TICCIH

The International Committee for the Conservation of the Industrial Heritage

BULLETIN

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CONTENTS

ON THE COVER: Power plant TE-3 in Vilnius, Lithuania, April 2020 (photo by German Simonson). *See Photo Focus on Industrial Heritage: Photographer German Simonson*

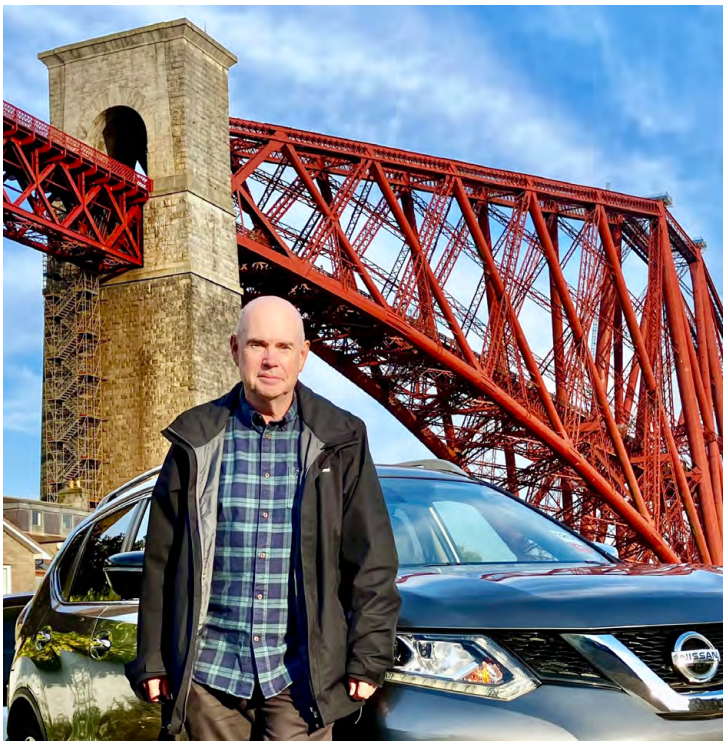
LOOKING BACK AT AN EXTRAORDINARY PERSONAL JOURNEY

Miles Oglethorpe, TICCIH President

Welcome to what is my last contribution to the Bulletin as TICCIH President. As many of you know, I will be stepping down as President at our 2025 World Congress in Kiruna at the end of August, and will be handing over to President-elect, Dr Marion Steiner. These are therefore exciting times, and I am really looking forward to supporting our new President and Board as they take TICCIH forward.

Looking back, it has been an extraordinary personal journey, starting in Santiago, Chile, in 2018. At the time, TICCIH was a relatively stable organisation with a steady cycle of activity which was not particularly demanding, even though being President was a scary prospect for me. This gentle equilibrium was disrupted first by the resignation of our long-serving Secretary General, Stephen Hughes, and shortly afterwards by the sudden onset of the COVID-19 pandemic. From that traumatic point on, the world changed, turbocharged by a digital revolution that has radically altered the way we work. TICCIH had to adapt if it was to survive, and in particular, it needed to take advantage of the new technologies to become genuinely global, filling the gaps in its geographical coverage and addressing issues that had previously been avoided or overlooked.

This is why the Board embarked upon a modernisation programme which has revolutionised our membership subscriptions and will soon modernise the Nizhny Tagil Charter and our Statutes. A huge driver behind these improvements has been our current Secretary General, Marion Steiner, whose vision for the future of TICCIH is comprehensive and ambitious. It is entirely appropriate and absolutely brilliant that she is now going to take over as President, and you can read more about her vision for the future later in this issue of the Bulletin.



Miles Oglethorpe in front of the Forth Bridge, Scotland (photo by author)

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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

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

The Forth Bridge in rare Scottish sunshine (photo by author)

Meanwhile, it will come as no surprise that a lot of energy over the last three months has been taken up by preparations for the Kiruna congress, and work is intensifying as the end of August approaches. I am hugely grateful to the conference team in Sweden for all the work they are putting in, not least Roine Wiklund. However, I must also acknowledge all those who have contributed to the work of our Communications Commission, which has disseminated news about TICCIH to a much wider audience. In addition, I need to highlight the work that has gone into selecting the recipients of the travel grants that have been possible thanks to a generous donation to TICCIH. And finally, I must say a big thank you to everyone who prepared a National Report, and to Bart Vanacker and Daniel Schneider for editing and preparing the resulting publication.

Although we have, understandably, been absorbed by our Kiruna congress, the world has not stood still, and a lot more has been happening. Our work with UNESCO in Southeast Asia is progressing well and is already yielding some fascinating results. I will be able to report on our progress in more detail in the next few issues of the Bulletin. Other significant events have been occurring, not least a conference in Katowice hosted by TICCIH Poland. You can also read more about it in this Bulletin, not least in relation to Working Industrial and Mobile Heritage, which is trying to stop our living industrial heritage from being killed off because of a lack of fossil fuels. On a personal note, I am deeply grateful to Piotr Gerber for arranging a visit to a working coal mine. I have been down a few working mines in the past, but never before to a longwall coal face. It was a truly phenomenal experience.

Elsewhere, I regret being unable to attend this year's excellent INCUNA congress in person, but I fully intend to do so next year. I am also lucky to be involved with other significant conferences later in the year, including Big Stuff in Ghent and CESB 2025 (Central Europe towards Sustainable Building, Prague), which always features a strong industrial heritage component.

Some of you will be aware of the amazing photography of Viktor Macha, examples of which featured in this Bulletin a few issues ago. Viktor reports that he has just loaded the 5,000th photograph onto his extraordinary 'Beauty of Steel' website, and that he calculates he now has over 233,000 images taken all over the world stored on his drive. A measure of the outstanding quality of his work is that, in May, he had an exhibition dedicated to his Beauty of Steel project, hosted at the LWL-Museum Henrichshütte in Hattingen, Germany.

I often wonder why I have been so fortunate to end up being president of such an amazing organisation, meeting so many wonderful people, and visiting incredible places. If I had to identify a trigger for all this happening to me, it would have to be the Forth Bridge and its inclusion on UNESCO's World Heritage list. The Bridge is one of the most powerful instruments of Cultural Diplomacy and has propelled me to places I would never have expected to be. So, it's lovely to be able to report that we have just celebrated the 10th Anniversary of its inscription, and that it remains a major source of inspiration and one of the world's most valuable and iconic industrial heritage cultural assets.

However, just as important, we share this anniversary with The Fray Bentos Industrial Landscape in Uruguay, the Sites of Japan's Meiji Industrial Revolution, the Rjukan-Notodden hydropower sites in Norway, the Speicherstadt and Kontorhaus District with Chilehaus in Hamburg, Germany, and the Aqueduct of Padre Tembleque Hydraulic System in Mexico. Being at the World Heritage Committee in Bonn on 5th July 2015 and sharing this moment with so many special people was amazing. As you can imagine, a very large quantity of Champagne was drunk on that day, but that was also because, by coincidence, the Champagne Hillsides, Houses and Cellars and The Climats, terroirs of Burgundy were also inscribed in the same session. You simply cannot get more special than that!

Contact the author

MOVING FORWARD - MANAGING CHANGE

Marion Steiner, TICCIH President Elect

"This is my last piece as TICCIH President," says Miles in this Bulletin and, Dear Reader, be assured that this piece here will be my one and only as TICCIH President Elect – a figure that we have created this year to put an official name on the huge task that had to be done by someone to lead TICCIH's Way Forward after Miles had announced in October 2024 that he intended to step down as President in the next General Assembly in Kiruna.

The decision to make myself available as a Presidential candidate required careful consideration, and, you know me, was explored in many lengthy discussions with dear colleagues from around the world. It is in great part thanks to them, and especially to the human energies of Esperanza Rock from Chile and Moulshri Joshi from India, that in the January Board meeting, I was happy to announce that I would step forward to take on this challenging task. Also, after six years as TICCIH Secretary General and more than twenty years of networking for Industrial Heritage globally, I feel that I have already succeeded in putting so many loose ends together and in bringing motivated people in to work with and for TICCIH that, in a certain way, this is just the continuation of a natural process.

Key goals I have in mind for the term 2025-28 and the renewed Board include implementing a more collaborative and shared workflow, rethinking TICCIH programmatically as a global community, and professionalising our work as the world's leading organisation for industrial heritage. I will return to the programmatic aspects of this in more detail at a later time, after my official inauguration as President, which will take place at the General Assembly in Kiruna on August 29.

Conchi Viaduct over the Loa River, Northern Chile. Photo: Marion Steiner, July 2024

In this piece here, still as President Elect in charge of managing the transition process, I would like to focus on telling you a little more about how we organised a collaborative way forward and how we pretend to better divide the work load between more people in the future, defining clear positions and tasks, creating work teams, and so on. With this motivation, as you probably remember from the News section of the last Bulletin, we organised an open call for candidates to the Board, inviting people from our membership

TICCIH BOARD, people and tasks, term 2025-28

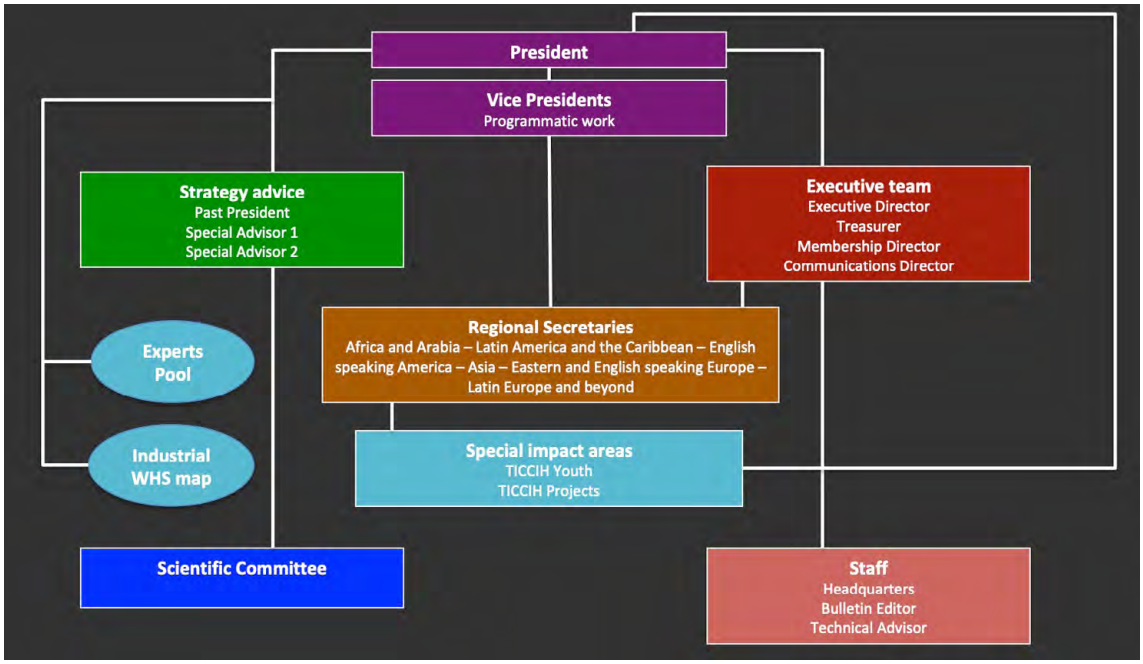
Proposal by Marion, 27 June 2025

No.	*Name, Country*	*World Region*	*Team*	*Tasks*
1	**Marion Steiner**, Germany	N-Europe/S-America	Presidential team	President, Programmatic work, Vision and Strategy, Representation
2	**Esperanza Rock**, Chile**	S-America	Presidential team	Vice President America, Programmatic work, Scientific Committee
3	**Moulshri Joshi**, India	Asia	Presidential team	Vice President Asia, Programmatic work, Experts Pool
4	**Miles Oglethorpe**, Scotland	N-Europe	Advisors to the President	Past President, Change Assistance, Administrative Continuity
5	**Massimo Preite**, Italy	S-Europe	Advisors to the President	General strategy advice, Experts Pool and WHS map
6	**Lucie Morisset**, Canada	N-America	Advisors to the President, + Scientific Committee	General strategy advice, Experts Pool and WHS map, Help with setting up the Scientific Committee
7	**Francesco Antoniol**, Italy**	S-Europe	Executive Committee	Executive Director, Secondary Treasurer, Organisational renewal
8	**Leonor Medeiros**, Portugal	SW-Europe	Executive Committee	Treasurer, Programmatic work
9	**Knut Markhus**, Norway**	N-Europe	Executive Committee	Membership Director, Global cross-sectorial campaigning
10	**Lucía Sánchez**, Venezuela**	S-America	Executive Committee	Communications Director, Website relaunch, Social Media
11	**Mirhan Damir**, Egypt*	N-Africa / Arabia	Regional Secretaries, + Special impact areas	Regional networks Arabia and Africa, Young people mentoring
12	**Yiping Dong**, China*	E-Asia	Regional Secretaries	Regional networks Asia, next TICCIH World Congress in Asia?
13	**Hsiao-Wei Lin**, Taiwan	Asia-Pacific	Regional Secretaries	Regional networks Asia-Pacific, ANIH
14	**Camilo Contreras**, Mexico*	C-America	Regional Secretaries	Regional networks, Latin America and the Caribbean
15	**Bartosz Walczak**, Poland**	E-Europe	Regional Secretaries	Regional networks Eastern and English speaking Europe
16	**Carolina Castañeda**, Spain	SW-Europe	Regional Secretaries	Latin speaking Europe and transcontinental networks (INCUNA)
17	**Bode Morin**, USA	N-America	Regional Secretaries	English speaking America, and global museums perspective
18	**Guilherme Pozzer**, Brazil / UK**	S-America/N-Europe	Special impact areas, + Scientific Committee	TICCIH Projects development, Help with setting up the Scientific Committee
19	**Florence Hachez-Leroy**, France	W-Europe	Scientific Committee	Start-up team, to lead the set up of the Scientific Committee
20	**Humberto Morales**, Mexico**	C-America	Scientific Committee	Start-up team, to lead the set up of the Scientific Committee
S	Daniel Schneider, USA	N-America	Staff	Headquarters at MTU
S	Bart Vanacker, Belgium	W-Europe	Staff	Bulletin Editor
S	Esteban Vásquez, Chile	S-America	Staff	Technical Advisor
LP	Neil Cossons, UK	NW-Europe	Life President	General advice where needed
LP	Eusebi Casanelles, Spain	SW-Europe	Life President	General advice where needed
LP	Patrick Martin, USA	N-America	Life President	General advice where needed

Considerations: 1.) Our call for candidates resulted in receiving 10 nominations from people to work on or with the board; 2.) Three of them* were co-opted for the term 2022-25, seven** are new with strong ties to TICCIH; 3.) People who want to work should be more than welcomed.

Resolution: "The Board unanimously decides to enlarge the TICCIH Board to 20 regular members starting with the term 2025-28." (Board Meeting, June 27, 2025)

Board composition and division of tasks for the term 2025-28, proposal by Marion Steiner, June 27, 2025



Organizational chart of TICCIH's future working structure, proposal by Marion Steiner, June 27, 2025

who were interested in working on and with the TICCIH Board in the next term 2025-28 to send us their nominations and personal mission statements by May 24. We received ten nominations: three from people who were already members of the Board, and seven from people who are each deeply engaged with TICCIH. I then scrolled through the personal mission statements, complemented by the profiles of the Board members who continue to serve on the Board, and based on that, elaborated a collective work proposal that I presented to the TICCIH Board on June 27.

The proposal included a clear definition of names, functions, and tasks on the Board for the term 2025-28 *(figure 1)*, a draft for an organizational chart *(figure 2)*, and the suggestion to enlarge the Board to 20 members in total, thus eliminating the distinction between regular and co-opted board members and providing more opportunities to bring in people with specific skills and from formerly underrepresented world regions. The Board received this proposal with applause and approved it unanimously.

In practical terms, this now allows us to organise the elections to the Board term 2025-28 as a non-competitive election, just like we did three years ago in Montreal. This time, in addition, we will organise the voting ahead of the Congress, remotely in a time period that starts on August 1 and ends on August 10. This will enable us to start working on the future as of now, and particularly throughout the week, many of the designated board members will spend time together in Kiruna.

As communication with our membership is vital for TICCIH, we decided to not only report on these issues here in written English in the Bulletin, but also to organise a Global Members Meeting in which I will present this again orally, the designated Board Members will present themselves, and, in addition, Prof. Dr. Dag Avango from the Luleå Technical University will provide you with a Preview to what the 19th TICCIH World Congress in Kiruna, which his team hosts, will look like. This meeting will take place on Tuesday, July 22. Please find more information below.

I would like to conclude this somewhat managerial piece by paying a personal tribute to Miles, who, during his seven years of service as TICCIH President, has demonstrated great openness to change of all kinds and a willingness to go beyond traditional limitations that is not easy to find. Additionally, his anticipated announcement that he intends to step down as President has enabled us to conceive, plan, and implement the transition as an open, transparent, and collective process. That human way of dealing with change is exemplary, and the humility that speaks from it is certainly something that distinguishes TICCIH nicely from other global organisations.

Contact the author

JOIN OUR GLOBAL MEMBERS MEETING ON 22ND JULY 2025

We cordially invite you to join TICCIH's Third Global Members Meeting, scheduled for Tuesday, 22 July 2025, from 13:00 to 15:00 UTC. As usual, the Global Meeting is open to all TICCIH members and friends. This new edition focuses on ongoing transformations within our organisation.

PROGRAM

- Welcome, by TICCIH President Dr. Miles Oglethorpe
- Presentation by TICCIH President Elect Dr. Marion Steiner:
  - Programmatic Vision for TICCIH XXI
  - Work Plan for the term 2025-28
  - Board composition proposal 2025-28
- Presentation round: Members and Nominees, TICCIH Board 2025-28
- Technical information about the election procedure
- Preview: TICCIH World Congress 2025 in Kiruna, by Prof. Dr. Dag Avango
- Questions and Answers
- Any Other Business

To join the meeting, please register in advance here.

You can also follow us on YouTube.

If you are unable to attend, please check our brand new YouTube Channel after the meeting for the recordings.

Know more about TICCIH's first two Global Members Meetings, which took place online in 2021 and 2023.

BOARD ELECTIONS 2025: KEY QUESTIONS & ANSWERS

Anticipating questions that may be asked in the Q&A part of the Global Members Meeting, we take the occasion here to answer some of them:

WHO HAS THE RIGHT TO VOTE?

Our current statutes define that in each country where TICCIH has at least five members registered in its international membership system, these can group and designate one person from their group as their National Representative.

Please note that this voting system is about to change and is planned to be replaced by a one-person-one-vote system in the next term.

WHEN AND HOW WILL THE VOTING TAKE PLACE?

Our Headquarters will contact the individuals who have been identified as eligible to vote by email shortly.

The voting will take place remotely during a time period starting on August 1 and ending on August 10 at midnight.

The voting will be organised via a Google form, through which the votes can be cast.

WHAT WILL THE VOTES BE ABOUT?

The current TICCIH Board puts forward the following three things for approval by the people eligible to vote, and will be shared publicly with the membership:

Minutes of the TICCIH General Assembly 2022 in Montreal

Financial Report 2022-2025

TICCIH Board composition and tasks 2025-2028

WHO WILL MANAGE THE PROCESS?

Daniel Schneider (ticcih@mtu.edu) from our Headquarters is in charge of managing the voting process. He is the primary contact person for all eligible voters.

LAST CHANCE TO REGISTER FOR THE TICCIH WORLD CONGRESS 2025 IN KIRUNA, SWEDEN

Registration is still open for the 19th TICCIH World Congress, which will take place from August 25 to 30, 2025, in the historic mining town of Kiruna, Sweden. Join the 19th TICCIH World Congress and celebrate 50 Years of TICCIH, an ideal moment to reflect on the past and shape the future of industrial heritage. While Early Bird and standard registration periods have passed, you can still register until July 31, 2025. This is your final chance to contribute to a global conversation on the future of industrial heritage and its relevance to today's societal challenges.

The congress's title is "Heritage in action: Legacies of industry in future making." It will focus on tensions and controversies surrounding industrial heritage and its relation to broader tensions in present-day society. Themes will range from sustainability, inclusion and colonialism to future generations, popular culture and AI.

Luleå University of Technology hosts the 19th TICCIH Congress in collaboration with TICCIH Sweden and Norway, the Swedish National Heritage Board, the municipality of Kiruna, and leading industrial and civil society actors in the Scandinavian north. Secure your spot today!

Visit the congress website for registration, program updates, and more.

Claymills Pumping Station, Burton-On-Trent, Derby, United Kingdom. This site, and others like it, encapsulate the 'classical' rendering of industrial heritage (photo by author)

THE NEED FOR NUANCE IN FUTURE INDUSTRIAL HERITAGE RESEARCH

Kieran Gleave, PhD Researcher, University of Cambridge

Industrial heritage is a term many of us are familiar with and often apply in our work or research. For many, it conjures images of preserved or re-used industrial landscapes and structures, or machinery and industrial artefacts safely stewarded in museum collections against the ravages of decay and demolition. Popularised in the final three decades of the 20th century, this conventional or 'classic' framing of industrial heritage has endured in several countries. Yet, a renewed look at the academic literature highlights the existence of an increasingly critical strand of industrial heritage research. Bookended by the socio-economic forces of de-industrialisation, themes of memory, identity, place, belonging, loss and community are increasingly pursued as critical research topics.

This divergence has yielded a set of methods distinct from the classical methods associated with industrial heritage management. For example, maintaining or repairing a conserved steam engine is significantly different from interviewing people about the role of de-industrialisation within their identities or memories. Following broader literary trends which distinguish heritage management from critical iterations of heritage studies, I have recently forwarded the 'classical' and 'critical' models of industrial heritage (*Gleave 2025*). This is intended to initiate conversations (both in the UK and

internationally) that I believe are long overdue, regarding the future directions of industrial heritage practice and research.

In navigating the classical approach to industrial heritage, there are three distinct methodological and method-based focuses. First, the conservation, curation and management of collections in museum settings. This relies heavily on collections and archival research, site interpretation, visitor engagement and collections conservation. Second, the management and maintenance of industrial sites, structures and landscapes. Often acting at arm's length from broader heritage management frameworks, structural recording, monitoring, and conservation are key. Third, the practical operation, maintenance and conservation of operational historic machinery. From small hand-powered machines to large engines, this strand of classical industrial heritage relies largely on expert knowledge and lengthy experience to maintain, repair, and operate historic plants safely.

By contrast, the 'critical approach' of industrial heritage is largely placed on the resonance of the industrial past within the lives of contemporary people. Researchers through this approach focus on more 'intangible' phenomenon and their intersections with the industrial past, rather than on public and visitor engagement with conserved buildings, sites, museums and collections. Indeed, contemporary sports, music, traditions, memories, identities, value systems and politics are now all being studied as industrial heritage. In a twist of irony, the forces of de-industrialisation (which early industrial heritage practitioners sought to guard against) are now themselves valued as research topics.

Rather than seeing industrial heritage as something that only experts and practitioners work with and define, scholars of this approach recognise that groups and communities have the agency to arrive at their own self-generated interpretations and understandings of 'industrial heritage', in excess of how it has been traditionally framed. As this critical focus is much more people-focused than classical industrial heritage, it is no surprise that the accompanying research methods differ. Here, interviews, oral histories, narrative analyses and public surveys are the prominent methods, as well as critical appraisals of museum interpretation. Furthermore, there is an increased tendency to explore industrial heritage outside the Anglosphere, as well as examining the ambiguous global legacies of the industrial past as drivers of slavery, colonialism, environmental change, and conflict.

Stepping back to view these two approaches together, we see that the 'classical' approach is considerably more objective in its utilisation of 'traditional' top-down conservation and curation methods. The 'critical' approach, on the other hand, prioritises investigations of subjective lived experience, which are strongly aligned with social science and humanities-based research. In presenting these two separate models of industrial heritage, I do not suggest that they should be wholly disjointed, or that one model is better than the other; both continue to enrich our knowledge through the production of cutting-edge research in their own ways. Indeed, this divide is not unique to industrial heritage and can be witnessed across the broader heritage sector and academic scholarship. Instead, my argument is that as we look ahead, we need to be mindful that these divergences exist and that making sweeping claims about or assessments of industrial heritage may hinder us in the future, particularly as these research strands inevitably continue to develop.

As heritage practitioners, managers, and scholars, we all have active roles to play in shaping and defining industrial heritage in the

Bargeware of the 'Roses and Castles' style. This is offered as a form of industrial heritage which has not been traditionally recognised, yet holds importance for some contemporary communities in the United Kingdom (photo by garryknight, Wikimedia Commons)

The development of the Ancoats Dispensary, Manchester, United Kingdom. While conventionally valued for its historic 19th-century façade, my doctoral research has identified that temporally-rooted communities have imprinted alternate meanings onto the structure following its recent conversion (photo by author)

years ahead. This is more important than ever, as the remnants and memories of our industrial pasts develop new and potentially problematic meanings in the context of climate change, de- and re-industrialisation, and global conflicts that continue to unfold. This is a conversation I'd love to begin with colleagues from a variety of industrial heritage backgrounds and contexts, irrespective of where you are in the world. If you have any thoughts or comments, please feel free to reach out to me via email.

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Contact the author

Many remains of oil presses can be seen on archaeological sites. At Sbeïtla, you can clearly see the stone vat and the two uprights that supported the press of an oil mill dating from the end of Antiquity (photo by Dennis G. Jarvis, Creative Commons Attribution-Share Alike 2.0 Generic license)

TUNISIA

TUNISIAN INDUSTRIAL HERITAGE STRUCTURE: THE OIL MILL, A DISCUSSION BETWEEN PAST AND PRESENT

Houda Kohli Kallel, Assistanat Professor (Dr.), University of Kairouan Researcher at the PHILAB Labor, Tunisia

Tunisia's oil mills represent a unique industrial heritage, bearing witness to the ingenuity of ancient societies and the central role played by olive cultivation in the country's history. Long considered solely as production tools, these mills now deserve recognition as heritage in their own right. This work explores the evolution of these structures, their socio-economic significance, and their potential to promote sustainable development and regional revitalisation.

OLIVE OIL INDUSTRY HISTORY

The history of Tunisian oil mills dates back to the Carthaginian era when the first basic structures were built *(Denoyer, 1951)*. Under Roman influence, significant technological advances emerged, including screw presses and hydraulic mills, enabling more efficient production *(Slim, 2004)*. These techniques continued to be used with successive adaptations during the Byzantine, Arab-Muslim and Ottoman periods.

In modern times, traditional mills have come under increasing pressure due to the introduction of European machinery and mechanised production lines. Despite these changes, oil mills have retained an essential role, particularly in rural areas where ancestral practices are still in use *(Camps-Fabrer, 1985)*. They continue to reflect Tunisian architectural diversity, incorporating elements of Berber, Andalusian, and colonial styles.

CULTURAL AND HERITAGE IMPORTANCE

Tunisian oil mills are more than just technical infrastructures. They

COUNTRY	MUSEUM	VALORIZATION APPROACH	MAIN STRENGTHS
Italy	Museo dell'Olio di Oliva, Imperia	Historical exhibitions, workshops, modernity	Multisensory and educational valorisation
Spain	Museo del Aceite, Baena	Interactive demonstrations, olive oil tours	Gastronomic and tourist promotion
Portugal	Museu do Azeite, Belmonte	Sensory and multimedia approach	Cultural and rural integration
Greece	Museum of the Olive and Greek Olive Oil, Sparta	Immersive scenography and practical workshops	Educational pathways, technological displays
Tunisia	Museum of Oil Culture, Sousse	Traditional presentation, low interactivity	Rich but underexploited heritage

bear witness to social practices and olive-growing traditions that are deeply rooted in local culture *(Riegel, 1996)*. Each mill has its own unique story linked to its specific architectural features, production methods, and community rituals associated with the olive harvest. This strong sense of identity gives the mills an undeniable heritage value, reinforced by the intergenerational transmission of knowledge and skills.

COMPARATIVE STUDY

A study of Mediterranean museums devoted to olive oil reveals significant differences in how heritage is promoted. In Italy, Spain, Portugal and Greece, interactive, educational museums help to preserve traditional skills and boost the local economy.

STRATEGIC DESIGN AND CREATION OF MUSEUMS DEDICATED TO THE HISTORY OF OIL MILLS

To make up for this delay, the creation of a national network of regional museums has been proposed. This project aims to safeguard and enhance traditional mills by transforming them into living museums, training centres, and tourist attractions. Based on the principles of strategic design *(Buchanan, 1992; Brown, 2009; Verganti, 2009)*, the project seeks to integrate cultural, educational and economic aspects through immersive and interactive experiences. The approach integrates augmented reality, digital tools, and co-design with local communities to ensure the relevance and sustainability of museum projects *(Norman, 2004; Duarte, Moreira & Silva, 2021)*.

CONTEMPORARY ISSUES

Preserving oil mills poses a dual challenge: maintaining their authenticity while ensuring their economic viability. According to Smith (2006), industrial heritage should be actively integrated into current social dynamics rather than remaining static. The participation of local communities and the promotion of traditional skills are essential. Recent rehabilitation initiatives, such as the transformation of oil mills into museums or training centres, demonstrate a growing awareness of this issue. Such projects, combining tradition and innovation, can bolster local identity and promote sustainable tourism (Ayari, 2020).

RESULTS AND DISCUSSION

The study confirms that Tunisian oil mills have adapted to technological change over time without losing their cultural identity. However, their heritage remains largely under-exploited. A comparison

SITE	TYPE OF MILL	CONSERVATION STATUS	STRENGTHS	NEEDS	VALORIZATION TOOL	STRATEGIC DESIGN
Dougga	Roman mill	Degraded, partially preserved	UNESCO heritage site, strong tourism potential	Restoration, development, and signage	Immersive augmented reality tour	Strengthen visual branding, immersive pathways
Thuburbo Majus	Roman oil mill	Visible ruins	Visited an archaeological site	Museographic reconstruction, educational animation	Interactive educational workshop	Co-design with schools, educational anchoring
Sbeitla	Berber and Roman mill	Partially intact	Moderate tourist attendance	Conservation, guided tours, immersive digital tools	Geolocated mobile application	Smart signage, playful content
Testour	Traditional Andalusian mill	Functional but underutilised	Historic city, living craftsmanship	Museum integration, sensory valorisation	Sensory and interactive museum space	Involvement of artisans, educational serious game
Mahdia	Traditional mill	Abandoned	Coastal city, seasonal attractiveness	Rehabilitation, tourist routes	Hybrid sea-oil tourist circuit	Cross-promotion with local tourism
Sfax	Existing museum	Underexploited	First oil museum in Tunisia	Modernisation, digital and educational integration	Interactive tours and temporary exhibitions	Central hub of the national network, digital

with neighbouring Mediterranean countries reveals the significant potential of these structures in Tunisia.

The enhancement of mill heritage must form part of a sustainable, territorial development approach that combines conservation, innovation, and citizen participation. Oil mills should be recognised as active drivers of the local economy and social cohesion, not relics.

CONCLUSION

Tunisian oil mills are exceptional witnesses to a thousand years of industrial history. They embody the memory of olive-growing know-how and carry a strong symbolic charge in Tunisian culture. Safeguarding them cannot be limited to simple architectural conservation: it must incorporate modern approaches to museums, education and tourism, based on close collaboration with local communities. Setting up a network of regional museums would make it possible to preserve this heritage while contributing to the sustainable development of the areas concerned. This project would offer an innovative response to the contemporary challenges of transmission, economic development and cultural affirmation. The Tunisian oil mill, at the crossroads between past and future, could become an inspiring model for dialogue between tradition and modernity.

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Contact the author

POLAND

DECLARATION OF KATOWICE: ON THE FUTURE OF WORKING AND MOBILE HERITAGE

Peter Ovenstone, The Working Industrial and Mobile Heritage (WIMH) Platform

A conference was held at the Silesian Parliament in Katowice, Poland, from April 10th to 11th, 2025, and was well-attended, with 138 participants from Poland and several other European countries. The business session included presentations made by Jaap Nieweg of Fedecrail, Hildebrand de Boer of ERIH, and TICCIH President Miles Oglethorpe. The event was organised and hosted by TICCIH Poland, with the support of Poland's Ministry of Culture.

The programme included visits to both the preserved "Ignacy" mine (a 2024 Europe Nostra Heritage Award winner) and an operational coal mine in Silesia, some of which are scheduled to continue production until 2040. These mines have the potential to secure longer-term supplies of coal for European industrial heritage. It was with this in mind, together with political lobbying, that the Declaration of Katowice on the future of Industrial & Mobile Heritage was prepared.

Declaration of Katowice: On the future of Working Industrial and Mobile Heritage

Modern Europe as we know it today has its origins in the development of science and technology. Technological achievements have driven industrialisation, transforming societies and driving political and socio-economic change. Evolving industries have, ultimately, improved living conditions and led to a doubling of average life expec-

Conference participants in Silesian Parliament Building (photo by Piotr Gerber)

tancy, enhancing the material world around us. This has, however, occurred at a cost, the most obvious manifestation of which is intensifying Climate Change.

Mindful of our changing climate, it is no surprise that Europeans are taking action to mitigate the negative impacts of industrialisation. As a result, older technologies are being replaced by more environmentally friendly, sustainable and efficient alternatives, and the intention is that in the coming years, fossil fuels will cease to be used as a source of energy. This is, of course, to be welcomed, but there is a strong argument for exceptions to be made to accommodate the preservation of Europe's hugely important working and mobile industrial heritage.

We, the participants of the Conference on the European Heritage of Coal and Steel, therefore wish to take action that will help preserve the working and mobile industrial heritage of Europe. A major priority will be to maintain a modest supply of fossil fuels to power this heritage and maintain it in an operational condition. This is vital to the successful conservation of this heritage, and greatly enhances the value of many much of this heritage as educational and tourism assets. It is also essential if this heritage is to be kept alive for the benefit of future generations.

On a European scale, actions have already been taken to enhance the efficiency of movable monuments which consume fossil fuels, such as steam locomotives, steam engines, steam-powered ships, and vehicles powered by combustion engines.

We are exploring the possibility of preserving hard-coal mine in Silesia, Poland. The vision is that the mine remains in production as a heritage colliery with the specific purpose of supplying coal for the needs of working and mobile industrial heritage, and for other specialist heritage sector activities (such as historic metallurgy and ceramics). The intention is that, in addition to securing heritage fuel supplies for the future, the mine will also play a leading role as an educational, training and intervention centre for the local mining community and the region.

In order to achieve this goal, the signatories of this agreement plan to take the following actions:

1. At a European Scale: Political Support

To conduct activities aimed at obtaining the consent of the European Parliament for the continued but limited use of fossil fuels specifically to fuel historic technical engines, machines and vehicles across Europe. This includes working and moving heritage owned by European museums as well as collectors and organisations of collectors of vehicles and devices that consume fossil fuels.

2. At a Regional Scale: Nurturing the Mining Heritage of Silesia:

To organise collaborative initiatives aimed at preserving one of the historic Upper Silesian coal mines that is currently in operation with the specific purpose of supplying Europe's technical monuments with the coal that they need to stay alive. The signatories of the agreement are therefore committed to conducting further work aimed at preserving the selected mine. This involves ensuring the basis of its future operation, and incorporating a working museum into its operations which demonstrates historical coal extraction and its associated processes on a safe and sustainable basis.

3. Traditional Skills and Knowledge: Intangible Technical Heritage

This declaration is being made in the knowledge that our working and mobile industrial heritage is of enormous cultural and educational value, and that this will be significantly diminished if it can no longer

Conference participants during underground field excavations at the level of 800m, Chwalowice Coal Mine (photo by Piotr Gerber)

function because the fuel it requires to operate becomes unavailable. We know that communities across Europe will be served very badly if the technical knowledge, expertise and skills associated with this live heritage is not passed on to future generations and is allowed to die.

The signatories of this agreement hereby declare their intention to conduct further work aimed at achieving these goals within the established international platform of 'WIMH' - Working Industrial and Mobile Heritage.

The Working Industrial and Mobile Heritage (WIMH) Platform represents a coalition of organizations dedicated to preserving Europe's rich working industrial and mobile heritage. Our members include the European Route of Industrial Heritage (ERIH), Europa Nostra (EN), the European Federation of Museum & Tourist Railways (FEDECRAIL), FIVA (the Fédération Internationale des Véhicules Anciens) and the International Committee for the Conservation of the Industrial Heritage (TICCIH). These organizations, along with countless volunteers and professionals, work to keep industrial heritage sites, railways, historic means of transport, and industrial equipment operational. This work is vital in allowing millions of citizens to experience and learn about the contributions of our ancestors to our current European way of life, and to our European cultural identity.

Contact the author

Circular Locomotive Shed, 2023 (photo author)

GREECE

VIDA'S EVALUATION STUDY OF THE PIRAEUS – ATHENS - PELOPONNESE RAILWAYS (SPAP), HISTORIC BUILDING COMPLEX AS ELEMENTS OF GREECE'S INDUSTRIAL HERITAGE

Hercules Fassourakis, Vault of Industrial Digital Archives (VIDA)

After the liberation and the creation of the independent Greek state, Athens was proclaimed capital in 1834. Immediately afterwards, Piraeus was designated as its official seaport, becoming a commercial and maritime centre and the first purely industrial city in the country, which acquired a formally designated industrial zone in 1892. Piraeus was directly connected to the Peloponnese, which was the most developed and productive region of the country before the annexation of Thessaly, with important ports and growing industrial centres such as Patras and Kalamata.

Within this framework, a contract was signed with the General Credit Bank on April 19, 1882, for the construction of a single-meter-gauge railway line. This line, starting from Piraeus, would connect the port and Athens with Corinth, Patras, Argos, Nafplio, and the village of Milous. The construction and operation of this network was undertaken by the joint-stock company 'Piraeus-Athens-Peloponnese Railways' (SPAP in Greek), founded on 17 October 1882.

Construction of the new line began from Piraeus on 8 November 1882. The Piraeus-Patras section was completed in December 1887, Kalamata was connected by rail in 1899 with Tripoli and Athens, while the railway network of the Peloponnese was completed in 1904 with the extension of the line to the port of Kalamata.

SPAP Old Railcar Depot, 2024 (photo by author)

The SPAP's metric network reached a total of approximately 750 km, making it the largest metric railway network not only in the country but also in Europe. The regime of Ioannis Metaxas put the network under state control in 1939. Nationalised in 1954, SPAP was integrated into the Hellenic State Railways (SEK) in 1962, which evolved into the Hellenic Railways Organisation (OSE) in 1971.

HISTORY AND DEVELOPMENT OF THE LEFKA REGION RAILWAY FACILITIES

The first locomotive depot of SPAP was constructed within the premises of the Piraeus Station between 1884 and 1886. The facility comprised two sheds: one designated for steam locomotives and the other for rolling stock. The facility, later known as the SPAP Central Piraeus Factory, located in the Lefka district, was completed in 1888.

In 1912, the Circular Locomotive Shed, now known as the Rotonda, was constructed to accommodate light maintenance operations for steam locomotives. The structure was built around a turntable, which was installed during the same period.

In 1937, SPAP entered the era of diesel traction. The operational requirements associated with this new technology necessitated the construction of a dedicated depot for housing and maintaining the network's first diesel railcars.

During the German Occupation and World War II, the Circular Locomotive Shed sustained significant damage, while the turntable was destroyed. Despite extremely adverse conditions and severe material shortages, SPAP succeeded in restoring the railway network's operation by 1946.

The further development of the Lefka railway complex began in 1951 with the addition of a second New depot, a new 37-meter-long conveyor table, a new canteen, and a two-storey building intended for staff accommodation.

The New Railcar Depot was completed in 1959. Around 1958, a modern turntable manufactured by the German company Windhoff was installed in front of the Circular Locomotive Shed. This 20-meter-long installation was designed to accommodate the newer steam locomotives introduced into service between 1947 and 1951.

SPAP Central Piraeus Factory, 2024 (photo by author)

The SPAP Circular Locomotive Shed and Railcar Depot ceased operations on August 7, 2005, while the majority of the historic Peloponnese railway network was decommissioned in 2011. The former Central Piraeus Factory of SPAP, now isolated from the remaining meter-gauge network, continues to operate as part of the adjacent Piraeus Factory Complex, constructed in 1903 for the maintenance of standard-gauge rolling stock. As a unified facility, the Piraeus Factory is currently operated by Hellenic Train, a member of the FS Group, following its separation from OSE and the privatisation of the Rolling Stock Maintenance Sector.

METHODOLOGY AND IMPLEMENTATION STAGES OF THE VIDA PROJECT

The VIDA project aims to conduct a historical and architectural evaluation of the SPAP complex and part of the SEK Factory (19th–20th centuries), from the perspective of industrial archaeology. This documentation will provide OSE with a key tool to highlight and promote the complex as a whole. The present study focuses on the survey and evaluation of the buildings comprising the SPAP Circular Locomotive Shed (A), Railcar Depot (B), and Central Piraeus Factory of SPAP (C), along with their associated industrial equipment. It also includes the section of the SEK Piraeus Factory surrounding the Wood Pattern Workshop and the Foundries (D). The project adheres to the principles of industrial archaeology and employs internationally recognised best practices for documenting and assessing industrial heritage. It fundamentally views the buildings as part of a historic ensemble, assessing them collectively rather than individually.

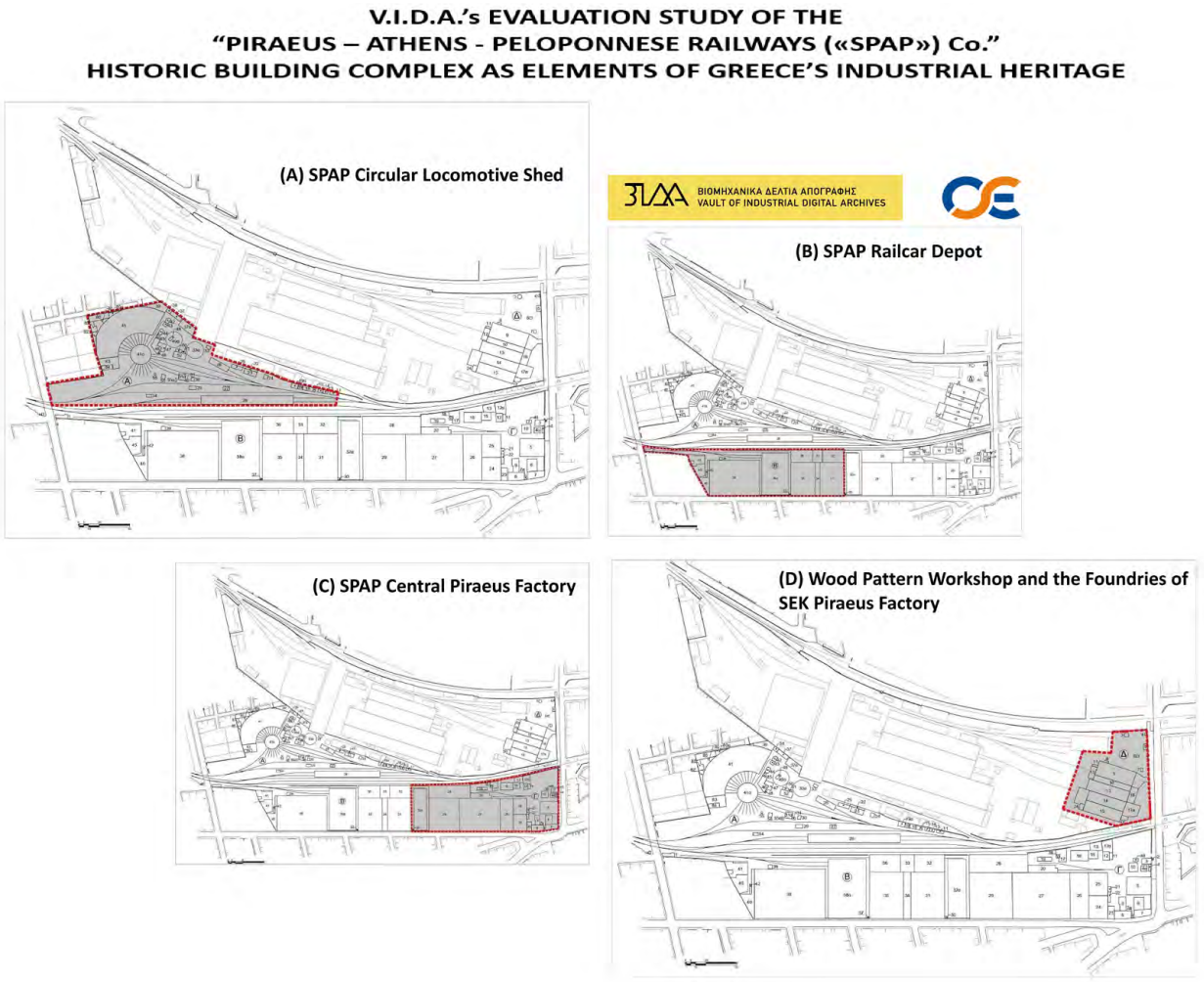
The project proceeded through the following methodological stages:

1. Conducted on-site inspections, field surveys, and photographic documentation to identify the distinctive features of each building and structure.

2. Developed a specialised "Historic Buildings/Structures Documentation & Evaluation Survey Report" for OSE assets, integrating field data with archival research and providing a standardised tool for nationwide application.

3. Performed bibliographic and archival research, including review of the OSE Historical Archive.

4. Survey Reports for each Building/Structure with data from on-site inspections and research findings.



SPAP topographic plans (plans by Nefeli Andrioti)

5. Architectural and historical assessments based on predefined criteria: Functional role within the complex and production workflow, Authenticity, Structural integrity, Architectural and Morphological Significance, Preservation & Evaluation of Equipment, Social and Historical Value. Each criterion was scored on a 1–5 scale. A preservation recommendation is provided for each building following the evaluation.

6. Initial proposal for reusing each building/structure to highlight the historic complex, suggesting possible uses such as a Museum, an Exhibition, Operational, Educational, and Recreational purposes.

The entire landmark complex of SPAP-OSE in Lefka, Piraeus, constitutes an exceptionally significant industrial monument and, in particular, a foremost landmark of the country's railway heritage. The complex's inherent historical, social, economic, technological, and architectural values apply to both the whole and its parts, forming OSE's unified heritage, which it must protect and promote. The complex is also distinguished by its notable contribution to the port city of Piraeus, as well as to broader industrial development. The workshops and maintenance facilities established for servicing rolling stock played a significant role in the field of Greek Mechanical Engineering and Manufacturing.

Within this context, the evaluation of industrial structures, as dictated by the principles of industrial heritage conservation, is conducted by considering both the Architectural Fabric and its functional use, i.e., its industrial equipment, as an integrated operational unit. Although the adaptive reuse proposals in this study represent an initial approach, evaluating the structures is crucial—and in some cases, mandatory —for any future use. Specifically, for buildings where functional or other elements must be preserved according to the evaluation, any new use must incorporate these elements as specified in the corresponding Survey Reports.

VIDA (Vault of Industrial Digital Archives) is a Civil Nonprofit Organisation dedicated to recording, preserving, and safeguarding Greece's industrial heritage.

Contact the author

The oldest tied-arch bridge in Japan from the Adachi side (photo by author)

JAPAN

SENJU ŌHASHI BRIDGE, THE OLDEST TIED-ARCH BRIDGE IN JAPAN

Katriina Etholén is publishing photos and articles about various themes on her blog Tales from the Brazier's Grotto.

I visited the Senju Ōhashi Bridge - 千住大橋 - in Tokyo in June 2024. The proper translation should be Senju Bridge, or to be even more precise, Senju Great Bridge, as that's what *ōhashi* means: Great Bridge. However, it appears that Senju Ōhashi Bridge is the translation used in the English language.

The Senju Ōhashi Bridge is a tied-arch iron bridge spanning the Sumida River that branches from the Arakawa River and connects the Arakawa ward and Adachi ward in Tokyo. It is one of the oldest tied-arch bridges in Japan. The Wikipedia article about the bridge states that it is the oldest, but according to several sources, the Eitai Bridge, which also crosses the Sumida River, was completed one year earlier. The Senju Ōhashi Bridge was designed by a bridge design office led by Jiun Masuda (1883-1947); it is unclear whether he designed it himself or if it was a collaborative effort. It was completed on 12 December 1927. According to the Live Japan website, it's 92.5 metres in length (91.6 metres, according to Wikipedia) and 24.2 metres in width.

The text on the Adachi side of the bridge says "Completed in December of the second year of Showa" (photo by author)

Utagawa Hiroshige's woodblock work called 千住の大はし, which can be translated as Senju no ōhashi, Senju Great Bridge

The modern Senju Ōhashi Bridge is not just one bridge, but consists of two bridges. Next to it, there is a newer bridge (completed in February 1973), painted with the same shade of blue as the 1927 bridge. Pedestrians are permitted to use both bridges, but cyclists are required to use only the old bridge. On the other side of the old bridge lies the third structure of the complex: a modern aqueduct that carries water pipes across the river. The Senju Water Pipe, which belongs to the Tokyo Metropolitan Government Bureau of Waterworks, is designed to match the style of the old bridge.

You cannot talk about the current Senju Ōhashi Bridge without talking about the history of the preceding ancient bridge(s) and Utagawa Hiroshige's woodblock work called 千住の大はし (Senju no Ōhashi, Senju Great Bridge). And that's what is on the stone info board, too. Hiroshige's ukiyo-e picture was made in the second month of 1856, and it's number 103 in Hiroshige's famous One Hundred Famous Views of Edo, which consists of 119 images.

The very first Senju bridge was built in 1594 by Kanto Magistrate Ina Tadatsugu. That was a couple of years after shōgun Tokugawa Ieyasu had entered Tokyo. It was the first bridge over the Sumida River, also known as the Arakawa River. The name Sumida River was not used at the time, and it was later adopted as a nickname. Tokugawa Ieyasu's policy was not to build a bridge, as he wanted to defend Edo (present-day Tokyo). However, Senju was the route to and from Edo for travellers using the Nikkō Kaidō and Ōshū Kaidō. Senju was designated as a post town (Senju-shuku, 千住宿) in 1597, three years after the bridge was built. Post towns provided lodging for travellers, as well as for pack horses and porters. It was a popular route; therefore, Tokugawa Ieyasu permitted the construction of a bridge. The original bridge was located approximately 200 metres upstream from its current location, and initially, it was simply called "Ōhashi" (meaning "great bridge"). The most famous poet of the Edo period, Matsuo Bashō, had seemingly chosen the bridge as a starting point for his trip in 1689 to the north of Japan. The trip was the subject of his masterwork, *Oku no Hosomichi*. On the Adachi end of the bridge, there is a memorial marking the start of that trip, but due to some roadworks, I missed it. On the other end of the bridge, there's an information board made of stone about Hiroshige's above-mentioned ukiyo-e work that was made in the second

month of 1856. It is number 103 in Hiroshige's famous *One Hundred Famous Views of Edo*, which consists of 119 images.

The bridge was a very robust, long-lasting structure. It had been renovated or remodelled several times after it was constructed. The great flood in 1885 finally washed the bridge away, and the following year, it was rebuilt as a wooden double-arch bridge. The current bridge was constructed as part of the reconstruction efforts following the Great Kantō Earthquake of 1923. Even though Hiroshige's woodblock print of the old bridge might be the most famous picture of the bridge, the current bridge has also been the subject of an artistic work. An image of the bridge is included in the series of woodblock prints titled "One Hundred Views of New Tokyo," a subscription series created by eight artists between 1928 and 1932. Sakuichi Fukazawa made the picture of the Senju Ōhashi Bridge.

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Contact the author

SPAIN

A SURVEY OF FOSSIL-FUELED POWER STATION CONSERVATION: ASSESSING THE REGRESSION OF INDUSTRIAL HERITAGE IN SOUTHWEST EUROPE

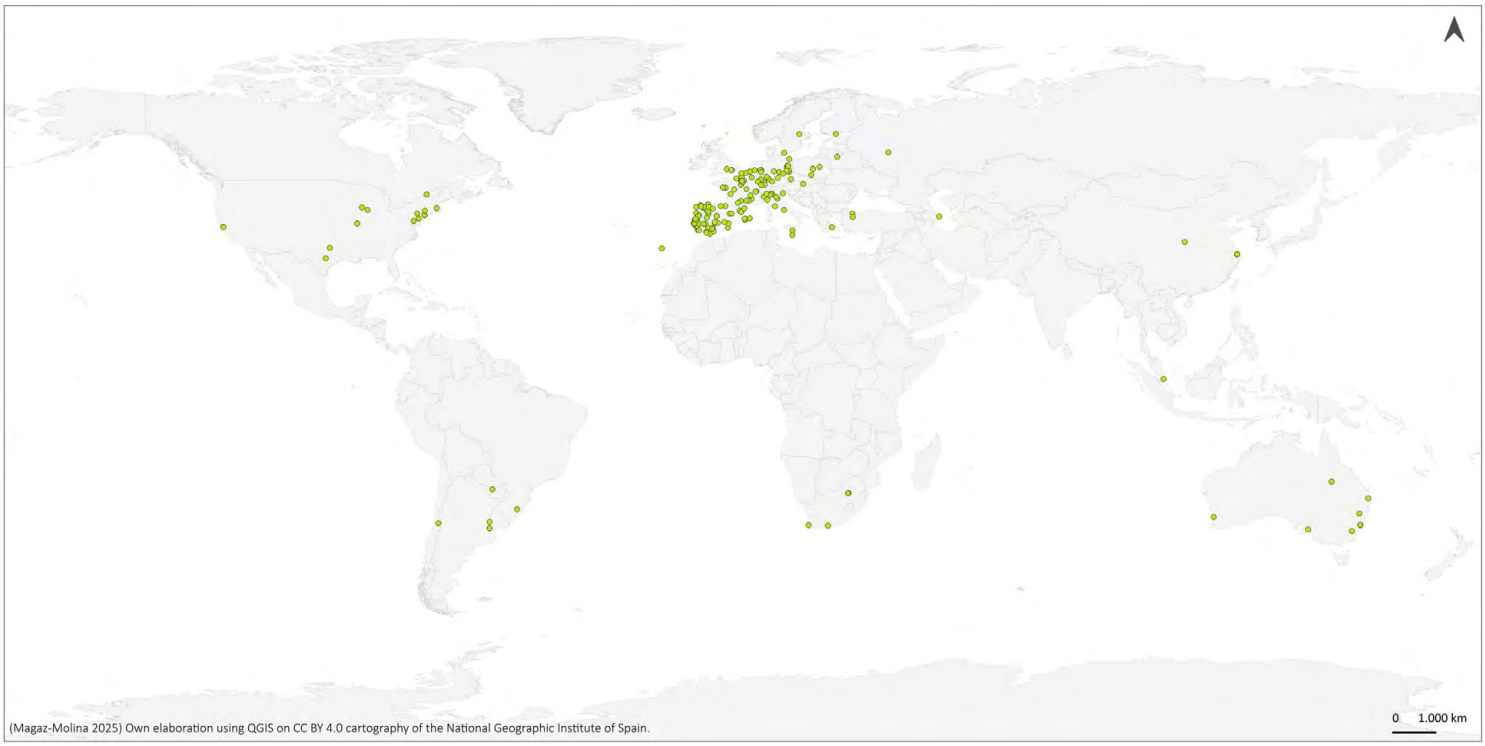
Jorge Magaz Molina, Lecturer at the University of Alcalá. Department of Architecture & Ángeles Layuno Rosas, Tenured Associate Professor at the University of Alcalá. Department of Architecture.

The impact of climate change on heritage and the role of culture in climate adaptation and mitigation programs have become increasingly important topics. Given the historical connections between industrial activity and environmental impact, the identification, protection, and conservation of industrial heritage present significant particularities that require both qualitative and quantitative approaches.

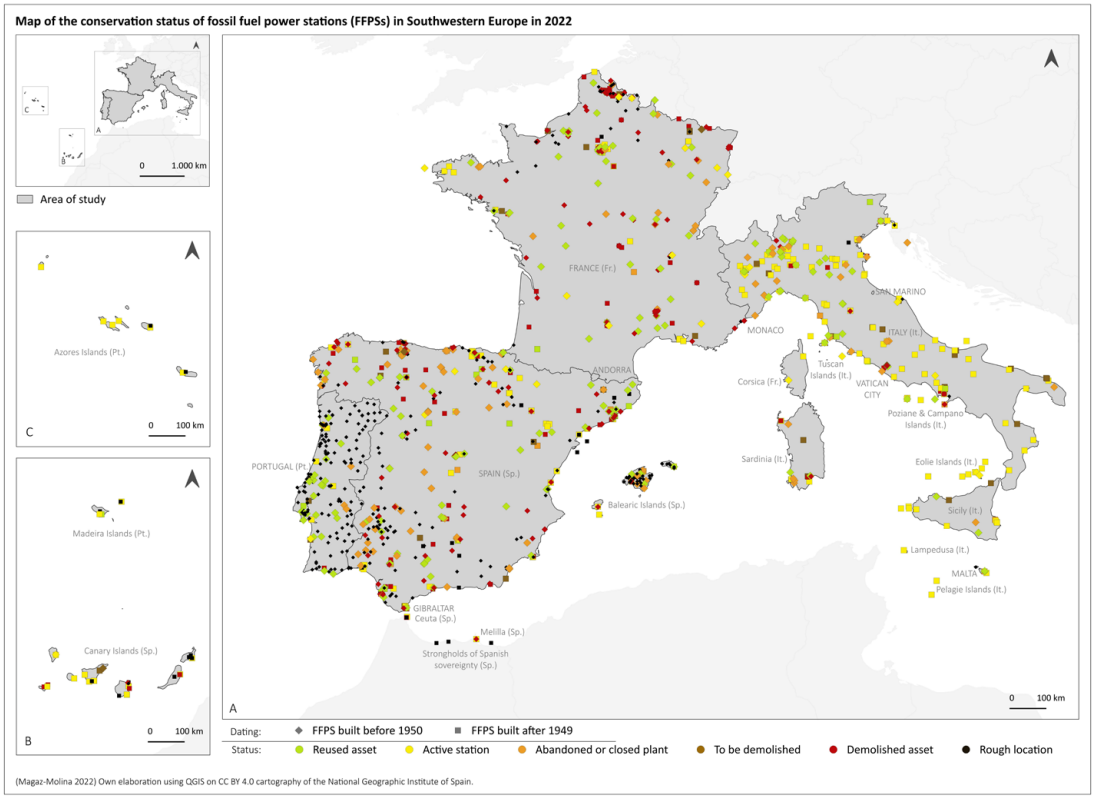
One of the primary concerns is the impact of environmental policies on the built legacy of industry. While the relationship between environmental regulation and industrial heritage conservation is well established, the rapid closure of fossil-fueled power stations as part of decarbonization policies raises significant contradictions in cultural management. This topic was discussed at the 2022 TICCIH Congress in Montreal, alongside other challenging topics, during a roundtable on "Industrial Heritage Conservation and Climate Change." Organisations such as English Heritage Trust have described fossil-fueled power stations as "great temples to the carbon age," emphasising their cultural and technological value. Nevertheless, their systematic dismantling is often presented by authorities and companies as a milestone towards sustainability. Researchers such as High and Lewis (2007) have argued that the dramatic nature of these demolitions reinforces among local communities the perception that deindustrialisation is irreversible. Similarly, Holm and Eklund (2018) have documented the difficulties faced by Australian mining communities in integrating heritage perspectives into the management of landscapes impacted by decarbonization.

A clear example of local community resistance to the loss of obsolete industrial landmarks can be found in the Spanish coal basins. These regions, which hosted the last active coal-fired power stations in mainland Spain, experienced accelerated plant closures between 2019 and 2022. This process sparked significant heritage debates, as communities suddenly became interested in preserving these sites as part of their landscape and identity. This was the case in Andorra & Escucha (Teruel), Velilla (Palencia), Compostilla (León) and As Pontes de García Rodríguez (A Coruña), although we also documented earlier demands in Asturias, the Basque Country and Catalonia. This concern was supported by non-governmental organisations such as Hispania Nostra, INCUNA, and ICOMOS. It led the Monitoring Committee of the National Plan for Industrial Heritage of the Spanish Ministry of Culture to issue recommendations to regional authorities, emphasising the interest of fossil-fueled power stations as heritage assets.

Within this context of change in Spain's energy structures and buildings, the research conducted at the Department of Architecture of the University of Alcalá on the legacy of the Francoist energy industry proposed a broader approach to analyse scenarios arising from energy transition programs. Following the Spanish case and noting the lack of transnational studies on the relationship between ecological transition and industrial heritage, a global sampling was initiated in 2022. This involved documenting both carbon culture conservation initiatives and cases of decarbonization and environmental restoration programs affecting the industrial legacy. The initial survey identified 206 former fossil-fueled power stations adapted to urban uses, primarily as museums and cultural facilities, but also as offices, stores, religious, and residential spaces. This initial sample may be subject to



Map of fossil-fueled power stations adapted to urban uses (map by J. Magaz-Molina)



Map of the conservation status of fossil-fueled power stations in Southwestern Europe (map by J. Magaz-Molina)

a particular bias, as a European language limitation may condition the accessibility of sources, favouring the inclusion of Western cases. Taking these preliminary results with caution, it can be appreciated that conservation and reuse actions for energy-related industrial heritage may be more frequent in countries with higher levels of economic development and those with established heritage management frameworks, where an artistic orientation can be identified as a criterion for preservation.

ENDESA and MSP power stations in Ponferrada transformed into a cultural pole focused on decarbonization between 2009 and 2022 (photo by Jorge Magaz Molina)

To better understand the processes surrounding the heritagization of industrial legacies affected by decarbonization, the study was focused on the countries of southwestern Europe—Spain, France, Portugal, Italy, Gibraltar, Malta, Monaco, and Vatican City—given their shared climate agreements, similar bioclimatic, historical, and technological contexts, and their established industrial heritage management. Andorra and San Marino were excluded due to the lack of records about the construction of fossil fuel power stations.

The methodology combined a multilingual review of heritage literature, administrative reports, and corporate documentation on industrial heritage management and decarbonization policies, along with the creation of a geo-referenced census of built, preserved, and lost facilities, utilising historical references dating back to 1880. This led to the development of a historical cartographic database of carbon-emitting power stations.

Despite the provisions of the European Regulation establishing the Just Transition Fund (EU Regulation 2021/1056), which calls for preserving the culture of communities affected by decarbonization policies, the study found no programmed actions for identifying, protecting, or preserving facilities affected by closures. Although European decarbonization programs provide funding for revitalising alternative economies based on enhancing industrial heritage, culture and heritage remain peripheral to the central debates of ecological transition policies.

Data show uneven administrative attention to industrial facilities from the second half of the twentieth century, with most lacking formal protection. Their large-scale, decontamination and maintenance costs are decisive economic factors. Besides, their contemporary technological aesthetics—distant from traditional monumental canons— has not gained widespread recognition. The demolition of polluting industrial heritage is presented as a measure to create new landscapes aligned with ecological criteria and the aesthetic paradigm of sustainability, which is also lucrative due to opportunities for material recovery and real estate speculation. Conversely, decarbonization programs appear to favour the reuse of historicist architecture from the nineteenth and early twentieth centuries, where factors such as scale, dating, and local protection status play a positive role. This could be a case of the refurbishment of Spanish coal-fueled power stations of Ponferrada (1918-1949) and Valdepeñas (1913), or the protection of the Italian facility of Genova-Lanterna (1927).

The role of local communities in decision-making regarding the conservation or transformation of industrial sites, as well as in negotiating the memory of territories affected by ecological transition, reappears as a key aspect for the cohesion of the regions affected by the closures. Although the controversies mapped in Spain, Malta, and France, and the conservation actions led by AIPAI in Italy, reflect a transnational public debate surrounding industrial heritage, the channels of participation that enable decarbonization processes remain a topic deserving further exploration.

The ongoing closure and transformation of fossil-fueled power stations across Southwest Europe highlights the complex interplay between environmental policy, industrial heritage, and community identity. While decarbonization programs are essential for addressing climate change, the rapid dismantling of these sites often overlooks their cultural and technological significance. Our research demonstrates that heritage conservation in this context faces significant challenges, including economic constraints, limited legal protection, and the prevailing narrative of irreversible deindustrialisation. A balanced approach, greater involvement of local communities, the development of adaptive reuse strategies, and the integration of heritage considerations into environmental policy can help ensure that the transition to a sustainable future does not come at the expense of industrial heritage.

The results of this study have been published in an open-access article.

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Herend porcelain kiln in the 1920s (unknown photographer)

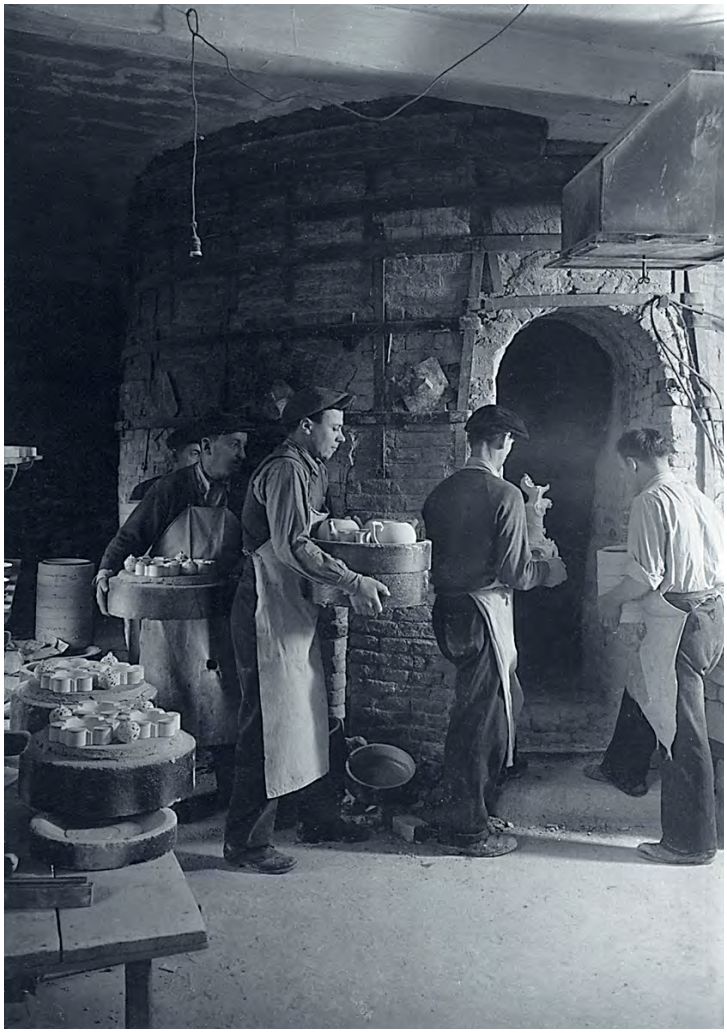
HUNGARY

200 YEARS OF HISTORY IN A 140-YEAR-OLD KILN – HEREND PORCELAIN MANUFACTORY

Dr. István Gergely Szűts

One of Hungary's best-known businesses was founded in 1826 in Herend, about 120 kilometres from Budapest. The country had a strong tradition of faience and ceramics production, but porcelain manufacturing only started to develop in these decades. Due to competition from Bohemian and German businesses, it did not become dominant in Europe, except for a few companies. One notable exception was the Herend Porcelain Manufactory, which quickly gained recognition as one of the most prestigious brands on the continent, both technologically and artistically.

In 1826, when it was founded, there was only a small craft workshop. However, by 1841, a split round kiln had been introduced, a rarity in the industry and an indication of significant production. Two years later, the factory burned down, and the kiln was damaged.



Kiln room in the 1950s. One of the kilns can still be seen and visited in the Herend Porcelain Museum (unknown photographer)

The chimney of the 140-year-old red-brick kiln (photo by Zsolt Bak)

A decade and a half later, the owner, Mór Fischer, had a so-called Meissen-fired kiln built after returning from a study trip to the Saxon Principality. The success of the manufactory and its growing capacity is illustrated by the fact that by 1867, there were three large and six small kilns in operation.

In 1884, with state support, the manufactory was transformed into a corporation and larger two-storey kilns were built, following the Bohemian model. At the turn of the century, three of these large kilns were already in operation; one of them can still be seen and visited at the Herend Porcelain Museum.

The kilns and chimneys of the manufactory have evolved in tandem with technological advancements and the increasing demands of customers. In 1937, one of the most successful years for the porcelain manufactory, there were five small kilns in addition to the three large ones. After World War II, the communist regime that took power nationalised the factory. Still, improvements were not made, and the wood-fired kilns, which had become obsolete in Western Europe, remained until the late 1960s.

Following the economic turnaround in Hungary in 1968, significant investments were made, and the area of the manufactory was expanded. Oil- and electric kilns, later replaced by gas-fired ones, were used in Herend for a short time. With this technological development, the old kilns and chimneys for smoke extraction were no longer needed. Until the late 1980s, the three large circular kilns still stood on the site of the manufactory, but after the change of regime in Hungary, they were dismantled one by one. In the end, only the one closest to the two-hundred-year-old main building remained. This round wood-burning kiln, now almost 140 years old, became an integral part of the exhibition space after the museum's complete renovation in 2000.

The small town, home to approximately 3,500 residents, has been shaped by the presence of the old factory, now a museum, since its founding. The two-story neoclassical building, along with the chimneys that appeared and later disappeared around it, has defined the town's skyline. In 1999, a new, modern clinker-brick visitor centre was built, where visitors can follow the porcelain-making process from raw materials to shaping and

painting. The complex visitor experience also includes the less well-known and visible process of firing, which can be seen in the 140-year-old kiln itself.

Beyond the visual experience, visitors can still occasionally catch the scent of firing. As they walk around the four-meter-diameter kiln, they can even touch the 140-year-old bricks and the steel rings that once stabilised this historic piece of industrial heritage.

Next to the kiln, visitors can also view rescued, now-unique tools that were once used in the industry, and the museum continues to collect technological artefacts from past manufacturing practices. The silhouette of the Herend Porcelain Manufactory's modern visitor centre and the heritage-listed old factory is truly completed by the towering chimney of the 140-year-old red-brick kiln, encapsulating two centuries of operation.

Contact the author

Coking Plant Orzegów (photo by author)

POLAND

TRANSFORMATION OF POST-INDUSTRIAL AREAS INTO GREEN SPACES IN THE CONTEXT OF SUSTAINABLE DEVELOPMENT OF THE UPPER SILESIAN AGGLOMERATION IN POLAND

Sandra Pichlak-Czop, Silesian University of Technology in Gliwice

The transformation of post-industrial areas into green spaces is one of the key challenges for the cities of the Upper Silesian agglomeration, which have developed for decades on the basis of heavy industry. Revitalisation of such areas is crucial for enhancing the quality of life for residents, protecting the environment, and restoring landscape values. The article analyses the importance of transforming degraded areas, using examples from the region, and highlights the role of urban greenery in the context of sustainable development and urban landscape regeneration.

The Upper Silesian agglomeration is a highly urbanised and industrialised area in Poland, which for decades was the centre of mining, metallurgy and energy in Poland. Intensive exploitation of natural resources and industrial development have led to the creation of extensive degraded areas, including slag heaps, pits, defunct industrial plants, and contaminated land. Today's urban and environmental challenges necessitate the transformation

Tradition Park at the right of the picture (photo by author)

of these areas in a manner that is both environmentally friendly and community-oriented.

Sustainable development involves a balance between environmental, social and economic aspects. Transformation of brownfields into green spaces contributes to:

- Protection and restoration of biodiversity,
- Reduction of the negative effects of urbanisation (urban heat island effect, air pollution),
- Social revitalisation and integration of local communities,
- Increasing the investment and recreational attractiveness of cities.

LANDSCAPE AND POST-INDUSTRIAL ASPECT

Degraded industrial sites, which once served as manufacturing hubs, now offer the potential to create unique post-industrial landscapes. Their redevelopment can combine recreational functions with the preservation and reinterpretation of cultural heritage. Industrial elements, such as shaft towers, steel structures, and slag heaps, can become landscape dominants that integrate the history of a place with a modern approach to designing public spaces. This approach promotes the creation of a strong place identity and engages residents in revitalisation processes.

EXAMPLES OF REVITALISED AREAS FROM THE UPPER SILESIAN AGGLOMERATION

The Coking Plant in Orzegów has been transformed into an educational park, showcasing its history in the background (Ruda Śląska, 3.37 ha). A recreation space has been created on the site of the former coking plant, which not only allows you to relax among the greenery but also serves as a reminder of the region's industrial heritage. The preserved elements of the industrial infrastructure now serve an educational function, and the entire site has been adapted for walks, events and social activities [see TICCIH Bulletin #101, 2023].

Frog Pits[1] features post-mining nature (Bytom, Chorzów, Piekary Śląskie, 226.2 ha) and was created by flooding former mining pits. Today, it is a valuable nature reserve, home to numerous species of birds and

other animals. Frog Pits is also a popular recreation area for residents of the metropolitan area - it's an ideal space for strolling, observing nature, and taking a break from the city's hustle and bustle.

Gródek Park, also known as the Silesian Maldives (Jaworzno, 58.54 ha), was a former sandpit and has been transformed into a highly picturesque landscape park, with turquoise water lakes and walking trails. Thanks to the combination of natural values and educational elements, the Arboretum attracts crowds of tourists and regional residents. It has become a symbol of ecological revitalisation and the effective use of a degraded area's potential.

The Regional Park of Culture and Recreation[2] (Chorzow, 600 ha) was established in the 1950s on former heaps and wastelands. It is now one of the largest urban parks in Europe. It houses, among others, the Silesian Zoo, the Planetarium, the Silesian Stadium and numerous bicycle and walking trails. It is an excellent example of transforming degraded land into a modern social, cultural and recreational space.

Tradition Park features history in a new version (Siemianowice Śląskie, 2.92 ha). The former mine site hosts a modern museum and an educational centre. The main building was revitalised and now houses exhibitions related to industrial history and cultural events. The surrounding area was transformed into a friendly urban park with small architecture and recreational areas.

CHALLENGES AND DIRECTIONS FOR FURTHER DEVELOPMENT

The process of revitalising brownfield sites involves a variety of challenges:

- The need to clean up the environment from industrial residues (e.g. heavy metals, post-mining waste),
- Preservation of cultural heritage and its integration with modern landscape architecture,
- Addressing the needs of local communities,
- Cross-sectoral coordination and fundraising.
- The development of such areas should be planned on a long-term basis, with the participation of residents, landscape architects, ecologists, and urban planners.

CONCLUSIONS

The transformation of post-industrial sites into green public spaces in the Upper Silesian agglomeration represents a real opportunity to improve environmental quality, strengthen social ties and revitalise urban space. By integrating aspects of landscape and industrial heritage, it is possible to create unique spaces that will serve residents, tourists and future generations. Sustainable redevelopment is not only a challenge, but also an opportunity for a new quality of life in a post-industrial city.

Contact the author

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BRAZIL

FROM FACTORY TO SCHOOL: INDUSTRIAL HERITAGE AND HISTORICAL EDUCATION IN CURITIBA, BRAZIL

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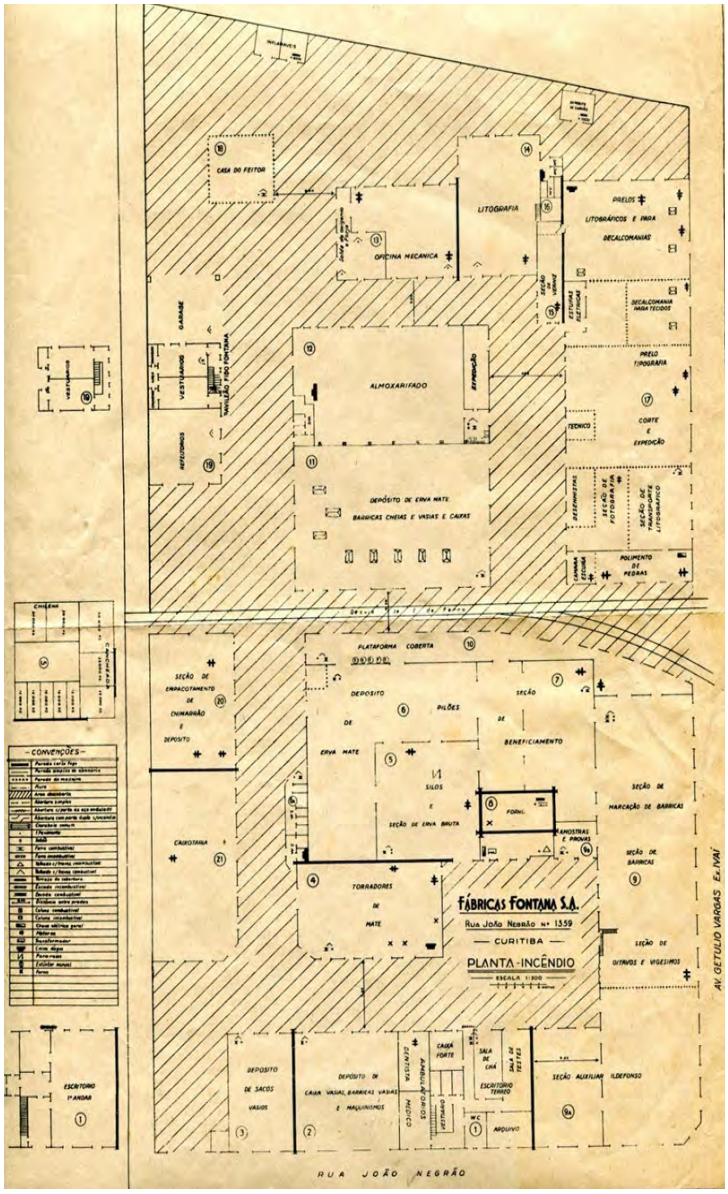
In the heart of Curitiba, the capital of Paraná state in southern Brazil, a compelling educational initiative has been unfolding within a former yerba mate factory. This site, once a major industrial complex for processing yerba mate – a key product in the 19th and 20th century regional economy and a significant example of regional industrial development – now houses the Federal Institute of Paraná (IFPR), a public federal institution offering technical, professional, and secondary education. Since 2012, this space has become the nexus of a pedagogical project integrating industrial heritage with history education.

The former Moinhos Unidos Brasil Mate S.A., later known as Chás Real, was established in 1834 and operated continuously at the same location for over a century. When IFPR acquired the property in 2011 to establish its new campus, an unexpected discovery was made. Beyond the factory building itself, an invaluable historical archive of heritage assets had been left behind. Hundreds of documents – industrial records, accounting ledgers, architectural plans, photographs, personal correspondence, and labour documents – were found abandoned on the premises, accompanied by complex original machinery, a material testament to the yerba mate processing in southern Brazil. This collection became the foundation for a project focused on the preservation, organisation, and educational utilisation of the documentation and the surviving industrial structure.

The project was initially provocatively named "What is this? A pile of old paper!", and is now known as "History Laboratory: The Student as Historian in Search of Sources." Students participated in training workshops on document preservation, cleaning, description according to NOBRADE (Brazilian Archival Description Standard), and digitisation, fostering crucial archival literacy. Equipped with lab coats, gloves, and masks, they organised the collection by decade (starting from 1882), created their own cataloguing forms, and developed a digital school repository.

During this process, the students encountered documents revealing urban transformations in Curitiba during the early 20th century – changes that align with methods described in history textbooks. A notable example was the comparison between Paris's urban reform in the 1850s, led by Haussmann, and Curitiba's urbanisation in the same period. Both involved sanitation measures, the opening of avenues, and the creation of public parks. According to an official report from 1888, the transformation of a former swamp into the current Passeio Público of Curitiba was spearheaded by Francisco Fasce Fontana, the founder of the factory where IFPR is now located. This connection between primary sources and textbooks resulted in an innovative didactic experience.



Fontana factories floor plan, 1975 (Collection of the project "What is this? A pile of old paper! Resignification of sources by young students")

Since 2016, high school students in the integrated technical program, under teacher guidance, have been developing pedagogical activities comparing the urban modernisation processes of Paris and Curitiba. This work utilises chapters from textbooks that address the industrialisation of European and American countries. Engaging with the yerba mate industry's archives not only provided students with direct contact with authentic historical documents but also fostered the development of critical thinking, a sense of belonging, and an appreciation for collective memory. By recognising the facto-

Inside the factory, 2015 (photo by More, A.)

Inside the yerba mate factory machinery, 2015 (photo by More, A.)

ry as a driving force behind Paraná's industrialisation – responsible, for instance, for spurring the construction of the railway connecting Curitiba to the port of Paranaguá – students began to perceive their school environment as part of a broader and significant historical process.

More than a decade after its inception, the project remains active. Each year, new students become involved through scholarships or as volunteers, continuing the work of research, digitisation, and document analysis. In addition to maintaining the preservation process, new discoveries have been made, including

handwritten letters that reveal intimate and commercial aspects of the founding family, detailed plans of the factory and its annexes, and technical documents with schematics and descriptions of the machinery architecture used in yerba mate processing. These records illustrate not only industrial production processes but also the spatial logic of the warehouses, internal work circuits, and technology employed from 1882 to 2010. These new findings reinforce the pedagogical and historiographical potential of the collection, opening avenues for further interpretations of the yerba mate industry's role in shaping the urban landscape and regional economy. The project also contributes to the production of digital didactic materials, collaborating with history teachers and the wider school community.

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NORWAY

THE POLAR ARCHIPELAGO OF SVALBARD: HISTORICAL EXPLOITATION AND INDUSTRIAL CULTURAL HERITAGE

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The polar archipelago of Svalbard has been exploited for its natural resources for several centuries. During the 16th and 17th centuries, Dutch and English whalers conducted intensive whaling operations in the region. Around the mid-18th century, Russian trappers began overwintering on the islands, primarily hunting fur-bearing animals. This practice was later adopted by Norwegian hunters from approximately the mid-19th century and continues to a limited extent today.

At the beginning of the 20th century, several nations, including England, Scotland, the United States, Sweden, Russia and Norway, initiated exploratory operations for mineral extraction. Numerous historical remnants from these various international activities remain scattered across the archipelago, continuing to shape its cultural landscape.

Coal mining continued in Longyearbyen until recent years, and the remnants of this industry remain a defining feature of the town's cultural landscape, clearly reflecting its historical foundations. Although all coal mining activities on Svalbard have now ceased — except for the Russian-operated mine in Barentsburg — the physical traces of this legacy remain prominent in the Arctic environment, and Norwegian authorities are committed to preserving these historical markers. All cultural heritage sites dating from before January 1, 1946, are automatically protected under the Svalbard Environmental Protection Act.

A persistent dilemma concerns how to preserve Svalbard's industrial cultural heritage, both technically and economically. These cultural environments do not generate direct revenue, yet their preservation is highly resource-intensive. The structures are large and complex, exposed to harsh and degrading natural forces, and require nearly continuous maintenance. While such upkeep was once an integral part of daily operations during active use, the closure of the mines has transformed maintenance into a substantial and difficult-to-finance undertaking.

Furthermore, knowledge related to the infrastructure and its maintenance is gradually being lost, while the accelerating deterioration of the sites exacerbates the problem. In short, many heritage assets are at imminent risk of disappearing, and addressing this issue will require innovative and sustainable preservation solutions.

Just outside Longyearbyen, Mine 6 still stands with its massive installations, and the aerial cableway system—once connecting multiple mines in and around Longyearbyen—remains a prominent testament to the industrial foundations of Longyearbyen and the broader Svalbard community.

Industrial heritage tourism

Today, tourism is one of Svalbard's most important economic sectors. Cultural heritage sites related to historical industrial activities, hunting and trapping, and scientific expeditions across the archipelago play a significant role in attracting visitors.

View of the remaining sections of the extensive surface infrastructure associated with Mine 6, located in Adventdalen, just east of Longyearbyen. These structures represent a significant component of Svalbard's early 20th-century coal mining heritage and exemplify the scale and complexity of industrial operations in the High Arctic (photo by author)

The aerial cableway system that transported coal from the mines to the shipping terminal at Hotellneset, located just outside Longyearbyen. This infrastructure was a critical component of the logistical network supporting Svalbard's coal industry, illustrating the integration of industrial transport solutions within the Arctic landscape (photo by author)

In Longyearbyen, the authorities have chosen to partially fund the preservation of industrial heritage through the Svalbard Environmental Protection Fund. This fund is primarily financed by a visitor tax, which is automatically collected from all individuals entering Svalbard.

In the mining town of Svea, located south of Longyearbyen at the innermost part of Van Mijenfjorden, authorities adopted a different approach to heritage preservation. Following the cessation of coal mining operations in 2016—after nearly a century of continuous activity—the entire area affected by industrial op-

Tourists exploring the historic marble quarry and the remnants of the associated mining settlement at London, located near Ny-Ålesund on the west coast of Spitsbergen. This site represents one of several early 20th-century industrial ventures on Svalbard and illustrates the intersection of heritage tourism and Arctic industrial history (photo by author)

erations was cleared and restored to its natural state, following the Svalbard Environmental Protection Act.

The mining activities in Svea have played a significant role in asserting Norwegian sovereignty over Svalbard throughout the past century, serving as a key geopolitical cornerstone. Consequently, the industrial presence in this region holds substantial symbolic and cultural importance both locally within the Svalbard community and nationally for Norway.

To preserve the cultural and historical value of Svea, the Norwegian Institute for Cultural Heritage Research (NIKU) proposed a digital documentation initiative. Before the commencement of the site restoration, a comprehensive digital model of the mining settlement was developed. This model aims to provide a virtual experience of the site post-removal and is nearing completion. It will be accessible via a dedicated website and partially integrated into the Gruve 3 mining museum in Longyearbyen.

This example illustrates the use of diverse strategies for preserving elements of Svalbard's industrial heritage. However, significant challenges remain. The rate of deterioration of other industrial heritage sites across the archipelago is accelerating, and limited efforts have been made to safeguard their cultural value. In summary, there is an urgent need for innovative preservation solutions, as many heritage assets are at risk of being lost shortly.

Contact the author

View of the former industrial site of Ferrania-3M in Ferrania, 2023 (photo by Land-In-Pro, CC BY-NC 4.0)

ITALY

THE FORMER "NUOVA DIREZIONE" OFFICE BUILDING IN FERRANIA (CAIRO MONTENOTTE, SAVONA), ITALY: CONSIDERATIONS ON BALANCING ARCHITECTURAL PRESERVATION AND ENERGY RETROFITTING IN INDUSTRIAL HERITAGE BUILDINGS

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In the 20th century, industrialisation and deindustrialisation processes profoundly transformed Italy. This is well exemplified by the history of the Ferrania-3M film factory in Ferrania, Cairo Montenotte (Savona), known as Italy's sole producer of cinematographic, photographic, and radiographic film. Its legacy as a major film manufacturer in the 20th century fostered a strong local community, and its industrial infrastructure shaped the small village's urban fabric while improving its social and cultural context.

The former office building—locally known as the "Nuova Direzione"—prominently positioned at the site's entrance —was built in 1955, ten years before the ownership shift that led the factory into a new production period under American investor 3M (Minnesota Mining and Manufacturing Company). The "Nuova Direzione" building, which held key operational functions throughout the factory, now stands as one of the tangible reminders of the entire industrial complex and former workers' community identity, showcasing characteristic features of 1950s office architecture. Recognising such industrial heritage buildings as valuable resources opens up opportunities for adaptive reuse, energy-efficient retrofitting strategies and sustainable transformation that help preserve local identity whilst minimising resource consumption and emissions in the building sector. From this perspective, the success of such reuse depends on effectively addressing key challenges, such as protecting the heritage value. This brief contribution addresses the challenge of balancing preservation efforts and energy retrofitting strategies for reusing historical industrial buildings, identifying suitable building-envelope improvement measures for "Nuova Direzione". The building has remained in nearly its original and intact condition in al-

View of the Nuova Direzione office building built in 1953-1955 by Ferrania S.p.A. in Ferrania, Cairo Montenotte, Bormida Valley, Italy (photo by Ferrania Film Museum)

most 70 years, incorporating passive comfort measures, thereby facilitating the potential implementation of retrofitting interventions. To this end, the systematic and gradual approach to the knowledge of the building was aimed at:

Identifying and documenting the building's socio-cultural, technological and architectural values: Data gathered through historical analysis, digital surveys, and archival research was synthesised and digitised to produce technical sheets, architectural drawings, and a 3D model.

Developing and evaluating feasible retrofit strategies in terms of energy-saving measures on the building envelope that preserve its historic fabric: based on the previously assessed data, research on innovative retrofitting measures was conducted, and four feasible interventions were selected.

Quantifying and interpreting achievable energy savings through thermal simulations: Typical transmittance values by typology and construction age were researched and implemented into a static software tool, which utilised Italian standards (UNI/TS 11300) to calculate current performance and retrofit scenarios.

Comprehensive archival research, combined with in-situ inspections and digital surveying, enabled the tracing of the building's original design choices in terms of materials and construction techniques. Documents, including 88 technical drawings, accounting summaries, and work journals, were synthesised into technical sheets that defined the building's geometry, materials, building techniques, and structural details, from the foundation to the roof. A digital survey was conducted using LiDAR (GeoSLAM ZEB GO), drone photogrammetry (DJI Mavic Pro), and manual measurements (Leica Disto D1) to assess the building both internally and externally. The data collected enabled the creation of detailed architectural drawings and a 3D model. This, together with the technical data sheets, provided a comprehensive understanding of the building and formed the basis for developing a retrofit strategy.

AN OVERVIEW OF FERRANIA'S LEGACY

The building's socio-cultural value can be clearly understood within the historical context in which the Ferrania-3M film factory developed. The small village of Ferrania is known for its significant chemical industrial site, which has evolved since 1915 with the establishment of the S.I.P.E. *(Società Italiana Prodotti Esplodenti)* factory on the Pian Ceriseto plain area. Originally dedicated to the production of explosives during World War I, the company gradually transitioned to manufacturing photographic film, renaming itself as F.I.L.M. *(Fabbrica Italiana Lamine Milano)* and then Ferrania S.p.a., developing throughout the 20th century as part of the broader network of chemical industries in the Bormida Valley, located in the mountainous region behind the port of Savona.

The post-war period marked the beginning of a golden era for Ferrania. In the aftermath of World War II, the national economy gradually recovered, and Ferrania's production and research activities resumed. A significant milestone was achieved in 1947 with the production of Ferraniacolor, the first colour-sensitive material for cinema. New buildings were constructed, among which was the "Nuova Direzione" office building. The construction of the "Nuova Direzione" office building began on April 21, 1953, and was completed by the end of December 1955. The "Nuova Direzione" served as the factory's administrative hub, embodying technological and architectural innovation to convey modern offices' comfort.

Left side, a view of the main facade of the Nuova Direzione office building in 1955 (photo by Ferrania Film Museum), right side, the same view showing the current condition of the building in 2023 (photo by Land-In-Pro, CC BY-NC 4.0)

The building's cultural value lies in its association with Ferrania's golden age, its role in illustrating the architectural evolution of the company's headquarters—especially in comparison with its office buildings in other Italian regions and their role in shaping the company's national identity—and its forward-thinking architectural and technological solutions designed to ensure optimal comfort well ahead of their time. The company employed thousands of men and women, significantly shaping the local community whilst transforming the lives of residents in the broader Bormida valley context.

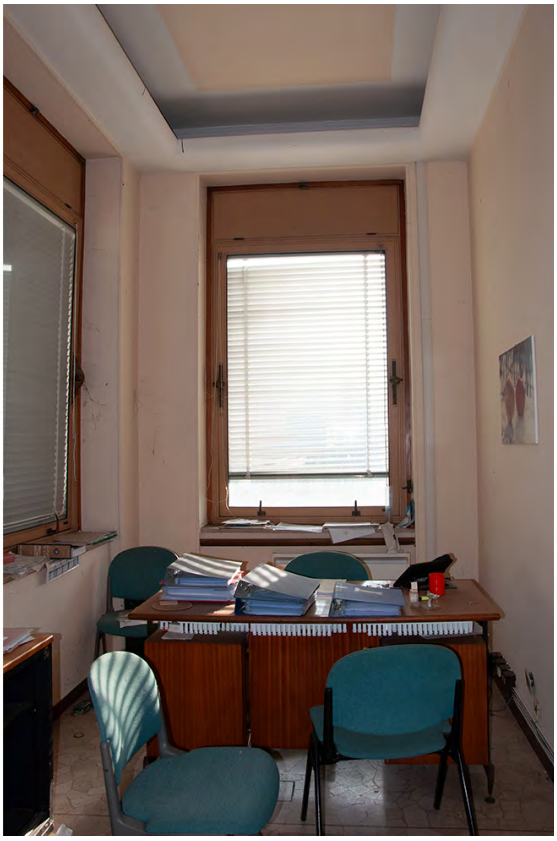
In the 1960s, Ferrania was acquired by the 3M Company, which continued to produce film. However, like many analogue film producers, Ferrania struggled with the digital revolution, and the original plant ceased operations in the early 2000s. Today, the majority of the buildings stand abandoned, and their once-industrial activity is replaced by decay, leaving behind a stark testimony to the area's former economic significance as well as its gradual decline. Its decline mirrors Italy's deindustrialisation in the 20th century, leaving behind a vacant structure at serious risk of decay.

AN EXAMPLE OF MID-CENTURY ARCHITECTURAL STYLE

The technological and architectural analysis allowed for the examination of construction elements in terms of geometry, materials, and structural details, as well as the identification of key elements characterising the 1950s office building as an architectural typology. The building is developed over three floors, resting on a basement, and hosts mainly offices, presentation rooms, and meeting rooms. It showcases a mid-century modern aesthetic, characterised by clean lines and forms, with regular rectangular rooms arranged to create a simple, horizontally defined compositional shape, and a flat roof.

The facade features beige stone tiles cladding and a regular arrangement of the windows. Moreover, a large rectangular glass block window prominently marks the staircase at the building's entrance, allowing for effective and scenic light transmission while ensuring structural continuity on the East elevation. Notably, other adjacent industrial buildings also use the same type of beige stone tiles cladding, contributing to a cohesive architectural aesthetic perception of the central front of the factory towards the main access road. The building's structure reflects typical post-war Italian construction techniques, utilising reinforced concrete frames. Walls are made of two parallel layers of hollow bricks separated by an air cavity (12 cm perforated bricklayers and 16–30 cm air gap).

Interestingly, beneath the slightly inclined flat roof, the SAP technology adopted by the Ferrania S.p.a. designers incorporated an air cavity that reaches up to almost 1 meter. The primary window type is produced by Sculponia S.r.l. and was released under the 1953 "Finestra Sculponia" patent. It is unique due to the incorporated Venetian blinds positioned between double-glazed panes, which pivot horizontally around a central axis. Above the window, a ventilation system consisting of an external grille and an internal tilting panel is placed, allowing for controlled air exchange. The Sculponia window represents one of the passive energy measures already integrated into the building, which likely enhances thermal and air sealing, facilitates easier maintenance, and ensures sleek operation. Its pivoting design provides a single, large glazed surface



Left side: A view of the interior of the Nuova Direzione office building in 1955 (photo by Ferrania Film Museum). Right side, the same view showing the current condition of the building (photo by Land-In-Pro, CC BY-NC 4.0)

with no vertical mullions, maintaining unobstructed views. The use of the "Finestra Sculponia" patent in the "Nuova Direzione" architectural design, marketed as a tool for "new architecture", underlines the alignment of the "Nuova Direzione" office building with mid-century modernism's push toward functional, minimalist, and expressive building components.

Another vital comfort design choice can be found in the acoustic design, with suspended ceilings and wall panels produced by the SADI *(Società Arti Decorative Interne)* company and placed in the projection rooms. SADI's ceilings offered both sound performance and visual elegance, catering to mid-century modern architectural demands whilst simplifying fitting, maintenance, and future updates. The predominant flooring decoration presents the typical Italian Palladiana decorative flooring technique, composed of irregular marble fragments characterised by distinct colours and arranged in a mosaic-like pattern. Seven types of marble have been identified, distinguished by their unique colours, such as Marmo Botticino or Marmo Rosso di Levanto. These materials and design elements, among others, convey historical and technological values that illustrate mid-century office architectural style and technological advancements.

ENERGY ANALYSIS AND POSSIBLE RETROFITTING SOLUTIONS

The energy analysis began by considering the building in its current state. The building, in its current state, has an annual energy consumption of 187.3 kWh/m², with transmittance values that far exceed Italy's limits. Key inefficiencies include high thermal transmittance in walls (U-value of 1.00 W/m²K) and single-glazed windows (with a U-value of up to 5.0 W/m²K). A retrofit strategy was then developed, taking into account the details outlined, therefore identifying feasible energy-saving measures that preserve the historic fabric and minimise impact on the building's authenticity and integrity, prioritising minimal invasiveness.

Four solutions were analysed. For the opaque elements, cavity insulation with mineral fibres is planned for the walls, gap insulation for the roof, and cork panel insulation for the basement. Additionally, a secondary glass pane is foreseen to be installed on the interior side of the existing single-pane windows located on the north façade. The transmittance values of the existing materials were determined using open-source databases and research on typical values by element typology and construction year. These solutions utilise the building's existing construction features, including cavities.

Secondary glazing preserves the historic window frames, while cork insulation maintains the structural authenticity of the slab. These potential interventions enable an energy retrofit that preserves both the external and internal character of the building. Key architectural elements, including the *Sculponia* windows and interior finishes such as Palladiana marble floors, remain untouched and preserved. The results of the analysis demonstrated that the combined implementation of these measures resulted in energy savings of approximately 40%.

CONCLUSION

In summary, the case study of the "Nuova Direzione" office building demonstrates how an effective and well-structured knowledge phase—enabling the accurate identification of historically significant architectural elements and features—can significantly contribute to the development of less invasive energy retrofitting solutions that are carefully balanced with the preservation of key architectural, technological, and structural details.

Enriching the broader dialogue on industrial heritage preservation and the need to implement energy retrofitting solutions, this brief contribution underscores the necessity of thoughtful, sustainable interventions, recognising industrial heritage buildings as invaluable resources and their potential for conscious reuse initiatives. A holistic and integrated approach that balances energy efficiency with heritage conservation issues is essential for fostering sustainable and resilient approaches to industrial heritage.

ACKNOWLEDGEMENT

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MEXICO

THE LAGUNA VERDE NUCLEAR POWER PLANT IN VERACRUZ, MEXICO

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The Mexican Nuclear Project was one of the most ambitious plans undertaken by the Mexican government during the second half of the twentieth century. As a result, several physics study institutes were created to meet the needs of the large project that the government had been pursuing. Physics studies in Mexico were mainly developed due to the government's interest in the growth of the nuclear field in the country, thus, the Physics Institute of the National Autonomous University (UNAM), the School of Physics and Mathematics of the Instituto Politécnico Nacional, and the National Commission for Nuclear Studies (CNEN) were created between the 1950s and 1960s.

The first outreach of the project included the construction of around seven nuclear power plants all along the country, from south to north to fulfil the energetic needs of Mexican lands, unfortunately, this goal was not fully achieved and experts are still questioning the reasons why the Mexican government halted the progress of this project; some of them consider that foreign powers stopped indirectly the continuity of it, while some others argue that the interests of the government went into a different direction. To date, there has been no official response to this question.

Nowadays, the only remaining legacy of the Mexican Nuclear Project is the Laguna Verde Nuclear Power Plant, situated on the coast

The Laguna Verde Nuclear Power Plant is located on the Gulf of Mexico's coast and almost six hours away from Mexico City (photo by author)

The reactor control centre simulator, a faithful copy of the control centre and where the new operators are trained (photo by author)

of the Gulf of Mexico and approximately six hours away from Mexico City. It was during the 1960s when the Mexican authorities selected the location, and in 1970, the first stone of construction was placed. Since then, the history of the Nuclear Industry has been written in Mexico's development.

AN OVERVIEW OF THE INTERPRETATION CENTRE

In December 2024, we decided to visit the Laguna Verde Power Plant to learn about the operation of a nuclear energy generator plant. During this visit, we observed the high-quality processes that comprise the plant's operation, from the several security checkpoints to the stages that any person must complete to arrive at the two power reactors. We had the opportunity to enter the first reactor.

The complete tour lasts approximately three hours, taking into account the passage through various checkpoints, the change of clothing, and the transfers between different areas within the plant.

The staff provided us with a detailed explanation during a tour of the Interpretation Centre, covering all the topics mentioned earlier. They also informed us that schools frequently visit the centre as part of their educational activities. The primary fuel of this Nuclear Power Plant is uranium, mainly coming from Ukraine. At the entrance to the first reactor, we passed through a security checkpoint, presenting our IDs, and entered one of the most significant buildings on the facility. In the lobby, they gave us a radiation dosimeter to measure the radiation levels that we could have received during our stay in the reactor. We must emphasise that these levels are truly minimum, and they are constantly monitored and measured by every user.

Reactor charge simulator (photo by author)

At the top of the reactor's building is the operation floor, which contains three pools to manipulate radioactive materials as part of their security measures. We were able to see the pools housing the fuel rods, the containers of radioactive waste and the cranes used to handle the rods during reactor refuelling.

The final stage of our tour was visiting the reactor control centre simulator. This simulator is a faithful replica of the control centre, where new operators are trained to work in the two reactors. This nuclear facility supplies more than 5% of Mexico's total electric power.

Laguna Verde is an excellent example of sustainable clean energy, and its interpretation centre inaugurates a new kind of industrial heritage museum.

Contact the author

Såheim Hydropower Plant (photo by Dag Endre Opedal, Kraftmuseet)

NORWAY

RECOGNIZING HYDROPOWER HERITAGE: NEW LISTINGS IN NORWAY'S INDUSTRIAL LANDSCAPE

Knut Markhus, Cultural Heritage Advisor/TICCIH Norway

In June 2025, Norway's Directorate for Cultural Heritage and the Norwegian Water Resources and Energy Directorate (NVE) jointly announced the addition of 40 new hydropower-related sites to the country's official inventory of nationally significant industrial heritage. This brings the total number of listed hydropower sites to 270, covering power stations, transmission infrastructure, dams, and river engineering works.

The listings reflect the vital role hydropower has played in shaping modern Norwegian society, as a foundation for both everyday life and industrial development. While listing does not entail legal protection or restrictions on operation, it ensures that heritage values are considered in regulatory processes.

According to Hanna Geiran, Director General of the Directorate for Cultural Heritage, "These heritage sites represent the industry that helped build the country. Across Norway, traces of hydropower's significance remain, many of them remarkable engineering achievements of their time."

The recent additions broaden the inventory by including small-scale plants, sites tied to wartime history, and facilities from the post-war

Tinfos II Hydropower Plant (photo by Dag Endre Opedal, Kraftmuseet)

Interior Tinfos II Hydropower Plant (photo by Dag Endre Opedal, Kraftmuseet)

reconstruction in the north. Together, they document technological innovation, regional development, and the evolving relationship between natural resources and infrastructure.

This initiative demonstrates how sector-specific heritage inventories can serve as crucial tools in managing industrial heritage landscapes, striking a balance between operational needs, cultural values, and future transitions in renewable energy.

Contact the author

DOMINICAN REPUBLIC

UNFINISHED, FORGOTTEN, REFRAMED, AND REUSED: AN EXPERIENCE IN THE DOMINICAN REPUBLIC

José Antonio Sáez Calvo, Instituto Tecnológico de Santo Domingo INTEC, FUPIA- UNED

In late 2017, the "Inacabados/Unfinished" exhibition, winner of the Golden Lion for Best National Participation at the 15th Venice Architecture Biennale, travelled from the Spanish Pavilion to Santo Domingo as part of the *Semanas de España* or Spanish Weeks series. Documented photographically, the show featured exposed concrete structures enlivened by projections of pop-up markets, vertical farms, bicycle workshops and night bazaars, illustrating how incomplete buildings can energise social, cultural and economic life rather than languish as ruinous monuments.

Upon its arrival in the Dominican Republic, the exhibition became a hands-on laboratory: engineering and architecture students from local universities formed interdisciplinary teams to draft reuse proposals that wove future maintenance strategies and new-use programming into every design from the very first sketch.

Today, wandering the historic streets of Santo Domingo's *Zona Colonial*, one encounters 17th-century masonry meticulously conserved and transformed into artisan workshops, boutique lodgings, and pedestrian promenades —a true paradigm of life cycle thinking. Yet only a few kilometres east in Gazcue, forty-six historically significant buildings were demolished to make way for speculative developments, erasing layers of collective memory, wasting vast stores of embodied energy and fracturing the social fabric. These opposing realities—reverent conservation and wholesale destruction—underscore the urgent need to decide the fate of *inacabados* in a country where tourism-driven construction often outpaces both planning and heritage stewardship.

Geographically vast and topographically diverse, the Dominican Republic presents three typologies of "unfinished" with transformative potential. First, the heritage districts, whose colonial fortifications and stately homes—including the "Ruins of San Francisco"—stand as silent witnesses to tactical preservation efforts awaiting imaginative reactivation. Second, the high-rise skeletons along the Malecón: the concrete frameworks of Hotel Prado and Vieramar III, halted since the early 2000s, yet framing spectacular Atlantic vistas that cry out for passive bioclimatic retrofits and mixed-use infills. Third, the coastal retreats near Cabarete, Las Terrenas and Boca Chica: abandoned resort shells isolated from local economies, their parking lots overrun by vegetation and corridors echoing ghostly silence. Each of these hulks holds embedded carbon and community narratives that demolition would obliterate, whereas reuse can unlock social and environmental capital.

International standards, such as VERDE, LEED, and BREEAM, offer frameworks for measuring energy, water, and materials efficiency; however, the local context must guide their application. In the Dominican energy sector, the government has advanced an Energy Efficiency Law that mandates upgrades to refrigeration and cooling systems and prescribes building-rehabilitation guidelines—measures designed to reduce operational carbon emissions without resorting to politicised climate-change rhetoric. At the same time, green finance has emerged as a powerful lever. On June 25, 2024, the Dominican Republic issued its first sovereign green bond, worth USD 750 million, with a 12-year tenor and a 6.6 per cent coupon, to fund clean energy, sustainable transport, waste management, and heritage conservation projects. Linking proceeds from these bonds to heritage-adaptation loans and conservation grants can further tilt the balance in favour of preservation rather than demolition.

Additionally, several high-impact restoration initiatives have been launched. The Master Plan for the Zona Colonial of Santo Domingo, an integrated revitalisation project funded at USD 30 million and approved by the Municipality in 2011, has renewed infrastructure, stabilised historic fabric and guided adaptive reuse across the entire precinct. The conservation of the Spanish historical building benefits from a joint supervisory framework between DIGEPEP and UNESCO, which has consolidated walls and begun to reactivate cultural programming on site. On the private side, the adaptive rehabilitation of the former tobacco factory in Santiago has transformed industrial halls into co-working studios and exhibition spaces, demonstrating how a combination of technical expertise and creative vision can rescue industrial heritage while generating new social and economic value.

Mobility and resource access are critical lenses through which to rethink the concept of "unfinished". In the National District alone, daily congestion exceeds one million vehicular trips, straining roadways and air quality. Yet unfinished shells can be repurposed as intermodal hubs, combining ground-floor shared-mobility stations, public bicycle docks and transit-oriented coworking spaces. Rooftops can harvest rainwater to supply markets and schools; façades can host vertical gardens that deliver fresh produce to local neighbourhoods. Along the coast, abandoned hotel wings could be transformed into mixed-income housing that is integrated into Bus Rapid Transit corridors and pedestrian networks, thereby curbing urban sprawl while respecting coastal setback regulations and erosion lines.

All these concepts demonstrate that architecture is an evolving process, with structures designed to adapt, incorporate citizen participation, and embrace incremental completion rather than fixed endpoints. When the exhibition travelled to Santo Domingo, its workshops distilled a key insight: urban plans must embed "adaptive reuse scenarios" from the outset. Zoning codes should permit temporary mixed uses, financing models must reward developers who conserve at least half of the existing fabric, and infrastructure networks must be conceived for retrofit rather than replacement. Such conscious urban planning demands cross-disciplinary training; only by educating engineers and architects together can future pro-

fessionals strike a balance between structural integrity and creative programming, as well as long-term maintenance.

The creation of heritage councils, as multidisciplinary bodies uniting public agencies, investors, community representatives and technical experts, can expedite permitting processes, oversee tax-incentive schemes and manage green-bond allocations. Legislators can codify reuse quotas that require a set percentage of urban growth to derive from rehabilitation projects and mandate mobility-connectivity standards for every renovation permit. Earmarking a defined share of green-bond revenues for community-led activation programs, participatory workshops, pop-up markets, and tactical urbanist interventions will ensure that reuse yields tangible neighbourhood-scale benefits.

By reframing *inacabados* as catalysts rather than constraints, the Dominican Republic can transcend the linear cycle of build-demolish-rebuild and embrace a circular paradigm that honours heritage, conserves resources, and empowers communities. Every architectural skeleton becomes an invitation; every abandoned shell, a seed for a future defined not by waste but by resilience, creativity, and collective memory. In so doing, the nation will not only extend the legacy of Inacabados and the heritage institutions that champion it but also chart a course toward inclusive, sustainable urbanism in the twenty-first century, where innovation and respect for the past converge to shape vibrant, adaptable cities for generations to come.

Contact the author

OBITUARY

ADRIAAN LINTERS (1951-2025)

We are deeply saddened to announce the passing of Adriaan Linters at the age of 74. He was a pioneering figure in the field of industrial heritage in Flanders and Europe. Linters, a historian by training, founded the Flemish Association for Industrial Archaeology (VVIA) in 1978 and served as its president until 2020. He played a key role in preserving numerous industrial heritage sites across Belgium. One of his first notable achievements in the 1970s was the successful campaign to protect the Stellingwerff-Theunissen distillery in his hometown of Hasselt—the first site in Belgium to receive official recognition for its industrial and archaeological value. It now houses the Gin Museum. His commitment extended to a wide range of sites, including some of the petroleum facilities at Petroleum Zuid in the port of Antwerp.

He was not only a strong advocate for Flemish industrial heritage, but also deeply passionate about the industrial past of Catalonia. He travelled frequently to Barcelona, where he built lasting connections and drew inspiration from the region's rich and well-preserved industrial sites. His international perspective enriched his work at home and underscored his belief in the shared value of industrial heritage across borders. That explains why Adriaan's influence extended far beyond Belgium. He attended several TICCIH congresses over the years, where he actively contributed to international discussions on industrial heritage. In the 1980s, he also served as secretary of TICCIH, further strengthening his role in the global network of experts and advocates committed to preserving industrial history.

Later, he worked as secretary of the European Federation of Associations of Industrial and Technical Heritage (EFAITH). In 2015, on the occasion of the European Industrial and Technical Heritage Year, EFAITH launched Industriana, a thematic network of SMEs, museums and other initiatives related to European and technical heritage. Linters authored hundreds of articles and several books

Adriaan Linters welcoming delegates to an EFAITH event at Beringen (photo by Miles Oglethorpe)


LESESTOFF: HELFEN, WO DIE NOT AM GRÖSSTEN IST | ZEITGESCHEHEN

Freie Presse

ANNABERGER ZEITUNG

LOKALES

ANNABERG-BUCHHOLZ

Ladensterben auf der Wolkensteiner

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Prüfer der Unesco auf Erzgebirgstour

Schärferes Asylgesetz soll im Eiltempo verabschiedet werden

Fünf Millionen VW müssen in die Werkstatt

Adriaan Linters and Miles Oglethorpe featuring on the front page of the Freire Presse newspaper during their visit to the Frohnauer Hammer in the German town of Annaberg-Buchholz

on the subject, such as *Industria* and *Spoorwegen in België. Chemins de fer en Belgique. Railroads in Belgium*. Passionate and tireless, he continued to advocate for the preservation of key sites, such as the Kortrijk train station, a symbol of the city's reconstruction after World War II, emphasising the historical narrative over aesthetic value [see TICCIH Bulletin #101, 2023].

In recognition of his life's work, Adriaan Linters received the European Heritage Award in 2019. In 2024, he was awarded the Sarton Medal from Ghent University's Faculty of Engineering for his half-century of dedication to industrial heritage. Adriaan Linters passed away in Kortrijk on May 31, 2025, after a battle with cancer. He is survived by his two sons, Steven and Willem, and seven grandchildren. He donated his body to science.

FULL OF IDEAS AND PROJECTS

Dr Assumpció Feliu Torras

It was at the TICCIH conference in Athens/Thessaloniki, where a meeting of attendees, including myself, recognised the need to establish a European volunteer group focused on industrial heritage. In 2000, an initial meeting took place in Paris, followed by subsequent meetings in Brussels and Barcelona, where the group was founded under the name EFAITH (European Federation of Archaeology for Industrial and Technical Heritage), with a president, vice president, and secretary general/treasurer. That's when I met Adriaan, the former secretary of TICCIH.

We created the so-called EFAITH weekends, at least one a year, to work together, attended by various countries, including Switzerland, France, Catalonia, Italy, Flanders, England, and more. Adriaan was a tireless worker, without a set schedule, and full of ideas and projects. I wish you, Adriaan, that even in the afterlife, wherever you are, your star continues to shine.

INCREDIBLY ACTIVE SUPPORTER OF INDUSTRIAL HERITAGE

Miles Oglethorpe

I was deeply saddened to hear the news that Adriaan Linters passed away on May 31st. Through many organisations, including EFAITH, Adriaan was an incredibly active supporter of industrial heritage not only in Flanders but across Europe. Although our paths rarely coincided, I know that he inspired many people and that he will be sorely missed. The one time when we did end up working closely together was on a UNESCO World Heritage Mission in 2015. By that time, I was aware of his formidable reputation and was a little nervous about the prospect of interacting with him for over a week. It turned out to be a wonderful experience, and I caught a glimpse of what a genuinely kind and knowledgeable person he was.

Adriaan Linters during the award ceremony of the Industriana label at 'De Centrale', a former power station in Ghent, 2019 (photo by Bart Vanacker)

Adriaan Linters during a UNESCO World Heritage Mission in 2015 (photo by Michael Streetz)

IX TICCIH SPAIN CONGRESS: INDUSTRIAL MOVABLE HERITAGE AS LIVING MEMORY

Julián Sobrino Simal, Miembro Junta Directiva TICCIH España, Universidad de Sevilla

From September 25th to 28th, 2025, the city of Motril (Granada) will host the IX Congress of TICCIH Spain under the theme Movable Industrial Heritage: Conservation, Memory, Innovation, and Social Value. This edition marks a turning point in the reflection on industrial movable heritage — machinery, tools, technical furniture, and other tangible objects — as an essential part of our society's technical, productive, and cultural legacy.

In a context where rapid technological change and deindustrialisation threaten to erase the material traces of labour history, this congress aims to highlight the crucial role these objects play in building collective memory, promoting sustainable innovation, and supporting heritage education. Far from being mere relics of the past, industrial movable goods are true material archives of human creativity and accumulated technical knowledge.

Organised by TICCIH Spain, in collaboration with universities, heritage associations, and the El Pilar Sugar Factory, the congress will be held in a symbolic location: a former sugar complex in Motril that preserves original machinery and has recently been transformed into a cultural landmark. This setting enables participants to bridge theory and practice, connecting academic debates with real-world challenges in conservation, museography, and the valorisation of industrial heritage.

The six thematic panels of the congress provide a comprehensive view of movable heritage, encompassing conservation and restoration techniques, innovations in documentation and museology, as well as the social, educational, and territorial dimensions of these assets. Special attention will be given to the case of Motril's industrial movable heritage, a paradigmatic example of technological evolution in the southern sugar industry.

The program includes workshops, technical visits, a forum for industrial heritage associations, exhibitions, and optional activities such as

Machinery, tools and technical furniture are an essential part of our society's technical, productive, and cultural legacy (photo by author)

'Movable Industrial Heritage: Conservation, Memory, Innovation, and Social Value' is the IX congress's theme

a visit to the Nereo Shipyards in Málaga — another benchmark in preserving the material culture of labour.

This event invites researchers, heritage professionals, students, technicians, and the general public to share their experiences and contribute to proposals that ensure the meaningful continuity of this heritage in contemporary life. The Motril Congress will also be a space for alliances and collective commitment, where the past is not only memory but a living resource for imagining the future.

Registration is now open! All information can be found on the congress website. Any questions? Send us an email.

Eperon d'Or is a beautifully restored Art Deco treasure that tells the story of Belgium's rich shoe and brush industry (photo by Eperon d'Or)

REGISTER NOW FOR THE BIG STUFF CONFERENCE 2025

Davy Herremans & Liesbet Daeninck, ETWIE/Industriemuseum Gent

The organisers of Big Stuff 2025 are pleased to announce that the early bird registration period has been extended until 31 July 2025. The conference will take place from October 14 to 17, 2025, at the Museum of Industry in Ghent, Belgium, with full hybrid access for remote participants and a satellite hub in Perth, Australia.

Big Stuff is the only international conference explicitly dedicated to the conservation and interpretation of large-scale technical heritage. From cranes and steam engines to looms, turbines, and heavy transport. The 2025 edition takes as its theme "Skills and Machines – A Living Partnership", highlighting the urgent need to preserve not only machines but also the practical knowledge and skills that sustain them.

The program includes four days of lectures, discussions, and live demonstrations, beginning with a keynote by Professor Rodney Harrison (University College London) on the role of technical heritage in contemporary debates around sustainability, education, and knowledge transfer.

Demonstrations of skills and machines at Museum of Industry (photo by Martin Corlazzoli)

Participants can now compile their schedules, selecting excursions to key industrial heritage sites across Belgium such as a volunteer-led train centre, museums with industrial heritage collections and educational sites focusing on technical knowledge and skills. Places on these excursions are limited and will be assigned on a first-come, first-served basis.

Big Stuff 2025 is organised by the Museum of Industry together with many (international) partners in the industrial heritage field. Conservators, engineers, curators, researchers, and volunteers from around the world are warmly invited to participate.

To register, explore the program, or learn more about travel and access options, please visit the conference website.

Contact Davy Herremans or Liesbet Daeninck

The VLOC is a leading aviation school with a heritage collection, training the next generation of pilots and aircraft technicians (photo by ETWIE)

GENERAL STATES OF THE INDUSTRIAL HERITAGE (AIPAI)

Edoardo Curra

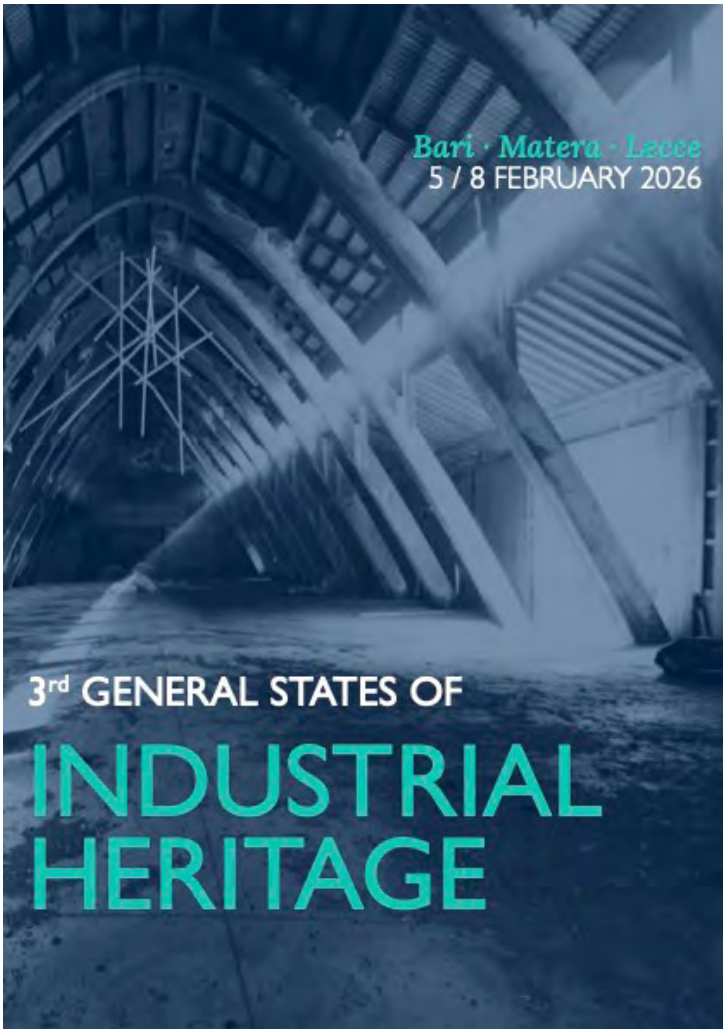
The Italian Association for Industrial Archaeological Heritage – AIPAI launches the Third General States of the Industrial Heritage. After Venice, Padua, Rome and Tivoli, the States will meet in Bari, Matera and Lecce, following an ideal circular path among the multiple heritage realities of production and labour affecting the north, the centre and the south of the peninsula. To take stock and develop strategies and visions for the near future, it is essential to set the most fertile conditions to foster discussion among experts and communities, as well as meetings between the multiple operational, research, and institutional spheres involved.

Industrial heritage is made up of what we recognize as extremely relevant from the near past of the labor culture; it is the answer to a question that does not belong only to scholars, but arises first and foremost from communities and companies to understand themselves and help to be prepared for the cultural, socio-economic and environmental challenges of the present and the years to come.

Recognition, then, is the result of processes that occupy an important place in the evolutionary dynamics of industrial and post-industrial cities and landscapes. It is therefore strategic to come together to identify and explore the values inherent in industrial heritage, both material and intangible, according to the approaches developed over more than seventy years by the world of industrial archaeology.

The congress is divided into the following thematic areas:

1. Machinery, patents and historical production cycles of industrial heritage
2. Cities and landscapes of industry and labour
3. Territorial and urban infrastructures
4. Design and construction for industry
5. History, culture and memory of industry and labour: research, archives, museums and practices valorisation
6. Digitisation and AI of industrial heritage: knowledge, design, management and fruition
7. Restoration and conservation of industrial heritage
8. Reuse and practices of urban and environmental regeneration
9. Industrial tourism, cultural routes, and experiences of fruition
10. Image, cinematography, digital media and industry communication



Congress poster featuring the Margherita di Savoia Warehouse, designed by Pierluigi Nervi (photo provided by AIPAI)

The conference participants have the opportunity to highlight the many paths characterising the present of Industrial Archaeology to be framed in their forward drives and in light of the roots of that specific area of memory.

The focus will equally go to knowledge, principles and actions related to the management, use or new life of the factory, architectures and industrial areas, communities, the needs of fruition, musealization, industrial tourism, as well as tools for design and restoration, including the opportunities of digitization and AI in the representation, knowledge, intervention and fruition of heritage and lost heritage.

The conference will take place from February 5 to 8, 2026, across three cities: Bari, Matera, and Lecce, with venues including the Politecnico di Bari, Università della Basilicata, and CNR di Lecce. For more information, please visit the official conference website.

Contact the author

GUEULES NOIRES – PORTRAITS DE MINEURS À TRAVERS L'EUROPE

Bernard Bay, Fabienne Foucart. Published in 2025. Mons, Editions Musea Nostra, 102 pp., ISBN 978-2-931317-16-7.
Order the book.

Book review by Patrick Viaene

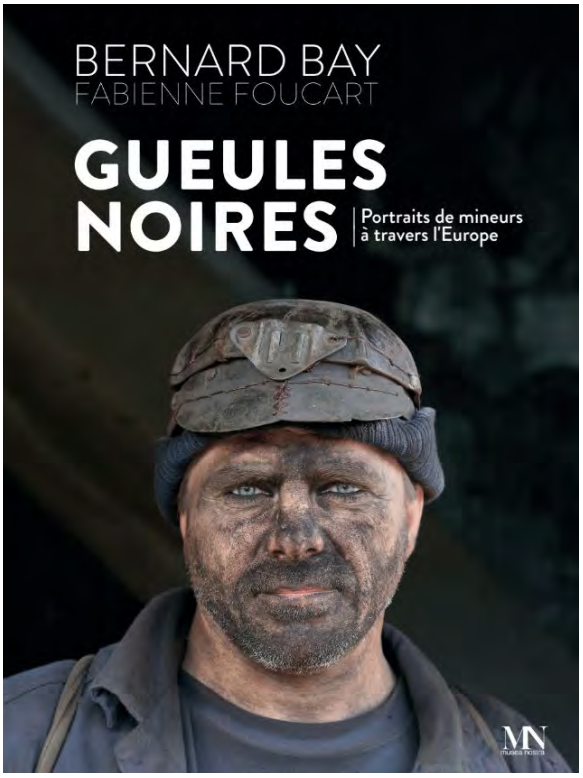
By looking to book *"Black faces, Portraits of Miners across Europe"* with photos by Bernard Bay and Fabienne Foucart, I discover (again) the work of two authentic and deeply human industrial photographers. Their approach illustrates a comprehensive spectrum of industrial production itself, particularly work in coal mines. Their photographs reveal the intricate interplay between the miners' diverse tasks and occupations. They also demonstrate that heavy industry cannot exist without the work of computer technicians, office workers, and administrative managers.

The viewer is confronted with the gestures and movements of the miners, with their bodily languages, the rich range of expressions on their faces, their handling, and the relationships they have with their tools and machines. Often, the miner is represented alone, with a humble or monumental appearance, while group photos invite spectators to question the mutual links between the miners. This entire universe of men and women at work is set in concrete spaces and places, ranging from buildings to landscapes, which function in most cases as backdrops, active and lively, thereby amplifying the expressiveness of the scenes represented.

This last element, the workplace, which is sometimes secondary for other photographers, has capital importance in Bernard Bay's work. From a young age, he has been inspired and captivated by direct witnesses of coal mining heritage. Born in 1959 in Borinage, his favourite playground was none other than the disused sites of the Ateliers et Charbonnages du Grand-Hornu. After four decades of identifying mining remains, often carried out since the 1990s alongside his partner Fabienne Foucart, this photographic inventory of mining heritage across Europe's different countries, meticulously digitised in its entirety, can undoubtedly be described as unique at the European level.

The long-term photographic project of Bernard Bay and Fabienne Foucart is part of the broader framework of industrial archaeology, which emphasises the importance of preserving the most significant physical evidence of industry. This trend has introduced a new current into the practice of heritage conservation, encouraging the younger generation of historians to enrich and complement their research on industrial enterprises in archives with the exploration of industrial remains in the field.

Already in 1994, with the publication and photographic exhibition *'L'Héritage des gueules noirs, de l'histoire au patrimoine industriel'*, Bernard Bay played an essential role as photographer and co-author. This project, carried out by *Archives de Wallonie*, presented for the



first time a historical and photographic panorama of a series of coal basins located in France, Belgium, the Netherlands and Germany. This work was undoubtedly crucial for the following projects, developed by Bay and Foucart, oriented towards the discovery of the history and current events of mining basins in Germany (Ruhr basin), Italy (Sardinia), Spain (Asturias, Leon), Poland (Silesia), Czech Republic, Slovakia, Croatia, Romania, etc. In each report carried out in these different countries, regardless of location, the viewer is confronted with images full of emotion, expressing the cohesion and brotherhood of the miners. At the same time, these photographs bear witness to the inevitable economic crisis in the coal sector and the massive destruction of mining infrastructure that quickly followed the closure of the coal mines.

The work of Bernard Bay and Fabienne Foucart is part of the historical tradition of great industrial photographers, including Lewis Hine, Gustave Marissiaux, Albert Renger-Patzsch, and Cas Oorthuys, among others. This tradition continued with Edward Burtynsky, Sebastiao Salgado, and Bernd and Hilla Becher. However, few of them highlight the human dimension of industrial work in their photographs, preferring instead to focus on a particular aesthetic, certain formal aspects, or limiting the scope of their work.

The book *'Gueules Noires'*, published on the occasion of a recent exhibition, presented in the Salle de Bélian in Mons, illustrates well the words of Bernard Bay: *'It is without nostalgia or backwardness, but with the certainty that we must preserve the memory of the industrial heritage as much as the human, that these photographs were taken, convinced that one day, these images will meet their time.'*

Contact the author of the book review

Birmingham Railway & Canal Historical Society Book of the Year Award to Stephen Hughes, 2025 (photo by Tim Edmonds)

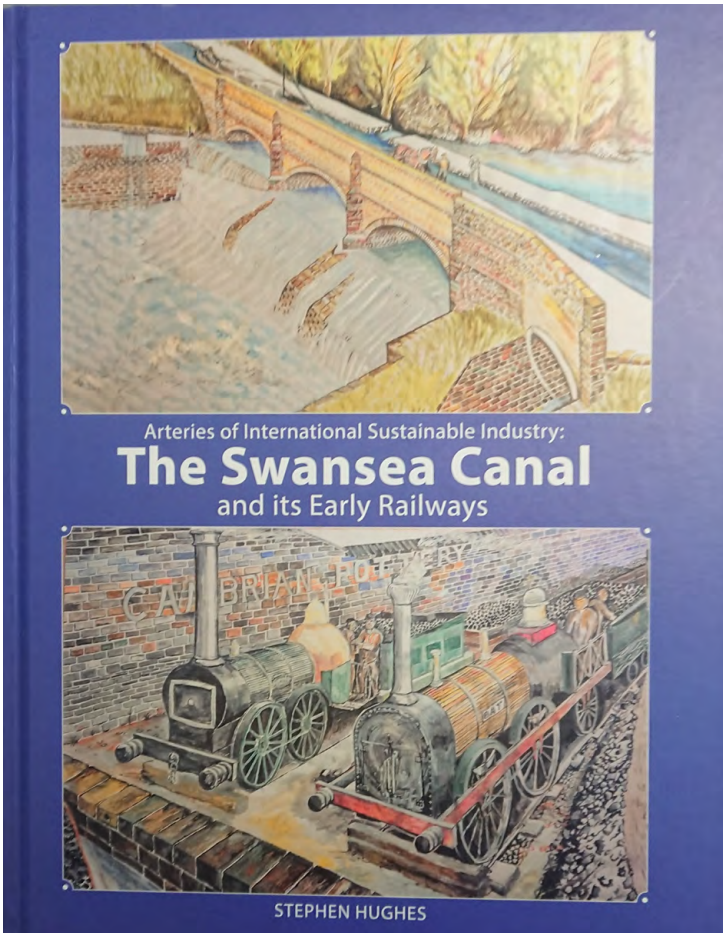
A BOOK ON THE INTERNATIONALLY SIGNIFICANT INDUSTRIES OF THE SWANSEA VALLEY WINS UK NATIONAL AWARDS

Stephen Hughes

This year's book awards for the UK Canal Book of the Year and the UK Transport History Book of the Year have been won by *'Arteries of International Sustainable Industry: The Swansea Canal & its Early Railways'*. The book, published in 2023 [see TICCIH Bulletin 106, 2024], tells the story of the Swansea Canal, its internationally significant early railways, and the role they played in developing the global industries of Swansea and the Swansea Valley.

The picture shows the President of the Railway & Canal Historical Society, Peter Cross-Rudkin (right), presenting a cup to the author & illustrator Stephen Hughes (left) in recognition of the book *'Arteries of International Sustainable Industry: The Swansea Canal & its Early Railways'* as Transport History book of the year.

The Royal Commission on the Ancient and Historical Monuments of Wales (UK) and the Swansea Canal Society have published *Arteries of Sustainable Industry: The Swansea Canal and its Early Railways* by Stephen Hughes, former Secretary-General of TICCIH. This is an archaeological and historical study of the Swansea region, one of the earliest intensive industrial landscapes in the modern world.



Front cover of Swansea Canal & Railways book

The international copper-smelting and tinplate industry, together with parts of the major coal-exporting and iron-smelting industries, was centred on the Swansea Valley essentially because the Swansea Canal provided a sustainable waterpower resource as well as transport throughout the nineteenth century. The Act of Parliament also allowed the development of an early 150-mile public railway system. The international development of the canal & early railway use is explored in detail in two of the four chapters.

The book can be purchased online at eBay & and the website of the Swansea Canal Society. The 82 reconstructions painted by the author for the book can be seen at Etsy.com and the Canal Junction website.

Contact the author

CREATING BEAUTIFUL PHOTOS OF UTILITARIAN INDUSTRIAL SUBJECTS

German Simonson is the driving force behind the "Industrial Fine Art" brand and genre.

I began my industrial photographic journey in 2019, creating photos of local industries in Lithuania, the country where I reside. The name "Industrial Fine Art" is intentionally aspirational and provocative at the same time, defining the goal: to create beautiful photos of often-ugly or, at best, utilitarian buildings and objects. The genre can be described as a mix of architectural, landscape, and urban exploration photography.

There are many types of subjects I am interested in — including heavy industry, such as blast furnaces, steel mills, coking plants, cement plants, power plants, headframes, and winding towers — as well as grain elevators, train yards, water towers, various silos, and factories in general.

Why exactly I became interested in this genre is unclear. Still, one theory suggests that the influence of post-apocalyptic computer game aesthetics, such as those found in *Fallout*, which often feature industrial landscapes as a backdrop, may be at play. The choice of industrial buildings as photographic subjects may seem strange to many. Still, I am continuing and evolving the work of famous artists of the past and present — Charles Sheeler, A. Aubrey Bodine, Bernd and Hilla Becher, Michael Kenna, David Plowden, W. Eugene Smith, and Trent Parke, to name just a few — who have created many excellent photos of industrial subjects.

To further promote this genre, I established a Facebook group of the same name. Today, it is the main attraction point worldwide for people who share an interest in this field. The author's portfolio can be found at www.industrialfineart.eu. Follow him on Instagram and Facebook.

To propose the publication of your photographs in the photo column and find the publication rules, write to Francesco Antoniol.

Cement plant Heidelber Materials Calusco d'Adda, Italy, September 2024 (photo by German Simonson)

Dolni Vitkovice, Czechia, September 2023 (photo by German Simonson)

HKM in Duisburg, Germany, September 2011 (photo by German Simonson)

Train yard in Ventspils, Latvia, August 2016 (photo by German Simonson)

LINKS TO ONLINE EVENTS CALENDARS:

- TICCIH Conference Calendar
- ICOMOS Conference Calendar
- UNESCO Events

To add events to the TICCIH Calendar please send details and a link to ticcih@mtu.edu

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TICCIH

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