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General view of Rijeka, Croatia, where structures associated with a variety of past industries have been adapted for use as museums and other cultural purposes. See page 19.

### MESSAGE FROM YOUR PRESIDENT

#### ENTERING A NEW ERA

*Miles Oglethorpe, TICCIH President*

There is no doubt that we are living in a period of accelerating change, and just to add to the sense of prevailing uncertainty, I am in the process of retiring from my job after 39 years of service at Historic Scotland. Those of you who know me will be aware that I have been planning this for a while, but that does not diminish the extent of the challenge, which is to leave as positive a legacy as possible and try to ensure that I depart with everything in good order. To give you an idea of the scale of the job, this recently involved the transfer of 39 boxes of industrial heritage literature into our library and national collection – one for every year of service! Of course, this doesn't include digital records, which is another headache!

For me personally, it is something of an emotional rollercoaster, with the added challenge of trying to ensure industrial heritage lives on in the organisation after I have left. In this respect, we are lucky to have my deputy and UK TICCIH National Representative, Mark Watson, still in post, and there are a surprising number of other colleagues who engage in industrial heritage-related activities across the organisation.

So, my ambition for the future includes the intention to devote more time to working on TICCIH business, and to catch up on some of the tasks I have been neglecting. Readers of the Bulletin will be familiar with the new workstreams (or ‘Commissions’) that have been championed by our Secretary General, their collective aim being to transform TICCIH into a more effective, truly global heritage organisation. From now on, these are going to provide a clear focus for my efforts, and of course, for other members of the Board.

There has, in fact, been some excellent progress since our Montreal congress back in September 2022. However, much work still needs to be done, not least because we want to complete most of it by TICCIH 2025 in Kiruna, where we will share our progress and seek feedback and approval at the General Assembly.

So, with this in mind, my first task will be to assist with Commission 1, which is to update TICCIH’s *Statutes*. They are no longer fit for purpose, and major priorities are to update our voting system, review the role of National Committees, consider the status of regional groupings, and formally define positions on the Board such as Secretary General, Treasurer and Vice President. We have already started this process and will step up our efforts in the coming months.

Our second Commission relates to the update of the **Nizhny Tagil Charter**, which is now over 20 years old and requires review. This is, therefore, a good moment for a critical revision which identifies its strong points and focuses on addressing its weaknesses. Some of you will already have been involved in fruitful discussions such as at INCUNA and Lota last year and have long since recognised the need for a reinterpretation of industrial heritage from a Southern perspective (as explored in the Montreal congress) and the importance of tackling some of the more difficult facets of our heritage.

Commission 3 seeks to explore issues and opportunities relating to **Education and Mentoring**. We urgently need to gain an over-



Miles Oglethorpe's 'legacy' on retirement from his job at Historic Environment Scotland (photo by author)

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

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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 organises 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](http://www.ticcih.org)

The **TICCIH Bulletin** is the only international newsletter dedicated to the worldwide conservation of the heritage of industrialisation, and is sent direct to members four times a year. The Editor welcomes all news, critical comment and articles related to our field. Everything published in the Bulletin can be accessed in a searchable [Articles Index](#) on the TICCIH web page.

Back issues can be downloaded as a pdf file from the TICCIH web site, [www.ticcih.org](http://www.ticcih.org)

view of Industrial Heritage education activities worldwide and start considering ways to support the development of scholarships, bursaries, internships and various degrees and online courses. Priorities include capacity building and supporting existing courses that are under threat. We are also assessing the potential to routinely include education activity in each country's National Reports.

**Curation and Conservation** issues are covered by Commission 4 and are a core interest for a lot of TICCIH members. They have also become an urgent priority in some countries. We have only just started on this workstream, but are aware of its importance. There is significant potential for collaboration with sister organisations such as ICOHTEC, ICOMOS, ICOM and BigStuff, and there are pressing issues such as the replenishment of skills in museums and interaction with communities. In addition, working with partner organisations such as FIVA, FEDECRAIL and Europa Nostra is taking on an extra edge in relation to the long-term supply of fossil fuels for working and mobile heritage.

One of the most important priorities facing TICCIH is Commission 5, which is tackling **Fundraising and Finance**. We need to work towards achieving a more resilient, sustainable business model, so we are working to support our new Treasurer by exploring new opportunities. A major priority is to maximise our subscription revenue. For this reason, we are merging this activity with Commission 7, which focuses on **Membership**. We are therefore investigating new and alternative ways of generating more income and will welcome fresh ideas from Bulletin readers and our wider networks.

Perhaps our most active workstream has been Commission 6, which covers **Communications**. I am hugely grateful to everyone (including our new editor and non-Board members) for their continuing contributions to the work of this group, which is cross-cut-

ting work, interacting with all the other Commissions. In addition to including this Bulletin and our website, we have begun harnessing the power of social media, not least via Facebook, Instagram, X and LinkedIn, and we are working on establishing a YouTube channel.

Commission 8 relates to **Publications** and has not yet formally commenced work. However, when it does, we anticipate it providing more structured support for our editor and a means of coordinating work on new publication projects, which will include future thematic studies, and we hope a reworking of Industrial Heritage Re-tooled book, in tandem with Commission 2's revision of the Nizhny Tagil Charter.

Last but by no means least, we have named Commission 9, 'TICCIH in Português,' which is promoting communication and activities in Spanish and Portuguese. This has been very active, and two 'Taller Online de MapaPI' meetings have already been held, the first occurring last October, shortly before the TICCIH Latin America congress in Monterrey, Mexico. Following a successful session at that congress, a second meeting was held in March 2024, with over 50 participants from across the world. It reported on and showcased the hugely impressive collaborative online mapping of industrial heritage sites across Latin America and the Caribbean. So far, over 500 sites have been recorded, and 150 people are working together, having lots of positive, exciting discussions. An editorial committee is being established with four new members were introduced at the meeting. See the [MapaPI page](#) for more information.

So, there has been lots happening within TICCIH in recent months, but there is so much more to be done. Once I have recovered from my change of circumstances and have more time at my disposal, I will be devoting more of my time and energy to TICCIH. One of my top priorities is to boost our membership, so if any readers of this Bulletin are not yet members, **please join the TICCIH family!**



*Recruit a new*  
**TICCIH MEMBER TODAY!**

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## EGYPT

## DOCUMENTING INDUSTRIAL LEGACIES IN EGYPT THROUGH THE VANTAGE POINT OF 'SHARING HERITAGE'

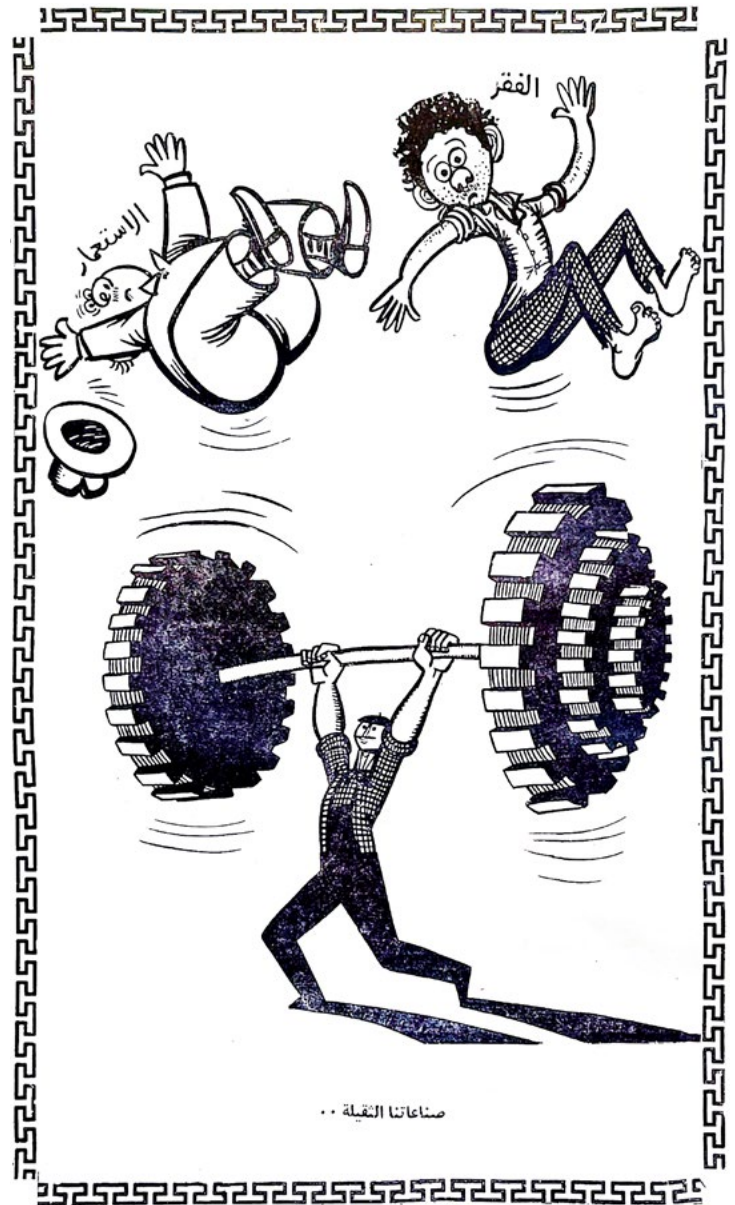
Mirhan Damir (Alexandria University/TICCIH Board), Pakinam Zeid (Alexandria University) & Heike Oevermann (TU Wien/ TICCIH)

In recent years, there has been an increasing effort to de-westernize the development narrative of modern industrial history, which predominantly focused on the so-called Global North. This narrative omitted those in the so-called Global South who were de facto directly connected to the outset of the 18th-century Industrial Revolution and, thus, the contested global industrial history. Egypt was one of those countries that contributed highly to the development of the modern industrial history. Regarding Egypt's modern industrial history, which started during the early 19th century, most of the publications focused on its history's socio-political and socio-economic aspects. Architectural and urban documentation attempts to document the industrial heritage in Egypt in relation to the global industrial industry have only appeared in the past decade.

One of these recent attempts was the 2020 MHFL research project, "Modern Heritage to Future Legacy: Conservation and Conversion of Modern Industrial Heritage Sites as an Integral Part of Urban Development in the Middle East: The Case of Iran and Egypt." Technische Universität Berlin, Humboldt Universität Berlin and Tarbiat Modares University (Teheran) conducted the research. The Berlin University Alliance provided seed funding under the excellence strategy of the German Government and the German States.

The multicultural researchers involved aimed at awareness-building on the significance of the modern industrial heritage sites by over-viewing the development of the modern industrial heritage in each country, highlighting its global relations that impacted the development of industrial structures, through shedding light on selected examples that epitomize the 'sharing heritage' concept. One of the project's contributions was the publication of two booklets on industrial heritage in Egypt and Iran. The booklets brought the project to an end and were published on the TICCIH website. They aimed at awareness-building by over-viewing the modern industrial history in both countries and thus contributing to the invitation of a 'sharing heritage' discourse by reviewing the global industrial history and its present prospects.

The MHFL booklet of Egypt encompasses a preliminary inventory map of 56 industrial sites constructed between the early 19th and mid-20th centuries. Six case studies were selected, each representing a regional area historically signified by a predominant industrial sector. Each case study also represented different time phases, exemplifying different multidimensional trajectory paradigms through-

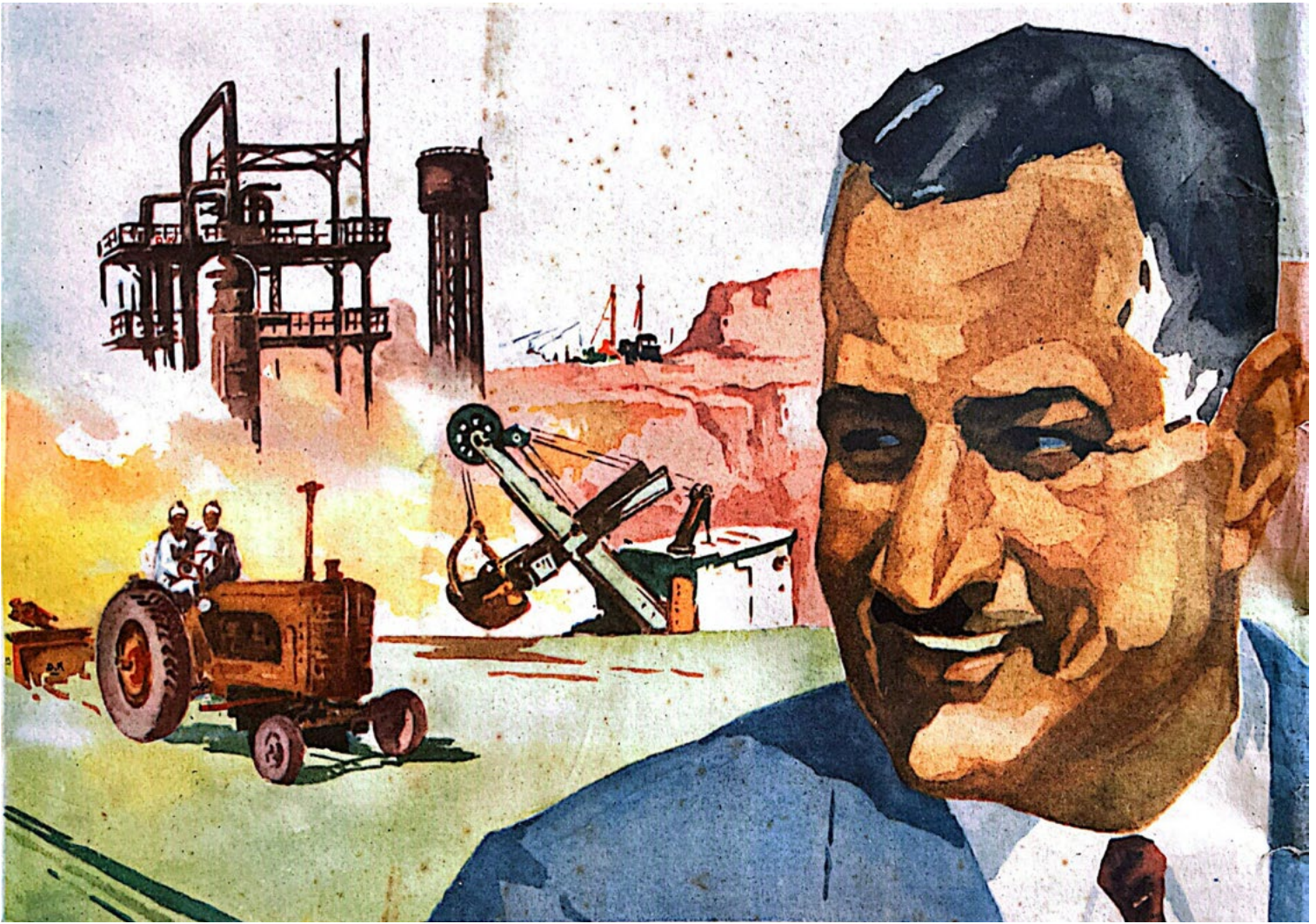


Advertisement propagating Nasser's industrialization project as salvation from poverty and colonialism (© MuseTech, Rose El-Youssef Magazine, July 1965)

out Egypt's modern industrial history. Thus, the booklet brought the project to a figurative end. The MHFL booklet of Egypt was an invitation to pursue research on modern industrial history in Egypt and its 'glocal' linkages.

A continuation of the MHFL project's contribution to the nascent field of research on modern industrial heritage in Egypt is impending. The MHFL research team shed light on interdependencies and narratives between the so-called Global North and the Global South. In documenting 'sharing heritage,' the research indirectly brings forward topics such as uncomfortable, dark, and dissonant heritage; wherefore lies overcoming of a eurocentric debate and valuation processes governed by nuances of what constitutes 'authenticity' and heeding of socio-political conditions and ideologies. Heike Oevermann and Mirhan Damir,





Magazine cover depicting Nasser's portrait and his industrialization prospects (© MuseTech, Rose El-Youssef Magazine, March 1965)

who were part of the MHFL project team, together with Pakinam Zeid, are presently working on commencing a new research project on modern industrial heritage, focusing on the context of postcolonial Egypt, namely Nasserist Egypt (1954-1970). The research proposal endeavors to document and inventory the industrial legacy and heritage of the era – tangible and intangible – and their enduring impact. Through sizeable interventions by German and Austrian entities, among others, mega industrial projects were made possible in President Gamal Abdel Nasser's reign, for example, Aswan's Dam, Helwan's Iron and Steel factory and a military armaments program. Accounts on the latter are widely reviewed in German and Austrian articles and magazines to have aggravated political affairs with Israel.

Surge of Industrialization in Nasser's Egypt, deemed an essentially social experiment/development at heart – significantly molding the society fabric and the laborers' sense of empowerment – reveals how the Nasserist industrialization project succeeded, albeit partially, in development. The nasserite industrialization policy is claimed by local scholarship to be the "last serious attempt made by an Egyptian or a post-colonial Egyptian government against imperialism while promoting self-sufficiency"; a 'red-herring' for many countries. The 'attempt' failed, however, in sustaining the goals of decolonization and sovereignty. In documenting this paradigm, we see eminently essential values and local knowledge, anchoring people to their heritage or what is more explicitly subsumed in German literature as industrial cul-

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ture 'Industriekultur.' Industrial culture being undervalued and thus facing critical challenges in Egypt compromises the overall integrity of the 'glocal' industrial narrative.

The research project's discourse should attend to 'sharing heritage' being documented and plotted on a bigger scale, emanating an 'atlas of sharing heritage,' so to speak, from the vantage point of the MENA region, which remains scientifically unexplored. Dissonant heritage and narratives being redefined/paraphrased in Nasserist Egypt in an attempt to understand 'transnational' perspectives and valuation processes mandate a tolerant/responsible attitude towards differing methodologies and ideologies ascribing meanings of 'heritage' and 'belonging' in the local context. The growing relevance of contemporary societies' claim to heritage development in Egypt, as well as the term and practice of 'co-production of knowledge' in the international community at large, predicts the research project's appeal to the growing base of Egyptian community-based and/or community-led initiatives prioritizing local crafts and know-how as well as the inclusion of locals in management of heritage. The continuation of this act of preserving local tradition and values is inextricable from industrial culture and legacy.

The proposed research project will be a cornerstone of modern industrial heritage sites in Egypt, especially during a recent phase in Egyptian history that is understudied in global industrial history. It will also recognize intricacies relating to industrial heritage recognition as a local and national asset in Egypt and its transboundary linkages.



Painting of Egyptian workman taking the forefront of Egypt's industrialization during the Nasser Regime (© MuseTech, Rose El-Youssef Magazine, March 1965)





Tile panel of de Fábrica de Produtos Pomba (photo by author)

## PORTUGAL

### AZULEJO FACADES AND INDUSTRIAL HERITAGE

*Paulo Oliveira Ramos, Art History Institute, NOVA FCSH/IIN2PAST*

For centuries, tiles (*azulejos* in Portuguese) have mostly been used to decorate the facades and the interiors of historic palaces, churches and monasteries in Portugal. Only in the last hundred years have tiles begun to adorn the fronts of shops and factories. This new use of tiles seemed to fall into two main groups:

1) Panels displaying allegorical industrial motifs. An example is the one painted for a shop in the northern city of Aveiro by António



Tile panel of de Fábrica de Balanças Romão & Comp.<sup>a</sup> (photo by author)

Augusto G. da Silva in 1927. At the heart of the panel, between the two mythological images representing Commerce and Industry, one can discern gears against the backdrop of factories and chimneys, with a centrifugal governor, a symbol of the steam age, occupying the left-hand side of the panel.

2) The second group concerns several store buildings with tiled facades whose motifs advertise the commodities produced and/or sold on the premises. I argue that this second group of tiled facades offers a rich resource for learning about Portugal's industrial heritage. I have chosen three examples, particularly from the Lisbon region.

The facade of *Fábrica de Balanças Romão & Comp.<sup>a</sup>* (Romão & Co. Weighing scales Factory), the work of painter Reis at *Fábrica Roseira* (Roseira Factory) in 1918, is unique due to the amount of information it contains. Flanking the entrance door, a large panel painted in





House of Screws' facade (photo by author)

a dense blue that contrasts with the lighter tone of the background, one finds an anvil, a hammer, a clip tong, and above all, the master blacksmith with a young apprentice near the forge.

On the front of the former *Fábrica de Produtos Pomba* (Factory of Pomba Products), there is a pair of polychrome medallions influenced by Art Nouveau, the work of António Luís de Jesus. One of the medallions portrays the interior of the factory premises, the most relevant aspect being the representation of the energy source: a schematic motor and its attendant transmission system, in which the axles, sprockets, and belts are visible.

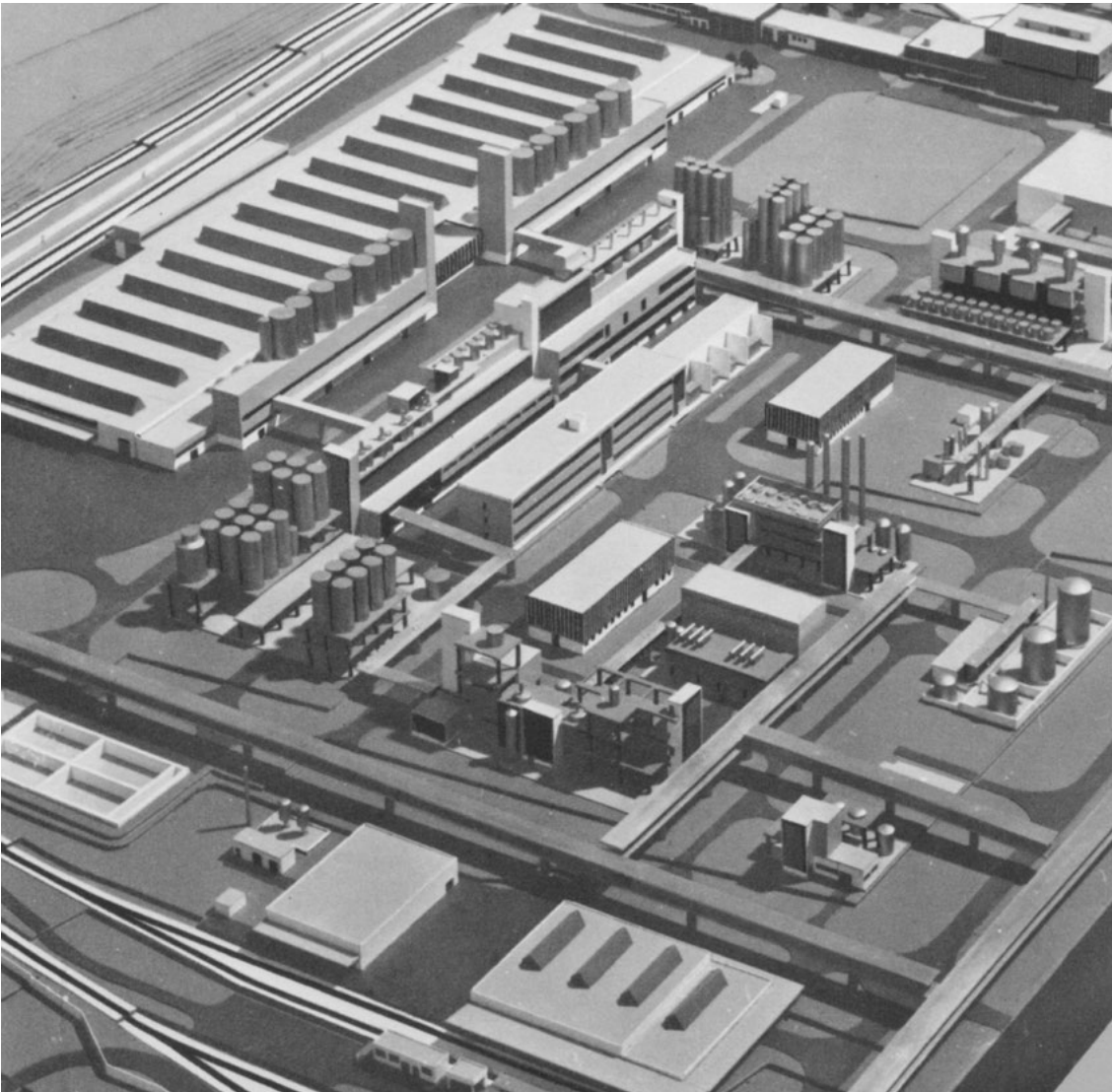
*Casa dos Parafusos* (House of Screws) arguably presents the most “imaginative composition for the facade of a commercial establishment” (R. S. Calado) extant in Lisbon. The pieces that make up the letters in the word “*parafusos*” (“screws”) not only immediately identify the branch of production of the factory at stake, but they also stand out as a most peculiar catalogue that any museum of industry would love to display to its visitors.

The remaining tile panels of this second type ought to be preserved, studied, and shown to the public in their original places so they do not end up in museum storage rooms or get sold by fractions at a flea market.



Tile panel by António Augusto G. da Silva in Aveiro (photo by author)





Model of the petrochemical plant in Litvínov – polyethylene and polypropylene production unit (1970)

## CZECHIA

### A NEW PROJECT OF THE RESEARCH CENTRE FOR INDUSTRIAL HERITAGE AT THE FACULTY OF ARCHITECTURE OF THE CZECH TECHNICAL UNIVERSITY IN PRAGUE

*Jan Zikmund, Research Centre for Industrial Heritage FA CTU Prague*

On March 1st, 2023, the Research Centre for Industrial Heritage at the Faculty of Architecture of the Czech Technical University in Prague began work on a five-year research project supported under the National and Cultural Identity (NAKI III) Research and Development programme of the Ministry of Culture of the Czech

Republic: 'Industrial Architecture of the Second Half of the 20th Century: Extension, Transformation, and Identity'.

The general objective of this project is to enhance a specific national and cultural identity by understanding, interpreting, and highlighting the cultural significance and possibilities for the sustainable preservation of what is currently one of the most at-risk categories of built heritage – the architecture of the second half of the 20th century, a category of structures that are still overlooked and undervalued among the broad spectrum of topics in industrial heritage.

The concept of industrial heritage needs to be expanded beyond how it is currently (traditionally) seen, understood and analysed. The specific aim of this project is, therefore, to advance knowledge in two thematic and methodological directions. First, it expands the temporal understanding by focusing

on the cultural segment of industrial architecture from the second half of the 20th century. Where necessary, it extends its focus back into the interwar period and forward into the transformational 1990s. In a parallel line of inquiry, it explores the attendant social phenomena of the observed period, which led to a need and a search for new interpretative approaches to industrial heritage and to the emergence of systematic efforts to protect it.

The selected topic, its focus, and its planned practical applications and publication outcomes have been chosen to ensure that the results can be directly applied in the areas of work of professional and educational organisations, public administration, local and regional government, private subjects, research institutions, the professional community, and the general public.

**Find out more** on work on the project and its outcomes.



Machine nº 1 in operation in the Fábrica de papel da Abelheira (Graham&C<sup>a</sup>) around 1950 (APAI Photographic Archive, photo nº 61)

## PORTUGAL

### WHERE TO NEXT? BIG MACHINERY'S NEW LIFE AFTER THE FACTORY

*Leonor Medeiros (CHAM, NOVA FCSH, APAI) & Conceição Serôdio (CML, APAI)*

The Abelheira Paper Factory, located in São Julião do Tojal, within the municipality of Loures, stands as an institution with a century-long history in paper manufacturing in Portugal. Its origins can be traced back to the use of one of the water mills of the Trancão River by the São Vicente Monastery at Quinta da Abelheira, marking the beginning of artisanal paper production. Following the dissolution of the religious orders in 1834, the estate

was acquired by João Gualberto de Oliveira, who established the future Abelheira Paper Factory between 1836 and 1839, outfitting it with a steam engine and the first continuous system paper machine in Portugal. One of his later heirs, Astley Campbell, son of William Smith, purchased the 1873 paper machine we put under focus on this article, which replaced the original number 1 machine and stayed in use until 2016.

In 1899, the factory was acquired by the Scottish firm William Graham Junior & Co., initiating a period of enhancements and diversification in paper production with the acquisition of a new machine, number 3, for sophisticated YK wrapping papers. In 1964, the factory changed its name to Graham – Abelheira Paper Industry, although the Graham management concluded. The factory was declared bankrupt in 1973, yet it reopened later that year under new





Current image of machine nº 1, inside the factory, 2024 (photo by FAPAJAL)

management and was renamed Fábrica de Papel do Tojal – FAPA-JAL. After the Portuguese Carnation Revolution, the factory was nationalized and managed by Portucel from 1976 to 1999 before becoming privatized again from 2000 onwards, focusing on tissue paper production.

Technological evolution in paper production was a constant for this industrial unit. Initially, the production was artisanal, harnessing the power of the Trancão River as an energy source for the mill. João Gualberto de Oliveira's acquisition marked the beginning of the factory's modernization, introducing energy production via a steam engine and two continuous system machines for the production of writing and printing paper.

From 1899 onwards, under the stewardship of William Graham Junior & Co., the factory experienced a period of significant innovations and improvements. New methods and equipment were introduced, aiming to continuously enhance the quality and diversity of papers produced. As such, the factory was equipped with two Fourdrinier paper-making machines from the 19th century, a Yanque type (1905) and another Fourdrinier from 1953, along with other vital equipment for modernizing the paper production processes.

The first paper-making machine from 1873 was designated number 1 and has survived to the present day, though its future is now uncertain. The Fourdrinier-type machine operated between 1873 and 2016. It measures six meters in width, thirty meters in length, and five meters high and has an estimated weight of about a hundred tons. The marks on its wheels trace back to the company "Mason Scott & Co. Ltd."

Noteworthy is also the involvement and context of machine number 1, particularly the wooden truss roofing that still survives in this factory location, a type of structure increasingly rare as the rehabilitation of buildings continues to dispose of these roofs.

In 1939, the factory acquired a new Babcock & Wilcox boiler, marking a significant advancement in production efficiency. This boiler, along with others already in place, enabled greater power and was crucial for installing a turbogenerator that improved the factory's energy efficiency.

Another critical technological milestone was the acquisition of machine number 4 in 1953, a Fourdrinier-type paper-making machine purchased from Bertrams Ltd., allowing for a significantly increased hourly production, ranging between 700 to 1,300 kilograms, depending on the quality of the paper produced. This machine produced a wide variety of multi-ply bags and other paper products, but it is no longer in the factory.

With reprivatization and management by FAPAJAL since the year 2000, the factory continued to innovate, investing in modern equipment for tissue paper production and improvements to production processes, including the installation of an Industrial Wastewater Treatment Station (ETARI), a thermal power plant, and a new natural gas-fired boiler.

The factory's centenary machine, nº 1 – Fourdrinier, which has been producing writing and printing paper since 1873, was refurbished to produce smooth papers for manufacturing tablecloths and hand towels but was deactivated in recent years. Today, the growth and



Example of a watermark roll of the type "Bond Malaposta," 2020 (photo by Leonor Medeiros)

technological update of the factory lead to discussions about the future of this machine, studying best practices for its preservation and valorization.

In 2021, a partnership began between the Municipality of Loures (CML), the New University of Lisbon (NOVA FCSH), and the Portuguese Association for Industrial Archaeology (APAI) to start surveying and registering the factory's oldest structures, including the survey of three energy production areas. Archaeology undergraduates contributed to this work, including prospecting on the estate lands and collecting historical plans.

The research team also intervened in 2022 in the recording and safeguarding of watermark rolls ("filigree rolls"), inventorying and photographing a set of more than two dozen different watermarks, an essential part of the story of this machine and the products it produced.

FAPA JAL, the current owner of this factory, heir to an industry operating in this territory since the 18th century, together with the Municipality of Loures, NOVA FCSH, and APAI, are seeking solutions for the future, and all suggestions are welcome.

Please send us examples or suggestions to help us safeguard century Machine n° 1 with the utmost respect for its context and history while simultaneously allowing this century-old industry to continue updating and modernizing. This is a challenge, after all, so current in much of our industrial heritage! You can reach us at [leonormedeiros@fcs.unl.pt](mailto:leonormedeiros@fcs.unl.pt) or [conceicao\\_serodio@cm-loures.pt](mailto:conceicao_serodio@cm-loures.pt).

[Watch a video about the factory.](#)

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View from the top of Wanda mine  
(photo by author)

## POLAND

### INDUSTRIAL HERITAGE AS AN URBAN CONNECTOR. EXAMPLE OF POKÓJ COAL MINE IN RUDA ŚLĄSKA

*Sandra Pichlak-Czop, Silesian University of Technology PhD Student & Inspector In Office of the Municipal Monument Conservator in Ruda Śląska*

The Pokój coal mine, situated in the central district of Ruda Śląska, Upper Silesia, Poland, currently represents a post-industrial landscape undergoing the intricate process of infrastructure decommissioning. This locale, nestled between the Wirek and Nowy Bytom districts, once delineated separate city districts, each bearing distinct cultural traditions and structural characteristics evident in the city's urban tissue. Connectivity between these districts primarily relies on verdant expanses and railway networks. However, undeveloped brownfields and railway tracts pose a formidable challenge for municipal authorities, necessitating prompt intervention and resource-intensive revitalization efforts.

The Pokój coal mine comprises two delineated sections - the Wanda and Lech segments, flanking either side of Niedurne-

go Street. Both sections enjoy partial conservation protection, both spatially and individually, safeguarding select architectural assets. The ongoing decommissioning initiatives, particularly in the Wanda section since 2018, have entailed dismantling surplus infrastructure, retaining only structures of paramount architectural and scientific significance for potential redevelopment. The site, spanning a rectangular footprint of approximately 400 by 800 meters, is demarcated by elevated embankments along its northern and western boundaries, complicating access from Niedurnego Street. Moreover, these embankments precipitate a westward recession of the site, exacerbating water accumulation during precipitation events due to insufficient drainage slopes.

#### Architectural heritage

The intrinsic value of the development site lies in its historical and architectural legacy, epitomized by iconic landmarks. Foremost among these is the Wanda headframe, towering at 88 meters, serving as a distinctive silhouette on the Ruda Śląska skyline. The prominence of the Wanda headframe alongside landmarks such as Blast Furnace A and St. Paul's Church collectively delineate the city's skyline. Additionally, the Wanda and Jan Karol bathhouses, adorned with original interior furnishings and architectural motifs, assume significance within the complex. Enclosed on the eastern periphery is the rescue station building, replete with original interiors and motivational inscriptions, serving as



Part of coal mine presenting Wanda's headframe and Wanda and Jan Karol bathhouse (photo by author)

a testament to mining safety. Although the remaining structures within the decommissioned mine enjoy conservation protection, their significance is predominantly urban, preserving the historical layout of the mine. Structures dating back to the mine's inception were not afforded conservation protection and were subsequently removed during modernization endeavors.<sup>1</sup>

### Conceptualization

In 2021, municipal authorities negotiated with mine management to secure acquisition rights for the Wanda section's land and buildings. The Municipality of Ruda Śląska commissioned a comprehensive site and facility analysis, focusing on adaptation and revitalization strategies to foster connectivity between the central districts of Nowy Bytom and Wirek. This analysis, facilitated by ARCA Biuro Projektów Urbanistyki i Architektury Michał Stangel from Gliwice, underpinned the conceptualization of revitalization and development strategies for the Pokój mine areas. The conceptual framework advocates for delineating functional zones within the Wanda section to optimize land utilization and foster community cohesion.

### Functional Zoning

The revitalization concept envisages the subdivision of the Wanda area into distinct functional zones, each tailored to specific urban needs and aspirations. These zones encompass:

- **Representative Zone:** Serving as a focal point for public engagement and service centralization, this zone fosters connectivity with prominent landmarks and revitalized post-industrial precincts (zone marked with number 1 on the map);
- **Residential Enclaves:** Segregated into multi-family housing clusters (number 2 on the map), pond-side residences (number 8 on the map), and Grochowska Street development (number 11 on the map), these zones cater to diverse housing preferences, promoting social inclusivity and urban vibrancy;
- **Residential and service zone** marked with numbers 3 and 12 on the map;
- **Service Infrastructure:** Incorporating the adaptive reuse of



the rescue station building (number 4 on the map) and the construction of modern office complexes, this zone exemplifies functional synergy and economic vitality (number 6 on the map);

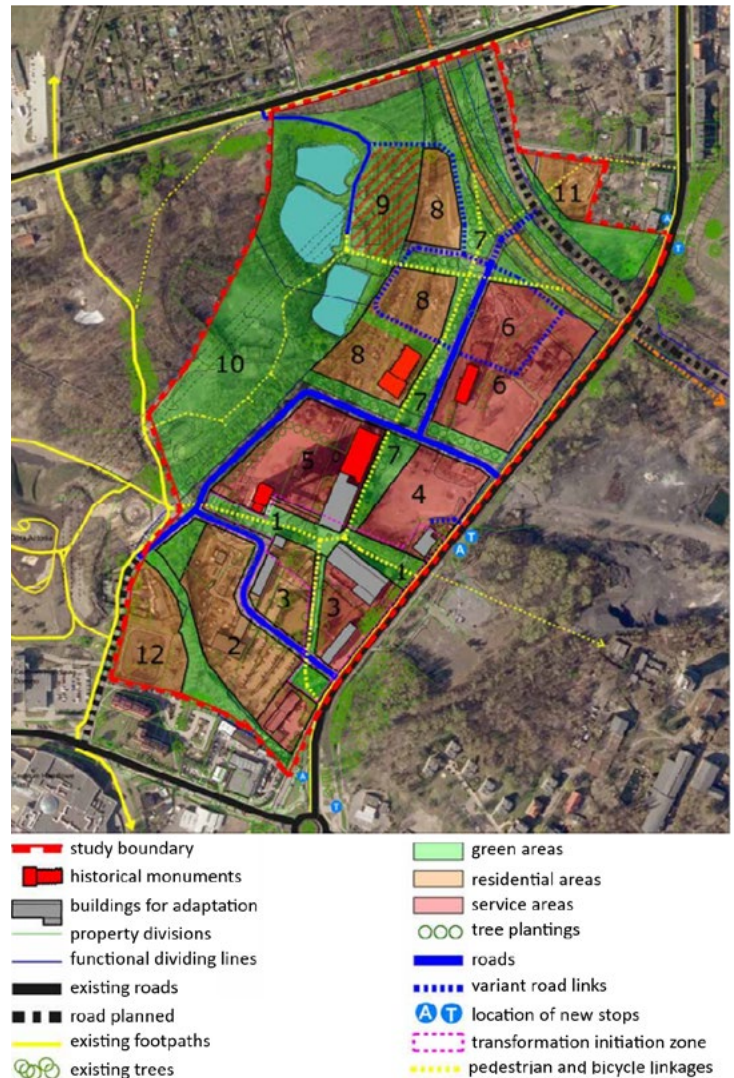
- Multi-family housing and co-housing zone (number 8 on the map);
- Recreational Oasis: (number 9 on the map) Leveraging post-industrial water reservoirs for recreational activities and green corridors, this zone advocates for active lifestyles and ecological sustainability, enhancing the urban experience;
- Green Spaces: Emphasizing the integration of greenery and small-scale architectural features, this zone fosters environmental stewardship and aesthetic appeal, enriching the urban fabric and connecting with Antonia hill2 (numbers 7 and 10 on the map).

## Conclusion

The transformation of the Pokój coal mine epitomizes a holistic approach to urban renewal, blending scientific rigor with historical preservation and community engagement. Ruda Śląska navigates this transformative journey, underscoring its commitment to sustainable development and cultural heritage preservation. Although funding negotiations between municipal authorities and mine management are ongoing, strategic planning initiatives continue unabated, ensuring the seamless implementation of revitalization efforts. Through collaborative partnerships and visionary planning, the Pokój coal mine is poised to reclaim its stature as a symbol of resilience and regeneration in the annals of urban history.

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Masterplan of Pokój coal mine (ARCA Michał Stangel)





View from historic Memlouki Borj El-Sibai: Overlooking abandoned residences for engineers and high-ranking staff (photo by Yara Rizk)

## LEBANON

### TRIPOLI STATION. A REFLECTION OF THE ENDURING COMMUNITY STRENGTH OF TRIPOLITANSA

*Christelle El Hage (École nationale supérieure d'architecture de Paris-Belleville) & Yara Rizk (Sapienza University of Rome)*

The Lebanese railway has a culturally rich heritage abandoned for over fifty years. Many talks have been held about restoring the tracks, but due to the political and economic instability of the area, the projects were never executed. The Tripoli Train Station, one of the three major stations of the country, stands as a historical landmark deeply intertwined with the city's history and community. It witnessed Tripoli's past and reflects its residents' active involvement in its establishment and

preservation. Recently, there was a significant victory for the community as the Director General of the Railways Authority (OCFTC), Ziad Nasr, withdrew his decision to convert part of the station into a truck parking lot following resistance from locals and activists.

The historical train station of Tripoli boasts immense historical, social, and architectural significance, spanning an impressive area of 50,000 square meters, almost one kilometer long, from north to south. The station exhibits a distinct French architectural style following the local trend of the time. The abandoned complex now reflects Tripoli's modern history, resembling a ruin overlooking the port where nature has gradually reclaimed much of the architecture and wagons.

Within the complex, there were once four residences for engineers and high-ranking staff, alongside amenities such as an office, a buffet/cafeteria, a post & telegraph room, and various admin-





Abandoned water tower and rusting rails define the historical landscape of the complex (photo by Yara Rizk)

istrative offices, including those for the director of the station and railway lines. Additionally, the site features a railway turntable ('sayniyeh'), an underground fuel depot, two workshops, and warehouses for tools and spare parts. The complex is also characterized by the historic Borj El-Sibai, one of seven guard towers built by the Mamluk in the fourteenth – fifteenth centuries to protect the city of Tripoli against the sea, further enriching the complex's historical tapestry. Of particular interest are the ancient wagons and locomotives housed within the station, dating back to the late 19th and early 20th centuries, providing a tangible link to the region's rich railway heritage.

Understanding the station's origins in the early 1900s is crucial to grasp its significance fully. Unlike other station projects in the region established under Ottoman-French concessions, Tripoli's station and its connection to Homs were initiated by a private Tripolitan company comprised of the city's notables and prominent figures. They collectively raised the necessary funds for the project and became its principal shareholders. This company was registered as an anonymous entity at the Tripoli Chamber of Commerce. Named "Chaussée," the company focused on establishing rail transport and expanded the Tripolitan port by constructing a pier for goods transshipment.

In March 1910, the Ottoman government issued an imperial decree (firman) granting the concession to build and operate this railway to the DHP company. Construction commenced shortly after that, with the railway becoming operational in June 1911. The establishment of this railway brought significant benefits to both Tripoli and Homs. Trade between the two cities flourished, facilitated by Tripoli's connection to the Akkar Plain and the grain-producing regions of Northern Syria, enabling enhanced import and export opportunities.

The tumult of World War I saw the Ottoman forces dismantle the Tripoli-Homs railway line for military purposes. However, with the advent of the French Mandate in Lebanon and Syria in 1920, the station was nationalized, marking a pivotal moment in its institutional history. It served as the terminus for the Taurus Express that was connected to the Orient Express in the 1920s until the 1940s and the break of WWII.

Following Lebanon's independence in 1943, the Tripoli station transitioned into state ownership. Recognizing its strategic importance, the Lebanese government embarked on ambitious development projects, including expanding the Tripoli port utilizing reclaimed land from the old pier. Moreover, they identified the potential for commercial growth by establishing a link between Beirut and the burgeoning Tripoli port. It wasn't until 1945 that the Tripoli station was finally connected to Beirut's





The ancient wagons and locomotives housed within the station, dating back to the late 19th and early 20th centuries, providing a tangible link to the region's rich railway heritage (photo by Yara Rizk)

central station at Mar Mikhaël. The 1960s marked a golden age for the Chemins de Fer de l'État Libanais, but this prosperity was short-lived.

The outbreak of the Lebanese Civil War in 1975 plunged the station and the rest of the Lebanese railway into neglect and disrepair. The Tripoli station witnessed the 15-year-long Civil War and served as a battleground. In 1983, it fell under the control of the Syrians. The station still bears the scars of war, with visible bullet holes in the locomotives, destroyed buildings, and numerous war graffiti serving as poignant reminders of the past.

Following the end of the Civil War, the railway station in Tripoli lapsed into more disrepair, characterized by rust and overgrowth. This decline was further exacerbated by the Lebanese government's inability to revitalize the national railway infrastructure, rendering the Tripoli station a relic of bygone days. Despite this decline, the station remained a beacon of potential for community-driven restoration initiatives.

The hope of restoration emerged in 2002 with a proposal to reinstate rail travel between Tripoli and Homs, Syria. By 2005, the Lebanese government had acquired new tracks and removed all ob-

structions along the line from Tripoli to the Syrian border. However, Lebanese-Syrian tensions and the assassination of Prime Minister Hariri in 2005 forestalled further developments, leaving newly purchased tracks gathering dust in the port of Tripoli.

In 2008, Friends of Tripoli Station (FTS) – a community-based initiative spearheaded by Elias Khlaf – embarked on a mission to safeguard the station and its heritage amid developments at the nearby port of Tripoli, which they perceived as a threat. The group sought to secure the station's designation as a cultural monument and repurpose it as a museum and research center. FTS worked with Heritage Association Tripoli to organize several events, including a public commemoration of the station's centennial in 2011. Ultimately, FTS's 2011 appeal to the Ministry of Culture and the ensuing evaluative survey by the Directorate of Antiquities failed to gain formal recognition for the station as an industrial heritage landmark. However, these community-led efforts cemented the station's informal status as a valuable cultural and historical asset in the hearts and minds of Tripoli's residents, who also embraced the deteriorating station as a venue for community events and concerts.



Today, one of the station's buildings houses the Tripoli branch of the Civil Defense, and the rest are left in ruins. The station is occasionally visited by enthusiasts, history buffs and artists and serves as an occasional scenic backdrop for wedding or graduation photoshoots. Despite this minimal use, the station's lack of formal heritage status leaves it in a precarious position regarding preservation and restoration.

In 2024, the director of OCFTC (the Lebanese rail and public transport authority) leased the station to a private trucking firm as a parking facility – ironically, the same year Tripoli was designated the Arab Capital of Culture by UNESCO. The lease of a valued cultural icon and community asset to a private interest sparked significant community backlash, leading to protests and negotiations with the

OCFTC director, who ultimately terminated the lease. The community's advocacy underscored its aspirations for the station's restoration, conservation, and integration into the national and local heritage. These unsanctioned and informal community efforts are the only impediments to evisceration of the Tripoli station's remaining cultural and historical value, even though OCFTC is specifically tasked with managing and preserving Lebanon's railways.

This narrative underscores the profound impact of communal advocacy in Tripoli on urban policy and development strategies, illustrating local initiatives' pivotal role in preserving and enhancing the city's cultural and historical assets.



Rikard Benčić Factory in 1970s  
(photo by Danilo Pavletić)

## CROATIA

### RIJEKA AND ITS INDUSTRIAL HERITAGE

*Kristina Pandža, curator and IT specialist, Rijeka City Museum, President of Pro Torpedo & External Associate of Centre for Industrial Heritage, University of Rijeka*

Rijeka, a small town on the Adriatic Sea coast, owes its development to manufacturing and industrial production, which started in the mid-18th century. The epithet industrial, which Rijeka as a city was adorned with in the 19th and especially the second half of the 20th century, is today only part of the term industrial heritage. Social and

economic changes at the beginning of the 1990s slowly affected the shutdown of mass production in the city.

Rijeka's industrial story begins at the beginning of the 18th century. The Habsburg family, Charles VI, encouraged trade in the city with various provisions. Rijeka then became a free port. All merchants were allowed to sail into the port, trade, and exchange with insignificant levies. This prompted the beginnings of the first production in Rijeka, shipbuilding and leather processing, and the production of candles and ropes. Not long after, the gradual development of manufacturing production followed, and space was created to develop other activities. The Sugar Refinery that came to the city in



Sugar Palace after renovation, new home of City Museum of Rijeka (photo by Petar Fabijan)



The room called New Age is dedicated to the production of paper in Rijeka (photo by Petar Fabijan)

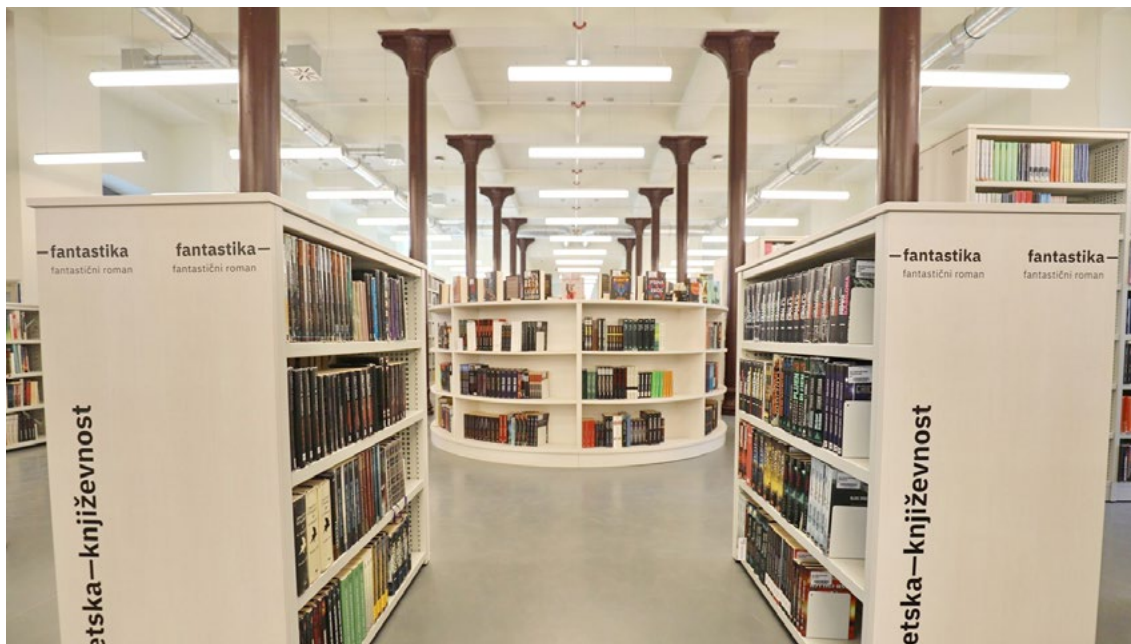
the middle of the 18th century was a turning point in the further development of the city as an industrial center.

Rijeka was annexed to Hungary in 1868, making it the leading Hungarian port. At the end of the 19th century, a modern port, new road routes, and a railway network were constructed, while industrial facilities were developed. In the western industrial zone, torpedoes, rice and tobacco were produced, and oil was refined. Great paper production, foundries, a tannery, an ice plant, and a slaughterhouse are in the east. In those years, Rijeka's industry was equal in strength to half of the industry in Croatia. After World War II, the industry was mainly focused on shipbuilding, metal foundries,

and heavy industry. The world's paper production, oil refinery, food industry, production of tractors, trucks, and smaller productions were also significant. However, in the 1990s, the process of shutting down the plants began, transforming the city into a place filled with abandoned and unused industrial buildings.

The industrial infrastructure of Rijeka is interesting for its size, location, and significance in the city's development. Buildings such as terminals, port warehouses, unused production areas, and halls form a special and recognizable industrial landscape that evokes the former era of industrial progress.





T-object after renovation, new home of City Library (photo by City of Rijeka)

## Benčić Complex

The Sugar Palace, the administrative building of the Sugar Refinery, was built as the administrative building of the sugar factory in 1752. The imperial decision brought large-scale sugar processing to Rijeka, which spurred the city's development and the growth of other factories. After the fire in 1785, the palace was significantly renovated and equipped with baroque interiors with wall paintings and stucco. It represents the highest quality baroque palace on the eastern Adriatic coast. After the refinery was shut down in the 19th century, it served as the administration building of the Tobacco Factory, and after the Second World War for the Rikard Benčić Engine Factory.

H-object (the name of the building is based on its floor plan) was built in the 18th century for sugar processing and has undergone numerous reconstructions and adaptations over time. It was used for storing and producing sugar, tobacco, and, finally, machinery production. During the Tobacco Factory in the second half of the 19th century, and in the absence of space for expansion of production, a historicist three-story building, the so-called T-object, was built. The production of Virginia cigars was started in that building in 1867. The brick house was built for drying tobacco and was later used during machine production.

### Revitalization of the Benčić Complex

All the remaining industrial buildings – the administrative building, H-object, T-object, and the brick house – are being revitalized to create a cultural quarter encompassing the cultural institutions of the city of Rijeka and the accompanying hospitality and tourism activities.

After the revitalization, the Sugar Palace houses the Rijeka City Museum. The central content of the palace is a permanent exhibition

focused on the architecture of the palace and the collection of the Museum of the City of Rijeka; on the second floor, the story of the former production complex – sugar, tobacco, and propellers and engines. The third floor is the office of the administration. On the ground floor of the building, there are spaces for a museum souvenir shop, an information center, a tourist agency, and a cafe. On the mezzanine floor, there is a museum depot and a library.

The Museum of Modern and Contemporary Art moved to part of the H-object in September 2017. The arranged part contains a large exhibition area, a larger entrance area suitable for various events, an educational area that can be used for smaller exhibitions, work areas for employees, and all necessary service areas.

The T-object is the new home of the library departments of non-fiction and science, literature, the public reading room, the department of periodicals, administration, general affairs, procurement, registry office, and the development library service for public relations and programs.

The Children's House is located in a renovated brick building. Activities in the new infrastructure include education, workshops, and quality organization of free time in well-designed rooms, all to develop creativity and social skills and acquire knowledge in the fields of literature, fine arts, film, media, and music. Through the first and second floors in one half of the building, there is a multi-purpose hall with 75 seats, a large projection screen, and a small stage.

There has been a long-standing consideration of how to use many abandoned industrial buildings in Rijeka. One idea has been successfully realized with the assistance of funds from the European Union and the fact that Rijeka was the European Capital of Culture in 2020. The Benčić complex, despite its small shortcomings, is gradually becoming the hub of cultural activities in the city.



A view of the mills across the River Derwent, before the building of the East Mill in 1911/12 (photo by Belper Historical Society)

## UK

### BELPER MILLS - A HISTORIC INDUSTRIAL COMPLEX 'AT RISK'

*Derek Latham, Chair of Derbyshire Historic Buildings Trust – Saving our heritage and Derwent Valley Trust, Architect and urbanist*

Established in 1974, the Derbyshire Historic Buildings Trust, a registered UK charity run mainly by volunteers, has rescued nearly 100 properties identified by the Trust as 'Buildings @ Risk.' It seeks to ensure all historic buildings in the English County of Derbyshire are looked after by their owners, but where necessary, intervening with the support of the community by acting as a catalyst, enabler, partner, or developer to restore them to a viable active use, involving the public through interpretation education or training in the process.

The latest and largest complex of buildings currently at risk is the

Belper Mills, located in the heart of the Derwent Valley Mills World Heritage Site. The Derwent Valley Mills were inscribed on UNESCO's World Heritage List in 2001, essentially because it was the birthplace of the factory system. TICCIH was instrumental in encouraging UNESCO to prioritise industrial heritage sites at that time.

The Belper complex is a major element of the property's 'Outstanding Universal Value' as one of the pioneer hubs in the Valley where Richard Arkwright's cotton mill factory system was put into practice from 1776 onwards by Jedediah Strutt and his three sons.

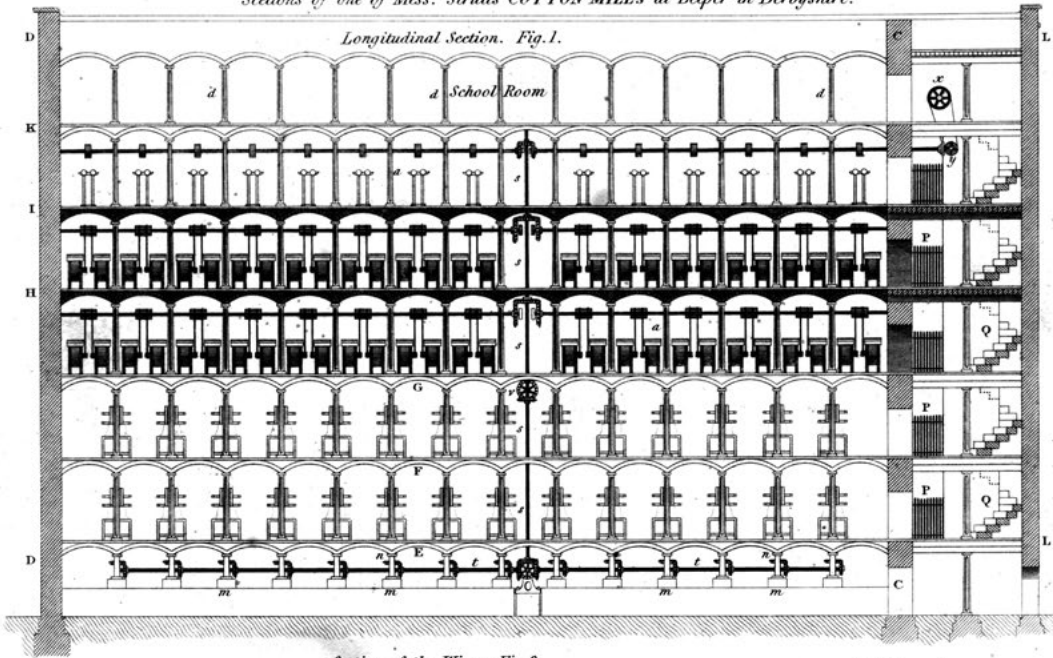
The revolutionary water-powered cotton mills in the Valley catalyzed the expansion of tiny agricultural settlements, with a smattering of cottage industry, into more populous mill-centered communities, where mill masters built houses to accommodate their workforce. The Strutt family not only built houses but also schools, chapels and recreational facilities, so Belper can claim to be the very first planned cotton mill town.



COTTON MANUFACTURE.

PLATE XIV.

Sections of one of Messrs Strutt's COTTON MILLS at Belper in Derbyshire.



Section of the Wing. Fig. 3.

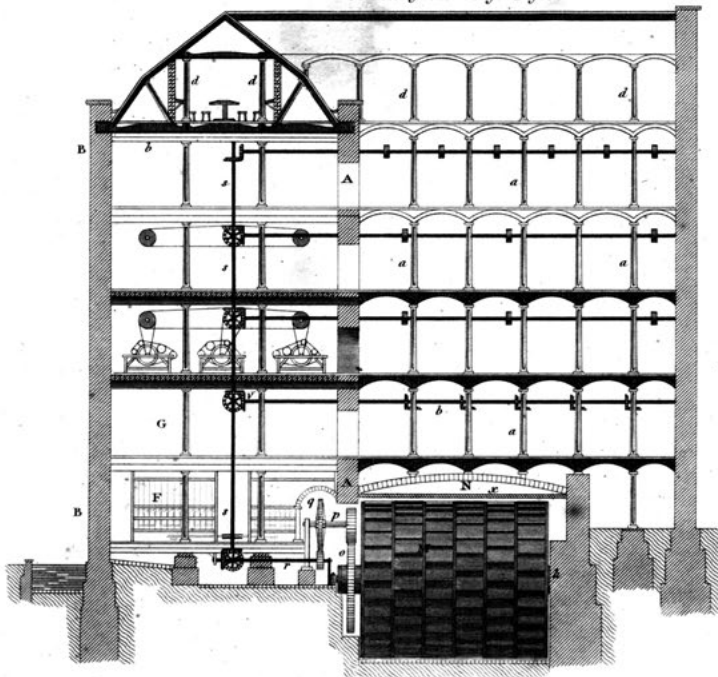
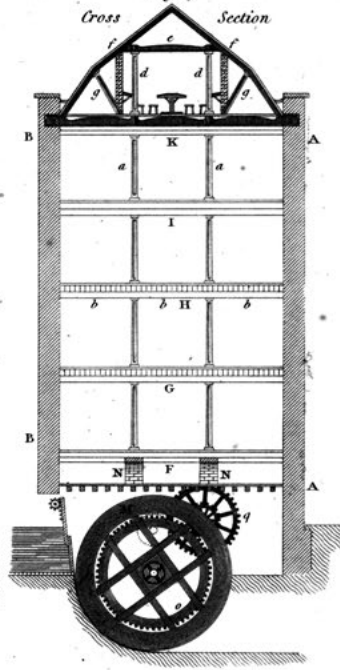


Fig. 2.



eng. Jan. del.

Published as the Act directs, 1814, by Longman, Hurst, Ross, Orme & Brown, Paternoster Row, London.

W. Leary sculp.

Illustration of the North Mill Construction by John Farey Jr. for the 1809 Rees's Cyclopædia

One of Jedediah Strutt's sons, William, was a particularly talented engineer who developed a system of fireproof mill construction. In 1804 he designed and built the North Mill which is now listed grade I because of its pioneering construction. Until recently the ground floor and basement of the North Mill housed an industrial museum operated by volunteers – The Belper North Mill Trust.

The Strutt family continued to be the major property and land holder in Belper until the 1950s but, by the end of the 19th century, they had handed over management of the mills to the English

Sewing Company. In 1911/12, the Company built a steam and turbine-powered seven-storey fortress-like mill with corner turrets, which dwarfed its 1804 neighbour and the other five mills within the complex at that time. Its exterior of Accrington red brick was no more than a 'skin' enclosing a steel frame - the new mode of construction similar to the skyscrapers of New York and based on the innovations of the 1804 mill's construction.

By then, the Derwent Valley had declined in significance as an industrial centre, with turbines replacing waterwheels as the main power



An aerial view of the mill site in 2021 (photo by The Derwent Valley Mills Partnership)

source. Yet the Belper mills continued in industrial use but contracted in size due to some demolitions. They were no longer spinning cotton until, in April 1986, the English Sewing Cotton Company, rebranded TOOTAL, closed down the Mills. They were bought by an entrepreneur and used in various ways by successive owners, but they were then bought by their current owner in 2003.

The new owner neglected to invest in the property. Over time, but with increasing rapidity, the condition of the Mills is deteriorating. Progressive disrepair of the roof and windows of the grade 2 listed East Mill has led to more and more tenants evacuating the building, leaving it empty for a decade and in an advanced state of disrepair. In 2018, the owner made a planning application for mixed new uses for the Mill complex. This application has yet to be determined, partially due to changes to the original proposal.

Derbyshire Historic Buildings Trust (DHBT) has been assisting the Derwent Valley Mills World Heritage Site (DVMWHS) Partnership – the organisation that has been delegated the responsibility for the production and oversight of the delivery of the Derwent Valley Mills World Heritage Site Management Plan by the UK Government – in steering the production of an alternative scenarios report for the Belper Mills complex. Both DHBT and the DVMWHS Partnership are concerned that the appropriate conservation of the Mills, especially if it is to be compliant with the aspirations of the DVMWHS Management Plan, is unlikely to be commercially viable without some form of significant public subsidy.

The output of the study will include the examination of three different scenarios to highlight the possible mix of acceptable uses for the Mills, the outline costs of conversion and repair of the buildings, the funding and finance that will be required to facilitate the project, and the market value of the end product. This information will highlight the magnitude of public subsidy that will be required to enable the appropriate conservation and repair of the Mills. In addition, the report will also explore the types of body and working arrangements that may need to be established to deliver the project. The alternative scenario report will be complete by the end of March 2024. The DHBT, along with the wider DVMWHS Partnership, await the determination of the planning application by the local planning authority, Amber Valley Borough Council.

It is hoped that both the current owner and Amber Valley Borough Council will engage in constructive conversations once the application is determined, informed by the alternative scenarios report, to help find a new vibrant future for the Belper Mill complex that brings these historically significant buildings back into active use to help conserve them for future generations. However, if the owner does not either start to undertake repairs to arrest the accelerating decline of the buildings or enter into meaningful discussions to find a bright new future for the buildings, The DHBT will be lobbying those public bodies with statutory powers to effect change on the site, including purchase, if necessary, to use their powers to ensure the buildings' future preservation.



## THE ARCHITECTURE OF STEAM – WATERWORKS AND THE VICTORIAN SANITARY CRISIS

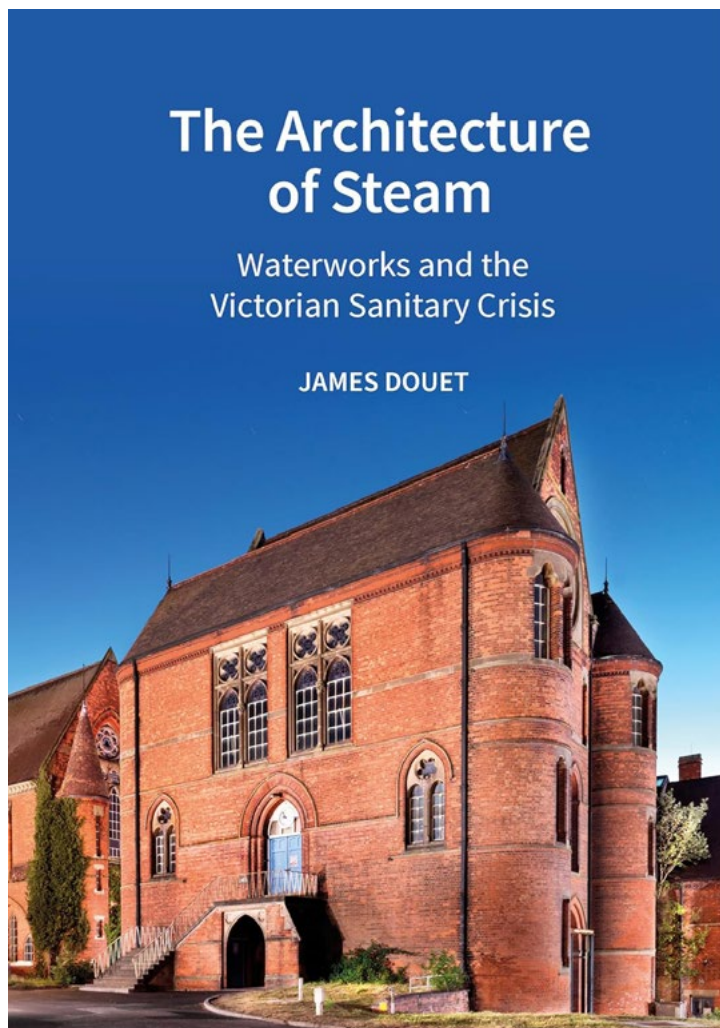
James Douet, Liverpool University Press and Historic England, 2023, 136 pp., 78 B&W illus., hardcover, €45. 30% discount for TICCIH members from the LUP website with discount code 27STEAM10

Reviewed by Norbert Tempel (first published in *Industriekultur* 4.23)

The continental European can only marvel at the magnificent buildings with their impressive technology, which were used in the motherland of industrialisation in order to cope with the great sanitary crisis around the middle of the 19th century. As a result of polluted rivers, the extraction of safe drinking water and an orderly sanitation system became a social task of the first order. Today, one can only imagine the care taken by their engineers and architects to meet the needs for representation of both municipal and private-sector clients. It is only in recent times that it has been possible for us to access clean water and safe drainage at all times for a large part of the world's population.

James Douet, long-time editor of the TICCIH Bulletin and, as the author of the TICCIH study *The Water Industry and World Heritage*, a competent connoisseur of the subject, has produced a compact work for the technical and architectural development of the waterworks with their magnificent steam engines and pumps in Great Britain. It is well illustrated with examples from many countries, fluently written and elegantly formulated so that even non-native speakers have a good understanding of the explanations of the technical developments and their “makers.”

The world's first constant water supply system, from which all later networks are descended, was built in 1830 in Nottingham by Thomas Hawksley, who was only 23 at the time: prior clarification by slow filtration in sand basins, steam pumps driven by the Cornish steam engines, which had proven itself in draining



metal mine, elevated water tanks, and iron water pipe pipes for the higher pressures of the constant supply networks.

The legacy of British waterworks is a global reference that, thanks to the many surviving sites – often with the revived historic steam engines – can be studied vividly on site.

## GUILLERMO KAHLO: FOTÓGRAFO DE FUNDIDORA

Alberto Casillas Hernández, EK Editores, 2017, 104 pp.

Reviewed by Alberto Casillas Hernández

This small book, published in March of 2017, is the result of a meticulous seven-year work of interpretations of industrial processes, work-employer relations, lack of personnel, industrial

technology and architectural design that the Mexican Photographer of German origin Guillermo Kahlo recorded, with his graphic lens of the first decade of the 20th Century. As well as studying the style of the captures of a certain height, each image that was shown to the photographer had the purpose of promoting Monterrey's steel industry in the Mexican capital's leading newspapers between 1909 and 1912.

Héctor Jaime Treviño Villarreal, Nuevo Leon General Archive's director, mentions that after Fundidora de Monterrey, S.A. declared bankruptcy on May 8th, 1986, its 86-year-long historical record was in total decay and in danger of vanishing. Fortunately, the State's Archive took control of the situation, convincing the Nation's Archive that the Steel Mill's records stayed in Nuevo

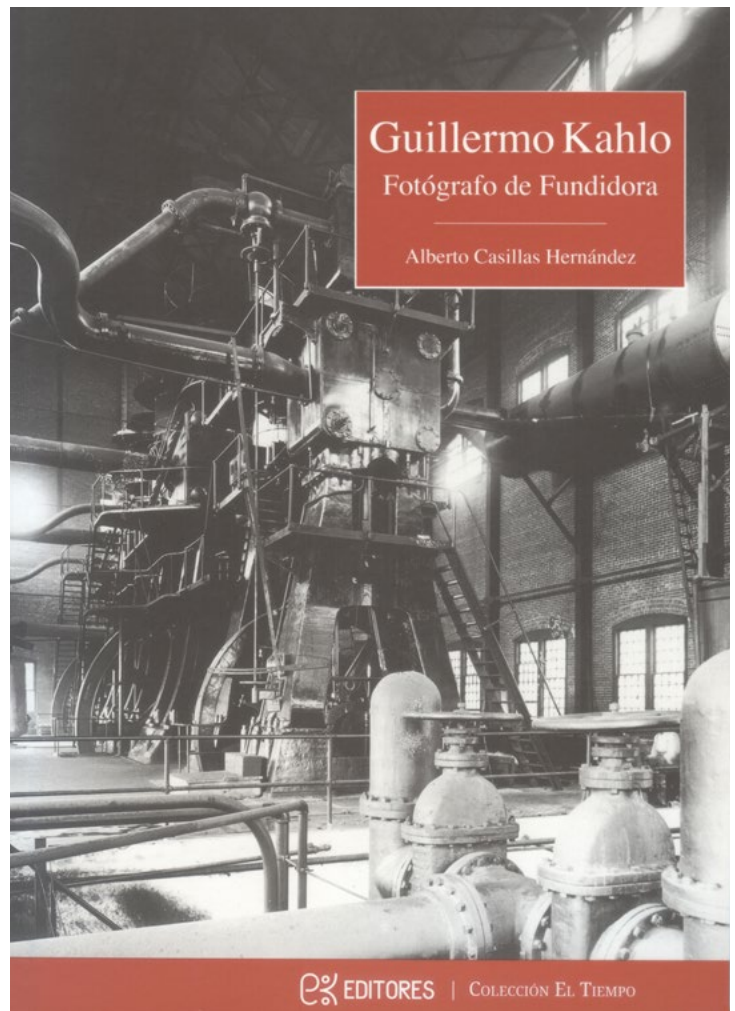
Leon being Fundidora Park the custodian of the industrial heritage, in the form of a historical collection known as Fundidora Historical Archive.

Among the documents the collection holds are the 149 photographs that Guillermo Kahlo took on behalf of the Spaniard Adolfo Prieto y Álvarez de la Vallinas, two-time CEO of the company. The first series of pictures are from 1909 to 1912, which show the interior of several shops and industrial processes, while the second period of 1924 - 1936 highlights the construction of public buildings, schools, and theaters, among others, made with structural steel.

Guillermo Kahlo. *Fotógrafo de Fundidora*, a book written with all academic rigor, contributes to the reconstruction of the much-needed industrial heritage in light of the disinterest and destruction of industrial machinery and buildings. A second element of the book constitutes that the photograph is used as a historical document and not only to adorn the text because it is through documents, blueprints, magazines, and movies of the period that we can comprehend the productive processes of the steel mill and to interpret the society captured by the lenses of Kahlo. Lastly, the final and perhaps more critical core of this research is to know how Fundidora Company used the images captured by Kahlo to revitalize the mill with a strong advertising campaign looking for potential customers for its iron and steel products.

Of all of the mentioned aspects, the one that offers more historical value is the one related to the prevalent unsafe conditions inside the steel company of Monterrey in 1909, the year that Kahlo photographed the industrial processes and its people. With the photograph, supported with written documents, we can compare and show the difficulties the workers faced in the first half of the 20th century due to the lack of safety equipment, diseases generated by the temperature, noise, etc. The images reveal the lack of hygiene and safety, which are difficult to find in written records. Emilio Luis Lara explains these elements: "The image contributed information and reflecting about the image and its function in history [..], proceeds to reconstruct the historical discourse visually related via images, utilizing several sources: bibliographic, periodical, documentary, iconographic, oral archives, etc."

Carlos Abruzzese dives deeper into the subject and considers that learning to read the iconic text is necessary, just as linguistic text. Photography is a type of document that demands special training for



reading and comprehension on the part of the researcher. This is why the majority of traditional researchers prefer paper documents as a source and photos as illustrative elements and not as documents themselves. Thanks to the information gained by visual interpretation, we can reconstruct historical content.

*Guillermo Kahlo. Fotógrafo de Fundidora* makes an exemplary historical contribution to industrial archaeology because it addresses images as documents, with a knowledge of the steel mill industry and endorsed by the oral memory of former workers that impregnated with their sweat and blood, the now defunct steel mill industrial processes.



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