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Industry been and gone: a conserved chimney in a Shanghai park. Stefan Berger and Steven High analyse how different nations reacted to deindustrialisation (page 3), and Massimo Preite reviews a study of how in China industrialisation overlaps with deindustrialisation, and what it means for industrial heritage. Photo: Canadian Society of Landscape Architects

WHY JOIN TICCIH?

Mirhan Damir

As an Egyptian, I was raised to acknowledge the collective and pluralistic Egyptian history that combined ancient Egyptian, Greco-Roman, Coptic, Islamic, and Jewish inheritances. As of Egypt’s modern history, which started during the early 19th century, it too became recently (early 2000s) part of Egypt’s heritage. The first time I heard about TICCIH, as well as about the field of industrial heritage, was in 2012. It was also at that time that I first became aware of Egypt’s prominent role in the global industrial history. In Egypt, however, industrial heritage still has a long way to go to be acknowledged fully by its society and authorities on both local and national levels. Until now, industrial structures are one of the first physical victims to face demolition towards state-inspired investment projects and town planning schemes. While regarded as redundant, these are often replaced with high rise residential blocks. It was then that I remembered Rossi’s well-known quote: ‘Industry, the source of every evil and every good, becomes the true protagonist in the transformation of the city.’ Legacies of the industrial history played a role in shaping many Egyptian towns, along with contributing to its global status in modern history. Now, these industries are becoming the true victims in the transformation of multiple Egyptian cities. What can be done to uncover the good of these unrecognized protagonists in that regard?

Since 2012, I observed the growing interest of Egyptian scholars towards the field of industrial heritage. It is recognizable that many younger and even older academics and researcher are shifting their interest towards documenting,
interpreting, and promoting Egyptian industrial heritage. In order to encourage more Egyptians to be engaged in this study field, it is important to offer a common platform in which various related topics can be discussed, exchanged, and (re)interpreted. Therefore, this aspired knowledge exchange has to go beyond individual scholarly publications, and reach a more proactive communication on local, national, and of course global levels.

TICCIH members are those willing to actively represent their country to document and promote the significance of their industrial legacies. They are even those interested to seek horizontal integration of shared industrial narratives on interdisciplinary global levels. When I was first acquainted with Marion Steiner in 2018, now TICCIH Secretary General, I was amazed by the challenging experiences she went through towards promoting and acknowledging multiple industrial sites. It was through TICCIH that she was able to create a global network, of which she was able to understand, reinstate, and push towards the protection of industrial heritage.

It is time for more people to join TICCIH’s global network and promote industrial heritage towards an actual presence in global dialogue. By building active bridges, it integrates scholars within active sustainable processes of research generating cycles. This Bulletin allows scholars and also younger academics to share their voice globally regarding this undermined field of knowledge. In the events of the significant roles of Africa and the Middle East in modern history, more representatives need to join this global platform of professionals. TICCIH sets the stage to offset the years of depreciated industrial manifestations. It is opening its prospects to allow us - as Africans and Middle Eastern – to join this internationalized track towards the affirmation and assertion of our rich industrial inheritance beyond national borders.

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TICCIH is the world organization on Industrial Heritage, promoting its research, recording, conservation and dissemination and education on industrial heritage. It holds a triennial conference and organizes interim conferences on particular themes. Individual membership levels range from $10 to $40 (USD), corporate membership is $65, and student membership levels range from $5 to $10.

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

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

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

& ON SOCIAL MEDIA:
After introducing the research project Deindustrialization and the Politics of Our Time in the last issue of the TICCIH Bulletin #89, we want to focus here on the role of industrial heritage which we see as central in any analysis of the political repercussions of deindustrialization.

Of course, the deindustrialization processes that are being compared in our research project have produced very different forms of industrial heritage regimes and the memory narratives that are being told through industrial heritage differ substantially.

In the United States and the UK deindustrialization occurred from the late 1970s onwards under the auspices of neoliberal policies that professed an unfettered belief in market radicalism. The state was used to combat in a class war from above those working-class organisations standing in the way of market-led processes of deindustrialization. In Canada, by contrast, those seeking assistance from the state for programmes cushioning the effect of deindustrialization used the language of Canadian nationalism to counter market radicalism. This made the Canadian deindustrialisation process quite distinct from the US one, and favoured more state intervention.

In the continental European countries that are part of our comparison, i.e. France, Italy and Germany, stronger corporatist traditions meant that market radicalism was never as extreme as it was in the UK and the US. Hence, state intervention in guiding processes of deindustrialization was more common here. In France and Italy powerful communist movements of workers turned out to be more antagonistic towards both employers and the state than was the case with a powerful social democratic workers’ movement in Germany. Therefore, attempts to come up with negotiated responses to deindustrialization that involved unions, employers and the state went furthest in Germany.

One of our starting hypotheses in comparing the impact of deindustrialization on subsequent heritagization regimes relates to the success of a corporatist management of deindustrialisation to thriving
cultures of industrial heritage. In other words, it is no coincidence that Germany, and in particular Germany’s foremost region of heavy industry, the Ruhr, has become the global superpower of industrial heritage initiatives. But in regions of heavy industry in France and in Italy, notably in the Nord-Pas de Calais and the industrial triangle between Genoa, Turin and Milan we also witnessed the emergence of strong industrial heritage initiatives, promoted at regional and local level. At the opposite end of the spectrum we find those neoliberal market-radical systems, like in the US and the UK, where deindustrialization left landscapes of ruination and desolation. Wherever possible, the redevelopment and sometimes gentrification of former industrial areas avoided the construction of industrial heritage, as memories of the industrial past were essentially unwanted by those political forces promoting neoliberal change.

The Canadian situation is different in so far as industrial heritage has found it difficult to find a secure place in public memorialization. Historic sites related to industry are therefore few and far between. Montreal’s Lachine Canal, one of the few national parks tied to industry, has quietly pivoted away from industrial heritage and towards the idea of it being an urban park: a place of leisure rather than of history.

Ironically, however, we can observe among working-class communities in the US, Canada and Britain strong resistance from below towards market-radical deindustrialisation strategies that also frequently involved the promotion of industrial heritage as an oppositional force. The memories preserved through such industrial heritage initiatives often celebrated the vanishing working class communities and sought to rescue its values into the present. Here industrial heritage could become a resource for working-class communities in attempts to defend their way of life vis-à-vis those who wished to superimpose the values of individualism and the marketization of all social relationships.

Those initiatives also existed in continental European countries, as initiatives from below that sought to harness urban social movements in order to protect working-class housing and to create forms of industrial heritage that would talk about the pride and social values of communities fast disappearing under the impact of deindustrialization.

But the active involvement of the state, whilst providing invaluable resources for the construction of industrial heritage, also meant that industrial heritage became not so much an oppositional force but a force brought into line with the corporatist solutions to industrial crises and, by and large, supporting the negotiated politics of deindustrialization. Hence initiatives from below become less prominent, as those from above took over the construction of industrial heritage, or at the very least the initiatives from below lost any oppositional force they might once have possessed.

In comparing industrial heritage initiatives across the six countries that are at the heart of the project, and by paying due attention to the transregional entanglements of industrial heritage initiatives, the project will ask in particular about who was able to develop agency in relation to industrial heritage initiatives. What were the respective roles played at different times by state administrators, politicians, employers, trade unionists, social movements, ordinary workers, academics, intellectuals, artists, preservationists and others who were intent on promoting particular visions and narratives of industrial heritage. What were their intentions and who did the memories, both of an industrial past and of deindustrialisation processes, speak to? To what extent could it become a resource for the people most affected by such processes of deindustrialization?

The project is particularly proud that it will be able to work with prominent partners from the world of industrial heritage preservation and non-academic stakeholders with an interest in industrial heritage. These include, of course, TICCIH, but also Ingenium (Canada’s Museum of Science and Technology), the Ruhr museum as well as the LVR industrial history museums in Germany, the Fondazione ISEC in Italy, the Archives nationales du monde de travail in France, the Centre d’histoire et d’archives du travail in Canada, the Deutsche Gewerkschaftsbund in Germany and the General Federation of Trade Unions in Britain. As we are looking to build additional partnerships during the course of the project, we would be open to suggestions for other partners.

Whilst focusing on the six core countries of the project, it is also intended to look, in an asymmetrical way, at developments in post-Communist countries after the collapse of Communism between 1989 and 1992. Here deindustrialisation followed a different time frame from that of Western capitalist countries. Industrial societies were protected from the vagaries of capitalist markets, even if they were run in highly unprofitable ways. After all, the Cold War was lost by Communism largely on the economic field, but, of course, also on the political field, as it could only cling to power by dictatorial means and never commanded the support of a majority of the population. However, the rapid deindustrialisation which followed the transition of Communist regimes to capitalist ones meant that former regions of industry in Eastern Europe also soon resembled territories of desolation and despair. Post-communist governments often were particularly in love with market-radical and neoliberal solutions. Workers, as archetypal proletarians, long the pet project of Communist elites, ceased to have any political power or voice.

An altogether different post-Communist scenario, however, happened in China, where the Communist Party itself became the promoter of a turbo-capitalism that successfully transformed the country into an economic super-power challenging the hegemony of the US. The strong statist traditions of the country also promoted forms of industrial heritage as means to celebrate what Chinese communists called the specific Chinese route to communism, a euphemism for an ‘enrichez-vous’ mentality, particularly prominent among Communist elites.

Post-Communist China also draws attention to the global south, where processes of industrialisation took place as mirror image processes to the deindustrialisation processes of the global north. However, within industrialising countries of the global south, we also find pocket of deindustrialisation and different strategies of how to deal with deindustrialization. Hence we also encounter diverse strategies for the promotion of industrial heritage in the global south. Whilst ‘Deindustrialization and the Politics of our Time’ will focus on a sustained comparison of countries in the global north, it
will at least attempt to encourage a dialogue with specialists on the
global south and post-Communist countries, because the project
starts from the assumption that ultimately processes of deindustri-
alisation and industrialisation and their accompanied heritigung
processes can only be understood in global perspective.

Following approaches from critical heritage studies and merging
them with insights from memory studies and social movement
studies, the project will also seek to develop new theoretical insights
into the study of industrial heritage and its multiple meanings in different
societal contexts.

We encourage all scholars working on industrial heritage and inter-
ested in the questions outlined above to contact us, so that we can
start entering into a meaningful dialogue.

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**WORLDWIDE**

**INDIA**

**THE ‘WHY’ OF RAILWAY INDUSTRIAL HERITAGE**

*Vinita Srivastava, Executive Director Heritage at Railway Board*

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A nuanced understanding of the past is useful for shaping a desired
future. This shared memory of the past fuels the future behaviour of
groups of people in industrial settings. An understanding of this practice
is more important now, as the world battles a pandemic that throws
basic questions of viability into the face of every transport provider.

Indian Railways is a nationwide, 24x7 transport operation and its
operations involve 365 days of fire-fighting daily issues. With over
a million employees, it is a job creator as well as ‘the lifeline of the
nation’. My role requires heritage preservation with one eye glued
to a microscope on business challenges, and another trained onto a
telescope pointed to the competitive future. How to avoid getting
cross eyed, and make sure we create a future for the past, is the
question that faces railway heritage in India today?

For over a decade, a dedicated unit for Railway Heritage at the
highest echelon of decision-making at Indian Railways has taken in-
fomed, far reaching steps to preserve railway heritage. With 34
museums and heritage galleries, 223 steam locomotives, 110 vintage
coches and wagons, 17 steam locomotives as working heritage (all
preserved and operating steam locomotives!), three UNESCO
world heritage routes, one UNESCO World heritage building and
many more with national and state recognition, the objects and as-
set base for heritage in Indian Railways is substantial. It has been a
visionary priority for railway management to do justice to this rich
legacy that goes back over 150 years.

In the 1830s, the introduction of a new rail transport system was almost
magical for colonial India. Imperial powers ushered in an advancement
that was smartly in step with the industrial revolution unfolding world-
wide. The railways for India were packaged as transformational, connec-
tive lifelines that would energise each little village they trundled through.

Much fanfare was thus attached to the opening of each line, track,
station or bridge; a railway engineer was quite a pioneer in every
sense of the word. A spatial map of the colonial empire was created
by the tracks laid across the geography of the subcontinent. Port
connectivity linked maritime routes to the inland railway networks
making access possible to what is modern India, Pakistan, Burma,
Bangladesh and the island nation of Sri Lanka. In 1945, this provincial
railway network and system within the country was inherited by
the parliamentary action of a newly independent nation.

As railway managers, we grapple with millions of rail travellers daily.
When social media informs our choices and a privately made video
of faulty toilets uploaded by an irate passenger can ‘go viral’, how do
we communicate a long and complex history of railways to our pas-
sengers? How do we delve into past railway journeys, history and ar-
chival documentation, to find ‘usable’ pieces of organisational history
such that the narrative can weave together a fabric? A shared heritage
for the future of railways in India is needed, from where a thriving de-
mocracy can derive its identity and strength. The yarns of this shared
heritage are warp and weft for the future of railways in India.
A history with a narrative thread helps people understand what is happening around them, and curating these narratives can bind individuals to communities, communities to places and places to identity. ‘The present,’ according to the historian and philosopher David Carr, ‘gets its sense from the background of comparable events to which it belongs....Discovering or rediscovering the story, picking up the thread, reminding ourselves where we stand, where we have been and where we are going—these are as important for groups as for individuals.’ This story-telling of the past has the power to transport rail commuters to another time and place. It can help build unseen but valuable connection between people, places and communities.

Just as public history and its effective narration can help us see ourselves as part of a still unfolding story and of something larger than ourselves, it can bring to focus organisational achievements and create a positive business identity of Indian Railways in the public view. Here are some examples of the layers of narratives that the story of Indian Railways holds:

- As a network, it maps the remotest regions of the entire nation
- As an economic lifeline it’s driven by people’s aspirations
- As a reliable 24x7 operations running 365 days a year, it has a reasonable safety record comparable with other world railways
- As a people-centric industrial entity, it is providing dignity of employment to a massive workforce
- At once a corporate face, it is also a citizen-friendly transporter of goods and passengers.

The Heritage Preservation Strategy of Indian Railways

Getting hold of these distinct threads of Indian Railway heritage began with special efforts to identify various heritage assets within the legacy system - like buildings, bridges, rolling stock, documents, photographs and artefacts - including the mundane such as antique clocks or benches. The managers themselves worked as historians, aiming to document all historical timeline events of Indian Railways - like opening of a new line, the inaugural run of a special train, closure of lines, or setting up of new factories and workshops. While the tangible heritage was spread across the organisation, the intangible lay embedded within its units and employees, their memory and histories. Museums and heritage galleries serve as partial repositories and a storehouse of knowledge and history.

With this understanding, efforts were not only internalised, they were made to reach out to the passengers and rail enthusiast as well, bringing them into the folds of heritage stewardship. Strategic interventions were made to the built heritage and rolling stock, especially locomotives. Steam powered and hand operated cranes and...
locomotives were identified for preservation. Locomotive fleets both working and on static plinths have been inventoried. Rejuvenation and strengthening of respective rail museums with model museum equipment list, suitable inclusions for signalling gear, station equipment, block instruments, block token, machines, tools, accessories have been detailed for public display at rail museums, heritage parks and galleries. This ensures that no stream of the railway narrative is omitted. Every possible object invoking a fondness for the railways of old is there for a viewer to gaze at and admire.

Further, inventoried objects and structures are required to have appropriate plaques displayed in front of each heritage building and asset to aid protection and preservation. At the UNESCO World Heritage site of Darjeeling Hill Railways, modification to the coaches to add a glass ceiling for panoramic view is an example of continuous efforts to make the heritage railways more attractive to tourists.

The preservation and digitisation of archival materials like photographs, drawings, books with appropriate metadata protocol ensures that intangible industrial heritage like skills and institutional memories are safeguarded. We now have a collaboration with Google Arts and Culture for virtual exhibit on Indian Railways which helps us tell our stories better. Institutional linkage with national heritage bodies and international organisations such as TICCIH and ICOMOS further strengthen the academic framework that must define and outline these disparate efforts. These distributed efforts in the preservation of railway heritage reflects the understanding and appreciation for the complex, interdependent working of the railway itself.

Branding, Culture and Industrial Heritage

Simply put, the strategic use of organizational history is to remind people ‘who we are’ and ‘what we mean’ to our users. The routine and discipline of railway work is all absorbing. Often the bond to the organisation is so strong that historical anecdotes come together to form a myth that perpetuates. We must ask ourselves ‘Why?’—why do some stories get repeated and remembered? Because possibly they capture something positive about values that people want to preserve. It is this understanding which helps frame strategy.

History can also be used to put adversity in context. Industrial giants in India like Godrej or the Larsen and Toubro (LandT) Infrastructure companies have had humble beginnings and grown into their now behemoth structures organically. An online virtual heritage gallery from Godrej has archival documentation starting from when it introduced the typewriter to India. LandT has associated with the mega statue project of nation builder and icon Sardar Vallabh Bhai Patel in Gujarat, at once borrowing some of that magic of nation-building to bolster its image as an infrastructure giant. In the pandemic, preserved industrial heritage reminds employees in the industrial world that ‘they have perhaps seen worse’ and serves to inspire them to believe they will ‘survive once more’. As the UNESCO inscription of the Darjeeling Himalayan Railway says ‘a remarkable feat of human ingenuity and engineering’ when preserved, serves to keep motivation and inspiration alive.

For Indian Railways, its history also underscores the unique nationwide connectivity that is its exclusive domain. After inheriting the army and railways from departing colonial builders, the older rail culture of a feudal and imperialist state started dissolving. Services became modern, customised to the needs of the populace of a growing democracy. Trains changed, freight services grew and so did the employee base. It has been the inherited skills, especially the vocational education structure of railway training schools and workshops which has kept its manufacturing setup together and
functioning over 70 years. This bit of industrial history can be used to put adversity in context and to help bring in continuity and perpetuity.

**Authenticity and Technology Selection**

The Heritage, Culture and Branding strategy of any organisation needs to respect the ability of its own people to sniff out the inauthentic. For us, railway employees are one of our most sceptical audiences. Their participation ensures that our efforts are grounded in genuine respect for heritage and avoid mere anecdotes that adorn executive speeches. The discipline and habits of railway workers are a binding thread for rail transport systems everywhere, even when automation and technology has reduced the human effort to keep a railways running.

An old saying, frequently attributed to Mark Twain, is ‘History does not repeat itself, but it often rhymes.’ The heritage story of Indian Railways cannot hinge upon nostalgia alone. While appropriateness in technology selection guides our business competitiveness, the role of heritage is more now of storytelling. Narratives that need preserving are the key to smooth transition from heritage to modernity in a carefully curated academic mind map.

It is the contours of this mind map that I have the privilege to draw and redraw every now and then. TICCIH Bulletin gives valuable inputs to me for this exercise and this article is a humble effort to repay that debt of knowledge.

**Contact the author**
The restored Como depot as seen from the platform has been restored to its original color scheme.

## USA

### RESURRECTING A COLORADO RAILROAD TOWN

**Z. P. Liollio, edited by David Tomkins and Robert Schoppe**

Como is an important landmark not only to Colorado, but to the Victorian-era mining regions of the United States. It was a vital node in a western railroad empire. There was a time in the late 19th century, in which the railroads were the alpha and omega of the communities to which they connected. Today it represents an intact engineering record. The restoration of the railroad complex at Como Depot is a testament to a group of volunteers representing a strong partnership between nonprofits and private individuals.

Como was once the crossroads of Colorado. Nearby coal mines made it the heart of the region for rail traffic. It was the first place that locomotives could recol outside of Denver. Hence, Como connected Denver with Breckenridge, Buena Vista, Gunnison, Leadville, and boomtowns across the state and beyond. Tucked just behind the front range of the Rocky Mountains, 80 miles southwest of the state capitol, it remains a quiet community of unpaved streets and historic storefronts. Once a busy hub, the railroad presence
The junction features an archetypal trackside hotel, a passenger and freight depot, a six-stall roundhouse, and a turntable for locomotives. The original date of construction for the depot was 1879, a time when the railroad was struggling to get on its feet following the economic Panic of 1873. In the following year, the Denver, South Park and Pacific Railroad sought to tap the recent mining boom in Leadville. This bolstered revenue and solidified Como’s presence at the base of Boreas Pass. However, the standard-gauge arm of the Colorado and Southern, the former railroad’s 1898 successor, would endure until 1981.

David Tomkins is a Como local who has invested himself in exploring the built landscape. I was fortunate enough to meet with him at Como in September of 2020. His preservation efforts began with the hotel. Constructed of red brick with multiple chimneys, it was painted white after the railroad era. Weathering around the corbeling of the chimneys and gables reveals the original deep reddish-brown hue. As David explained his meticulous stabilization process for the hotel, his enthusiasm was evident. As we ambled along, 4,300 feet of three-foot gauge track lay in front of us. The rail, all laid by hand, is a labor of love by the Denver, South Park and Pacific Historical Society and their president, Robert Schoppe. This group is composed of seasoned preservation professionals and railway buffs. Reflecting on my own experiences, there is no way to lay track by hand unless you have plenty of dedication and energy behind it.

At the time of my visit, a team track had been built in front of the station platform and hotel. An adjacent mainline is now planned, and it will encompass a display track currently holding a Colorado and Southern boxcar. There is also a discussion of building several three-way turnouts (to switch between three different sets of rails).
Boxcar No. 608, dated 1878, is indicative of this decade in rolling stock construction: a lumber door, wooden brake beams, a simple wooden brakeman’s ladder, and a twenty-six foot length.

The roundhouse is connected by rail, roughly eight-hundred feet to the southeast of the hotel, and is owned by Dr. Chuck and Kathy Brantigan of Denver. Their steam locomotive resides there, and is occasionally operated by the South Park Rail Society.

The stone roundhouse was completed in 1881. A replacement riveted-plate-girder turntable was recently installed just in front of it. Prior to delivery, a painstaking repair had to be made to the concrete supporting the turntable pit rail. Well engineered bearings allow an entire steam locomotive and tender to be turned by hand. At one time, there were additional locomotive stalls and an attached boiler room, as well as a free-standing smithy. The boiler room foundation at the southeast corner of the roundhouse can still be seen. This room was accessed through the machine shop, which was along the back wall.

After the railroad’s abandonment of the property, the roundhouse became a sawmill in the 1950s. By 1982, when the new owner purchased it, the roof had partially caved in. Several smoke jacks which vent the smoke from parked steam locomotives are extant. In Como’s case, they are wooden. David noted that in the older photos, the smoke jacks were closer to the front elevation. This implies that locomotives were originally reversed in, instead of positioned head first, as practiced later. The reason for the change and its resulting modification to the building is unclear. The building is now stabilized and houses some extraordinary rolling artifacts.

Among the tall timber columns of the roundhouse interior, I admired an important museum collection. Perhaps the most pristine is Denver, South Park and Pacific boxcar No. 608. With ongoing conservation efforts, some of the original lettering survives. A much later Colorado and Southern gondola is also in the roundhouse.
undergoing restoration; replacement wooden planks are being installed between the upright stakes to form the sides. A much more in-depth project, a two-axle ‘bobber’ caboose frame, rests nearby atop several sawhorses. Due to the fragile condition of it, an exact reproduction has been built from heavy timbers. Another partial piece of rolling stock is also seen along the back wall. Salvaged from what was likely a wreck, part of an early wooden passenger car survives as a tangible cross-section. Named Geneva, this piece of equipment was also built in 1878 as Denver, South Park and Pacific coach No. 3. The sheathing has been stripped, so that part of the frame is visible. Peering through the doorway, the coach has been stabilized with new wooden bracing. A stove flue is evident just to the upper left inside the doorway, as are some pieces of original trim and clerestory. The rolling stock collection in the roundhouse thus gives a sampling of late-1870s narrow-gauge railroading.

In an adjacent stall is a steam locomotive with a curious history, Dubbed Klondike Kate, this Baldwin Locomotive Works 2-6-2 ‘Prairie’-type served a short career in the Yukon Territory. On the Klondike Mines Railway roster, it was locomotive No. 4 (built 1912). Today it is operational and meticulously cared for. Every appearance Klondike Kate makes, especially under steam, is met with a lot of fanfare. The Brantigans take pride in owning this locomotive. As founders of The Denver Brass, it’s easy to see the parallel between

The depot, with vertical tongue-and-groove siding, was likewise built in 1879, next door to the hotel. Many passenger stations in this region were built on foundations of bridge timbers. This can be structurally problematic over time, and required remediation to make the interior plumb and square. Several wooden raceways remain, fastened high on the interior walls near the front corners, with grooves routed in them. These grooves, David explained, held telegraph wires. To represent its days as a working depot, a mix of reproductions, original pieces and representations are displayed. A telegraph office is complete with a telegraph key, receiver, desks, potbelly stove, and even a spur-and-bevel geared train order semaphore. This signal let inbound train crews know if new orders were waiting at the depot. This provides a compelling pre-World War II environment.

Other rooms in the station include display cases with small pieces, such as archaeological artifacts found at the site and railroadiana from the region. Along the front wall, a train board is hung, an exact reproduction of one found at the depot. It includes the last 1937 train schedule scrawled in white chalk. The original train board is now stored in a protected space. As far as authentic writing goes, one closet reveals some actual 1930s-era graffiti. David then smiled, noting the freehand-painted ‘No Fire’ sign and the obvious soot and smoke damage on the ceiling.
The neo-classical house of the Head Mining Director of the Ural mining and metallurgical plants with Simanov’s mill on the opposite bank of the river in an early colour photograph from 1909. Photo S. Prokudin-Gorsky

Simanov mill converted, Makarov’s bridge and the new apartment building in 2013. Photo Artyom Ustyuzhanin
In 1997 the mill became its new life. The updated enterprise worked and developed. At the expense of its own profits, the flour mill built new bulk warehouses, an engineering shop and 2 residential buildings for employees. It would seem that this how it should be – the historically formed enterprise in the city center is growing and developing, introducing new technologies into production in order to keep up with the times. However, this area located on the banks of the river was also of great commercial interest for investors. The site of the mill was bought by the Ural’s mine and metallurgy company (UGMK) – the largest copper producer, investor and developer in the Urals. The old enterprise was moved to a new flour mill specially built outside the city for this purpose.

A number of projects were considered for the conversion of the flour mill. The owners chose to build a high-quality residential complex. The project was supposed to preserve two red-brick historical buildings, Simanov’s mill of 1884 and a former workshop. Initially, the site had an industrial purpose, so the whole process for the construction of a residential complex was long and difficult over several years. Active urban communities, dissatisfied with the upcoming demolition of the flour mill, expressed their opinions in the media and collected facts, trying to shed light on the processes taking place in the ‘closed site’. Excursions to the flour mill territory were organized.

Today the Makarovsky residential complex includes several new buildings. Six-story historical mill has been reconstructed into apartments and a kids club is planned to be organized in the former workshop. In general, this project of re-profiling an industrial heritage site is unique for Yekaterinburg, because both socio-economic and cultural issues are being resolved at the same time. During the construction of a new residential complex, a historical industrial facility is preserved, not destroyed as it was recently during such reconstructions.

At the same time, the facility of the Simanov’s mill is special because in the Urals there are almost no multi-story industrial buildings from the 19th and 20th centuries, with its focus on the metallurgical and mining industries. Monuments of the industrial era, such as the Simanov’s (Makarov’s) mill, being multi-story buildings, are as a rule adapted for a residential function and become hotels or apartments. And this kind of conversion is a first experience.

It should be noted that the historical industrial facility, the Simanov’s mill, is well integrated into the silhouette of the residential complex, and high-rise residential buildings are a kind of background for it. The color scheme of the facades also works for this: the blue color of the new buildings advantageously fetches out the brown
brick building of the mill. As a result, the panorama of the city river got a bright end in the form of a new residential complex with a well-integrated industrial heritage site. The second historical building of the complex, the workshop, was not lost either. From this location, the whole landscape of the new residential area is also well perceived. The advantages of this project also include the fact that now the improvement of the city river embankment is carried out at a high modern level.

The emergence of such projects is undoubtedly important for the popularization of the industrial heritage in the regions. With each new adapted historical industrial object, an awareness of their importance for the development of the material culture of each country will come.

USA

MORE THAN SUNSHINE AND MICKEY MOUSE - PRESERVING FLORIDA’S INDUSTRIAL PAST

Mariah Justice, Master’s graduate, University of Edinburgh

The state of Florida often conjures up mental images of pristine beaches, palm trees, and Disney World, yet Florida’s historical narrative is one that includes the prevalence and influence of industry. For Florida’s native population, this industrial history creates a rich heritage that plays a critical role in the definition of their region, hometown, and personal identity. However, with a state economy that has largely transitioned to providing services in lieu of producing goods, Florida’s remaining tangible ties to its industrial past are left vacant, derelict, and erased. This Master’s thesis study explores the value of industrial heritage in the state of Florida and how it can be preserved for communities and future generations.

More than just orange groves, historic industry within the state of Florida ranges from lumbering to phosphate mining to cigar manufacturing. The industrial revolution permitted Florida’s natural resources to be exploited at an exponential rate. Many of Florida’s wetlands, waterways, and forests were shaped physically and socially as advancements in technology allowed Florida’s trees to be utilized for lumber and the production of turpentine. Cigar manufacturing contributed to Florida’s unique demographic, attracting immigrants from Cuba, Italy, and Spain. Phosphate mining continues to shape Florida’s west coast physically and politically as this area continues to produce about one-third of the world’s phosphate today.

However, as Florida transitioned to a service economy, this industrial history was largely ignored and even erased in favor of Edenic representations aimed at the attraction of tourists. The remaining timber mills and turpentine stills, brick cigar factories, and steel phosphate plants were ignored as places of cultural heritage. With this prevailing tradition of projectionism combined with the transience of tourists, Florida struggles to maintain its ties to its historic industrial heritage.

My research found that adaptive reuse provides a solution to preserving Florida’s historic industrial buildings. It appeals as a solution not solely because it addresses pertinent social and environmental issues. While the tourism industry often erases physical links to Florida’s pervasive industrial past, adaptive reuse of historic sites provides a means for Florida’s inhabitants to experience an aspect of their heritage that has deeper roots than just a lounge chair on the sand.

Independent breweries and restaurants have found success in adapting industrial spaces within the state. Old cigar factories, ice plants, and railway stations have become new sites of creativity and economic productivity. They continue Floridian heritage not only through the maintenance of industrial buildings, but by drawing upon the heritage which is associated with their products. Brewers have been found to name their creations after key Floridian historical events and industrial landmarks. Restauranteurs use local Florida produce giving homage to the state’s farming tradition. Through their spaces and products, business owners preserve history that is distinctly Floridian.

This study originated from a desire to define my personal identity. After moving outside the state, I discovered that there was little built heritage with which to identify myself as a native Floridian. Yes, historic architecture exists in the form of grand hotels, but their origination as a space for enticing tourists left them largely inacces-
sible to local people like myself. When searching for an authentic and accessible piece of built Floridian heritage, I found myself lacking. Without any accessible historic structure, I was detached from the Floridian collective memory.

Undertaking this study in the months of the pandemic presented significant challenges in the form of restricted travel and research. Yet the greatest challenge was uncovering the varied and extensive industrial past of the state. Many sites have been destroyed to accommodate new builds where tourists can purchase a coffee from a familiar franchise. Covered up by projections of paradise and convenience, there remains little literature and less physical evidence of the industries that shaped what since 1970 has been calling itself the Sunshine State.

For a native population that shares neither a common accent nor culture, industrial heritage contributes to the formation of a more complete identity. Instead of inventing one around enticing tourists to tropical bliss, industrial heritage allows Floridians to base an identity upon their authentic history. It immortalizes the experience and influence of the common working men and women and recognizes that their lives were meaningful contributions to the state of Florida as it is today. Many native Floridians have not had the opportunity to visit the lofty hotels overlooking the beach, yet all of us have had to go to work.

It is in this way that industrial heritage provides Floridians with a critical representation of their past. It permits a history that is relatable as a human. Next year, Florida is projected to see the largest migration on record of people moving to the state. This mass migration proves to be the greatest threat to the remaining industrial structures as land is cleared for the construction of more homes.
An adapted ice factory, St. Augustine, 2020. With a continued historic character but new functions industrial structures provide Floridians with a tangible connection to an important aspect of their past. Photo: Charles Justice

and grocery stores. Without adaptive reuse ensuring the survival of industrial buildings, Florida runs the risk of losing irreplaceable ties to its humanity.

Florida is not alone. Similar locations reliant upon tourism as a means of economic support have often erased portions of their industrial history in favor of projections of paradise. This erodes historic fabric and character, leaving native populations robbed of their heritage. Adaptive reuse can use the authenticity of industrial structures in these locations as a building block to create a greater sense of place for its inhabitants. In these spaces, individuals can experience a part of their history, and thereby a part of themselves. By preserving industrial heritage through adaptive reuse, previously conceived touristic places, like Florida, will have more to offer communities than simply a suntan.
This year sees the 200th anniversary of the official opening of the Union Chain Bridge, linking England and Scotland. When it was opened, this engineering triumph over the River Tweed was the longest wrought-iron suspension bridge in the world, with a span of 137 m. It was designed by a naval engineer, Captain Sam Brown, who had pioneered the use of iron chains and cables in place of hemp rope for ship’s rigging. The bridge’s opening ceremony on 26 July, 1820, was a big event. Crowds of fashionable onlookers, parties in picturesque river boats, eminent dignitaries including Scottish civil engineers Robert Stevenson, John Rennie, James Jardine, and mathematician Professor John Leslie from the University of Edin-}

burgh, stood alongside several hundred local residents who started gathering from early in the morning, keen to secure themselves a good vantage point and to ensure they were amongst the first to cross this ‘curious and elegant structure’ (The Cambrian, 12th August 1820).

A digital programme of activity was delivered in place of an on-site event, aimed at commemorating the anniversary of the bridge as well as engaging audiences and raising awareness of the conservation project. During the week of the bicentenary the Union Chain Bridge: Crossing Borders, Inspiring Communities project website was launched. The site celebrates the history and heritage connected to the bridge and will be the repository of information about the ongoing conservation project and public engagement activities. Digital content includes blogs on the historical context and the 1820 opening ceremony, craft activities for younger audiences, including a UCB themed model-making activity, opportunities for people to share their memories of the bridge and much more.

The main highlight of the digital bicentenary celebrations was the production of a specially commissioned short film. This film com-
Brown’s patented chain link design was taken up for bridges all over the world. The stone pylons were designed by the engineer John Rennie. Photo: Northumberland County Council

Brown’s patented chain link design was taken up for bridges all over the world. The stone pylons were designed by the engineer John Rennie. Photo: Northumberland County Council

bines stunning aerial photography of the bridge with an appreciation of the technical skill involved in its construction. Featuring archive material, costumed interpreters and a specially composed musical score, the film acknowledges the steadfastness of the Bridge throughout the 200 years of its history, even though life in the borders has changed significantly since it was opened in 1820.

The number of people engaged in the bicentenary celebrations by moving to a digital celebration far exceeded the figure we would have expected to attend an on-site event. The opportunity presented by the complications of Coronavirus has allowed the project to reach new audiences online. Taking inspiration from the ingenuity employed in the construction of Union Chain Bridge, we will continue to reimagine how we engage our audiences digitally, promoting the history and heritage of the bridge and raising the aspirations of young people within our communities.

Union Chain Bridge: Crossing Borders, Inspiring Communities is an ambitious project involving the conservation of the internationally significant Union Chain Bridge, the preservation of its intangible heritage and an extensive programme of education and public engagement. Co-owned by two nations’ local authorities, the Union Chain Bridge is symbolic of this uniquely collaborative project that comprises of a partnership between Northumberland County Council, Scottish Borders Council, Museums Northumberland and the Friends of the Union Chain Bridge.
SERBIA

HISTORIC CANAL RESTORATIONS

Krista Pašković, TICCIH and IWI member, and David Edwards-May, president of Inland Waterways International

Vode Vojvodine have completed restoration of Bezdan and Šebešfok locks giving access to the Vojvodina canal system from the Danube and from a small lateral canal from the Hungarian town of Baja. Bezdan was the first structure to be built with concrete cast under water and was completed in 1856. The lock remained disused for many years, but its restoration was completed in 2020, as part of a project totalling €8 million under the IPA Serbia-Hungary instrument.

Šebešfok in 2018. New lock gates were built, two on the Danube side and two on the canal side. Other installations were a new crane to handle the steel beams for isolating the lock chamber, anda building to store these beams. The lock had to open by hand and not by electricity, to maintain its authenticity. The project will contribute to reducing the risk of flooding by restoring water runoff capacity of the canal and its structures, at the same time allowing development of other business activities such as tourism and boatbuilding. Dredging works are in progress, and the reopening was celebrated on 25th September. Šebešfok lock is at the entrance to the Baja-Bezdan Canal which leads to the Hungarian town of Baja. Electric boats only are allowed on the Serbian part of the canal, and according to information when we visited in 2017, unpowered craft only on the Hungarian side.

Iron Gates model restored

This unique hydraulic model was made in 1960 to study the effects of the Iron Gate hydropower and navigation project, at Kovin, 55 km downstream from Belgrade. The 1:1000 scale model is 146 m long, and faithfully represents the bed of the Danube through the Iron Gate - the varying depths and widths, the meanders, tributaries, ravines and bays reflecting the unpredictable character of the Danube through its splendid gorge. The model was needed before
Construction began in 1964 to show how the Djerdap hydroelectric power plant would affect the course of the Danube and its banks, especially from the dam upstream to the confluence with the Tisa.

Affected by the ravages of time, the model was restored and reopened to the public in June 2020. Pumps were replaced, the river-bed repaired, and a path laid out beside the model. Krsta Pašković visited the model in 2002 and discussed with the then mayor how it could be preserved as a technical monument. A delegation from IWI including Ron Oakley, David Edwards-May, Bill and Laurel Cooper and Paul Wagstaffe also visited the model in April 2003, during the scientific forum ‘Danube: River of Cooperation’.

The hydraulic model of the Iron Gates was naturally shown to Yugoslavia’s president Josip Broz Tito.
THE RETURN OF THE PUTTING OUT SYSTEM

James Douet

Industrial historians and archaeologists of work will have been intrigued by recent papers reporting the return of putting-out, the manufacturing arrangements which preceded, and were obliterated by, the invention of the factory system. 'Putting out', or the domestic system, is the English name for a form of organisation which developed in Europe in the 15th century, best known in textiles and for making small mechanisms like guns and locks. Wool, yarn or small parts were ‘put out’ to domestic workers by merchants, who collected the finished articles when they were ready. Work was paid for ‘by the piece’ and would ideally be integrated into the rhythm of the farming season and the daily pulse of domestic chores. Putting-out started to become uncompetitive for producing textiles once English mill owners showed how it was more productive and profitable to concentrate and control their workers within the new mechanised ‘manufactories’. The demise of putting-out is synonymous with industrialisation and the Industrial Revolution, so discussion of its return strikes an immediate chord.

It seems that pre-capitalist putting-out is making a comeback, or being ‘digitally reincarnated’, through ‘platform capitalism’. Acquier (2018) defines this as ‘a set of organizations carrying out productive and for-profit activities through digital platforms that arrange transactions between providers and customers’. Much like the methods of 18th century cloth merchants and 19th century small arms manufacturers, then, though with the Internet to effect the transactions...
rather than by packhorse. There are other parallels. Just as it was the domestic piece-worker rather than the merchant who invested capital in a loom or a lathe, so it is the homeowner who provides the property that AirBnB rents out, while it is the driver rather than Uber or Lyft who supplies the taxi by which they make their money.

Other researchers have identified more conventional routes by which the putting-out system, considered already a historical phenomenon by Karl Marx a hundred and fifty years ago, might be alive and thriving. In Thailand and other Asian countries, large garment producers have put-out at least a part of their production to small rural workshops since the 1990s in an effort to evade strong labour laws controlling working conditions applicable in their factories. Companies can achieve greater flexibility by dividing their workforce into core factory and peripheral putting-out groups. The rural putting-out workers are used as buffers that absorb fluctuations in output (Campbell 2016).

18th century cloth merchants would have quickly grasped the euphemism 'flexibilization of labour', which covers both of these manifestations of neo-putting out. They have in common other attributes, such as concealed or undeclared work and a lack of social protection of workers.

What, if anything, might this mean for industrial archaeologists, concerned as we are for the historical material evidence of work and production? It seems unlikely that the factory is going to disappear any time soon, continuing to offer as it does the same advantages of concentrating processes, higher productivity, control of quality and labour supervision that attracted Richard Arkwright and early adopters of the system in the 1770s.

It is the office, on the other hand, which may have had its day as a building type. Covid has violently galvanised a current which was already strong in companies large and small of ‘putting out’ white collar administrative work by getting workers to work from home (although usually still paid a salary rather than piece work). Might the arrival of the putting-out system to office work hollow out the town centres in which these buildings cluster just as deindustrialisation drained traditional centres of industrial production? As managers, designers, sales and administration staff stay at home, their abandoned former workplaces may in time become as interesting to archaeologists and preservationists as the obsolete sites of mining, weaving or factory work.


COLLECTING BIG STUFF: OIL AND GAS AT NATIONAL MUSEUMS SCOTLAND

Ellie Swinbank, Curator, Technology, National Museums Scotland

National Museums Scotland (NMS) has a long history of collecting industrial objects. Our predecessor museum, the Industrial Museum of Scotland, was founded with the intention of collecting the materials and processes of manufacture, contemporary technologies and the tacit skills that went with them. For a lot of the museum’s lifetime the emphasis has been on historical collecting but there has always been a remit for collecting relevant current material.

A key acquisition from recent years is the flare tip from the decommissioned North Sea Murchison oil platform. Unlike much of our contemporary collecting, it represents the end of a technical endeavour rather than the beginning. That said, the decommissioning of Scotland’s oil and gas industry is a new industry in itself and expected to take 25-35 years to dismantle nearly 500 offshore installations.

Collecting the flare tip from the Murchison oil platform is a way of looking back at the recent past and of representing the beginning of a new chapter. The item itself has just entered the realm of obsolescence, but the process of retrieving it and dismantling the platform is an expanding and evolving discipline as reflected the University of Aberdeen now offering a master’s degree in decommissioning.

The developments in the industry since the 1960s were already well represented in the NMS collections by drill and platform models used to inform manufacture, samples of North Sea oil, a cross section of the Ninian oil pipeline from Sullom Voe terminal in Shetland, which is on display alongside drill bits and a model of the Elgin wellhead. These collections form a powerful core of the Science and Technology collections and enhance our ability to tell the story of 20th and 21st century Scotland. To continue to tell that story we
needed to collect the beginning of the decommissioning story, and that is where our relationship with the Murchison platform began.

The platform is located 240 kilometres north east of Shetland. It was installed in 1979 and began producing oil in 1980, more than 390 million barrels before its shutdown in 2014. One of the largest North Sea oil platforms ever built, the huge structure has been described as a scaled up Gothic cathedral in the sea. Murchison was part of the first wave of North Sea decommissioning so, in many ways, it embodied what was to come in the industry over the following decades.

Murchison was a perfect collecting target for NMS which wanted to develop its collection on three levels: the decline of the industry; the engineering involved in removing these mega-structures from the North Sea and – perhaps most importantly – the people who work in these alien environments.

The first challenge in collecting of this nature is how to reach out to the companies involved and build a relationship where political sensitivities and concerns about reputational risk could contribute to resistance, and then make a case for why elements of their work should be collected for heritage purposes. NMS was lucky to have a ‘way in’ to Canadian Natural Resources (CNR), the owners and operators of the Murchison platform, through the visual artist Sue Jane Taylor. Sue Jane has a deep understanding of the energy industries, workforce and environments having spent more than 30 years recording people and their technologies. She has gained access to remote and publicly prohibited offshore installations and had been invited by CNR to make three visits to Murchison between 2014 and 2016. NMS had the good fortune to have worked with Sue Jane in 2008 when developing the gallery called Scotland: A Changing Nation and she was able to put NMS staff in touch with the right people at Canadian Natural Resources.

The first phase of collecting from Murchison was for the development of the new science and technology galleries in the National Museum of Scotland. Among these galleries, which opened in 2016, is Energise, exploring the evolution and issues surrounding the different types of energy in Scotland’s portfolio. At that stage NMS...
collected a sample of the last crude oil to come off Murchison, the driller’s console and telephone that were used on the platform for more than 35 years, and two pipeline ‘pigs’ designed to clean debris from oil pipes and named for the squealing noise they make in the process. Another wonderful thing about the relationship with Sue Jane Taylor and her work and contacts among the Murchison staff was that she was able to source oral history recordings and film footage that supported the interpretation of these items and will become part of the permanent history files for these objects.

It was the slightly later and much larger acquisition of the Murchison platform flare tip that is probably the most impressive and powerful symbol of the technical, human and decommissioning stories. An oil rig is the most recognisable icon of the industry but collecting an entire rig would be impossible for NMS. The flare tip was selected as an emblem of the whole rig, a part to represent the whole. At over four metres tall and weighing a ton, the flare tip is probably NMS’s biggest acquisition of recent years, outside the aviation collections. NMS felt that flare tip would provide a powerful experience of the scale of the industry and of the interface between humanity and technology, especially when paired with film footage taken by Taylor. A worker must climb 259 steps to inspect the tip, with the ocean churning below. The hair-raising piece of film showing this emphasises the risks of offshore work and the challenging environment the workers had to face every day to do their jobs. Extinguishing the flare tip was highly symbolic and represented the end of the working life of this massive structure. This made the flare tip an even more pertinent object to collect to symbolise the beginning of the decommissioning process.

It was hoped that the flare tip would be a prompt to start discussions among NMS’s visitors around our reliance on fossil fuels and the future. That it would raise questions about energy security, dependence on petroleum related products, Government climate change targets, and loss of income from the industry as it declines. It could also spark debate about what to do with the infrastructure of industry when it becomes obsolete or no longer functional. What should be done with the almost 500 platforms and the 10,000km of steel pipeline that will need to be removed from the North Sea over the coming decades? What about the suggestion that the underwater parts of oil rigs could simply be cleaned up and left in the ocean to become marine habitats? Given that the Murchison flare tip is the only one that has been saved for heritage reasons, what has happened, or will happen, to others?

The proposal to acquire the flare tip says: ‘No other Museum in the UK holds a flare tip in their collection - we would be the first to do so. It will be as significant a legacy for our successors as the Boulton-Watt engine was for us. It will be a unique synecdoche for the rig as a whole; and therefore decommissioning, and therefore North Sea oil; and therefore the Scottish experience in the twenty-first century.’

Since arriving at the National Museums Collections Centre in Granton, Edinburgh, the flare tip has been accessible to visitors both on monthly public tours and also by appointment for anyone. It does not currently have any interpretation with it, but all of the rich materials generated and collected by Sue Jane Taylor are available. It would be ideal to show her film of the man climbing the steps as part of the tour because that footage so stunningly illustrates all the elements that the object brings together, but how to show it as part of a tour in a storage area is not obvious, although carrying a tablet with the film clip on it would be a possibility.

Putting it on display in the Museum would be far better, but it brings further and larger challenges. Getting it to and into the building would only be half the battle. Finding an appropriate place where it could stand upright and be properly viewed is the other, more difficult half. However, we do intend to properly share this object with our audiences as the oil and gas industry, and its decommissioning, continues to play a central role in Scottish life, albeit a shifting role in an ever-changing social, political and economic environment.
LESS THAN A YEAR TILL TICCIH MONTREAL 2021

*Miles Oglethorpe, TICCIH President*

If all goes to plan, in slightly less than 12 months’ time, we will be gathering for TICCIH 2021 in Montreal, Quebec. It was always going to be an ambitious event, but this particular congress is going to carry with it an intense emotional resonance. I for one am likely to get over-excited at the prospect of actually meeting people ‘in the flesh’.

Like many of us, I am deeply grateful to the various increasingly effective videoconferencing platforms for keeping us connected during the pandemic, but I now crave real human contact more than ever before.

However, we are acutely aware that a cloud of uncertainty still hangs over 2021, and it is possible that predictable normality may not have returned by the summer for the congress to take place as planned. So, we will be keeping the situation under constant review, but our assumption is that the congress will go ahead at some point, whilst acknowledging the potential need for it to be postponed should circumstances turn against us.

With this in mind, our preparations are continuing. There has been a good response to the Call for Sessions, and we look forward to more papers being submitted, especially once the sessions have been selected and confirmed. Pre- and Post-congress tours are also in an advanced stage of organisation, so everything is falling into place nicely. The expectation is therefore that we will be in a position to review the timing of the congress in three-month’s time.

This means that we are working on the assumption that TICCIH will hold its General Assembly in Montreal in September 2021, and that we all therefore need to prepare. In practice, this requires that TICCIH members in every country ensure their membership is up-to-date, and they have a National Representative in place. Many of you will recall that our Statutes require that there must be at least five paid-up TICCIH members, from whom the agreed National Representative can be chosen. National Representatives are important because it is they who, on the advice of their members, have the votes at the General Assembly where the elections are held for the Board and key office bearers, including the President.

For this reason, your General Secretary and I have been writing to National Representatives and contacts across the world inviting them to get organised and to take advantage of the new, much more inclusive subscription system. We are also pointing out that this is the moment when TICCIH members can themselves consider standing for election to the Board. In addition, this is also an opportunity to forge links with national branches of ICOMOS, taking advantage of our partnership agreement and its newly formed Industrial Heritage scientific committee.

One important feature of our congresses is the tradition of sharing National Reports which are written by each of the National Representatives. Based on a common template, these vivid summaries are brought together to create a unique snapshot of the evolution of industrial heritage across the globe since the previous congress three years earlier. At Santiago de Chile in 2018, a session devoted to the National Reports proved so successful that we decided to make them a permanent feature of the Congress and to place them in a plenary session. This will allow best practice in different countries to be showcased to the entire conference, whilst also empowering delegates to discuss shared issues and challenges. For this reason, it is especially important that members and representative start gathering information now so that the National Reports can be with the Bulletin Editor by May 1, 2021.

So, my message to you this Bulletin is that our next Congress will go ahead and it is important that you plan with that in mind. If circumstances change and the congress needs to be delayed, your work will not be in vain. In the meantime, it is important that you start preparing, make sure your TICCIH membership is up-to-date and that your National Representative is in place and the information and consultation to prepare the National Report is underway.

Personally, I can’t wait for the next Congress, but I cannot finish without paying tribute to the outstanding work that is continuing on social media and via virtual conferences. Most recently, it was fantastic being able to join the annual INCUNA/TICCIH España conference, which went ahead in Asturias, Spain, in September in hybrid form. Congratulations are due to everyone who worked so hard to make that possible. I am also greatly looking forward to attending virtually the ERIH Annual Conference which takes place this year in Oberhausen, Germany, in a similar hybrid form. This will be especially important given our intention to sign an ERIH/TICCIH Memorandum of Understanding in the near future.
Corona is a mess. Since too many months now, I feel under constant pressure trying to meet the deadlines of the most minimal things, and never before have I felt the need to apologize so much to so many people around the world for just not coping with it. And I am sure I am not an exception. They say that the time university professors need to invest in teaching has tripled, and in my case I deliberately decided that my students’ intellectual and moral well-being should be my first priority in these most uncertain times. In Valparaíso, we are in complete lockdown now since three or four months, I can’t even remember, and we are teaching online since even before the pandemic - since the social upheavals and the fight for a new Constitution in Chile which started on October 18, 2019. That makes one year, and yet there is no end of online teaching in sight.

In a crisis meeting on mental health issues that we recently held at our institute, one of our students pointed out: ‘We cannot even be sure here in Chile to still be living in a democratic system once we get out of this pandemic’. And despite all that, we try to cope not only with our teaching responsibilities, but also continue our research and publication work, hold administrative meetings, organize outreach activities, do our professional networking, and so on - 99% whilst sitting alone in a room (if we can afford that) and in front of a screen. I deeply share the feeling Lucie Morisset expressed the other week when we tried to fix a meeting on the preparations of the Montreal Congress 2021: ‘I just hope we get out of this as sane as we were before.’ We may not.

And I am talking from a quite privileged situation. I am healthy, still have a job, live in a nice house with a garden, and am permanently accompanied by a cute dog who reminds me every once in a while that taking regular breaks is necessary to de-stress, and springtime has lately started here in the Southern hemisphere. Most of the people in this country and in other parts of the world are in much more difficult situations.

So, despite all the mess, here I am, sitting in front of my screen again finally typing my piece for the imminent TICCIH Bulletin – because I can’t NOT write anything, and there is indeed news I wanted to share with you on how our global network evolves.

A global pandemic definitely not being the most suitable time for an international membership campaign, we however are proud to publish in this new number of our Bulletin the latest version of our poster. It is now also available in French, preparing for the TICCIH Congress 2021 (for more information about Montreal 2021, see Miles Ogletorpe’s contribution on the previous page). The Mandarin and German versions are on a good way and ready to be published soon. And just as I said the last time: if you want to translate the poster into your own language, please let me know.

This Bulletin includes a new testimony on ‘Why join TICCIH?’ this time from our National Correspondent for Egypt, Mirhan Damir, who is also acting as a Coordinator in Northern Africa and the Middle East region, spreading the word about TICCIH amongst her contacts in the Emirates, Jordan, and also Tunisia. We are extremely grateful for her coordinating efforts in this region of the world where TICCIH membership is still scarce, despite the fact that the industrial legacies in those parts are important and merit all our interest.

Another important news announcement of the TICCIH Board is the introduction of a new kind of membership. Ever more aware about the huge difficulties that paying even the most modest membership fees means for people in some parts of the world, we have created the category of Sponsored membership. It is already enabled on our website, and everyone can apply or nominate other people who are doing a great job on industrial heritage but just can’t afford to pay the fees. TICCIH does not want to exclude these people from our network, and we have even created a new option for donations everyone can make who wants to support this inclusive approach. Please get in touch for any doubt you may have on this.

Last but not least, I have been continuing my networking efforts in order to set up a global Communications Team for TICCIH, in which we will include a range of younger people from around the world, one common target being to intensify our presence and networking on social media. Our inaugural meeting is delayed (Corona once again!), but the good news is there is still time to send me a note if you want to get involved from the start (just email me: marion.steiner@pucv.cl or secretary@ticcih.org). Please don’t be shy in doing so – and be assured that this will not mean any abuse of your time. I am very aware that time, and especially spare time, is one of the most important resources. On the other hand I believe that being in touch with dear colleagues and friends around the world is among the few things that best make us cope with all the mess.

Please take good care of yourselves, your beloved ones and friends. I will be back in touch and happy to receive any news and emails of yours.

Yours,

Marion
**TICCIH c'est qui ?**


Depuis le début des années 1980, les experts de TICCIH – par le biais de l'ICOMOS, le Conseil international des monuments et des sites – conseillent l'UNESCO sur les bâtiments industriels, les sites et les paysages à inclure dans la liste du patrimoine mondial.

Avec la tenue en Asie de son congrès de 2012, puis de son congrès de 2018 en Amérique latine, TICCIH s'est mondialisé. La recherche, la conservation et la diffusion du patrimoine industriel se déploient aujourd'hui à toute vitesse dans le monde.

**REJOIGNEZ-NOUS !**

Le Comité est également un solide outil de communication dans un réseau qui compte désormais plus de 60 pays et 500 membres.

Les membres de TICCIH proviennent d'universités, d'organismes publics, d'institutions culturelles, d'associations et d'organisations sans but lucratif, de musées et d'entreprises privées. Ils ont en commun un grand intérêt pour l'histoire de l'industrie et renouvellent ainsi la compréhension traditionnelle du patrimoine culturel.

Les enjeux actuels incluent une réflexion critique sur les interdépendances transnationales, soulèvent les contradictions entre l'industrialisation et la durabilité et interpellent le legs environnemental de l'industrie, y compris les changements climatiques.

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INDUSTRIAL HERITAGE IN THE COVID19 AFTERMATH
FACEBOOK VIDEO CONFERENCE

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The idea of a moment of reflection on the impact on industrial heritage of the pandemic due to the spread of the Corona virus came from the repeated invitations of friends and family to come up with something that would fill the void of the days of complete lockdown, which for Italy lasted, approximately, from March 9 to May 18.

Towards the end of April about twenty experts were invited, mostly on the basis of personal relationships and their real knowledge of the universe of industrial heritage, but coming from different fields of the discipline - academics, professionals, public officials, from associations and private bodies, activists and enthusiasts - as well as different nations of the world. We did not want to give any direction with respect to the contribution to the conference: maximum freedom to express their opinions with respect to the important event in progress. Points of view, therefore, coming from different environments, from different sensitivities and angles, above all from situations in which the effect and the perception of the impact of the virus were, at the time, still not homogeneous (for example, if Italy was in full lockdown, in South America or India, this had not yet happened).

From the point of view of the practical and technical implementation of the event, it was decided on basic tools, simple to use and available for free. A screen recording program was suggested, the production of videos no longer than 15 minutes long, and uploading of these on a YouTube channel in a dedicated playlist with social sharing on a Facebook page specially created for the event. This was to combine the needs of maximum possible dissemination and sharing by the producers of the contributions, and to guarantee the recorded testimony persistence on the web.

The speakers at the conference were Knut Markhus from Norway, Dora Chatzi Rodopoulou from Greece, Viktor Macha from the Czech Republic, Susana Domingues with Alexandra Alves, Barbara Silva Bruno, Rita Salvador and Jose Gameiro in Portugal, Bode Morin for the United States, Adriaan Linters in Belgium, Humberto Morales Moreno for Mexico, Ana Maria Sosa Gonzalez from Uruguay, Anna Karla Almeida in Switzerland, Margaret Hart Robertson from the Canary Islands, Florence Hachez-Leroy in France, Ana Luisa Howard with Cristina Meneguello, Aline de Carvalho and Alice Bemvenuti from Brazil, Miles Og lethorpe in Scotland, Miguel Angel Alvarez Areces in Spain, Linda Pastare in Latvia, Lucia Sanchez Figueroa in Venezuela, Nilson Acosta Reyes for Cuba, Moulshri Joshi from India, Kaie Metsaots for Estonia, and in Russia Evgeniy Pavlovich Mosienko. The closing address of the event, by me, Francesco Antoniol in Italy, will be held in the last part of 2020, also in consideration of the continuous evolution of the pandemic, in partial balance of this event.

As you can see, there is no claim to coverage of the entire globe. However, we believe that the initial idea, of bringing an informal testimony from below, was an interesting formula. The presentations, as expected, were very varied and it is this aspect that made them, in the opinion of the authors, interesting. From reflections on the difficulties of associations that manage tangible assets (which cannot easily or are not even able to open to the public) to more structured museums which manage reduced flows of people by applying anti-Covid rules; from research professionals who find themselves unable to continue their work and who risk unemployment to activists who invent new, lighter and more sustainable ways of visiting and crossing sites that maintain their tourist vocation. The concept and practice of digitization enters our lives in a more insistent and inevitable way. And reflections on the ways, times and opportunities to provide on-demand content, on the mediation that above all these remote assets require, on the renewed need for a great era of description and meta-dating of assets, on the perhaps renewed role of all of us, cultural operators, of reinterpreting the objects of industrial heritage with a view to proposing them through the network, these brief reflections on what the experience of the Facebook conference has been so far.

By renewing the invitation to consult the video testimonials on social media, simply by typing the title of the conference you will be sent to the page. We anticipate that the pdf ebook with the contributions collected so far will be soon out. Despite the fact that we all hope that the pandemic will end in a short time, the page remains active and ready to welcome new suggestions and contributions. In fact, the conference itself was a consequence, we hope positive, of the impact of Covid19 on our discipline; for the first time, in fact, so many testimonies from industrial heritage experts have been uploaded to a social media and the same have been made available free of charge to the public. We are proud to have started a small but significant revolution that will hopefully last. May the cause be exhausted but the positive effects last for a long time!
The conference subtitle ‘Legacies for our future’ signals the importance given to reflection on the current conditions of the railway heritage and the role it could play in the future, as an old and still potential element of urban structuring. The host city Campinas was one of the largest railroad junctions in Brazil at the beginning of the 20th century. TICCIH and the International Railway History Association (IRHA) supported the initiative to discuss preservation issues relevant to Latin American countries: territorial management, education and heritage communication. The meetings are intended to stimulate knowledge in the areas of history, urbanism and railway heritage, in a joint effort of the Railway Memory Research Group of the State University of São Paulo - UNESP and the POSURB-ARQ Research Group, Policies for Preservation and Territorial Management of the Pontifical Catholic University of Campinas, in the state of São Paulo.

Originally scheduled to occur in March 2020, it was delayed because of the COVID-19 pandemic, but isolation measures were maintained and forced the conversion to an online format. Even if this does not allow the same forms of personal interactions as face-to-face, public participation was maintained. Both the conferences and the oral presentations allowed space for debates on current topics.

The conferences were gathered around three current and pertinent issues in the Brazilian and Latin American context. The first of these focused on the relationship between heritage preservation and education, discussing the railroad heritage as an opportunity to stimulate learning through railroad industrial goods, in a current context of great socioeconomic inequalities. At the conference table of this session, Gracia Dorel-Ferré (LLSEti, Paris, France) and Zaída Garcia Valecillo (Universidad Pedagógica Experimental Libertador, Venezuela) highlighted the importance of railway heritage as a privileged field for education. If the permanence of the rails and stations allows the immersion in the knowledge about the history of the city, education can stimulate the debate about the importance of preservation for citizen formation.

The museological institution has a recognized role in the field of heritage preservation. In the session ‘museums and railroads’ participated Martha Patricia Albores Morales (Subdirector of Museology and Museography / Museo Nacional de los Ferrocarriles Mexicanos, Mexico), Juan Manuel Cano Sanchiz, (USTB/ICHHST, China) and Marilia Xavier Cury (MAE/USP, Brazil). It was a great opportunity to contemplate and compare railway or industrial museums in different countries (Mexico, Brazil and China). [Dr Cano Sanchiz will compare the railway heritage approaches in Brazil and China in the following TICCIH Bulletin]

With the theme of management of the railway heritage in the territory we face the debate of heritage preservation by emphasizing the issues of planning and territorial management. These aspects were contemplated by the exhibitors Sebastián Andrés Seisdedos Morales (Pontificia Universidad Católica de Chile) who highlighted historical issues of the mountain railways in the Andes at the beginning of the 20th century; Monica Rossana Ferrari (University of Tucumán & TICCIH-Argentina) emphasized the history and preservation issues of railway heritage in the cultural landscape of Quebrada de Humahuaca (Argentina); and Vera Regina Tângari (PROARQ-FAU/UFRJ, Brazil) exposed the difficult issues of railway heritage management at the interface with urban areas crossed by railway lines.

As a way to extend the discussions proposed in this event, the IV Journey of Young Researchers took place concomitantly, where the scientific results achieved by undergraduate and graduate students on railway history, urban studies and preservation of the railway industrial heritage were presented. It is an annual event, started in 2017 as an academic meeting for the formation of young members of the Railroad Memory research group, and since 2019 it has opened to the wider academic public, with the aim of deepening the debate and stimulating research perspectives as well as the formation of future researchers. The parallel events have sought to encourage reciprocal debate on the hypotheses and methods present in international research and in the ongoing work of young researchers on the subject.

The most debated issues from the papers were directed to relations between the city and the railway (in the past and in the present); questions about heritage education; research methodology, in particular the recording of the materiality of railway assets; the possible interactions between tourism and the memory of the railway (with emphasis on the tourist train).

In summary, the conferences sought to open the discussion on the preservation and management of the railway heritage for the national and also continental scope involved. The general proposal of the event was successful and there was interest in participating in future editions of the same.
This virtual meeting was structured around two sessions, ‘Preservation of mountain railways and tourism strategies’ and ‘Training, research and skilling of personnel in the management of railway heritage’. It was organised and sponsored by the Taiwan Ministry of Culture and co-organised by Heritage Directorate, Railway Board, Ministry of Railways. The event was curated by Taipei Economic and Cultural Center in India and SpaceMatters, Delhi based design consultancy specialising in industrial heritage. Three prominent railway organisations co-hosted and led the discussions, the Preparatory Office of National Railway Museum (Taiwan), National Rail Museum, New Delhi and National Academy of Indian Railways (NAIR), Vadodara. An invited set of observers included officials from the four UNESCO World Heritage sites of Darjeeling, Kalka-Simla, Nilgiris and Chhatrapati Shivaji Terminus. ICOMOS India and the Rail Enthusiasts’ Society (RES), representing experts and enthusiasts of modern, industrial heritage also joined the meeting.

Senior officials from Alishan Mountain Railways and Takao Railway Museum led the discussion and shared their experience in the field of preservation, interpretation and management of their tangible and intangible railway inventory. While Indian Railways, with its UNESCO World Heritage railway routes, remains a model for technical caretaking and management of large-scale heritage, the Taiwanese experience in creating an ecologically oriented tourism model is notable. Executive Director, Indian Railways Vinita Srivastava made special note of the four pillars of an immersive experience that made Alishan a remarkable celebration of railway history. These are eco-tourism centred around biodiversity of the forest, conservation strategies of hill stations that respect and recreate the natural beauty, high quality hotel experience extended through curated walks, farmer’s markets etc., and engaging story telling during the journey.

Both sides presented experience and identified gaps on the subject of eco-tourism and sustainable management of mountain railways. Darjeeling Mountain Railways and Alishan Forest Railways both face risks from natural disasters such as landslides and are keen to address the growing risk to its natural and built heritage in the face of climate change. Session 2 dealt with the question of bridging skill and knowledge gaps facing those involved in the conservation and management of tangible and intangible railway heritage. Director Miao-Hsiu Huang of Alishan Forest Railway and Cultural Heritage Office described a gap in conducting historical research and noted that the same could be an area of cooperation. Prof Dr Kalpana Dube, Head of Faculty at National Academy of Indian Railways, Vadodara recommended a cross cultural knowledge exchange on best practices in preservation. NRM New Delhi urged rail museums to come together on the formulating creative strategies to sustain their audience during the pandemic. Director Ashish Gundal of NRM expressed keen interest in developing creative strategies to engage the sense of sight, sound, smell and touch of the visitors especially children.

Loss of skills and original technologies was a shared concern for both sides. Director Hung from National Railway Museum, Taiwan spoke about Taiwan’s commitment to use original technology to preserve old structures and locomotives. Museum to museum skill development and exchange programs and documentation of best practices were proposed as possible joint-programs.

Several speakers referred to the pandemic and communicated an overall sense that heritage conservation needs to place people – workers, their families, volunteers, visitors – at its centre. As a co-curator, this was in line with my overall ambition with this meeting. If people – with all their different aspirations and abilities – are the driving force of heritage conservation then our effort as practitioners need to be directed towards building cooperation. Technological excellence needs to be developed and supported within an empathetic and inventive space. This is the essence of Sustainable Development Goal 17 ‘Partnership for the Goals’ which states ‘Global Goals can only be met if we work together’. The virtual forum was an example of this Global Goal in action.

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Massimo Preite

For the topics covered, this book is able to satisfy a wide variety of interests. First of all, the work testifies to the growing attention to the events of industrial heritage in areas and countries where the processes of first colonization and then decolonization have followed industrialization trajectories that differ from those of the Western world. It is a huge issue, which has not yet found its proper treatment, which was only partially addressed at the 2012 TICCIH congress in Taiwan (Post-colonialism and Reinterpretation of the Industrial Heritage) and which predictably will be re-thematized with greater commitment in the next TICCIH congress in Montreal in 2021.

As a further confirmation of the centrality of this issue in the coming years, one cannot fail to note the increased number of industrial heritage UNESCO World Heritage List inscriptions concerning non-Western (Japan) or post-colonial countries (Indonesia, Bolivia, Chile, Uruguay). The enhancement of non-European industrial heritage is therefore one of the emerging themes of the next years and the Chinese experience is certainly among those that will rise to the fore as a benchmark.

Two words about how the book was born: it is the result of a four-year research program funded by Sapienza University of Rome and coordinated by Edoardo Currà who, together with his team of researchers, carried out multiple study missions to Shanghai and organized study seminars at Sapienza University and at Tongji University.

The resulting publication, while referring only to the city of Shanghai, represents in our opinion an effective demonstration of how, through a coordinated use of the tools of regulatory protection, urban planning and architectural design, it has been possible to complete a significant number of interventions for the reuse of industrial heritage, which have all the prerogatives to propose themselves as general reference models. The succession of contributions that make up the work allows you to retrace all the stages of this exemplary process in sequence. The two initial essays by Edoardo Currà reconstruct with extreme clarity the historical events that led the city to assume the role of crucial gateway for western penetration of the Celestial Empire by virtue of its particular geographical position: unlike Canton or Macao, commercial ports isolated by mountain ranges from the rest of the Empire, Shanghai developed at the end of the Yangtze, a river which, although practically unexplored by foreigners, was known to penetrate to the heart of the nation (S. Winchester, 1996). In view of the exploitation of this positional advantage of great strategic value, the United Kingdom first (1843) and shortly after the United States and France (1844) entered into agreements for the establishment of particular ‘concessions’ that allowed them, in a regime of absolute extraterritoriality with respect to any form of Chinese jurisdiction, to develop their business and commercial activities in total autonomy. Thus began a phase of great economic and urban dynamism for Shanghai, even if, as Currà notes, a true industrial apparatus only reached its full development in the early decades of the 1900s. During the regime of ‘concessions’, economic modernization interventions were limited to the execution of those services and infrastructures (water works, gas lighting, telegraph and telephony, electricity generation, urban transport, etc.) that are the result of industrial civilization and that qualify as ‘industrial cities’ even those places without a strong production base.

The industrial profile of the city was established in particular after the First World War, with the decline of the old colonial powers and with the impetus that the textile industry gained from the development of the internal market: the six industrial cotton mills of 1898 thus became 58 by 1925. This impetuous was tragically interrupted...
in 1931 with the invasion of Manchuria by Japan and the confiscation of the factories. After the Second World War a period of industrialization policies began pursued by the People’s Republic of China from 1949 which, perhaps due to a lack of available documentation or difficult access to archival sources, did not find an exhaustive description in the book. The quick hints at the total collectivization of production and the experience of the ‘community factories’ in Shanghai elude the radical and dramatic economic experiments of those years.

However, Curà’s exposition takes up a more precise narrative with the events following the industrial relocation of the 1980s, when ‘a large number of industrial companies moved out of the urban center’ of Shanghai. It might seem a well-known story which realigns the events of the Chinese city to those of many Western cities experienced in those years. But it is precisely to warn us of the risk of incurring this misleading comparison that the author draws our attention to the original aspects of the experience of industrial recovery in China (and in Shanghai in this case) compared to the paths more familiar to us.

First of all, ‘with respect to European events, in Shanghai the de-commissioning and deindustrialisation of the historic city take place simultaneously with the continuation of an important and lasting industrialization’. In Europe and in the West more generally, industrial heritage emerged against the tide with respect to the economy that repositioned itself away from material production sectors to those of services and the intangible; industrial heritage was therefore born in contrast to the decline, and in some cases disappearance, of industry as we have known it, and which played so much part in the material organization of the framework our lives. The debt that recent and current generations have incurred both for good (habits, consumption, lifestyles) and for evil (extraction of natural resources, environmental deterioration, pollution), is immense, and the looming risk of the cancellation of material of traces of past industry would deprive us of one of the most explanatory and symbolic testimonies of our civilization. Hence the obligations that we assign to the conservation of industrial heritage in a society that seems doomed to deindustrialization.

On the other hand, in countries such as China, where industrial de-commissioning ‘is not associated with phenomena of decrease in production’, factories and plants no longer in use end up on the margins of an industrial process that does not need ‘heritage’ to be remembered as it never stopped, is always in existence, and nothing seems to stand in its relentless push forward.

From this concurrence between heritage and industrial development, some consequences emerged which were carefully examined in the work carried out by the Curà’s team. First of all is the need to prevent at least the most representative industrial heritage from being overwhelmed by the tumultuous dynamics of Chinese industry. Several contributions in the book mention the regulatory measures to protect the modern architectural heritage adopted by Shanghai. As Curà and Paolini pointed out, the first of these dates back to 1988 when the Ministry of Construction and the Ministry of Culture issued the Notice to the Intensive Survey and Conservation Heritage Building of Post-opium war China under which the College of Architecture proceeded to identify 30 representative buildings to be protected. Subsequently, further provisions were adopted expressly aimed at the preservation of industrial heritage. With the Regulations of Shanghai Municipality of 1 January 2003 Shanghai became ‘one of the first cities to have addressed, in Chinese territory, the problem relating to the protection of disused industrial sites’ and only three years later, in 2006, the first constitutional document for the protection of industrial heritage was promulgated (Notice on strengthening the protection of industrial heritage). In accordance with these provisions, the Shanghai Administration for Cultural Heritage prepared an accurate census which ended with the publication in 2009 of a catalogue of as many as 290 industrial assets. The importance of this initiative cannot escape readers who pay attention to the very valuable maps showing a wide selection of the assets in question.

A second consequence of an industrial heritage that is established in parallel with a sustained process of industrialization rather than at the end is a lesser cogency of the ‘memory obligations’ to be assigned. The converted industrial buildings in Shanghai are not entitled to the celebration of any industrial past, as the industry is still booming and, to a large extent, the new destinations assigned to the former industrial buildings seem to fully share, with the industrial activities in place, the same impetus and the same anxiety to project towards the future, through the creation of art districts, creative districts and other innovative models of heritage park.

Some contributions in the volume are expressly dedicated to an accurate study of how the conversion of industrial heritage to new destinations in the fields of creativity and innovation took place. In the contribution of Marina Pugaletto and Alessandra Russo, the phases of the progressive recovery of the Mogashan Lu (former Shantex Holding Corporation textile complex) were retraced: preceded by a master plan (2005) which redesigned the system of external spaces and connections between the various warehouses, a transformation / restructuring of the disused industrial buildings was initiated which, although in some cases resulting in ‘a loss of their original identity’, in others it led to significant redevelopment interventions in which happy marriages were made between the insertion of new structures and conservation of the original ‘built’. Edoardo Curà’s contribution on the Huafeng Cotton Mill in Baoshan, on the other hand, offers a magnificent example of structural and architectural analysis of one of the most important remaining textile factories from the 1920s that coincide with the most intense development phase in Shanghai. Finally, in Cesira Paolini’s contribution, another monument of Shanghai’s industrialization was examined, the Old Millfun, whose construction, started in 1921, was inspired by the multi-storey slaughterhouse in Toronto. The result was a stately plant that clearly stands out from the usual types of slaughterhouse, consisting of a system of low buildings separated from each other to avoid interference. The imposing reinforced concrete structure, articulated on several levels, ‘constitutes an evocative environment, crossed by ramps, stairs and walkways’ in which the multiplication of internal views generates ‘an image incredibly similar to Escher’s drawings’.

The common sign of these cases of reuse is adaptation to creative activities: the labyrinth of industrial buildings of Mogashan Lu has
been converted into the new M50 Art District, the Baoshan cotton mill has become one of the hubs of the Creative Park Bund 1919, the Slaughterhouse has been transformed into an Art Center to hold exhibitions, conferences, theater and museum activities. All these experiences are placed on a common frontier where projects and programs to support the dynamism and attraction of contemporary megalopolises are tested through the enhancement of creative activities: similar experiences are known that have already been underway for years in the main world cities; the literature on the subject is endless.

Some critical issues highlighted by Currà seem all the more meritorious to us with regard to the outcomes of these transformation interventions: first of all a certain inability to narrate the role that the former plants have played in the industrial process, then the lack, in some cases, of ‘unitary projects of public space and greenery’ capable of mending the former industrial fabric torn by its decommissioning, and finally their being the result of ‘basically open projects’ during which the survival of industrial sites is jeopardized by the surge of the value of the land. However, these criticalities do not take anything away from the innovative value of the experiences illustrated.

Finally, the last lesson that can be drawn from the experiences of recovery of the industrial heritage in Shanghai is the tendency to overcome a logic of case-by-case interventions in favor of an overall vision that seeks to affirm itself through planning acts extended to ever larger areas.

The contribution of Antonio Cappuccitti offers an effective demonstration in this sense: within the polycentric framework of the Shanghai Master Plan (1999-2020), planning projects have been developed over the years on various urban river areas with the objectives of environmental and functional regeneration, reconversion of production areas and ‘beautification’: the Suzhou Creek Rehabilitation Project (1998) which includes the M50 area, the Huangpu River Waterfront Urban Regeneration Plan including the Expo area and relevant ex-production areas (2001) and the Master Plan for Xuhui Water Front Area (2011) within which the West Bund Biennial for Contemporary Art and Architecture found its place in 2013.

Finally, it remains to mention the essay by Conghui Zhou for an examination of the Landscaping Strategies on three particular sites: the Memorizing Chimney in Xujiahui Park which can hardly be considered as ‘a good exploration on the preservation and renovation of the industrial site’ since ‘the low proportions of former elements to be reserved and the lost of the heritage identity’; the Houtan Park where the Author finds that ‘the biggest concern for water and ecological issue’ has perhaps gone to the detriment of the modest ‘amount of industrial elements preserved’, and the Shanghai Steel Sculpture Park where ‘in order to maintain the historic context of the site, a large portion of the abandoned industrial buildings... have been kept and renovated to integrate into the landscape’ by reusing ‘a large quantity of industry wastes in the landscape design’.

In conclusion, Edoardo Currà and his team of researchers have produced a work that, due to its interdisciplinary nature, is aimed at the greatest variety of experts in conservation and enhancement of former industrial sites and factories and which, due to the richness of its contents, can offer strong stimuli to the reformulation of the principles and doctrine which inspired the vast sector of the industrial heritage.

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