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Monumente jenseits des Digitalen

Architecture of Memory

Monuments Beyond Digital

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NIKOLA BEIM

Architecture of Memory

Monuments Beyond Digital

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Abstract

Architecture of Memory
Monuments Beyond Digital

The dissertation examines the inaugural axiological study of monuments as defined in *The Modern Cult of Monuments: Its Character and Origin* by Austrian art historian Alois Riegl in 1903 Vienna. It traces its influence on architecture and preservation fields from the twentieth to the twenty-first century, shifting focus from the physical to the digital realm. The dissertation is structured into three research areas: “The Notes on the Modern Cult of Monuments,” “The Anamnesis of the Cult,” and “The Cult Beyond the Digital.” Central to this research is the exploration of a monument's value in the twenty-first century within the digital sphere while reflecting on Riegl's preservation theory. Additionally, the project endeavors to develop a novel representational model for monuments that navigates the intersection of physical and digital environments, leveraging contemporary digital tools and methodologies.

Architektur der Erinnerung
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Die Dissertation untersucht die erstmalige axiologische Studie von Denkmälern, wie sie im *Der Moderne Denkmalkultus: Sein Wesen und Seine Entstehung* durch den österreichischen Kunsthistoriker Alois Riegl im Jahr 1903 in Wien definiert wurde. Sie verfolgt deren Einfluss auf die Architektur und Denkmalpflege vom zwanzigsten bis ins einundzwanzigste Jahrhundert, wobei der Schwerpunkt vom Physischen ins Digitale verlagert wird. Die Dissertation ist in drei Forschungsbereiche gegliedert: “Die Anmerkungen zum Modernen Denkmalkultus,” “Die Anamnese des Kultes” und “Der Kult jenseits des Digitalen.” Im Zentrum der Recherche steht die Frage nach dem Wert von Denkmälern im einundzwanzigsten Jahrhundert innerhalb des digitalen Raums, während sie Riegls Theorie der Denkmalpflege reflektiert. Zusätzlich strebt das Projekt die Entwicklung eines neuen Repräsentationsmodells für Denkmäler an, das sich im Schnittpunkt von physischen und digitalen Umgebungen bewegt und dabei zeitgenössische digitale Werkzeuge und Methoden nutzt.

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Introduction

In reality, architecture is formed with all its history; it grows with its justifications, and only through this process of formation does it fit into the built or natural world which surrounds it.

Aldo Rossi: Selected Writings and Projects

Architecture of Memory: Monuments Beyond Digital examines the inaugural axiological study of monuments as outlined in *The Modern Cult of Monuments: Its Character and Its Origin* by the Austrian art historian Alois Riegl, first published in Vienna in 1903. The dissertation traces the influence of this seminal work and examines its effects on architecture throughout the twentieth and twenty-first centuries, focusing on the transition from the representation of physical to digital monuments. For over 120 years, rediscoveries of Riegl's work have inspired multiple authors and movements to offer new interpretations. What has driven Riegl's most prominent comeback, or series of comebacks, is not only the publication of new translations since the 1980s but the discovery of new dimensions that repositioned his work in new contexts, for example, when dealing with architectural ruins and monument values. Riegl's axiological study defined values attributed to monuments, which became essential to the twentieth-century preservation theory. These values are, for example, age value, historical value, use value, and newness value, among others. Riegl claimed that monument values vary over time, making him much at home in the period of postmodernism as in his own time. His essay also provided a theoretical foundation for developing a monument value of our time that I propose in the last chapter.

To follow a cohesive narrative, this dissertation is structured into three chapters, starting with the initial publication of Riegl's *Modern Cult*, narrated in "Notes on The Modern Cult of Monuments," which is then followed respectively by "The Anamnesis of the Cult," and "The Cult Beyond the Digital." While the first chapter focuses on the birth of *The Modern Cult*, the second maps the anamnesis of the *Cult* in the second half of the twentieth-century architectural discourse, and the third proposes to approach the *Cult* in relation to the technological possibilities of our time. Large gaps are noticeable between the studied periods, which indicate the absence of Riegl's legacy. For this reason, this dissertation seeks to offer a continuous story of the *Cult's* development from its inception until today.[1]

I approach the chapters as connecting parts of a single body of work. By closely studying *The Modern Cult of Monuments* in Chapter 1, I develop my main research question: What is the monument's value of the twenty-first century? Here, I am building upon Riegl's historical value, which was the

[1] The word *'Cult'* used within the context of this dissertation refers to the shortform for the title *'The Modern Cult of Monuments.'*

monument's utmost important value in the nineteenth century, and the age value of the twentieth century, the most universal and modern value according to Riegl's study. The main question is accompanied by a secondary research question: How do we represent monuments with their new value of the digital in the twenty-first century? The monuments discussed in this dissertation represent architectural objects of an unintentional type which are embedded in both built and digital environments. The succession of chapters reveals how Riegl formulated the notion of time and temporality concerning monuments and memory during the rise of modernism, which was highly valuable for postmodern thinkers regarding historical narratives (Chapter 2). This notion also served as key aspect for the development of a digital palimpsest, a spatial structure consisting of documented layers of a monument's life from today's perspective (Chapter 3).

The opening chapter introduces Austria's capital and center of cultural life, Vienna. It focuses on the city's historical, social, and cultural context at the turn of the twentieth century and this dissertation's main protagonist, Alois Riegl, an Austrian art historian and preservationist. It exemplifies the contrast between the fall of historicism and the emerging modern movement at the time, which supported the development of innovative ideas. This newly forming ground gave birth to multiple intellectuals in various disciplines, including Riegl, manifesting a complex set of relations within the city. Riegl's formation of thought has been influenced by forces in and outside of Vienna, specifically during his educational and professional work as a curator and preservationist. Before analyzing his preservation essay, *The Modern Cult of Monuments*, it is necessary to understand his primary art historical concepts that extend into the fields of preservation and architecture. By reviewing notions such as *Kunstwollen*, haptic and optic qualities of artworks, the temporality of perception, or the question of style, further inquiries into *The Modern Cult* become more comprehensible and provide opportunities for translating Riegl's work today more concisely. Therefore, this dissertation argues that studies of Riegl's large body of art historical, architectural, and preservational works should not be viewed separately and that such divisions can potentially impoverish an understanding of his work at large. When studying Riegl's influence on architecture, for example, one cannot isolate *The Modern Cult* from other fundamental principles he developed within art history. They permeate his preservation essay on monuments, indicating that his scholarship is interlinked and mutually informative. Similar to John Ruskin, Riegl claimed that human should not interfere with a building's natural decay by modifying or restoring it to its original state. This approach to preservation is also called 'touchless,' which opposes the traditional method of restoration that has been employed since the eighteenth century.

Riegl divided monuments into three main categories: intentional monuments, monuments with historical value (characteristic for the nineteenth century), and monuments with an age value representing the value of the twentieth century. The concept of intentional monuments was known from antiquity

throughout the Middle Ages as the only monument type. On the other hand, historical and age-value monuments are unintentional monuments, which refer to structures not originally designed or intended to serve as monuments but have gained significance over time. Within the context of Riegl's work, they represent the cult of modern monuments as he categorized them.

A close reading of *The Modern Cult* leads to the conclusion that Riegl's preservation essay defining modern monument values was not accepted by society at the time of its introduction. In particular, it was rejected as a part of a legislative proposal for protecting monuments in Austria at the time. The development of modern values, such as age value, might appear natural by succeeding a historical value of the nineteenth century. In reality, however, the age value stands against the principles of the rising modernism represented in the Viennese environment. The contradictions of Riegl's value theory and his appreciation of the monument's decay resulting in ruins did not allow him to implement his preservation concerns at that time. These discoveries helped form the research questions that I address in the following chapter: Was Riegl's *Cult* and its age value applied and accepted by society, meaning by different groups of preservationists, historians, or architects during the twentieth century, and if so, in which ways?

The second chapter discusses the act of anamnesis manifested through recalling elements that might have disappeared from memory while reinterpreting them simultaneously, resulting in the formation of a new narrative. This anamnesis occurred in relation to Riegl's *Modern Cult* during the 1980s – the essay, once forgotten, was rediscovered, translated, and reinterpreted by a number of authors. It reappeared worldwide during postmodernism when architectural historians, for example, Kurt Forster and Diane Ghirardo, translated the original text into English and positioned it within a new context. Simultaneously, a societal need emerged to reinterpret history utilizing historical concepts at the time.

The rediscovery of Riegl's work at large happened in several disciplines, including art history, architecture, conservation, and monument studies, which was primarily due to numerous translations of his work. Riegl has influenced all of the above-mentioned disciplines. Yet his work did not influence these disciplines simultaneously. Instead, it permeated them consecutively and thereby created an interesting succession in historiographical terms, suggesting how the relation to time, history, and monuments shifted throughout the twentieth and twenty-first centuries. Thus, Riegl's broad legacy should not be understood as a continuous influence threat but rather as the legacy of fragments, which are separated from each other sometimes but overlap at other times. Riegl's legacy in architecture is exemplified by a return to the ornament, the concept of *Kunstwollen*, and the call to protect the built environment. Riegl's ideas, of great architectural significance, appeared in various periods, such as modernism (predominantly in German-speaking countries) and postmodernism (international architectural

discourses), and shifted to today's digital domain. A similar view can be applied to Riegl's art historical and preservation work that moved from the local to the global context through the work of individual authors and institutions throughout the twentieth and twenty-first centuries.

The particular interest of this dissertation lies in measuring the effect of Riegl's legacy in architecture through his work of *The Modern Cult*. It was translated into English for the first time by architectural historian Kurt Forster and his doctoral student at the time, Diane Ghirardo, and published in the journal *Opposition 25* in 1982. The entire issue was devoted to analyzing Riegl's work and its effects on architecture as a discipline beyond the German-speaking countries, to be introduced in the United States (US) at the time. The period of postmodernism when Riegl's translated work started to appear is characterized by a return to memory and rethinking of history, alongside a reconsideration of fragments of architecture left from the World Wars. This period saw a renewed interest in historical references, context, and local traditions as a reaction to the modernist ideology of the early and mid-twentieth century. Riegl's theory demonstrated its significance multiple decades later in societies that had to reflect entirely new situations compared to Riegl's– in the aftermath of World Wars that left cities and their architecture in ruins. Architects had to face the radical question of how to proceed with these ruins. They hence sought new strategies to reposition themselves and the discipline of architecture and redefine its historical narratives and identity. Societal changes and architectural ruins prompted a reevaluation of Riegl's ideas, with a strong focus on his concept of age value, especially so during the 1980s. This happened in relation to the postmodernist emphasis on the multiplicity of meanings and interpretations that aligned with Riegl's recognition of diverse values assigned to monuments. Furthermore, Riegl claimed that these values change over time, manifesting their varying character. Societal values are equally in constant flux, which relates to the postmodern focus on the subjectivity of interpretations and the importance of context.

Given the existing gap in understanding how Riegl's work on preservation can be recontextualized in the digital era, my dissertation introduces an innovative approach. I offer an interpretation of the *Modern Cult of Monuments* from a contemporary standpoint in the last dissertation chapter, "The Cult Beyond the Digital." It articulates a new model of representation and engagement with the digital realm while reflecting upon Riegl's ideas and monument values using digital tools such as photogrammetry and 3D scanning.

Reviewing Riegl's values from today's perspective raises new questions: What is the monument's value in the twenty-first century succeeding Riegl's historical and age values? How is the monument represented by shifting from the physical to the digital realm following Riegl's touchless preservation

approach? By answering these questions, I argue that the contemporary significance of Riegl's preservation methodology in architecture relates to the recent use of digital documentation techniques, also called "non-contact recording methods." In other words, the chapter traces the shift of focus from physical touchless preservation to the point when digital tools for monument documentation became available. Furthermore, the monuments' values, as defined by Riegl more than a hundred years ago, require revision, building upon historical and age values while reflecting on societal needs at the current time. Thus, a value defined in this dissertation as a value of the twenty-first century is called a timeless value, which challenges the traditional notion of time since it is ascribed to monuments of the digital domain.

To answer the question of the monument's representation in the twenty-first-century digital realm, the concept of a new digital documentation method is introduced, called "digital palimpsest." This framework allows for a new relationship between the viewer and the monument and incorporates other essential concepts from Riegl's art historical work. A digital palimpsest builds upon and goes beyond the notions of historical and age values while presenting a timeless value. By an overlay of various documented stages of a monument's aging within a palimpsest, this framework shows the progress of the monument's existence regarding its appearance, form, and materiality.

This dissertation does not offer a complete genealogy of Riegl's work but rather examines a curated fragment. Offering the former would be redundant as this topic has already been addressed by various scholars (Iversen 1980, Olin 1982, or Cordileone 1997). In addition, this dissertation does not position *The Modern Cult of Monuments*, classified as a preservation essay, within the preservation discipline in greater detail. This effort could have led to another interesting project. From my perspective as an architect, however, I am interested in the effects of this essay on the discipline of architecture. This dissertation, hence, does not act as a survey but is structured around specific case studies that introduce a narrative, and show how Riegl's *Cult* has been transforming over a hundred years, thus connecting to what I consider to be turning points in my interpretation of this seminal theory within architectural discourse.

Chapter 1

The Notes on the Modern Cult of Monuments

The following chapter depicts the complex context of fin de siècle Vienna with its social, cultural, and political relationships, also known as Viennese modernism or Vienna 1900. This period is considered a critical moment of transition from traditional to modernist thinking in art, culture, philosophy, and intellectual thought. The chapter emphasizes the contrast between the end of historicism, which dominated much of the nineteenth century, and the beginning of modernism, which translated into Vienna's society and culture at the turn of the century. This new ground gave birth to multiple intellectuals from various disciplines, including Alois Riegl, who will pose as the key figure of this chapter.

In this chapter, I will introduce Alois Riegl's biography and his most important work. I will also analyze the influences and movements that have shaped and redefined Riegl's thought from the Enlightenment until his time in Vienna. Multiple thinkers strongly impacted Riegl, both within and outside Vienna, and I shall also outline how these figures influenced his scholarship. *The Modern Cult of Monuments*, Riegl's seminal work on the preservation of cultural heritage, will be analyzed together with several concepts from his art historical works. After closely examining the essay, I formulate the primary and secondary research questions at the end of this chapter: Was Riegl's *Modern Cult* accepted by society and applied in practice during the twentieth century? If Riegl defined values for monuments of the nineteenth and twentieth centuries, what is the monuments' value in the twenty-first century? In relation to this newly defined value, how are monuments represented today when they shift from the physical to the digital realm?

1.1. RIEGL'S VIENNA

The period of fin de siècle Vienna offers a rich but complex history, given its cultural, social, and political context, and has been reviewed by numerous scholars as part of a larger historiographical debate.[1] In my dissertation, I contextualize Vienna as the center of the Austro-Hungarian Monarchy at the turn of the century, a place that formed and influenced a wide range of intellectuals.[2]

At the time, Vienna was characterized by the emergence of new theories and practices. Specifically, it was shaped by a certain duality: the rise of modernism on the one hand and the decline of historicism on the other. Viennese museums, such as the Leopold Museum and the Museum of Applied Arts (MAK), house an extensive number of artworks from the period. Many are also exhibited in the MAK's Permanent Collection. The Leopold Museum published a text referring to Vienna at the time as "simultaneously the capital of the aristocracy and the liberal intellectuals, home of the magnificent *Ringstrasse* and endless slums, a place of anti-Semitism and Zionism, rigid conservatism and the onset of modernity."[3] Thus, Vienna seemingly developed in both directions. The longing for the past, representing historical styles, themes, and tradition, and its modernist outlook resulted in the city's double character, which influential intellectuals so aptly described in their theories of the time.

It is important to note that Vienna, as the center of the monarchy, also represented the center of cultural life. Art was central to this life and celebrated primarily by the upper middle class. Viennese society bestowed art with the highest value, especially what concerns the domains of literature, theater, and music.[4] Numerous influential figures of emerging modernism lived and participated in this rich Viennese cultural scene. Many of the period's key figures flocked to Vienna from other parts of the monarchy, a fact that has received little attention. Art historians, architects, artists, and other intellectuals, such as Alois Riegl (born in Linz) or others, hailed predominantly from what is today's Czech Republic, including Max Dvořák, Adolf Loos, Josef Hofmann, Joseph Maria Olbrich, and Edmund Husserl. They all brought their language, culture, and religion to Vienna, thus contributing to the city's multicultural character.[5]

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[1] Three main publications formed scholarly contemporary understanding of Vienna 1900: *Fin-de-siècle Vienna: Politics and Culture* by Carl E. Schorske (1979), *Wittgenstein's Vienna* by Allan Janik and Stephen E. Toulmin (1973), and *The Austrian Mind: An Intellectual and Social History, 1848-1938* by Willian M. Johnston (1972).

[2] The Austro-Hungarian monarchy existed from 1867 to 1918, formally known as the Austro-Hungarian Empire.

[3] "Vienna 1900: Collection: Leopold Museum," Vienna 1900 | COLLECTION | Leopold Museum, accessed December 5, 2023, https://www.leopoldmuseum.org/en/collection/vienna-1900.

[4] Allan Janik and Stephen Toulmin, *Wittgenstein's Vienna* (New York: Simon and Schuster, 1973), 67.

[5] Languages spoken in fin-de-siècle Vienna were German, Hungarian, Croatian, Slovak, Czech, Romanian, Polish, Serbian, Slovenian, among others. The main religion was Christian Catholic.

Religion also played an important role in the monarchy. The relationship between the Austro-Hungarian Monarchy and the Catholic Church was historically significant and multifaceted, reflecting both political power dynamics and the social fabric. Catholicism was the dominant religion and held a privileged position as the state religion, particularly in the Austrian part of the empire. The Austrian writer Adalbert Stifter and his contemporaries, the art historian Rudolf Eitelberger and the government official Josef von Helfert, were also involved in the discourse around this particular relationship in the public domain.[6] Furthermore, the association between the monarchy and the Church played an essential role in developing emerging theories, such as Riegl's preservation theory and the debate around monument preservation in Vienna at the time, which will be discussed later in this chapter.

RINGSTRASSE

In the last decades of the nineteenth century, the reconstruction of the monumental *Ringstrasse* (fig. 1.1), a Viennese main boulevard in the historical style, proved the nostalgic Austrian character and its longing for national history and defining their identity.

> Thanks to its stylistic homogeneity and scale, 'Ringstrasse Vienna' has become a concept to Austrians, a way of summoning to mind the characteristics of an era, equivalent to the notion of "Victorian" to Englishmen, "Gründerzeit" to Germans, or "Second Empire" to French.[7]

[6] Margaret Olin, "The Cult of Monuments as a State Religion in Late 19th Century Austria," *Wiener Jahrbuch Für Kunstgeschichte* 38, no. 1 (1985): 177–98, https://doi.org/10.7767/wjk-1985-0107, 181.
[7] Carl E. Schorske, *Fin-de-Siècle Vienna: Politics and Culture* (New York: Alfred A. Knopf, 1980), 24.



Figure 1.1: *Ringstraße*, *Kärntnerstraße* intersection with horse-drawn tram, the opera on the left. Photography, 1890.

The reconstruction of the *Ringstrasse*, starting in 1859, represented a unified voice of the Viennese public as well as professionals involved in the design and construction of boulevard architecture. This effort was visible not only in Vienna but also across Europe in various locations, despite each region developing its own particularities in relation to its culture. The *Ringstrasse* has held a historically monumental character for multiple reasons. The reconstruction period signified an important shift in urban planning and architecture by replacing the old city walls with new architectural elements in a variety of historical styles. The boulevard became a central point of Viennese social and cultural life locating its prominent institutions, such as the Vienna State Opera, the Burgtheater, the University of Vienna, the Austrian Parliament, the City Hall, and the Museum of Art History, along its perimeter. These institutions consequently contributed to the intellectual and cultural development in the city ever since. The overwhelming character of *Ringstrasse* buildings also symbolized the political power of the monarchy, with Vienna at its center.

In Vienna, the values and aesthetic ideas of liberal society were manifested in their architecture. In “City Planning According to Artistic Principles,” Camillo Sitte, the prominent Viennese architect and

urban planner of the late nineteenth century, examined the monumental character of buildings on the Viennese "*Ring*" while discussing the work of the city's sculptural school that created many public works, primarily façades or public space decorations. This also included ornamentation supporting the historical character of Viennese buildings, for example, the sculptural ornamentation of Imperial museums located along *Ringstrasse*.[8] Camillo Sitte, alongside Otto Wagner (yet from different perspectives), reacted to the historical appearance of the main boulevard by criticizing the builders of the *Ringstrasse* and their "betrayal of the tradition to the exigencies of modern life."[9] In the majority of locations along the boulevard, the city's historical style overtook the modern look of the built environment. Thus, the relationship between historicism and modernism represented in the city's architecture was off-balance and strongly manifested through a return to the past and its traditions.

Today, after approximately 150 years, the *Ringstrasse* still appears monumental, with its historic and formidable character. The word monumental plays a primary role here, not in terms of preservation but in terms of scale. It is undeniable that the *Ringstrasse* buildings also present themselves as unintentional monuments[10] and represent the ideology of their time throughout the centuries.[11] How do contemporary viewers perceive them? How do they relate to the present? They represent the historical value of the nineteenth century and the ideal of beauty as the most appreciated quality of monuments at that time. Even though these monuments survived the twentieth century without being completely ruined during the wars, they did not undergo the powers of "natural aging." They did not become fragments, and they do not show traces of war and outwear on their façades. Today, they are part of the twenty-first century, manifesting their historical value as if they were 'frozen' in time.

Vienna served as a role model for other European capitals in modernization and city planning. Urban planners, such as Camillo Sitte, were concerned with the proper placement and organization of public statues and monuments in the urban fabric, which he presented in his modern city planning theory.[12] Sitte explicitly analyzed historical urban examples of Italian cities, their square organizations, and their monument placement. These examples differ widely from city to city because of the organic development of their historical urban fabrics. Sitte deemed it essential to work through the operative

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[8] Camillo Sitte, Christiane Crasemann Collins, and George R. Collins, *City Planning According to Artistic Principles* (London: Phaidon, 1965), 17.

[9] Carl E. Schorske, *Fin-de-Siècle Vienna: Politics and Culture* (New York: Alfred A. Knopf, 1980), 62.

[10] Unintentional monuments are objects not initially intended to serve as monuments but became ones over time.

[11] The *Ringstrasse*, as a part of historic centre of Vienna, was inscribed on UNESCO's List of World Heritage in 2001 and in Danger in 2017. Therefore, this site carries an 'Outstanding Universal Value' fulfiling the criteria (ii)(iv)(vi).

[12] Camillo Sitte, Christiane Crasemann Collins, and George R. Collins, *City Planning According to Artistic Principles* (London: Phaidon, 1965).

diagrams of any possible layout to distinguish placement variations. The placement of monuments, which we can categorize as intentional monuments within public spaces, generally depended on the square shape and size and usually allowed only one installation per square. From an urban point of view, the functional square with the monument is constructed in the right proportion to its surrounding buildings and the human figure. After rigorous study, Sitte implemented his findings within the Viennese urban fabric through a series of principles he developed for placing monuments. In his work, he operated only within the framework of intentional, rather than unintentional, monuments, contrary to his contemporary Alois Riegl, who was predominantly concerned with the latter. Even though there is no written evidence of a relationship between Sitte and Riegl, their simultaneous presence in the city, their examination of monuments, their roles, and protection (but from different perspectives) suggests that they were aware of each other's work.

***RIESENTOR* CASE (fig. 1.2)**



Figure 1.2: Top: Bruno Reiffenstein. *Photograph of the portal of St. Stephen's Cathedral in Vienna.* 1926.



Bottom: Current state of the *Riesentor*. Photograph by the author, 2024.

Historic preservation was entwined with historical scholarship and contemporary architecture in late nineteenth-century Vienna. During this period, historicism, as represented in architecture and the applied arts, served as a tool for defining national identity in the German-speaking countries.[13] The inclination toward historicism is evident in historical styles, such as the Gothic, Baroque, and Greek buildings on the *Ringstrasse*.[14] The *Ringstrasse* City Hall (*Rathaus*) architect and restorer of St. Stephen's

[13] Diana Reynolds Cordileone, *The Austrian Museum for Art and Industry: Historicism and National Identity in Vienna 1863-1900* (Modern Humanities Research Association, 2008), 123.
[14] Margaret Olin, *Forms of Representation in Alois Riegl's Theory of Art* (University Park, PA: Pennsylvania State University Press, 1992), 20.

Cathedral in Vienna, Friedrich Schmidt, represented the classical restoration approach. This approach, which focused on restoring historic structures, dominated Western Europe until the end of the nineteenth century when the preservation method gradually appeared. Schmidt, in line with the tradition of the nineteenth century, restored multiple works of architecture to their original state, opposing the ideas of some Viennese figures, such as Riegl's. Schmidt's restoration plan for the Giant Portal of St. Stephen's Cathedral (*Riesentor*)[15] from 1882 (fig. 1.3) was heatedly discussed in Viennese society because he wanted to restore the portal to its original Romanesque style regardless of the cathedral's otherwise Gothic style. Hence, the question arose as to who was allowed to decide how to preserve the portal or building.

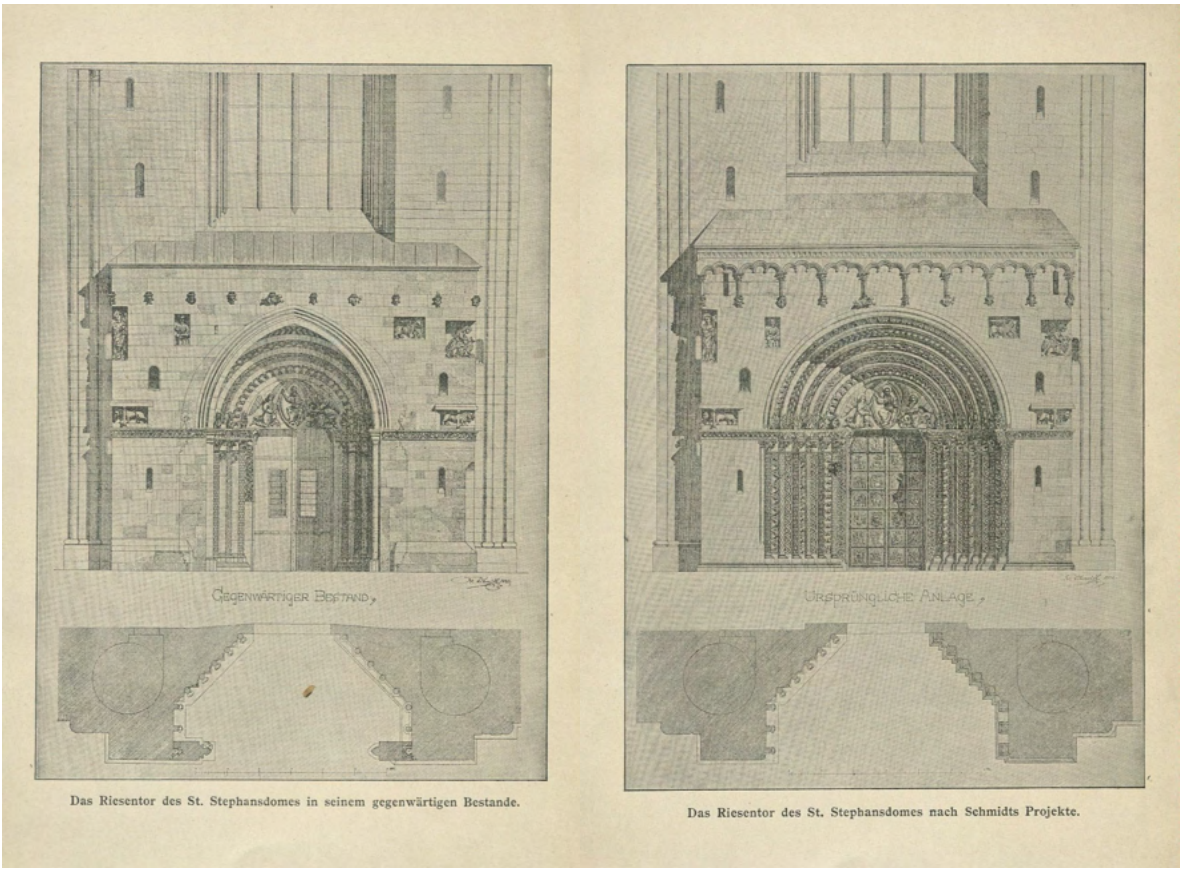


Figure 1.3: Friedrich von Schmidt. *Das Riesenthor des St. Stephansdomes.* Drawings, 1882.

Left: *Das Riesenthor des St. Stephansdomes in seinem gegenwärtigen Bestande.* [The Giant Portal of St. Stephen's Cathedral in its current condition].
Right: *Das Riesenthor des St. Stephansdomes nach Schmidts Projekte.* [The Giant Portal of St. Stephen's Cathedral based on Schmidt's projects].

[15] The portal served as the main entrance to the cathedral built in the early thirteenth century in Romanesque style. It is located on the Western facade between two towers called *Heiden-türmen*.

Schmidt was appointed as the main restorer of the cathedral; thus, he held the position and the power to restore it as he envisioned. Restoration efforts on the building were first initiated by the Cathedral Building Society (*Wiener Dombauverein*) with interior renovations in 1880. Two years later, the Building Society turned its focus toward the *Riesentor* following Schmidt's restoration plans and thus aimed to restore the portal to its original state.[16] The *Dombauverein*'s efforts to restore the portal were juxtaposed by two groups: art historians and the Catholic Church. These groups communicated their stands regarding the reconstruction by publishing articles in the Viennese press. Moritz Thausing, an art historian, presented his critique in the newspaper *Neue Freie Presse.*[17] At the same time, the Catholic Church commented in the Catholic newspaper *Das Vaterland,* claiming that the Gothic style (the main Cathedral style) is truly Catholic, so the cathedral should remain as is and not be turned into its original state. Religion played a key role in Austrian society, especially concerning monuments. This is evident in the case of the *Riesentor*, where Catholic representatives actively participated in the restoration debate and publicly voiced their opinions. The decision about the case was made at the meeting of the Central Commission for the Research and Preservation of Artistic and Historical Monuments (*Die Zentral-Komission für Erforschung und Erhaltung der Kunst und historischen Denkmale*),[18] the state institution responsible for monument protection. The meeting was attended by Thausing's colleague, Theodor Sickel, who succeeded in convincing the Commission to quell the restoration plans.[19] However, twenty years later, in 1902, the restoration ideas for the *Riesentor* were rediscovered, supported by the Commission, and rejected by the newly formed Secession, an art movement founded in 1897 by a group of Austrian artists. Besides these groups, some of Thausing's art history students, including Alois Riegl, participated in the conversations. Comments were given again in numerous articles in the Viennese press, such as Riegl's critique published in the *Neue Freie Presse* or a text by the Secession group in their journal, *Ver Sacrum*.[20] In an article titled "Das Riesenthor zu St. Stephan," Riegl mentioned John Ruskin, an English writer and art critic of the Victorian period while commenting on the restoration case in relation to his equal appreciation of Gothic and Romanesque styles (for art historians) and comparing his approach to Thausing's.[21] Riegl considered stylistic unity as the primary criterion of preservation, and he

[16] See details of the case in: Margaret Olin, "The Cult of Monuments as a State Religion in Late 19th Century Austria," *Wiener Jahrbuch Für Kunstgeschichte* 38, no. 1 (1985): 177–98, https://doi.org/10.7767/wjk-1985-0107, 177-198.
[17] Moritz Thausing expressed his stand in "Phylloxera Renovatrix" published in the newspaper "Neue Freie Presse" on the 25th April 1882.
[18] The Commission's original name was *"k. k. Central-Commission zur Erforschung und Erhaltung der Baudenkmale"* and was changed to the above mentioned in 1873. Since then it took various forms and names, currently known as *"Bundesdenkmalamt."*
[19] Margaret Olin, "The Cult of Monuments as a State Religion in Late 19th Century Austria," *Wiener Jahrbuch Für Kunstgeschichte* 38, no. 1 (1985): 177–98, https://doi.org/10.7767/wjk-1985-0107, 190.
[20] Alois Riegl's text appeared in *Neue Freie Presse* on 1st February 1902. The Secession's text against restoration was published as "Promemoria" in the Secession journal *Ver Sacrum*, Vienna 1902, pp. 49-56.
[21] Alois Riegl, "Das Riesenthor zu St. Stephan", in: *Neue Freie Presse*, 1st February 1902.

defended the current appearance of the cathedral because it symbolized this unity.[22] The cathedral's west façade, including the *Riesentor*, consists of Romanesque and Gothic styles and thus represents the coexistence of multiple historical layers within one structure without one being dominated by the other.

In his writing, he introduced a new type of value related to mood, *Stimmungswert,* which can be observed with the *Riesentor*.[23] However, he neglected to mention this value in his preservation essay, *The Modern Cult of Monuments*, so *Stimmungswert* did not become widely known among the public.[24] Within the same period, Riegl commented on another restoration case: the altar of St. Wolfgang (*Der Pacher-Altar*) in Salzkammergut, Upper Austria. In both cases, the prevailing opinion was to reject any restoration efforts and instead opt for the preservation method regarding national monuments at the turn of the century.

To conclude, the pro- and anti-restoration groups presented their commentary through various newspapers; thus, their opinions reached the general public because newspapers were widely available in the city, and not restricted to scholars and experts only. Therefore, groups' comments informed and shaped public perception of the monuments and their protection from various viewpoints over multiple decades. Moreover, these various approaches to monument protection consequently influenced how its authenticity was perceived concerning its materiality, form, and appearance, among others. The issue of authenticity in relation to preservation was also addressed by an architect and architectural researcher, Thordis Arrhenius, claiming that "authenticity, origin, and authorship are concepts at the core of the polemic that has surrounded conservation throughout its history."[25] In line with Riegl, I would also add that the diversity of styles implemented in the *Riesentor* expressed its authenticity and development of styles over centuries, and thus, it would undoubtedly be "against nature," in a Rieglian sense to oppose the monument's aging by restoring it to its original form. The previously mentioned figures – Thausing, Sickel, and Riegl – are thus representatives of a rising preservation method in Austria at the turn of the century, alongside the movement of modernism.

THE MODERN QUEST

The quest to oppose the historicism of the nineteenth century in Vienna was primarily manifested with the rise of modernism in a variety of disciplines, both in culture and science, such as painting,

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[22] Margaret Olin, *Forms of Representation in Alois Riegl's Theory of Art* (University Park, PA: Pennsylvania State University Press, 1992), 21.
[23] Lucia Allais, Andrei Pop, *Mood for Modernists: An Introduction to Three Riegl Translations* (Grey Room, 2020), 14.
[24] Riegl's article, introducing *Stimmungswert*, was never republished and appeared in English for the first time only in 2020. See: Lucia Allais, Andrei Pop, *Mood for Modernists: An Introduction to Three Riegl Translations* (Grey Room, 2020).
[25] Thordis Arrhenius, *The Fragile Monument - on Conservation and Modernity* (London: Artifice, 2012), 12.

literature, music, theater, dance, architecture, medicine, psychology, and philosophy represented by influential figures such as Gustav Klimt, Egon Schiele, Oskar Kokoschka, Otto Wagner, Josef Hoffmann, and Joseph Maria Olbrich, among others, who tried to free themselves from the past.[26] In some parts of his work, Alois Riegl, the key figure of this chapter, also offers a modern view that can be traced to the title of his last published work, *The Modern Cult of Monuments*.

One of the contributions of Viennese Modernism was the establishment of the *Gesamtkunstwerk*, translated as a "total work of art," to bring art into human life and equalize the status of the applied arts to the visual arts. In 1903, with the rise of the applied arts, the *Wiener Werkstätte* was created to support the production of local decorative artists.

The Viennese culture was further described by Allan Janik and Stephen Toulmin in their seminal work, *Wittgenstein's Vienna*, as "our own twentieth-century cutlery in its infancy."[27] Their work also pointed out how a false picture of Vienna had been mediated to the outside world, represented by glorious images of "Strauss waltzes, charming cafes, tantalizing pastries, and a certain carefree, all-embracing hedonism."[28] However, these notions have foundations in historical events at the end of the nineteenth century and are the result of various crises and city conflicts. To Viennese outsiders, these events are kept hidden to keep Vienna's unique cultural spirit untouched. Furthermore, the Jewish history of Viennese intellectuals who strongly contributed to the emergence of modernism at the turn of the century Vienna became a topic of scholarly research during postmodernism, examining the relationship between Jewish traditions and modern Viennese culture.

> The contribution of Jews and those of Jewish descent to the modern culture of Vienna has been so large as to be predominant. Further, the Jewish background of these individuals, whether in the form of secularized religious tradition, the ideology of emancipation, the very forms of assimilation themselves, or the existential problems of living in an antisemitic environment, had strongly influenced them, and that this had been reflected in their work.[29]

It is important to note that Janik's and Toulmin's work *Wittgenstein's Vienna* challenged the Schorskean paradigm of "the failure of liberalism." Janik wrote: "Alleging that Schorske neglected the enlightened-Jewish character of Viennese culture and the powerful stream of opposition to Viennese aestheticism and the "politics of fantasy" that aestheticism encouraged – that is, what I have called "critical modernism."[30]

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[26] Carl E. Schorske, *Fin-de-Siècle Vienna: Politics and Culture* (New York: Alfred A. Knopf, 1980). Introduction.
[27] Allan Janik and Stephen Toulmin, *Wittgenstein's Vienna* (New York: Simon and Schuster, 1973), 13.
[28] Ibid., 33.
[29] Steven Beller, *Rethinking Vienna 1900* (New York: Berghahn Books, 2001), 9.
[30] Allan Janik, "Vienna 1900 Revisited", in *Rethinking Vienna 1900* (New York: Berghahn Books, 2001), 29.

Their work, among other publications, brought attention to an otherwise unrecognized Jewish community in Vienna, which strongly contributed to the city's culture and life. However, in the upcoming decades, many Jewish individuals were forced to flee the country, particularly to the US and Britain, strongly influencing Anglo-American culture and forming a Western image of Viennese modernism.

In Viennese architecture, modernism is manifested through a variety of architectural approaches. It is important to mention an architect from this period who was Riegl's contemporary, namely Otto Wagner, a functionalist and professor of architecture at the Academy of Fine Arts. In the complex environment at the turn of the century, he supported the ideas of German modernist architect Gottfried Semper. He was equally interested, however, in the notion of the ornament and engaged with founders of the *Secession* group, particularly his assistant Joseph Maria Olbricht and his student Josef Hoffmann. Thus, Wagner stood between two complex schools of thought in Vienna: the rationality of modernism and the ornamentation of the *Secession* group, which he joined in 1899. To further show Viennese's diversity of thought at the time, we proceed to another Viennese figure, Adolf Loos, who was also engaged in a discussion around the ornament. On the one hand, he honored Wagner; on the other hand, he criticized the use of ornament, resulting in the publication of his famous work, *Ornament and Crime*. Within the city's context, one can observe how Riegl, Loos, Wagner, and Semper all appreciated various contrasting movements simultaneously. The emergence of multiple concepts and their modifications forced the protagonists of Vienna 1900 to continually re-evaluate their thoughts and redefine their theories. This process has sometimes led to what we now perceive as a juxtaposition of their opinions, creating a tangled image of Vienna from our perspective in the twenty-first century.

1.2. FORMATION OF RIEGL'S THOUGHT

BIOGRAPHY

Alois Riegl was an Austrian art historian of the second half of the nineteenth and early twentieth centuries and is one of the protagonists of the Vienna School of Art History (*Wiener Schule der Kunstgeschichte*), which focused on the formalist analysis of artworks.[31] The Vienna School, based at the University of Vienna, was established by Rudolf Eitelberger, who became the first professor of Art History in 1852 and also served as the artistic advisor to emperor Franz Joseph I.

Riegl was born in Linz in 1858, but spent most of his adult life in the Austrian capital Vienna. He was a man with many contradictions, proven by his multiple, oftentimes opposing stances throughout his professional career. Riegl's ideas and writings are mainly associated with the art historical movement known as historicism because of his focus on the artwork's historical context. However, it is important to note that Riegl's theories and concepts can also be seen as influential precursors to modernism. It is thus challenging to assign Riegl's work to a specific movement, as he was shifting between the historicism of the nineteenth century and modernism of the early twentieth century. Interpreting his scholarship is a challenging task because he moved between traditional and modern thought while developing his concepts, which he often defined broadly, such as in the case of *Kunstwollen*. Riegl was by far not the only thinker who constantly repositioned himself between different movements; others, too, were trying to invent new conceptions operating between different schools of thought to find their relevant perspectives.

[31] Other important figures of the Vienna School are Franz Wickhoff, Julius von Schlosser, and Max Dvořák, among others.

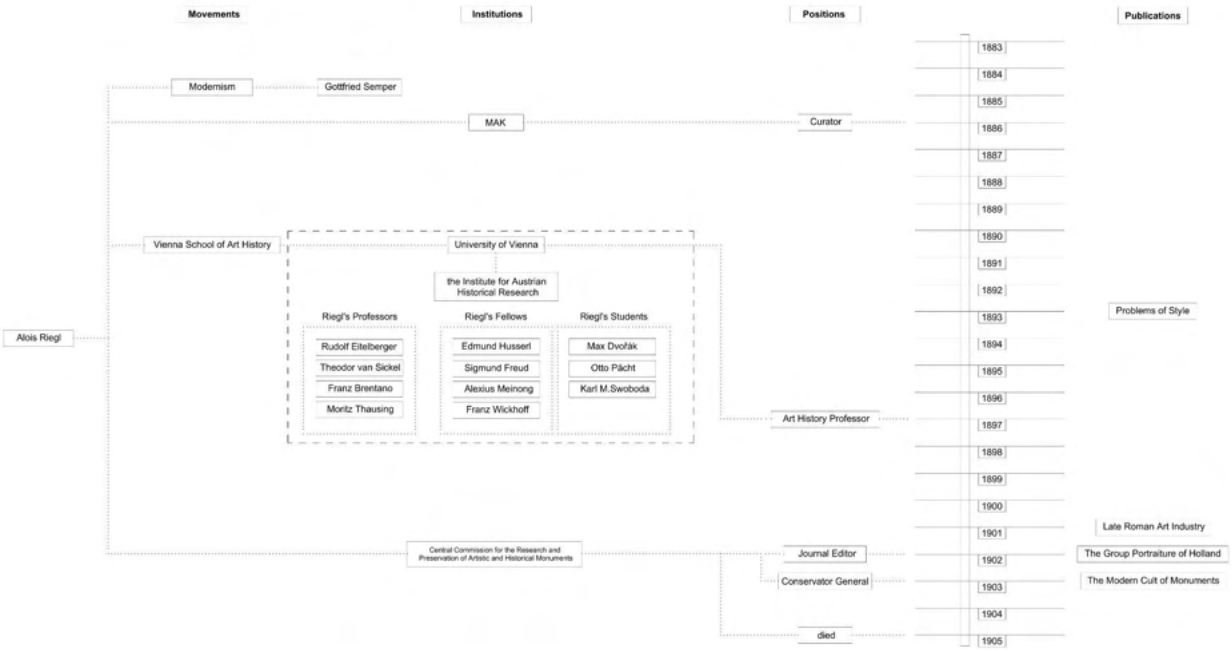


Figure 1.4: Network diagram by the author, 2024.

The network diagram (fig. 1.4) shows the variety of movements in Vienna that Riegl engaged with together with institutions he was employed by in certain positions. Furthermore, all the information is defined on the timeline alongside the publications of his most important works.

INSTITUTIONAL POSITIONS

Riegl held various positions at Austrian institutions during his short but active career, which was described by Diana Reynolds Cordileone as follows:

> Riegl's career trajectory was outwardly a picture of both academic productivity and bureaucratic success in service of the Habsburg Empire.[32]

[32] Diana Reynolds Cordileone, "Mood, Modernism, and The Museum for Art and Industry," in *Alois Riegl Revisited: Beiträge Zu Werk Und Rezeption*, ed. Peter Noever, Artur Rosenauer, and Georg Vasold (Wien: Verlag der Österreichischen Akademie der Wissenschaften, 2010), 37.

Alois Riegl took an interest in both academic and organizational positions during his career, contributing to the formation of Viennese culture at the time. After studying at the University of Vienna, Riegl held positions in public institutions while publishing primarily on art history. However, toward the end of his life, he turned his focus to monument preservation. His publishing career spanned a rather short period from 1891 to 1903. Riegl's early death in 1905, at forty-seven years, ended his career somewhat unfinished. Some of his writings were edited by his students and were published posthumously. In addition, the archive at the Department of Art History at the University of Vienna contains many of Riegl's materials and offers research opportunities.

Riegl's transition from student to professor at the university occurred gradually, similar to his objective of applying his knowledge in his curatorial work in the museum (MAK). He participated in numerous debates in Vienna, commenting on events by publishing articles and essays in local newspapers and communicating with the general public through his writings. By doing so, he gained publicity in Viennese society and institutional trust to hold a leading position in a state organization, such as the Central Commission for the Research and Preservation of Artistic and Historical Monuments.

Riegl served as an instructor and associate professor (*Extraordinarius*) until 1897, when he became a full professor (*Ordinarius*) at the Department of Art History at the University of Vienna. Until that year, his work could clearly be attributed to the formalist approach. Becoming an editor of the Central Commission's journal in 1902 was followed by a more prominent position of the Conservator General in 1903. His student, Max Dvořák, reacted to Riegl's new position by stating that "a silent, lonesome man, already half cut off from the world through deafness, who had lived until then far from daily life and strife, absorbed in his ideas and research, suddenly became a glowing, tireless organizer."[33] During this period, Riegl also worked on a legislative proposal to reorganize monument protection in Austria. The preface to this legislative proposal became known as *The Modern Cult of Monuments* (*Der Moderne Denkmalkultus: Sein Wesen Und Seine Entstehung*). Riegl's proposal was rejected at the time. However, twenty years later, the Austrian Monument Protection Act (*Denkmalschutzgesetz*, 1923) was established, enabling Austrian authorities to protect their monuments under federal law for the first time.[34] Although the Austrian Monument Protection Act does not explicitly mention Riegl's *Modern Cult of Monuments* as a reference, its emphasis on protecting monuments for their historical, artistic, and cultural significance aligns with Riegl's ideas.

[33] Max Dvořák, quotes in Margaret Olin, *Forms of Representation in Alois Riegl's Theory of Art* (University Park, PA: Pennsylvania State University Press, 1992), 175.

[34] Long title of the Act is: *Bundesgesetz betreffend den Schutz von Denkmalen wegen ihrer geschichtlichen, künstlerischen oder sonstigen kulturellen Bedeutung* (Federal laws address the protection of monuments because of their historical, artistic, or other cultural significance). The Act is still in use after more than a hundred years.

The Austrian Central Commission was founded in 1850. It was based on the French Commission (*Commission des Monuments Historiques)*[35], which was established a few years earlier, in 1837. The French Commission was the first of its kind and was directed by Eugene Viollet-le-Duc, a nineteenth-century architect, theorist, and preservationist who is also considered one of the first modern architect since he applied rational methods in his architectural style. He emphasized the functional logic of building elements through structural rationalism. In his work, Viollet-le-Duc used innovative materials such as iron or glass. He appreciated Gothic architecture both for its aesthetic qualities and structural principles that he transformed in his approach. With respect to historical styles, he advocated for functionality in architecture. Thus, his emphasis on structure and material influenced later movements in architecture, such as modernism.

In Austria, Rudolf von Eitelberger initiated both the foundation of the Austrian Commission (originally called *k. k. Central-Commission zur Erforschung und Erhaltung der Baudenkmale*) and the Museum of Applied Arts (originally called *Österreichisches Museum für Kunst und Industrie*). The museum, whose role was primarily sociopolitical, was established in 1863. Eitelberger became its first director, focusing on collecting objects from the past, which represented the historicism approach.

> After 1871, Eitelberger's vision for the Austrian Museum included both an international and a domestic political mission. While defending Austria's international prestige and commercial interests abroad, he also wanted to use the museum to promote patriotism within Austria's borders.[36]

The museum, belonging to the *Ringstrasse* reconstruction project, was designed by architect Heinrich von Ferstel in the historical Florentine-style brick building between 1866 and 1871 (fig. 1.5). The building's appearance was aligned with the museum and with Eitelberger's vision of supporting national identity. It was common for Viennese artists and architects to borrow forms from the Italian Renaissance and adapt them to their vision.[37]

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[35] M*onument historique*, used for the first time by *Aubin-Louis Millin de Grandmaison* in the late 18th century in France, represented the notion that some histories became dependent on the monuments to show and celebrate their success. The development of Millin's notion revolved around the French Revolution's ideas to support national heritage and expose national milestones in the form of historical monuments transformed into a *site of reflection*.

[36] Diana Reynolds Cordileone, *The Austrian Museum for Art and Industry: Historicism and National Identity in Vienna 1863-1900* (Modern Humanities Research Association, 2008), 127.

[37] Ibid., 131.

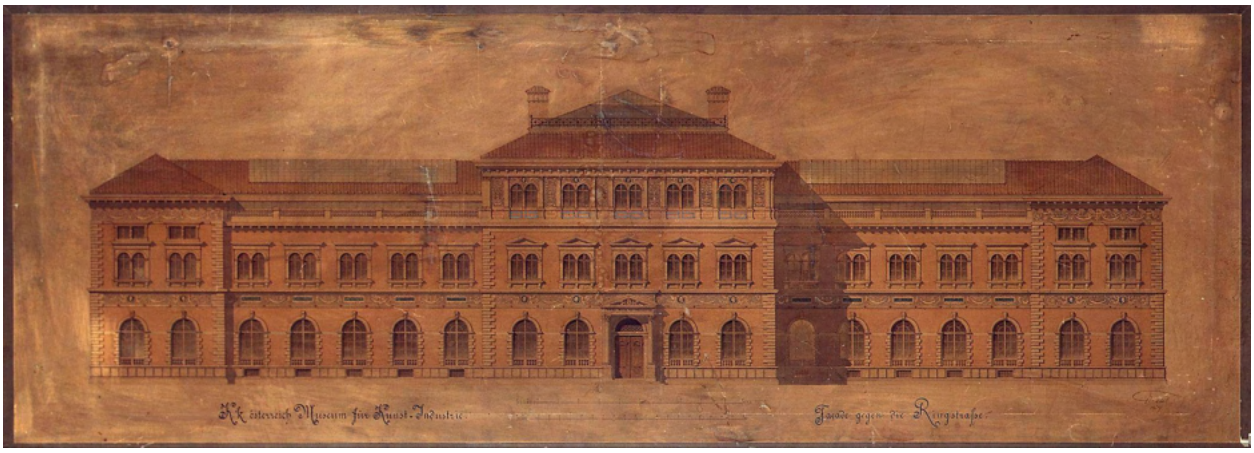


Figure 1.5: Heinrich von Ferstel. *Facade gegen die Ringstrasse (Facade towards the Ringstrasse)*. Wien, 1867.

The Austrian Museum of Art and Industry was affiliated with the University of Applied Arts Vienna (*Universität für Angewandte Kunst Wien*), offering courses in both classical and applied art disciplines.[38] The museum was designed following its model – the Victoria and Albert Museum (originally named the South Kensington Museum, established in 1852) in London– whose main goal was to offer education for manufacturers, artists, and the general public to enhance their understanding of a "good taste" and to focus on international exhibitions.[39] As a trained art historian, Riegl had been working in the museum since 1884 and became a curator of the museum's textile section[40] with the ambition of becoming the director of the museum. In 1900, he wrote a letter to the Ministry to acquire the desired position; however, his request was declined two years later. The curatorial position in the textile section of the museum shows the connection between Riegl and the Arts and Crafts movement, in which textiles and ornament played an important role. The Museum-University relationship offered an environment where art historians had the opportunity to advance or "apply" their education while working with art objects firsthand and thus build upon their theoretical knowledge. To Riegl, this was precisely the correct approach.

INFLUENCES

Riegl's thought was strongly shaped by influences in Vienna and from abroad. Fin de siècle Vienna was seen as "a period that scholars have described in terms of a crisis of historical

[38] The University was originally named *Kunstgewerbeschule* (Vienna School of Arts and Crafts) until 1941, when it became an institution of higher education, and was renamed, as we know it today, only in 1998.
[39] Diana Reynolds Cordileone, *The Austrian Museum for Art and Industry: Historicism and National Identity in Vienna 1863-1900* (Modern Humanities Research Association, 2008), 125.
[40] Riegl's habilitation was focused on the study of oriental carpets referring to Greek and Roman antiquity.

consciousness,"[41] making it a milestone of historical discourse. The crisis of historicism has been discussed in the works of various philosophers across Europe, specifically in German-speaking countries. Early nineteenth-century thinkers such as Georg Wilhelm Friedrich Hegel and Friedrich Nietzsche reflected on the crisis by questioning the notion of historicism. Their thoughts significantly influenced intellectuals during the Vienna 1900 period. While the nineteenth century is considered a century of historicism, intellectuals started to question the basic tenets of historicism in the twentieth century. This broader notion was also adapted by Riegl and presented in his axiological study of monuments reflecting the crisis in Austria at the time.

German Philosophy

It is necessary to examine the philosophical discourse of the eighteenth century to trace the ideas that Riegl developed at the turn of the twentieth century. Even though the Austrian academia and the emerging school of positivism had a negative connotation to the German philosopher Immanuel Kant due to his theory of idealism and relation to God, the University of Vienna nevertheless offered a class on Kant's philosophy that Riegl (together with Sigmund Freud) attended. Riegl's appreciation for disintegration regarding the question of style was influenced by Kant's philosophy of the *beautiful* and *sublime*.[42] The greatest influence of Kant on Riegl was through his reading of the German art historian Konrad Fiedler on Kantian formalism during his student times.[43] Spanish architect and historian Ignasi de Sola-Morales writes about this impact by stating that "the impact of Fiedler's thought on Riegl went beyond simple 'sectarian' influence; it became one of the fundamental pillars on which his theoretical conception was based. A theory of art, with no presence of a general aesthetic, allowed Fiedler to establish the subjective origin of the work of art and the need to refer this origin to the different forms of sensibility of the subject. The visual, the auditory, the tactile, were now understood to be the basic categories for understanding every kind of physical object."[44] He continues, "Fiedler started from the impossibility of an objective conception of reality and things, a concept that was derived more from Kant's theory of knowledge than from his aesthetics, and proposed that art was primarily a phenomenon created by the senses and understood by them."[45] In other words, Fiedler believed that an understanding of the world is not purely objective or independent of human perceptions and interpretations. This approach strongly relates to Riegl's concept of the subjectivity of perception, which he defined in his art

[41] Michael Gubser, *Time's Visible Surface Alois Riegl and the Discourse on History and Temporality in Fin-De-Siècle Vienna* (Detroit: Wayne State University Press, 2006), 10.
[42] See Immanuel Kant, *Kritik der Urteilskraft (Critique of Judgment),* 1790.
[43] Kantian formalism focuses on the form or structure of objects, particularly in the realm of art and aesthetics, rather than their content or contextual associations.
[44] Ignasi de Sola-Morales, "Toward a Modern Museum: From Riegl to Giedion," *Oppositions* 25 (1982), 70.
[45] Ibid., 71.

historical publications.[46] Riegl's development of haptic and optic qualities of an artwork perceivable by human senses can be seen as a direct continuation of Fiedler's conception.

Another German philosopher who strongly influenced Riegl's work was Georg Wilhelm Friedrich Hegel, specifically through the notions of history, aesthetics, and the dialectical tension between subject and object. Professor of the history and theory of art Margaret Iversen identified that this influence is manifested when Riegl "integrates into his theory [of "subjective" and "objective"] many insights from Hegel's *Aesthetics*, especially Hegel's sense of the way painting exists for an observer, as a mere appearance rather than as an externally existing self-sufficient entity."[47] This phenomenon can be described in Rieglian terms as a relationship between the viewer and the artwork. Furthermore, the viewer perceives the artwork only temporarily. Even though it is only for a brief moment, the viewer emerges in the artwork. Furthermore, Kurt Forster noted that Riegl "found the 'spirit' not to hover above the melee but to exist only within it, and he felt the objective assembly of facts to be profoundly impossible since they were never facts without qualities."[48] This observation points out the subjectivity of view in Riegl's concepts.

During his student years at the University of Vienna from 1876 to 1877, Riegl had also been exposed to the work of German philosopher Friedrich Nietzsche, specifically *Ultimately Meditations*.[49] "Like Nietzsche, Riegl now argued that an excess of historical knowledge was not proof of scholarly acumen, neither a marker of national identity nor a guarantee of commercial success; it was an indicator of cultural crisis. For Riegl, the European's love of imitation was an outward symptom of an inner lack of confidence."[50] Riegl built upon Nietzsche's critique of culture and commented on the ongoing contemporary crisis in Europe when historicism had been facing its end, and a new movement was about to emerge.

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[46] Concept of perception and subjectively was extensively discussed by Riegl in "Late Roman Art Industry" *(Spätrömische Kunstindustrie)*. Here, he explored the idea that the perception of art is not static but evolves over time, influenced by cultural and historical contexts. He emphasized the role of the viewer's subjective experience in interpreting art, marking a significant departure from the objective analyses prevalent in art history at the time.

[47] Margaret Iversen, *Alois Riegl: Art History and Theory* (Cambridge Mass: MIT Press, 1993), 9.

[48] Kurt Forster, "Monument/Memory and the Mortality of Architecture," *Oppositions* 25 (1982), 22.

[49] In the original: *Unzeitgemässe Betrachtungen,* completed in 1876.

[50] Diana Reynolds Cordileone, *The Advantages And Disadvantages Of Art History To Life: Alois Riegl And Historicism (*Journal of Art Historiography, 3, (2010), 8.

Viennese Influences

Vienna's end of historicism and the development of numerous movements within the city impacted Riegl's work and career from many perspectives. "Many of Riegl's ideas came from professors working in fields outside his own—from history, philosophy, archaeology, philology. These contributions were often indirect, as Riegl adapted and transformed their applications in his work."[51] At the turn of the century, Vienna saw innovations in multiple interconnected disciplines, which directly and indirectly informed scholars at the city's institutions.

During his student years, Riegl attended the University of Vienna and the Institute for Austrian Historical Research, led by Theodor van Sickel, who was very influential in Riegl's development of empirical methodology. At the turn of the century, an inclination towards the natural sciences emerged to discover the world. Riegl acknowledged this new trend through the empirical methodology he employed. In his approach to art history, Riegl combined close, detailed analysis of artworks with a broader consideration of their cultural, historical, and psychological contexts as opposed to the stylistic analysis that dominated art history in the late nineteenth century.

Furthermore, at the Institute, he attended courses by Franz Brentano on the subject of ethics, focusing on the objective verification of value that informed the development of his later work on monument values. Riegl joined this course together with other important Viennese figures, such as Edmund Husserl (phenomenology) and Alexius Meinong (philosophy). In this environment, Riegl started to formulate his questions on art theory and history. Another of Riegl's professors who introduced him to the periodization of styles in art history was Moritz Thausing – who significantly contributed to Riegl's ideas on questions of style, integrity, and categorization of art styles. Thausing held a position as the second chair in art history at the University of Vienna as well as a director of the Albertina Museum.[52] Riegl also attended Eitelberger's art history seminar together with Franz Wickhoff. They both later held professorship positions at the department. Philosopher Robert von Zimmermann also informed Riegl on the subject of Herbartianism within the context of Herbartian formalism.[53]

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[51] Michael Gubser, *Time's Visible Surface Alois Riegl and the Discourse on History and Temporality in Fin-De-Siècle Vienna* (Detroit: Wayne State University Press, 2006), 53.

[52] The website of the "Department of Art History" states that, "uniquely, a second Chair in Art History was established already in the 19th century, in 1879. It was first filled by Moritz Thausing (1838–1884), followed by Franz Wickhoff (1853–1909) in 1885 and Joseph Strzygowski (1862–1941) in 1909. Eitelberger's chair was again occupied as late as 1897 by Alois Riegl (1858–1905), who was succeeded by Max Dvořák (1874–1921) in 1909. Julius von Schlosser (1866–1938) then followed in 1922 and Hans Sedlmayr (1896–1984) in 1936." See: https://kunstgeschichte.univie.ac.at/en/about-us/history-of-the-department/.

[53] Herbartianism is a philosophical and educational theory developed by a German philosopher and psychologist of the late eighteenth and early nineteenth centuries Johann Friedrich Herbart. The theory emphasizes the importance of educational psychology and the instructional process in teaching while it proposes that education should be based on a scientific approach.

RIEGL'S WORKS

Riegl is considered a pioneer of art history as a discipline that emerged at the turn of the century in Vienna. His principal works include titles such as "Problems of Style" (*Stilfragen*), "Late Roman Art Industry" (*Die spätrömische Kunstindustrie nach den Funden in Österreich-Ungarn)*, "The Group Portraiture of Holland" (*Das holländische Gruppenporträt*), and "The Modern Cult of Monuments: Its Character and Origin" (*Der moderne Denkmalkultus, sein Wesen, seine Entstehung).*[54] Most of his publications were translated into English only in the second half of the twentieth century, mainly in the 1980s. Thus, they became available to a larger audience for the first time. Due to several new translations, Riegl's work gained traction with Western audiences, resulting in numerous reinterpretations of his theories in a new context to be analyzed in the following chapter.

Riegl's posthumously published works were edited by his students, such as Max Dvořák, Otto Pächt, and Karl M.Swoboda, among others, including, for example, the famous work "Historical Grammar of the Visual Arts" (*Historische Grammatik der bildenden Künste, 1965*).[55] Max Dvořák additionally published Riegl's biography titled simply "Alois Riegl" in the year of his death, 1905. Riegl often published articles in local newspapers commenting on current events in Vienna, which contributed to his public image.

Given my interest in Riegl's work *The Modern Cult of Monuments*, my research primarily focuses on monument preservation theory and touches upon his art theory concepts only briefly in the areas where they overlap with his work on preservation.

CONCEPTS

While Riegl was developing visionary concepts within the field of art history and preservation, he found himself in need of developing new terminologies to define his novel ideas. Therefore, he invented a wide range of neologisms at the time, such as *Kunstwollen, Stilfragen*, and *Alterswert,* among others. These terms reflect the characteristics of the German language and culture (such as compound words) and are often printed in their original German form. The Anglophone historiography emphasizes the difficulty and untranslatability of these neologisms until today. Such an example can be seen in the Forward to the *Historical Grammar of the Visual Arts* by Benjamin Binstock, where he comments on the translation of

[54] See Problems of Style: Foundations for a History of Ornament (1893), trans. Evelyn Kain (Princeton, NJ: Princeton University Press, 1992); The Late Roman Art Industry (1901), trans. Rolf Winkes (Rome: Giorgio Bretschneider, 1985); The Group Portraiture of Holland, trans. Evelyn M. Kain and David Britt (Los Angeles: Getty Research Institute, 1999); The Modern Cult of Monuments: Its Character and origin (1903), trans. Kurt W. Forster and Diane Ghirardo (Oppositions 25, 1982).
[55] Historical Grammar of the Visual Arts, trans. Jacqueline Jung (New York: Zone, 2004).

the term *Kunstwollen* in particular: "Scholars cannot agree on an English translation of the term or what it means and often leave it in German as a transcendental signifier without a signified."[56]

My dissertation primarily focuses on examining Riegl's seminal preservation theory and art historical concepts that informed it consequently. Thus, my work does not offer a diagnosis or categorization of Riegl's entire body of work. Rather, it serves as a curatorial selection of thoughts that revolve around and contribute to *The Modern Cult of Monuments*. In order to fully understand Riegl's preservation theory (his last published work), it is essential to analyze Riegl's previously developed notions, such as *Kunstwollen*, the relation between a viewer and an artwork, haptic and optic qualities of artwork, and the question of style. Without prior knowledge of these concepts, which laid the intellectual foundation for his monument study, it is rather challenging to grasp the meaning and contribution of Riegl's modern preservation thought, which represents one of the most complex preservation theories of the twentieth century.

Kunstwollen

One of the essential concepts developed by Riegl is considered *Kunstwollen*. Riegl coined the term, defined in the "Late Roman Art Industry," as follows:

> A teleological view according to which I saw in the work of art the result of a specific and consciously purposeful artistic will that comes through in a battle against function, raw material and technique. In this theory, the latter three factors no longer have the positive creative role that the so-called *Semperian* theory gave them, but rather a limiting, negative one. They constitute, as it were, the coefficients of friction within the whole.[57]

Even though most authors preferred to keep *Kunstwollen* in its original language, readers can find its translation in multiple texts as "*will to art*" or "*artistic will,*" which belongs to the previously developed "*will-forms*" in German philosophy, such as the *"good will"(der Gute Wille)* by Immanuel Kant,[58] the *"will to live"(Wille zum Leben)* by Arthur Schopenhauer,[59] or the "*will to power"(Wille zur Macht)* by

[56] Benjamin Binstock, "Alois Riegl, Monumental Ruin," foreword, in *Historical Grammar of the Visual Arts* (New York, NY: Zone books, 2004), 13.
[57] Alois Riegl, *Spätrömische Kunstindustrie* (1901; 2nd ed., Vienna, 1927; reprint, Darmstadt, 1973), 9.
[58] Immanuel Kant used the term *"good will"* in his work "Groundwork of the Metaphysics of Morals" (Grundlegung zur Metaphysik der Sitten), first published in 1785.
[59] Schopenhauer's phrase *"will to live"* was introduced in his central work "The World as Will and Representation" (*Die Welt als Wille und Vorstellung*). The first edition was published in 1818.

Friedrich Nietzsche.[60] Riegl used the term "teleological" in his definition to explain the purpose that the term *Kunstwollen* serves rather than the cause by which it arose. In her study on Riegl, Margaret Olin identified this purpose as a way to replace "the opposition between real and ideal with a perceptual opposition between tactile and optical, or, respectively, near and distant perception."[61] Riegl identified *Kunstwollen* as an anti-materialistic view juxtaposed with the rising movement of modernism and one of its main protagonists, Semper, who celebrated new rationality, technology, and materials. It is important to note that *Kunstwollen* is not the only concept standing in contrast to the rising movement of modernism in Vienna at that time. Throughout Riegl's career, he introduced multiple notions opposing modern views, such as age value (*Alterswert*) of monuments.

Numerous interpretations of *Kunstwollen* have been offered by art historians attempting to grasp Riegl's thought. Henri Zerner described *Kunstwollen* as "elusive"[62] and identified two streams of its interpretation appearing in the discipline of art history: a neo-Kantian explanation defined by Erwin Panofsky and a Hegelian interpretation represented by Hans Sedlmayr.[63] The ambivalence of *Kunstwollen's* interpretation and the lack of underlying scientific clarity about its meaning is what Zerner defines as Riegl's "relative" formalism. To reflect on Zerner's classification of possible interpretations of *Kunstwollen*, I argue that this concept can be seen as predominantly metaphysical and, therefore, Hegelian, represented by the "spirit" appearing within various contexts.

Haptic and Optic

Riegl's haptic and optic qualities of artworks are rooted in the theory of the German neoclassical sculptor Adolf von Hildebrand, who developed the concept of near and distant:

> The idea of a three-dimensional object, which observer continues to hold, and which, until the observer reached this distance-point, was partially produced by stereoscopic vision, – an idea, namely, that certain parts are nearer than others, – is now produced by factors which have only two dimensions, such as differences in color, light and shade, size, distinctness, perspective, fore-

[60] Nietzsche coined the phrase *"will to power"* in the publication "Thus Spoke Zarathustra: A Book for All and None" (*Also sprach Zarathustra: Ein Buch für Alle und Keinen*) published in four volumes between 1883 and 1885.
[61] Margaret Olin, *Forms of Representation in Alois Riegl's Theory of Art* (University Park, PA: Pennsylvania State University Press, 1992), 132.
[62] Zerner argues that Kunstwollen's meaning varies depending on its context, and so it reflects on Riegl's mind in a constant flux.
[63] Henri Zerner, "Alois Riegl: Art, Value, and Historicism," *Daedalus*, 1976, 180.

> shortening, etc. These characteristics have been known to us from infancy as marks for distinguishing what is distant from what is near.[64]

In other words, an object's spatial perception and appearance closely relate to human sensory agency. Artists deploy certain techniques to express the three-dimensional reality of an object when representing it in two-dimensional space. In his analysis of issues in painting and sculpture, Hildebrandt developed a set of categories to closely define objects' spatial qualities in two dimensions by introducing near and distant concepts. These newly defined properties were influential for art history at large and especially for Riegl's development of the haptic and optic qualities of the artwork. They were equally important to his contemporary Heinrich Wölfflin, a Swiss art historian, who responded to Hildebrand's concept by developing the new categories of "linear" and "painterly."[65] Regarding Riegl's and Wölfflin's body of work, Riegl did not receive as much attention as his contemporaries since his concepts were deemed unclear and hard to apply compared to those by Wölfflin.[66]

Riegl understood the *haptic* as a touch sensation related to vision and not as *tactile* in a literal sense. Haptic quality refers to detailed, relief-like representations, emphasizing the materiality and surface of objects while suggesting a closer, more intimate mode of perception. On the other hand, *optic* quality refers to strictly *visual* perception from afar, focusing on the atmosphere, the play of light and shadow, and the illusion of depth. In summary, both haptic and optic qualities refer to human vision and, consequently, offer a foundation for Riegl's theory of perception.

The Relationship to the Viewer

Riegl's formalism focused on the visual properties of artworks, such as composition or spatial relationships, among others. His formalism was informed by the historical development of artistic forms[67] as well as by the relationship between an artwork and the viewer. He discussed the latter in his publication *The Group Portraiture of Holland,* which Wolfgang Kemp defined in the introduction as a "method of relations" or the "beholder's involvement."[68] A group portrait, studied by Riegl, represents individual figures that are not family-related but belong to some corporation, which he then referred to as

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[64] Adolf von Hildebrand, *Das Problem des Form in der bildenden Kunst* (Strasbourg, 1893); English trans., The Problem of Form in Painting and Sculpture (New York, 1907), 22.

[65] See: Heinrich Wölfflin, *Kunstgeschichtliche Grundbegriffe: Das Problem der Stilentwicklung in der neueren Kunst* (Bruckmann, München, 1915); translated as *Principles of Art History: The Problem of the Development of Style in Later Art.*

[66] Henri Zerner, "Alois Riegl: Art, Value, and Historicism," *Daedalus*, 1976, 177.

[67] Riegl's historicism approach is manifested through his interest in the historical context of art, meaning how art evolved over time and how historical circumstances influenced artistic styles and forms. On the other hand, his formalism focused on the aesthetic qualities of artworks. Thus, Riegl's method in art history is notable for its synthesis of historicism and formalism; he did not present the formal analysis and historical context as separate but rather as interconnected.

[68] Alois Riegl, *The Group Portraiture of Holland* (Los Angeles, CA: Getty Research Institute for the History of Art, 1999), 11.

"corporate" portraiture.[69] The emphasis on the study of composition (interior unity) and the relations between the viewer and artwork (exterior unity) was presented by Riegl by way of analyzing Dutch paintings (fig. 1.6). The spectator of the artwork actively participates in its viewing by supplying his imagination; in other words, he is immersed in the artwork. Riegl suggests that the viewer takes part in something that is not shown in the artwork but only suggested, for example, a direction of looking at Dutch group portraits where the gaze is directed on something not visible to the viewer.[70]



Figure 1.6: Rembrandt van Rijn. *The Sampling Officials of the Amsterdam Drapers' Guild, Known as 'The Syndics.'* 1662.

> The artists of Holland were the first to realize that the viewing subject can take mental control over all the objects in a painting by making them part of the viewing subject's own consciousness. Accordingly, they were the first to paint intentionally in a manner that suggests things to the viewer as generalized mental representations rather than through specific sensory responses (specifically tactile, but also visual).[71]

[69] Ibid., 62.
[70] Michael Podro, *The Critical Historians of Art* (New Haven, CT: Yale University Press, 1982), 94.
[71] Alois Riegl, *The Group Portraiture of Holland* (Los Angeles, CA: Getty Research Institute for the History of Art, 1999), 366.

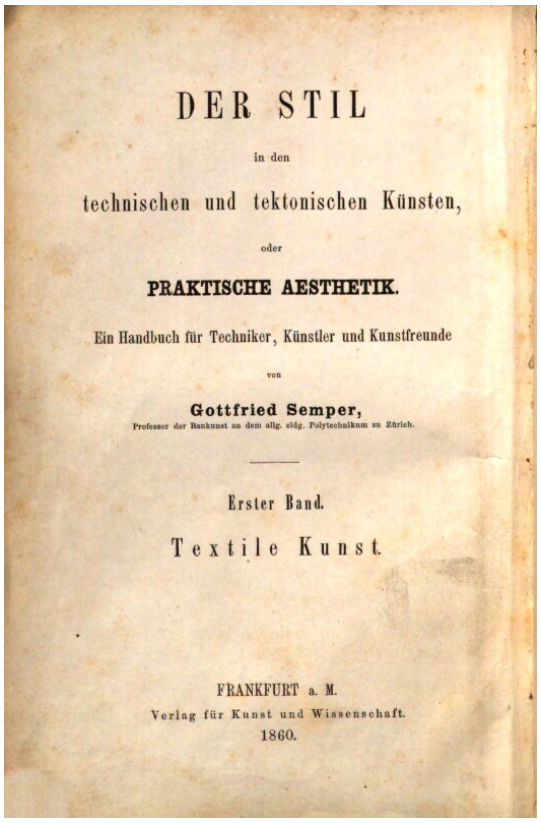
Here, Riegl shows the active nature of the viewer when viewing the artwork. The viewer participates in the artwork by providing their imagination to contemplate what the artwork suggests is not explicitly present. However, Riegl believed that the viewer possesses "mental control" when viewing the artwork. It is also important to emphasize the spatial qualities of these paintings – the figures were situated in the foreground with free space behind them, giving the viewer a sense of distance.

Furthermore, scholar Michael Gubser examined Riegl's notion of time in relation to artworks by stating, "Riegl believed that art provided us with a way out of this historiographical dilemma. Artworks not only represented cultural and historical values but also depicted the movements of history and time in material form. In Riegl's formalism, art embodied the temporality of perception; it enacted and reenacted, as vision objectified in form, the perceptual relationship between man and the world in a past era, as well as the ever-changing perceptual relationship between past and present."[72] Through this statement, we can observe a notion of materialized time that is perceivable by a viewer only temporarily.

The Question of Style (*Stilfragen*)

Riegl defined art styles based on their relation to antiquity; for example, the Renaissance relied on antique models, while the Baroque freed itself from antiquity. Thus, Riegl utilized the comparative method to define the historical style in his scholarly work. He studied the genealogy of style in his work, *Stilfragen*, which was published in 1893 as his first major publication. Riegl developed particular concepts concerning style and strongly opposed the act of imitation in art; he preferred the coexistence of multiple styles in one artwork. The question of style was addressed in a German-speaking environment not only by Riegl but also by Gottfried Semper, who published *Der Stil in den technischen und tektonischen Künsten oder Praktische Ästhetik* (Style in the technical and tectonic arts, or, Practical aesthetics) in 1860. Riegl, publishing his *Stilfragen* (fig. 1.7) more than thirty years later, was well aware of Semper's work and commented on it in the first chapter on *Geometric Style*. Even though they were both concerned with the question of style in art, they addressed the issue from different perspectives and professional backgrounds.

[72] Michael Gubser, *Time's Visible Surface Alois Riegl and the Discourse on History and Temporality in Fin-De-Siècle Vienna* (Detroit: Wayne State University Press, 2006), 9.


DER STIL

in den

technischen und tektonischen Künsten,

oder

PRAKTISCHE AESTHETIK.

Ein Handbuch für Techniker, Künstler und Kunstfreunde

von

Gottfried Semper,

Professor der Baukunst an dem allg. eidg. Polytechnikum zu Zürich.

Erster Band.

Textile Kunst.

FRANKFURT a. M.
Verlag für Kunst und Wissenschaft.
1860.


126173
NH,
58,-

Stilfragen.

Grundlegungen

zu einer

Geschichte der Ornamentik.

Von

Alois Riegl.

Mit 197 Abbildungen im Text.

Berlin 1893.
Verlag von Georg Siemens.
Nollendorfstr. 42.

Berlin ZLB, Ku 36/74

Figure 1.7: left: Gottfried Semper, *Der Stil,* 1860.
Right: Alois Riegl, *Stilfragen*, 1893.

Margaret Iversen further elaborates on Riegl's study of style:

> Riegl's theory of the history of style implies that every age has a characteristic relation or attitude to the world, which is realized in its art, design, and architecture. The eclectic historicism of the Ringstrasse was anathema to him.[73]

Riegl's opposition to the reconstruction of the main Viennese boulevard designed by modernist architects, such as Semper, would consequently categorize him as an anti-modernist thinker. However, he aimed to formulate a theory with a modern outlook, especially what regards his preservation theory, where he proposed a monument value for the upcoming century. Thus, it is very challenging to define Riegl's work within a specific movement at the time, as he proposed theories in various directions, often contrasting ones.

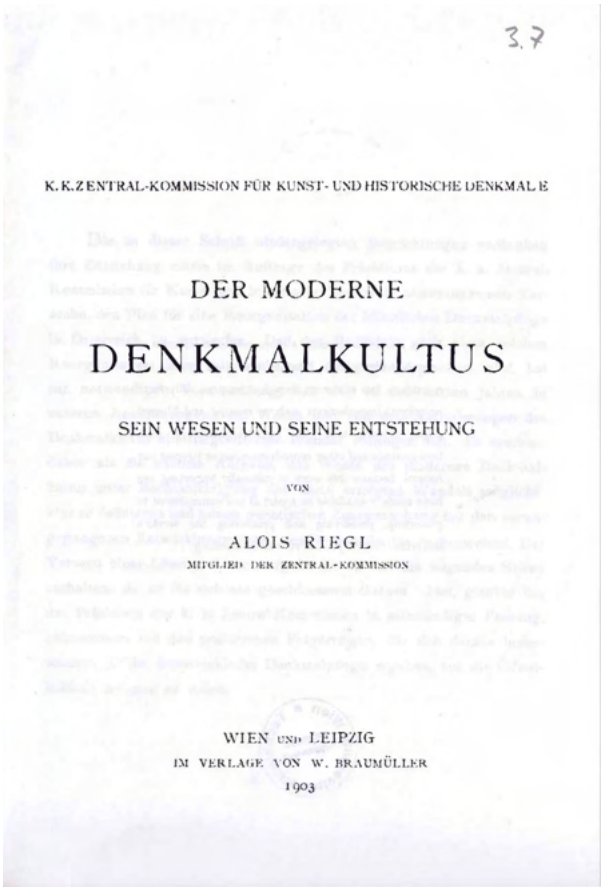
[73] Margaret Iversen, *Alois Riegl: Art History and Theory* (Cambridge Mass: MIT Press, 1993), 35.

Riegl's thought differed and was in constant flux, mirroring the dynamic environment of Vienna at the turn of the century. Thus, Riegl's concepts were embedded in nineteenth-century historicism and informed a rising modernism at the turn of the century. After an examination of Riegl's background and career at large, the following subchapter offers an analysis of his preservation essay in greater detail to gain a foundation for further research presented in Chapters 2 and 3.

1.3. RIEGL'S AXIOLOGY

INTRODUCTION TO THE *CULT*

In 1903, Alois Riegl published his seminal preservation essay, *The Modern Cult of Monuments: Its Character and Its Origin (Der Moderne Denkmalkultus: Sein Wesen Und Seine Entstehung)*, as his last publication (fig. 1.8). Its main goal was to propose a plan for reorganizing public monument preservation methods in Austria in the early twentieth century.[74]


3.7

K.K. ZENTRAL-KOMMISSION FÜR KUNST- UND HISTORISCHE DENKMALE

DER MODERNE

DENKMALKULTUS

SEIN WESEN UND SEINE ENTSTEHUNG

VON

ALOIS RIEGL

MITGLIED DER ZENTRAL-KOMMISSION

WIEN UND LEIPZIG

IM VERLAGE VON W. BRAUMÜLLER

1903

Figure 1.8: Alois Riegl, *Der Moderne Denkmalkultus*, 1903.

Riegl used the term *Denkmalkultus* as the title of his essay, consisting of two words – *Denkmal* (monument) and *Kultus* (cult). In German-speaking countries, *Denkmalpflege* represents a discipline commonly translated as "historic preservation," but in the original meaning, it refers both to restoration and preservation approaches. However, an English translation sometimes suggests otherwise; therefore,

[74] His efforts for new legislation for monument protections were denied.

most scholars prefer to retain the original meaning of the German title, which refers to both methods. Riegl dated the beginning of *Denkmalpflege* to the period of the Italian Renaissance when society began to care for antique monuments. Furthermore, Riegl's "work on the Denkmalpflege argued that the art historical value of a monument emerged only in the tension between past and present, between objective features and subjective valuation."[75] In other words, Riegl strongly focused on the notion of time and temporality, which played a key role in his work and presented a constant negotiation in a valuation process.

In order to reflect on the term *Kultus*, it is necessary to review early Christian art.[76] Its protagonists recognized fine arts as a valuable medium for celebrating their cult. Riegl used the word [*Denkmal*] *Kultus* to refer to his perception of monuments beyond their preservation, focusing on their cultural relevance and meaning as cult objects.[77] Similar to early Christian artists, Riegl articulated the notion of the monument as a medium to celebrate the cult of modern monuments, an object of veneration, and particularly in this essay, Riegl seems to be taking a modernist, rather than historicist approach. In her study of Riegl's monuments theory, Margaret Olin emphasized the connection between Riegl's and Ruskin's preservation theories. Even though both appreciated the age value, Riegl categorized it for the first time as a monument's value in his essay.

> Riegl explicitly Christianized the cult of monuments. His conception of the age value far surpassed Ruskin's piety. He felt that he stood before a time of religious renewal comparable to the dawn of the Christian era. "Stimmung" (roughly "mood" or "atmosphere"), the current artistic goal to which he ascribed the cult of age, itself characterized eras of religious upheaval.[78]

The religious aspect of Riegl's *Cult* ties into Austria's history of a predominantly Catholic society, a tradition that visibly shaped Riegl's writing. The official definition of the term "cult" also points toward its religious characteristic as a "particular system of religious belief."[79] Beyond this aspect, it can also refer to something that receives immense popularity among certain individuals as a cultural phenomenon, or it can denote a specific set of beliefs or behaviors. Concerning monuments, the cult can also be

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[75] Michael Gubser, *Time's Visible Surface Alois Riegl and the Discourse on History and Temporality in Fin-De-Siècle Vienna* (Detroit: Wayne State University Press, 2006), 12.
[76] The dating of early Christian art begins from the 3rd century, following the legalisation of Christianity in the Roman Empire by Emperor Constantine in 313 CE, and ends in the early 6th century.
[77] Alois Riegl, *The Modern Cult of Monuments: Its Character and Its Origin*, trans. Kurt Forster and Diane Ghirardo (Oppositions 25, 1982), Translators' Note, 51.
[78] Margaret Olin, "The Cult of Monuments as a State Religion in Late 19th Century Austria," *Wiener Jahrbuch Für Kunstgeschichte* 38, no. 1 (1985): 177–98, https://doi.org/10.7767/wjk-1985-0107, 195.
[79] For more details, see: Cult | english meaning - cambridge dictionary. Accessed January 8, 2024. https://dictionary.cambridge.org/dictionary/english/cult.

interpreted as a spiritual phenomenon present in the monument but which is kept invisible in its form, lasting beyond a particular generation, as Lewis Mumford writes: "Ordinary men must be content to fix their image in their children: retrospectively they may seek to ensure immortality by imposing the cult of the ancestor."[80] *Kultus*, referring to the word "culture," also appears in the name of Riegl's employing institution, the *Ministerium für Kultus und Unterricht* (Ministry of Culture and Education).

Riegl is considered to be "the first historian to have recourse to a theory of values in interpreting the conservation of ancient monuments."[81] Through his axiological study, he defined the role and function of historical and artistic monuments in modern society, while reflecting on the historiographical scholarship of the nineteenth century. Lucia Allais, an architectural historian of the modern period, identified the role of Riegl's essay in the following words: "By creating an extensive catalog of monumental values at play in this cult, Riegl hoped both to provide a practical guide for dealing with different constituencies competing to re-make an architectural object *and* to build a universalist aesthetic theory where monuments were seeds for a communitarian, international empathy."[82] Thus, Riegl published a monument protection manual and influenced an international preservation field that built upon his value system, such as the establishment of "Outstanding Universal Value" (OUV), which is part of the UNESCO World Heritage Convention, adopted in 1972. The development of OUV stood as a reaction to the various global trends and events: loss and damage to cultural heritage sites around the world during the post-World War II era, growing recognition of the importance of protecting cultural sites not only nationally but also globally, and increasing awareness of international cooperation in heritage protection.

In the process of assigning monument values, Riegl utilized the concepts he developed in art historical scholarship and implemented them in monument protection theory. However, to understand Riegl's approach to monument protection, it is first necessary to examine preservation as a discipline. I would argue that preservation has a bifold character. It showcases the relationship between the original and the preserved work, and between the original author and the preservationist. This opposition created tensions between different preservation schools throughout history. By examining the history of a preservation discipline, it is possible to observe a continuation of John Ruskin's antagonistic approach to Riegl's preservation approach. Ruskin contributed to the European monument protection theory and establishment of the Arts and Crafts movement.[83] Alongside his other interests, Ruskin developed an

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[80] Lewis Mumford, "The Death of the Monument," in *Circle: International Survey of Constructive Art* (London: Faber and Faber, 1937), 263.

[81] Françoise Choay, *The Invention of the Historic Monument* (Cambridge: Cambridge University Press, 2001), 77.

[82] Lucia Allais, *Designs of Destruction* (The University of Chicago Press, 2018), 17.

[83] Other protagonists of the movement in Britain were William Morris and Charles Rennie Mackintosh.

interest in architecture and preservation through his multiple visits to Venice, documenting buildings before they absolutely decayed (fig. 1.9). Through his numerous drawings and aquarelle paintings of façades, he studied the details of the elevation of the city's Romantic style architecture. He was also inclined toward natural ornamentation specific to Gothic architecture, similar to the French preservationist Viollet-le-Duc, who also admired outstanding achievements of this style, but from a different standpoint. While Ruskin admired Gothic architecture as an expression of society's collective spirit, moral qualities, and craftmanship, Viollet-le-Duc rather appreciated Gothic structural rationalism and functional aspects through the efficient use of materials.

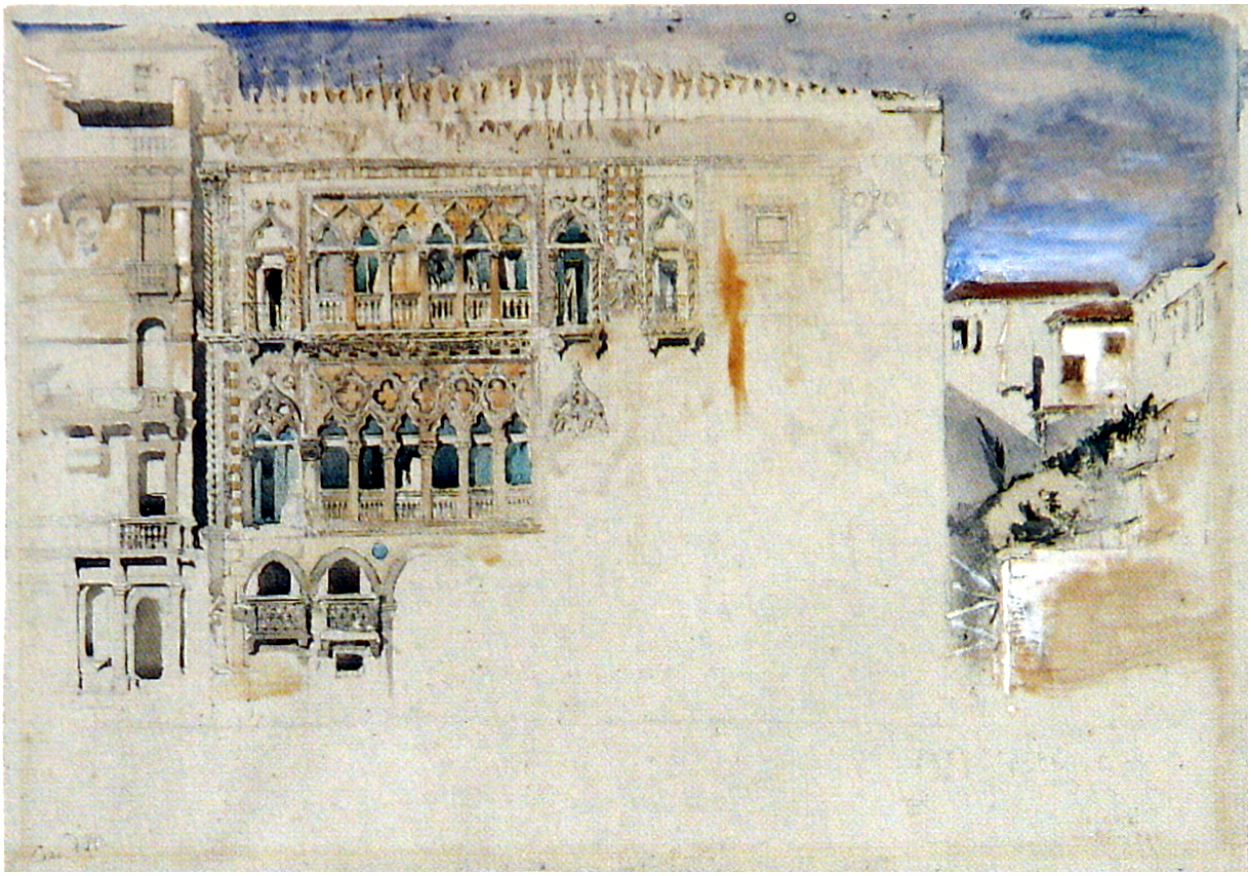


Figure 1.9: John Ruskin. The Casa d'Oro, Venice, 1845.

Ruskin elaborated on his preservation methods in greater detail in his famous publication "The Seven Lamps of Architecture," where he expressed the admiration of architecture's age, particularly in the chapter "Lamp of Memory":

> For, indeed, the greatest glory of a building is not in its stones, or in its gold. Its glory is in its Age, and in that deep sense of voicefulness, of stern watching, of mysterious sympathy, nay, even

> of approval or condemnation, which we feel in walls that have long been washed by the passing waves of humanity.[84]

Ruskin had already defined the importance of architecture's *age* and its *voicefulness* in 1849, but he did not devote any further attention to it. In 1903, on the other hand, Riegl elaborated on *age* as a monument value for the upcoming century, thus presenting it as a key concept in his preservation essay. Ruskin further discussed the notion of touchless preservation of buildings, writing that "*we have no right whatever to touch them*. They are not ours. They belong partly to those who built them and partly to all the generations of mankind who are to follow us."[85] Similarly, Riegl claimed that one should not interfere with a building's natural decay by modifying or restoring it to its original state. Even though Riegl and Ruskin used different formulations for their touchless preservation approach; they shared the same preservation method: appreciating the power of nature in relation to monuments and their aging.

Riegl opposed his Viennese contemporary, Friedrich Schmidt, the restorer of St. Stephen's Cathedral in Vienna at the time. Schmidt, as well as the French restorer Viollet-le-Duc, were protagonists in restoring objects to their original state, while Ruskin and Riegl followed the doctrine of touchless preservation, appreciating objects' traces of aging. This tension between the two schools of thought also manifested in Vienna at the turn of the century and consequently shaped the city's protection of monuments and their perception by the public.

LANGUAGE AND TRANSLATIONS

Riegl's language and style used in the essay were considered incomprehensible to the general public at the time, similar to his other publications. It is due to the scholarly focus of his works, which were primarily targeted toward academic and professional audiences interested in art history, preservation, and cultural heritage, rather than the general public. Besides that, the distribution and reach of academic texts, such as Riegl's, were limited at the time compared to today. They were mainly available in academic libraries and institutions and offered only restricted access to the public.

The issue of Riegl's very complex language was addressed by the authors of the English translation, Kurt Forster and Diane Ghirardo, who elaborated on the difficulty of the historical language Riegl used:

[84] John Ruskin, *The Seven Lamps of Architecture* (New York: John Wiley & Sons, 1884) first published in 1849 in London: Smith, Elder and Co., 173.
[85] Ibid., 182.

> Alois Riegl's essay on "The Modern Cult of Monuments" is written in a language both wrought in the nineteenth-century fashion of scholarly discourse and honed to a resolutely individual edge. It proves correspondingly difficult to translate.[...] Writing as he did in Vienna prior to Wittgenstein and Loos, his language strikes the modern reader as speculative and remote.[86]

Furthermore, the author of the English translation of *Die spätrömische Kunst-Industrie,* Rolf Winkes (translated only a few years after *Der Moderne Dennkmalkultus*), commented on Riegl's complicated writing just as much as the translators of *The Modern Cult of Monuments* did.[87] Riegl's complex language and writing style were present throughout his extensive body of work and not specific to one publication only, making his texts not easily accessible to a broader audience beyond experts.

Der Moderne Denkmalkultus was translated from German into multiple languages for the first time in the 1980s. The essay has been included in numerous journals, such as *Oppositions 25*, which will be discussed in greater detail in the second chapter. It also appeared in various anthologies focusing on cultural heritage and preservation, providing proof that Riegl's essay undoubtedly belongs to the classics of Western preservation history and theory and has retained its relevance until today. One of the anthologies calls for a return to classical texts because "at the time when cultural heritage is increasingly promoted as being of universal value (or as "world heritage"), it is particularly opportune to reexamine the historical and philosophical antecedents of current issues."[88] Thus, Riegl's essay contributes to heritage studies until today. Preservationists have been constantly ascribing new values to monuments, and Riegl's axiological study still serves as a base for this process of redefinition. Revisiting Riegl's essay allows them to address contemporary issues from a new perspective while reflecting upon his thoughts and reviewing their resonance.

The essay was originally published in the Central Commission's journal, primarily focusing on art and historical monuments in Vienna between 1875 and 1911.[89] Posthumously, the essay was included in *Gesammelte Aufsätze,* edited by Riegl's student, Karl M. Swoboda.[90] Riegl additionally published other

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[86] Alois Riegl, *The Modern Cult of Monuments: Its Character and Its Origin*, trans. Kurt Forster and Diane Ghirardo (Oppositions 25, 1982), Translators' note, 50.
[87] Alois Riegl, *Late Roman Art Industry,* trans. Rolf Winkes, Preface.
[88] Nicholas Price, M. Talley, and Alessandra Melucco-Vaccaro, preface, in *Historical and Philosophical Issues in the Conservation of Cultural Heritage ;* Edited by Nicholas Stanley Price, M. Kirby Talley, Alessandra Melucco Vaccaro (Los Angeles: The Getty Conservation Institute, 1996).
[89] The journal's publisher was W. Braumüller *(Wilhelm Braumüller Universitäts-Verlagsbuchhandlung)*, the oldest private book publisher in Austria, founded in 1783.
[90] Alois Riegl, *Gesammelte Aufsätze* [*Collected Essays,* translated by the author], ed. Karl M. Swoboda. Filser, Augsburg/München 1929, pp. 144-193.

essays concerning preservation that were accessible through public newspapers and journals at the end of his life.[91]

THE ORIGINS OF MONUMENTS

Before I analyze Riegl's axiological study in greater detail, let me briefly introduce the origins of historical monuments. The notion of a historic monument was defined in a written form only after the French Revolution in the eighteenth century, which was then superseded by the *Venice Charter* in 1964. Since the French Revolution, multiple approaches to the historical monument and its protection in various European countries were established. The first phase of the development of the historical monument was mainly focused on antique artworks. Therefore, the historical monument relates to notions of history and art. Consequently, artists and historians defined a framework to approach historical monuments.

Throughout history, monuments have served a variety of roles, reflecting the cultural, social, political, and religious values of the societies that built them. These roles have evolved over time, but some of the key functions of monuments throughout history include, for example, commemoration of significant individuals or events, holding religious significance, conveying political or ideological statements, and providing artistic expression, among others. The meaning of a monument and its values have been reinterpreted in history as they reflect the shifting values of the society to which they belong. According to French architectural and urban historian and theorist Francoise Choay, general historical monument values can be divided into four categories: national, cognitive, economic, and artistic.[92] However, Riegl was the first to introduce a detailed study of monument values only at the beginning of the twentieth century.

It is also necessary to mention that technology has played an essential role in the preservation discipline throughout its history. This aspect will be analyzed more deeply in Chapter 3, aiming to show its relevance in the preservation discipline in relation to Riegl's essay.

ANALYSIS OF THE *CULT*

In the essay's opening, Riegl claims that "a monument is a work of man erected for the specific purpose of keeping particular human deeds or destinies alive and present in the consciousness of future

[91] See, for example: Alois Riegl, "Neue Stroemungen in der Denkmalpflege, Mitteilungen der K.K. Zentral-Kommission für Erforschung und Erhaltung Kunst- und Historischen Denkmale.", *3.F.: Bd.4 1905*; Alois Riegl, *Das Denkmalschutzgesetz,* Neue Freie Presse, 27. February 1905.
[92] Françoise Choay, *The Invention of the Historic Monument* (Cambridge: Cambridge University Press, 2001), 77-78.

generations."[93] This statement reflects on the original meaning of the word monument, derived from the Latin *monēre*, meaning "to remind." Therefore, a monument has a commemorative value and belongs to the cultural heritage of a specific society. Another definition of a monument from a psychological point of view is offered by Riegl's Viennese contemporary, Sigmund Freud, who stated the following: "If I may be allowed to generalize – which is unavoidable in so condensed an account as this – I should like to formulate what we have learned so far as follows: *our hysterical patients suffer from reminiscences*. Their symptoms are residues and mnemic symbols of particular (traumatic) experiences. We may perhaps obtain a deeper understanding of this kind of symbolism if we compare them with other mnemic symbols in other fields. The monuments and memorials with which large cities are adorned are also mnemic symbols."[94] This perspective adds an emotional aspect (that Riegl rather neglected in his work) to the notion of a monument deriving from the past while giving a monument an additional role or meaning for society.

In his axiological study, Riegl defined monuments as either *of art* or *writing,* and also into intentional (*gewollte*) and unintentional *(ungewollte*) types. As part of the *Modern Cult*, Riegl invented the notion of unintentional monuments as a visionary concept as opposed to the notion of intentional monuments that were already part of the historical discourse. His work, as well as my dissertation, are primarily concerned with the study of unintentional monuments, which Riegl further divided into two additional categories, the *artistic and the historical monuments* defying the *Modern Cult* (fig. 1.10).

[93] Alois Riegl, *The Modern Cult of Monuments: Its Character and Its Origin*, trans. Kurt Forster and Diane Ghirardo (Oppositions 25, 1982), 21.
[94] Sigmund Freud, *Five Lectures on Psycho-Analysis* (New York: W.W. Norton & Company, 1977; first published in English in *the American Journal of Psychology* in 1910), 16.

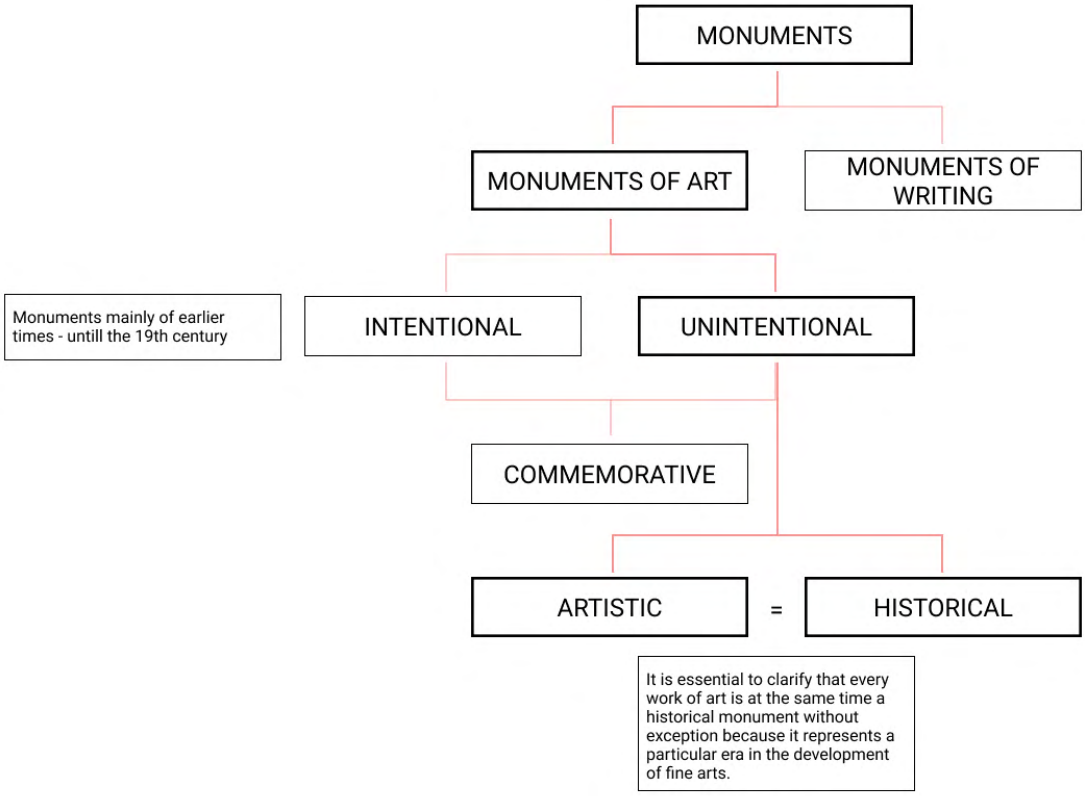


Figure 1.10: Monument Categories, diagram by the author, 2024.

The general definition of an artwork claims that it is a visible or audible work of an artist with artistic value closely related to Riegl's concept of *Kunstwollen*. At the same time, a historical monument is a work that represents historical value. Sound art, as an audible monument, was classified as a monument of writing if written as a composition.

According to Riegl, historical value is more comprehensive when discussing monument value. This could be potentially related to its more reliable character defined by Henri Zerner by claiming that "the former – historical –value is objective and stable; the latter [art value] – entirely dependent on the taste of the day (and of the individual observer) – is consequently subjective and variable."[95] It represents all the works that existed in the past and are no longer present; all the changes followed are conditioned by the original state and could not have happened without it. In the modern conception, every historical occurrence is irreplaceable to human activities or developed skills. It is essential to clarify that every work of art is, at the same time, a historical monument without exception because it represents a particular era in the development of fine arts. This concept also applies vice versa; every historical monument is an artistic monument as well. According to Riegl, separating artistic and historical monuments is not

[95] Henry Zerner, "Alois Riegl: Art, Value, and Historicism," *Daedalus*, 1976, 186.

possible. From this viewpoint, the historical monument is strongly interlinked with art history, where the connection between various disciplines, such as art history, architecture, and historic preservation, is more than evident. Therefore, I will closely examine the influence of the *Modern Cult* on the above-mentioned disciplines in the following chapter and will measure its effects on architecture in particular.

As Riegl also mentioned, not all artworks have the same artistic value based only on the time they were created. This is because assigning values is a subjective process that depends on individual decisions. It is also a relative value in constant flux, redefined by expert groups knowledgeable on art as it reflects changing cultural and societal values. Artistic value is not easily transferred to the general public and can, therefore, be considered anti-democratic and elitist. The original premise claimed that older artworks possess higher value than younger ones if they correspond to the historical period of their creation. Undoubtedly, additional parameters contribute to their value, such as perception, form, and color properties. Riegl studied these in debt, thus informing the creation of value systems accordingly. Since the Renaissance, artists have followed the antique canon in creating their artworks. This concept was valid until the nineteenth century when this objective artistic canon faded away and was substituted by art periods. In this notion, all historical monuments are consequently considered unintentional (*ungewollte*). All intentional monuments could be unintentional as well, depending on the viewer's perspective. Riegl stated that both intentional and unintentional monuments hold commemorative value (*Erinnerungswert*), as they both represent some notion of the past. However, I would claim that an intentional monument's primary value is the commemorative one, while unintentional monuments can have multiple values assigned simultaneously, and the commemorative value is only one of them; thus, the value hierarchy for each of them differs. I also argue that every monument represents a specific moment in history through its true appearance as an index of society's values at the time of its creation, but a monument that imitates something from the past does not offer a realistic representation of such values but an ideal representation. This might also be one of the reasons that Riegl opposed the imitation of styles.

According to Riegl, monuments can be divided into three groups based on their functions. *Intentional monuments* were created with a particular will to remind us of a specific event in the past. *Historical monuments* point to a specific moment, but the choice of an event reflects our subjective preferences. Furthermore, *monuments with age value* are works that existed some time in the past, regardless of their origin.[96] These three types serve as different stages in generalizing modern monuments, their classification, and preservation methods. Therefore, they act as an operational framework or as a guideline to assign values and properties to any monument.

[96] Alois Riegl, *The Modern Cult of Monuments: Its Character and Its Origin*, trans. Kurt Forster and Diane Ghirardo (Oppositions 25, 1982), 31-38.

The concept of intentional monuments was known from antiquity throughout the Middle Ages as the only monument type. On the other hand, historical and age value monuments belong to unintentional monuments; thus, they represent the cult of modern monuments, as Riegl categorized them (fig. 1.11).

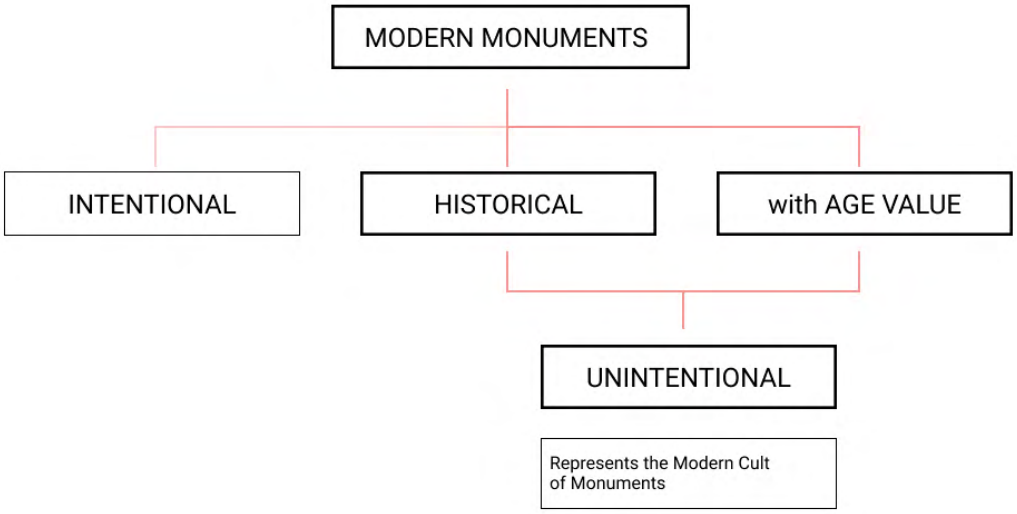


Figure 1.11: Modern Monument Categories, diagram by the author, 2024.

Riegl further elaborated on the foundation of the age value concerning the Christian Catholic religion in his posthumously published book *Gesammelte Aufsätze* as follows:

> After all, an authentically Christian principle is the basis of the value for age: that of humble submission to the will of the Almighty, which feeble man should not dare, sinfully, to obstruct.[97]

To elaborate on Riegl's statement, I would note that age affects all monuments equally, as it affects all living organisms. One is not allowed to interfere with the aging process, which would be considered an act against nature or God's will. Therefore, monuments with age value are continually *dematerializing* and can be interpreted as living organisms between birth and death. Only by caring for them (offering them protection) can they achieve a longer life span than humans. Age value is also closely related to the temporality of perception that Riegl developed as one of his art theory concepts and was later applied in his study of monuments. Scholar Michael Gubser claims that "in Riegl's analysis, artworks embodied temporal juxtapositions. Monuments expressed a localized temporality of self-realization, embodied time

[97] Alois Riegl, *Gesammelte Aufsätze* (edited by Karl M. Swoboda. Augsburg and Vienna, 1929), 186.

in the formal traces of age, and comprised integral links in a universal historical chain."[98] Modern characteristics of age value can be further related to the protection of the environment and of animals primarily in Germanic countries at the time demanding protection of "monuments of nature."[99]

Furthermore, the Italian Renaissance developed the concept of the commemorative value of monuments. People have appreciated old deeds as part of their work, and in this way, the past has gained a present value (*Gegenwartswert*) for modern life and work. During the Italian Renaissance, modern monument preservation took form through the first monument protection measures, during which the artistic and historical values of monuments were discovered (referring to antique monuments). From this period until the nineteenth century, Italians have recognized the distinction between the artistic and historical value of monuments. Riegl had a particularly strong relationship with the Italian Renaissance, and he frequently returned to this period throughout his scholarship, such as in works on *Stilfragen* or the *Late Roman Art Industry*, where he examined the style, ornamentation, and form of artworks.

In the *Modern Cult*, Riegl introduced a value that is a product of the historical value, namely the development value (*Entwicklungswert*). He claimed that the historical value changed into this new value, which is precisely the age value. Therefore, the following condition was presented: if there had been no historical value, no age value could have been established as its predecessor. Based on this notion, Riegl argued that the nineteenth century was the century when historical value was seen as the monument's most important value, while the twentieth century is the century of the age value, which is the most universal and modern value. However, I would argue that an underlying inner conflict is represented in *Alterswert* as the most modern value. It appreciates the traces of the past on the object in question and manifests the most modern value for the upcoming century. This tension between historical and modern is embedded in this particular value itself and thus challenges our understanding of it.

Riegl defined monument values for his time. However, societies must redefine them too because they are in constant flux and reflect on their needs that change over time. In his essay regarding monuments and memory, Kurt Forster elaborated on this notion by stating that "the very idea of the monument proved to be at once historically determined and relative to the values of every time."[100] Furthermore, it is essential to point out that this conception applies only to unintentional monuments, because the values of intentional ones are predefined when erected. This is because they hold commemorative value throughout their entire existence, reflecting on a specific event of the past. This value must be maintained throughout an entire monument's existence. Thus, intentional monuments

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[98] Michael Gubser, *Time's Visible Surface Alois Riegl and the Discourse on History and Temporality in Fin-De-Siècle Vienna* (Detroit: Wayne State University Press, 2006), 163.
[99] Alois Riegl, *The Modern Cult of Monuments: Its Character and Its Origin*, trans. Kurt Forster and Diane Ghirardo (Oppositions 25, 1982), Notes, 50.
[100] Kurt Forster, "Monument/Memory and the Mortality of Architecture," *Oppositions* 25, 1982, 22.

require restoration to keep their original look unchanged. Intentional monuments also face another issue. They could potentially lose their commemorative value because of political reasons, which has been especially the case in the United States in more recent years (fig. 1.12). "More than 140 Confederate monuments have been removed from public land since the Charleston, SC, church shooting in 2015, and about two-thirds of those came down in 2020 in the aftermath of George Floyd's death on May 25."[101]



Figure 1.12: A statue of Confederate General Robert E. Lee in Richmond, Virginia, 2020. Photography by Mobilus In Mobili.

More than the loss of commemorative value, these monuments faced removal from public display and loss of relevance within heritage discourse because whatever they represented in the past did not correspond to what society sought in its monuments at the time of their removal. The *National Monument Audit*, produced by Monument Lab in partnership with The Andrew W. Mellon Foundation in 2021, offers various findings about monuments across the United States. One of them claims that "monuments have always changed" while listing the oldest recorded monument removal in the US, dating to July 9th,

[101] Bonnie Berkowitz and Adrian Blanco, "A Record Number of Confederate Monuments Fell in 2020, but Hundreds Still Stand. Here's Where,"in *The Washington Post*, March 12, 2021, https://www.washingtonpost.com/graphics/2020/national/confederate-monuments/, accessed December 13, 2023.

1776.[102] Thus, the *Audit* undoubtedly points out that there is an urgency to deal with the topic of monuments' removal, among other issues, within the contemporary discourse.

Riegl's further classification of the main monument types can be juxtaposed with the present-day value representing the concept of modernism. According to Riegl, defining the age value is relatively straightforward given its out-of-date appearance. This property is characteristic only for physical objects as tangible heritage, which decay naturally with time. We cannot consider it in a case of intangible heritage in traditional terms.[103] Age value is supposed to be evident to the masses, not only to art historians and experts:

> These monuments are nothing more than indispensable catalysts which trigger in the beholder a sense of the life cycle, of the emergence of the particular from the general and its gradual but inevitable dissolution back into the general. This immediate emotional effect depends on neither scholarly knowledge nor historical education for its satisfaction since it is evoked by mere sensory perception. Hence, it is not restricted to the educated (to whom the task of caring for monuments necessarily has to be limited) but also touches the masses independent of their education.[104]

According to Riegl, only educated professionals in the field can take care of monuments. The public, however, is encouraged to participate in the monument's life by perceiving its natural decay. He considered the "life cycle" to be eliciting an emotional response from the viewer, a phenomenon he called *Stimmung*, a mood. Riegl's concept of the relationship between an artwork, in this case, a monument, and the viewer, contributes to the age value category. I would also add that the age value has a democratic character similar to the optic and haptic properties of an artwork defined by Riegl previously, and so they both allow access to the general public. Also, both qualities can be perceived by human vision from an early age without familiarity with the object. Thordis Arrhenius furthermore claimed that Riegl's age value serves as "the extension of heritage into mass-culture."[105] In other words, the age value becomes a medium between a monument and people's everyday culture.

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[102] See the full document at https://monumentlab.com/audit.

[103] According to UNESCO, intangible heritage includes traditions or living expressions inherited from our ancestors and passed on to our descendants, such as oral traditions, performing arts, social practices, rituals, festive events, knowledge and practices concerning nature and the universe or the knowledge and skills to produce traditional crafts. See: https://ich.unesco.org/en/what-is-intangible-heritage-00003, accessed November 20, 2023.

[104] Alois Riegl, *The Modern Cult of Monuments: Its Character and Its Origin*, trans. Kurt Forster and Diane Ghirardo (Oppositions 25, 1982), 24.

[105] Thordis Arrhenius, "The Cult of Age in Mass- Society: Alois Riegl's theory of Conservation," *Future Anterior: Journal of Historic Preservation, History, Theory, and Criticism*, Spring 2004, Vol. 1, No. 1 (Spring 2004), 75.

Riegl attributed the Austrian *Denkmalpflege* at the time with a socialist character, especially so in the article *Neue Stroemungen in der Denkmalpflege* (New Trends in Monument Preservation) published in the Central Commission's journal.[106] An important aspect to observe in the article is the changing political situation in Austria toward the end of the nineteenth century. The figure of Karl Lueger, who "transformed an ideology of Old Right – Austrian political Catholicism – into an ideology of a New Left, Christian Socialism,"[107] was influential in the development of national politics and, in particular, in the development of Vienna as a newly elected mayor in 1897. Lueger's viewpoints and the new political climate in the city informed local thinkers, such as Riegl, who discussed the political-socialist character of *The Modern Cult of Monuments*. Margaret Olin also argues that "socialism, to Riegl, was above all a matter of feelings, and particularly the rule of mass feelings over the intellect and over individual egoistic desires."[108]

Riegl's approach to preservation might appear radical compared with traditional methods applied to restore historical monuments (for example, returning the monument to its original condition) utilized by his contemporaries, such as Friedrich Schmidt, at the turn of the century. Furthermore, Riegl's concept of the relationship between a monument and its context was incredibly important. Therefore, Riegl stood against the imprisonment of art in a museum. This would only lead to a separation from its original environment. It also raises the much larger issue of whether exporting monuments beyond national and cultural borders to a new context also means raising new concerns in terms of monument preservation.

Riegl's values are *values of contrast* – they frequently stand in opposition to each other. This can be observed, for example, through the contrast between age and present-day value. Age value is represented by signs of imperfection, such as changes in form, color, or other material properties. These properties were juxtaposed to the era's vision of the desire for "newness" during the rise of modernism. Alongside the present-day value, Riegl introduced the newness value (*Neuheitswert*) as an essential step towards defining the modern cult of monuments, which is the opposite of the age value. The newness value can be retrospectively seen in the work of Viollet-le-Duc, for example, in the complete reconstruction of the city of Carcassonne between 1853 and 1879 (fig. 1.13). Here, the preservationist neglected the changes made to the historical monument over time and restored it to its original form. Hence, newness value seeks the monument's beauty in its completeness, whereas age value prefers a natural decay of its structure. The primary goal of the newness value is to preserve the monument in the best condition and to deviate from the original state only in minor ways. Riegl argued that the nineteenth-

[106] See: Alois Riegl, *Neue Stroemungen in der Denkmalpflege (pp. 85-104)* published in *Mitteilungen der K.K. Zentral-Kommission für Erforschung und Erhaltung Kunst- und Historischen Denkmale*. 3.F.: Bd. 4, 1905.
[107] Carl E. Schorske, *Fin-de-Siècle Vienna: Politics and Culture* (New York: Alfred A. Knopf, 1980), 133.
[108] Margaret Olin, "The Cult of Monuments as a State Religion in Late 19th Century Austria," *Wiener Jahrbuch Für Kunstgeschichte* 38, no. 1 (1985): 177–98, https://doi.org/10.7767/wjk-1985-0107, 194.

century premise lay on keeping two values: historical value with its originality and newness value because of its unity of style.



Figure 1.13: Eugène-Emmanuel Viollet-Le-Duc. *City of Carcassonne and its fortifications*. east side, drawing. 1853.

Riegl compared human creation, such as the work of a monument, with a natural organism that exists without any additional human involvement. In this regard, modern human reflects part of their lives through the monument. Therefore, Riegl opposed any intervention on the monument. Thus, according to him, the central preservation conflict lies between the newness and age value. Even though the concept of age value might appear as a natural development of the values of the past century (as a successor of a historical value of the nineteenth century), it opposes the principles of the rising modernism reflecting on society's values. Margaret Olin comments that Riegl's conflicting values "mirror the conflicts of the institutional and political context to which Riegl's legislation was a response."[109] To expand on Olin's argument, I would claim that there were two types of conflict concerning the values of monuments, namely a conflict regarding the values themselves and a conflict between those monument values and the modern society to which they belong.

[109] Margaret Olin, "The Cult of Monuments as a State Religion in Late 19th Century Austria," *Wiener Jahrbuch Für Kunstgeschichte* 38, no. 1 (1985): 177–98, https://doi.org/10.7767/wjk-1985-0107, 177.

IMAGES INCLUDED IN THE ENGLISH TRANSLATION

Riegl's original essay did not contain any drawings or photographs, as opposed to other publications, such as *Die spätrömische Kunst-Industrie,* which consisted of photographed artworks from the period in question. The nature of the text-only essay seems to be explained through the fact of it being written as a preface to the legislative proposal for monument protection in Austria. The English translation, however, contains images visualizing Riegl's concept. These were selected by the translators, who remarked in their final notes that "any choice of illustration beyond specific examples mentioned in the text is bound to be somewhat arbitrary. Since Riegl held fast to fundamental issues – using examples with an eye to their general relevance rather than individual significance – our illustrations have one purpose only: to heighten and focus the author's arguments."[110] It is important to note that both translators of the essay were architectural historians and theorists, rather than preservationists, so their professional backgrounds undoubtedly informed their image selection process.

The selected illustrations can be divided into three categories. First, images of objects Riegl directly referred to in the text; second, images referring to Riegl's concepts published before he wrote the essay, and third, images of objects created after Riegl's publication, which the translators selected based on the representation of described concepts in the essay.

The etching of the Column of Trajan in Rome (fig. 1.14) by Italian eighteen-century architect and artist Giovanni Battista Piranesi belongs to the first category, which Riegl directly refers to in his text:

> A work like Trajan's Column was considered fair game during the Middle Ages, even though its associations with the might and grandeur of the old Roman Empire should have secured its survival for the ages.[111]

[110] Alois Riegl, *The Modern Cult of Monuments: Its Character and Its Origin*, trans. Kurt Forster and Diane Ghirardo (Oppositions 25, 1982), Translators' Note, 51.
[111] Ibid., 26.



Figure 1.14: Giovanni Battista Piranesi. *The Column of Trajan in Rome*. Etching, 1758.

Although Riegl did not mention Piranesi in his essay, the translators had multiple reasons to choose this image as the most representative of the column. Both Riegl and Piranesi expressed an interest in Roman art and architecture. Piranesi showed his appreciation of Roman architecture through numerous etchings,

and Riegl used literary work to analyze the art of this period. Riegl returned to the period of Late Roman art in multiple books besides *The Modern Cult*, such as in *The Problems of Style* and *The Late Roman Art Industry*, and hence Riegl's theory focusing on the art of this period naturally produced different viewpoints over time. Both Riegl and Piranesi were fascinated by ancient ruins, assigning them specific value. Moreover, the original Piranesi etching shows the column and its context on the square in Rome, but the etching used in the translation is cropped, and, therefore, decontextualized (which Riegl would certainly not appreciate).

A photograph of Oxford's Queens College by William Henry Fox Talbot from 1843 (fig. 1.15) can be counted to the second category (before Riegl published the essay). It undoubtedly serves as the most important image of this category since it became a frontispiece of the essay. This photograph expresses Riegl's central idea of *Der Moderne Denkmalkultus* – appreciation of the age value of monuments showcasing the decay of the photographed façade of a building. Even though Riegl and Talbot were contemporaries who both strongly advanced their disciplines, there is no evidence regarding any intellectual exchange. We do know, however, that Talbot's invention of the photographic process, called *calotype*, impacted Riegl's major discipline, art history, at large. Was it then only the translators' choice to visualize Riegl's concept through this exact photograph? And why was this photograph so essential to becoming a frontispiece of the translation?

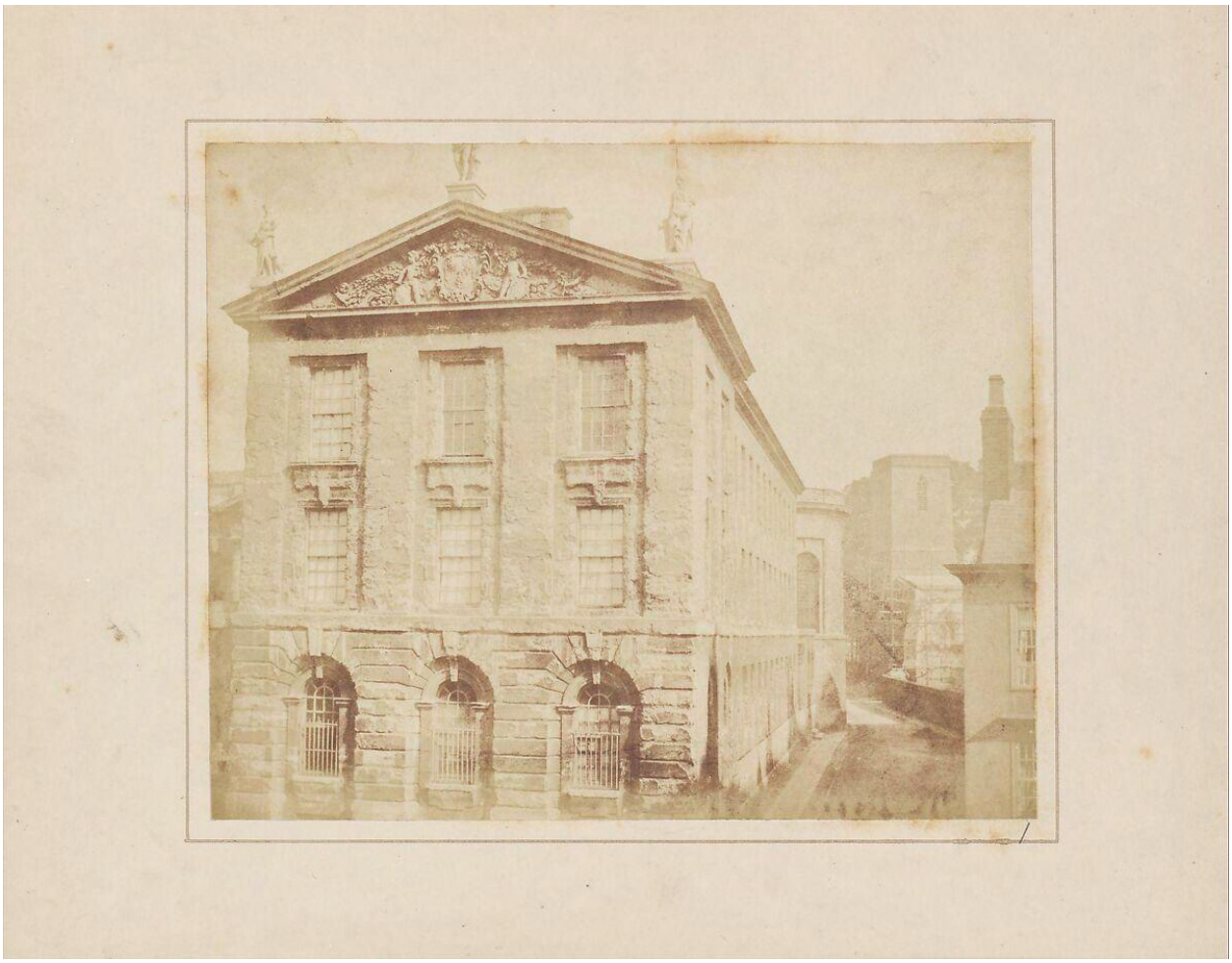


Figure 1.15: William Henry Fox Talbot. *Part of Queens College, Oxford.* Photography, 1843.

The ruined *Casa della GIL* (Center of Fascist Youth Organization) in Rome belongs to the third category of images. The translators chose this image as it exemplifies Riegl's definition of decay, which is present in modern architecture.

> Art history demonstrates that the development of the *Kunstwollen* is tending toward an integration of the individual art object with its environment, and naturally our own era proves to be the most advanced in this respect. But despite picturesque cottages in paintings such as Michetti's *Daughter of Jorio*, where the frame cuts off the head of one of its figures, the composition of the whole is still an undisputed postulate in the visual arts. Already in this integration alone lies an aesthetic element, a fundamental quality of art which we will discuss further as one of the present-day values, specifically newness-value. A lack of completeness would therefore only displease us in a modern work: which is why we do not build ruins (except

> to fake them), and a newly built house with crumbling stucco or sooty walls disturbs the viewer because he expects an accomplished or flawless form and polychromy.[112]

Riegl discussed the appearance of ruins in relation to architecture; however, he differentiated between two types of ruins – a ruin of a historical monument (which he appreciated) and the new, modern one (which he opposed). The translators visualized the latter concept by choosing an image of a decayed Italian modernist villa used by Nazis, which was built long after Riegl's death during the 1930s. Riegl honored ruins as a result of natural decay much more than man-made ruins resulting from wars. Thus, he manifested an admiration for the power of nature that is above human desire for destruction.

[112] Alois Riegl, *The Modern Cult of Monuments: Its Character and Its Origin*, trans. Kurt Forster and Diane Ghirardo (Oppositions 25, 1982), 32.

1.4. CONCLUSION

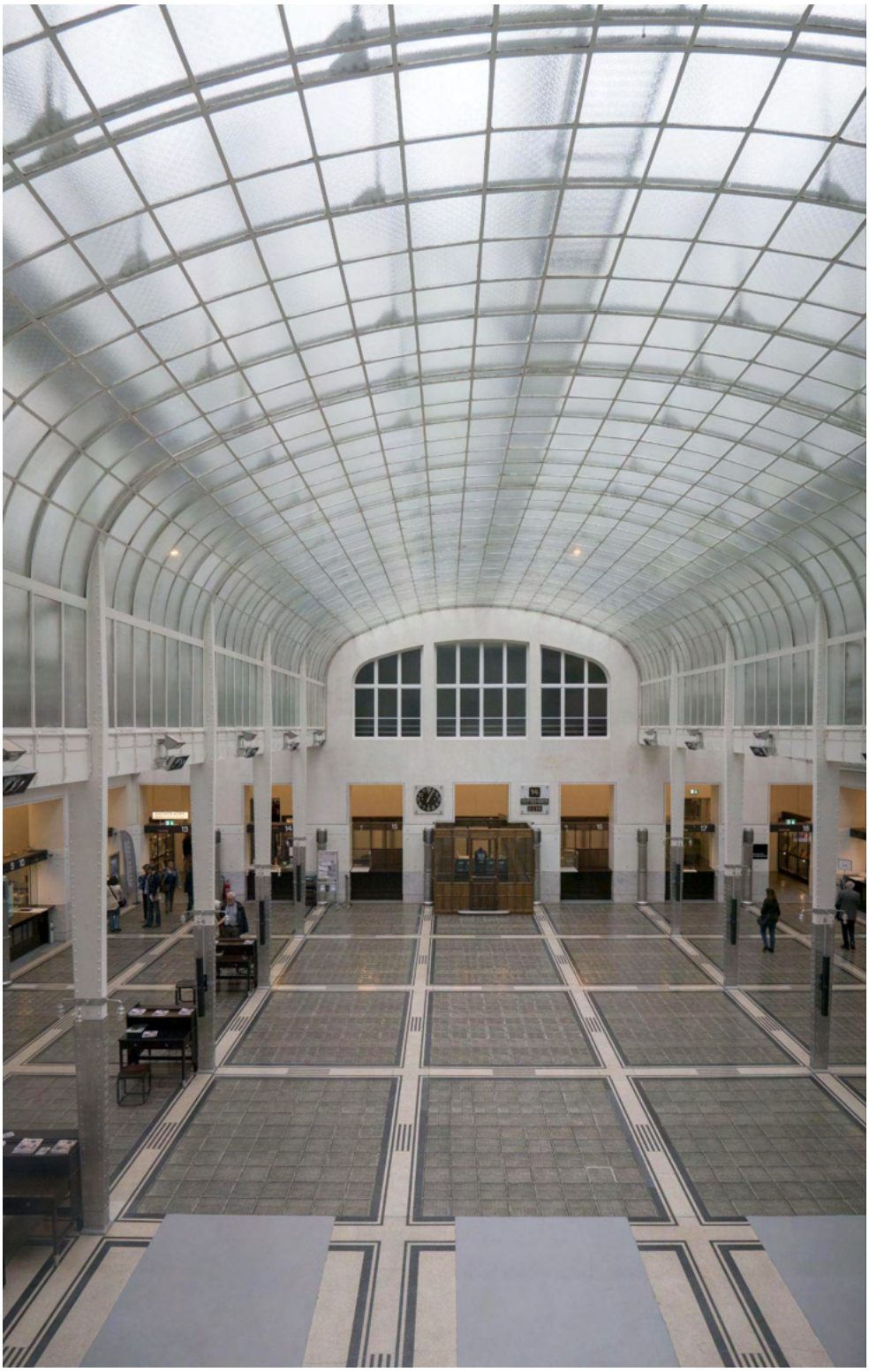
The age value defined by Alois Riegl at the beginning of the century as a modern monument value stands in opposition to the historical value representing the "newness" of the monument typical for the nineteenth century. It might appear paradoxical to call a modern monument one that shows its "age" and a historical one that represents "the new" characteristic of the emerging modern movement. Also, Margaret Olin described Riegl's effort as "utopian" when he thought of *Alterswert* as the primary concern of historic preservation in the future.[113] The contradictions of Riegl's value theory, as well as his appreciation of the monument's decay made it impossible to implement his concept into practice, whether in architecture or preservation, at his time. The quest for newness, completeness, and total beauty opposed his definition of the "new" represented by the age value, which exhibited precisely the opposite – traces, incompleteness, and deterioration. These traces indexed time and made visible the changes in an object.

Most leading figures of Viennese society hailed primarily from bourgeoisie circles, which favored certain life attitudes. These attitudes provided the foundation for their progressive thinking and thus enabled the growth of multiple disciplines that juxtaposed Riegl's theory (fig. 1.16 a, b).



Figure 1.16: Otto Wagner. *Postal Savings Bank*. Vienna, 1903.
Top (a): Photography of the front view, author: Thomas Ledl, 2017.

[113] Margaret Olin, "The Cult of Monuments as a State Religion in Late 19th Century Austria," *Wiener Jahrbuch Für Kunstgeschichte* 38, no. 1 (1985): 177–98, https://doi.org/10.7767/wjk-1985-0107, 197.



Bottom (b): Photography of the interior, author: Thomas Ledl, 2014.

The values which this society cherished were reason, order and progress, perseverance, self-reliance and disciplined conformity to the standards of good taste and action. The irrational, the

> passionate and the chaotic were to be avoided at all costs. By following these rules, one would be rewarded with a good name and whatever measure of success was regarded as commensurate with individual talent.[114]

I argue that heritage is represented by the relationship between society and the object, between the viewer and the artwork. From a close examination of the *Modern Cult*, it is evident that modern society did not accept the age value, as Riegl envisioned. His theory was dormant for multiple decades and waited to be reawakened in new contexts and societies. The aftermath of the World Wars, which left cities and their architecture in ruins were the grounds on which Riegl's monument theory could flourish. Architecture faced the radical question of how to proceed with these ruins, thus seeking strategies to reposition and redefine its historical narratives and identities. The following chapter will measure the effects of Riegl's theory on architecture during the second half of the twentieth century by mapping its legacy, specifically an application of the age value. The question I will address here is the following: When and how was the age value applied in architecture, and if so, when was it succeeded by other values?

Furthermore, the analysis of Riegl's essay gives rise to this dissertation's main research question: if the nineteenth century was the century of the historical value, and the twentieth century of the age value of monuments, both defined by Riegl at the turn of the century, then what is the value of monuments in the twenty-first century? This question is addressed in the dissertation's final chapter.

[114] Allan Janik and Stephen Toulmin, *Wittgenstein's Vienna* (New York: Simon and Schuster, 1973), 42.

Chapter 2

The Anamnesis of the Cult

2.1. RIEGL'S LEGACY

Mapping the various paths of Alois Riegl's legacy throughout the twentieth and twenty-first centuries is a complex task. The challenge lies in the interdisciplinary nature of his work and the depth of his ideas, which frequently transcend the borders of singular disciplines. The fields Riegl influenced have produced diverse trajectories, each tracing the ongoing influence of his concepts. Margaret Iversen, an art historian, comments on the return of Riegl's theory:

> Over the past few decades there has been a slow crescendo of interest outside German-speaking countries in the work of the Austrian art historian Alois Riegl (1858-1905), despite the dearth of translations into English or any other language (with the exception of Italian).[1]

Iversen's statement points out the absence of translations of Riegl's work, which began to appear for the first time in the 1980s.[2] Until then, Riegl's writings excluded audiences that were not versed in German. The fact that interest has grown despite these language barriers indicates an acknowledgment of Riegl's contributions primarily to art history. It also demonstrated how scholars attempted to overcome Riegl's complex German language. However, these new translations only increased the international recognition of Riegl's contributions to art history. The reasons for the rediscovery of Riegl's work varied in art history and architecture concerning monument protection. In the second half of the twentieth century, art history offered a critical reassessment of formalism while heeding Riegl's alternative approach to art's historical and cultural context. Cities destroyed in the postwar period challenged architects to consider how to handle the ruins of war. This is where Riegl's approach to monuments became at once beneficial and innovative. Art historians and architects reacted to Riegl's attention to non-progressive historical development and varying monument values by offering new interpretations of his theory.

[1] Margaret Iversen, *Alois Riegl: Art History and Theory* (Cambridge Mass: MIT Press, 1993), 3.

[2] The first English translations include *The Modern Cult of Monuments,* published in 1982; *Late Roman Art Industry,* published in 1985; *Problems of Style: Foundations for a History of Ornament,* published in 1993; and *The Group Portraiture of Holland,* published in 1999.

RETURN TO VIENNA 1900

There has been not only a return to Riegl's work starting from the 1980s, predominantly outside of German-speaking countries, but also the rediscovery of a much broader theme of Vienna 1900. During this period, multiple conferences and exhibitions worldwide focused on its reinterpretation (fig. 2.1).[3]



Figure 2.1: *Vienna 1900, art, architecture & design*. The Museum of Modern Art, New York, July 3-October 21, 1986, brochure cover. Text by Gertje Utley, 1986.

Schorske's work on fin-de-siècle Vienna became particularly suitable during the formation of the new movement of postmodernism starting in the 1970s, defined by Steven Beller:

[3] The exhibition at MoMA in New York took place between July and October 1986 titled "Vienna 1900: Art, Architecture and Design."

> The disquiet with the development of modernist thought and culture of the 1970s had coagulated into a diffuse but nevertheless identifiable cultural and intellectual movement, the more enterprising members of which came to articulate their dissatisfaction as postmodernism. What Schorske had identified in fin-de-siècle Vienna as the roots of ahistorical modernism now seemed even better suited as a precursor to the similarly cast-adrift mood of postmodernism.[4]

Schorske's book relates Vienna to Western thought as it maps the origin of modern concepts pertaining to the city. Furthermore, it exemplifies the Central European heritage to which Vienna belongs. Schorske's narrative of history in this geographical location also led to another reconceptualization, namely the blurring of boundaries between West and East in the context of Central Europe.

The rediscovery of the period of Vienna 1900 also connects to another global event – the end of the Cold War. The concept of Central Europe was addressed by various authors, such as Milan Kundera, a writer of Czech origin. In his work "The Tragedy of Central Europe," Kundera argues that Central Europe is not strictly tied to the Soviet Union. It also belongs to the West, including Vienna as part of this region. Hence, Central Europe is geographically considered to be a region between Eastern and Western Europe. I contend that the idea of Central Europe mirrors the relocation of intellectuals from different areas to Vienna, which played a pivotal role in shaping the modern conceptualization of Vienna as the center of culture. During the 1980s, this interest in Vienna at the turn of the century did not come only from abroad. Austrians also sought to redefine their national identity, which was in crisis. This search for a new identity is discussed in greater detail by Schorske and Beller in their works on Vienna 1900.

RIEGL-INDUSTRIE

There are several reasons why Riegl's work received new attention only after a prolonged period of its absence in Western historiography. One reason is Riegl's influence on Nazi supporters, such as Hans Sedlmayr, who held a chair at the Department of Art History at the University of Vienna between 1936 and 1945. This influence resulted in negative associations with Riegl's theory for decades. Furthermore, Riegl's somewhat speculative research approach opposed the turn of twentieth-century empirical methodologies.[5] These factors contributed to the limited reception of Riegl's theory during the first half of the twentieth century.

[4] Steven Beller, *Rethinking Vienna 1900* (New York: Berghahn Books, 2001), 5.
[5] Margaret Iversen, *Alois Riegl: Art History and Theory* (Cambridge Mass: MIT Press, 1993), 3.

Jaś Elsner, a British art historian and classicist, identified the resurrection of Riegl's studies as "*Riegl-Industrie*" by claiming that "the rediscovery of Riegl by art historians in the English-speaking world as a major early theorist and practitioner was supremely motivated by a perceived need to revive some aspects of formalism in the discipline during the 1980s and after."[6] Since the late 1970s, numerous Western scholars have devoted their doctoral research to Riegl's biography and work, such as Margaret Olin, Margaret Iversen, and Diana Reynolds Cordileone, whose publications provide a fundamental source of knowledge on Riegl's work. The rediscovery of Riegl's work at large happened during the 1980s in art history and cognate disciplines, such as architecture, conservation, and monument studies.

In 2005, a hundred years after Riegl's death, the Austrian Academy of Sciences, the Austrian Museum of Applied Arts, and the Institute of Art History at the University of Vienna organized the congress "Alois Riegl 1905/2005". The proceedings of this congress were published in the book *Alois Riegl Revisited* in 2010.[7] Austrian and international scholars from disciplines such as art history, preservation, and architecture discussed the meaning of Riegl's work at the conference and in the publication.

Throughout the twentieth and twenty-first centuries, Riegl's legacy has been carried forward primarily in the fields of art history, preservation, and architecture. From my viewpoint as an architect, I am particularly concerned with tracing the effects Riegl's work *The Modern Cult of Monuments* had on architecture. I am particularly interested in a period that begins in the second half of the twentieth century and extends into the age beyond digital, which will be discussed in the next chapter. However, in order to identify his influence on architecture as a whole, it is essential to analyze and categorize Riegl's legacy across various disciplines.

Art History

Riegl's influence can be seen most clearly in art history. Undoubtedly, this is where Riegl had had the greatest impact. Art history was his main professional occupation, and he published the majority of his works on this subject. This legacy was continued primarily by Riegl's German-speaking students, such as Max Dvořák, Otto Pächt, and Karl M. Swoboda, in the early decades of the twentieth century. The exile of German-speaking art historians of Jewish origin, such as Ernst Gombrich, Erwin Panofsky, and Edgar Wind, to the US and Britain in the 1930s enabled them to convey Riegl's theory to English-speaking audiences. In this way, they helped to shape Riegl's image in Western culture before the first

[6] Jaś Elsner, "Alois Riegl and Classical Archeology," in *Alois Riegl Revisited: Beiträge Zu Werk Und Rezeption* (Wien: Verlag der Österreichischen Akademie der Wissenschaften, 2010), 45.

[7] The congress was supported by the Federal Chancellery Austria and the Center for Austrian Studies at the University of Minnesota and took place in Vienna during 20-22 October 2005.

English translations of his work appeared. Jaś Elsner argues that these scholars' interest in Riegl resulted in the following turn:

> These scholars, and their followers, initiated a fundamental turn from issues of form and structure in art to questions of meaning; and that turn was interestingly prompted in part, and certainly typified, by their specific reactions to Riegl and to everything his heritage could be made to stand for.[8]

As a leading figure of iconology, Panofsky's methodological approach to interpreting images, symbols, and motifs in their historical context can be viewed as a reaction to Riegl's interpretation of art. Riegl's interpretation had a foundation in formalism, which primarily focused on an artwork's visual aspects, independent of its historical context. Thus, even though Panofsky reacts to Riegl's methodology, his approach contrasts Riegl's.

In addition, Riegl influenced the early twentieth-century German philosopher and media theorist Walter Benjamin and his conception of art and methodology. Historian Michael Gubser argues that "Riegl's designation of age value as a modern aesthetic-*cum*-religious cult [*Kultus*] recalled his discussion of the ritual cult of time measurement in antiquity and prefigured Benjamin's discussion of the cult value of art in the well-known "Work of Art" essay."[9] Thus, Riegl's influence on Benjamin can be traced in his essays "The Work of Art in the Age of Mechanical Reproduction" and "Theses on the Philosophy of History," where he engages with Riegl's notion of time, temporality, perception, and aura of artworks.[10] Benjamin's notion of aura refers to an artwork's original quality, authenticity, and authorship related to its particular context or tradition. In his study of the mechanical reproduction of artworks, he argues that "in even the most perfect reproduction, *one* thing is lacking: the here and now of the work of art – its unique existence in a particular place. This unique existence – and nothing else – bears the mark of the history to which the work has been subject. This history includes changes to the physical structure of the work over time, together with any changes in ownership."[11] Furthermore, he also refers to the *Modern Cult* in relation to the aura that links his work to one of Riegl's by writing: "Originally the contextual integration

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[8] Jaś Elsner, "Alois Riegl and Classical Archeology," in *Alois Riegl Revisited: Beiträge Zu Werk Und Rezeption* (Wien: Verlag der Österreichischen Akademie der Wissenschaften, 2010), 45.
[9] Citation of footnote: Mike Gubser, *Time's Visible Surface Alois Riegl and the Discourse on History and Temporality in Fin-De-Siècle Vienna* (Detroit: Wayne State University Press, 2006), 255.
[10] Mike Gubser, *Time's Visible Surface Alois Riegl and the Discourse on History and Temporality in Fin-De-Siècle Vienna* (Detroit: Wayne State University Press, 2006), 208.
[11] Walter Benjamin, "The Work of Art in the Age of Mechanical Reproduction," in *Illuminations* (New York, NY: Schocken Books, 1969), 3.

of art in tradition found its expression in the cult. We know that the earliest artworks originated in the service of a ritual – first the magical, then the religious kind. It is significant that the existence of the work of art with reference to its aura is never entirely separated from its ritual function."[12] Benjamin, like Riegl, emphasized that perceiving an artwork needs to include historical context, which, according to Benjamin, also holds an *aura*. This phenomenon can also be seen as a natural progression of Riegl's study of the relationship between a work of art and its viewer. In this regard, Benjamin was mainly concerned with how technological advancements (such as photography and film) change the relationship between the viewer and the artwork, affecting its (loss of) aura and traditional role. In contrast, Riegl noted that modern reproduction technologies, such as photography, suggest that we will soon find new ways to avoid the loss of original works and so their aura. This progress will allow scholars to analyze copies without affecting the original artifacts, thus addressing the contentious issue of preserving their age value.[13] Riegl's suggestion to study copies of original artworks can be transferred from analog to digital formats, which will be analyzed in detail in the last chapter.

Another of Riegl's influences on Benjamin is evident in his 1929 text called *Books That Have Remained Alive*, in which he comments on Riegl's publication *Late Roman Art Industry* as:

> epoch-making work [that] applied with prophetic certainty the sensitivity and insights of expressionism (which occurred twenty years later) to the monuments of the late Imperial period, broke with the theory of 'periods of decline,' and recognized in what had previously been called 'regression into barbarism' a new experience of space, a new artistic volition [Kunstwollen]. Simultaneously, this book is one of the most striking proofs that every major scholarly discovery results in a methodological revolution on its own without any intention to do so. Indeed, in the last four decades, no art-historical book has had such a substantive and methodologically fruitful effect.[14]

Benjamin's statement thus demonstrates his admiration and affinity for Riegl's methodology while also affirming his relation to the Vienna School of Art History (originally *Wiener Schule der Kunstgeschichte)*.[15] In another essay titled *Rigorous Study of Art,* Benjamin further discusses the work of Riegl and Wölfflin on art historical topics in length.[16]

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[12] Ibid., 3.
[13] Alois Riegl, *The Modern Cult of Monuments: Its Character and Its Origin*, trans. Kurt Forster and Diane Ghirardo (Oppositions 25, 1982), 37.
[14] Walter Benjamin, "Bücher, Die Lebendig Geblieben Sind, "Gesammelte Schriften, vol. 3, p. 170.
[15] Thomas Y. Levin, "Walter Benjamin and the Theory of Art History," *October* 47 (1988): pp. 77-83, https://doi.org/10.2307/778982, 80.
[16] Walter Benjamin and Thomas Y. Levin. "Rigorous Study of Art." *October* 47 (1988): 84–90. https://doi.org/10.2307/778983.

Preservation

Riegl has also considerably influenced international preservation studies. It is important to note that "only in the nineteenth century did preservation evolve from an antiquarian, quirky, episodic pursuit into a set of national programs. Only in the twentieth has every country sought to secure its own heritage against despoliation and decay."[17] Published at the turn of the twentieth century, Riegl's work on monument preservation was intended to serve as new legislation for the protection of national monuments in Austria. Although it was not accepted at the legal level, it influenced international preservation policy throughout the twentieth century, particularly regarding the deterioration of monuments and urban destruction.

Beginning in the 1930s, several important conferences on preservation, informed by Riegl's axiological study, were held throughout Europe. This included the *Athens Conference* (1931) and *the Fourth Assembly of the International Congresses on Modern Architecture* (1933), which resulted in the publication of the document known as *the Athens Charter* drafted by Le Corbusier. Its significance lies in the fact that "it gave a survey of the current state of towns and their chaotic development, and an analysis of the causes of the difficulties. Moreover, it formulated a program for the rational layout of towns, which would allow them to fulfill, as best as possible, their four vital functions: 'dwelling, working, recreation and circulation.' The resolution recommended the protection of the architectural heritage."[18]

In addition, *the Venice Charter* of 1964, formally known as the International Charter for the Conservation and Restoration of Monuments and Sites, recognizes various cultural heritage values that move beyond purely aesthetic or historical considerations and is informed by Riegl's value system for monuments. In Article 2, the Charter defines the importance of technology and tools for the analysis and preservation of monuments, which can be seen in relation to Riegl's suggestion to employ available technologies for the further study of monuments. This point will also become particularly important in the following chapter. Riegl's approach of minimal intervention in the monument aligns with the Charter's principles – it advocates conservation measures that do not remove or alter historic layers.

Riegl's axiological study can also be approached in relation to the concept of the "Outstanding Universal Value" (OUV) as defined by UNESCO and applied worldwide.[19] This value is essential for the inscription of monuments on the World Heritage List. Riegl's value system, particularly his recognition of multiple overlapping values that each contribute to a monument's significance, resonates with the

[17] David Lowenthal, *The Past Is a Foreign Country* (Cambridge: Cambridge University Press, 1985), xvii.

[18] Wacław Ostrowski, *Contemporary Town Planning: From the Origins to the Athens Charter* (Hague: International Federation For Housing and Planning, 1970), 159.

[19] See UNESCO: Outstanding Universal Value means cultural and/or natural significance which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity. As such, the permanent protection of this heritage is of the highest importance to the international community as a whole.

broader evaluation characteristics in the process of ascribing Outstanding Universal Value. Riegl's theory also focused on preserving and maintaining the original artifact's authenticity. The UNESCO approach to World Heritage aligns with Riegl's theory by emphasizing the preservation of authenticity and integrity in managing and conserving heritage sites.

Architecture

Riegl's influence on architecture is diverse and has manifested itself in different periods ever since the publication of his works. Riegl's wealth of architectural ideas resulted in several publications, such as *Problems of Style: Foundations for a History of Ornament, Late Roman Art Industry*, and *The Modern Cult of Monuments*. Thus, his influence on the discipline of architecture can be seen through various themes, such as the study of ornament, *Kunstwollen*, or the protection of monuments.

Riegl's work published in *Stilfragen* (Problems of Style) was preoccupied with ornament studies at large. The most prominent figure who was influenced by Riegl's study of ornament (both in architecture and art history) was his student, Moritz Dreger. Dreger taught art history at the Academy of Fine Arts from 1900 to 1917 on Riegl's recommendation and used this academic position to spread Riegl's ideas. Margaret Olin discusses Riegl's influence on architecture in relation to the Viennese *Secession* at the turn of the century in the following way:

> An architect drew from *Stilfragen* the moral that the artist should not copy from nature, and in the organ of the Vienna Secession, *Ver Sacrum*, a former student of Riegl [Dreger, note of the author], used the lineage of the acanthus to address the central artistic issue of authenticity, defending the use of borrowed motifs.[20]

Riegl's growing influence in the Viennese academic environment extended far beyond his home institutions, the University of Vienna and the Austrian Museum, as Dreger introduced Riegl's ideas to the Academy of Fine Arts.[21] The Secession's official magazine, *Ver Sacrum* (Latin for "Sacred Spring"), was founded by Secession painters Gustav Klimt and Max Kurzweil and published between 1898 and 1903. It published artworks that celebrated the movement as a new style, accompanied by literary works by various international authors (fig. 2.2).[22]

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[20] Margaret Olin, *Forms of Representation in Alois Riegl's Theory of Art* (University Park, PA: Pennsylvania State University Press, 1992), 85.

[21] The original name in German is *Akademie der bildenden Künste Wien*.

[22] The list includes writers such as Rainer Maria Rilke, Arno Holz, Hugo von Hofmannsthal, Maurice Maeterlinck, among others.



Figure 2.2: *Secession*. Cover of the magazine *"Ver sacrum."* 1899.

The Secession in Vienna was one of the uprising movements in the city, along with the Modernist movement. The movement's leading figures were active in both the fine and applied arts, challenging the traditional division between these two fields. This position was at odds with the English Arts and Crafts movement, which, despite its significant influence on Viennese culture and the establishment of the Museum of Applied Arts, favored keeping the disciplines separate. Riegl's ornamentation theory not only influenced architects in Vienna, such as Otto Wagner, but also spread to intellectuals beyond Austria's borders. One such legacy can be found in the work of the Belgian designer, theorist, and representative of *Art Nouveau*, Henry van de Velde. Since the last decade of the nineteenth century, he had been influenced by Riegl's aesthetic theories, especially the notion of *Kunstwollen*.[23]

[23] Kenneth Frampton, *Modern Architecture: A Critical History*, third edition, first published in 1980 (London: Thames and Hudson Ltd, 1992), 97.

Riegl studied the notion of *Kunstwollen* in relation to architecture, particularly in the work *Late Roman Art Industry*. In the first chapter, he defined architecture as "certainly a functional art, and its function was indeed always to create spaces within boundaries in which man would have the possibility of moving freely."[24] He described how we perceive most of the external objects with our eyes while bringing the concepts of optic and haptic in architecture to the foreground. In his study of late antique architecture, he focused on the spatiality of architecture presented through longitudinal buildings, allowing for movement out of the plane into three dimensions. In the same study, he also introduced another spatial concept, *Baukunst,* which is a direct translation of "the art of building." This concept can be seen as a precursor of Riegl's preservation theory, according to which monuments possess artistic value.

Returning to the use of *Kunstwollen* in architecture, the research leads us to the work of British architectural historian Kenneth Frampton. In addition to the study of ornament, he mapped the significance of *Kunstwollen* in the early years of the twentieth century, as it appeared in German architectural circles. This includes the German architect Peter Behrens, who was familiar with the work of both Semper and Riegl, and who published his ideas about both figures in his essay *Was ist monumentale Kunst?* ("What is Monumental Art?") in 1908. In this essay, Behrens leaned toward Riegl's notion of *Kunstwollen* rather than Semper's focus on the technical and material agency of architecture and sought to apply Riegl's approach to AEG (*Allgemeine Elektricitäts-Gesellschaft*)[25] product design.

In his text, Frampton described *Kunstwollen* as an "elitist theory," referring to the practice of talented individuals as "an ordained 'atectonic' principle."[26] In response to this statement, I would argue that *Kunstwollen* is accessible to all individuals and their "will to create" art, regardless of the outcome, because *Kunstwollen* represents the activity or the process rather than the outcome and, thus, should not differentiate between the skills and knowledge brought to the activity.

Riegl's legacy can be traced by architectural scholars who analyze his art historical concept of ornamentation and its possible continuation, even more recently, in the twenty-first century. The concept of ornament, for example, was influential for the art and architecture historian and theorist Spyros Papapetros, whose dissertation focused on the notion of animation, primarily in relation to Andy Warburg and Alois Riegl.[27]

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[24] Alois Riegl, *Late Roman Art Industry*, trans. Rolf Winkes (Roma: Giorgio Bretschneider, 1985), 20.
[25] AEG was a German producer of electrical products founded in 1883 in Berlin. In 1996, it was acquired by *Electrolux*.
[26] Kenneth Frampton, *Modern Architecture: A Critical History*, third edition, first published in 1980 (London: Thames and Hudson Ltd, 1992), 112.
[27] See: *On the Animation of the Inorganic: Art, Architecture, and the Extension of Life* (The University of Chicago Press, 2012)

Finally, the main concern of this dissertation, and of this chapter in particular, is to measure the impact of the essay *The Modern Cult of Monuments* on the discipline of architecture. Since the 1980s, architectural historians and theorists have appreciated Riegl's concept of preservation, reflecting primarily on his value system for monuments.[28] The concept of age value and its implications were only rediscovered in architecture in the second half of the twentieth century with the advent of postmodernism. Architects turned to the past, to the ruins left by the World Wars, rethinking the role of architecture in relation to these fragments and historical narratives.

[28] See more in Oppositions 25 published in 1982.

2.2. TURN TO FRAGMENTS

RETURN TO MEMORY AND MONUMENTS

The twentieth century was confronted with different approaches to the past, memory, and monuments. Architectural historians Beatriz Colomina and Mark Wigley capture the feeling of interwar architecture in the following way:

> The shock of war, the shock of the machine, the shock of the metropolis have in common anesthesia, the temporary removal of feeling, whether physical or psychological. In "Experience and Poverty" (1933), Walter Benjamin wrote about people returning from World War I poorer in experience, unable to communicate, silent, and in shock after feeling the full force of modern technology. [...] Feeling was no longer possible. Humans were anesthetized. This poverty of experience finds its parallel in modern architecture, in glass-and-steel buildings on whose smooth surfaces the inhabitant cannot leave any traces, any memory.[29]

In response to this statement, it is essential to point out that the machine age at the turn of the twentieth century introduced a level of automation, speed, and efficiency that was previously unimaginable. The machine age also saw the modification of the nature of work, social interactions, and the built environment. This new situation resulted in a new human experience, one that brought a sense of shock and overload. The properties of glass and steel, the building materials used primarily in modernism, served as an allegory for the poverty of human experience. Structures made of modern materials were seen as impersonal, sleek, and rigid. They represented the modern era's emphasis on function over form and efficiency over individuality. The architectural spaces, where human presence left no "traces" or "memory," reflect the amnesia and lack of personal connection that Benjamin associated with modernity. The modernists saw the opportunity to rebuild the cities destroyed during the wars with new technology and construction materials as a great potential to implement their grand plans and erase history. These are also the reasons why Riegl's concept of age value did not succeed in that period. It only gained relevance after the Modernist approach had waned. Age value, materialized in the patina of an object, reflects "an appearance or aura that is derived from association, habit, or established character,"[30] and opposed the

[29] Beatriz Colomina and Mark Wigley, *Are We Human?: The Archaeology of Design* (Zürich, Switzerland: Lars Müller Publishers, 2016), 96.
[30] Definition of patina by Merriam-Webster dictionary. See: https://www.merriam-webster.com/dictionary/patina.

modernist desire to use new materials. This contradictory relationship, however, changed in the following period.

The beginnings of postmodern thought can be traced back to discussions of Husserl's phenomenology, which involved a critical examination of its basic premises, especially regarding the nature of consciousness, experience, and knowledge. Postmodernism uses these ideas as a starting point to address the notions of objectivity, truth, and the construction of reality. It is important to note that Husserl, together with Riegl, was a student of Brentano at the University of Vienna, and so they were directly related. The connection between Husserl's phenomenology and postmodern thought is evident in the work of philosophers such as Martin Heidegger (who was a student of Husserl) and Jacques Derrida. Both Heidegger and Derrida contributed significantly to postmodern philosophy by extending and critiquing Husserl's ideas in different ways.

The return to memory and the rethinking of history in the period of postmodernism took place for various reasons. Because of the period's renewed interest in historical references, context, and local traditions, it opposed the ideology of early and mid-twentieth-century modernism, which often favored universality, functionalism, and the absence of ornament. Historian Mary McLeod described the term postmodernism in the following words:

> The first, and still the most common, understanding of the term refers to the tendency that rejects the formal and social constituents of the modern movement and embraces a broader formal language, which is frequently figurative and historically eclectic. While advocates of postmodern architecture have often agreed more about what they reject than about what they endorse, certain themes have consistently been explored: historical styles, regionalism, decoration, urban contextualism and morphologies, among others.[31]

Since the 1970s, architecture has been strongly influenced by what McLeod mentioned, and so its position and meaning within its society has changed dramatically. The issues addressed by architecture include monuments, which are part of the built environment. They are in constant dialog with their surroundings while existing in a broader context of history and culture. The postmodern emphasis on the historical context is present in the work of various architects and historians and contrasts with the

[31] Mary McLeod, "Architecture and Politics in the Reagan Era: From Postmodernism to Deconstructivism," *Assemblage*, no. 8 (February 1989): 22–59, https://doi.org/10.2307/3171013, 24.

modernist opposition to the past. Thus, a postmodern return to memory and history responds to modernism's break with tradition.

Furthermore, the production of architecture during the period under discussion was reintroduced, according to McLeod, as "a return to the concept of architecture as art. Architecture's value no longer lay in its redemptive social power, its transformation of productive processes, but rather in its communicative power as a cultural object."[32] According to Riegl's preservation theory, every work of art is also a historical monument. Thus, McLeod's statement of a return to architecture as art also signifies a return to monuments as they represent architectural objects. In addition, Riegl's emphasis on monuments as cultural objects became particularly relevant during this period and gained new momentum.

David Lowenthal, an American historian and geographer with an interest in cultural heritage, began studying the subject of the "past" in the early 1970s. He states that "the impact of urban redevelopment on older city cores, nostalgic reactions to catastrophe and corruption and other failures of the brave new post-war world, the pillage of antiquities for sale to collectors increasingly enamored of the past led me to wonder whether these trends might have common roots and to speculate on the fate of a tangible heritage so intensively mined. Present needs seemed to reshape past remains in a fashion strikingly analogous to revisions of memory and history."[33] In sum, Lowenthal was concerned with the complex relationship between urban development, historic preservation, nostalgia, and the formation of collective memory and identity. He noted that the transformation of urban centers through post-war construction projects often results in demolishing historic buildings and neighborhoods. While such redevelopment can bring about economic growth and modernization, it can also result in the loss of architectural heritage. Thus, Lowenthal critiques the process of modernization and its effects on historical narratives. His statement also raises questions about the sustainability of cultural heritage in the age of progress, and the ethical implications of transforming historical sites and their narratives to serve current needs.

Historically, the term memory derives from the Latin *memoria* and serves as one of the five canons of rhetoric. The art of memory has its origins in ancient Greece. It works through a cognitive process called *mnemotechnics*, which are methods for restoring memory and organization in the human brain. It connects memories with the human mind by linking images to places from the past. In ancient

[32] Mary McLeod, "Architecture and Politics in the Reagan Era: From Postmodernism to Deconstructivism," *Assemblage*, no. 8 (February 1989): 22–59, https://doi.org/10.2307/3171013, 27.
[33] David Lowenthal, *The Past Is a Foreign Country* (Cambridge: Cambridge University Press, 1985), xviii.

Greece, the use of memory in public speech was very important. The founder of the art of memory is the author Simonides of Ceos. In the twentieth century, British historian Francis Yates emphasized the importance of memory techniques in the context of education and culture from ancient Greece to the Renaissance in her most influential work, *The Art of Memory*, which traces the history of mnemonic systems.[34]

Although external to the human body, memory possesses spatial qualities that the mind can perceive. Therefore, both memory and perception are located outside of the human mind. Australian philosopher Elisabeth Grosz argues about the exteriority of these notions by stating that "perception takes place outside ourselves, where objects are (in space); memory takes us to where the past is (in duration)."[35] Perception locates the body in the environment, while memory refers to past events. Consequently, past and present coexist in parallel as they coincide in "virtual" space. On the other hand, the past and the present differ in their formal representation. As the present occupies actual time, the past can be perceived as virtual and projected into a digital space in the form of a monument.

Spatially, memory uses the *method of loci*, a mnemonic technique, or memory enhancement. This process focuses on visualizations that use spatial memory and familiar cues about one's environment to recall information quickly and efficiently. The Renaissance *Memory Theatre* (fig. 2.3) by Giulio Camillo applies these principles to provide full access to the mind. The architectural mnemonic refers to the use of memorized locations within the structure. Thus, in this case, the focus lies on developing an artificial memory during the memorization process. The technique of memorization uses spatial relations to recall memories by using visual memory.

[34] See: Francis Yates, *The Art of Memory* (London: Routledge and Kegan Paul, 1966).

[35] Elisabeth A. Grosz, *Architecture from the Outside: Essays on Virtual and Real Space* (Cambridge, Ma: The MIT Press, 2006), 122.

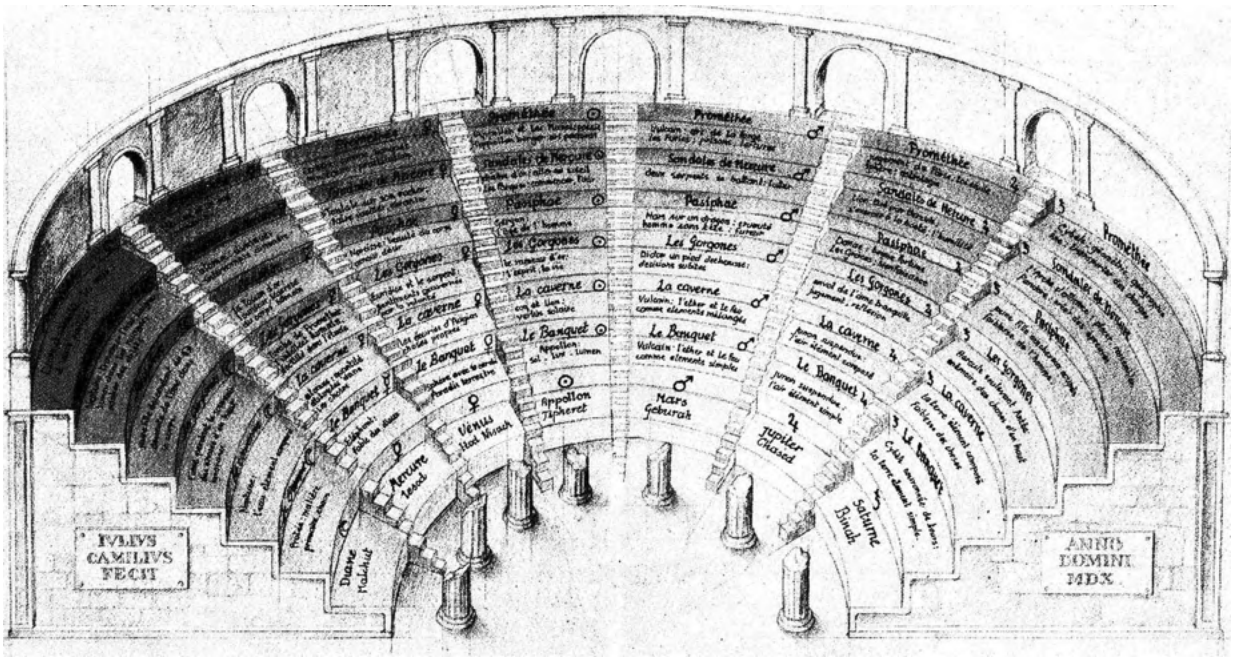


Figure 2.3: Giulio Camillo. *Memory Theatre* (1519-1544).

The Memory Theatre is not considered a monument in the conventional sense, as it serves only as a cognitive tool to organize knowledge and memory. Metaphorically, however, it represents a virtual place that allows the viewer to recall memories, just as traditional monuments do. Just as a physical monument stimulates collective memory and reflection, Camillo's conceptual monument helps to memorialize the human ability to organize and recall knowledge.

The *method of loci* can be related to a concept developed by the Norwegian architect Christian Norberg-Schulz in the late 1970s. He introduced "the spirit of a place," known as *genius loci,* emphasizing the character of a place and the historical context while representing a newly formed phenomenological approach in architecture.[36] In classical Roman religion, the spirit of a place was a supernatural being who protected a place, such as a house. One of Norberg-Schulz's critics, Paolo Portoghesi*,* claims that he "will be remembered in the history of our discipline as the greatest and most persuasive assertor of the fact that any work of architecture belongs to a place, and therefore, first of all, is 'local.'"[37] Norberg-Schulz's postmodern concept is related to the Romantic view of monuments that he shared with Riegl. In regard to a place of memory, Mario Carpo claims that "the performative ritual of the act of remembering posited first, the need to go somewhere, and then the direct physical experience, optic

[36] Christian Norberg-Schulz devoted an entire publication to this concept. See: Christian Norberg-Schulz, *Genius Loci: Towards a Phenomenology of Architecture* (New York: Rizzoli, 1979).
[37] Christian Norberg-Schulz, *Architecture: Meaning and Place: Selected Essays* (New York: Rizzoli, 1988), 7.

or tactile, of the original monument. Remembrance was predicated upon, and activated by, the experience of a special place or object, often remote or unique, and the view, or vision, of something special."[38] Carpo's statement refers to the qualities of a monument as defined by Riegl, such as the physicality of its form, its optic and haptic qualities, or the originality of the monument, meaning a monument without restoration.

As monuments retain memory and relate to a specific place, they represent *lieux de memoire*, a site of memory introduced by French historian Pierre Nora during the 1980s. In his publication *General Introduction: Between Memory and History,*[39] he points out the differences between these two concepts while arguing that society should try to understand itself through memory. He classifies memory as subjective, individual, and, at the same time, as collective. As a part of human consciousness, memory also involves forgetting its content and deforming its shape. On the other hand, he considers history to be relative, based on the empirical experience of collected evidence. Nora responds here to the idea of the early twentieth-century French philosopher and sociologist Maurice Halbwachs, who introduced the concept of collective memory. Halbwachs argues "that a society can have a collective memory and that this memory is dependent upon the 'cadre' or framework within which a group is situated in a society."[40] Halbwachs explains that collective memory provides a stable zone in an ever-changing world, although he does not advocate the importance of the individual. Nora similarly argues that identity is not necessarily grounded in a national framework. Rather, it refers to a particular social group in terms of belonging. While drawing on the sociological perspective of Halbwachs, Nora employs his concept of *lieux de memoire* to expand his work beyond the confines of the nation-state.

"Memory and history, far from being synonymous, are thus in many respects opposed," as Nora and Kritzman note.[41] The opposition between memory and history reflects upon the formal approach to the past, even as they both operate within its realm. The subjective and personal character of memory exists only within *lieux de memoire,* which means that places of memory are symbolic and form a collective identity. Sites of memory, therefore, consist of historical traces that shape the identity of present and future generations. The monuments located in the urban fabric, especially at sites of memory, can be read through different layers to understand the past and the city's traces of history. As architect Aldo Rossi notes, "in reality, architecture is formed with all its history; it grows with its justifications, and

[38] Mario Carpo "The Postmodern Cult of Monuments," *Future Anterior* 4, no. 2 (2007), 54.
[39] Pierre Nora and Lawrence D. Kritzman, *Realms of Memory: Rethinking the French Past* (New York: Columbia University Press, 1996).
[40] Maurice Halbwachs and Lewis A. Coser, *On Collective Memory* (Chicago: University of Chicago Press, 1925).
[41] Pierre Nora and Lawrence D. Kritzman, *Realms of Memory: Rethinking the French Past* (New York: Columbia University Press, 1996), 3.

only through this process of formation does it fit into the built or natural world which surrounds it."[42] Architecture thus establishes a dialectical relationship between different histories, which, in turn, creates a new entity. This relationship is based on contextual relevance.

Conferences

In the 1980s, international conferences on monuments and new approaches to cultural heritage began to occur more frequently in institutional and academic contexts.[43] An institutional example is a conference organized in April 1984 in Washington, D.C., by several organizations such as UNESCO, the Smithsonian Institute, the U.S. Committee of the International Council on Monuments and Sites (US/ICOMOS), and the U.S. National Trust for Historic Preservation. This conference, entitled "The Challenge to Our Cultural Heritage: Why Preserve the Past?" resulted in an eponymous book publication.[44] The event was attended by professionals from various fields, such as preservation architects, architectural historians, urban planners, journalists, and museum curators from fourteen countries. This participation signaled a global interest in preservation and the notion of monuments and memory that transcended the disciplinary boundaries of the time.

The publication includes an essay by the Norwegian art historian Stephan Tschudi-Madsen, who directly mentions Riegl in connection with restoration debates in the German-speaking world:

> Around the turn of the century, the German-speaking countries began to join the leaders in the fields of art history and restoration philosophy, with scholars such as W. Frodl and A. Riegl. They had been restoring just as much and in just the same way as the rest of Europe, but ideas such as Alterswert (age value) came to the fore.[45]

The author also refers to the predominance of conservation over restoration at the turn of the century, which can also be seen in Riegl's and Frodl's approach.[46] The term conservation is used here in contrast to the traditional approach of restoring objects to their original state.

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[42] Aldo Rossi, *Aldo Rossi: Selected Writings and Projects* (London: Architectural Design, 1983), 49.

[43] Since the late 1930s, only a few discussions of monumentality have taken place, for example, in: "In Search of a New Monumentality: a Symposium by Gregor Paulsson, Henry-Russell Hitchcock, William Holford, Siegfried Giedion, Walter Gropius, Lucio Costa, Alfred Roth," published in *Architectural Review CIV* (September 1948): 117-128. Two of these discussions were published in Yale's journal *Perspecta*: one article on "Monumental Architecture; or the Art of Pleasing in Civic Design," a response by Henry Hope Reed, Jr. to Ruskin in *Perspecta 1*, Summer 1952: 51-56; and another article on "Monumentality" by the painter Neil Welliver in *Perspecta 11*, 1967: 23-31.

[44] Yudhishthir Raj Isar, *The Challenge to Our Cultural Heritage: Why Preserve the Past: Proceedings of a Conference on Cultural Preservation, 8-10 April 1984, Washington, DC* (Washington, DC: Smithsonian Institution Press, 1986).

[45] Stephan Tschudi-Madsen, "Architectural Conservation: The Triumph of an Idea," in *The Challange to Our Cultural Heritage: Why Preserve the Past*, ed. Yudhishthir Raj Isar (Washington, DC: Smithsonian Institution Press, 1986), 149.

[46] Walter Frodl was an Austrian art historian and monument conservator born shortly after Riegl's death in 1908.

An academic example manifesting an interest in the topic of monuments is a forum organized by architecture students in the GSD program at Harvard, entitled "Monumentality and the City" in December 1981. The transcript of the forum and numerous essays were published in the academic journal *The Harvard Architecture Review* under the same title as the event in spring 1984. Various authors, such as Kurt Forster, Françoise Choay, Christiane Crasemann Collins, and George Roseborough Collins, among others, have published their essays on monumentality and the return to memory in this very issue. Although monumentality is not Riegl's concern and not the essential characteristics of monuments as it refers to large-scale structures, some of the essays in the issue focus specifically on the notion of monuments from a postmodern perspective that can be related to Riegl's work. The following question, posed by architectural historian James S. Ackerman during the forum, was particularly representative concerning monuments and architecture at the time:

> In that sense I think the whole question of monumentality is the wrong question for now, another holdover from the past which we've lost. How can a society like our own, which has no dreams, no confidences, and no faith, deal with monuments or monumentality?[47]

Ackerman's statement offers a critical perspective on the state of collective consciousness and values at the time and how these relate to the concept and significance of monuments. In the first part of the statement, Ackerman suggests that the traditional discourse surrounding monuments, which often revolves around notions of permanence, admiration, and commemoration, may no longer be relevant or meaningful in the context of the 1980s. Instead, he suggests that the traditional view of monuments belongs to a bygone era and needs to be reevaluated from a postmodern perspective. This approach implies a sense of disconnection between past and present societal values. Ackerman also questioned the purpose of monuments in a fragmented society deeply affected by post-war conditions. Monuments, in the traditional sense (as intentional types), symbolize collective ideals, achievements, or shared histories. If society is characterized by a lack of collective dreams, confidence, and faith, then what role can monuments play? What values would they embody or reflect? Ackerman points out that the problems affecting monuments and architecture also mirror societal issues because architecture is an accurate representation of society. He calls for a redefinition of the significance and representation of monuments in a modern society facing new circumstances. The return to historical theories, such as Riegl's preservation theory, already eighty years old at the time, served as an operational tool for rethinking the

[47] "Forum transcript," *The Harvard Architecture Review IV: Monumentality and The City*, 1984, 38.

values of the monument in a new context. Thus, Riegl's theory begins to be reinterpreted or adapted to fit new circumstances or to address new problems that were very different from those of his time.

The architectural historian Françoise Choay, also included in the issue, mentioned Alois Riegl in her essay on Alberti. In particular, she discusses the relation between the monument's function that helps us remember and Riegl's remembrance value (*Erinnerungswert*).[48] Thus, her essay proves that Riegl's *Modern Cult* is a possible source for postmodern architects, historians, and theorists who engage with ruins, monuments, and memory in a broader sense.

Strongly influenced by Riegl's work, Kurt Forster discusses the fragility of the urban environment in his essay "Monuments to the City," defining the fragments of post-war cities as "remains." He also gave a lecture of the same title at the GSD at Harvard in the spring of 1983. The review of the lecture appeared in the HGSD News in 1983, two years after the Forum on Monumentality was organized at the same institution (fig. 2.4).[49] Forster modified the original name of the Forum from "Monumentality" to "Monuments", both in the title of his lecture and the following essay. He thereby indicated that he was primarily interested not in enormously large structures, but rather in objects of historical and cultural relevance, such as ruins and excavations. He particularly analyzed Piranesi's work on Roman ruins, including one of Piranesi's images (Trajan Column etching) also in the English translation of Riegl's *Modern Cult*.

[48] Françoise Choay, "Alberti: The Invention of Monumentality and Memory," *The Harvard Architecture Review IV: Monumentality and The City*, 1984, 99.
[49] Kurt Forster, "Kurt Forster Excavates 'Monuments to the City,'" *Harvard University. Graduate School of Design. HGSD News* 11, no. 4 (1983), 5.



Kurt Forster Excavates "Monuments to the City"

In our cities, monuments abound. We commemorate great statesmen, poets, historic events, concepts of liberty and justice. They are familiar and expected markers in our urban streetscapes.

But, according to Kurt Forster, professor of the history of architecture at MIT, our cities also contain other kinds of monuments—what he calls "monuments to the city itself." They too are familiar—indeed often universally recognizable—constructs. However, their complex roles and varied meanings may not be so accessible.

In a talk before a large audience at the GSD on February 9, Forster, who recently joined the faculty of MIT after 15 years at Stanford, attempted to unearth these monuments to the city, examining their typologies and layers of meaning and association.

He began his talk by showing slides of well-known examples of such monuments. "The Eiffel Tower, Rockefeller Center, almost every city on one scale or another has such emblematic images available to itself," he said. They are what the Romans and the Italians of the Renaissance called images of an "*instauratio*, that is to say the renovation of the city, the periodic and partial renovation, or remaking of the city." Such monuments serve "each time to restore it [the city] to a presumably more essential state, a truer image of its own potential self."

Peculiar to our modern monuments, Forster said, is the notion that from the spot where the monument rises, often a distinctive and highly valued parcel of a city's real estate, one can gain more knowledge about the character of the city. "These *instauratios* of the city," he observed, "increasingly in modern times are predicated upon a duality between a singularly privileged, often isolated, almost artificially severed site, and the promise to acquire from that point of view, more of an insight into the city—a more penetrating understanding and a more sweeping and encompassing perception."

While some monuments carry with them this idea of *instauratio*, of renovation, of a crowning image of a city's essence, others connect the city to its historical origins, Forster said. In ancient Rome, he pointed out, the simple thatched hut of Romulus was painstakingly maintained amidst the grand, marble-clad, palatial structures of the Palatine Hill. Today, in the middle of large-scale, downtown Salt Lake City, small, 19th century houses are maintained, harkening back to the city's beginnings under its founder Brigham Young.

The monument to the city has also made another gesture, Forster said. It has been used to "try and escape the city's ultimate fate which, according to all prophecies and anxieties, is that of its own destruction. And surely in the 20th century, we don't need to be reminded of the actual truth of that prophecy. Nagasaki, Rotterdam, other cities, are [the] proof."

The London Monument, designed by Wren and Hook to commemorate the devastating fire of 1666, is in its dimensions, placement, and symbolic design such an example, he said. The shaft-like structure's location in the middle of a major thoroughfare, its carefully calculated height of 222 feet (exactly the distance between its site and that of the origin of the fire), and the flaming urn sculpture topping it—all work together as a sort of apocalyptic sign, signifying both destruction and rebirth. And, lest the observer lose sight of the monument's intention, a plaque at its base reads, "So as throughout to remind us of the final destruction of the world by fire."

Forster similarly sees Adolf Loos' controversial super column design for the Chicago Tribune Tower Competition of 1922 to be, in its signification, like that of the London Monument. The Anglo-Americanphile Loos, he argued, was certainly familiar with both the London fire and the Chicago fire of 1871, and his competition entry was meant to "give Chicago the monument it doesn't have, as an *instauratio*, as a new start, a rebeginning."

Forster concluded his talk with a discussion of the prize-winning project for the 1981 Berlin Competition submitted by Peter Eisenman and Jaquelin Robertson. The project, entitled "The City of Artificial Excavation," encompasses many of the varied typological elements Forster associates with monuments to the city because "in it appear and disappear the beginning and the end of the city. It preserves and shatters the continuity of metropolitan life. It recovers lost origins, but it also forecloses their future."

"The City of Artificial Excavation," the prize-winning project for the 1981 Berlin Competition by Peter Eisenman, Arthur Rotch Adjunct Professor of Architecture; and Jaquelin Robertson.

The competition block assigned to Eisenman, (Arthur Rotch Adjunct Professor of Architecture at the GSD) and Robertson, stands in the midst of some of Berlin's historical and contemporary boundaries—a newer grid overlaying an older one, which once marked the urban limits of the 18th century city, and the 1961 Berlin Wall bounding the northern side of the site.

The design for the block unearths the past (low brickwalls form hypothetical foundations aligned with the older grid system); comments on the present (higher walls, the exact height of the Berlin Wall, follow the outline of the newer grid); and then joins past and present (steps lead up to walkways on the higher walls from which the passerby can survey the whole site, much as one would do at an archeological excavation).

The project is, Forster observed, "both a construction and an excavation, and the two are in a sense held . . . in a balance which, at no point, allows an arrest on one foot or the other, between the unmaking, the unbuilding of the city, and the reconstruction and refoundation of it.

"[The project] is both an adieu to the city and, at the same time, another beginning of the city in an *instauratio* which knows only the moment of its remaking. It folds the beginning and end of the city together, sealing the quadrants of its history like the four corners of a sheet of paper, and folding them into an empty envelope."

Figure 2.4: Kurt Forster, "Kurt Forster Excavates 'Monuments to the City.'" Published in *Harvard University. Graduate School of Design. HGSD News* 11, no. 4 (1983).

THE CULT OF RUINS

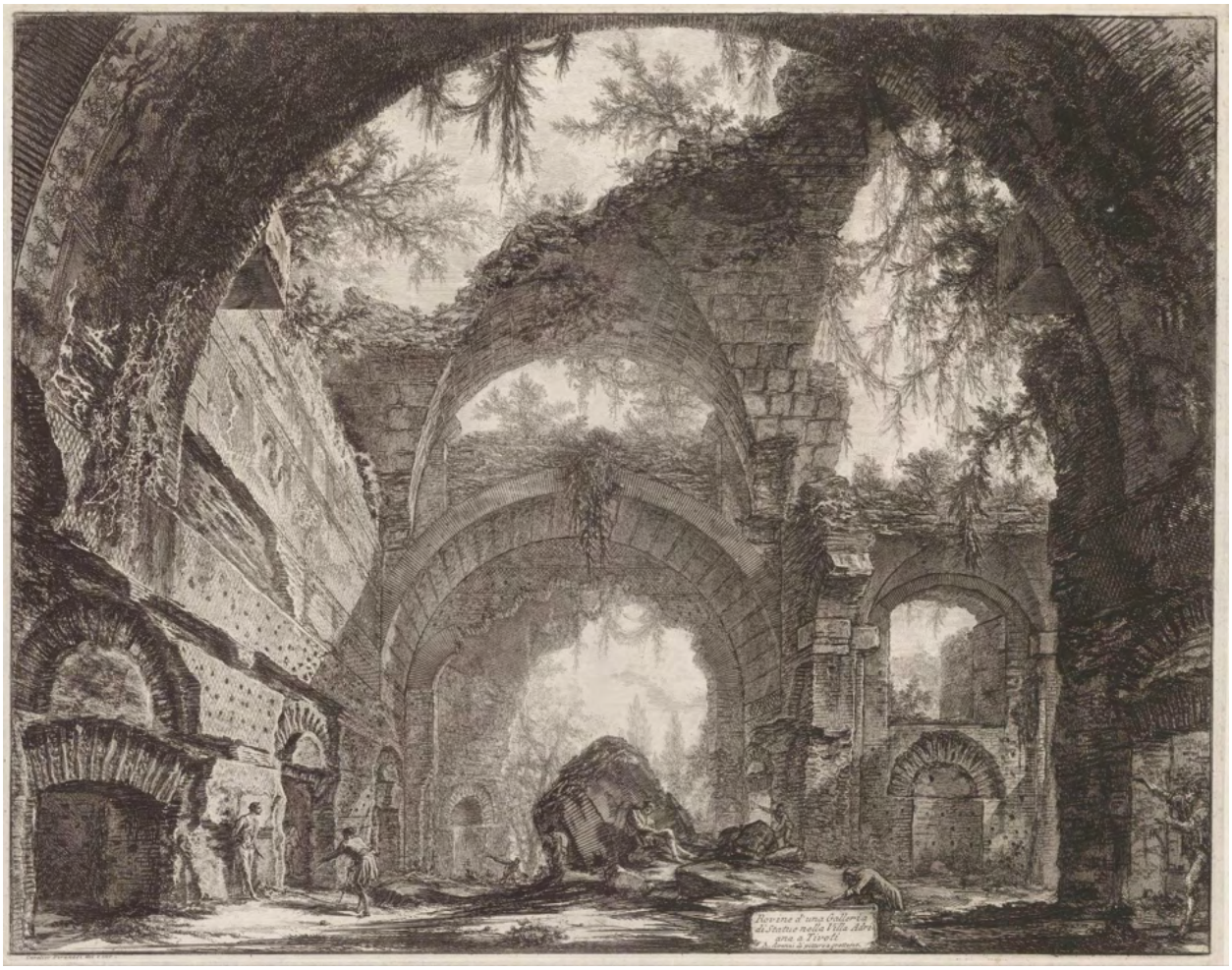


Figure 2.5: Giovanni Battista Piranesi. *Ruins of the large Baths*, erroneously called the Sculpture Gallery at Tivoli. Etching, 1785.

In a Rieglian sense, ruins signify a temporality and transformation of the form and materiality of monuments. They show the passage of time. They prove that everything, including monuments, changes with the passage of time. Riegl's appreciation of ruins at the turn of the century was highly original compared to other preservationists or historians. He discussed the disintegration of monuments through their natural deterioration of form, resulting in ruin. Riegl points out that ruins of older structures can more easily evoke an emotion in the viewer than newer objects because of their different historical values.[50] Therefore, the natural aging and transformation of objects into ruins over the course of their history are equally crucial to Riegl's axiological study. The 1980s saw a strong return to visualizing ruins,

[50]Alois Riegl, *The Modern Cult of Monuments: Its Character and Its Origin*, trans. Kurt Forster and Diane Ghirardo (Oppositions 25, 1982), 35.

such as in the images of Piranesi's etchings of Roman ruins, which corresponded to Riegl's rediscovered ideas (fig. 2.5).

According to Riegl, the ruin is not the end of the object because it transforms itself back into an amorphous nature over time.[51] In the Rieglian sense, this process can be thus considered a natural cycle of physical objects. Riegl notes that the cult of ruins first took shape in the seventeenth century, in the work of Dutch painters (fig. 2.6), who mainly depicted ancient ruins.



Figure 2.6: Nicolaes Berchem. *Italian landscape with aqueduct ruins.* Painting, 1675.

These ruins often evoked emotional responses in their viewers and addressed topics such as the sublime power of nature or tragic beauty. By the twentieth century, however, the perception and values associated with ruins had changed. The modern approach to ruins was now less emotionally intense, as

[51] Alois Riegl, *The Modern Cult of Monuments: Its Character and Its Origin*, trans. Kurt Forster and Diane Ghirardo (Oppositions 25, 1982), 32.

ruins were approached as reflecting natural laws rather than human emotions. To summarize, Riegl's definition of the modern cult of ruins points out that in the twentieth century, the modern perception of ruins was not as emotional as in previous eras, especially seventeenth-century art. The modern viewer approaches the ruin as a mere old structure rather than a monument with assigned values. Thus, the cult of ruins represented a shift from an emotional and romantic view to a more rational and pragmatic modern perspective, which will change in the subsequent period of postmodernism.

Influenced by Riegl, Walter Benjamin dealt with the notion of ruins and their aestheticization in various texts. He wrote about ruins directly and metaphorically when discussing issues of modernity, the passage of time, and decay in his texts. Building on Riegl's theory, ruins represent a process of decay and aging to Benjamin, rather than objects themselves. They represent a form and materiality in constant development and bear the marks of natural and human interventions. They possess authenticity as their main characteristic, "being real or true."[52]

Ruins remind us of past events; they are witnesses to history. They may even evoke nostalgia for things that are irretrievably lost and, therefore, inaccessible to us. Svetlana Boym, a Russian-American cultural theorist, claims that "nostalgia remains an intermediary between collective and individual memory. Collective memory can be seen as a playground, not a graveyard of multiple individual recollections."[53] Boym argues that collective memory as a social framework helps to describe the phenomenology of human experience. The mind becomes aware of collective memory by distancing itself from the community. As a reflective nostalgia, it places the spatial organization between what is observed and what has occurred. Boym encounters the connection between the individual and the collective through the notion of nostalgia. Although nostalgia possesses a highly subjective character, it serves as an essential apparatus in society.

In addition, ruins offer an imagination of the past. In some cases, they can also pull a sense of shame and anxiety from the past into the present. These emotions are not only related to the past as an inaccessible time but also to the future. How will we remember? The German literary scholar Andreas Huyssen describes ruins as follows:

[52] Authenticity as defined by the Cambridge dictionary. See: https://dictionary.cambridge.org/dictionary/english/authenticity.
[53] Svetlana Boym, *The Future of Nostalgia* (New York: Basic Books, 2016), 54.

> Clearly our imaginary of ruins can be read as a palimpsest of multiple historical events and representations, and the intense concern with ruins is part of the current privileging of memory and trauma both inside and outside the academy.[54]

In his essay, Huyssen compares ruins to the notion of palimpsest, which I discuss in great detail in the following chapter. Monuments, including ruins, represent layers of history, similar to the concept of palimpsest.

Thinking about ruins always includes "reflections about history: about the nature of the event, the meaning of the past for the present, the nature of history itself as an eternal cycle, progress, apocalypse, or murderous dialectic process."[55] This dialectic thinking has been an integral part of Riegl's work. Besides the dialectic character of *Kunstwollen* or the historical progression of styles, his axiological study of monuments, and partially of ruins, offers multiple dialectic cases. Riegl's preference for preservation over restoration demonstrates the main dialectic tension in his theory. Specifically, preserving ruins in their current state rather than restoring them presents a unique set of challenges: it might lead to the loss of values previously ascribed to the monument or to the loss of authenticity. One of Riegl's categories, unintentional monuments, stands in dialectic relation to the intentional ones. It is important to point out that ruins always belong to the category of unintentional monuments since they were not built to be ruins but turned into ruins, either naturally or artificially. Furthermore, these dialectics can also be seen in Riegl's value system, particularly regarding age value and newness value. Thus, Riegl's preservation theory is based on dialectic thinking concerning monuments and their ruins through multiple points.

Many places around the world suffered the effects of the World War II. Ruined cities and their inhabitants have largely lost their cultural heritage (fig. 2.7) and, with it, part of their collective memory. A question immediately arises: How can the cultural heritage of cities that have lost buildings from their rich past (including Gothic churches, Baroque palaces, etc.) be rescued from these ruins? Architect Kisho Kurokawa argues that the post-war period "provided an excellent opportunity to think about and act upon the cities and buildings destroyed in the war. Confusion in the city made it impossible for monuments or symbols to control or dominate urban spaces."[56] Newly rebuilt city parts offered older monuments to take part in the urban fabric in new, different ways. Many European cities serve as great examples of post-war

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[54] Andreas Huyssen, "Authentic Ruins, Products of Modernity," essay, in *Ruins of Modernity*, ed. Andreas Schönle and Julia Hell (Durham NC: Duke University Press, 2010), 17.
[55] Julia Hell and Andreas Schönle, *Ruins of Modernity* (Durham NC: Duke University Press, 2010), 1.
[56] Kisho Kurokawa, "The Philosophy of Metabolism," in *Rethinking Technology: A Reader in Architectural Theory*, ed. William W. Braham and Jonathan A. Hale (Abingdon, UK: Routledge, 2007), 232.

reconstruction, development, and historic preservation. They form a rich collective monument, constantly commemorating the city's violent history through its various re-configurations, demolitions, restorations, and reconstructions.



Figure 2.7: *Stephansdom*. Destruction in 1945, Vienna. Photograph, 1945.

Two approaches emerged regarding the reconstruction of damaged monuments. The first was to remove the old ruins, erase the past, and build something completely new, while the second was to reconstruct with and alongside the remaining ruins. These two approaches have developed in parallel in many places around the world since the 1950s. As Kurt Forster writes in his article, "modern ruins mostly exhibit the effect of destructive interventions and less the process of gradual decay."[57]

The disappearance of ruins corresponds to a societal desire to "re-create," which means that ruins are not preserved because they are negatively connotated. The St. Stephen's Cathedral in Vienna, which occurred in UNESCO's first publication on monuments in 1951, needed a reconstruction of its roof. The architectural historian Lucia Allais analyzes this reconstruction in further detail:

> What looked like an identical reconstruction, was in fact a wholly re-engineered modern structure, made by pouring a vast concrete floor on top of the gothic walls, and using this floor to erect and support a massive steel frame on top. Where there had once been a dense lattice of wood, a new space had been opened up: a modern steel shed built atop an ancient cathedral. Photographed in the same visual style that Giedion used in his advocacy of the "spatial interpenetration" of modernism, St. Stephen's new roof was an advertisement for structure as much as for historicism. In an alternate scheme that a Viennese architect had proposed in 1945, the space under the roof was made into a bunker, whose protective function was then expressed emphatically in stylized parabolic concrete ribs.[58]

In some way, this reconstruction (fig. 2.8) reminds us of the end of the nineteenth and early twentieth discussions (related to *Riesentor*) between Riegl and other pro- and anti-restoration groups. The *Riesentor* was not reconstructed to its original state following these debates. Instead, the restoration of the Cathedral's bombed roof followed the modern re-engineering approach, which made a reconstruction of the original structure necessary. However, while reconstructing the roof, a shift occurred from the traditional reconstruction approach with its classical techniques toward the development of new building approaches. This approach maintains the visual integrity of the historical structure while fundamentally altering its construction and materials. Since Riegl strongly supported the idea of the unity of styles, which the new reconstruction to some extent fulfilled, it is worth speculating that he might have approved

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[57] Kurt Forster, "Die Ruine als Nachklang, Vorbild oder Zukunftsbotin," in *Ruinierte Öffentlichkeit* (Diaphanes, 2012), 194. Translation by the author. Original text: "In modernen Ruinen tritt meist die Wirkung zerstörerischer Eingriffe und weniger der Prozess eines allmählichen Zerfalls zutage."

[58] Lucia Allais, *Designs of Destruction: The Making of Monuments in the Twentieth Century* (Chicago: The University of Chicago Press, 2018), 21.

of this approach, regardless of his otherwise preferred touchless preservation methodology. It is also important to note that photography (as shown in figure 2.8) played an important role in the reconstruction process by promoting a fusion of reconstruction and modern structural techniques.



Figure 2.8: Lothar Rübel. *Wien 1, Stephansplatz*, 1948.

Responding to the post-war situation, architectural historian Anthony Vidler writes that "the reconstruction plans in Europe for London, Coventry, Dresden, Hamburg, and Berlin; in Japan for Nagasaki, Hiroshima, and Tokyo; and for many other urban centers all operated more or less quickly between 1945 and 1950 to erase traces of attack, clear the rubble, and rebuild according to hopes for a better and more humane world."[59] Thus, the approach laid out above opposed the preservation of ruins as Riegl envisioned it, and instead focused on erasing the past. Vidler argues that there is, however, no way to remove the consequences and traces of the past, stating that "no amount of reconstruction, obliteration of the traces, or happy coverups can erase the traces of these sites. They are the evidence we have of both loss in the past and of our anxiety for the future, of our fear of erasure through violence."[60] Similar to Freud's concept of mnemic traces, which are stored in the human unconsciousness and never truly disappear, the traces of the building's past are stored in the memory of the site and its inhabitants when they recall the site's past.

The large reconstruction projects realized in the aftermath of the Second World War can be seen as a realization of "modernists' grand prewar plans," as Vidler states."[61] A great example of such a modernist vision for the city is Le Corbusier's 1925 urban plan for Paris, *Plan Voisin* (fig. 2.9). The project represents the grand pre-war plan envisioned by the architect to replace the historic district with new modernist architecture, but it was never realized.

[59] Anthony Vidler, "Air War and Architecture," in *Ruins of Modernity*, ed. Andreas Schoenle and Julia Hell (Durham NC: Duke University Press, 2010), 30.
[60] Ibid., 33.
[61] Ibid., 33.

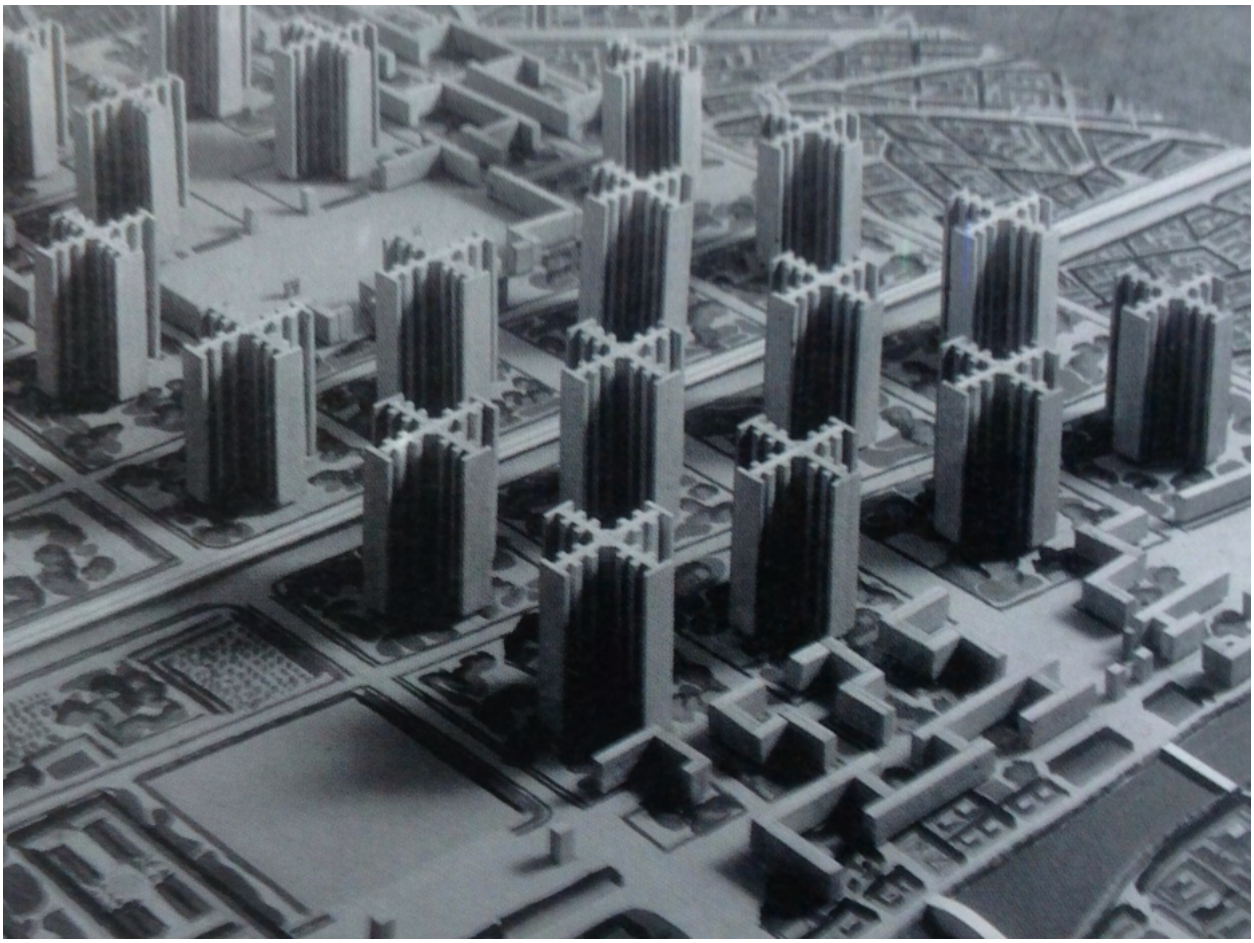


Figure 2.9: Model of the Plan Voisin for Paris by Le Corbusier displayed at the Nouveau Esprit Pavilion, 1925.

To oppose the first approach to the reconstruction of damaged monuments, Kurt Forster mentions the *Kaiser Wilhelm Gedächtniskirche* (Kaiser Wilhelm Memorial Church) in Berlin as a key example of coexistence, or what he calls "the juxtaposition" of ruins and modern structure (fig. 2.10). The church was built in the last decade of the nineteenth century in Berlin. The building, bombed in 1943 during the Second World War, was deliberately not reconstructed to stand as a reminder of the effects of the war. The old building currently functions as a memorial hall on the ground floor. However, in order to maintain the previous function of the church on the site, a new and modern church was designed next to the old one by German architect Egon Eiermann in the 1950s and built in 1963.



Figure 2.10: Erich Andres. *Berlin. Gedächtnis-Kirche.* 1965/1975. Ruined tower next to the new tower.

The project brought a discussion of ruins to the foreground, as it was "a bone of contention and attempted solution in the controversy over ruins in the German post-war period."[62] The structure of the church from the Second World War demonstrates the Rieglian approach of touchless preservation while it represents the past and the aging process since its partial destruction. The church was mainly affected by human violence and the brutality of the war; therefore, its values and its role for society changed accordingly. The church transformed its previously ascribed values from an unintentional type of monument to an

[62] Kurt Forster, "Die Ruine Als Nachklang, Vorbild Oder Zukunftsbotin," *Ruinierte Öffentlichkeit* (2012), 201. Translation by the author. Original text: "Sie war zugleich Zankapfel und Lösungsversuch in der Kontroverse um Ruinen in der deutschen Nachkriegszeit."

intentional one to commemorate past events while losing its former use value (as a church). But one might wonder if the site needed a new, side-by-side structure at all. In a Rieglian sense, the older structure has a higher value than the newer one. In this way, we juxtapose not only the ruined and new objects on the site, but also their values – the age value in opposition to the newness value, which certainly brings a new dialectical tension to the historic site.

Regarding the issue of reconstructing ruins, Rem Koolhaas stated that "the total demolition of any historic building to make way for new architecture seems unthinkable, even barbaric. In other words, the old is seen as more culturally relevant than the new."[63] Koolhaas suggests, from the perspective of a practicing architect rather than a historian, that building "with" ruins is essential to the disciplines of architecture and preservation. Instead of eradicating physical structures along with their historical and cultural values, he prefers to preserve them while also taking into account a moral aspect.

[63] Rem Koolhaas, Jorge Otero-Pailos, and Jordan Carver, *Preservation Is Overtaking Us* (New York: Columbia Books on Architecture and the City, 2016), 88.

2.3. AGE VALUE APPLIED

RETURN TO THE MONUMENT CULT

This subchapter will measure the effects of Riegl's theory on architectural discourse, specifically in the 1980s. For this purpose, I will turn to the opposite side of the world (from Riegl's point of view), namely to US intellectual circles and their protagonists of history and theory of architecture. This turn to Riegl's already eighty-year-old theory can be viewed as an act of *anamnesis*. Authors Andrew Benjamin and Charles Rice emphasize the meaning of *anamnesis* as follows:

> *Anamnesis* means remembrance or reminiscence, the collection and re-collection of what has been lost, forgotten, or effaced. It is, therefore, a matter of the very old, of what has made us who we are. But *anamnesis* is also a work that transforms its subject, always producing something new. To recollect the old, to produce the new: that is the task of *Anamnesis*.[64]

The act of *anamnesis* is linked to recalling elements that might have disappeared from memory and identity formation. While it emphasizes the importance of the past in shaping our present selves, it also suggests that we gain a deeper understanding of our identity by remembering our past. It is important to realize that anamnesis is an active process as it has a transformative character. It not only recalls the past, but reinterprets it, creating a new narrative. In the process, we actively engage with the past to inform our *status quo* and perhaps also shape our future. Thus, the act of anamnesis, as an operative tool of memory, bridges the past with the present and the future. Anamnesis also occurred in relation to Riegl's *Cult* in the 1980s – the essay, once forgotten, was then recalled. At the same time, the *Cult*, written during the rise of modernism in Vienna, transforms itself as it is rediscovered in a new context at a different point in history. This point in history is the advent of postmodernism in various places around the world, instigated through the publication of new translations of the original text, mainly by architectural historians. This transformation creates the possibility for new interpretations of what is to come. In this way, the *Cult* performs precisely the act of anamnesis; it is recalled and produces something new at the same time. This transformation can be defined as a shift from the modern to the *Postmodern Cult*, which Mario Carpo defines in his essay. There, he offers a view of the postmodern interpretation of Riegl's *Cult* as follows: "New monuments can have no power of historical orientation because the postmodern vision of history no longer provides any preset line of progress along which historical signs may clearly be

[64] See: Andrew E. Benjamin and Charles Rice, *Walter Benjamin and the Architecture of Modernity* (Melbourne, Australia: Re.press, 2009).

situated."[65] Thus, the Postmodern Cult opposes the teleological view of history, which follows a clear trajectory of progress. Unlike traditional monuments, which are often erected to commemorate specific historical events, figures, or periods and serve as points of reference within a historical narrative, the monuments included in the Postmodern Cult do not fulfill this role as effectively due to how history is viewed in the postmodern context. This view challenges the idea of a single, overarching, and linear historical narrative and instead emphasizes fragmentation and subjectivity. History is seen as diverse and non-linear. Monuments erected in this context may not conform with a single historical narrative, making their interpretation more open and subject to multiple perspectives.

Many of Riegl's thoughts, written during the rise of modernism, resonate with and anticipate key aspects of the postmodern view of monuments and heritage. Postmodernism, for example, emphasized the multiplicity of meanings and interpretations, in line with Riegl's recognition of multiple monument values. Furthermore, Riegl claimed that values change over time, so they are not fixed, but reflect the societal values of the time. This view is related to the postmodern emphasis on the subjectivity of interpretations and the importance of context. As William Gass notes:

> The monument's aid and enemy is time. The monument promises to persist, to recognize only one tense, to unify every moment, to live…to live so long in one place that time itself becomes a solid there…to live so long time dies…to live…not for itself, of course, but for the transcendent values it represents…though such a boast is usually an ardent lie.[66]

William Gass's statement in the early 1980s suggests the paradoxical interaction between monuments and the passage of time, suggesting both struggle and symbiosis. In this way, Gass demonstrates the multiplicity of interpretations between a monument and historical time in a postmodern context. Again, the above statement suggests that although monuments have sought to embody and preserve transcendent values in history, their ambition has not been truly realized in the postmodern period. Through this paradox of representation, we can see that the values of monuments change over time and are affected by the ever-changing nature of time.

The Translations

As discussed in the previous chapter, Riegl's work, including the *Modern Cult of Monuments*, was translated from German into English and other languages only in the second half of the twentieth century. At this point, Riegl's work became accessible to a wider audience beyond the German-speaking

[65] Mario Carpo "The Postmodern Cult of Monuments," *Future Anterior* 4, no. 2 (2007), 53.
[66] William Howard Gass, "Monumentality/ Mentality," *Oppositions* 25 (1982), 137.

countries. This allowed for new interpretations of the seminal twentieth-century preservation theory to emerge in new contexts across diverse cultures.

The first English translation, which will be my main concern, was published in the journal *Oppositions*[67] by Kurt Forster and Diane Ghirardo in 1982 (fig. 2.11).[68] Riegl's text, which was already challenging for German-language readers, required an English translation that made it accessible to the audiences of the 1980s. The translation resulted in the adoption of Riegl's thought into US intellectual circles, yet influenced architectural discourse only during postmodernism.

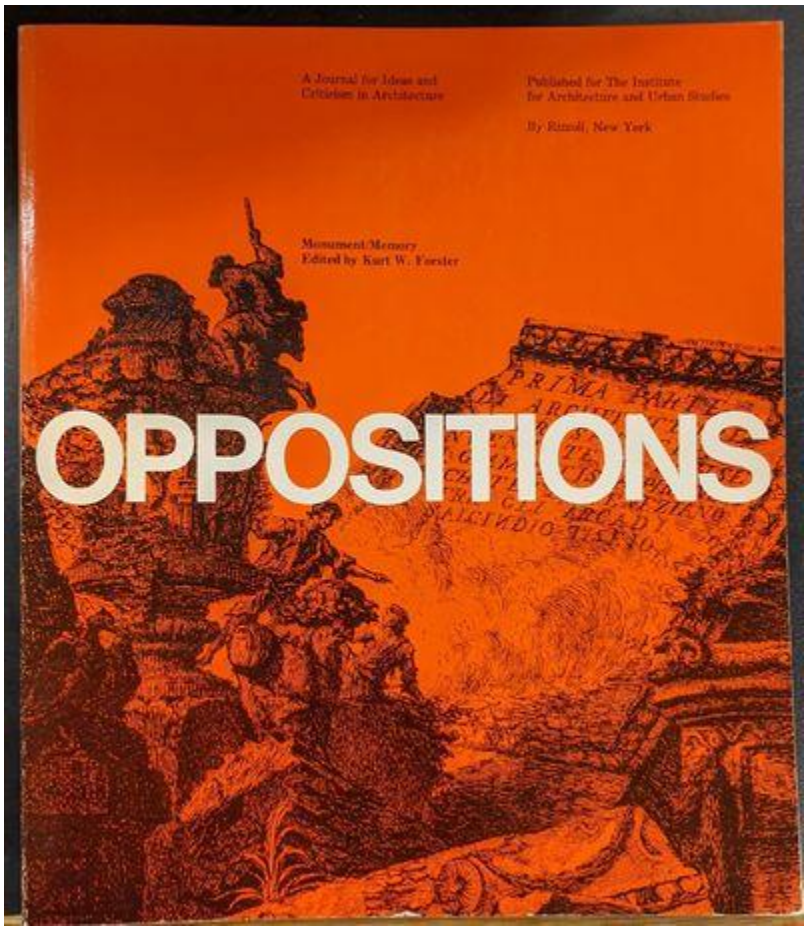


Figure 2.11: *Oppositions* 25: Monuments/ Memory, 1982. Cover page.

The journal, as defined by architectural historian Joan Ockman, stood as "the first number of self-styled 'little magazine.' *Oppositions* appeared in September 1973 after at least two years in preparation. Proclaiming itself a 'Journal for Ideas and Criticism in Architecture,' *Oppositions* constituted a unique

[67] The *Journal for Ideas and Criticism in Architecture* was published by The Institute for Architecture and Urban Studies in 26 issues between September 1973 and Spring 1984.
[68] Riegl's text was published in volume 25 of *Oppositions* by Rizzoli International Publications, edited by Kurt Forster.

appearance on the American architectural publishing scene in these years, its provenance being neither academic nor profession, and its orientation being strongly European."[69] The 25th volume, which included Riegl's translated text, thus serves as evidence of the journal's European orientation – the search for topics with a European background, such as the Austrian axiological study and the concept of historical monuments as defined by Riegl. The journal also published other European texts previously not translated into English, such as the works of Manfredo Tafuri or Aldo Rossi. The contributors to the journal were not all from the United States but were rather international and drew from a variety of professional backgrounds, contributing to the journal's diversity.

The journal's title, "Oppositions," has a triple meaning: "positions" as taking a position, "oppositions" as standing against mainstream architecture, and "zero positions" as a position that brings something new to architectural discourse.[70] Including Riegl's text in a US journal meant taking a new position on a decades-old theory, which was written in an Austrian context from a postmodern perspective. Riegl's translation in volume 25 included new interpretations of his work by a group of architects, theorists, and historians interested in European monument preservation and art history.

Introducing Riegl to US-led discussions in the 1980s was a result of the journal's vision: "*Oppositions*, along with the Institute itself, was greatly responsible for insinuating a largely unfamiliar body of theory and ideology into the architectural discussion on this side of the Atlantic, as well as for ushering in an unprecedentedly strong emphasis on the theory itself; and the impact of this, especially in the schools, but also within an initially suspicious profession, was substantial."[71] This statement shows the journal's mission to introduce theories and concepts previously unknown in the US, such as *The Modern Cult of Monuments,* while focusing on the development of architectural theory.[72] The impact of the journal and its theories was significant as it offered new perspectives on theoretical concepts, namely within the US discipline of architecture.

The editor of the volume, Kurt Forster, introduced the topics of monuments and memories, together with the figure of Alois Riegl, as the issue's main theme. It is worth noting that the volume of the Harvard Architecture Review magazine, published two years later, was quite similar in content. Both focused on the notion of monuments and memory, but from different perspectives. While Oppositions 25 focused on Riegl's essay and concepts of monuments/memory, the Harvard issue was focused more

[69] Joan Ockman, "Resurrecting the Avant-Garde: The History and Program of Oppositions," in *Architectureproduction*, ed. Beatriz Colomina (New York, NY: Princeton Architectural Pr., 1988), 181.
[70] Ibid., 182.
[71] Ibid., 192.
[72] The Institute mentioned in the citation refers to Institute for Architecture and Urban Studies, a non-profit architecture studio and think tank located in New York, that operated between 1967 and 1984, and re-opened in 2003.

broadly on monumentality represented in the context of the urban fabric while reflecting on the postmodern needs of the discipline. Nevertheless, both magazines show the direction that architecture was taking in redefining the role of monuments in the 1980s.

In his opening essay of the issue, Forster emphasized the importance of returning to Riegl's preservation theory at the time:

> What makes Riegl's study of monuments and his speculation on the historical fate of art and architecture a touchstone for our own thinking today? At a time when casual borrowing of historical forms for new buildings is said to signal the end of modern architecture, a true historian's view is both sobering and challenging. When daylight raids on an already ransacked body of historical architecture are again becoming routine in some schools of architecture, there is every reason to reflect on the historical course, its relationship to history. And, in the modern era, history lies before our eyes in the form of its "monuments.[73]

Forster's statement emphasizes the return to memory and history in architectural discourse. It was essential to review the notion of the monument not only as a theoretical and historical concept, but also as a built structure, which often took the form of a ruin. The question Forster raises suggests that Riegl's preservation theory and his concepts of how art and architecture evolve historically are still pertinent in the 1980s. Moreover, they can serve as a foundation for engaging with monuments in a broader architectural discourse. Forster also refers to contemporary architects and architecture students who frequently draw inspiration from limited possibilities of historical styles and forms that have already been exhaustively explored. He emphasizes the need to reflect on the relationship between history and architecture. At the time of writing, and even today, we can see the history represented in the form of architecture, meaning the monuments inform us not only about the past but also serve as evidence of the cultural values and historical context. The role of history is essential in shaping the cultural values that monuments hold. These values are constantly changing as society confronts new social, political, or economic contexts. Thus, history is visible through the monuments of our built environment. Riegl's text presented the reader of the 1980s with another essential question – what is retained in the architecture that is independent of its style? This approach makes Riegl's theory truly remarkable from a postmodern point of view.

[73] Kurt Forster, "Monument/Memory and the Mortality of Architecture," *Oppositions* 25 (1982), 18.

In her essay, a historian of 17th and 18th-century architecture, Erika Naginski, asks: "Does *The Modern Cult of Monuments* tell us about how we visualize the past? For the multiple values Riegl enumerates in his essay – after tallying up a good number of them, Henri Zerner bemusedly wonders, 'Why do we need all this?' – essentially correspond to ways of seeing. Or more precisely, they correspond to the ways in which we are prompted to organize discrete layers of history when we look at artifacts, sculptural fragments, architectural ruins, and the material remains of lost civilizations."[74] Naginski's reference to Zerner provides further evidence of the resurgence of Riegl's theory at the time of Zerner's writing. Zerner and Naginski question the significance of Riegl's axiological study in responding to various architectural conditions. Riegl's multiplicity of values represents the above-mentioned "different ways of seeing"; thus, his theory as a whole allows for numerous ways of interpreting how we analyze and understand different layers of history when engaging with objects of the past. This process goes beyond simply recognizing the physical properties of objects to understanding their cultural, historical, and social significance.

THE APPLICATION OF AGE VALUE IN ARCHITECTURE

Alois Riegl's early twentieth-century theory contrasted the age value of a monument, emphasizing its evolution over time, with the historical value typical of nineteenth-century structures. His concept of aging monuments, paradoxical at the time, did not find practical application in architecture or preservation. However, post-war social changes and the presence of architectural ruins in the urban fabric prompted a reevaluation of his views in the 1970s and 1980s.

In his *Analysis of the Modern Cult of Monuments*, the English architect and historian Alan Colquhoun introduced Riegl's values and described their juxtaposition to two other concepts – *Kunstwollen* and newness value. Colquhoun emphasized the importance of the age of the monument in a postmodern context:

> Although evidence of decay is no longer, as it was in Riegl's day, the most crucial element in our sense of age-value, it would seem that it is still the "age" of historical buildings that constitutes their value today, rather than their qualities either as intentional or unintentional monuments. The past is valued for its "pastness" and not because it provided models for a normative architecture

[74] Erika Naginski, "Riegl, Archaeology, and the Periodization of Culture," *RES: Anthropology and Aesthetics*, no. 40 (2001), 136. For the citation of Henri Zerner see: Henri Zerner, "Alois Riegl: Art, Value, and Historicism," *Daedalus* 105 (Winter 1976):177-188.

> or represents timeless architectural values (as it did from 1450 to roughly 1800), nor because it can be accurately reconstructed as evidence of the organic relationship between monuments and the societies that produced them (as was the case in the nineteenth century).[75]

The author refers to how the value of historical monuments has been perceived and developed. Even more than eighty years after Riegl's writing, Colquhoun states that age value still stands as a core value for monuments. Age does not necessarily have to be perceived through formal or material decay, but simply through the deterioration or dilapidation of the monument. Age is more important in the valuation of a monument than its intentional or unintentional character, which Riegl classified as the main type of monument. The values of historical monuments during the 1980s were not clearly mirrored by the societies that produced them as was seen in history. Monuments' values change over time, reflecting the ever-changing nature of our built environment. The postmodern cult celebrates the "pastness'" of monuments and links them to a bygone era. Colquhoun argues that "it seems, therefore, that we are still in the period that Riegl defined as dominated by 'age-value,' even though the problems connected with this concept are no longer those that confronted Riegl himself."[76] While the concept of age value remains relevant even in the 1980s, the specific issues it raised have changed since Riegl's time. As mentioned in the previous chapter, Riegl's age value as the main value of the modern monument was not accepted by his own society at the time; however, as Colquhoun proves, it was precisely in the 1980s that this value came to be appreciated, albeit from a different perspective.

[75] Alan Colquhoun, *Modernity and the Classical Tradition: Architectural Essays 1980-1987* (Cambridge, MA: MIT Press, 1991), 218.
[76] Ibid., 221.

2.4. CRITICAL BIBLIOGRAPHY

The critical bibliography listed here is a collection of multiple editions of the *Modern Cult of Monuments*, which were published from 1903 to the present (2024). It also includes entries for publications of the essay that were included in numerous anthologies, published as translations, or that appeared as conference proceedings, dissertations, or commentaries. Entries are organized by categories and sorted chronologically. These entries also reveal the periods in which the authors or organizations were particularly interested in Riegl's preservation essay over more than a hundred years.

First Publication

Riegl, Alois. *Der moderne Denkmalkultus. Sein Wesen und seine Entstehung*. Braumüller, Wien/Leipzig 1903.

As already mentioned in Chapter 1, the essay was first published in German in 1903 in the journal of the *Central Commission for the Research and Preservation of Artistic and Historical Monuments* (Die Zentral-Komission für Erforschung und Erhaltung der Kunst und historischen Denkmale).

Editions

Riegl, Alois. *Der Moderne Denkmalkultus: Sein Wesen und Seine Entstehung*. Whitefish, Montana: Kessinger Publishing, 2010.

Riegl, Alois. *Der Moderne Denkmalkultus: Sein Wesen und Seine Entstehung*. London, England: Forgotten Books, 2017.

Riegl, Alois. *Der moderne Denkmalkultus.* Bremen, Germany: Inktank-Publishing, 2019.

Translations

English Translation: The Modern Cult of Monuments: Its Character and Origin. Tr. Kurt W. Forster and D. Ghirardo. In: Oppositions 25, 1982, 21–50, ISSN 0094-5676.

French Translation: Le culte moderne des monuments. Sa nature, son origine. Trad. et présenté par Jacques Boulet (= In Extenso. Volume 3). École d'Architecture, Paris-Villemin 1984. New Edition: L'Harmattan, Paris 2003, ISBN 2-7475-5127-X.

French Translation: Le culte moderne des monuments. Son essence et sa genèse. Trad. de l'allemand par Daniel Wieczorek. Éditions du Seuil, Paris 1984, ISBN 2-02-006821-4.

French Translation: Le culte moderne des monuments : son essence et sa genèse / Aloïs Riegl ; traduit de l'allemand par Daniel Wieczorek ; avant-propos de Françoise Choay. Preface by Françoise Choay. Translated by Daniel Wieczorek. Paris: Éditions du Seuil, 2013.

Italian Translation: Il culto moderno dei monumenti. Il suo carattere e i suoi inizi. Tr.: Sandro Scarrocchia (= Rapporti della Soprintendenza per i beni artistici e storici per le province di Bologna, Ferrara, Forlì e Ravenna. Volume 50). Nuova Alfa, Bologna 1985.

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Russian Translation: Алоиз Ригль. Современный культ памятников. Его сущность и возник-новение. Moscow: Centre for Experimental Museology, 2018.

It was not until the 1980s, nearly eighty years after its original publication, that translations of the essay began to appear in several languages. Until then, the essay was only available in German in its original publication or in anthologies.

Anthologies

Riegl, Alois. “Der Moderne Denkmalkultus. Sein Wesen Und Seine Entstehung.” In *Gesammelte Aufsätze*, edited by Karl M. Swoboda, 144–93. Augsburg: Dr. Benno Filser Verlag, 1928.

Riegl, Alois. “Der Moderne Denkmalskultus. Sein Wesen Und Seine Entstehung.” In *Georg Dehio Und Alois Riegl - Konservieren, Nicht Restaurieren. Streitschriften Zur Denkmalpflege Um 1900*, 43–87. Birkhäuser, 1988.

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Commentaries on Riegl’s *Cult* began to appear again during postmodernism, such as Henry Zerner’s essay, which has served as a reference for other scholars to this day.

2.5. CONCLUSION

In conclusion, Riegl's legacy is extensive and spans multiple disciplines. Scholarly research on Riegl's work and its impact on art history, architecture, and preservation has been ongoing since the early twentieth century. His work was first discussed in a German-speaking environment, and it was not until the 1980s that the first translations appeared, giving his work a new significance.

The post-war period also saw a return to the notion of memory and the search for new historical narratives. There were several reasons for this. Scholars from various fields analyzed the notion of history, memory, and cultural heritage to define a new stance in opposition to the modernist approach of objective truth and universal narratives. The renewed interest in memory was also related to postmodernism's recognition of the importance of individual and collective memory in shaping cultural identity. Philosophers and theorists in this period challenged grand narratives and emphasized the fragmentation and plurality of experience. This philosophical shift encouraged a more nuanced approach to history and memory.

In his preservation theory, Riegl discussed the cult of ruins and the values associated with these objects as part of the natural decay of monuments. During the reconstruction period in the heavily bombed cities, there was a double approach to the ruins of the World Wars. The first approach was to completely rebuild the monument from scratch to erase the traces of the past. In contrast, the second approach incorporated ruins into a new structure, so that retained parts of the ruins could serve as a reminder of past events or to acquire other culturally significant meanings and values. The latter served as a method of preservation that did not erase history, but offered new narratives of the past, which resonated with Riegl's work.

The return to the *Modern Cult* discussed in this chapter refers primarily to the English translation of Riegl's preservation work and its impact on architecture. Numerous Western architects, historians, and theorists reinterpreted his axiological study. Had *The Modern Cult of Monuments* not been rediscovered and translated into English in the 1980s, Riegl's contribution would have had considerably less influence and resonance within contemporary architectural scholarship. Authors, especially those who contributed to volume 25 of *Oppositions*, expressed interest in Riegl's preservation theory beyond Austrian national borders and gave it a new meaning in an international context. Therefore, Riegl's work provided a foundation for a new way of thinking about historic monuments and their values in the postmodern era.

The values defined by Riegl at the turn of the century, especially age value, became relevant again. During the rise of postmodernism, societies found themselves in a new socio-political context fundamentally different to Riegl's. In this way, the rediscovered age value took on a new meaning in a post-war world where cities lay in ruins and architects sought new approaches of engaging with them. As

Riegl emphasized in his essay, age value is primarily present in ruins that have fallen victim to natural decay. Undeniably, however, architectural ruins that are the result of world wars also have age value. In addition, through the passage of time and the historical distance to the structures of the past, a greater number of monuments gained age value based on their age at the time of their valuation.

Chapter 3

The Cult Beyond the Digital

The following chapter focuses on adapting Alois Riegl's *Modern Cult of Monuments*, written in Vienna in 1903, to the twenty-first century, moving monuments from their physical presence into the digital realm, where they are accessible on a global scale. The chapter poses the following questions: what is the value of the monument in the twenty-first century, and how is the monument represented in the digital realm? To answer these questions, I analyze a selection of digital technologies that facilitate the transition from the *Modern Cult* at the turn of the twentieth century to *The Cult Beyond the Digital,* which has recently emerged in contemporary architectural discourse. *The Cult* defined here utilizes digital tools but also suggests possibilities of moving beyond the digital to the age of AI. In the process, I propose a timeless monument value for the twenty-first century and suggest a new digital documentation method, the digital palimpsest, which shifts monument values from a physical to a digital environment. This process allows for a new relationship between the viewer and the monument. Due to recent technological advances, the digital palimpsest can store, manage, and reveal multiple versions of age value at any time, non-chronologically, in the digital realm.

The second part of the chapter focuses on mapping the relationship between technology and preservation, which has been intertwined throughout the history of the discipline. In developing the idea of the digital palimpsest, I analyze the technological possibilities that allow for such a representation, which is directly related to Riegl's theory of monuments. I also present shifts in heritage preservation that were aided by the advancement of technology, such as the progression from two-dimensional (drawing and photography) to three-dimensional (digital replica), and four-dimensional (a digital palimpsest incorporating the dimension of time) representational models.

3.1. BEYOND AGE VALUE

In previous chapters, I have identified Riegl's contributions to preservation theory and his legacy in various fields, but primarily on the built environment, namely architecture. I also mapped the origin of age value, and its discontinuity and rediscovery throughout the course of the twentieth century.

In the following chapter, I question whether the age value of monuments, which Alois Riegl developed over a hundred years ago, has diminished as we have entered the digital and beyond-digital realms of the twenty-first century. My findings suggest a two-fold answer. By reviewing the built environment, age value still shows its effects on some monuments, just as historical value is kept alive in other types of monuments to this day. Moreover, age value allowed a new value to emerge in the transition from the built to the digital realm. However, the technological shift from physical to digital allowed the age value to be perceived physically and digitally under varying conditions: in its original location or on the digital screen. The age value in the physical structure can only be grasped as continuous change since what has passed is lost forever. In the digital realm, however, the age value is documented as a "frozen" layer of time. It appears as a single moment stored as a superimposition of multiple states. Therefore, unlike the physical structure, no important state is lost.

MONUMENTS IN THE AGE BEYOND DIGITAL

Monuments that exist in a digital environment can be divided into three categories according to their materiality. These include, first, monuments created in the digital realm that were later materialized; second, monuments created in the physical environment that were later digitized, and third, hybrid monuments that exist between physical and digital environments and are represented by current technological tools.

This chapter's primary concern is to analyze how monuments of the second and third categories transform from brick-and-mortar constructions to the digital environment. Monuments shift not only their material properties, but also their values, meaning, and functions from the built environment into the digital realm. These monuments do not undergo the process of aging, the natural passage of time that affects their functionality, or change their appearance due to their virtual existence, contrary to what Riegl suggested in his theory of the age value of physical monuments. However, with the right tools and methods, it becomes possible to interpret age value in a digital model, hence, as a digital representation of a physically aging monument.

The rise of digital technology in recent decades has strongly impacted our understanding of media, space, and objects within it. As an architect and the founder of MIT's Media Lab, Nicholas

Negroponte argues, "being digital will change the nature of mass media from a process of pushing bits at people to one of allowing people (or their computers) to pull at them. This is a radical change because our entire concept of media is one of successive layers of filtering that reduces information and entertainment to a collection of "top stories" or "best-sellers" to be thrown at different "audiences."[1] Negroponte wrote his book *Being Digital* in the era of the *Internet,* known as Web 1.0. The main focus of the Internet at that time was connecting people online through computer service companies such as *Netscape*. *Being Digital* focused on various types of communication that were primarily asynchronous, such as email. Correspondence did not take place simultaneously between different parties but across different time zones and locations, as the recipient or sender preferred. However, Web 1.0 evolved into Web 2.0, which focused on user-generated content and participatory culture, to the current state we call Web 3.0. Digitized monuments have become a part of this network, characterized by their digital properties. As described by Negroponte in the 1990s, the digital age has four qualities: decentralizing, globalizing, harmonizing, and empowering.[2] Consequently, these qualities apply to monuments positioned in the digital domain more than thirty years later. Furthermore, the shift from Riegl's classical conception of monuments to the global context leads us to redefine and reclassify the current notion of monuments in the physical and digital realms, reflecting the needs and desires of society.

Mark Wigley argued that in what has been called the "digital age," the "memorializing function" of buildings "has been displaced by images." To him, buildings are "at best, fragile images, props in heterogeneous publicity campaigns." Yet digital archives, he notes, "have taken over storing memory from solid structures."[3] Even if we take care of buildings, their lifespan is limited. On the other hand, digital records have the potential to exist beyond the buildings' lifespan, extending their appearance through a digital medium. These digital archives are dematerialized structures that keep alive the memory of their physical twins in the form of a three-dimensional record.

The space we inhabit is frequently mediated by several digital devices, shifting our perception of the real and the virtual. We are increasingly connected to digital networks and various types of social media. French professor of the History of Architecture and technology Antoine Picon thus argues that "the future of public spaces will depend to a large extent on the successful interaction between the physical and the virtual."[4] Our presence in public and private locations is constantly tracked, monitored,

[1] Nicholas Negroponte, *Being Digital* (New York: Alfred A. Knopf, 1995), 84.
[2] Ibid., 229.
[3] Mark Wigley, "The Architectural Cult of Synchronisation," *The Journal of Architecture* 4, no. 4 (1999): 409–35, https://doi.org/10.1080/136023699373783, 409.
[4] Antoine Picon, *Digital Culture in Architecture: An Introduction for the Design Professions* (Basel: Birkhäuser, 2010), 12.

and analyzed by digital networks. These actions result in the dual character of space: it is analog and digital, physical and virtual at the same time. According to the Spanish sociologist Manuel Castells, these two categories are named *spaces of flows* and *spaces of places*.[5] They simultaneously define our presence in both spaces, as each physical space is loaded with a large amount of data flowing through the invisible digital systems that surround us. These dual space properties directly influence the notion of monuments existing in the physical environment and their shift into the digital space. Consequently, I propose that monuments can also be divided into *monuments of flow* and *monuments of place,* depending on their materiality. Their relationship offers a new urban dynamic and pushes the boundaries of our spatial thinking and perception.

Digital Preservation Policy

UNESCO defines intangible heritage, specifically digitized heritage, in the *Charter on the Preservation of the Digital Heritage*. As the document states, "the purpose of preserving the digital heritage is to ensure that it remains accessible to the public," which means making intangible heritage in the digital domain accessible to a global audience. However, the Charter does not address intangible heritage as digitally documented physical spatial structures, which is the primary focus of my dissertation. Instead, it defines the roles and functions of digital items as intangible heritage, including texts, databases, still and moving images, audio and graphics, software, and web pages, among others. The Charter's article highlights the nature of digital heritage as "frequently ephemeral, and require purposeful production, maintenance, and management to be retained."[6] This characteristic also applies to digitized monuments whose virtual structures require regular preservation.

Place and Digital Monument

Scholars of virtual heritage, Erik Champion and Bharat Dave, claim that

> Place gains unique character through time and use. Place is not just adaptable, but also markable, recordable, it leaves signs of its use; it reveals the way it was used and perceived by the way in which is has eroded. In this sense one can argue that place is an artifact, as past events can often be inferred from it.[7]

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[5] Manuel Castells, "Space of Flows, Space of Places," in *Rethinking Technology a Reader in Architectural Theory*, ed. William W. Braham and Jonathan A. Hale (Abingdon, UK: Routledge, 2007), pp. 440- 456.
[6] "Charter on the Preservation of the Digital Heritage," Article 1- Scope (Paris: UNESCO, 2009).
[7] Erik Champion and Bharat Dave, "Dialing Up the Past," in *Theorizing Digital Cultural Heritage. A Critical Discourse* (Cambridge, MA: MIT Press, 2007), 338.

Rieglian modern monuments represent a "place" as defined in the quote above. A place evokes memories of past events through the monuments it hosts. Although unintentional monuments exist for a purpose, they are also a representation of people's memories. Monuments thus become mediators of memory between a place and the people who experience this place. As we move to the digital realm, the digital representation of a physical monument still refers to a physical place. It thus has the ability to recall past events because they are documented in its physical structure.

Although the technology used to digitize monuments is borderless and is used in the same way beyond nation-state contexts regardless of the culture it represents, the notion of a monument is culturally specific. Thus, this notion does not represent a universal idea that applies in the same way everywhere. Once the right tools are employed to represent digitized monuments, a monument and its context can be mediated, for example, through an AR app that approximates its appearance in its original location and provides information about its past.

Elisabeth Grosz reminds us that the process of remembering needs to take place both in time and space:

> To remember (to place oneself in the past, to relocate, to cast oneself elsewhere) is to occupy the whole of time and the whole of space, even admitting that duration and location are always specific, always defined by movement and action. It is to refuse to conceptualize space as a medium, a container, and instead to see it as a moment of becoming, of opening up and proliferation, a passage from one space to another, a space of change, which changes with time.[8]

Through this statement, Grosz points out that remembering is an immersive experience and not only the mental act of recall. It requires one to position themselves in a specific location and time (duration) of memory. This virtual space provides the viewer with an active, dynamic experience that evolves over time. In other words, each memory signifies a journey from one space to another while reflecting a constant change. The same process is possible to observe once working with digitized monuments and their transition from the real to the virtual.

TIMELESS VALUE

The value of digitized monuments shifts from a physical environment where monuments undergo the process of natural aging to a digital environment, unaffected by the passage of time. Therefore, these

[8] Elisabeth A. Grosz, *Architecture from the Outside: Essays on Virtual and Real Space* (Cambridge, MA: The MIT Press, 2001), 118.

monuments are assigned *timeless value* as they do not change once they are digitally documented, unlike their physical twins.

We can observe the development of Riegl's value system from the historical and age value of physical monuments to a timeless value[9], which occurs in the digital domain. All physical monuments are undoubtedly affected by entropy, which provides evidence of the passage of time. It signifies the deterioration of a structure under the passage of time as a natural condition. The deterioration of an object can be related to Riegl's concept of age value, which is represented by the traces of time that cause the decay of the monument (fig. 3.1). The decay of the physical monument is similar to the principles of the second law of thermodynamics, which states that entropy always increases and, therefore, always leads to a less ordered state. This process is given naturally without human interference. In this way, entropy contrasts with the stability of physical structures (architecture) and contributes to the alternation and temporality characteristic of objects in the physical world.



Figure 3.1: Joseph Michael Gandy. *A Bird's-eye view of the Bank of England.* 1830.

On the other hand, digitized monuments exist outside of time; they are not affected in the same way as their physical references. Moreover, they are defined by the timeless nature of the digital realm as opposed to the materiality of the physical environment. Time affects the computer hardware where

[9] Timeless is meant here in the literal sense, as outside the passage of time.

digitized monuments are stored as digital files but does not affect them (their appearance) when displayed on its screen. Digitized monuments are composed of zeros and ones – they exist only in digital space. They are independent of the material world and the effects of the passage of time and aging. These monuments hold a timeless value because the collected data serves as a snapshot of their existence. The passage of physical time contrasts with the timelessness of the digital environment to which the digitized monuments belong.

DIGITAL PALIMPSEST

After the waning of modernist fantasies about creation ex nihilo and of the desire for purity of new beginnings, we have come to read cities and buildings as palimpsests of space, monuments as transformable and transitory, and sculpture as subject to the vicissitudes of time.

Andreas Huyssen

As timeless value represents the value of digitized monuments in the twenty-first century, a digital palimpsest serves to preserve monuments in the digital realm. The digital palimpsest offers a digital spatial framework that provides a multiversal image of historical monuments in the twenty-first century, while redefining their values and roles to reflect the society of the time. The digital palimpsest builds on and goes beyond the notion of a Rieglian modern monument. This notion of the modern monument is primarily characterized by its age value, and was not accepted by the society at the time of its creation, but only several decades later. Has the age value been rendered obsolete, or is it still relevant today? Coming together through several age value layers, the value of the twenty-first century is defined as a timeless value that visibly demonstrates the aging of a monument in terms of its appearance, form, and materiality. It allows to create new connections between data sets – between the different states of a monument within the digital environment. The monument is documented over its lifecourse, showing us its historical value as favored in the nineteenth century, revealing its age value as the value of the twentieth century, and exposing the traces of time on its material form. These documented stages of the monument and its values form a digital palimpsest of the twenty-first century. Thus, this digital model offers a new representation of the past by overlapping layers with various information and, in doing so, creating new relations between histories that have not been perceivable before.

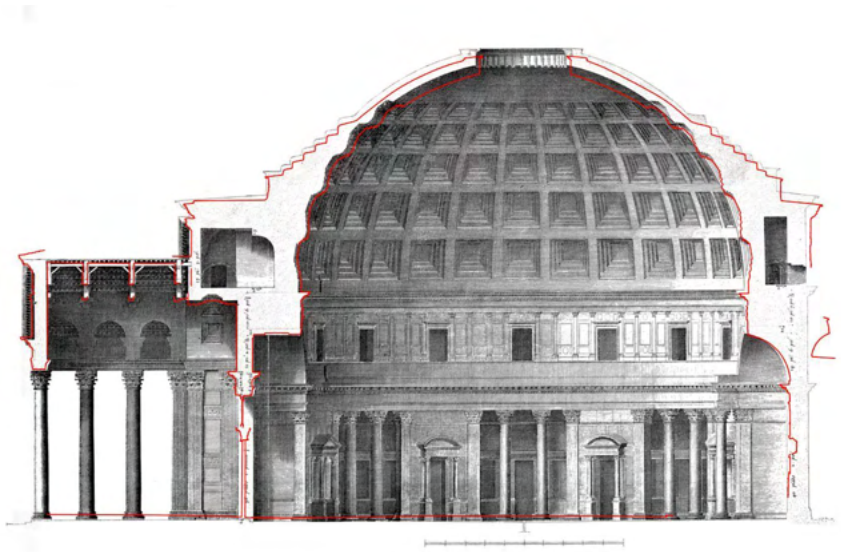


Figure 3.2: The Bern Digital Pantheon Project. Comparison between Desgodetz's 1682 longitudinal cross-section with the Bern Digital Pantheon Model (red line) (Desgodetz 1779, p. 7, pl. VI). 2016.

The Bern Digital Pantheon Project from 2016 (fig. 3.2) displays two layers: the longitudinal cross-section drawing from 1682 and the section of a 3D model from the time of scanning. Their intersection is shown by the red line visible in the figure. These two juxtaposing layers of information thus form a basic digital palimpsest. Already by the superimposition of only two layers, the viewer can observe the formal changes of the monument over time.

The timeless value of a digitized monument is present in the digital palimpsest. Because physical monuments are witnesses to history, they can speak to specific times through structural change. They carry the Rieglian age values: they can be documented using contemporary digital tools and processed within digital space, in order to create a digital representation of the aging process of the physical monument. This aging, whether natural or anthropogenic, creates multiple layers that form a digital palimpsest.

The word palimpsest is derived from the Greek *palimpsēstos,* which means "scraped again." According to Merriam-Webster, the word originally referred to a writing material (such as a parchment or tablet) that was used one or multiple times after previous writing had been erased.[10] The concept of the palimpsest was invented in the Middle Ages as vellum, an animal skin which served as a writing base, was scarce. Therefore, the reusing of skins and the practice of overwriting were encouraged (fig. 3.3). Over time, the previously overwritten text revealed itself as a multilayered document.

[10] https://www.merriam-webster.com/dictionary/palimpsest. Accessed on October 20, 2023.

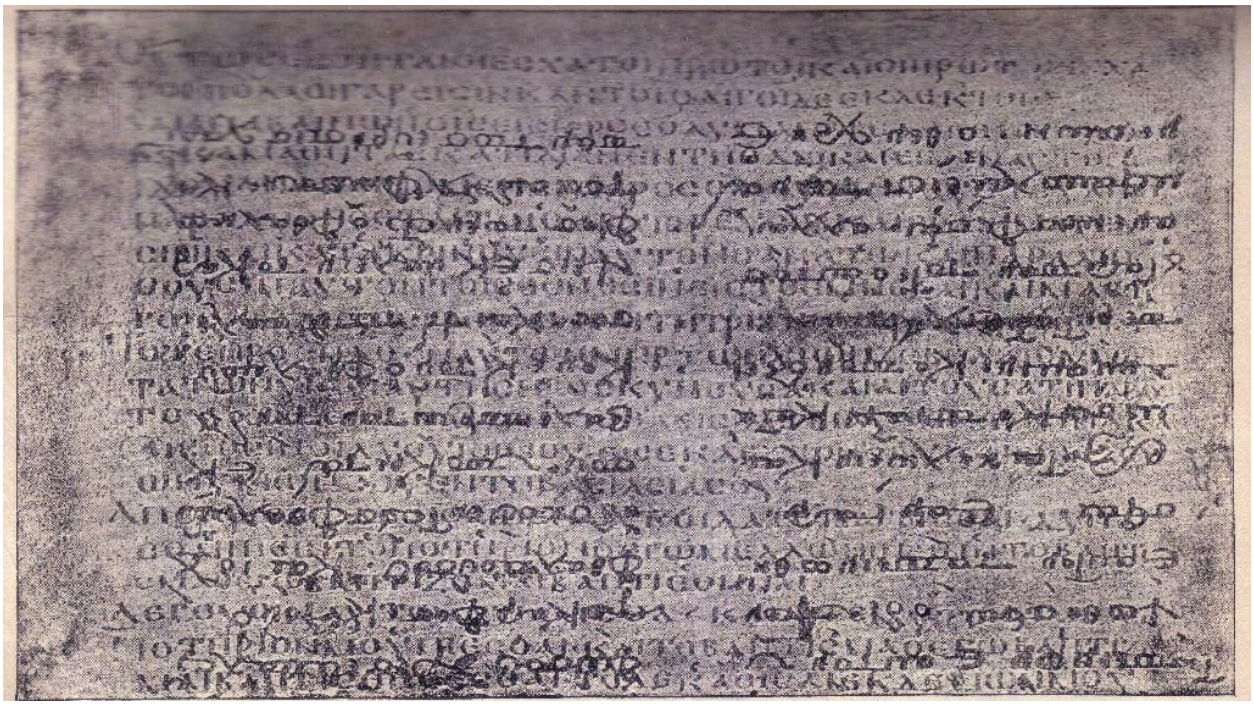


Figure 3.3: Codex Ephraemi Rescript. An example of a palimpsest.

Modern technology, such as the ultraviolet light developed in the nineteenth century, or the more recently developed technology of spectral imaging[11], makes it possible to reveal hidden layers that never really disappeared (fig. 3.4). The Walters Art Museum in Baltimore, MD, USA, in collaboration with experts in conservation and image science, developed a series of analyses of the Archimedes Palimpsest, which was created in the tenth century.[12]

[11] In multispectral imaging, photographs of an area are taken at different wavelengths of light.

[12] For more details, see: R. L. Easton, W. A. Christens-Barry and K. T. Knox, "Spectral image processing and analysis of the Archimedes Palimpsest," 2011 *19th European Signal Processing Conference*, Barcelona, Spain, 2011, pp. 1440-1444.

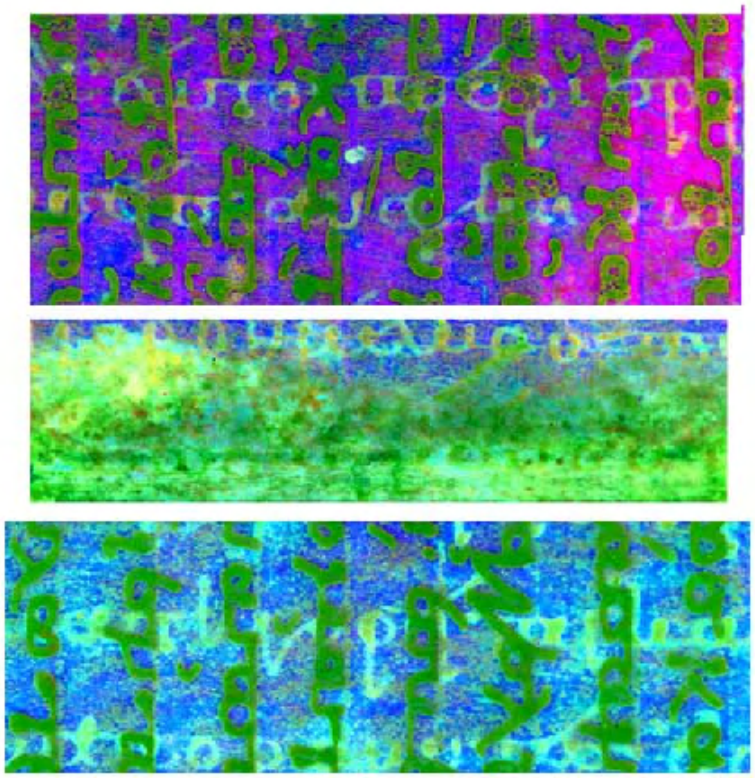


Figure 3.4: Renderings of PCA pseudocolor image of f. 120v-121r that differ in hue angle. The top, middle, and bottom sections are respectively, from the upper folio, gutter, and lower folio.

Technologies such as spectral imaging allow for a new reading of the palimpsest's invisible layers, providing new historical information about an object that might have otherwise been lost.

The concept of a palimpsest also appeared in the nineteenth-century work of an English writer, Thomas De Quincey, "The Palimpsest Of The Human Brain." He writes:

> Such a palimpsest is my brain; such a palimpsest, oh reader! is yours. Everlasting layers of ideas, images, feelings, have fallen upon your brain softly as light. Each succession has seemed to bury all that went before. And yet, in reality, not one has been extinguished. And if, in the vellum palimpsest, lying amongst the other diplomata of human archives or libraries, there is anything fantastic or which moves to laughter, as oftentimes there is in the grotesque collisions of those successive themes, having no natural connection, which by pure accident have consecutively occupied the roll, yet, in our own heaven-created palimpsest, the deep memorial palimpsest of the brain, there are not and cannot be such incoherencies.[13]

[13] Thomas De Quincy, "The Palimpsest Of The Human Brain.," in *Suspiria*, 1845.

In the 1860s, the French poet Charles Baudelaire quotes and comments on De Quincey's thoughts on palimpsest in his poems titled *Les Paradis artificiels* with the following words: "Nevertheless, between the palimpsest that carries, one superimposed over another, the Greek tragedy, the monkish legend, and the knightly romance, and the divine palimpsest created by God, which is our incommensurate memory, arrises this difference, that there is something in the first of a fantastic, grotesque chaos, a collision between heterogeneous elements, whereas in the second the inevitability of temperament imposes a harmony among the most disparate elements."[14]

Baudelaire then continues his thoughts on time and memory:

> It often happens that a person on the brink of death will see the theater of their life suddenly expanded and radiant within their brains. Time, then, becomes infinitely elastic, and a few seconds will hold the feelings and images of many years. And the true point for astonishment in this experience is not the simultaneity of arrangement under which the past events of life, though successive, has formed this revelation, but the resurrection itself, and the possibility of resurrection for what had so long slept. What has passed from our memory is preserved in this true reflection, which we are compelled to recognize when it is arrayed before us as in a mirror; traces once impressed upon the memory are indestructible. By solemn circumstances, by death perhaps, by the intense stimulation of opium, all of the vast, complex palimpsest of the brain suddenly unfurls to reveal the superimposed strata of our past experience, mysteriously fixed in the phenomenon we call forgetfulness.[15]

In the twentieth century, the historian David Lowenthal referred to De Quincy's concept of the brain as a palimpsest, by stating that "many saw memory itself as the receptacle. Because the past shaped everyone's present, no transient impression could be expunged from the mind; the storehouse of memory permanently preserved them all."[16]

While neither literature refers to the spatiality of the palimpsest, their description of the brain and its layers already introduces the multidimensionality of this concept.

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[14] Charles Baudelaire, *Les Paradis Artificiels* (Paris: Auguste Poulet-Malassis,1860).
[15] Ibid.
[16] David Lowenthal, *The Past Is a Foreign Country* (Cambridge: Cambridge University Press, 1985), 16.

In the 1920s, Sigmund Freud wrote an essay, *A Note Upon The 'Mystic Writing-Pad,'* describing it as "nothing more than a writing-tablet from which notes can be erased by an easy movement of the hand. But if it is examined closely, it will be found that its construction shows a remarkable agreement with my hypothetical structure of our perceptual apparatus and that it can in fact provide both an ever-ready receptive surface and permanent traces of the notes that have been made upon it."[17] Metaphorically, Freud's mystic writing-pad is nothing more than a memory device of its time, using available technology to write, rewrite, and store. Freud shows the similarity of perception and consciousness to the mystic writing-pad: two layers of the system, one of which "receives the stimuli" while the other serves as "the foundations of memory." The mystic writing-pad allegory can be connected to the idea of palimpsest, although they are not exactly the same. Freud uses his concept to explain the formation of memory traces. In his view, the conscious mind can erase memories to allow for the formation of new ones; but the earlier memories never truly disappear because they leave traces in the human unconsciousness. This process is similar to writing on a parchment and reusing it repeatedly while individual text layers are never truly gone, thus forming a palimpsest. Freud's essay deeply influenced Jacque Derrida's work on writing, memory, and traces a few decades later. He explores the implications of Freud's analogy in *Writing and Difference,*[18] published in the 1960s. For Derrida, the concept of trace becomes a central theme in his deconstructionist philosophy. Even though Derrida did not directly engage with the concept of the palimpsest, his writing resembles conceptual similarities, such as when he discusses the relationship between presence and absence or the reference of one text to another.

In architecture, the technique of drawing on tracing paper evokes the concept of a palimpsest due to its technique of multilayering. The drawing created on the tracing paper references the original drawing and adds new information through an overlay due to the transparency of the paper. The drawings on tracing paper as layers are semi-transparent, thus allowing the effect of "seeing through." This technique can be considered a paper palimpsest which was used in architecture before the method of palimpsest was employed three-dimensionally. The spatial use of palimpsest occurred for the first time in the work of architects such as Peter Eisenman in the 1970s. His projects, published in *The Cities of Artificial Excavation,* serve as great examples of how the palimpsest technique can be applied spatially. A shift took place away from Eisenman's cube studies of the 1970s, which were defined as siteless and positioned in abstract space, to "the vast plane of physical and historical topographies of specific sites."[19] In this way, the excavation projects reflect the context of different locations and represent a distinct

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[17] Sigmund Freud, "A Note Upon the 'Mystic Writing-Pad'" in *The Ego and the ID and Other Works* (The Hogarth Press, London, 1961 originally published in 1925), 228.

[18] Jacques Derrida, *Writing and Difference* (Paris: Éditions du Seuil, 1967).

[19] Bédard Jean-François, ed., *Cities of Artificial Excavation: The Work of Peter Eisenman, 1978-1988* (Montréal: Canadian Centre for Architecture, 1994), 7.

approach to working with fragments of the site. The application of the layering technique, specifically the historical layering of past, present, and future layers, manifests the return of history as the site offers multiple scenarios through its own discontinuity.[20] This layering allows us to notice another viewpoint of the concept of time, which was also one of Riegl's concerns.

Eisenman defined the relationship of his approach to Freud's theory by stating the following:

> I am very interested in psychology. The work of my digging projects (what I call my digging projects) started with sand boxes. The houses started to go down as well as up. When you forget the datum, the consciousness of the ground is there. It is all linked to my psychoanalysis which has to do with the fact that I realized that life did not begin at ground zero and work up but that it went down into the unconscious. When the unconscious became part of my work, I began to lose the centrism of rationalism and origins, clarity and purity, etc. The hole digging is a metaphor of my own unconscious.[21]

Similarly to the notion of "digging," architectural traces also serve as a metaphor for the site's unconsciousness. The memories of a site can be recalled by approaching them in a historical context.[22]

Antoine Picon borrows Eisenman's approach in his Derridean period when he describes the destabilization of an architectural form, stating that "one could say that form is no longer synonymous with stable presence. Form could be different. It's a frozen moment- this explains the enduring fascination of the pictures of Muybridge and Marey – as if architecture were the section of a certain moment in a time of theoretically limitless geometry and technological flow."[23] Eisenman curated layers of history that he uncovered on historical sites while creating a new type of architecture to represent this frozen moment in time. Thus, the method of palimpsest is based on the main principle of layering, overlaying, and juxtaposing historical layers within the urban context, thus working with the notion of time.

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[20] Bédard Jean-François, ed., *Cities of Artificial Excavation: The Work of Peter Eisenman, 1978-1988* (Montréal: Canadian Centre for Architecture, 1994), 33.

[21] Eisenman to Lynne Breslin, in "Interview: On Architecture of Text," Space Design 258 (March 1986): 64.

[22] Eisenman's conceptual basis of the Berlin projects recalls Freud's analogy between archeology and "preservation in the sphere of the mind… Since we overcome the error of supposing that the forgetting we are familiar with signified a destruction of the memory-trace – that is, its annihilation – we have been inclined to take the opposite view, that in mental life nothing which has once been formed can perish – that everything is somehow preserved and that in suitable circumstances (when, for instance, regression goes back far enough) it can once more be brought to life." (From Sigmund Freud: *Civilization and its Discontents,* 1930).

[23] Antoine Picon, "Histories of the Digital: Information, Computer and Communication," in *When Is the Digital in Architecture?* (Montréal, Québec: Canadian Centre for Architecture/ Sternberg Press, 2017), 92.

Now, more than fifty years after the first implementation of a palimpsest in the built environment, the method shows its limitations. An architectural palimpsest displays historical layers in the context of its site, and these layers are permanent. This contrasts the primary characteristics of the original concept of palimpsest, which merely serves as a temporary medium for writing (text to be regularly erased). Following Riegl's notion of temporality and age value, the palimpsest type I define here goes beyond the limitations of a physical palimpsest. It employs digitally documented layers of monuments that create a digital palimpsest. Therefore, it offers a temporary representation of a physical monument through continuous documentation. In the digital realm, we can peel back and scrutinize each layer of the digital palimpsest, individually and collectively, as we may choose. In a physical palimpsest, however, we can only observe selected and curated layers of history, resulting in a subjective view of history created by its author (e.g., architect or preservationist). In a digital palimpsest, we can observe multiple histories simultaneously by juxtaposing several layers. We can analyze every single layer that contributes to the object's formation. This has the benefit that we can review both the fragment and the entirety of the building. Ruins, which Riegl so appreciated, can thus also be viewed as fragments of reality. These fragments can be extracted from the physical environment and inserted into a digital palimpsest, where they can form an aggregate with other documented histories. The digital palimpsest represents a part of reality; thus, it is only a reality fragment and is itself composed of multiple fragments.

Layers are not selected according to their relevance by a single author or collective of a "palimpsest architecture." They instead include the work of all previous authors who were responsible for the changes a monument underwent in each of its separate layers. Therefore, a digital palimpsest does not serve as a design tool, as Eisenman applied it in his projects. Rather, it should be used as a tool for digital archiving and preservation – to collect information about a physical monument and visualize its past. Over its history, different states of a physical monument are influenced and formed by a number of groups, including architects, preservationists, and others. When we document such a monument, its digital form is consequently also informed by this collective of authors.

In a digital palimpsest, the main goal is to collect data about the existence of a physical monument in its individual layers. This process digitally preserves a monument and makes it available to future generations as digital cultural heritage without altering the monument's physical structure. Using a "touchless" preservation method, the work of architecture is thus preserved in the Rieglian sense. No version of the preservation is lost, unlike in the physical realm, where preservationists decide the state in which the building should be preserved. Digital documentation, however, freezes the physical monument into one specific moment of time, assigning it age value of that particular time. Therefore, any monument's layer with a digitized age value can be compared to another by juxtaposition or overlay. This allows us to review aging differences and the impact of natural and human forces on a physical

monument. Through this approach to preservation, I introduce a new methodology to the field of preservation and a new way of representing monuments in the *age beyond the digital* by overlaying, overwriting, remixing, and reusing collected data.

Digital palimpsest can also be seen as a database: "if anything should be preserved, it is the database rather than the building,"[24] as Mark Wigley noted. He argues that the protection of digital records is more important than the physical presence of a building. Even though the building is decaying, what should be primarily maintained is the digital collection of the building. Reflecting on the *Modern Cult*, Wigley's statement aligns with Riegl's preservation theory, where the building is left to decay and is preserved by a "touchless" method, such as digital documentation, which results in a building's information database.

Building on Riegl's preservation theory, Wigley claims that the monument is seen as a space of remembrance, more precisely as a "synchronization device."[25] Wigley's argument implies that time is the most important aspect of Riegl's preservation theory and the notion of the digital palimpsest. Riegl's historical and age values are strongly tied to the notion of temporality, as is the digital palimpsest. Time can be observed reversibly in the digital palimpsest. At the same, it possesses a timeless character as well, since it exists outside of time and physical space. It only refers to a particular time and space in the built environment. Even though the technology used for the creation of a digital palimpsest is border-less and has no relation to the documented location, a digital palimpsest has a two-fold relation to the physical site of its origin: it is either fully de-spatialized, meaning the digitized monument is *meta-versed* through VR to the viewer without any relation to its original location, or it is contextualized through its augmentation on the physical site.

The first option allows for reviewing a digitized monument through a digital device from anywhere in the world, offering the viewer a fully immersive experience. Such is the case in the "A Museum Made Digital" project (fig. 3.5) by ScanLAB Projects, which provides "a new way to experience Sir John Soane's Museum."[26] The digitized museum is a digital replica of both the museum's space and its objects. It changes the form and materiality common of early nineteenth-century London to today's digital environment and makes it accessible online from anywhere in the world, given a good internet connection. This approach to digitizing monuments has been used when working with art collections in museums to reach a wider audience without visiting the original site in recent years, primarily due to travel restrictions.

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[24] Mark Wigley, "The Architectural Cult of Synchronisation," *The Journal of Architecture* 4, no. 4 (1999): 409–35, https://doi.org/10.1080/136023699373783, 409.
[25] Ibid., 412.
[26] For a complete virtual tour, see: https://explore.soane.org/.

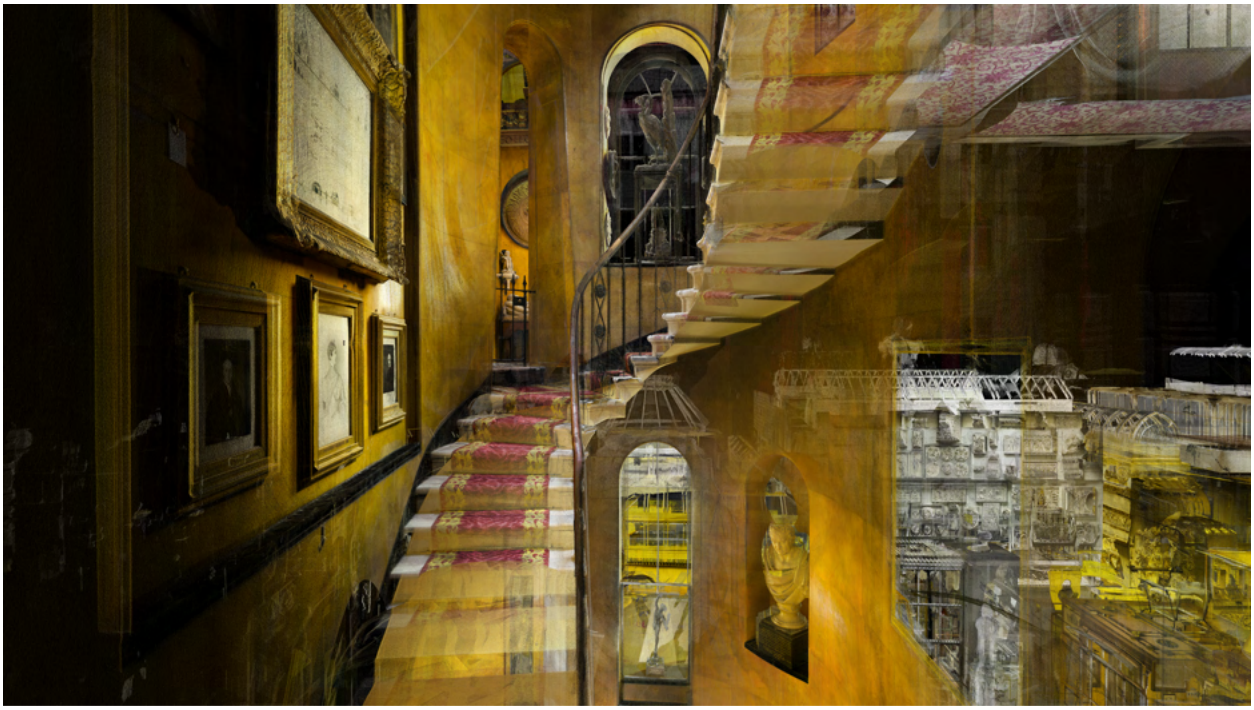
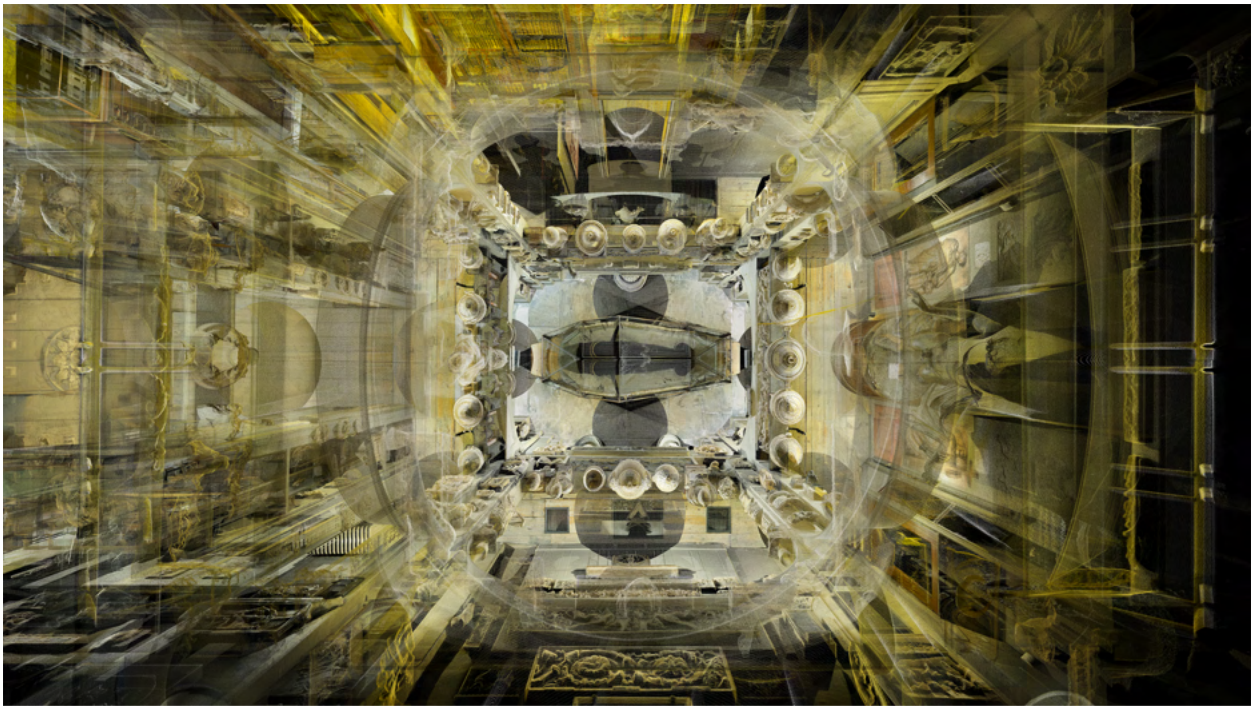


Figure 3.5: ScanLAB Projects. *A Museum Made Digitial. The Sir John Soane Museum.* Digital replica. Top: Museum Stairs.



Bottom: Sepulchral Chamber.

The second type requires the viewer to visit the monument's site to augment its historical past through a digital device (fig. 3.6). One of the projects dealing with augmented layers is the app "Over Time," which was developed by Monument Lab in Philadelphia, PA. The organization's website mentions that the app "offers educational, self-guided tours of a public space by unearthing the multiple layers of history, meaning, and interpretation of that site through a personal smart device."[27] Therefore, this type of digitized monument relates more closely to Riegl's notion of place and remembrance and the notion of a culturally specific monument that is shown within its context.



Figure 3.6: Monument Lab. *Over Time*. Augmented Reality App.

[27] "OverTime," Monument Lab, accessed December 14, 2023, https://monumentlab.com/projects/overtime.

A digital palimpsest offers a continuously updated model as new data from the original site becomes available. Because of this property, the model provides a preview of its layers, modified in time. Therefore, the palimpsest questions the notion of time as linear and offers a non-linear view of history through its existence in the digital realm.

Over the last centuries, the representation of monuments has transformed. Starting with an appreciation of historical value, which celebrated the constant beauty and completeness of the historical monument, it moved towards appreciating the aging process of the monument, tracing time in physical form while simultaneously appreciating a monument's steady change. Nowadays, monuments are facing a new age of representation. The palimpsest is eternally stored, and it serves as a retainer for all possible histories including both historical and age values.

The digital palimpsest possesses a referential capacity similar to architectural drawings. It refers to architecture that will not be built in the future based on a classical drawing but refers to what was built or unbuilt in the past. Thus, as a representation, the digital palimpsest points towards an external object other than itself. Specifically, its reference is always a physical monument located in a built environment. These two are always bound together, as the French literary critic and writer Roland Barthes has argued in view of an object and its referent as photography: "They merge in meaning value, in which the former acts entirely in service of the real. In this context, without the "real" object, the virtual would have no meaning, no soul, no referential."[28] Digital palimpsest and models located within it are also related and bonded to real, original objects. They would have no meaning and no virtual presence without the existence of real objects; therefore, their creation depends on them. Once they are created as references, they can exist independently from their referential objects, and thus, they are not affected by the physical world.

Physical monuments are part of the urban fabric, and therefore, urban planning is based on the interconnectivity of different areas and spaces, including monuments. With the increasing impact of technology on our daily lives, our navigation in a cityscape is choreographed by digital devices, which become an extension of our memory. As architect and urban designer William Mitchell reminds us, we increasingly "rely on our electronic extensions – smart vehicles and hand-held devices, together with the invisible landmarks provided by electronic positioning systems – to orient us in the urban fabric, to capture and process knowledge of our surroundings, and to get us to where we want to go."[29] The technological shift allows monuments to be represented in the digital realm as a symbol on a digital map

[28] Fiona Cameron, "Beyond the Cult of the Replicant: Museums and Historical Digital Objects – Traditional Concerns, New Discourses," in *Theorizing Digital Cultural Heritage A Critical Discourse* (Cambridge, MA: MIT Press, 2007), 59.
[29] William J. Mitchell, *City of Bits: Space, Place and the Infobahn* (Cambridge, MA: MIT Press, 1996), 50.

(fig. 3.8) or as a digital replica of the physical object (fig. 3.9), which then becomes a part of the virtual urban network.



Figure 3.8: Google Maps with tags of monuments in the city.



Figure 3.9: Google Earth, 3D representation of a monument in its original location.

Furthermore, in his study on architecture as an interface, Antoine Picon argues that "at an urban level, the public spaces of tomorrow will be places where two realities are intertwined,"[30] the physical and the virtual, represented by a digital interface. Another feature influencing contemporary urban planning is the method of *digital tagging,* which combines digital space with a physical location name, the *tag*. This approach thus supports the idea of "localized" content that provides a wide range of data, such as the popularity of a location among visitors, the frequency of their visits, or the visibility of a specific area in the urban fabric. When working with collected data, digital tagging can also be applied to digitized monuments.

In digital space, a digitized monument appears at a real scale (1:1), since it represents its physical twin. This representational model of a monument within a digital palimpsest consists of documented data from the physical site but does not include information characteristic of digital architectural images, such as occupancy or suggestions for the programmatic use of the space, which is filled with people, atmosphere, social events, or services. Traditionally, a digital twin is used to simulate the performance of a potential or actual building. In the case discussed in this chapter, a monument's digital representation does not exist to control a physical object; it serves to document the changes that have occurred to it and thus archives them as a digital replica, preserving it for the future.

This leads us to the question of who uses or participates in a digital palimpsest, and how can it be seen by the viewer. These questions also relate to what Greg Lynn asked concerning digital archives: "How can archives that include digital content be studied, conserved, exhibited and published?"[31] The digital palimpsest, as an archive of a physical monuments' aging, faces the same issue. The digital palimpsest can only be explored online as it only exists online. Through its digital preview, it offers the viewer a glimpse into its many layers. Thus, the model is mediated through a digital device, namely the interface. The viewer (e.g., scholar, preservationist, or general public) can experience the digital palimpsest four-dimensionally as it unfolds in space and time. As a historian of design and architecture, Molly Wright Steenson writes, "visualizing, generating, mediating and spatializing data are all different formats and modes of other archaeologies of the digital in architecture."[32] Reflecting on this statement, a digital palimpsest can also be seen as an archaeological project, a retrieval information system shifting from a text-based database to a spatial organization of data.

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[30] Antoine Picon, *Digital Culture in Architecture: An Introduction for the Design Professions* (Basel: Birkhäuser, 2010), 56.
[31] Greg Lynn, "Going Native: Notes on Selected Artifacts from Digital Architecture at the End of the Twentieth Century," in *When Is the Digital in Architecture?* (Montréal, Québec: Canadian Centre for Architecture, 2017), 284.
[32] Molly Wright Steenson, "Information Archaeologies," in *When Is the Digital in Architecture?* (Montréal, Québec, Canada: Canadian Centre for Architecture, 2017), 196.

Not only can the general public benefit from digital preservation of our cultural heritage at large, but so can specialists. Preservationists and scholars can learn about the documented changes of a monument and, on this basis, suggest future preservation measures. The digital palimpsest helps us to understand the materiality and formal changes that occur in a monument by mapping its structures – internal and external – over time. This process then helps to predict how monuments should be maintained and preserved in the future based on prior knowledge of the monument's history.

Digital Materiality

Digital materiality reflects the materiality of our built environment, referencing its physical properties. This new kind of materiality is embedded in every aspect of our daily lives through digital devices. Human senses have been adapting their perception of physical and digital environments simultaneously. Antoine Picon has noted that "indeed, digital technologies have transformed the way humans see, hear, and touch. We can no longer see without being decisively influenced by digital cameras. We listen to compressed digital files, and we wear perfumes that have been synthesized with the aid of sophisticated software that allows for the combination of fragrances in the same way that designers juggle with forms and colors using graphics programs. The list of ways in which the human relationship to the physical world has been transformed by the digital is simply astonishing."[33]

Digitized monuments are not composed of brick and mortar but of zeroes and ones. Unlike their physical twins, which are made of many materials, digitized monuments consist of *digital data*. They represent the materials of their physical twins through digital textures while simulating the physical properties of the material in the digital environment. Wolfgang Ernst discusses the material in the digital realm called "digitized archivalia" by stating that:

> The strength of digitized archivalia lies not in their (highly vulnerable) migrability into the technological future but in their substantially potentized present online accessibility. Longevity is rooted in the materiality of archivalia—discourse in their immaterial circulation as information.[34]

Digitized archivalia[35] represents one layer of a palimpsest because it archives and preserves the material of a physical object in digital form. In other words, the digital palimpsest represents its physical twin,

[33] Antoine Picon, "Beyond Digital Avant-gardes: The Materiality of Architecture and Its Impact," *Architectural Design* 90, no. 5 (2020): 118–25, https://doi.org/10.1002/ad.2618, 122.
[34] Wolfgang Ernst, "Underway to the Dual System: Classical Archives and Digital Memory," in *Digital Memory and the Archive* (Minneapolis, MN: University of Minnesota Press, 2012), 88.
[35] According to Merriam-Webster dictionary, archivalia is a material preserved in or suitable for preservation in archives.

including its form and texture (materiality) in a digital realm. Importantly, in a digital environment, the software allows to detach the monument's texture from its form. The texture is captured alongside the monument's form during the digital documentation process and constitutes independent information of the spatial model. The documented changes of form and texture can therefore be studied separately. To be viewed together with the form, the texture must be projected onto it.[36]

A concept of a palimpsest as an overlay of digital information onto the physical environment was developed, for instance, by the *Interactive Architecture Lab* in an urban project. The lab layered digital data with real space using tools such as 3D scanning and VR. The lab claimed that their "project records personal stories and local histories, layering them over the city at a 1:1 scale. Building this collective memory is especially important in areas undergoing dramatic urban redevelopment."[37] With the aid of current technologies, the built environment is translated to the point clouds of spatial data, offering a new immersive experience.

The project utilized the latest technological developments to realize the lab's vision of merging physical and ephemeral within one space. However, their use of the palimpsest concept is focused on an ephemeral installation rather than the representation of physical structures in the digital realm, where my main focus lies. The lab's case study serves as a preliminary step in developing the digital palimpsest as a new way of representing monuments in a digital space.

The debate over monuments also includes the question of authenticity in relation to the aging and preservation of monument. Once a monument is digitized, how does its authenticity change? The digitized monument offers a true representation of a physical monument and, thus, reflects the authenticity of its physical monument as well. It transforms the physical authenticity into a new digital version; however, the digital authenticity is not affected by the passage of time or other natural forces, meaning that the monument remains the same and does not change its documented authenticity in the digital realm. Monuments represented through multiple layers in the digital palimpsest also consist of multiple authenticities, with each representing one layer of a documented monument. Thus, we can observe the diversity of authenticity in the model of a digital palimpsest and compare its appearance as opposed to the limitation of physical space.

Digital Authorship

[36] The "Reality Capture" software reconstructs the model from the point cloud and creates a texture that is projected onto the model.

[37] Takashi Torisu, "Palimpsest," Interactive Architecture Lab, accessed September 27, 2016, http://www.interactivearchitecture.org/lab-projects/palimpsest.

Authorship in a digital palimpsest is constituted by multiple actors throughout the documented history of a physical monument. Roland Barthes wrote in the late 1960s that "linguistically, the author is never more than the instance writing, just as I is nothing other than the instance saying I: language knows a 'subject,' not a 'person.'"[38] Distinguishing between individual signatures and later attempts to alter the monuments is challenging because of an overlay of information. By examining individual layers that multiple authors and groups create, the digital structure becomes an authorship hybrid – not formed by a single, but by multiple actors.

The digital palimpsest consists of multiple histories and, thus, the work of multiple authors and teams is embedded in one digital representation model. This can include the work of an architectural team, preservationists, engineers, and artists, which is documented retrospectively. All their contributions to the monument represent individual layers of information about the building and its authorship. In the end, the building is formed and modified by several individuals contributing to its various stages. In the digital realm, the individual layers of the palimpsest can be reviewed and analyzed in great detail to distinguish multiple individual human-made and natural changes of a monument throughout its history, as opposed to its physical twin.

Riesentor Case

In the first chapter, I described the efforts to restore the *Riesentor*, the Giant Gate of St. Stephen's Cathedral in Vienna. I consider this case important for several reasons. First, Riegl's involvement in the debate about the restoration and his stance against restoring it to its original state stood out at the time. Second, the character of the *Riesentor* consists of multiple historical layers and styles, which makes it a perfect example for consideration as a physical palimpsest. Third, the *Riesentor* has the potential to serve as an example of a digital palimpsest, with digital tools being employed for its digital preservation. Overall, the palimpsest character of the *Riesentor,* which can shift from the physical realm to the digital allows for its historical layers to be individually analyzed and reviewed in a non-chronological order that was previously unimaginable.

The *Riesentor* consists of different historical styles. Originally, it was built in a Romanesque style in the twelfth century, and was partially restored into a Gothic style centuries later. It serves as a hybrid of styles until this very day (fig. 3.10, fig. 3.11). Following the end of the nineteenth and beginning of the twentieth centuries debates involving the key figure of this dissertation, Alois Riegl, and other interested parties, the question of the unity of styles and analysis of the development of *Riesentor* remains relevant still today.

[38] Roland Barthes, "The Death of the Author," *Manteia* 5 (1968), 145.

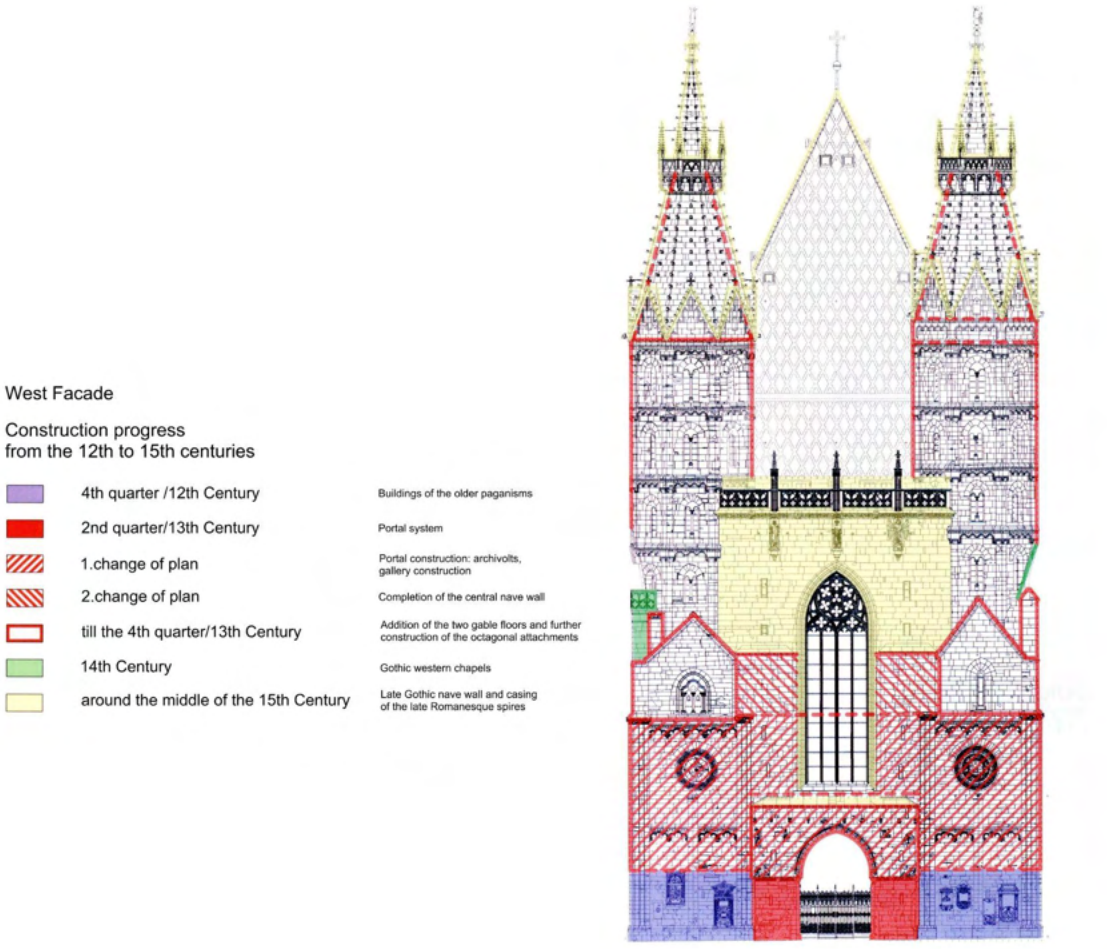


Figure 3.10: West Facade of St. Stephen's Cathedral. Construction progress from the 12th to the 15th centuries, elevation drawing.

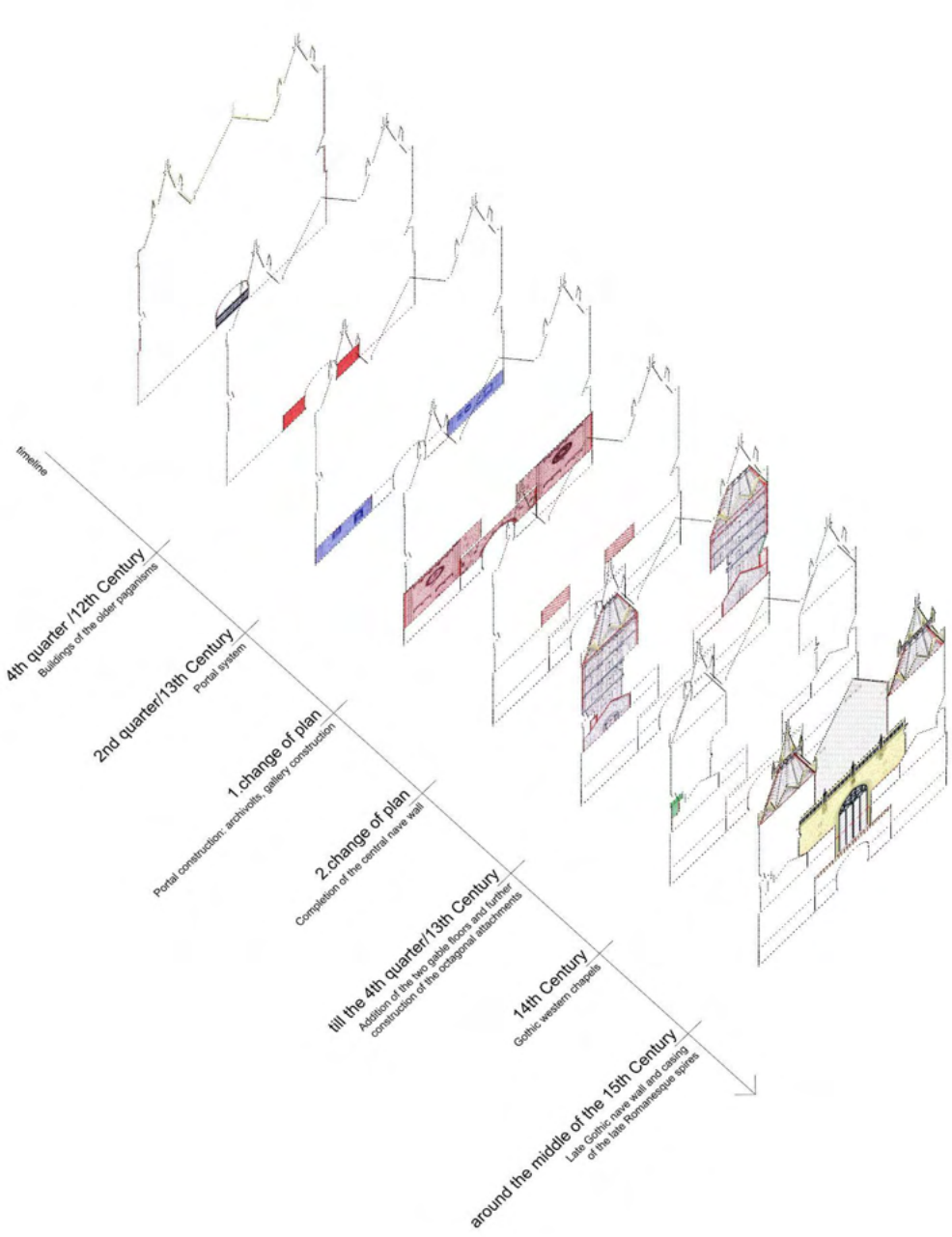


Figure 3.11: Axonometric diagram of building phases of the West Facade of St. Stephen's Cathedral separated into individual layers forming schematic three-dimensional palimpsest. Drawing by the author, 2024.

Unlike the traditional preservation of a physical monument such as St. Stephen's Cathedral, digital preservation allows the *Riesentor* to be digitally documented, storing its history as digital data. The *Riesentor's* digital representation consists of various historical layers as they unfold in time (together with

their various age values). In this way, the general public, preservationists, and art historians, among others, can witness the changes that have occurred in the structure of the *Riesentor* since its construction. It is also important to note that the *Riesentor* is one of the oldest parts of the Cathedral itself.

Individual layers that build the digital palimpsest offer a view of structural, material, and formal changes of the *Riesentor.* Through their overlay, the digital palimpsest reveals the changes and visual development of the *Riesentor* that are available for further research and digital preservation.

CONTINUITY OF RIEGL'S THEORY IN THE DIGITAL PALIMPSEST

The transition from Riegl's point of view, which was firmly entrenched in fin-de-siècle Vienna, to the digital and beyond digital age, informed the changes in the value system of monuments accordingly. Even though Riegl ascribed several values (age, historical, artistic, commemorative, use, newness, or present value) to the monument at the time, in my study, I specifically focus on one primary value (timeless value) representative for a monument in the twenty-first century in the digital realm as a successor of age value. Furthermore, I analyze the possible transition of specific art historical concepts that Riegl implemented in the *Modern Cult* to digitized monuments. These concepts revolve around issues such as haptic and optic properties, the relationship between the artwork, i.e. the monument and the viewer, and the role of time and temporality, among others.

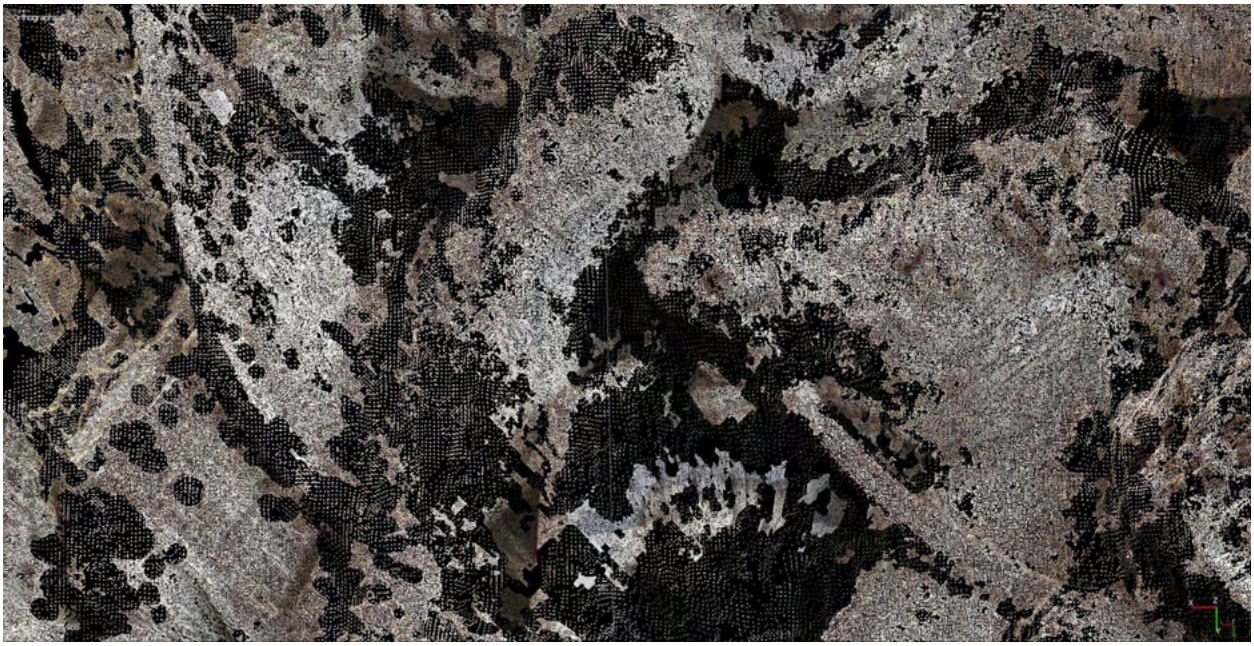
Haptic and Optic

The qualities of haptic and optic, which are important in analyzing a work of art, have implications for both physical and digital objects. They are visible to the human eye from an early stage of life. In the digital domain, haptic and optic properties strongly relate to the resolution of a representational model, including its form, texture, and depth. Depending on the resolution of the digital model – the number of points that make up the cloud, which potentially translates into faces that constitute the mesh – contemporary viewers can perceive an object's optic and haptic qualities of a digitized monument. The resolution of a digital model also allows for the possibility of zooming into the model to review various details that are not perceivable by human eyes, making the digital palimpsest a unique tool for understanding the intricacies of a physical monument. The photogrammetry scan and its resulting images produced by architect Michael Young refer to the ability to view different states of resolution within a spatially digitized object (fig. 3.13). However, the phenomenon of zooming was defined by Antoine Picon as often "problematic in the sense that we can shift almost instantaneously from

the infinitely small to the infinitely large."[39] Nevertheless, the reference to the physical monument helps the viewer to navigate the model while zooming, as opposed to the digital model without reference, which can appear either extremely small or large.



Figure 3.12: Michael Young, Photogrammetry scan of the *Ludovisi Sarcophagus*, Palazzo Altemps (2019). Top: Optic quality from afar.



Bottom: Haptic quality from close.

[39] Antoine Picon, *Materiality of Architecture* (Univ. of Minnesota Press, 2021), 113.

It is important to differentiate between the "visually tactile," referring to the haptic property of artworks in the physical and digital realm, and a human's sense of touch. Haptic and optic refers to qualities of a digital model that can be perceived through AR or VR technology. Thus, the viewer experience is entirely visual, situated in a new digital context.

The Relationship to the Viewer

Heritage and heritage studies focus not on the object but on the relationships between an object and society, hence the socio-political and cultural context of an object. Therefore, the relationship between a viewer and an artwork in a Rieglian sense, in our case, the monument, is important to consider when digitizing monuments. Thus, it is paramount to examine the process of digitizing monuments not only from a technological perspective but also from a relational point of view – that of technology, monuments and their values, and society.

In this regard, we are faced with the very question of how digital documentation incorporates the context of built heritage and its relationship to the society and culture of which it is a part. How does this process translate the social, cultural, and political relationships of cultural heritage to society into the digital format? While digital documentation is focused heavily on the representation of an *object*, it is critical to include the information that contributed to its existence in the physical space through other means, such as text, images, or recordings that can be embedded in the digital model.

The Question of Style (*Stilfragen*)

Alois Riegl is a protagonist of the *unity of styles* in a work of art. This concept is relevant to the case of the *Riesentor* where multiple styles coexist. Digital tools and representations allow us to build on the concept of unity of styles and move it to the digital realm. Because preservationists gain access to a digitized monument which is stored in a digital palimpsest, they can analyze different styles present in the collected layers of a monument documented over time. In this way, the digital palimpsest becomes an analytical tool for examining the evolution of an object's historical styles throughout its often complex history. This process can be useful in art historical terms to examine the formation of the artwork without altering its structure. In Rieglian terms, the historical styles of a monument coexist together without any of them dominating each other. This logic also applies to the digital palimpsest. Following Riegl's idea of the unity of styles within a work of art, the digital superimposition of different stages of development of a historical monument offers a new representation of this unity in the digital realm.

The Role of Time and Temporality

The notion of time and temporality is present throughout Riegl's work and is also incorporated into the concept of the digital palimpsest. Although time in Riegl's concept is linear and has a teleological direction characteristic of the Christian society to which Riegl belonged, monuments represented in a digital environment exist outside of time. In the digital palimpsest, the viewer can examine the timeless value of the monument embedded in the documented historical layers in non-chronological order, thus observing the monument's temporary qualities and its continuous change in the physical realm. As the media theorist Wolfgang Ernst noted:

> The temporality of architecture is endurance, and time is architecture's channel of transmission. Architecture endures not only in the material but also in the temporal sense. A building is not an ephemeral presence; it endures in the purest sense of temporality.[40]

A physical object can be transformed into a dematerialized one while retaining its temporal properties. Thus, the digital palimpsest can be thought of as a temporary structure that represents real-time data as it is collected. In this way, the digital palimpsest is in a state of *permanent temporariness*. Authors Sandi Hilal and Alessandro Petti have worked with the notion of "permanent temporariness" in relation to the architecture of refugee camps, which share many conceptual similarities to digital palimpsest. Their question is whether it is "possible to use the notion of heritage not as a fixed representation of nation-state identity but rather as a right to freedom of movements across nation-state – imposed borders."[41] Beyond the Rieglian notion of place and the importance of the monument's context, in the digital palimpsest, the digitized monument operates much like the notion of heritage in a refugee camp – beyond nation-state borders, it only approximates the *real*.

In the case of the digital palimpsest, when the origin, a physical monument, no longer exists, a digital palimpsest provides the closest possible representation of an absent structure. The notion of heritage in a refugee camp is dual: it operates simultaneously in two environments – the space of exile and the space of origin. Similarly, a digital palimpsest refers to two distinct but interconnected spaces – the space of origin (physical) and the space of reference (digital).

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[40] Wolfgang Ernst, "Toward a Museology of Algorithmic Architectures from Within," in *When Is the Digital in Architecture?* (Montréal, Québec, Canada: Canadian Centre for Architecture, 2017), 63.

[41] Lucia Allais, Sandi Hilal, and Alessandro Petti, "The Permanent Temporariness of Heritage," Harvard Design Magazine, 2022, https://www.harvarddesignmagazine.org/issues/50/the-permanent-temporariness-of-heritage.

The German historian Reinhart Koselleck also explored the notion of temporality.[42] He wrote that the "temporality of history cannot be captured in any linguistic act. To quote Goethe: 'An important event is narrated in the same city differently in the evening than in the morning.' And this applies not just to history ex-post, but also to history in spe. What you say today has a different meaning tomorrow. A word spoken once and a sentence written down once congeal irrevocably and unalterably as soon as they are preserved."[43] This quote also applies to the notion of the digital palimpsest – when working with temporary layers, the overlapping technique offers a constantly changing view of the collected layers. When the historical layers within the palimpsest are juxtaposed, the viewer gains a new perspective on the historical content.

Touchless Preservation in the Digital Realm

Regarding the aging of a monument, Riegl's theory suggests that humans should not interfere with the natural decay of a monument. In other words, we should preserve the monument without touching it, as John Ruskin also briefly suggested in his writings.[44] Following this doctrine into the digital realm, digital documentation offers the possibility of preserving a monument without altering it, while storing information about its form, material properties, and appearance for future generations.

Riegl also claimed that all monuments are equal in their aging; they exist between life and death and cannot escape the arrow of time. The age value of a monument does not require any knowledge of the viewer to recognize and appreciate it, because they can view it without prior knowledge just through their vision by seeing its traces and acknowledging its aging. Similarly, the timeless value of digitized monuments does not demand any prior knowledge of the viewer as it appears on the digital screen.

[42] See more details: Reinhart Koselleck, *The Temporalization of Concepts* (Finnish Yearbook of Political Thought, 1, 1997), 16-24. https://doi.org/10.7227/R.1.1.2

[43] Reinhart Koselleck, *Sediments of Time: On Possible Histories* (Stanford, CA: Stanford University Press, 2018), 18.

[44] Specifically mentioned in: John Ruskin, *The Seven Lamps of Architecture* (New York: John Wiley & Sons, 1884).

3.2. INSTRUMENTS AND REPRESENTATIONS

If we look at buildings as architects, what matters is not so much what digital technologies can do, but what we could not do without them.[45]

Mario Carpo

Historically, preservation has focused on preserving monuments in the built environment. Only recently have digital tools enabled the preservation field to digitally document, store, and three-dimensionally trace their evolution in previously unimaginable ways.

In the following pages, I will define how and why the transformation from Riegl's age value for physical monuments to a timeless value for digitized ones is possible in our time. To this end, I explore the relationship between preservation and technology by examining the tools available for digitizing physical monuments and analyzing their possible representations in the digital realm. While developing his preservation theory, Riegl was not preoccupied with the question of preservation technology and its tools. To follow his touchless preservation approach, we can use analog and digital tools to document physical monuments and translate them into digital space. Adam Lowe, the director of Factum Arte and the founder of Factum Foundation for Digital Technology in Conservation, calls digital preservation techniques "non-contact recording methods."[46] This approach continues Riegl's touchless preservation in the digital environment. Artist and preservation architect Jorge Otero-Pailos[47] calls Lowe's methodology "experimental" due to the nature of the deployed processes, such as the digitalization of artworks, which changes their material properties.[48] Lowe and his team applied the non-contact methodology in many projects, combining two complementary methods, 3d scanning and panoramic photography which allows to capture a high detail of documented surfaces.[49]

Historically, the primary documentation methods included drawing, photography, and photogrammetry. In the twenty-first century, all previously mentioned documentation methods are

[45] Mario Carpo, "A Short but Believable History of the Digital Turn in Architecture," e-flux, March 2023, https://www.e-flux.com/architecture/chronograms/528659/a-short-but-believable-history-of-the-digital-turn-in-architecture/, accessed on [date].
[46] This approach is defined on Factum Foundation website, https://factumfoundation.org/the-foundation/.
[47] Jorge Otero-Pailos is associated with the movement of "experimental preservation."
[48] Jorge Otero-Pailos, Erik Langdalen, and Thordis Arrhenius, *Experimental Preservation* (Zürich, Switzerland: Lars Müller Publishers, 2016), 15.
[49] See one of the case studies discussing the use of these techniques in detail: Carlos Bayod Lucini, "The Raphael Cartoons as the V&A: Close-Range Digitisation at a Monumental Scale," in *The Aura in the Age of Digital Materiality: Rethinking Preservation in the Shadow of an Uncertain Future* (Cinisello Balsamo, Milano: Silvana Editoriale S.p.A., 2020), 169–71.

already applied not only in regard to the preservation of physical objects but also in digital workflows, and hence provide various possibilities for their application in the digital realm.

We can use digital technologies to create a digital palimpsest and preserve our built environment in a digital format, instead of merely using preservation methods for the physical realm. As the quote by Mario Carpo suggests, we can preserve buildings digitally because the technologies for such digital preservation are now available to us. Without them, we would preserve only physical objects, but without the benefits of digital preservation that I have outlined above. Therefore, in the following section, I briefly discuss the digital turn in preservation enabled by the advancement of technology from two- (drawing and photography) to three- (digital replica) and four-dimensional (digital palimpsest) representational models.

DIGITAL DOCUMENTATION INSTRUMENTS

Digital preservation evolved slowly at the turn of the twenty-first century, when its importance for the field was less clear. Through digitization, however, the creation of records related to technological developments provided an opportunity to replace the original work with the copy.[50] Thus, in keeping with Riegl's desire to study copies without altering original objects, digitized models provide a basis for analyzing the historical development of a physical monument without any alteration. In this way, digitized monuments serve as a basis for further research and the digital preservation of physical objects.

The discipline of preservation, reflecting on technological progress, profits from using new digital instruments to redefine methods for protecting monuments. Increasingly accurate documentation technology allows for the virtual recreation of our built environment. As Michael Young stated, "reality as mediated through images is a much larger cultural question than architecture's internal disciplinary battles."[51] The debate about the preservation of architecture touches many other fields outside of its discipline, especially when working with digital tools that mediate the image of our cultural heritage. Therefore, preservation methods have a greater impact than just on the discipline itself and the society of which it is a part.

When we digitally preserve objects, we create a digital representation that shapes our perception. This mediated representation contributes to our understanding of the physical object, depending on how it is mediated. The tools used to represent objects contribute to cultural heritage, identity formation, and a

[50] Salvador Muñoz Viñas, *Contemporary Theory of Conservation* (Routledge, 2004), 23-24.
[51] Michael Young, *Reality Modeled after Images: Architecture and Aesthetics after the Digital Image* (New York, NY: Routledge, 2022), 3.

sense of collectivity by creating two-, three-, and four-dimensional records. As an architect and mathematician, Andrew Witt argues:

> Ways of encoding the technical knowledge of design, including in drawing machines, geometric manuals, and digital software, are essential to the culture and practice of architecture… The knowledge that is instrumentally encoded actually represents a radically new kind of collective cultural memory, a vast cabinet of new disciplinary practices.[52]

Specific types of instruments used in preservation technology represent a group of tools that contribute to identity formation through various types of representational models: abstract, mathematical, and descriptive, among others.

The digital palimpsest is a model whose primary goal is to approximate reality as closely as possible while documenting and storing all possible histories of the monument. At the same time, the palimpsest resists the loss of information. Collected data about a monument comes in many different formats: texts, two-dimensional drawings, photographs, diagrams, recordings, and three-dimensional documentation. But what is the role of this data? According to architect Laura Kurgan, "data are always translated such that they might be presented. The images, lists, graphs, and maps that represent those data are all interpretations. And there is no such thing as neutral data. Data are always collected for a specific purpose by a combination of people, technology, money, commerce, and government. The phrase 'data visualization,' in that sense, is a bit redundant: data are already a visualization."[53] Thus, a digital palimpsest serves as an archive of a monument with all its data available to visualize the monument's changes, life, and even afterlife. The layers of information stored within the digital palimpsest can be seen as a new form of archive – evolving, growing, and generating new layers. In this way, the digital palimpsest is an active archive type – it stores and produces new information. In a traditional sense, archives are storages of past or present information. Nevertheless, the digital palimpsest serves as an archive for studying copies of original work without destroying them, as Riegl envisioned when he wrote: "the development of modern techniques of reproduction promises that in the near future (especially since the invention of photography and facsimile reproduction) new and perfect means compensating for the

[52] Andrew Witt, *Formulations: Architecture, Mathematics, Culture* (Cambridge ; London: The MIT Press, 2021), 58.
[53] Laura Kurgan, *Close Up at a Distance Mapping, Technology, and Politics* (Zone Books, 2013), 35.

loss of originals will be found. In this way, scholarly research, which remains a source of conflict for age-value, can continue without interfering with the original."[54]

Throughout history, there have been instances where preservationists have been accused of "committing 'crimes'" for making minor modifications to an original object that could be tantamount to its destruction. Therefore, in numerous cases working with digital copies offers a way to avoid these situations. On the other hand, a specific group of preservationists working in the domain of "experimental preservation" prefers to work with original artifacts, as Otero-Pailos claims, "as a necessary method for advancing knowledge about those very things, and indeed for protecting their future."[55] These experiments aim to challenge the traditional methods of preservation, often stepping into other disciplines beyond it. Digital preservation, defined as touchless (by Riegl) or non-contact (by Lowe), offers a new method of reviewing historical and cultural objects as digital palimpsests, which can also be interpreted as an experimental method contrasting classical approaches in the field. Experimental preservationists build on Riegl's notion of unintentional monuments when they work with found objects, or more precisely, "quasi-objects," assigning them new meaning. In doing so, they reinterpret objects from the past and place them in a new context.

The digital palimpsest is constantly evolving as new monument data emerges over time, such as changes in a monument's materiality and form, relocation of a monument, or destruction. The preservationist Erica Avrami notes the following in relation to new technologies:

> New technologies allow for the collection of precise spatial data, the recording of a wider range of resource types, the incorporation of digital photography, and the inclusion of historic contexts, all of which contribute to an analytical framework for using the data to inform planning goals and policies.[56]

As a starting point for digitizing monuments, preservationists first survey the monument in question. The process of surveying has evolved through the development of technology and tools from the close-up measurement of the physical environment to the accurate digital representation of objects. Therefore, the current preservation techniques used to digitize monuments can accurately represent the physical object

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[54] Alois Riegl, *The Modern Cult of Monuments: Its Character and Its Origin*, trans. Kurt Forster and Diane Ghirardo (Oppositions 25, 1982), 37.
[55] Jorge Otero-Pailos, Erik Langdalen, and Thordis Arrhenius, *Experimental Preservation* (Zürich, Switzerland: Lars Müller Publishers, 2016), 11.
[56] Erica Avrami, ed., "Preservation and the New Data Landscape," Columbia GSAPP, accessed February 14, 2022, https://www.arch.columbia.edu/books/reader/370-preservation-and-the-new-data-landscape.

and create an exact digital replica that is presented in the digital realm. Andrew Witt emphasizes the benefits of digitization tools:

> With increasingly precise survey instruments, these cartographic programs generated exact virtualizations of the land and used the device of perspective projection at an immense scale to quantize national and colonial territory.[57]

Technologies that have significantly advanced surveying (and preservation) throughout history include photography, photogrammetry, and LiDAR scanning.

The digital documentation process is highly subjective, depending on various parameters, mostly on the team performing the documentation task. Documentation, such as photogrammetry, is created through a series of perspectival images (photographs) that do not provide a true representation of a three-dimensional object due to the properties of the camera lens (e.g. distortion) as opposed to an orthogonal drawing. Although this process produces a new, mediated image of architecture, it does not produce a new type of architecture as such. The digital representation does not create or redefine the actual appearance of architecture as it exists in reality. It merely serves as a digital index.

With the advancement of technology and the use of digital tools, the age value of a monument can be documented, stored, and represented, moving from a physical to a digital environment. Although these processes were not possible in the twentieth century, today, the age value can be stored in a digital space, providing a single layer of history – a moment captured in time. In this process, it is important to understand that we can document and store many layers of history, including different stages of a monument's life, from its original state-historical value to nature-exposing age values at different points in time.

Geographic Information System (GIS)

The concept of the digital palimpsest is similar to the Geographic Information System (GIS), which emerged in the 1960s and has since been employed in a wide range of applications. GIS is designed to capture, store, manipulate, analyze, manage, and visualize spatial data, much like the processes embedded in the digital palimpsest. It allows users to locate data spatially. In GIS, data collection is based on remote sensing and implementing satellite and aerial imagery into the systems. GIS shares a number of similarities with digital palimpsest. Both GIS and the digital palimpsest serve as a flexible database of information about the surveyed subject. While GIS works with information about a

[57] Andrew Witt, *Formulations: Architecture, Mathematics, Culture* (Cambridge; London: The MIT Press, 2021), 115.

location as a "key index variable," the palimpsest has a dual application in terms of its physical context (depending on whether it is shown in AR or VR). The GIS and the digital palimpsest manage a large amount of data which is structured into layers that allow for a spatial visualization of the surveyed objects. The overlay of layers in the system enables the viewer to analyze new information. In GIS, symbols, colors, and other styles represent different types of data. Both GIS systems and digital palimpsests have interdisciplinary applications in architecture, engineering, preservation, and data science.

An example of a type of GIS software[58] is Google Earth, which shows spatial representations of the Earth from collected satellite imagery, photographs, and GIS data. Google Earth also uses photogrammetry to spatially represent objects located within the built environment (fig. 3.13). As Laura Kurgan points out, Google Earth is "more of a nickname for our access to images of anyplace on the globe."[59] She goes on to claim that "Google Earth is only the latest step in the public availability or democratization of high-resolution satellite imagery."[60]

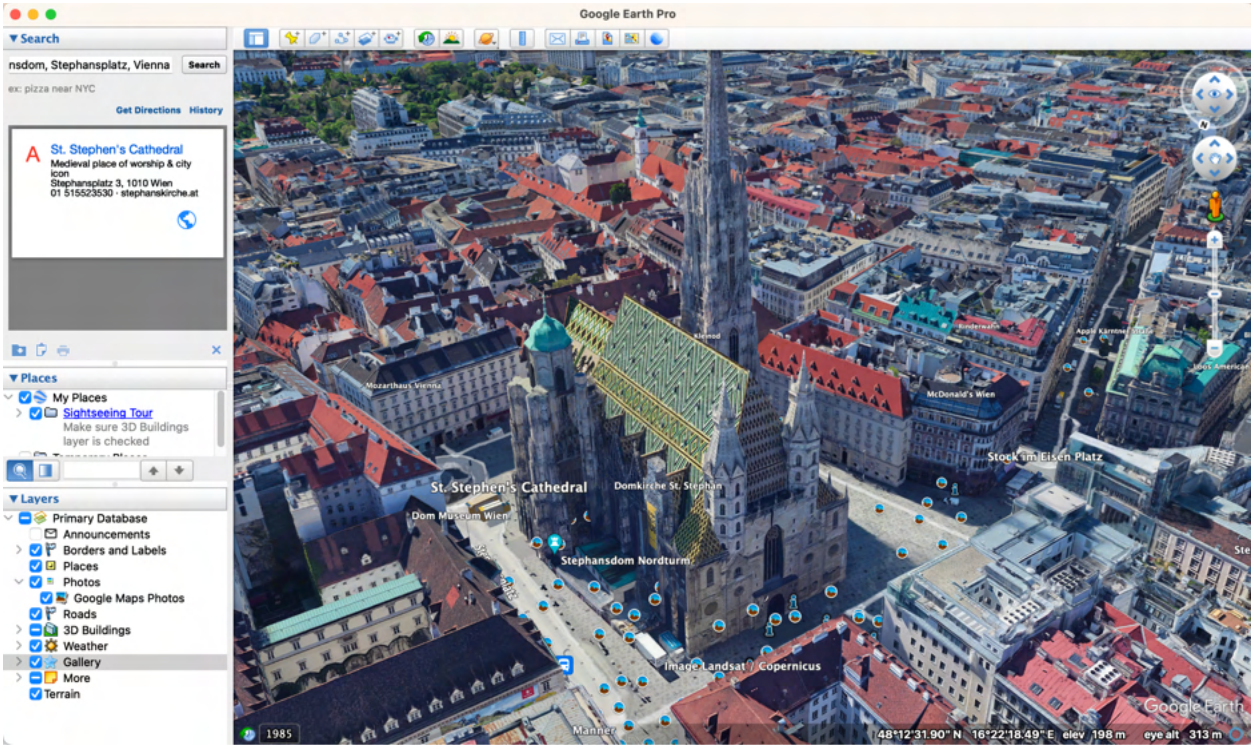


Figure 3.13: A three-dimensional photorealistic preview of St.Stephen's Cathedral in Vienna, Google Earth. Screenshot by the author, 2023.

[58] Other, more specialized GIS software is ArcGIS or QGIS.
[59] Laura Kurgan, *Close Up at a Distance Mapping, Technology, and Politics* (New York: Zone Books, 2013), 20.
[60] Ibid., 24.

The main feature of Google Earth is to visualize the collected data designed for the general public and to provide easy navigation. Similarly, the digital palimpsest provides a database for a broad audience to view digitized monuments, but also offers and insights into their historical layers. The software includes information such as individual layers on the light and weather conditions of the surveyed site, tags with photographs of specific points, and terrain data, among others.

In addition to the features already mentioned, Google Earth also offers a *time-lapse* feature that shows changes on the planet documented since 1984. The Timelapse Project is a collaboration between Google and various institutions: NASA, the US Geological Survey, the European Commission, and the European Space Agency. Together, they collect and manage satellite imagery of the planet to create time-lapse videos of various locations around the world. They are presented as animations consisting of one image per year; thus, manifesting the changes in the environment over nearly forty years. The method of regularly documenting a built environment over a period of time is also the main principle of the digital palimpsest. The changes documented in a digital palimpsest can be viewed spatially through layers related to a specific time in the past, similar to the time-lapse feature in Google Earth.

However, Google Earth works within the urban context and does not consider changes to individual buildings within the urban fabric in detail. This is the task of the digital palimpsest: to document changes in a single monument. One such attempt to document the transformation of a singular built structure is shown in the Bartlett Transformation 2013-2018 project by ScanLAB Projects (fig. 3.15). Although it shows only two phases of the building, it represents a first step in developing the concept of a digital palimpsest by mapping the evolution of the building over time using 3D scans.



Figure 3.15: ScanLAB Projects. Image before (right, 2013) and after (left, 2017) the reconstruction of Wates House, 22 Gordon Street, London, Bartlett School of Architecture, UCL

The primary goal of the project is to show the transformation of the UCL building scanned at different times, years apart, to represent the state before and after the building's reconstruction through a series of point cloud animations. On their homepage, ScanLAB Projects elaborates on the project's aim: "The resulting data set was assembled and overlaid to create two digital point cloud models. The dual phases of the film vividly reveal the substantial change in space and scale brought about by the refurbishment."[61]

The digital palimpsest, similar to the previously mentioned projects, works with the notion of change and temporality facilitated by documented data. In this way, the digital palimpsest shows the evolution of the monument's aging while preserving it without physically altering it. Following Riegl's approach of touchless preservation, the digital palimpsest builds upon Riegl's theory by not intervening in the aging and natural decay of monuments, but by preserving them for future generations through their documentation.

Digital technologies allow us to document the condition of a monument and reconstruct its historical value by restoring it to its original state using available sources such as drawings, plans, sections, sketches, or photographs to retroactively fill in the missing information in the digital palimpsest. Reconstruction tools, such as three-dimensional modeling software, make it possible to reconstruct layers,

[61] "Bartlett Transformation 2013-2018," ScanLAB Projects, accessed October 25, 2023, https://scanlabprojects.co.uk/work/bartlett-transformation/.

allowing contemporary audiences to experience the past in a new way through the monument's collected historical layers. These layers are in constant flux as they also represent the age value of the monument, which changes in the physical world over time.

As Lucia Allais notes, "nineteenth-century architects imagined that monuments were either restored or not, [while] twentieth-century monuments were more likely to be hybrids, equally damaged by neglect and zealotry."[62] In the twenty-first century, then, we can build on the previously used term hybrid and situate it in a digital environment. Digital tools allow digitally preserved monuments to exist between two states, the original and the preserved. A physical monument must be restored or modified from its original state when it is digitally documented and translated into a digital environment. However, with digital modeling tools, a digitized monument can be returned to its original state, e.g., as it was originally intended in the technical drawing documentation.

Digital Photogrammetry

Digital photogrammetry is a twenty-first-century documentation technique for digitizing monuments, alongside 3D laser scanning and other digital technologies. Processes such as photogrammetry and laser scanning are not exclusive to the discipline of architecture or historic preservation, but are used in various fields with numerous applications.

Historically, photogrammetry was built on the advent of photography in the 1830s, so it is important to recognize that its discovery offered new dimensions for spatial surveying. This means that photography has been one of the main processes included in photogrammetry (fig. 3.15). Although a technique of photogrammetry was known in Riegl's time, he did not express any interest in this new mode of surveying and documenting the built environment, or in technology in general that could potentially aid in the preservation of modern monuments and relate to his doctrine of touchless preservation. Nevertheless, it is essential to use this method of preservation for digitizing monuments in our time, reflecting Riegl's value system. Photogrammetric surveying allows a new value of monuments to emerge, especially since the advent of the *digital*. Although Andrew Witt described photogrammetry as a "powerful new technique to record and dimension the visible world,"[63] this method also allows us to see an invisible aspect of the world – the time that has passed.

[62] Lucia Allais, *Designs of Destruction: The Making of Monuments in the Twentieth Century* (Chicago: The University of Chicago Press, 2018), 48.
[63] Andrew Witt, *Formulations: Architecture, Mathematics, Culture* (Cambridge; London: The MIT Press, 2021), 119.



Figure 3.15: Auguste Mestral, Gustave Le Gray. *The Ramparts of Carcassonne*. Photograph, 1851.

Photogrammetry was coined as a term by the German architect Albrecht Meydenbauer, who also invented its first application in the field of architecture for purposes of *cultural preservation.*[64] Over the course of the twentieth century, photogrammetry evolved from "mechanized visualization in architecture"[65] performed by human labor to digital documentation of a built environment aided by software. Photogrammetry, using contemporary digital tools, is a way to virtualize the built environment since the advent of the digital, and thus serves as a method of digital preservation as a continuation of Riegl's concept of touchless preservation.

With the development of surveying tools, photogrammetry evolved from an analog to a digital technique. While documenting the built environment, the digital tools used for photogrammetry allow for documentation of not only the visible world, as Witt noted earlier, but also of an invisible time. Time as an invisible measure is made visible on the changing form of the monument, and digital photogrammetry documents this process of transformation in several steps. As Michael Young notes, "the environment as

[64] Ibid., 119.

[65] Lucia Allais, "Rendering. On Experience and Experiments," in *Design Technics: Archaeologies of Architectural Practice* (Minneapolis: University of Minnesota Press, 2020), 22.

scanned through digital images is a mapped, exploitable collection of data: it is reality modeled after images."[66] Digital photography creates an image of a physical monument that is translated into a three-dimensional representation in a digital space. In photogrammetry, a digital model created from many photographs is defined by point clouds offering a "blurry" representation of architecture before these points are transformed into meshes (fig. 3.16).

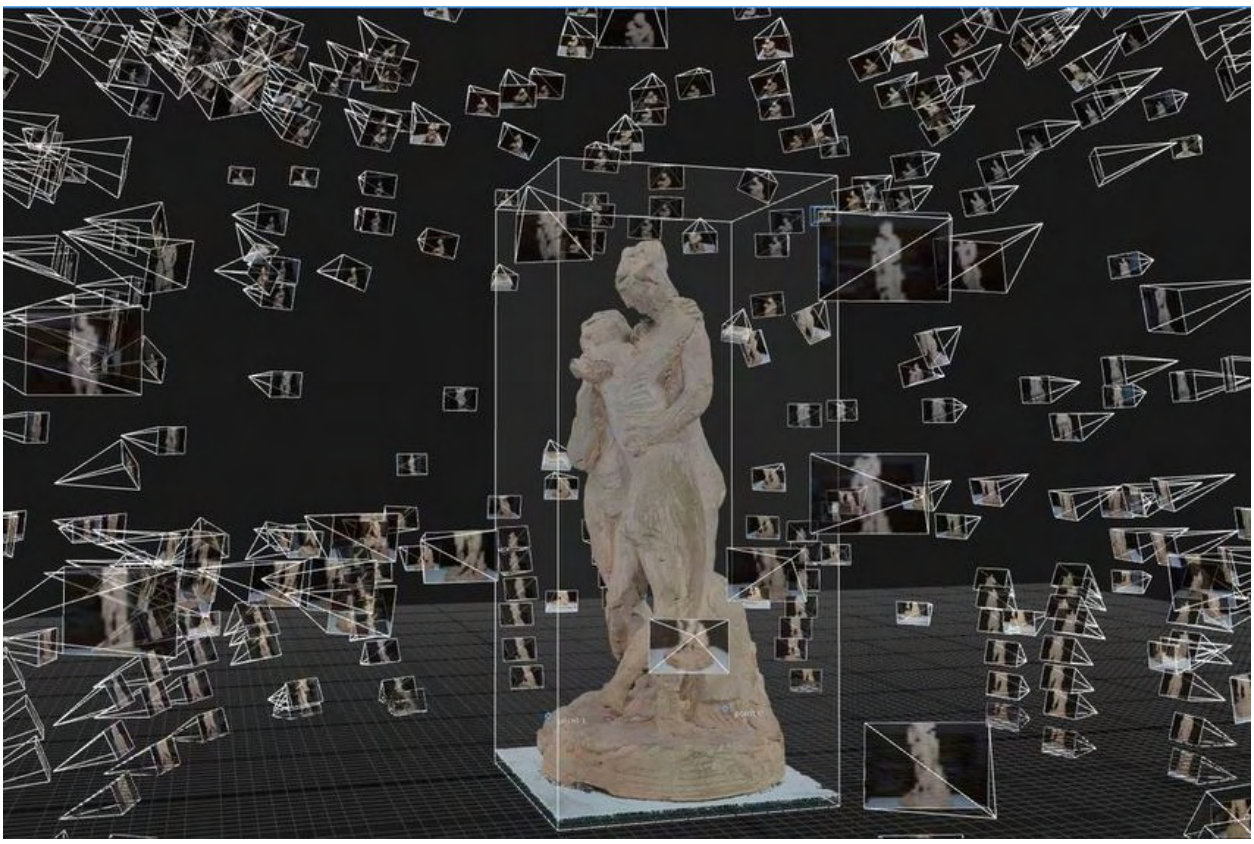


Figure 3.16: Point cloud of the *Three Graces* by Antonio Canova, recorded by Factum Foundation for the Musei Civici Bassano del Grappa.

These point clouds, reminiscent of the more than one century old avant-garde movement of *pointillism*, can be translated into a model defined by a mesh consisting of faces. The higher the resolution of the photographs, the higher the number of triangles that define the model. A physical monument becomes a digital one – from many collected photographs. Thus, physical reality is mediated and transformed into a data-based reality that can be manipulated in the digital environment. Andrew Witt

[66] Michael Young, *Reality Modeled after Images: Architecture and Aesthetics after the Digital Image* (New York; London: Routledge, 2022), 13.

notes that "photogrammetry could be used to scan existing architecture as never before, in effect creating mesh triangulations of buildings that virtually recorded their many dimensions."[67]

When the documentation instrument digitally records the work of architecture, it maps only its surface. During this documentation process, the instrument does not collect data about its internal structure or elements that it does not "see." Therefore, the inner structure of documented architecture will result in empty spaces instead of their physical material structures. *But what can the instrument see what human eyes cannot?* What is supplied with various materials and structures in a built work of architecture is represented by a void in a digital photogrammetric model. The instrument only sees what is in front of it, not what lies behind the surface. The data we collect during the photogrammetry process is information about the geometry of the external surface and its texture, but not data about the inner structure of the geometry. This observation leads me to the argument that there is no interiority in the architectural form of a digitized monument created by photogrammetry.

Similar to Riegl's concept of the aging monument, we can only experience the changes visible on the monument by sight, i.e. changes on the surface and not on its internal structures. Even though there may have been changes to the internal structure, other documentation tools must be used to analyze them and translate them into a digital model. Within the photogrammetric model, there is no differentiation of the form set by the relation of outside-inside, since there exists only an outside or inside of the form. Therefore, when we look at the palimpsest model, we are as much outside of the space as we are inside the space because of its virtuality. There is no tangible boundary between what is inside and what is outside, because the digital model represents only the external structure while the internal spatial data is missing.

The visual information about the interior of the structure, as opposed to the photogrammetric technique, can be obtained, for example, by X-ray diffraction (XRD) or X-ray fluorescence (XRF). These methods reveal information about the internal structure up to a certain depth (fig. 3.17). The collected data can help reconstruct the digital palimpsest model to develop its interiority and contribute to the preservation of internal structures that may be defective.

[67] Andrew Witt, *Formulations: Architecture, Mathematics, Culture* (Cambridge ; London: The MIT Press, 2021), 119.

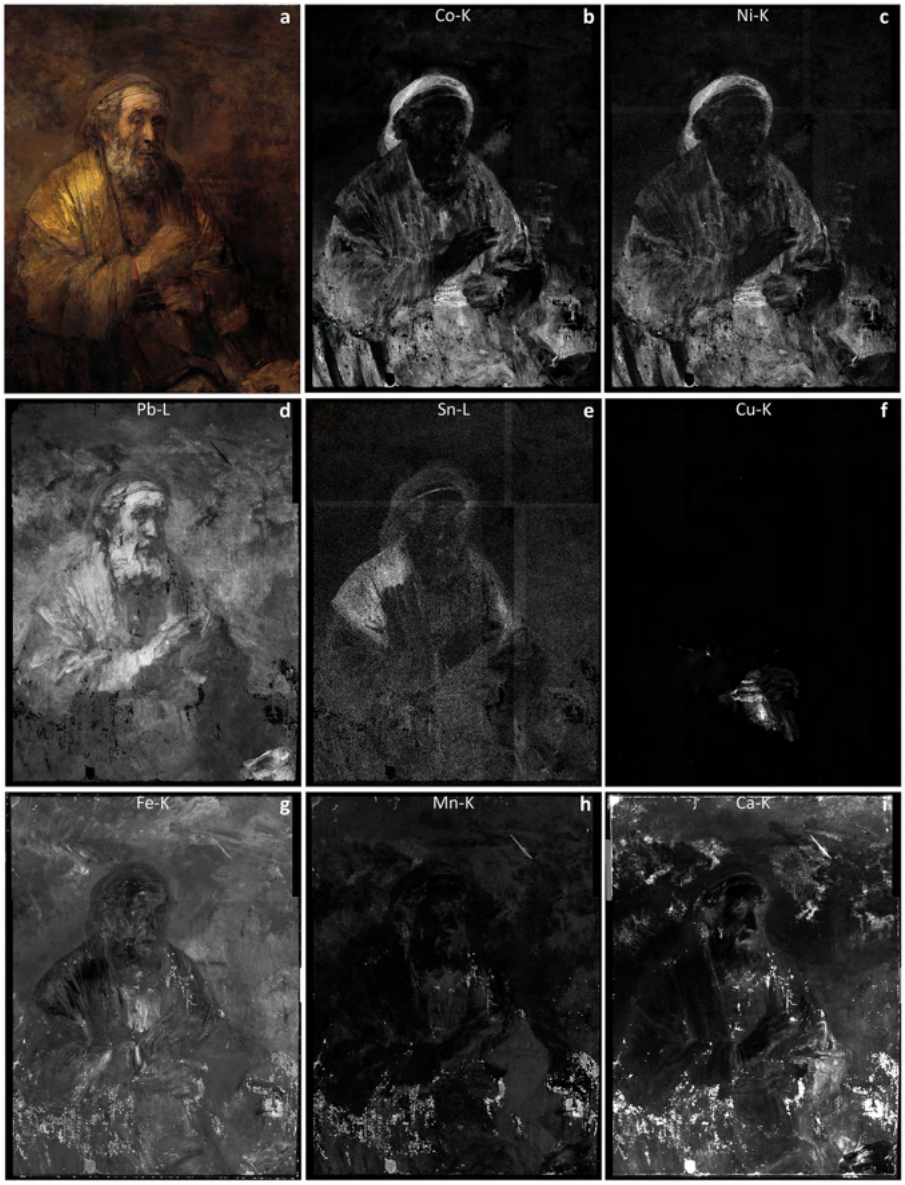


Figure 3.17: Macroscopic X-ray Fluorescence imaging (MA-XRF) has been used to analyze paint samples from Rembrandt's *Homer.* Visible light image (a) and corresponding MA-XRF maps: cobalt (b), nickel (c), lead (d), tin (e), copper (f), iron (g), manganese (h), and calcium (i).

The inner space of the structure, in the case of a photogrammetric model, the hollow space, is known from the history of architectural representation as *poché.* It had transformed from the black solid infill by Donato Bramante (fig. 3.18) to the free plan by Le Corbusier to Rem Koolhaas's library project in Paris, where he renders solid blocks of information as *poché.*[68] An internal structure of the model in the digital palimpsest is represented by a void, which represents missing information between point clouds or

[68] Michael Young, *Reality Modeled after Images: Architecture and Aesthetics after the Digital Image* (New York ; London: Routledge, 2022), 19-40.

meshes. This void has no material evidence or digital data; it thus becomes an unoccupied empty information space, a reversal of the traditional *poché.* It is important to note that there is no hierarchy in the digital palimpsest – all elements and all layers form and contribute equally to the representational model.

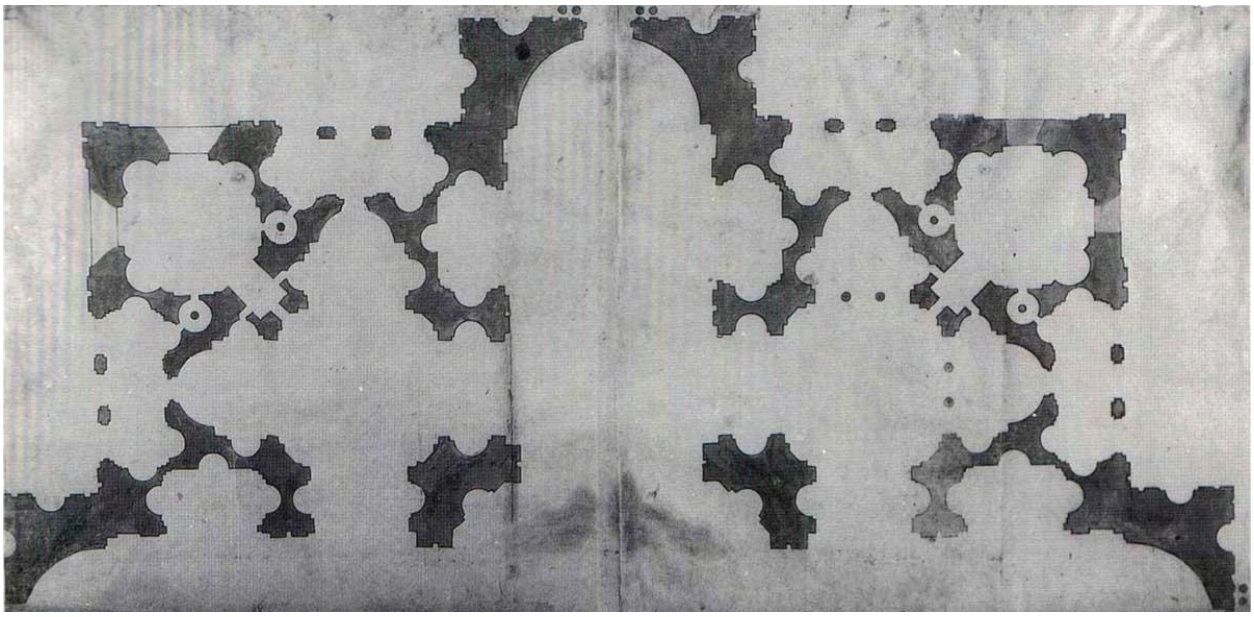


Figure 3.18: Donato Bramante, Parchment Plan of St. Peter's Basilica in Rome, 1506.

Resolution

Digital monument documentation results in a spatial record of a built environment as digital data. The recordings have different resolutions depending on the tools used or the advancement of technology in the current age. What is commonly known are low and high resolution images. This logic also applies when a monument is documented as a spatial record; therefore, it can be directly translated into the digital realm. The high-resolution models allow for a closer inspection of elements in the structure, even those that are not visible to the human eyes on the physical structure of the monument. With the ability to zoom into the structure, intricate details appear while offering the viewer a new experience compared to an original object where some details are not perceivable in their real scale.

It is important to note that digital information is always discrete and therefore contains gaps between points (in the point cloud) rather than the continuity of a built environment. Discrete is a digital property that refers to data or systems characterized by distinct values. As Young notes, "the gaps, noise, and errors that occur in digital scans are artifacts of the technology, the terms reflecting an aesthetic response

based on previous assumptions and representational conventions."[69] These gaps are created regardless of the technological tools used due to the *mediation* of information from the physical to the digital realm; however, they are related to the resolution properties of the documenting instrument. Using the right technique in digital documentation can reduce the number of gaps in the model. For example, the combination of LiDAR scanning and photogrammetry offers a higher-resolution three-dimensional model with its texture because of the higher precision of measurements. Although both methods are used to capture spatial information about physical objects, they utilize different techniques and principles during the documentation process.[70] While photogrammetry is based on capturing overlapping photographs of an object from different viewpoints,[71] a LiDAR system emits laser beams toward the targeted object. In this process, the laser beams reflect off objects and return to the LiDAR sensor. The system measures the time it takes for each pulse to return. In order to produce a spatial digital model from collected data, photogrammetric image processing uses specialized software, such as Reality Capture, where overlapping photographs are processed to identify common points. The software can then construct a 3D model based on the positions of those points in various photographs. In LiDAR, the measurements (the distance between the LiDAR system and the object) are used to generate a point cloud that represents the scanned object. Another important difference between these two techniques is that photogrammetry provides both geometric (shape, size) and radiometric (color, texture) information about an object. However, the LiDAR technique only provides exact information about the shape of an object without capturing color or texture like photographs.

In photogrammetry, two-dimensional images become three-dimensional representations of a built environment. Once the photogrammetry is regularly used to record the aging of the monument, there is a potential to move from the two-dimensionality of architectural photography to a four-dimensionality[72] represented in the model of the digital palimpsest through the collection of "states" in time and, thus, geometric deformations and others.

Similar to Riegl's preoccupation with time, the French mathematician and physicist Henri Poincaré and the visual artist Esprit Jouffret, Riegl's contemporaries, also explored the notion of time in their work, particularly time as a fourth dimension (fig. 3.19).[73] Because four-dimensionality cannot be

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[69] Michael Young, *Reality Modeled after Images: Architecture and Aesthetics after the Digital Image* (New York; London: Routledge, 2022), 48.

[70] Both photogrammetry and LiDAR can be used in remote sensing applications, like aerial surveys or topographical mapping.

[71] Aerial photogrammetry might use drones or aircraft, while terrestrial photogrammetry is conducted from the ground.

[72] Time as the fourth dimension of space was defined by the French mathematician Joseph-Louis Lagrange in 1788.

[73] Esprit Jouffret's *Elementary Treatise on the Geometry of Four Dimensions*, published in 1903, included drawings of hypercubes and polyhedra, all in an effort to visualize the 4th dimension.

perceived by the human eye, it must always be mediated to us. In that regard, the digital palimpsest serves as a mediator between the four-dimensionality of a monument and human perception.

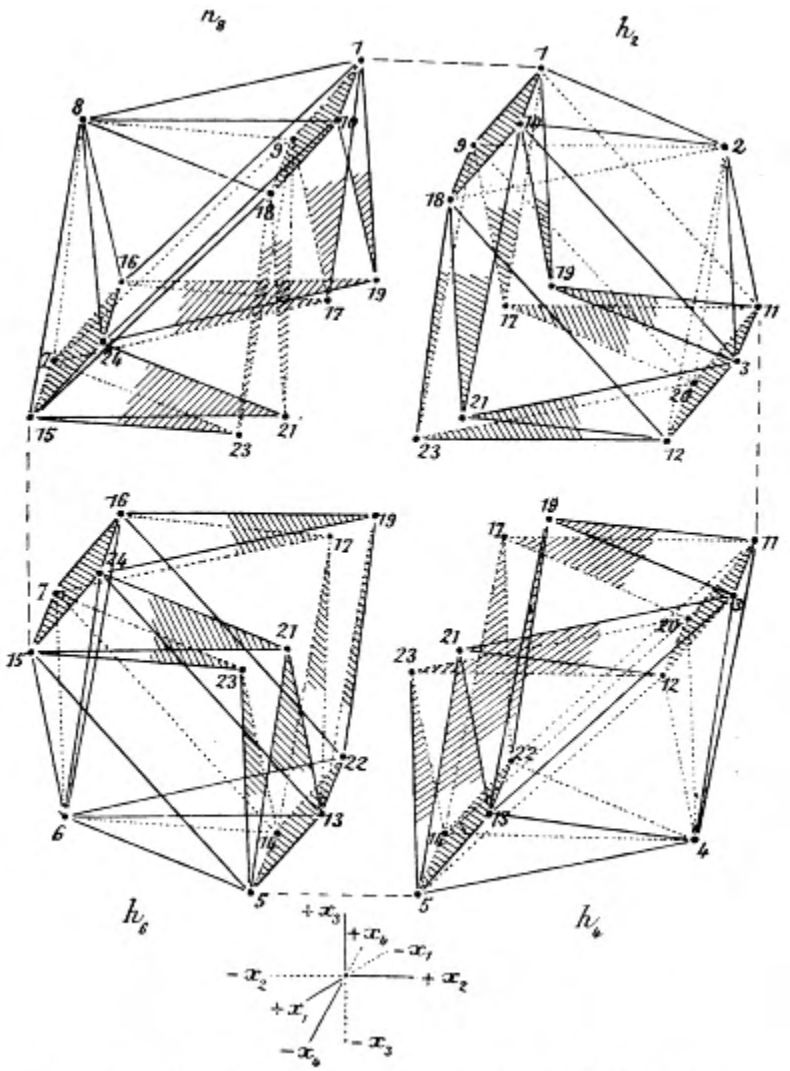


Fig. 41. — Perspective cavalière des seize octaèdres fondamentaux.

Figure 3.19: Esprit Jouffret, drawing of a projection of a four-dimensional hyper-octahedron with a few of the octahedral faces exploded out.

The question of *depth* is important when documenting the real environment and translating it into another medium or reality, e.g., AR or VR. How does a point cloud represent depth when viewed through an online platform? How do we perceive distance? Michael Young explains:

> This digital image consists of multiple points located in three-dimensional space, a spatial model where depth is calculated through images, each point a luminous pixel defined by numerous specifying a mixture of red, green, and blue light. The assumption is that each of these points acts as the representation of a real point in the world as captured by an array of photon-collecting diodes (i.e., a camera).[74]

The light captured by the documentation instrument on the surface of the three-dimensional model is always only an approximation of the number of light sources present in the scanned- physical environment. Thus, the digitized monument does not exactly represent its physical twin in terms of its surface lighting conditions and offers only its resemblance.

REPRESENTATIONAL SHIFT

From a historical point of view, there have been various types of monument representations, both analog and digital. These include two-dimensional representations of monuments in the form of a drawing (fig. 3.20) or a photograph, three-dimensional representations such as a replica, which mostly occur in the digital realm, and four-dimensional representational models that represent the passage of time.

[74] Michael Young, *Reality Modeled after Images: Architecture and Aesthetics after the Digital Image* (New York; London: Routledge, 2022), 168.

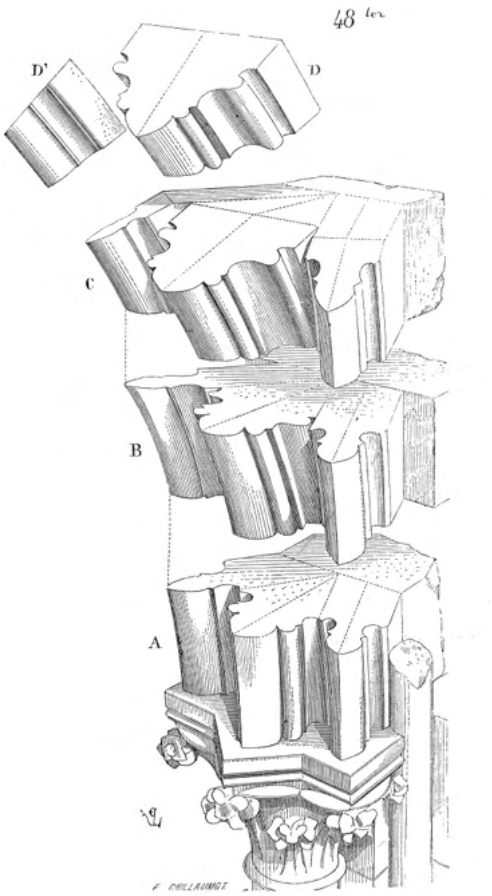


Figure 3.20: Eugène-Emmanuel Viollet-le-Duc. Exploded perspective drawing of a Gothic arch.

This shift in representation is due to the technological advances in the discipline of architecture and preservation in particular. Building on two- and three-dimensional models, the digital palimpsest is a four-dimensional representation of a physical monument. However, it retains certain properties of its previous models – two-dimensionality through the collected photographs or drawings necessary for the reconstruction and three-dimensionality given by the digital model as a result of an assembly of collected spatial data as a digital replica. Thus, two- and three-dimensional records serve as a preliminary step in the creation of a digital palimpsest.

Two types of digitized spatial models exist: digital replicas and digital twins. Although they share certain commonalities, their functions vary. The three-dimensional representational digital twin model gained popularity in the early 2000s. Its primary goal was to simulate the real environment under various conditions, monitor its reference in real time, or analyze the collected data about the original object to make predictions about its future performance. Its applications have been mainly in manufacturing,

automotive industry, aerospace, healthcare, or construction industry. On the other hand, a digital replica can be used for archival purposes and digital preservation, while also allowing for the study of an artifact without altering the original. By storing digital replicas online, they can be made available to a wider audience – the general public as well as researchers. A great early example of a digital replica is the Digital Pantheon project (fig. 3.21), conducted by the University of Bern between 2005 and 2008, in which the architectural monument was 3D-scanned with a laser scanner several times to further reconstruct the structure in the digital space.[75]

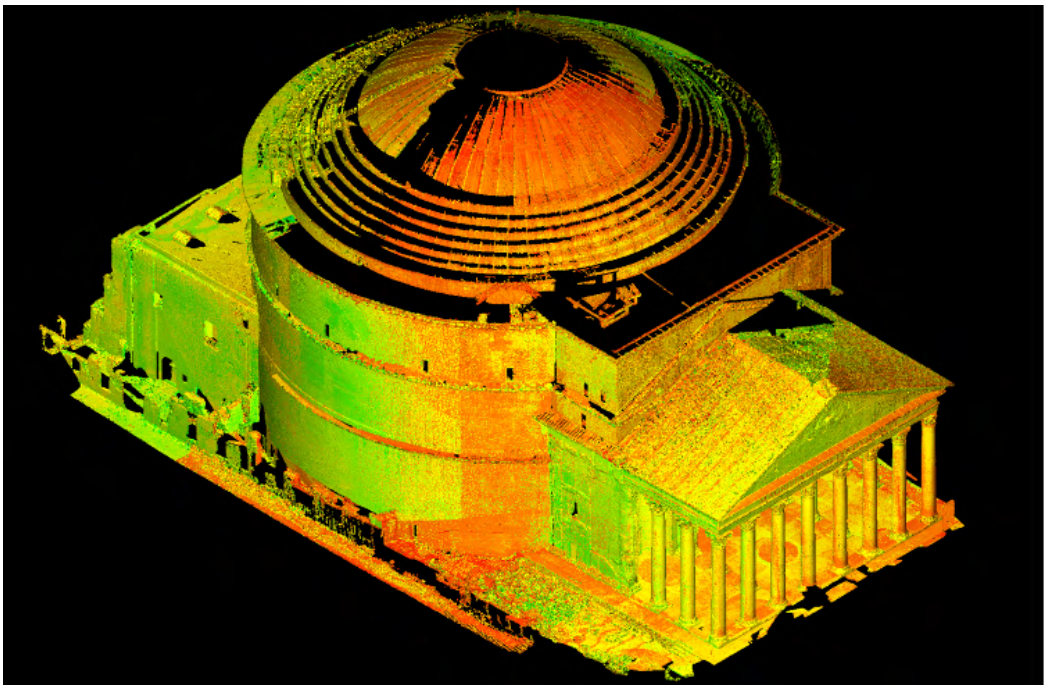


Figure 3.21: The Bern Digital Pantheon Project, Laserscan 2005, 2016, Digital Pantheon, Edition Topoi.

As Erica Avrami notes, "today, the increased accessibility of geospatial technology, open data laws, urban dashboards, the public engagement and multimedia options afforded by online platforms, and the burgeoning arena of civic tech engender a raft of quantitative and qualitative data, tools, and methods for understanding the relationships between people and their communities, and for informing policy decisions toward just and ecologically sustainable development."[76] These technological advancements have accelerated preservation methods and contributed to the development of four-dimensional digital representations of monuments.

[75] "Digital Pantheon," The Edition Topoi, accessed December 7, 2023, http://repository.edition-topoi.org/collection/BDPP.
[76] Erica Avrami, ed., "Preservation and the New Data Landscape," Columbia GSAPP, accessed February 14, 2022, https://www.arch.columbia.edu/books/reader/370-preservation-and-the-new-data-landscape.

In the discourse of digital documentation, the concept of "Freedom of Panorama" has been introduced to establish regulations regarding the copyright of objects. It is closely related to the question of the ethics of documenting an object located in an urban environment. The Freedom of Panorama (FOP) provision differs depending on the jurisdiction of each state. Copyright law allows the general public to document the building without legal permission. However, the aspect of ethics plays an important role here, which is certainly not a new concept in the field of preservation. Alois Riegl has been concerned with questions of morality and Catholic traditions in his work as well. Thus, the ethical aspect of working with digital representations of physical monuments is present in the Rieglian sense. The extent to which one preserves the monument or how to digitally represent it becomes a public matter.

Resurrecting Monument



Figure 3.22: Walter Möbius. *Dresden-Altstadt. Ruins of Frauenkirche*. View from the West, 1946.

The monument *Frauenkirche* (fig. 3.22) in Dresden, Germany, was heavily bombed during World War II and left in ruins for decades due to the socialist politics of the DDR.[77] The church was finally reconstructed between 1997 and 2005, as architectural historian Mark Jarzomberk said, "in the euphoria of German reunification,"[78] using computer-aided technology,[79] sometimes called *archeological reconstruction*. The reconstruction period coincides with the rise of computer modeling, which appeared in the 1990s and marked the beginning of the use of digital technologies in historic preservation. The digital reconstruction of the *Frauenkirche* can thus be seen as a first step towards the digitization of monuments starting at the turn of the millennium. As Wolfgang Ernst notes:

> The impression of reversal against the essential characteristic of historical time, which is material entropy, manifest in this case as architectural ruins. The archeological reconstruction of the Frauenkirche was in fact a media-archeological one; supported by algorithmic calculation, the remaining bricks and stones of the cathedral were reconfigured into the core of the reconstruction.[80]

The architects of the reconstruction, Thomas Bauer and Jorg Lauterbach, identified the lack of information in the archaeological ruins as an absence of data. However, because of the digital simulations performed, the computer was able to interpolate the gaps and complete the model of the digital reconstruction.

[77] The *Frauenkirche*, commonly translated as "Church of Our Lady," was built in the eighteen century in Baroque style by the German architect George Bähr.
[78] Mark Jarzombek, "Disguised Visibilities – Dresden/'Dresden'," in *Memory and Architecture* (Albuquerque, NM: University of New Mexico Press, 2005), 55.
[79] The computer modeling software, CATIA, originally invented to design military aircrafts whose mission was to bomb, was now ironically used to reconstruct the church.
[80] Wolfgang Ernst, "Toward a Museology of Algorithmic Architectures from Within," in *When Is the Digital in Architecture?* (Montréal, Québec, Canada: Canadian Centre for Architecture, 2017), 68.



Figure 3.23: Siegfried Bregulla. *Frauenkirche*, 2007. Quartier I, Frauenkirche and Quartier III (Construction Site).

Although the reconstruction was considered to be successful (fig. 3.23), it was criticized for the methods used. Jarzombek criticized the reconstruction of the church because of the random displacement of ruins in the reconstruction. The misplaced stones (in a darker shade) that made up the original church were "separated, measured, analyzed, and then placed into the fabric of the new walls of the church, hopefully at the very spot where they once belonged. Preservationists call this a 'critical restoration.'"[81] In terms of the computer model of the reconstruction, the repositioning of the former building blocks was somewhat arbitrary, leaving us with the question of the relevance and authenticity of the old material for the reconstruction. This attempt at reconstruction is what Jarzomberk calls an "aesthetic governed by the positivistic conceits of the restorers."[82] The reconstruction of the *Frauenkirche* is considered a hybrid – composed of old building blocks and new stones, representing the fragile relationship between the church's past and present. In the digital palimpsest, the missing information about the monument, namely a ruin, can be digitally reconstructed similarly to the case of *Frauenkirche*. Digital palimpsest can potentially work with available data embedded in historical drawings, photographs, or video recordings to

[81] Mark Jarzombek, "Disguised Visibilities – Dresden/'Dresden'," in *Memory and Architecture* (Albuquerque, NM: University of New Mexico Press, 2005), 56.
[82] Ibid., 56.

approximate the previous forms and materiality of the physical monument in order to resurrect it for the contemporary viewer.

Four-dimensional Monuments

An object that has a length has one dimension. A length and width make two, and an object with a length, a width, and a height has three dimensions. Any object that really exists, from the time it came into existence until the moment it vanishes forever, has duration, the fourth dimension.[83]

Ana Teixeira Pinto

A digital palimpsest represents a four-dimensional object that exists in a digital environment. It maps the aging of a physical monument, manifesting detectable changes in its form and material over time. The digital records of a monument demonstrate the duration of its life through a series of layers. A digital palimpsest is also considered a hyperdimensional object because it relates to space with more than three dimensions.

From a historical perspective, the development of hyperdimensional objects brought the notion of time to the foreground (fig. 3.24). In 1788, the French mathematician Joseph-Louis Lagrange "presented time as an auxiliary dimension to describe dynamic mechanical motion, arguably the first algebraic unification of four dimensions."[84] Around 1915, the fourth dimension became a popular concept in architecture in France, and thus had a broader impact beyond only mathematics.

[83] Ana Teixeira Pinto, "Enantiomorphs in Hyperspace: Living and Dying on the Fourth Dimension," Journal #72, accessed October 25, 2023, https://www.e-flux.com/journal/72/60498/enantiomorphs-in-hyperspace-living-and-dying-on-the-fourth-dimension/.

[84] Andrew Witt, *Formulations: Architecture, Mathematics, Culture* (Cambridge; London: The MIT Press, 2021), 124.

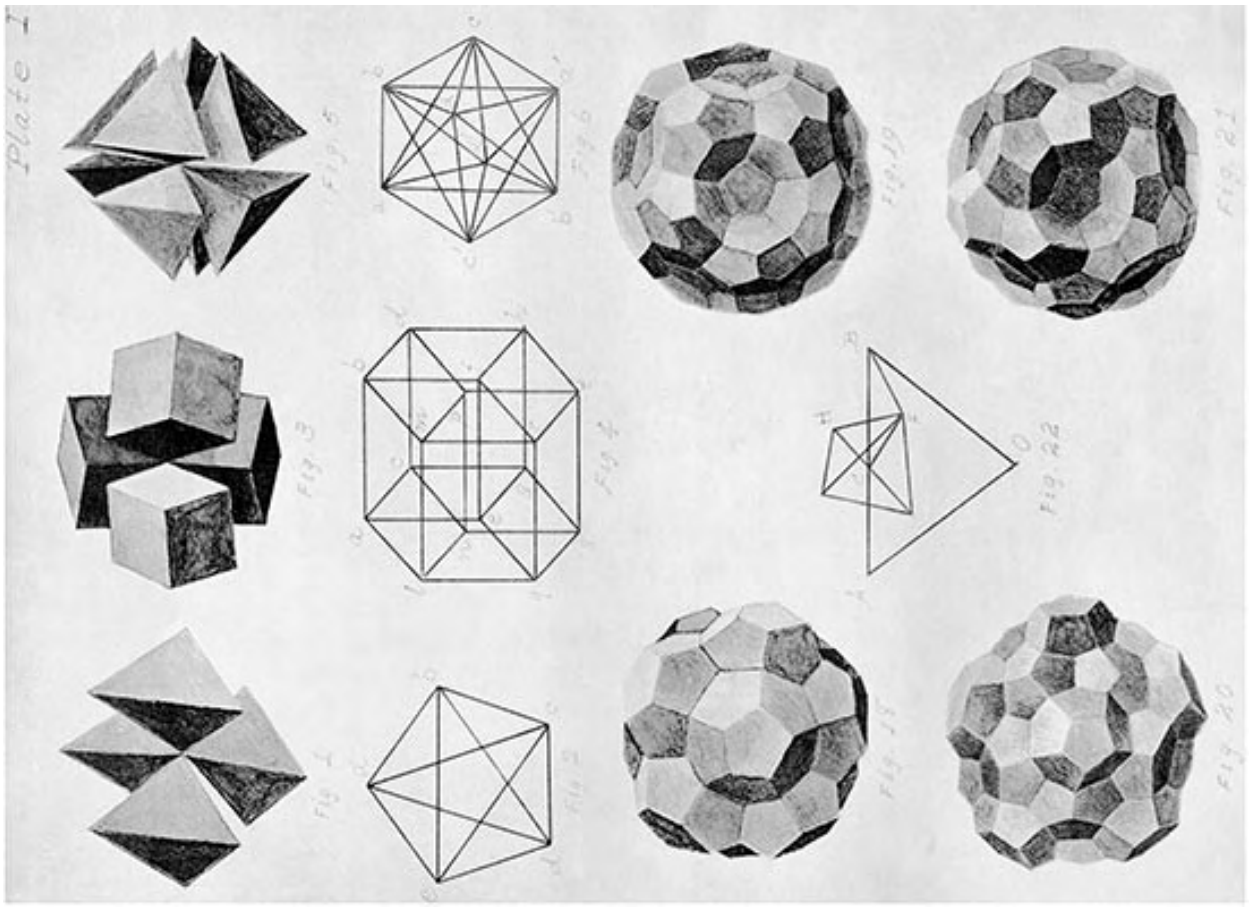


Figure 3.24: W. I. Stringham. Illustration of regular figures in n-dimensional space, 1880.

How can we examine four-dimensional objects such as digital palimpsests? A series of two-dimensional drawings, such as plans and sections, represent the three-dimensional building. A four-dimensional object can be represented by a three-dimensional model if the same logic applies. Viewing the four-dimensional model of a digital palimpsest is enabled by technologies such as virtual and augmented reality, providing new experiences for contemporary viewers. Regarding four-dimensional models, it is crucial to understand that human senses cannot perceive the fourth dimension in space and, therefore, must be mediated.

The four-dimensional digital representation of a physical monument is *mediated* by a digital palimpsest. Enabled by a documentation process, the digital palimpsest consists of a series of three-dimensional models (the same monument documented in different stages of its existence). The constructed digital model is based on the collection of records about the reference monument. These records represent the physical monument and its environment and serve as a *reproduction* of reality. Consequently, a digital palimpsest also serves as a reproduction of a physical monument in a digital space. Each time a palimpsest is viewed as a reproduction of the real, the representation will vary

depending on the device on which it is displayed.[85] The digital model of the real is always of a lower resolution than the reality it represents.

When we digitally document monuments and their existence, we can divide them into two categories regarding their relationship to their physical twins. The first type refers to digitized monuments that exist in parallel with their physical twins, while the second deals with digitized monuments that exist after the death of their physical twins. The latter type deals with monuments in a digital space without further documentation of their reference. In this case, digitized monuments gain complete independence from the physical environment and from the documentation of any changes that should be implemented in the model. They take on a life of their own.

An example of the second category is the digitized model of the Nakagin Capsule Tower in Tokyo, designed by the architect Kisho Kurokawa, completed in 1972. The tower, which represents the Japanese movement of metabolism, was disassembled in 2022 due to its deteriorating condition and other aspects related to the site and the building itself. Despite the fact that the tower stands as a prime example of metabolism, it was not included in the list of World Heritage Sites, and thus, its legal protection was not initiated. However, the Japanese group *Gluon* decided to digitally preserve the building, claiming that: "the entire real space information is converted into 3D data. In addition to the three-dimensional recording of complex shapes and structures that cannot be recorded with only two-dimensional photographs and drawings, it also records the trajectory of changes of the building over time as the residents have ingeniously lived. By doing so, we can accurately grasp the architectural shape and leave it as a digital archive for future generations."[86]

In the case of the digitized model of the Nakagin Capsule Tower, the contemporary viewer can see the palimpsest character of the building as the changes that have occurred during its existence and are embedded in the digital model. The group used laser scanning techniques and a large number of photographs to create a highly accurate, complex model of the tower. Gluon launched a crowdfunding campaign called the "3D Digital Archive Project" to release the tower's 3D point cloud data as open source.[87] This project clearly adopted a participatory approach to protect the heritage site with the help of the public. The open-source model has the potential to be represented by various technologies, such as virtual or augmented reality, for research purposes, similar to the digital palimpsest applications within or outside of its original site.

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[85] The viewing depends on the device's size and screen properties such as resolution, color depth, among others.

[86] "3D Digital Archive – Nakagin Capsule Tower," Gluon, September 30, 2022, https://gluon.tokyo/projects/3d-digital-archive-nakagin-capsule-tower.

[87] See more details about the campaign here: 3D Digital Archive Project /建築『中銀カプセルタワービル』を3次元スキャンで記録に残したい。: Motion Gallery," motion, accessed October 25, 2023, https://motion-gallery.net/projects/3dda-nakagin.

3.3. CONCLUSION

The emergence of methods utilizing digital tools in the preservation discipline is relatively new. Advances in preservation are possible through the integration of new technologies into already established processes. Various disciplines are involved in such digitization efforts. These new digital preservation methods may find applications in art history, architecture, design, or history.

The historical knowledge developed by Riegl in the early twentieth century and the current technological possibilities available for digital documentation contribute to the development of a digital palimpsest in the twenty-first century. The *Modern Cult of Monuments,* proposed by Riegl more than a hundred and twenty years ago, was represented by the age value of monuments. In the twenty-first century, the *Cult* has changed accordingly, refreshed by digital tools. Therefore, I propose the concept of the *Cult Beyond the Digital* represented by a timeless value that reflects and adapts the age and historical values defined by Riegl. The digitized monuments forming the new *Cult* can be revisited through a digital palimpsest, serving as a multiversal image of history.

In "Preservation is Overtaking Us," Mark Wigley discusses the vision of preservation and argues that "it is a forward-looking celebration of life, that is a way of looking at something that seems to be fading or gone and incubating new life within it. Preservation is always suspended between life and death."[88] In response to this statement, I would argue that the digital palimpsest, consisting of digitized phases of monuments, goes beyond the framework of a monument's existence between life and death. The digital palimpsest preserves the monument digitally, offering it a hypothetical existence without its physical presence, one that reaches beyond its physical lifespan.

In a digital palimpsest, the model is placed in a digitally mediated environment in which data is collected and stored as individual layers. These layers are the result of monitoring that must be continuously repeated. While the idea of a palimpsest historically refers to an object created by writing on animal skin, it has evolved into a method conceptually applied in several fields. Since its invention, it has found applications in literature, philosophy, and architecture. By moving into the digital realm, the application of the digital palimpsest is twofold: it digitally preserves cultural heritage as an active type of archive, and at the same time, it serves as a digital preservation tool for experts to analyze the evolution of a monument over time. The digital palimpsest, as a new type of representational model, can be applied in various fields, from architecture to urban planning, from preservation to art history. It offers new ways of understanding preservation methodology, technological applications, geometry, architectural representation, and working with spatial data.

[88] Rem Koolhaas, Jorge Otero-Pailos, and Jordan Carver, *Preservation Is Overtaking Us* (New York: GSAPP Books, 2014), 7.

A palimpsest is defined by the notion of time. In a digital palimpsest, time is the most important property of the model. A physical time in constant flux is represented in the digital palimpsest as a snapshot of history. Thus, it is an archive of the monument's evolution over time as well as a process of documenting the monument's aging.

Conclusion

This dissertation examined Riegl's *Modern Cult* in three periods – his own, in postmodernism, and today, framing its transformation over a hundred-twenty years. Even though these periods are separated by multiple decades, they are connected through a renewed appreciation of Riegl's preservation theory. The last two mentioned periods saw *The Modern Cult of Monuments* transform in new contexts, such as changing societal values, post-war realities in urban spheres, and the development of technological tools that can now support the preservation of monuments.

Riegl's view of monuments, particularly those holding age value, was explicitly situated within a Christian ideological framework. Therefore, it stands in opposition to the concept of the universality of the idea of monument that is particularly Western (seen by some as problematic from today's point of view), such as a definition of the Outstanding Universal Value of monument defined by UNESCO. As a result, Riegl's perspective might be challenging to apply to non-Christian societies and translate into a new context.

The age value that Alois Riegl defined as a modern monument value contrasts the historical value of a monument's "newness," which was typical for the nineteenth century. It seems paradoxical to assign a modern monument "age" value and a historical one "newness," which was characteristic of the modern movement. Riegl's own contradictions in his value theory and his appreciation of decay and ruin ultimately prevented him to put his concept into practice, whether in architecture or preservation. The societal quest for novelty, completeness, and total beauty stood in contrast to his definition of the "new," which demonstrated age value precisely through the opposite – traces, incompleteness, and wear. These traces stood as an index of time, representing the changes in a monument.

I argue that heritage is represented by the relationship between society and the object, or in Rieglian terms, between the viewer and the artwork. A close examination of the reception of the *Modern Cult* reveals that the value of age was not accepted in the way Riegl envisioned. His theory had been dormant for decades, waiting to prove its relevance only after the devastation of both world wars. Cities were bombed to the ground, and architects were faced with the difficult question of how to rebuild what was left, and how to approach ruins of cultural, social, or religious significance. As such, they sought new strategies to repositioning themselves and redefining historical narratives and identities. It was at this point that they turned to Riegl's work and gave his theory new meaning and prominence.

Riegl's influence now spans several disciplines and is recognized by scholars worldwide. His work, initially confined to the German-speaking world, only gained wider significance through translations in the 1980s. This return to Riegl's work happened particularly in what is known as the period of postmodernism. This period saw a shift toward exploring memory and historical narratives with

an emphasis on the subjectivity of interpretation, challenging modernist notions of objective truth. This shift saw an increased focus on the role of individual and collective memory, offering diverse perspectives on experiences and histories.

In his preservation theory, Riegl discussed the cult of ruins and the values associated with these objects as part of the *natural* development of monuments. However, the reconstruction periods after two world wars required new approaches, two of which stood out particularly. In the first one, ruins were demolished, and new buildings were erected in their place. This approach assumed that the past, and all traces of war had to disappear in order to build a better future. The second approach, however, argued for ruins to be incorporated into the urban fabric to serve as memorials. The reconstruction process connected ruins with new buildings to resume their old function or assume a new function. The second approach was clearly inspired by Riegl, as it sought to not erase the past but to offer new narratives of history. The reconstruction period, particularly after the Second World War, was thus the first crucial moment when Riegl's theory became relevant again.

Another renewed interest in the *Modern Cult* took place in the 1980s. This decade saw Riegl's work translated to several languages, sparking interest in his work well beyond German speaking circles. This dissertation, however, has preoccupied itself mainly with the English translation, as it significantly impacted the work of English speaking theorists, preservationists, and architects who offered new interpretations of Riegl's axiological study. Many of these theorists saw the era of postmodernism as a one where age value regained importance, even though society now faced different issues than at the turn of the century. Had *The Modern Cult of Monuments* not been rediscovered and translated into multiple languages, most importantly into English, Riegl's work would have hardly been known internationally. The reason his work gained traction is largely due to a seminal reception of his work in Volume 25 of *Oppositions*, which introduced Riegl's theory to a new audience. This provided a new foundation for the interpretation of Riegl's work and inspired new ways of thinking about historical monuments and their values, not only in the postmodernism of the 1980s, but also in the twenty-first century.

Reviewing Riegl's work today requires placing it in the context of digital technologies that intervene in established preservation processes. In my dissertation, I have sought to move Riegl's theory into the digital realm and analyze how his theory can contribute to digital preservation methodologies that mark a significant advancement in the field. In the last chapter, I have traced the relatively recent emergence of digital preservation methodologies and introduced "experimental preservation," an approach for multidisciplinary engagement that seeks to explore new preservation technologies beyond the fields of art history, architecture, or history. Drawing on both Riegl's early twentieth-century work and the digital documentation techniques I explored in the last chapter, I have developed the idea of a *digital palimpsest*, and have introduced a refined version of a monument value in the twenty-first century,

namely the *timeless value* of digitized monuments. In its digital form, I have argued that a palimpsest can serve a dual purpose: it actively preserves cultural heritage and allows experts to analyze the evolution of a monument. The digital palimpsest is a fundamentally new representational type of model, and is applicable in architecture, urban planning, preservation, or art history. It offers innovative perspectives on preservation methodology, spatial data analysis, and novel architectural representations. The digital palimpsest, as I envision it, essentially archives a monument's historical evolution, and documents its aging, representing physical time as a series of historical snapshots in a digitized format.

The concept of a digital palimpsest, possessing a timeless value, indicates the obsolescence of Riegl's age value in the post-digital historiographical context, also called the digital end of history.[1] In this new epoch, the depth of historical time is compressed into a perpetual "now" of digital data access. In digital realm, everything is recorded and then possibly communicated to its audiences. Therefore, all the historical layers of digitized monuments are flattened and can be retrieved non-chronologically. In this way, history can be reviewed in reverse.

This dissertation has offered a translation and adaptation of Riegl's concepts in the *Modern Cult* to the twenty-first century, particularly through adapting the age value of monuments through digital tools. My contribution thus provides a new interpretation of his work that encompasses both age and historical values. I have demonstrated how Riegl's touchless approach to preservation bears the potential to evolve from a physical context into a digital one. This transition is particularly feasible given the inherently visionary and forward-thinking nature of Riegl's theoretical framework.

In addition, my dissertation has called for a renewed focus and engagement with architectural theory when critics lament its death.[2] My dissertation acts as a bridge to the era of postmodernism where theory was still an important and thriving part of architecture as a discipline.

One possible avenue that remains to be further explored is the extent to which the digital palimpsest can make use of generative techniques such as AI. Generative AI could help the digital palimpsest in performing its role as a spatial database in more efficient and novel ways to predict and optimize the preservation of monuments for future use. In doing so, it could be envisioned as an additional artificial layer which will be embedded in the palimpsest model. This, however, remains a task for future research endeavors.

[1] The concept of the end of history was developed by Francis Fukuyama, The End of History and the Last Man (New York: Free Press, 1992). The digital end of history is addressed by Maurizio Ferraris, Hysteresis. The External World (Edinburgh University Press, 2024).
[2] More on the topic of the end of theory, see: https://www.e-flux.com/architecture/history-theory/159231/the-end-of-theory-a-conversation/.

Appendix

Digital Preservation and Generative AI

The appendix provides additional research findings and suggestions on how the digital palimpsest can be used as a preservation tool to generate new data with the help of generative AI. Thus, the digital palimpsest is not seen as a mere architectural representation of a monument but rather as a tool for preserving monuments in the future. This brief examination of the relationship between digital preservation and AI also provides a new research direction that could constitute a new project beyond the scope of this dissertation.

Since the digital palimpsest already serves as a spatial database, it offers manyfold potentials for further use. Introducing the processes of AI and machine learning is especially promising for experts in the field of preservation. Precisely because of their ability to work with large datasets, artificial intelligence can generate new content that reflects learned patterns and styles. This is especially true for detecting changes in the layers stored in digital palimpsests and analyzing their evolution over time. These generated processes consist of two types. The first type is a retrospective one, which focuses on the gaps between collected data while feeding them with the "imagination" of a machine, thus forming a new image of the past. The second type is a predictive one, which uses AI to work with collective data to generate future-oriented results.

Using AI and machine learning for data sets is not necessarily a new development. However, AI can now analyze large volumes of digital content and automatically generate metadata, which makes it easier to categorize, search, and retrieve information. This is especially useful for large archives where manual cataloging is impractical. Working with 3D datasets adds complexity and offers new solutions for the creation of spatial outputs, which will be helpful to various disciplines, such as architecture and preservation.

Retrospective AI

Architect and educator Karel Klein has been working with AI technologies for several years. In her article, "Machines à Rechercher," she reflects on the notion of anamnesis in memory recollection, arguing that "the claim for anamnesis to be both a search for the unknown in memory and the production of fantastic images that result from this problematic endeavor might indeed be the bridge across the abyss of not knowing first confronted by Plato."[1] Whatever information is lost in documented digital layers could be filled in by AI, especially through machine learning, mnemonic recollection, and imagination. This would transform the collected data into a new image of memory, in the case discussed in this

[1] Karel Klein, "Machines à Rechercher," *Log* 55 (2022), 103.

dissertation – a new image or spatial model of a monument. The process can be seen as an imitation – the filling in of missing data, i.e. memory, by the machine in order to produce a complete image of the past. This process of feeding data into memory is not exactly what is classically defined as the process of remembering. Rather, it is what Marcel Proust defined as *mémoire involontaire*, as the invention of memory. Karel Klein argues that AI has the capacity of such artificial imagination:

> Because the images produced are not simple retrievals of stored memory but seemingly elaborate reimaginings of that memory, AI seems to possess a capacity for imagination. It is tempting to propose that AI is, in fact, not an acronym for artificial intelligence but artificial imagination.[2]

The digital model can serve future preservation purposes by introducing generated data as an artificial layer into the digital palimpsest. This process can be seen as a combination of the documented physical changes that humans and nature have made to the monument over time and the imagination of a machine to fill in the missing information. Reflecting on Riegl's *Modern Cult*, the digital palimpsest – including artificially generated layers – offers an updated type of the *Cult* in the twenty-first century, beyond the digital and at the dawn of the AI age.

Various architects have been exploring the relationship between memory and archeology for decades. Peter Eisenman's conceptual basis for the Berlin Excavation project, for example, recalls Freud's analogy between the "preservation in the sphere of the mind" and the discipline of archaeology. "Since we overcome the error of supposing that the forgetting we are familiar with signified destruction of the memory-trace – that is, its annihilation," Freud notes, "we have been inclined to take the opposite view, that in mental life, nothing which has once been formed can perish – that everything is somehow preserved and that in suitable circumstances (when, for instance, regression goes back far enough) it can once more be brought to life."[3] In this way, Eisenman brought the process of recollection into play with architectural discourse, referring to scholarly work based in psychology. In the essay "Remembering, Repeating, And Working-Through," Freud introduced the concept of working through the missing, blurred memory. This methodology is similar to what an AI does, creating something new from existing data sets that appear incomplete. Thus, by working through (*Durcharbeitung*) the collected data stored in the digital palimpsest in Freudian terms, new and missing information can be filled in according to the rewriting principle. As Klein further writes, "AI-produced images are the anamnesis of its curiously

[2] Karel Klein, "Machines à Rechercher," *Log* 55 (2022), 101.
[3] Bédard Jean-François, ed., *Cities of Artificial Excavation: The Work of Peter Eisenman, 1978-1988* (Montréal: Canadian Centre for Architecture, 1994), 23.

trained artificial memory."[4] The term *anamnesis,* employed in Chapter 2 in relation to the return of Riegl's *Modern Cult*, reappears here again, but in a different context and situated in the digital domain. By using AI tools during the act of anamnesis, information such as destroyed or missing parts of monuments can be "rediscovered" by a machine. As a result, the image of the past is artificially constructed as a hybrid of collected data and the machine's imagination, a hybrid of reality and fiction.

Predictive AI

In a broader sense, predictive AI is a method of data analysis. This approach is already widely used in architecture, from design optimization, structural analysis, and construction optimization to climate analysis or energy efficiency modeling. Through its use in digital preservation, AI can help analyze the documented development of a monument over time and generate predictions about its future use, appearance, or other unknown aspects. In other words, the documented histories of a digitized monument provide a basis for machine learning to perform statistical optimization and find differences between historical layers, which then produces a new layer – the future artificial layer of the palimpsest. According to an architect and scholar, Daniel Cardoso Llach, using machine learning in such processes can help "to draw generalization[s], to infer patterns, and to predict future outcomes based on prior experience encoded as data." He cautions, however, that "data are never neutral – they are cultural artifacts situated in social and material settings. This means that data are not inherently truthful but *constructed*, and thus their production and the processes for collecting, curating, and visualizing them are acts of design."[5] Therefore, while this approach to preservation is design-oriented, it also involves subjective decisions about how to collect and work with data. When we collect data for a digital palimpsest, many variables affect the collection, such as the expertise of human labor, the time of the documentation, or changing light and weather conditions. All these factors affect the construction of the data, which in turn affects the digital representation of the monument and future preservation outcomes.

In his book on Artificial Intelligence, architect and theorist Neil Leach argues that "AI, after all, is all about predictions. It recognizes patterns and predicts the future. And its success lies in the accuracy of its predictions."[6] Building on this statement, I would argue that the more data collected in the digital palimpsest, the wider range of results it can offer in predicting and creating new layers. By interpolating collected data sets of historical layers, machine learning can suggest a new scenario of preservation in a

[4] Karel Klein, "Machines à Rechercher," *Log* 55 (2022), 98.
[5] Daniel Cardoso Llach, "Sculpting Spaces of Possibility. Brief History and Prospects of Artificial Intelligence in Design," in *Routledge Companion to Artificial Intelligence in Architecture* (London: Routledge, 2021), 19.
[6] Neil Leach, *Architecture in the Age of Artificial Intelligence: An Introduction to AI for Architects* (London: Bloomsbury Visual Arts, 2022), 159.

digital environment. This characteristic of generative AI is also called *autocomplete*, commonly used in software such as ChatGPT, and can also be applied when working with digitized monuments. While the original (physical) monument is always missing something, the digitized monument can be completed to any of its previous states by AI. This process aligns with those applied in history when restoring monuments by preservationists such as Viollet-le-Duc or Schmidt, as opposed to Riegl's approach.

The digital palimpsest is in a constant state of transience; every new layer documents the temporary state of a monument at a given point in time. Furthermore, Leach argues that "with the introduction of AI, we are encountering a novel set of ideas that look set to promote a renewed interest in theoretical discourse."[7] This objective also aligns with the focus of my dissertation. Throughout the dissertation, I have made a case for a renewed focus on the theory of architecture, especially by considering how we can translate and adapt Riegl's work in the context of the twenty-first century. In doing so, I have argued that the digital palimpsest offers a novel way of integrating Riegl's ideas on touchless preservation with the architectural and preservational demands of the twenty-first century and the digital tools available.

Leach describes the theory of "predictive perception" as a condition of how we perceive the world, which is analyzed in neuroscience studies and incorporated into generative processes.[8] The theory of perception also takes center stage in Riegl's work. It negotiates the relationship between the artwork and the viewer, who should actively engage with the artwork. However, as we move into the digital, humans and machines start to perceive artworks, and any object, in fundamentally different ways. Machines begin to make their own predictions about the object, often referred to as "machine hallucinations."[9] This leads us to a question beyond the scope of this dissertation: how does the machine predict the monument's future and its preservation based on its learning? Through machine learning, artificial intelligence can predict the future condition of monuments and assist in their preservation by analyzing patterns and trends in data. The process involves several steps, including data collection, storing data in the digital palimpsest, machine learning models, and predictive analysis using these models. Once the model is trained and offers predictions about the monument's future condition, the AI can recommend future preservation measures based on contemporary and historical data. To further leverage the machine learning model, AI can test and simulate different preservation scenarios to evaluate their effectiveness and impact before beginning work on the physical monument (its preservation). Even if the monument undergoes the predicted preservation, the ML model can continue to adapt and learn

[7] Neil Leach, "From Deconstruction to Artificial Intelligence: The New Theoretical Paradigm," in *The Contested Territory of Architectural Theory* (Abingdon, Oxford: Routledge, 2023), 230.
[8] Ibid., 233.
[9] As the great example of machine hallucinations used in working with artworks is Refik Anadol's ongoing project exhibited in MoMA in New York: https://refikanadol.com/works/unsupervised/.

from newly available data over time. Moreover, AI can contribute to the documentation and archiving of digital data of the monument. In the case of the digital palimpsest, the digital model serves as an archive of a physical monument, while the AI assists in working with the collected data for future research and preservation efforts.

By leveraging AI and machine learning, preservationists can better understand the factors that affect monuments and make more informed decisions about their care and maintenance. This approach not only helps to extend the life of these cultural assets but also does so in an efficient and data-driven way in the digital domain.

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