



INDUSTRIAL HERITAGE AND SUSTAINABILITY – A LEGACY FOR TOMORROW

Ninth Berlin Forum for Industrial Heritage and Society

26 November 2021
Conference 10:00 am to 5:00 pm
Digital Conference including English
Simultaneous Translation



TOPIC

In the various fields of industrial heritage (conservation, research, conversion/use, valorisation), focal points and working methods have changed again and again over the past several decades. This was due to historical influences, special regional developments and new interpretive approaches in current discourses. At least since the resolutions passed by the Paris Climate Conference and the most recent German Constitutional Court ruling on climate protection policy, a new paradigm shift has been imminent. The transformation processes that are so necessary here challenge us to make even greater efforts to take sustainability criteria into account in our work.

Several years ago the discussion regarding new standards and assessment frameworks for the general preservation of historical monuments was begun. Now, a corresponding debate for industrial heritage has only just been taken up. And it must be said that preserving historical objects alone will not meet the requirements of sustainability. Instead, our approaches to restoration and re-use must in future deal much more intensively with issues relating to climate protection and sustainability.

Objects and sites of industrial heritage in particular call for such a debate, because they typically stand for innovation and inventive talent, but at the same time hark back to an age in which aspects such as resource efficiency, ecology and social fairness have long stood in contradiction to our current goals and values. Because of this, it is all the more important for us today to take sustainability criteria into account when discussing issues of conservation and sustainability.

When viewed in this way, discussions about industrial heritage will always aim to overcome the traditional aspects of the industrial age in a forward-looking manner. Sites of industrial heritage can, as was the case with the original innovative energy used to produce them, become the cradle for a new age of business and production while being beacons for active climate protection and sustainability.

This Ninth Forum primarily aims to bring together people who not only deal with these questions on a theoretical level, but also those who, through their creative drive, have taken it upon themselves to dedicate their lives to the realisation of sustainable projects and approaches. The aim is to exchange experiences and ideas, to appreciate the work of pioneers in the field and to establish new networks throughout the region and beyond.

These are our questions:

- What is the current state of thinking on how sustainability criteria influence industrial heritage?
- How can we determine our ecological footprint in the future?
- What materials should we use? Concrete, brick or steel? Industrial heritage and gray energies
- Finding new economic potential in old buildings - examples of the circular economy?
- Funding and sustainability - Investing in industrial heritage?
- Industrial heritage and "soft tourism" – a perfect combination?
- The renaissance of the old hydropower plants - a valuable contribution to renewable energy?

We have found engaging and persuasive speakers on these and related topics. And with the Ninth Berlin Forum for Industrial Heritage and Society, we want to provide new impetus for thinking and acting by those who deal with industrial heritage in different functions and responsibilities both regionally and nationally.

Thanks to our cooperation with ERIH (European Route of Industrial Heritage), we can offer our online guests a simultaneous English translation of our lectures and discussions.

PROGRAM

FRIDAY, 26 NOVEMBER 2021

09:30 | OPENING OF THE DIGITAL CONFERENCE ROOMS

Our breakout rooms offer the opportunity to get to know others and network in small groups.

10:00 | WELCOME

Prof. Dr. Dorothee Haffner | HTW Berlin, Head of bzi
Prof. Dr.-Eng. Carsten Busch | President of the HTW Berlin
Christiane Baum | Secretary General ERIH

INTRODUCTION TO THE FORUM TOPIC

Prof. Joseph Hoppe | Head of bzi

10:30 | SETTING THE TONE

SUSTAINABILITY AND INDUSTRIAL HERITAGE. OUR REFLECTIONS

Prof. Dr. Günther Bachmann | Publicist, former Secretary General of the Council for Sustainable Development

TIME TRAVEL INTO THE FUTURE OF CLIMATE CHANGE - A SCIENTIFIC SUSTAINABILITY GAME

Daniel Tamberg | Sciara Agency, Potsdam/Berlin

Discussion

11:20 | BREAK

11:40 | PANEL I: THINKING AND FINANCING SUSTAINABLY

INDUSTRIAL HERITAGE AND SUSTAINABILITY – WHAT DO WE KNOW?

Dr. Roman Hillmann, German Mining Museum Bochum and the Georg Agricola University of Applied Sciences, Bochum

SUSTAINABLE HANDLING OF PROTECTED BUILDING MATERIALS – A GLOBAL RESPONSIBILITY

Prof. Dr. Heike Oevermann | Professor of Monument Preservation Otto-Friedrich University, Bamberg

#BAUTKEINENSCHIESS – REFLECTIONS ON THE NECESSITY OF NOT BUILDING

Manuel Ehlers | Head of Sustainable Property, Triodos Bank N.V. Germany

Discussion

PROGRAM

13:00 | BREAK | NETWORKING IN DIGITAL SPACES

14:00 | PANEL II: MANAGING AND PURSUING SUSTAINABLY

BRICKS, JEANS AND SHOES

Michael Oehler | Founder and Managing Director Trippen Shoes, Berlin/Zehdenick

INDUSTRIAL HERITAGE AND SUSTAINABLE TOURISM

Michael Stober | Managing Director Landgut Stober,
formerly Landgut Borsig, Groß Behnitz

Discussion

15:00 | BREAK | NETWORKING IN DIGITAL SPACES

15:20 | PANEL III: SUSTAINABLE USE OF OUR INDUSTRIAL HERITAGE

LOUISE, OLDEST SURVIVING BRIQUETTE FACTORY IN THE WORLD – FROM LIGNITE TO BIOCOAL?

Andreas Claus | Project Manager for the Lighthouse Climate Adaptation Project

Marc Sander | Commercial Manager of the Lüneburg Heath Nature Conservation Park
Foundation

HISTORIC HYDROPOWER PLANTS – WORLD HERITAGE IN OPERATION

Antonia Hager M.A. | UNESCO World Heritage Manager, Augsburg

THE CRCLR HOUSE – A PRACTICAL EXAMPLE OF CIRCULAR CONSTRUCTION IN THE FORMER KINDL BREWERY

Simon Uhcholl Lee | Board of Directors TRNSFRM eG, Managing Director
CRCLR GmbH, Berlin

Discussion

16:45 | SUMMARY

Prof. Joseph Hoppe

LECTURES AND BIOGRAPHIES

SUSTAINABILITY AND INDUSTRIAL HERITAGE. OUR REFLECTIONS

Sustainability must be the legacy of an industry that has unreservedly exploited people and the environment to pursue unrestrained growth. Since 1750 the earth has been transformed in a highly impactful way – and produced an age we now refer to as Anthropocene. And since that time, little or no thought has been given to sustainability. Something which rings true even today. Sustainability is a political, system-relevant term. And not just here in this country, but worldwide. Sustainability is concerned with inter-generational justice within the earth's ecological capacity to cope with the burdens we place upon it. Now, for the first time, it also combines ecology and justice with the concepts of time and the economy.

The German Federal Government has been pursuing a sustainability strategy for 20 years now. Much can be said about the multitude of initiatives and processes that have been put into place. One thing, however, cannot be said: These measures are enough to achieve even halfway sensible goals. This lecture will deal in detail with sustainability standards and processes. It will also focus on the cultural sector so that much-needed impetus can be provided.

Industry used to mean the reproducibility of mass-produced products. Today, in an astonishing mutation, it has come to mean uniqueness or, as it is called in Industry 4.0 jargon, "batch size one".



GÜNTHER BACHMANN was an adviser to the Federal Government as Secretary General of the Council for Sustainable Development from 2001 to 2020. A distinguished landscape planner and soil scientist, Mr Bachman worked for many years at the German Federal Environment Agency. He is a Fellow of the international environmental NGO Conservation International, is a board member of the German Sustainability Award Foundation, teaches as an honorary professor at the Leuphana University of Lüneburg and works on a voluntary basis for a number of initiatives and associations. As a publicist, moderator and speaker, he

also uses his expertise to address many questions around sustainability.

LECTURES AND BIOGRAPHIES

TIME TRAVEL INTO THE FUTURE OF CLIMATE CHANGE – A SCIENTIFIC SIMULATION GAME

Together with the Potsdam Institute for Climate Impact Research (PIK), the non-profit organisation SCIARA is developing a very special simulation platform. In this multi-player, online game for every citizen, possible climate futures can be explored, understood and designed interactively - using the same scientific models of the earth's system used in climate research.

The goal: To discover how climate change and individual economic and political climate protection measures could impact your own life. The first application of the flexible SCIARA simulation platform couples your lifestyle decisions, which can be repeatedly adjusted over the course of the simulated period, with climate impact models. This is then continuously updated, clearly demonstrating the consequences of your lifestyle choices. The intention of the SCIARA's developers is to promote a realistic, deep awareness of climate change while giving decision-makers in business and politics indications as to which measures are likely to receive broad social acceptance.



DANIEL TAMBERG was born in 1969. He is married, has three grown children and has worked in the IT industry for 30 years. During this time he has been a software engineer, project manager and consultant across a variety of areas in large software projects. Because of his lifelong interest in the environment, energy and simulation work, he has long considered how he can use his skills with even greater purpose. At the end of 2019, he returned to his idea of bringing scientific models and real people together. He also persuaded his co-managing director Sebastian Kutscha – and through him six medium-sized IT companies –

to be involved in the project. With additional cooperation from the Potsdam Institute for Climate Impact Research, they founded and developed the SCIARA in mid-2020.

LECTURES AND BIOGRAPHIES

INDUSTRIAL HERITAGE AND SUSTAINABILITY - WHAT DO WE KNOW?

Quite a few publications and policy papers on industrial heritage and sustainability have already been published. But what contribution can industrial heritage actually make to limiting climate change and the extinction of the world's various species? Trend-setting approaches are being made in the conservation sciences and are also being derived from the rehabilitation methods already in use in industrial heritage. And these approaches can be transferred over and applied to buildings in conservation and rehabilitation work. De-industrialisation, which is often referred to as structural change, has drawn upon best-practice processes taken from the post-mining history of North Rhine-Westphalia, where these sustainable development goals have received significant societal support. The experience gained in maintaining and investigating the legacy of industrialisation such as steam engines, coal mining machines and nuclear power plants – objects now regarded with some ambivalence – could also yield a new ethical approach when contemplating a very valid question regarding sustainable development goals: Namely, should we limit ourselves in what we do or can a technological solution for these problems be found?



ROMAN HILLMANN is a historian of architecture and construction technology. He has been the project coordinator of the Ruhr Heritage Conservation Centre (hcc.ruhr) at the Deutsches Bergbau-Museum Bochum since 2020. Since September 2021, he has also been a professor of Industrial Heritage Conservation in the Master's degree track in Material Engineering and Industrial Heritage Conservation at the Georg Agricola University of Technology in Bochum. Since 2007 he has been a freelance architectural historian, since 2009 a lecturer in Restoration Sciences at HTW Berlin and most recently headed the book project "Modern

Architecture of the GDR. Layout. Construction. Monument Preservation" (Spector Books Leipzig 2021). His current post-doctoral work at the University of Stuttgart is entitled "Character of the Eastern Modern. From building policy to the construction and aesthetics of serial architectures to spatially composed urban planning in the GDR".

LECTURES AND BIOGRAPHIES

SUSTAINABLE HANDLING OF PROTECTED BUILDING STRUCTURES AS A GLOBAL TASK

The goal of the sustainable handling of protected building materials is directly related to the complex societal evaluation and assessment processes involved in historical materiality. What is being discussed as “good practice” in the conservation and reutilisation of structures? How can we critically reflect, preserve and use the various meanings, knowledge and global networks in which local cultural heritage sites are embedded? How can the 17 global goals for sustainable development be implemented when working with industrial heritage?

The aim here is to identify criteria for dealing with our industrial legacy. In the process, eight criteria for good practice in monument conservation have been identified – providing an analytical tool that can be used both for scientific research and for actively supporting systematisation in practice. Studies have shown this: in particular in the case of urban industrial heritage sites such as the Zeche Zollverein or in the theory and practice involved in the appropriately sympathetic conversion and repurposing of textile factories (see also <https://www.youtube.com/watch?v=8KlxzwdClc>).



HEIKE OEVERMANN studied architecture (Braunschweig, Seville) and World Heritage Studies (Cottbus). After further extensive training in a number of different offices, she founded architectureRelated together with Andreas Oevermann. In 2012 she received her doctorate from TU Berlin Prof. Johannes Cramer on the (conflicting) transformation processes of the Zollverein coal mine and UNESCO World Heritage Site.

Since 2011 Heike Oevermann has worked at the Georg Simmel Centre at the Humboldt University in Berlin and was Deputy Director from 2016 to 2021. She is involved in interdisciplinary

scientific work that seeks to encourage conversations and exchanges with society through knowledge transfer projects.

In 2020 she completed her training with Prof. Hans-Rudolf Meier to become a post-doctorate lecturer at the Bauhaus University Weimar. Her accompanying thesis was on monument preservation and recent urban construction history. For the academic year 2021/2022, she will be the acting Chair of Monument Conservation at the Otto Friedrich University in Bamberg (Chair Gerhard Vinken).

LECTURES AND BIOGRAPHIES

#BAUTKEINENSCHIESS - REFLECTIONS ON THE NECESSITY OF NOT BUILDING

The climate crisis is a real and present threat. Fundamental changes as well as new answers must be found to ensure we are firmly on the path to remaining within the global 1.5 degree warming goal. And the same is true for the construction industry: Emissions from the building and construction sector are responsible for 38% of global energy-related CO2 emissions with cement production, waste generation and surface sealing acting as further climate killers. Unfortunately, as it was most recently practised, construction is not compatible with the concept of climate-neutral cities. There is also a great deal of new construction under way with significantly more new apartments being built than is theoretically required for the needs of an increasing population.

The fact remains: We must work with resource-saving, local, renewable materials - primarily and as far as possible with wood, clay and hemp. But the most sustainable way of building is clearly not to erect new structures, but rather to use existing buildings in a new and forward-thinking way.

In his lecture, Manuel Ehlers talks about possible climate-friendly and societally acceptable future scenarios in the construction and real estate industry. In the process he draws upon examples that already embody this ethic.



MANUEL EHLERS studied industrial engineering at the TU Berlin and the Bauhaus University Weimar. His focus was on civil engineering, construction management and project development. He subsequently worked as a project developer for large institutional and owner-managed companies in Berlin. In this role, he developed ambitious, economically successful projects and found that commercially-developed real estate projects and sustainability often contradict each other – especially when various societal aspects come into play. Or in other words: Even the highest grade sustainability certificate – viewed as a whole

– does not say much about a project's actual degree of sustainability. Since 2016 he has been responsible for Sustainable Properties at the Berlin branch of Triodos Bank, which promotes sustainability and transparency in banking. In this role, he finances projects that promote social participation, studio houses, young cooperative housing projects and projects involving social sponsors.

LECTURES AND BIOGRAPHIES

BRICKS, JEANS AND SHOES

Shortly after the Wall came down, the first industrial machines for the Berlin Trippen workshop were acquired in Zehdenick, formerly the largest brick producing region in Europe. This facility was acquired after the bankruptcy of a shoe factory. A few years later, Trippen set up its German production facilities here with the former employees of the jeans and shoe factory in order to produce shoes in a way that conforms with sustainability standards. Today, Trippen in Zehdenick is facing a new challenge: how to reinvent raw materials such as leather and rubber in a climate-neutral way.



MICHAEL OEHLER Michael Oehler had founded a workshop for bespoke shoes and shoes for stage and film productions in Kreuzberg even before he completed his master craftsman examination in 1987. In 1991, together with Angela Spieth, he founded Trippen, a shoe label with 120 employees (after Covid), which produces and sells its shoes worldwide. Their products are known for having an emphasis on comfort, sustainable materials and sophisticated design.

LECTURES AND BIOGRAPHIES

INDUSTRIAL HERITAGE AND SUSTAINABLE TOURISM

Monuments are repositories of past knowledge - "In the past people thought first and then built. Today, unfortunately, the converse is often true". A successful transformation process must carefully unearth this knowledge and transfer it to the present day. This is the only way to create a healthy foundation for tomorrow.

Monument specialists are professionals in dealing with change. And the Stober estate is a good example of this: The industrialist Albert Borsig built a model agricultural estate that has flourished since 1866. In 1923 the farm had grown to some 2,700 hectares, on which the forerunners of ecological agriculture were already being practised and the first sustainable technologies were being used. The ecologically sustainable hotel which exists there today offers history you can actually touch – and takes yesterday's vision of sustainability through today's needs and beyond. At the same time it presents a story that demonstrates how implementing sustainability depends on currents, atmospheres, networks and organisms.



Visionary **MICHAEL STOBER** was born in Mühlbach / Baden in 1958. After pursuing a variety of different professions in the course of his life (including being a philosopher, photographer, musician, dishwasher, furniture restorer, bronze caster and renovator), he once again took up the search for the ultimate challenge. In 2000 he bought a dilapidated estate left over from the old Borsig dynasty in idyllic Brandenburg and transformed it into a prosperous "lighthouse in the greater Berlin area" (AHGZ 2017, No. 16). Since 2012 it has been regarded as the most sustainable conference hotel in the world. It is climate-positive and was named the Greenest Hotel in Europe in 2017 and 2021.

LECTURES AND BIOGRAPHIES

LOUISE, OLDEST STILL SURVIVING BRIQUETTE FACTORY IN THE WORLD - FROM LIGNITE TO BIOCOAL?

The visitor attraction and technical monument briquette factory LOUISE in Domsdorf in Southwest Brandenburg is considered the world's oldest surviving facility of its kind. Working together with the factory's sponsor, the city of Uebigau-Wahrenbrück, the Friends of the LOUISE Briquette Factory Technical Monument, Domsdorf e.V., founded in 1994, are committed to the preservation, careful renovation and further development of this industrial heritage monument.

As part of a usage and sustainability design plan, the idea of turning the LOUISE into a biocoal production facility was conceived in 2017. A possible partner for this project may be the Lüneburg Heath Nature Conservation Park Foundation, which has acquired forest areas in the vicinity of LOUISE and manages them sustainably. By using pyrolysis, residual forest waste wood and landscape conservation material could be processed into biocoal with a wide range of possible applications. This would also contribute to protecting the climate.



ANDREAS CLAUS was born in 1963 and is a qualified teacher. As the full-time mayor of the city of Uebigau-Wahrenbrück, he was – until 2019 – the first mine director to be responsible for a property protected under the German Mining Code. He is now a volunteer member of the Friends of the LOUISE Briquette Factory Technical Monument, Domsdorf e.V.

MARC SANDER, born in 1982 in Winsen / Luhe, grew up on his parents' farm. He is a trained forestry manager and studied forestry engineering and business administration. He is the current commercial director of the VNP Foundation for the Lüneburg Heath Nature Reserve and will become its new managing director on January 1st, 2022.



LECTURES AND BIOGRAPHIES

HISTORIC HYDROPOWER PLANTS - WORLD HERITAGE IN OPERATION

The Augsburg water management system has been a UNESCO World Heritage Site since July 2019.

It has a unique place in the world and is a fine example of progress, aesthetics and sustainability. According to UNESCO, it represents an urban water landscape that is unparalleled in terms of its technical diversity, which continues to this day, and testifies to the exemplary handling of the world's most vital resource: water.

This world heritage site comprises a total of 22 properties connected to the fields of technology, industrial archaeology, architecture and visual arts from over eight centuries of the city's historical legacy. The abundance of water available here has always offered favourable conditions for households, crafts, trades and industry. Ten of the World Heritage properties are hydropower plants complete with their historical and technical fittings, whose turbines and generators are still in operation.

Today's use of the water management system not only documents the continuation of old traditions with the help of new technologies, but also its sustainability – something which is all the more important in our current age of climate change.



ANTONIA HAGER studied architecture at the Augsburg University of Applied Sciences from 2005 to 2009, and from 2009 to 2011 at the University of Bamberg. From 2011 to 2013 she was a research assistant at the University of Bamberg in the Department of Building Research. After pursuing freelance work in building research and employment in an architecture and consulting services office, she headed up the Regensburg district Lower Monument Protection Authority from 2015 to 2016. In 2017 to 2019 she prepared the UNESCO World Heritage application for the Augsburg Water Management System for the city of Augsburg and assumed its management after it successfully gained World Heritage recognition in 2019.

LECTURES AND BIOGRAPHIES

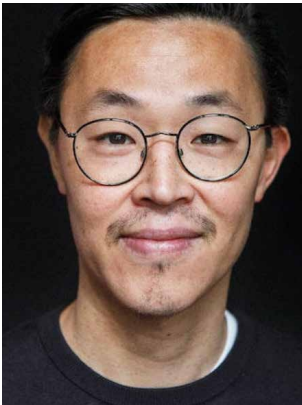
THE CRCLR HOUSE - A PRACTICAL EXAMPLE OF CIRCULAR CONSTRUCTION IN THE FORMER KINDL BREWERY

The CRCLR House is currently under construction in Berlin-Neukölln. This project revolves around a 2-storey historical building at the former Kindl Brewery, which is being converted and completely renovated with a further three storeys to be added. The project motto is "Circular Building for a Circular Economy".

That means:

- Reusing components and materials with a history of use
- Building in such a way that all components are reusable
- Only providing materials that support sustainable cycles of use, both in terms of biological and technical resources

The CRCLR House strives at every level to put these above principles into practice.



SIMON UHCHOLL LEE studied mathematics in Berlin and Grenoble. Initially, he worked in financing for start-ups and in the social entrepreneurship space.

Simon is also a founding member and board member of TRNSFRM eG, which is committed to a different approach to land use and management. Their focus is on strengthening the common good through social, economic and cultural use as well as on affordable, preferably communal living through social cohesion. In working to achieve these aims, TRNSFRM eG assumes the role of building contractor as a non-profit property developer and is responsible

for the planning and circular structural implementation of projects.

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