paraty and its landscape in Brazil.

When TICCIH gets these appeals from ICOMOS' World Heritage Unit in Paris (usually sent to the President), the procedure is to forward them to members of the Board and National Representatives and to consult the database of members and their interests to find suitable people with appropriate knowledge and experience who are prepared to carry them out.

## ■ TICCIH and the World Heritage List: a strategy for advising on industrial and technical cultural properties

This short report was TICCIH's response to the expert workshop on science and technology held in London in January (the papers and conclusions can be found at [www.unesco.org.uk/Workshop\\_Papers.htm](http://www.unesco.org.uk/Workshop_Papers.htm)). After the meeting, Dr Stephen Hughes expressed concerns (*TICCIH Bulletin* #40, 2008) that TICCIH might be bypassed if it was not able to complete the series of influential 'single industry contextual studies', begun in 1996 to guide the selection of World Heritage properties. The report, a pdf of which can be downloaded from the TICCIH web site, proposes a structure and a methodology for carrying out further studies. But it also points to the need to find some funding arrangement. One option, highlighted in July by the TICCIH Board, is for universities to take on such studies as a doctorate research programme.

Thanks to all the contributors

Photographs are by the authors unless stated otherwise.

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TICCIH is the world organisation 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 £20, corporate membership £40, and student membership £10  
Payment to TICCIH, Lloyds TSB Bank plc, 27 Fore Street, Redruth, Cornwall TR15 2BJ, UK; Account No: 1351659, Bank Sort Code: 30 97 00.

There is an on-line membership form on the web page.

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 four times a year and is sent to all members. If you have not received an issue, please contact the editor for a replacement. Back issues can be downloaded as a pdf file from the TICCIH web site.

Opinions expressed in the Bulletin are the authors', and do not necessarily reflect those of TICCIH.

**Editor:** Articles and news of recent and future events should be sent to the Editor, James Douet, Museu de la Ciència i de la Tècnica de Catalunya, Rambla d'Egara, 270, 08221 Terrassa, Spain, [ticch@gencat.net](mailto:ticch@gencat.net).

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■ The stimulating study of everything related to the industrial heritage, and especially to its conservation, cannot be done without the help of industrial archaeology. As we know, this draws on the material culture and on the memory of work to achieve its aims. Frequently, however, the recovery of the industrial heritage is only partial, in for example the restoration of industrial architecture, of archaeological, ethnographic, philological or historical aspects, while the technological side can sometimes be neglected so that an integral vision of the industrial or preindustrial environment is not realized.

The general deterioration and the abandoned condition of many historic sites make the study and analysis of the technologies used both in construction and implementation, as well in operation, especially important if we want to conserve this interesting heritage.

For this, the classic tools of design and analysis deserve as much application as the modern applications of Computer-Aided Design and Engineering (CAD-CAE). These will help us to investigate from the technological point of view, to make graphical reconstructions and subsequent computer animation of the object, thereby obtaining an understanding how the historical object worked and facilitating in this way a virtual visit.

Museums of science and technology often present magnificent exhibitions that recreate perfectly an industrial environment, with wonderful explanatory panels, preserving oral or written records or maybe historic photographs of the period, and even using simple computer animations that, nevertheless, from a didactic point of view do not achieve their full potential.

Realising computer animations through infografical technologies needs a profound

## Infografical techniques for industrial engineering as an integral tool for industrial archaeology

Professor José Ignacio Rojas-Sola

understanding of the computer techniques themselves but also the technical knowledge the engineers bring from their training. The detailed study of the engineering object in question grants us information and understanding that can not only complement static explanatory panels, but can also create computer animations that work at the real speed of the process, as it is known in the PAL system, one second of video coincides with 25 frames (static images that join to provide the sensation of movement).

Solutions using virtual reality can be obtained as well, though they need other more complex implements which provide sensitive solutions quite different to those from computer animations.

The Research Group that I direct, ENGINEERING GRAPHICS AND INDUSTRIAL ARCHAEOLOGY of the Andalusian Plan for Research, Development and Innovation and which operates within in the

The 'Sardinero' windmill in Campo de Criptana (Ciudad Real, La Mancha, Spain)

Directory of Research Groups of the autonomous government of Andalusia, presents one line of research that is devoted squarely to this subject: *Industrial Archaeology and History of the Technology: Recovery of the industrial heritage through of computer-aided design and engineering technologies.*

We have been working for more than ten years on subjects related to the protoindustrialization, in most cases on the industrial agrarian heritage such as olive oil mills and presses, watermills, windmills or fulling mills, the results of many of which have been published.

At present we are involved in a project for the Spanish National I+D Plan devoted to the historical-technological study of the windmills of La Mancha, Spain (those memorably documented by Cervantes). In order to realize, for example, an animation that will accurately show the working of these mills, we need to know the true speed of the axle and of the gears between the wheels, based on the relation of frames in system PAL. This is only one instance to show why it is important to study the industrial heritage from the engineering perspective, enabling us to provide the necessary information for visitors to an interpretation center or museum.

Our line of research has a double purpose: to produce historical - technological and graphical information, as well as interpreting and explaining the reality of the activity or period. For this, engineering has to take on the study of its own development as a discipline, and doing it from the technical as well as the historical point of view.

Studying the physical remains and the old technical drawings related to our industrial heritage make possible the following:

To reconstruct former industrial processes.

To define technological situations of our past.

To offer a panorama of the styles and constructional technologies used in industrial buildings and machinery design.

To obtain models of the morphologies who might be suitable for computer animation and of describing of them in virtual form.

To study the design codes, functional parameters and possible optimizations of the machinery that will help us to identify the 'technological baggage' of the rural areas of our country.

To finish this brief contribution, I want to make clear our intention of constituting a multidisciplinary team to apply for funding for an Innovation and Development Project under the 7th Framework programme of the European Union, and to request for help to recover and study the heritage associated with the culture of olive cultivation and of olive oil production, principally among countries of the Mediterranean basin. For



this I would welcome any expressions of interest.

*Professor Dr José Ignacio Rojas-Sola, Industrial Engineer, Professor of Engineering Graphics, Industrial Design, Technical Drawing, Descriptive Geometry and Computer-Aided Design at the University of Jaén, Spain, Director for Western Europe of the International Society for Geometry and Graphics (ISGG) jirojas@ujaen.es*



Wooden millstone gear wheels, and how they appear in the infographical version.



Quebec, Canada was chosen as the location for the 16th annual symposium of the ICOMOS to coincide with the 400th Anniversary of the city's founding and the establishment of the first permanent French settlement in North America. Inscribed on the World Heritage List in 1985, Quebec was also an ideal choice as it provides a powerful demonstration of the key role of heritage in fuelling a cultural and economic revitalization of a community that had been in decline.

The theme of this symposium was "Finding the Spirit of Place: Between the Tangible and the Intangible." With five concurrent sessions taking place over two days, I was overwhelmed by the diversity of the presentations in terms of geography, typology and philosophical or theoretical outlook. I heard that "spirit of place" was the genius of a monument's creator embodied in the physical place, or that it emanated from the community who claimed ownership of a heritage place and expressed in its living traditions, practices and usages. From a North American aboriginal perspective the spirit of a place was an entity that existed apart from the physical form – a viewpoint which sets up a direct challenge to European approaches that see the preservation of the physical evidence as the starting point for preserving the "spirit of place." By the end of the conference, I did not feel any closer to a clear, precise definition but I am not sure that one was needed. What was important about this symposium was the reaffirmation, paper after paper, that value and meaning in heritage cannot be limited to the physical properties of place. Value lies in the power of a place to evoke a sense of the past, to transmit the memories of place and to sustain a meaningful link between past and present within a community.

The symposium also provided an opportunity for TICCIH to reinforce its

## Finding the Spirit of Place

ICOMOS 2008 Symposium and General Assembly, Quebec, Canada

**Janet Wright,**  
Canadian National Representative

Part of the ICOMOS group visiting the Chateau Frontenac, Quebec.



The new president of ICOMOS is a preservation architect who has worked up to now on the management of the historic built environment.

relationship with ICOMOS. Over the past year, both organizations have been working together to produce commonly accepted guidelines for the Conservation of Industrial Heritage based on the Nizhny Tagil Charter for Industrial Heritage signed in 2003. The new draft guidelines were tabled as part of the Report of the Secretary General (a copy can be found in the Documentation Centre of the TICCIH website) and Irina Iamandescu (Romania) spoke at the General Assembly expressing TICCIH's interest in finalizing the common guidelines and its continuing commitment to work cooperatively with ICOMOS. Patrick Martin (USA) and Jan af Geijerstam (Sweden) were also very active throughout the symposium meeting with ICOMOS representatives and building awareness of TICCIH objectives.

On a final note, the symposium also marked the end of an era for ICOMOS. Michael Petzet from Germany who had served as President since 1999 was stepping down. There were two North Americans candidates for the presidency – Dinu Bimbaru from Canada who had been serving as Secretary General and Gustavo Araoz from the United States who had been the Executive Director of ICOMOS US and member of the Board of the Directors. From TICCIH's perspective, while Bimbaru has been instrumental in preparing the draft guidelines and participated in the workshop in Terrassa, Spain last year, both candidates had been part of the review process. Gustavo Araoz won the fairly close vote, Benedicte Selfslagh (Belgium) is the new Secretary General and Jadran Antolovic (Croatia) the Treasurer. What this will mean for the future direction of ICOMOS remains to be seen, but it is assumed that the current discussions on the guidelines and future cooperative efforts will continue under the new administration.

# world wide

## South Africa

### Industrial Heritage in South Africa

Dr. David Worth

■ TICCIIH membership in South Africa, and indeed in Africa as a whole, remains minimal. Nonetheless, an awareness of the importance of industrial heritage continues to grow, particularly among heritage professionals and statutory bodies. The Pilgrim's Rest gold mining area, in Mpumalanga, is now on the Provisional World Heritage List, and an inventory is shortly to be undertaken with a view to formulating a Conservation Management Plan for the site. This would in turn inform any future World Heritage Site Management Plan. The future of the 1924 grain elevator at Cape Town's Victoria and Alfred Waterfront has unfortunately not yet been secured. After ownership of the site largely passed to Dubai World in 2006, existing proposals were put on hold, and there have been no indications as to how they intend to proceed with the site. The nomination of the Hex River Railway Pass as a Provincial Heritage Site in the Western Cape has been the first such nomination of an industrial heritage site since the new legislation was passed in 1999. The Hex River Railway Pass, now abandoned by South African Railways but used by an entrepreneurial farmer for tourism, was an important link between Cape Town and the interior during the Mineral Revolution of the late nineteenth century, and has been assessed as having 'considerable significance' by the heritage consultants.

Back in 1874, the mines of the Cape Copper Mining Company, in and around O'kiep, were annually producing 10,000 tons of ore. A "new pumping engine on the Cornish principle, a thirty-inch cylinder steam jacketed condensing beam pumping engine costing, including two boilers, engine and boiler house, £3,800, started pumping water from a depth of 480 feet in 1874. The Cornish mine pumping engine, supplied by Harvey's of Hayle, is the only one of its kind in Africa, and the only one south of the equator to retain much of the original engine in situ.

Clearly there remains a problem with establishing TICCIIH as a credible organisation at national or regional level, while membership levels remain so low. However, as became very clear at the ICOMOS meeting held in Pretoria in October 2007, they too are having difficulties with membership and associated levels of activity in Africa. As long as there is at best minimal institutional support for organisations such as TICCIIH

and ICOMOS, it is hard to see how a critical mass of membership can be achieved.

## North America

### The Rideau Canal on the World Heritage List

Professor Patrick Martin

■ From Canada, we note the 2007 inscription of the Rideau Canal on the World Heritage List, and see that the Klondike Gold Fields are on the tentative list. These are the first industrial heritage sites listed from Canada. However, there is an optimistic initiative to list the Petrolia/Oil Springs area of Ontario, where commercial oil production is claimed to have begun in the mid-19th century. I represented TICCIIH (in an unofficial way) at an ICOMOS/Canada conference devoted to discussing this effort in April.

The SIA is experiencing a slight downturn in membership, but the publications and conferences are running along smoothly, with a recent conference in Silicon Valley, California, and a Fall Tour planned for Chattanooga, Tennessee. SIA has initiated a cooperative effort with the heritage committees of several engineering societies to upgrade the profile of IH sites, with an eye to influencing the next round of WHL nominations.

The saga of Bethlehem Steel continues; the latest news is that the site is being used as a movie set to film "Transformers 2". A \$600 million casino is in the works, along with a recently-announced \$500 million industrial park. While all of these efforts pay some attention to the former functions of this original steel facility, they do not focus on the history in a meaningful way.

## France

### Grand Forge de Buffon

■ The restoration project of the Grande Forge de Buffon, Burgundy, France won a prize in this year's Europa Nostra awards (see Mark Watson's account of the conference). This unique ensemble of an 18th century industrial complex includes a metallurgical factory with a foundry, a refinery and a mill, accommodation and facilities for its masters and workers as well as a chapel and an orangery.

The water-powered forge was built between 1768 and 1772 with three parallel workshops aligned with the canal containing



the blast furnace, finery forge and foundry. Production stopped in 1923. It was listed as a monument historique as early as 1943. The site was opened for visitors in 1978 and the restoration began of the various industrial and residential parts of the complex, including reinstalling parts of the then missing machinery.

## Australia

### Cockatoo Island, Sydney

Dr Iain Stuart, JCIS Consultants

■ Cockatoo Island is a sandstone outlier in the bed of the old Parramatta River now submerged by Sydney harbour. It is one of a number of islands in the harbour used for industrial purposes. It was convenient for use as a graving dock as it is surrounded by deep water and the sandstone was easily quarried by convict labour to form the dock. The combination of docks and convicts continued until the 1890's when Cockatoo Island eventually became a large dockyard with extensive ship repair and construction facilities. Many of Australia's naval and merchant ships were constructed here and the two graving docks could service ships up to the size of a battle cruiser or light aircraft carrier. Precipitously closed in the 1990's, Cockatoo Island suffered from the demolition and sale of much of the infrastructure and remediation of site contamination. It is administered by the Sydney Harbour Federation Trust. ([www.harbourtrust.gov.au/topics/sitescockatoo.html](http://www.harbourtrust.gov.au/topics/sitescockatoo.html))

It is also now, in the opinion of the Urban Island's project, an urban island. An urban island, in case you missed the term in school, is "a post industrial site devoid of program or inhabitants; a blind spot in the contemporary city; an iconic ruin; dormant infrastructure awaiting cultural inhabitation." TICCIIH members would perhaps remember places such as this as our industrial heritage.

In 2006 a group of architects, designers and planners involving mostly University of Sydney academics as well as guests from Costa Rica, Germany, Japan, Switzerland

# world wide

and the United States spent twelve days on Cockatoo Island dreaming up new, experimental and creative possibilities to revitalise this site. The report on this dreaming is presented in *Urban Islands Vol 1: Cuttings* (Joanne Jakovich (ed), Sydney University Press, 2008). The book contains a wide variety of theoretically informed papers. The word papers in its academic sense is not correct here – they are

impressions, comments, reports of performances, design images. They swirl and intertwine with the imagined history of the Island (some architects cannot tell a slip from a dry dock) and while they provide a welcome relief from the standard management recommendations in a conservation management plan I do wonder what to make of them.

I would recommend this work for all who are

interested in post-modern architectural approaches to industrial heritage rather than the standard museum/adaptive reuse approach. As they keep running Urban Island's there is presumably the opportunity to participate as well.

*(Disclaimer – Dr Stuart worked as part of the team preparing the Conservation Management Plan for Cockatoo Island)*

## Securing the future of Europe's Engineering Heritage

Europa Nostra Forum,  
NewcastleGateshead, UK, 2008

**Mark Watson**  
Historic Scotland

■ Engineering, the harnessing of the forces of nature for the benefit of man, was the big subject addressed by a Europa Nostra forum in the twin English cities of Newcastle and Gateshead, linked by a series of striking 19th and 20th century bridges. There also was opportunity to see the Stephenson Engineering Works, and an outstanding travelling exhibition prepared by the Technical Universities of Gdansk and Kaiserslautern on Tczew bridge in Poland, a wrought iron lattice railway bridge (1846-57) that had an eventful war. It showed how an international approach adds value to the understanding of an engineered object.

Sir Neil Cossons began by reminding us that "to engineer is human". Then Arthur Spiegler described the achievement of the Vienna waterworks in bringing water from

# conference reports

the Alps in 1873 followed in 1910, when the Viennese population peaked at two million, by a second longer pipeline of 270 km and 26 aqueducts. Rather than singling out individual features for monument protection he argues the whole ensemble needs consideration.

Workshops touched maritime and railway heritage under the themes "valuing, understanding, caring and enjoying". Eusebi Casanalles spoke of industrial heritage in its historic and social context. To Axel Fohl, technology did not respect

international borders, so neither did his books. Looking at past Europa Nostra winners, 13 out of 145 awards were industrial: a reasonable balance. A future task is to fill the gaps in the history of architecture by history from below. Iron and reinforced concrete need research, for example.

Ian Ayris explained how a heritage audit in England helps to identify such gaps. Of 610 sites, 11% are extractive, 57% are in manufacturing (divided between organic and inorganic, so 250 wind and water mills are represented, but few shipyards), 8% represent power and 24% represent transport (mostly railways). Half of these sites rely on volunteers to survive.

Andrew Backhouse sees "Industrial Powerhouse" as the brand for ERIH in the north-west of England, where 17 sites together attract 2.5 million visitors. The Ruhr projects a coherent image but some UK tourist organisations do not welcome the industrial heritage brand. ERIH delivers cross marketing and shares good practice, so where next, he asked, at the end of this EC-funded phase?

The architects behind the Europa Nostra Award winners Camden Roundhouse, London (2007) and the Van Nelle Factory, Rotterdam (2008) described their interventions. John McAslan Architects sought to reignite the original ethos of the railway roundhouse by a girdle outside and by service and circulation routes in the undercroft. Wessel de Jonge said that the new function at Van Nelle should follow its form. The famous façade is now treated as a ventilation inlet behind a secondary glazed corridor that created a climatized working environment for the 115 companies the factory now holds. The development was part funded by tax credits for investment in a listed building.

Europa Nostra then debated its draft declaration on engineering heritage. Medals were also won by Tour et Taxis, Belgium, and the Grand Forge de Buffon, France. The full list of Award Winners is at [http://www.europanostra.org/awards/2008/aureates\\_country.html](http://www.europanostra.org/awards/2008/aureates_country.html)

High Level Bridge, 1848 (foreground): a cast and wrought iron road and railway bridge between Newcastle and Gateshead, has recently been refurbished.



## Towards the Inscription of 'The Tomioka Silk Mill and Related Industrial Heritage' on the World Heritage List

Tomioka World Heritage Forum,  
20th March, 2008

**Dr Miles Oglethorpe**  
UK TICCIH representative

■ The latest in a series of events supporting the nomination of the Tomioka Silk Mill and associated silk-related industrial heritage was organised by the Gunma Prefectural Government. Keynote lectures were delivered by Dr George Agung from the UNESCO World Heritage Committee, Dr Christopher Charlton and Dr Miles Oglethorpe. There followed a panel discussion co-ordinated by Dr Keichi Schimizu of the National Science Museum in Tokyo and also involving Professor Hidetoshi Saito of Tsukuba University and Professor Yukuaki Ishihara of Maebashi Kyoai Gakuen College.

There are nine candidate sites on the Japanese tentative list of world heritage sites, and the aim of the forum was to promote Tomioka, currently the only industrial nominee, both locally and within Japan. After the main presentations, the panel generated a lively discussion, and the event was widely reported in the press and on local and national TV.

The Tomioka Silk Mill, which dates from 1872, is seen as one of the most important drivers behind the industrialisation of Japan, which by 1909 had become the largest exporter of raw silk in the world. The nomination of Tomioka is being co-ordinated by Dr Toshitaka Matsuura, whose recent article in TICCIH's journal, *Patrimoine de l'industrie* (No. 16, pp. 91-94), describes it in detail.

In addition to the mill itself, the major aim is to include other elements of the cultural landscape of which it is a part. These include silkworm farmers' houses in the sericulture landscape of Akaiwa region, the Usune Grand Mulberry Tree (thought to be the oldest in the world), the archaeological remains of early silkworm egg storage facilities, the Takayama Sericulturists' School, the beautifully preserved Tomisawa's (silkworm farmer's) House, the old Kanra-Sha Obata storage building, and two associated railways at Usui Pass and Old Kozuke. The urban landscape of silk weaving mills in Kiryu is also of great interest.

The nomination of Tomioka is most welcome, and if successful, it will be the first industrial World Heritage Site in Japan. For a country with such a prominent industrial history, international recognition of its industrial heritage is long overdue. TICCIH has a strong presence in Japan, and its Japanese membership co-organised a hugely successful conference on industrial heritage and tourism in Nagoya in 2006. However, the extent and importance



One of the main buildings of Tomioka Silk Mill, which are built from red brick around a massive timber frame.

of Japan's industrial achievements and the associated built heritage is still often overlooked, as is demonstrated by the recent loss of the Yosami Radio Station. The hope is therefore that Tomioka can help to ignite and sustain a greater interest in and respect for industrial heritage in Japan, and that in the future, aided by the work of Japanese colleagues and of TICCIH Secretary, Stuart Smith, there will be other industrial candidates included within the tentative list.



### Sustaining Heritage: Giving the Past a Future

Tony Gilmour

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AUS\$ 34.95 plus postage  
Available from [www.sup.usyd.edu.au](http://www.sup.usyd.edu.au)

Despite sustainability being the trendy word of this generation, if we are to keep the past for the future we need to work out how to do it. Tony Gilmour has presented an interesting discussion on one side of the issue of sustainable heritage by looking at heritage economics. His broad argument is that commercialisation has been a continual part of heritage and should be dealt with seriously as a partner for heritage conservation rather than being seen as the enemy. Gilmour looks at three broad areas: an understanding about how heritage conservation is financed; the debate about whether the past has been too commercialised; and how effectively heritage properties have been managed. His conclusion is that despite cries of alarm from so-

me commentators about the lack of authentic heritage in many commercialised projects, commercialisation has been and always will be part of heritage conservation due to the lack of resources.

His main case study is that of the Museum of Contemporary Art housed in the former Maritime Service Board building at Circular Quay in Sydney. This is a useful study for Gilmour's purposes as there were changing assessments of heritage values, varying proposals to improve the precinct by development and changing funding models as the project developed. This study allows the reader to see the varying issues raised by Gilmour in play and how they were all balanced, although one might suggest that the fundamental problem was the concept that people would pay to see contemporary art.

Tony Gilmour has written an interesting and thought provoking book which provides much of interest for all heritage practitioners (including TICCIH members) to dwell upon.

**Dr Iain Stuart**  
JCIS Consultants

## Museu de la Tècnica de Manresa Barcelona

**Nuria Matamala**  
Director

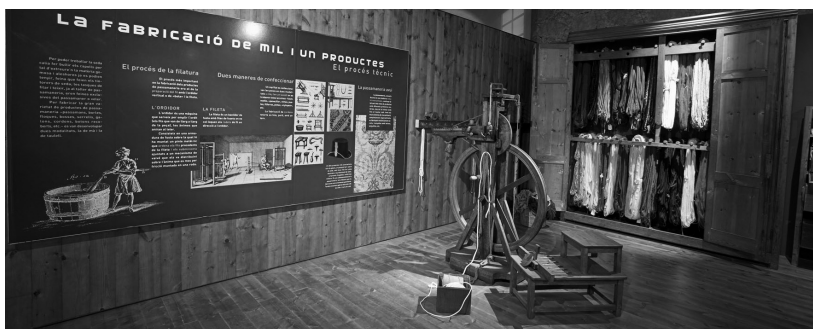
■ During the 19th century, a few towns developed into specialised weavers of ribbons and tape, with complex networks of domestic workshops and factory-based production. One of these is the Spanish city of Manresa, where production just about continues but the heritage of ribbon-making is still visible everywhere. The local Technical Museum, one of the 'franchise' museums in the national Catalan Museu de la Ciència i de la Tècnica, inaugurated a new permanent exhibition in September based on its important collection of ribbon weaving and finishing machinery.

The exhibition is structured through a chronological tour of the different areas of ribbon production. From the town's 18th century silk-weaving tradition up until the ribbons of the 21st century, the exhibition designer has taken a scenographic approach that tries to bring the visitor into the different workspaces where the narrow

fabrics were woven. So the passementerie workshop is the basement of an 18th century house, with the reproduction of an ancient workshop from a drawing of Diderot on the wall. The attic workshops that were typical of the town until relatively recently, and the weaving shop of the factory, combine recreations of the workspace with conventional exhibition materials: mural images give us false perspectives; wooden floors of the older productive spaces, concrete for the more modern factory spaces; lighting (lanterns for the workshops, fluorescent tubes for the factory); façades reproduced with textured printing; a big factory entrance, full-scale figures standing in front of back-lit panels

and stage props complete the different resources that suggest the industrial processes and their setting.

The museum itself is under the monumental vault of the town's old water reservoir, built in 1865. Three identical brick vaults enclose a space of 24,000m and held 12,000 m3 of water. It was fed by the Sèquia, a 14th century canal which has supplied the town with its water for six centuries. The other section of the permanent exhibition explains this great work of medieval engineering, which transformed the agricultural production of the area as well the urban living conditions in the town. Manresa's water comes from the Sèquia to this day.



## TICCIH Conferences

For all conference information consult [www.mnactec.cat/ticcih/agenda.php](http://www.mnactec.cat/ticcih/agenda.php)

### China

#### First Chinese International Conference on Industrial Heritage

Chengdu, 10-15 May, 2009  
(Postponed from October 2008)

■ Info: Peng Lingchang, Dean, Museum of Industrial Civilization, Chengdu, No.1, Jianshenan Road, Chengdu City, 610051, Sichuan Province, P.R.China, e: [plcsy@126.com](mailto:plcsy@126.com), T: 0086-28-84325686, F: 0086-28-84355056.

### Germany

#### XIV TICCIH Congress: 'Industrial Heritage, Ecology and Economy'

30 August – 5 September, 2009  
Call for papers

■ Institute for History of Science and Technology, (IWTG) of the Technical University of Freiberg, in cooperation with TICCIH-Czech Republic and TICCIH-Poland, 30 August – 5 September, 2009. Info: [info@ticcih2009.de](mailto:info@ticcih2009.de) or see the congress website: [www.ticcih2009.de](http://www.ticcih2009.de)

### Spain

#### Second meeting of the Electricity Thematic Section, mNACTEC, Terrassa

■ Hydroelectric heritage. Registration free. Call for papers. Info on the TICCIH web site.

## World Conferences

### France

#### Mining landscapes, a disputed heritage

Lewarde. 13-15 November, 2008

■ Centre historique minier de Lewarde. Conference organised by CILAC and the Centre historique minier. Complete programme and inscription form at form at [www.chm-lewarde.com](http://www.chm-lewarde.com) and [www.cilac.com](http://www.cilac.com)

### United Kingdom

#### On the Waterfront: culture, heritage and regeneration of port cities

Liverpool. 19-21 November, 2008

■ International conference in Liverpool, European City of Culture 2008, on port and harbour regeneration.

### Germany

#### IIIrd International Congress of Construction History,

Cottbus. 20-24 May, 2009  
Call for papers

### Denmark

#### Incredible Industry - Preserving the Evidence of Industrial Society

Copenhagen. 22-27 May, 2009

■ Special issues arising from the conservation of industrial cultural heritage, industrial materials, products and production equipment. [www.kongres09.nkf-dk.dk](http://www.kongres09.nkf-dk.dk); [kongres09@nkf-dk.dk](mailto:kongres09@nkf-dk.dk)