



# SIGNS OF **REMEMBRANCE**

*Preserving the spirit of place of 20<sup>th</sup> century industrial  
heritage in De Waterdriehoek after adaptive reuse*

**AR3A010**  
**Nino van Dijk**  
**Graduation Studio**

Research Plan  
5861667  
Revitalising Maritime Heritage



# STENZCO

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# 1 INTRODUCTION

## 1.1 BACKGROUND

Late 19th- and 20th-century industrialisation in the Netherlands caused a rapid growth of industrial buildings and marked its place on cities’ appearance to this day.<sup>1</sup> With the transition to a post-industrial society, many industrial buildings have become vacant.<sup>2</sup> These structures, once central to urban economic development, now present significant opportunities for adaptive reuse, allowing them to fulfill new roles within contemporary urban landscapes.

According to the The International Committee for the Conservation of the Industrial Heritage (TICCIH) its *Nizhny Tagil Charter for the Industrial Heritage* Industrial heritage remains include important aspects which are of historical, technological,

social, architectural or scientific value.<sup>3</sup> These values are expressed through “buildings and machinery, workshops, mills and factories, mines and sites for processing and refining, warehouses and stores, places where energy is generated, transmitted and used, transport and all its infrastructure, as well as places used for social activities related to industry such as housing, religious worship or education.” These elements represent intrinsic site values, enriched by intangible human memories and customs.

Industrial heritage can be seen as artefacts of people and places, and its processes over time. It has the power to revitalise communities and revive cultural identities.<sup>4</sup>

*Sites, Structures, Areas and Landscapes “The Dublin Principles”* The industrial heritage is “highly vulnerable and often at risk, often lost for lack of awareness, documentation, recognition or protection but also because of changing economic trends, negative recognition or protection but also because of changing economic trends, negative perceptions, environmental issues or its sheer size and complexity.”<sup>5</sup> This vulnerability is further stressed by Cristian Wicke, who claims that “since the mid-20th century,

“To understand the **genius loci** of a place does not mean to copy old models. It means to determine the identity of the place and to interpret it in ever new ways.” (Norberg-Schulz, 1979)

however, energy transitions and increasing economic globalization have left urbanized regions in highly industrialised countries extremely vulnerable.”<sup>6</sup>

This vulnerability results in the loss of traces of culture, as the industrial heritage is often a bearer of tangible and intangible cultural values. These values give a place its character and is determined by how things are in our every day life-world concrete phenomena. By determining these unique value’s, the spirit of

place can be grasped.

In the context of the Biesboschhal in Dordrecht, Netherlands, preserving this spirit of place is crucial for maintaining the Waterdriehoek’s historical and cultural heritage. This research attempts to provide guiding principles for the adaptive reuse of the Biesboschhal. Although the building’s physical appearance shows signs of decay, the intangible values could proof essential to maintain its spirit of place.

## 1.3 RESEARCH QUESTIONS

The research questions that are formulated respond to the problem statement. The main question, together with the sub questions, forms the groundwork of the research. The main question of the research is as follows:

“How is the spirit of place preserved in Twentieth-Century industrial heritage after adaptive reuse?”

The question explores the delicate balance between maintaining the unique character and atmosphere of historic industrial sites while adapting them for new, modern purposes. It delves into how adaptive reuse strategies can ensure that these sites, with their rich historical, social, and

architectural significance, retain their essence or genius loci – the spirit of place – even as they are transformed to meet contemporary needs.

To help answer the main question three subquestions are composed:

- “What is genius loci and how can it help preserving cultural values?”
- “What adaptive reuse strategies are there and how do they include the unique characteristics of place?”
- “How is the spirit of place preserved in transformed case studies?”

## 1.4 RELEVANCE

The significance of this research lies in the growing number of adaptive reuse projects and the pressing need to preserve existing structures with minimal loss of cultural values. By integrating a theoretical framework grounded in the preservation of the spirit of place and evaluating whether these principles

are reflected in contemporary adaptive reuse strategies, the study aims to contribute to the ongoing discourse on preservation strategies, introducing a framework based on the unique characteristics of place and the cultural significance tied to industrial heritage.

<sup>1</sup> Chilingaryan, *Industrial Heritage: In-Between Memory and Transformation*.

<sup>2</sup> Bell, *Welcome to the Post-Industrial Society*, 46–49

<sup>3</sup> TICCIH. *The Nizhny Tagil Charter for the Industrial Heritage*.

<sup>4</sup> Douet, *Industrial Heritage Re-Tooled: The TICCIH Guide to Industrial Heritage*.

<sup>5</sup> ICOMOS, TICCIH. *Joint ICOMOS-TICCIH Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes*.

<sup>6</sup> Wicke, *Industrial Heritage and Regional Identities*.

2 THEORETICAL FRAMEWORK

The theoretical framework for the research consist of two fundamental theories: the *genius loci* of Christian Norberg-Schulz in his book *Genius Loci: Towards A Phenomenology Of Architecture* and Stuart Hall’s theory on identity in his introductory chapter *Who Needs Identity* in the book *Cultural Identity*.

In Norberg-Schulz’s Genius Loci adopts a phenomenological approach to architecture. He states that the spirit of place, genius loci, belongs to the place and when this is identified it can be interpreted in “ever new ways”. Place is an integral part of existence because acts take place and are meaningless without reference to a locality. It is this locality that this research tries to grasp and embed into the adaptive reuse strategy of the desgin task. The spirit of the place does what it “wants to be”. Architecture means to visualise the genius loci of a place. By identifying the genius loci of the Waterdriehoek, this can be implemented in the redesign of the design brief. Identification and orientation are described by Norberg-Schulz as “primary aspects of man’s being-in-the-world”.<sup>7</sup>

Stuart Hall explores the inherent instability of identity, arguing that identities are never unified and, especially in late modern times, become increasingly fragmented and established along various, often overlapping, discourses and practices. He emphasizes that identities are not fixed but subject to

continuous change and transformation, shaped by framing historical processes. Hall further explains that identities, while seemingly linked to a historical origin, are not about “who we are” or “where we came from,”<sup>8</sup> but rather about using history, language, and culture to shape what we might become and how we represent ourselves moving forward. This suggests that the historic past plays a crucial role in shaping our identity and emphasizes the need to preserve this history as an essential part of understanding who we are.

Together, these complementary theories form a foundation for the research, grounded in the core concepts of identity and genius loci. This theoretical base enables the research to start from the essence of these concepts and apply them in evaluating different adaptive reuse strategies and practical case studies. Understanding genius loci will shape design choices for the Waterdriehoek, situating place as an active component of architecture.

3 METHODOLOGY

To be able to answer the composed questions of the research a combination of research methods is needed. First a literature review will be conducted to gain an understanding of the existing research and debate on the subject of Industrial Heritage. Additionally, multiple heritage design approaches will be looked into to bring to light how these treat the cultural heritage aspects and values and ultimately the *genius loci*. Thirdly, a case study research will be executed to link theory with practice and gain knowlegde of adaptive reuse’s current state.

3.1 LITERATURE REVIEW

In order to define the necessity of preserving the spirit of place and to form valuable starting points a literature review will be carried out. This review includes critical perspectives about the *genius loci* in Norberg-Schulz’s book which are considered as a theoretical basis for the rest of the review.

To understand the current research landscape in heritage values studies and its role in conveying cultural values, guidelines from both The International Committee for the Conservation of Industrial Heritage (TICCIH) and the International Council on Monuments and Sites (ICOMOS) will be examined and reflected upon. These frameworks will be considered for their approaches to integrating the preservation

3.2 ADAPTIVE REUSE STRATEGIES

To adress the need for the profession of architecture to implement the theory of genius loci, different adaptive reuse strategies are looked into:

- M. Kuipers and W. de Jonge their strategies in the book *Designing from Heritage*.
- The book *Heritage-based design* by P. Meurs



of the spirit of place in heritage preservation principles.

To place the findings in the correct context, the post-industrial society will be researched, looking into the effect societal change has on the way cultural heritage and it’s values are percieved.<sup>9</sup>

Additionally, heritage can be understood as a cultural process that shapes identities of individuals, groups and nations. The process of determining which elements hold value is a sort of ‘identity work’ where architects play a pivotal role.<sup>10</sup> This highlights the architect’s powerful position in heritage discourse, affecting both societal memory and preserved material passed to future generations.

- ICOMOS’ *Approaches to the Conservation of Twentieth Century Cultural Heritage*.
- The book *Yellowred* by M. Boesch
- *Adaptive Reuse of the Built Heritage* by B. Plevoets

These different strategies will, after thorough analysis, contribute to understanding how cultural values can be represented after adaptation.

7 Norberg-Schulz, *Genius Loci: Towards a Phenomenology of Architecture*.  
8 Hall, *Who Needs Identity? In Questions of Cultural Identity*, 1-17.  
9 Howard, *The Routledge Research Companion to Heritage and Identity*.  
10 Smith, *Uses of Heritage*.



### 3.3 CASE STUDY RESEARCH

In the case study, research aims to bridge theory and practice by examining how various projects adapting industrial heritage address the concept of genius loci. By exploring these different approaches, the research provides a clearer understanding of the state of the art in preserving the spirit of place of industrial sites.

Three adaptive reused industrial heritage projects have been selected to assess if and how they treat concept of genius loci:

1. LocHal, Tilburg
2. RDM Onderzeebootloods, Rotterdam
3. Tate Modern, London

By analyzing these projects, it becomes possible to determine the design approaches employed and how these approaches addressed the preservation of cultural values. This analysis reveals the strategies used to balance adaptation with the conservation of the site's heritage significance.

Another method for gaining insight into different approaches to adaptation is by obtaining expert perspectives on each project. Conducting interviews with experts involved in each case study provides valuable information on the specific strategies and thought processes guiding the project's approach.

### 3.4 DESIGN BRIEF AND RESEARCH

The thesis results could provide important input for the Heritage & Architecture Graduation Studio design brief. Although the design is not incorporated in the research, findings during the research can be processed into the design and vice versa.

The design brief centers on the 20<sup>th</sup>-century industrial monument 'De Biesboschhal' located in the De Staart area of

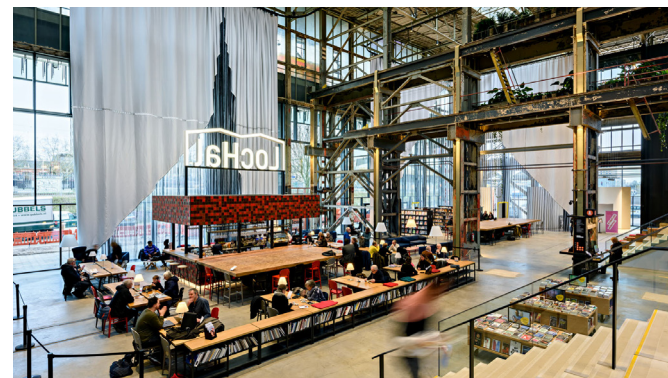


figure 1 LocHal



figure 2 RDM Onderzeebootloods



figure 3 Tate Modern

Dordrecht. This site, once a polder dedicated to shipbuilding, has now transformed into a developing urban district. De Biesboschhal, along with the kraanspoor, are the last remaining traces of the former shipyards. It is therefore crucial to protect the historical and cultural values these structures embody, ensuring their preservation within the evolving urban landscape.

## 4 PLANNING

To structure the research's schedule along with the design of the Graduation Studio a overview of both is made. Placing them along side eachother gives insight in their interrelation in all phases of the graduation year.

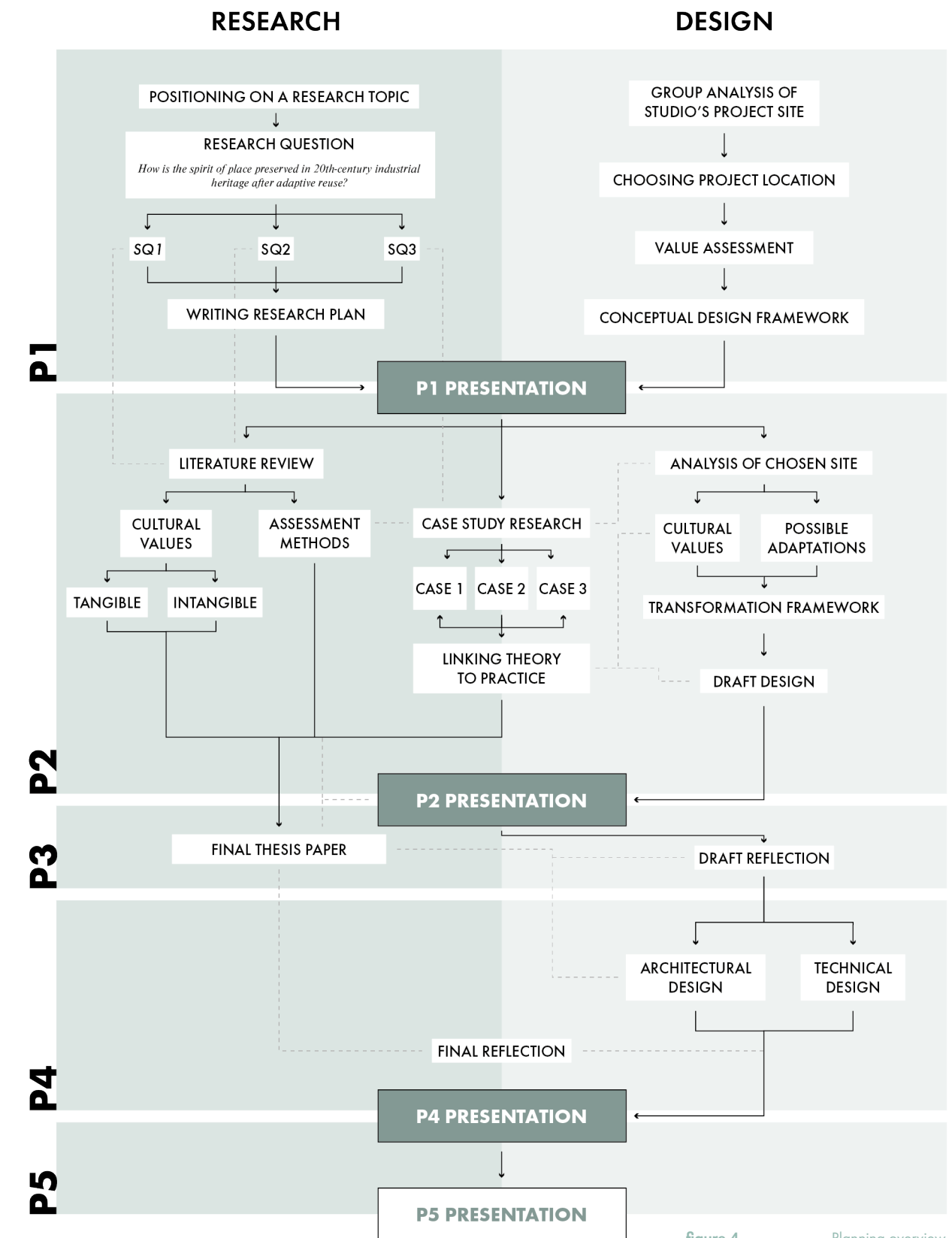


figure 4 Planning overview

## 5 BIBLIOGRAPHY

### 5.1 LIST OF FIGURES

- 1** Case study project 1: LocHal, Arnhem. Source: available at <https://www.braaksma-roos.nl/project/lochal-tilburg/>, accessed on 8 October 2024.
- 2** Case study project 2: RDM Onderzeebootloods, Rotterdam. Source: available at [www.https://rotterdam.info/locaties/onderzeebootloods/](https://www.rotterdam.info/locaties/onderzeebootloods/), accessed on 8 October 2024.
- 3** Case study project 3: Tate Modern, London. Source: available at <https://www.herzogdemeuron.com/projects/126-tate-modern/>, accessed on 8 October 2024.
- 4** Overview of the different stages of research and design. Source: own work

### 5.2 LITERATURE

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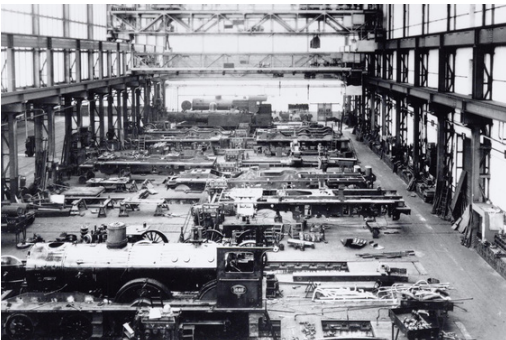


LocHal

Architect	Braaksma & Roos
Location	Tilburg, NL
Building year	1932
Transformation	2017
Function(s)	Library, meeting and events location, office

The LocHal once was a production maintenance hall for locomotives. The building went vacant after the company closed down in 2009. The hall is redesigned as part of the city. Orthogonal, industrial division of spaces is put into the design from large to small scale. The riveted steel structure narrows down to the . Workers used to only be able to look at the high skylights, now visitors can walk up to it with the addition of ascending stairs.

source: <https://www.braaksma-roos.nl/project/lochal-tilburg/>

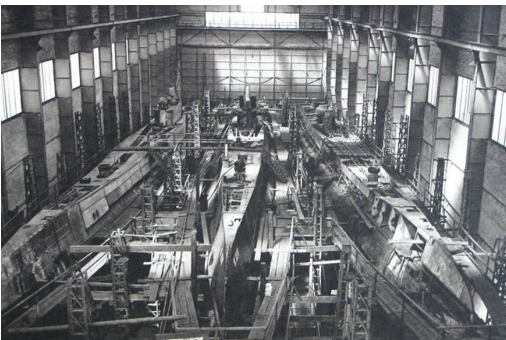


RDM

Architect	Various
Location	Rotterdam, NL
Building year	1929
Transformation	from 2004
Function(s)	Meeting and events location

RDM (Rotterdamse Droogdok Maatschappij) has a long history in shipbuilding and this particular building was used to produce submarines. After it went vacant and fell into the hands of the municipality it got transformed into a multi-purpose venue supporting cultural and educational activities. The transformation is done with minimal interventions, preserving the spirit of place.

source: Contrei, Bouwhistorische Verkenning RDM Onderzeebootloodsen. 2014.

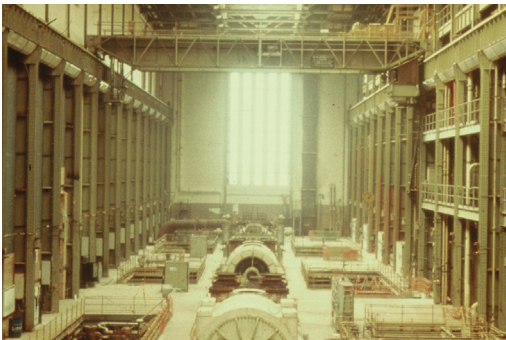


Tate Modern

Architect	Herzog & de Meuron
Location	London, UK
Building year	1947
Transformation	2000
Function(s)	Museum

Tate Modern is situated at the Thames and is a characteristic landmark for the industrialisation of London. The former Bankside Power Station had been redundant since 1981 and was reinjected after the transformation to a museum early 21st century. Because the building reflects the industrial revolution period in London, it is particularly interesting how this is preserved after adaptive reuse. The transformation preserves the industrial character while adapting it to a cultural purpose. the project retained key elements like the Turbine Hall, which serves as a dramatic central space, blending history with modern functionality. The adapted power plant is relevant to the research in the way it's situated in the city, along the Thames river, and its scale, which parallels that of maritime heritage structures. Additionally, it reflects London's industrial cultural identity in a similar sense as De Biesboschhal serves as an artefact of the Waterdriehoek.

source: <https://www.tate.org.uk/about-us/history-tate/history-tate-modern>

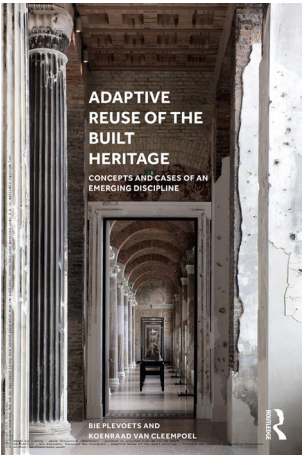




Adaptive Reuse of the Built Heritage

Author B. Plevoets and K. Van Cleempoel  
Year 2019  
Topic Design Approaches and Strategies  
Relevance

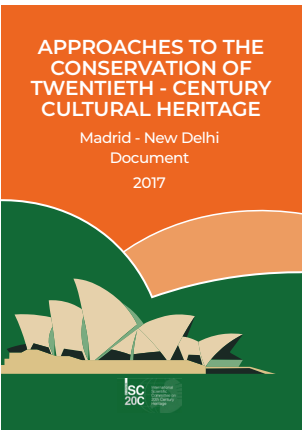
The book examines theories and methodologies that guide adaptive reuse. It emphasizes the role of adaptive reuse in sustainable development, presenting it as a strategy to retain cultural value while meeting current urban demands



Approaches to the Conservation of Twentieth-Century Cultural Heritage

Author ICOMOS  
Year 2017  
Topic Design Approaches and Strategies  
Relevance

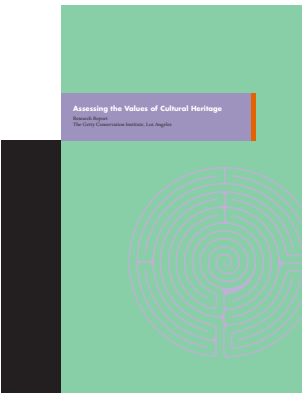
The document outlines methods for preserving modern heritage by addressing its unique materials, construction methods, and social values. It emphasizes the need to understand and respect the specific cultural and historical contexts of 20th-century sites.



Assessing the Values of Cultural Heritage

Author The Getty Conservation Institute  
Year 2002  
Topic Value Assessment  
Relevance

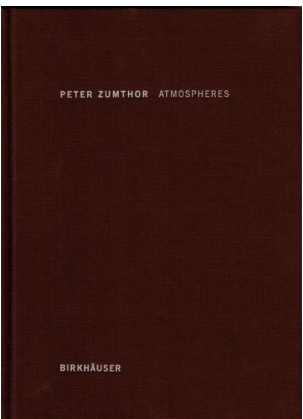
The document presents methodologies for value assessment, emphasizing a comprehensive approach for balancing cultural heritage values to inform conservation decisions, aiming to sustain heritage in ways that respect their significance to both current and future communities.



Atmospheres

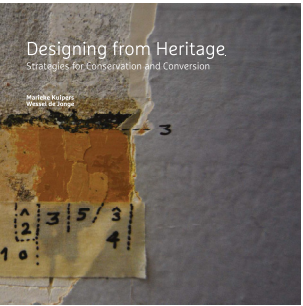
Author P. Zumthor  
Year 2006  
Topic Phenomenology in Architecture  
Relevance

Zumthor explores how architecture can evoke emotions through carefully crafted environments and respects the subtleties of place and perception.



Designing from Heritage

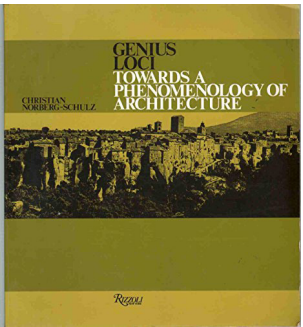
Author M. Kuipers and W. de Jonge  
Year 2017  
Topic Design Approaches and Strategies



Genius Loci

Author Christian Norberg-Schulz  
Year 1980  
Topic Design Approaches and Strategies  
Relevance:

Forms the basis of the theoretical framework of the research. The book delves into the phenomenology of architecture using the concept of spirit of place and claims this always remains.



Heritage-based design

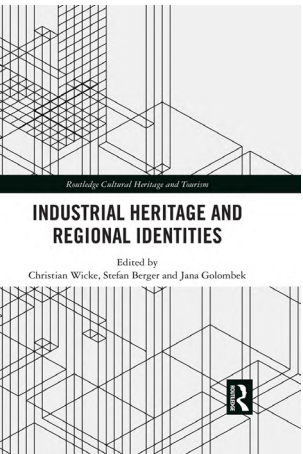
Author Paul Meurs  
Year 2016  
Topic Design Approaches and Strategies



Industrial Heritage and Regional Identities

Author C. Wicke, S. Berger and J. Golombek  
Year 2018  
Topic Industrial Heritage, Social Studies  
Relevance

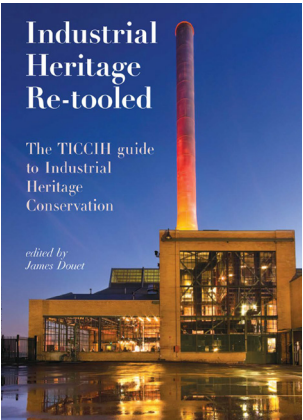
The book explores the relationship between industrial heritage and the formation of regional identities in a post-industrial time. It shows how former industrial sites and practices become symbols of local identity and how it can be a tool for cultural representation.





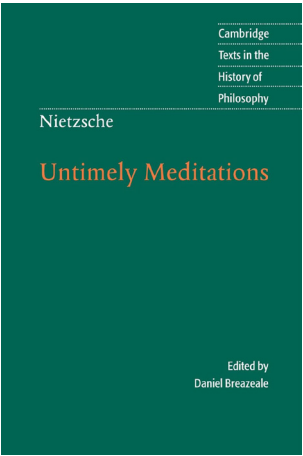
Industrial Heritage Re-Tooled

Author J. Douet  
Year 2013  
Topic Heritage Studies



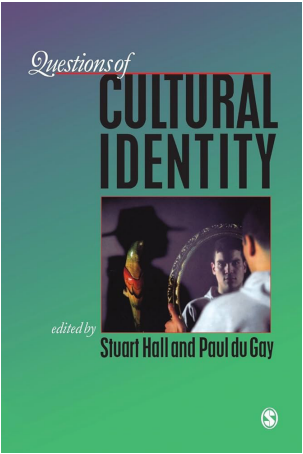
On the Use and Abuse of History for Life

Author F. Nietzsche  
Year 1874  
Topic Philosophy  
Relevance Nietzsche examines how history affects human life and argues for a balanced relationship with history, advocating for its use as a tool to inspire and enrich life, rather than to overwhelm or constrain it.



Questions of Cultural Identity

Author S. Hall and P. du Gay  
Year 1996  
Topic Social Studies  
Relevance Hall examines the fluid, constructed nature of identity, arguing that identities are neither fixed nor stable but are shaped by history, language, and cultural narratives.



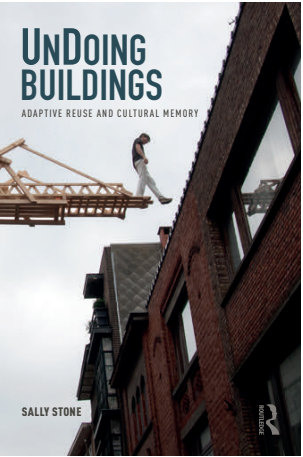
Uitvoeringsrichtlijn bouwhistorisch onderzoek met waardestelling

Author Erkende Restauratiekwaliteit  
Year Monumentenzorg  
Topic 2024 Value Assessment



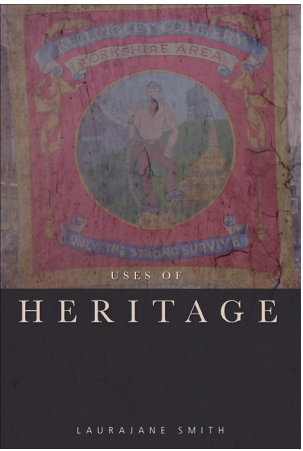
Undoing Buildings

Author S. Stone  
Year 2019  
Topic Design Approaches and Strategies, Social Studies



Uses of Heritage

Author L. Smith  
Year 2006  
Topic Heritage Studies, Social Studies  
Relevance Discusses heritage not only as a collection of tangible aspects, but a cultural process that shapes social identities.



Yellowred: On Reused Architecture

Author M. Boesch, L. Lupini, J. Machado  
Year 2017  
Topic Design Approaches and Strategies  
Relevance Boesch introduces a framework of colours to show how interventions of buildings treat the existing opposed to the additions, retaining historical significance.

