



VANISHED MATTERS

an investigation into authentically reconstructing absent structures

Research Plan

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Figure 6: The destroyed Berliner Schloss

Source: Berliner Schloss after destruction. (2020). Tagesspiegel. <https://www.tagesspiegel.de/berlin/so-wurde-das-berliner-stadtschloss-ge-sprengt-5093359.html>



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Architecture is the very mirror of life. You only need to cast your eyes on buildings to feel the past, the spirit of a place; they are the reflection of society.”

- Ieoh Ming Pei ¹

INTRODUCTION

To the broader knowledge of our societies, architecture exists to create the physical environment in which humans live and work. However, architecture represents much more than that. Architectural designs and structures are embedded with the values, preferences and intentions of their designer. They become manifestations of our cultural, social and historical context while reflecting on our aesthetic sensibilities, technological advancements and social priorities at a given moment in time. Furthermore, these architectural creations do not exist in isolation but are interwoven with our human experience.¹ Therefore, buildings influence the way we interact with our surroundings, define our daily routines and shape our emotional responses. Walking through a city with modern buildings like Rotterdam will evoke a different response than what we might feel during a stroll through Delft.

Sadly, the destruction and loss of historically significant buildings disrupt this complex interplay between architecture and human experience. When sites are damaged or demolished, that part of our shared cultural memory vanishes, including the embedded history, traditions and collective identity. With that loss, the stories they tell about our history are being silenced. Such losses not only damage our connection to the

past but also deprive a future generation of the opportunity to be shaped by lessons, values and memories embedded within these structures. It is therefore important to keep the losses to a minimum and possibly re-establish historically significant sites.

One way of dealing with architectural losses and creating a bridge between the past, present and future is the process of reconstruction. Reconstruction allows architects to reimagine, restore and revitalize architectural structures, allowing us to preserve our cultural heritage. The term reconstruction is defined as the process of building or creating something again that has been damaged or destroyed.² This makes the process of reconstruction seem like a clear-cut issue in which it is legitimate to copy a lost structure in its original form. But the process of reconstruction itself raises a multitude of philosophical questions.³

First and foremost, should we as a society reconstruct vanished structures? If so, how should we reconstruct? Is it justifiable to rebuild something exactly the way it was before? Is it justifiable to not rebuild like before? Can a 'copy' remind us of the vanished history that was rooted in the structure? Can an abstract version represent the same values?

¹ Jodidio, P., & Strong, J. A. (2008). I.M. Pei: Complete Works. National Geographic Books.

¹ Naus, W. (2022, May 20). Because it can help preserve cultural heritage important for understanding and social benefit — why social science? Why Social Science? <https://www.whysocialscience.com/blog/2022/2/22/because-it-can-help-preserve-cultural-heritage-important-for-understanding-and-social-benefit>

² reconstruction. (2023). <https://dictionary.cambridge.org/de/worterbuch/englisch/reconstruction>

³ OpenLearn. (2018, February 2). To restore or not to restore? - OpenLearn - Medium. <https://openlearn.medium.com/to-restore-or-not-to-restore-70b27a0a3f49>

Figure 2: Gebroeders Pot shipyard before destruction with all three sheds

Source: De Winter, J. W. (2023), Pot Terrain before destruction.



PROBLEM STATEMENT

Most of the philosophical questions that come up within the topic of reconstruction can be traced back to the historical background of reconstruction and seem to share one discussion point, authenticity. At first, heritage protection focused on the physical preservation of structures, without consideration of their historical accuracy, sometimes even 'perfectionising' the structure to what was believed the intention of the previous architect was. However, in the 20th century, a growing emphasis on the protection of historic structures emerged.⁴ Eventually, authenticity, defined as the quality of being real or true – the original – was introduced to protect the credibility of cultural values.^{5,6}

Most reconstructive projects focus on partly destroyed or damaged projects in which traces of the original can still be found. What is less covered in architectural practice and the academic field is the reconstruction of vanished structures. This might be due to the fact, that the act of recreating or re-establishing a piece of history is a complex undertaking. Projects that do try to re-establish vanished matters are often accompanied by criticism like the Humboldt forum in Berlin. Which, after years of being absent, was reconstructed with its traditional baroque façade, making it seem to an unknowing passerby as if it was never

absent in the first place. It is said that the reconstruction is creating a hyperreality in which the real history is taking a step back because the authentic history is not being cherished.⁷

While the process of destruction poses a significant threat to the commemorative memory and social identity, the lack of authenticity in reconstruction is threatening to falsify history in itself. This leads me to question how we can ensure authenticity in reconstructive projects when the structure has been absent for multiple decades?

The UNESCO World Heritage site of Kinderdijk presents itself as a perfect exemplary site for this research. In 1997 Kinderdijk was announced to become a UNESCO World Heritage site as a functioning water management system. This included the nineteen mills, the Wisboom pumping station, locks, board houses and so on.⁸ However, a crucial part of the development of the mills was missing.

Back in the day, mills used wood as their construction material for the blades. Due to the heavy utilization of the blades, they lasted at most a few decades, and sometimes even less. Realising the problem at hand, Adriaan Pot, secured a patent to produce iron mill blades in 1852. Those iron blades were similar to the wooden blades in weight and price, but were

promised to outlast their wooden counterparts by a long time. On the Gebroeders Pot shipyard in Kinderdijk, which was still functioning as a shipyard continuously building ships until 1916, the shipyard took on the production of the iron rods. In 1852, the first iron rod from the Pot shipyard was inserted into one of the mills in Kinderdijk. Other millers followed the example and soon the Pot shipyard was the main supplier of rods throughout the whole of the Netherlands. Production ceased around 1944 when the mills as we know them were replaced by steam engines and further developments.⁹ Consequently, the Pot shipyard lost its function as the terrain was too big to maintain and afford. A larger part of the area was sold shortly after the production of the last rod and demolished for different constructions.¹⁰

Today this destruction of parts of the shipyard causes a physical lack of built heritage that reminds us of the history of the Pot shipyard. Because Kinderdijk was only established as a UNESCO World Heritage site in 1997, this consequently means, that there was never a chance to protect that side of contribution to the water system because it was physically missing from the place. One can argue, that would the shipyard have remained established on the site, it would have gained world heritage sta-

tus as well.

Within a site like this, where the actual built heritage has been missing for multiple decades, the question of how to reconstruct such significance is raised. Given the fact, that there is a longing for authenticity within historically significant structures, it must be questioned what the best way to re-establish the site is, to remind of the historical events and contributions of the Gebroeders Pot shipyard.

RESEARCH QUESTION

How can we ensure authenticity in reconstructive projects, of structures that have been lost, to remind us of the real history that once was?

What are the regulations and guidelines for reconstruction? (theoretical/historical framework)

How can authenticity be defined in the reconstructive field?

What are the commonly applied methods and perspectives on the reconstruction of lost architecture?

⁴Hubel, A. (2019). Denkmalpflege: Geschichte - Themen - Aufgaben. Eine Einführung.
⁵authenticity. (2023). <https://dictionary.cambridge.org/de/worterbuch/englisch/authenticity>
⁶Encyclopedia of Global Archaeology. (2013). Springer.
⁷Mager, T. (2016). Architecture RePerformed: The Politics of Reconstruction. <https://doi.org/10.4324/9781315567761>
⁸UNESCO World Heritage Centre. (n.d.). Mill Network at Kinderdijk-Elshout. <https://whc.unesco.org/en/list/818/>

⁹Uitgaven van de StichtingOud Zevenhuizen - Moerkapellen. (2018). Verleden Tijdschrift, 132.
¹⁰De Winter, Jan Willem, interview by author, Kinderdijk, October 26, 2023

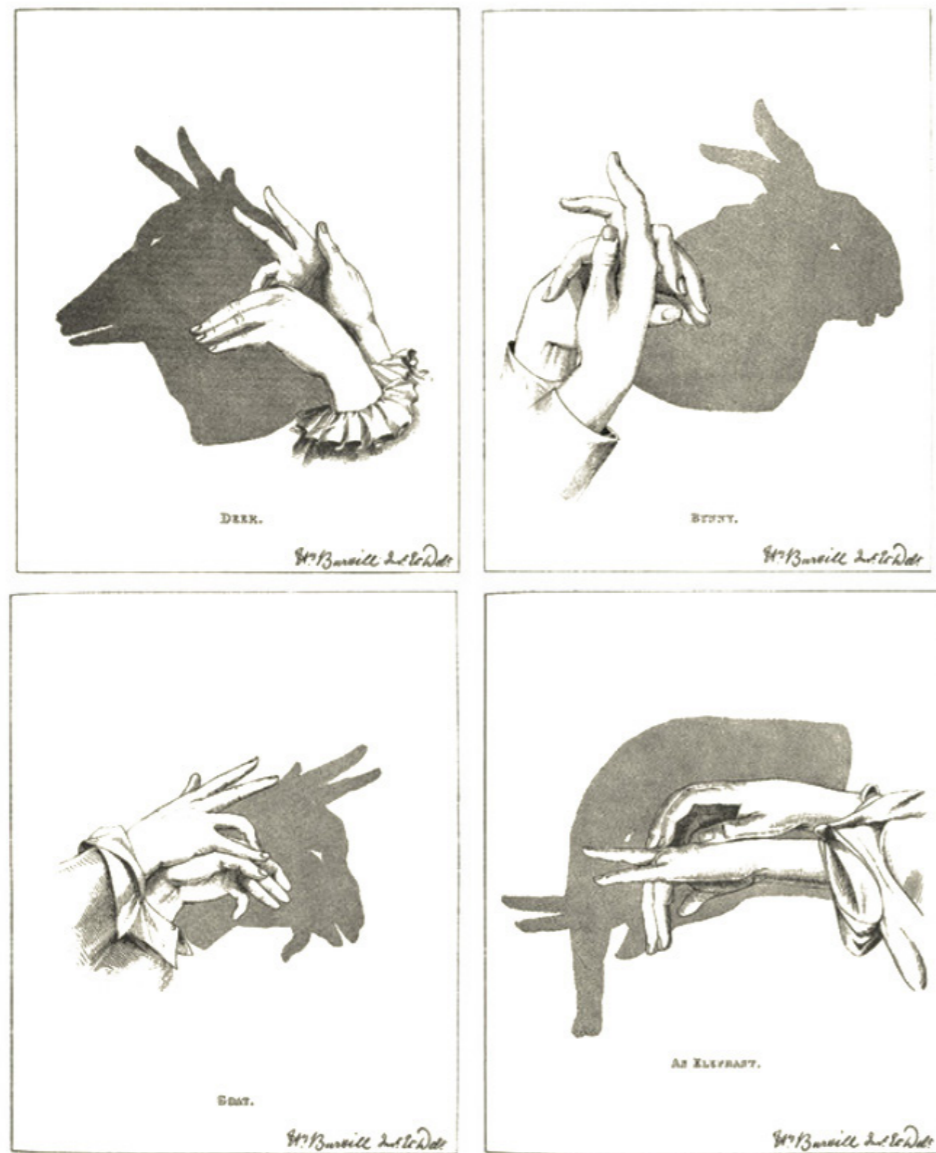


Figure 3: Hand-shadow figures, abstractly representing the task of reconstruction.
 Source: Morris, E. R. (2018, March). Hyperreality. Ericandallmorris. <https://www.ericandall.me/an-american-hyperreality>

ARGUMENT OF RELEVANCE

Within a future-facing practice like architecture, in which we design in the present for the future, it is very important to recognize the significant social responsibility of an architect to shape the world we live in. In reconstructive processes of vanished structures, the responsibility becomes even greater as architects are then not only restricted to shaping the present and future, but they are also shaping the physical matter of the past as the project becomes one of new construction. But how can we define what is the right way to such a new construction?

In the introduction to this paper, it is vocalised that heritage is about protecting the anchors of our common history. It is about reminding the world of how we got here in the first place. Among heritage protection, the topic of authenticity takes a prominent place in discussion, but also as criteria of quality, judged by the fact, that to become a UNESCO World Heritage site, a cultural site needs to be of outstanding universal value, which is tied to the condition of meeting the condition of integrity or authenticity.¹¹ Even though authenticity is defined as the quality of being real or true, this definition leaves room for interpretation in the field of heritage protection.¹² Is something real or true when it is original, when it seems original, when the material is original, its form, its function? The many ways of interpretation pose the need to clearly define authenticity within the cultural context.¹³

What is important to realise is, that re-construction of lost structures and therefore lost history does not mean rewriting history. We should be aware that what is lost is lost and we can never get it back in its original form. Reconstruction rather means reminding us of the history that we have lost with all its aspects throughout time. Similar to 'ombromanie', also known as the practice of creating hand-shadow figures, reconstruction of vanished structures is merely recreating the outline of what is known to us and not the actual structure. (figure 3)

Can authenticity within the reconstructive field therefore first and foremost be defined as the quality of reminding of the real, the true, the 'original' history of the vanished matter with all its facets?

To conclude, this research enables the reframing of authentic reconstruction of vanished buildings. In doing so it invites architects to re-examine the impact that different approaches of reconstruction have on the world around us. My contribution to the field therefore lies in the creation of a combined toolbox, that guides architects through possible design solutions that will make what has vanished matter once again. Bridging the past, present and future through historical remembrance that authentically symbolises the events of the past.

¹¹ Van Thoor, M. T. (2020). Authenticity, a credible concept? Bulletin KNOB, 119(4).

¹² Authenticity, (2023)

¹³ Van Thoor (2020)

METHODOLOGY

This research aims to understand the importance that authentic architectural choices can have on the reviving of history, the framework in which it acts and analyses different approaches used in current projects. Through that, I aim to create an exemplified toolbox on reconstruction methods, which can be used as a guideline for the project, in the following design phase. The methodology can be split into two steps. The theoretical understanding and the contextual research and toolbox establishment.

Step 1: Sets the framework of the paper by analysing the regulations and guidelines that are in use and define authenticity in the reconstructive architectural field.

In order to establish a proper structure and foundation for this research, academic literature will be the predominant source of information. To understand the current positions and opinions on the subject it is important to have basic knowledge about the historic roots of the reconstruction process. Therefore, there will be a short reflection on the historical events since the beginning of heritage, starting in the late 18th century, covering the opinions and approaches of the most important figures like Emanuel Violet le-Duc, John Ruskin and multiple more (see figure 5 for more details). This will seamlessly transfer to the current regulations and guidelines that are applied within the reconstructive field. Those will be found within charters and conventions like the Venice Charter (1964) or the Nara document of authenticity (1994) and completed by UNESCO's and ICOMOS's applied regulations. Emerging from this is the discussion about authenticity and its value to the field of heritage. The subject of authenticity is without a doubt a highly complex matter with varying opinions and definitions available. Within this research, the goal is to define a common ground on which it is possible to act. This will be done through the analysis of discussions on the matter of authenticity, found in literatu-

re research (magazines, newspapers, journals, comments). The challenge will be to narrow down the abundant sources and funnel them to the most important aspects as well as sorting through valid opinions or opinions that are influenced by personal aspects. It is important to then create a link between the regulations and guidelines applied, and the definitions of authenticity, compare them and establish if these correspond.

Step 2: Identifies and categorises the methods used in different cases linked to the reconstruction of lost architecture and will, from the findings, create a toolbox that can be used in the future design approach.

After the historical and academic foundation is identified, the second part of the research will establish, through analysing various case studies, what approaches are applied in practice and map them out. Because of the time limitation set to this research, I will limit myself to a maximum of 10 exemplary cases. To narrow down the massive amount of possible case studies it is important to define the framework in which this research will work. Therefore, it is important to define the term 'vanished' structures. In this research, it will be defined as structures that have been absent for 20-30 years. Archival research, plans, secondary literature and if possible, interviews are my chosen method for this analysis. With the gained knowledge through these sources, I will illustrate, in the form of sketches or diagrams, the used approaches. These might be things like the use of the original colour, proportions, materials, forms etc. Found knowledge will be categorized and visualised in a toolbox. With that, design approaches for a reconstructive architectural structure can be formulated.

For an overview of the steps taken in order to successfully conclude this research the research diagram illustrates the most important ones.

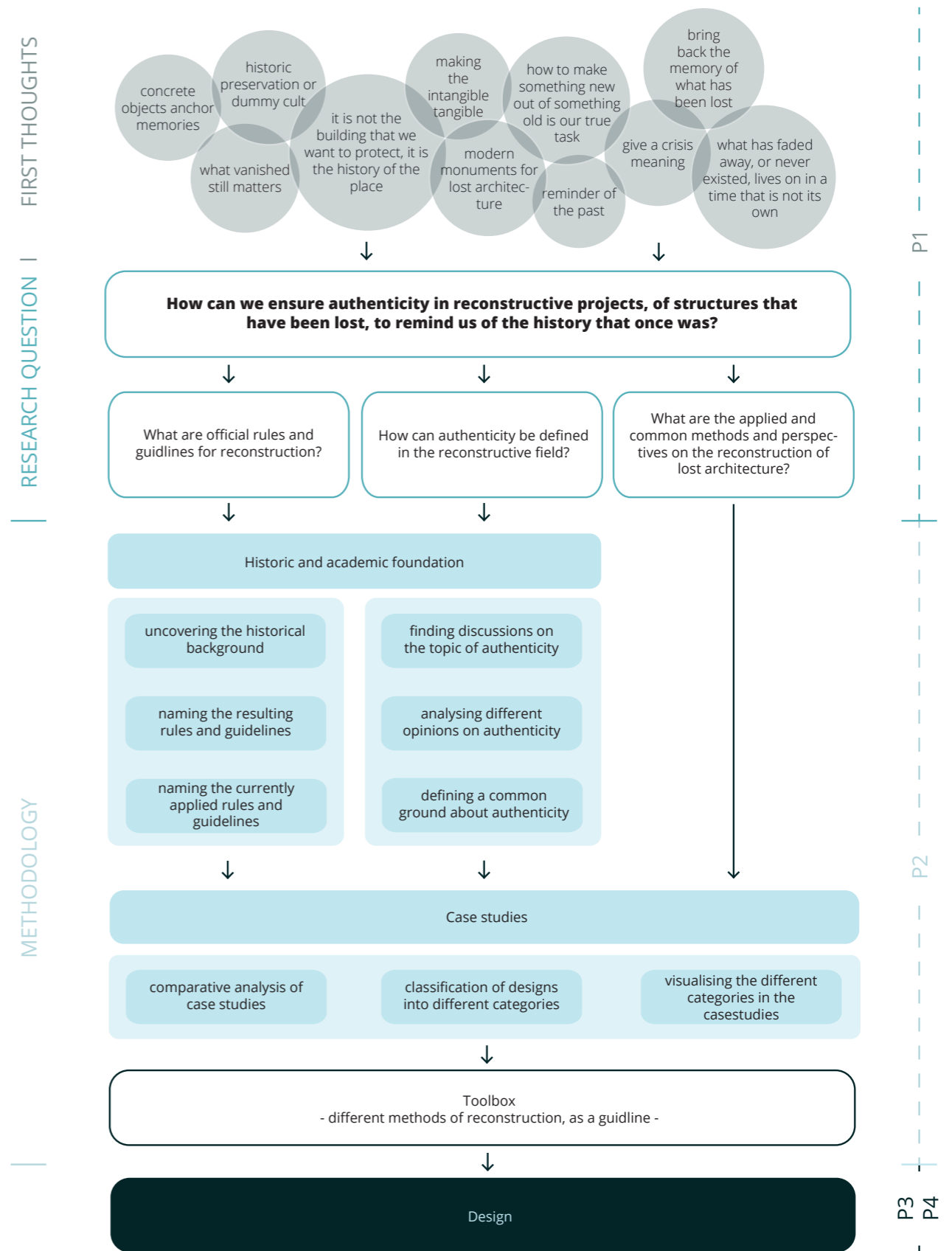


Figure 4: Research diagram, explaining the steps taken with time indications, illustration by author

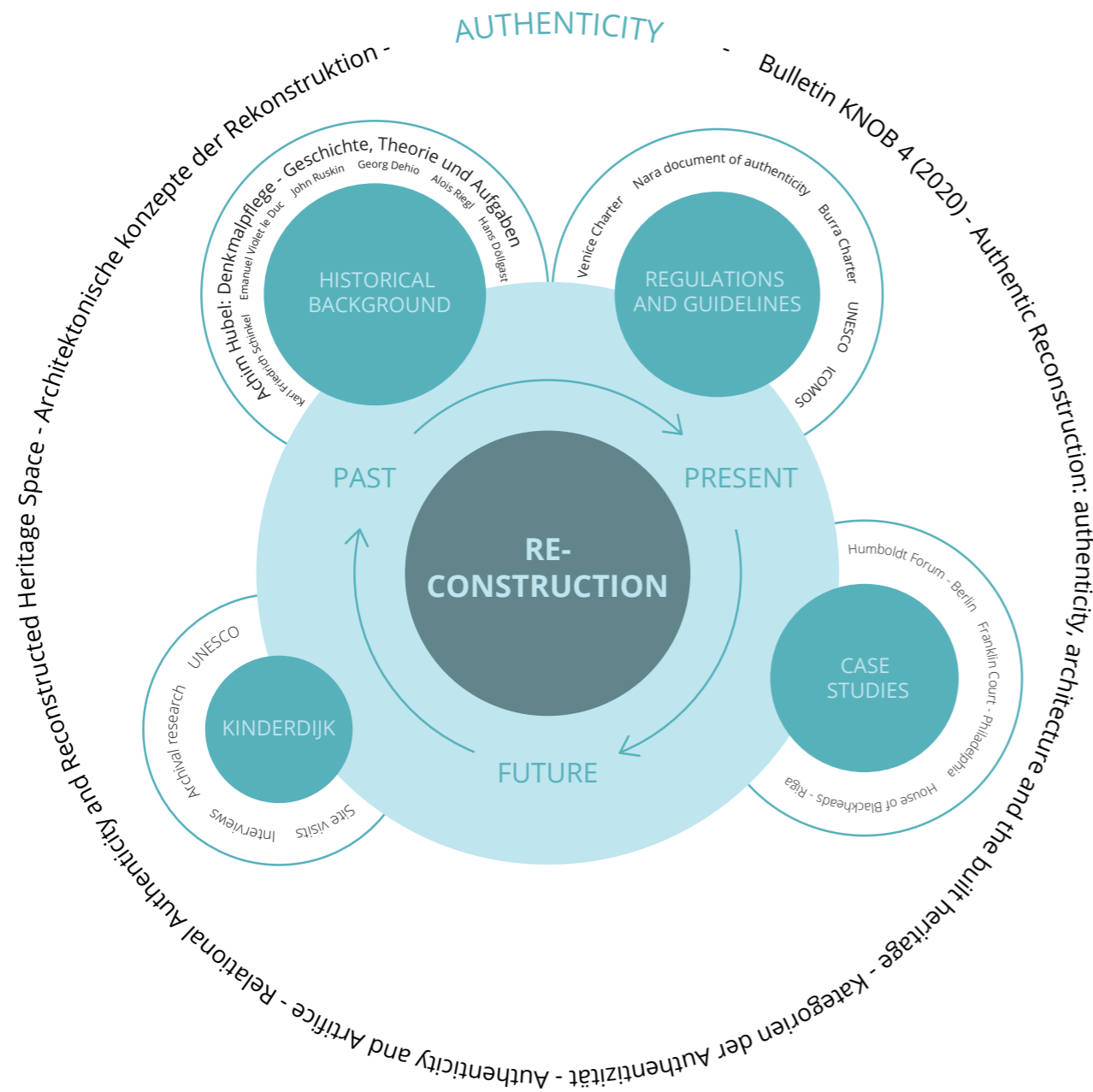


Figure 5: Mindmap for the frame of reference, describing the different categories in which to research and the various publications and case studies that can be useful. Authenticity surrounds the whole diagram as an indication of its importance in linking all the different aspects, Illustration by author

FRAME OF REFERENCE

Historical background

As mentioned previously, to fully understand the notions of reconstruction and its development, it is important to understand the historical background with its most prominent figures and opinions. Some of the most important figures who took a stand in different views on heritage protection and reconstruction are [Karl Friedrich Schinkel](#), [Emanuel Viollet le Duc](#), [John Ruskin](#), [Georg Dehio](#), [Alois Riegl](#) and [Hans Döllgast](#). If one can understand the points of those figures, one can start to grasp the concept of heritage. It is however not solely focused on reconstruction and needs to be filtered for the opinions and ideas of authenticity.

[Achim Hubels 'Denkmalpflege - Geschichte, Theorie und Aufgaben'](#) gives a good overview of the history and can be used as a basis because the time of the research is limited. For further refinement of the opinions and theories of those figures, it is possible to dive into their specific publications.

Regulations and Guidelines

With the intention to grasp what is internationally recognised as valid or not valid reconstruction methods, there are several actively used charters and conventions that need to be analysed. Some of the charters that prove to be significant for this research are:

[The Venice Charter \(1964\)](#) as one of the most well-known foundational documents that emphasises the need to balance reconstruction with historical accuracy.

[The Burra Charter \(1979\)](#), stresses the importance of understanding, protecting and conserving cultural heritage, with an emphasis on respecting the values and significance of historic places while allowing for necessary adaptations and use.

[The Nara Document of Authenticity \(1994\)](#) highlights the importance of maintaining the true spirit of heritage places and objects while acknowledging that authenticity may be vulnerable to interpretation and change over time.

Further research will uncover more regulations and guidelines that are important to the topic. Especially looking into [UNESCO and ICOMOS guidelines](#).

Theory of authenticity

Understanding the theory of authenticity in the field of reconstruction is a major part of this research, as the goal is to find a common definition of the term to further use in the creation of the combined toolbox. Because the variety of opinions and the different views are so broad it is important to look at several journals, newspapers, comments and books.

[The Bulletin KNOB 2020 Nr. 4](#) states several approaches to authenticity in architectural practices which already show the complexity of the matter. While ['Authentic Reconstruction - authenticity, architecture and the built environment'](#) by [John Bold](#) examines this idea of reconstruction, using it as a prompt to examine a range of deeper issues on heritage and the built environment.

Case studies

To shed light on the currently used practices and methods used in reconstructive projects, there will be a comparative case study analysis. The selection of case studies is already limited by the time definition of 'vanished' structures of 20-30 years but will further be refined by choosing exemplary projects of different methods.

[The Franklin Court from Venturi & Rauch](#) for example shows the abstract reconstruction of only what is known about the building. The reconstruction of the [Humboldt Forum in Berlin](#) however followed a highly visual-focused reconstruction, that brought back the baroque façade of the original building. More examples will be chosen at a later time in correspondence with the research.

A full list of references is disclosed in the appendix

GLOSSARY

Authenticity

the quality of being real or true

Heritage

features belonging to the culture of a particular society, such as traditions, languages, or buildings, that were created in the past and still have historical importance:

Historic

important or likely to be important in history

Historical

connected with studying or representing things from the past

Hyperreality

something that is too perfect to be real

Perfectionising

creating something that is beyond what has been there before

Reconstruction

the process of building or creating something again that has been damaged or destroyed
Toolbox

Vanished

not now present or existing

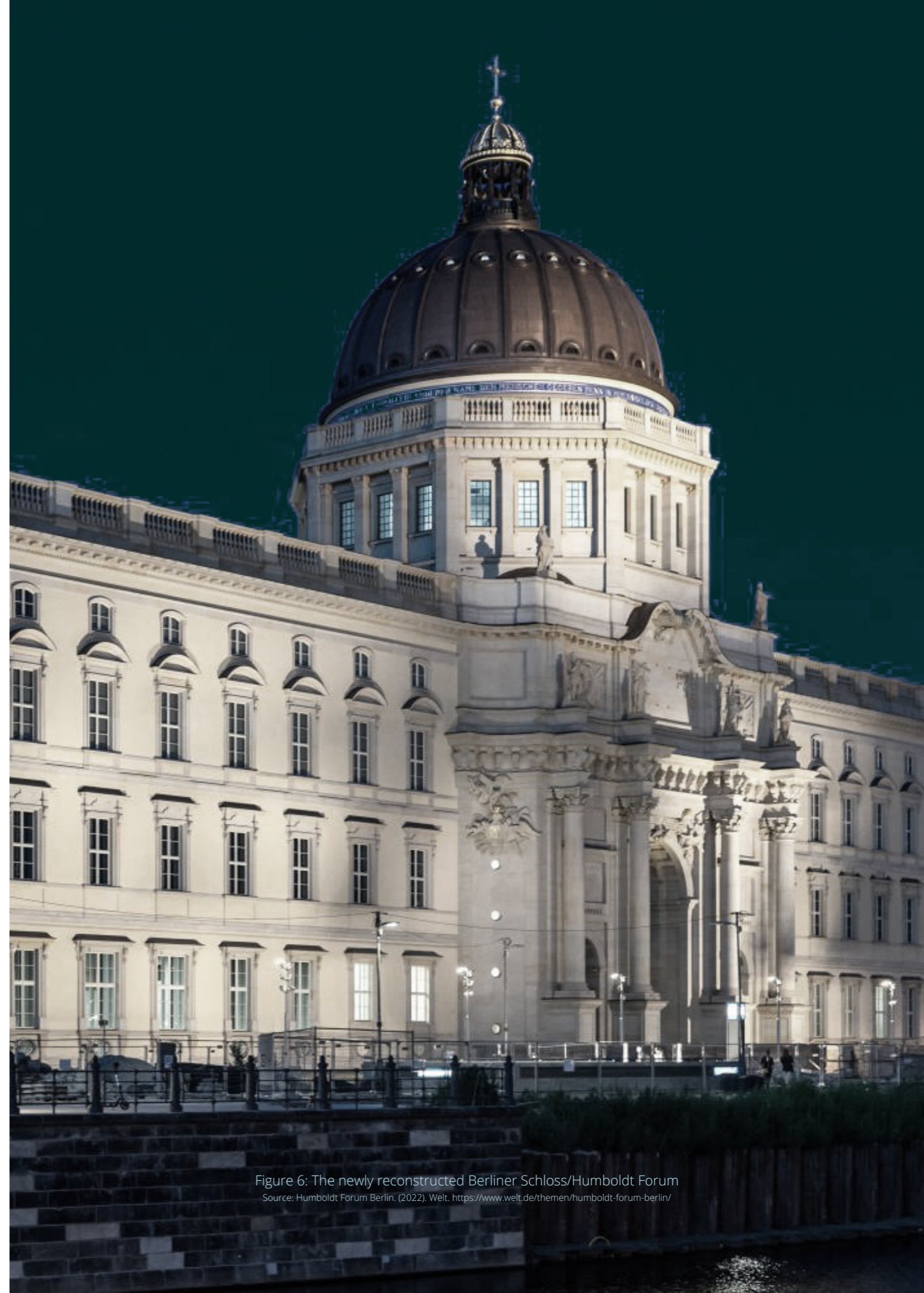


Figure 6: The newly reconstructed Berliner Schloss/Humboldt Forum
Source: Humboldt Forum Berlin. (2022). Welt. <https://www.welt.de/themen/humboldt-forum-berlin/>

APPENDIX

EXPECTATIONS

Concerning expectations for this research, I am already convinced about the importance of reconstruction for the upkeep of our societies history. At the same time I also believe that the authenticity of reconstructions has a deeper meaning. However I believe it is not finely enough defined or used yet. I expect to find various categories in which 'historic authenticity' can be divided into and in further approaches used. Hopefully, this research will amount to a deeper appreciation of reconstructive processes and the historical stories they tell.

FRAME OF REFERENCE

Literature:

Charters and conventions

- Venice Charter

- Burra Charter

- Nara document of authenticity

- UNESCO

- ICOMOS

Books

- Denkmalpflege: Geschichte, Theorie und Aufgabe - Achim Hubel

- Architektonische Konzepte der Rekonstruktion, Alexander Stumm

- Schöpferische Wiederherstellung - Hans Döllgast

- Authentic reconstruction: authenticity architecture and the built environment - John Bold

- Bulletin KNOB Nr. 4 (2020)

Case studies:

- Humboldt Forum, Berlin

- Franklin Court, Philadelphia

- House of Blackheads, Riga

- Frauenkirche, Dresden

- Universitätskirche, Leipzig

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Figure sources:

Figure 1: Berliner Schloss after destruction. (2020). Tagesspiegel. <https://www.tagesspiegel.de/berlin/so-wurde-das-berliner-stadtschloss-gesprengt-5093359.html>

Figure 2: De Winter, J. W. (2023). Pot Terrain before destruction.

Figure 3: Morris, E. R. (2018, March). Hyperreality. Ericrandallmorris. <https://www.ericrandall.me/an-american-hyperreality>

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