

# Contemporary Spolia in Adaptive Reuse

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## Abstract

The reuse of building components is a common practice since ancient times, and among such reuses, the *spolia* means spoils initially and gradually implies a mixture of the concepts of ruins and spoils. It often indicates a special reuse associated with a meaningful intention, distinguishing it from general material reuse. In buildings' adaptive reuse, some parts of the buildings will inevitably be demolished and deconstructed because of new spatial purposes. However, what happens to their dismantled components if they are reused instead of being shipped and discarded in landfills? Attention to *spolia* in adaptive reuse should be put on the agenda in the face of climate and resource crises today. The contemporary *spolia* plays a role in the building's adaptive reuse by adapting these dismantled components back to the buildings themselves for changing needs and purposes beyond only the materiality, allowing the reinterpretation and appropriation of their reuse. How does contemporary *spolia* interact with adaptive reuse? The research will reveal the two typical approaches to contemporary *spolia* in adaptive reuse through case studies, to show how adaptive reuse could benefit from the prior life of building components and their *spolia* way, and rediscover a long-term absent material culture today.

Keywords: *Spolia*, Adaptive Reuse, Contemporary Practices

Whether the Basilica of Maxentius reuses leftover pieces from the neighbouring Temple of Venus and Rome, or Le Corbusier infills the walls of Chapelle Notre-Dame-du-Haut with stone from an old church, building components reuse is seen as a common practice. There is no doubt that building components reuse is not a contemporary invention, as the matter “is always preserved: demolition materials do not disappear, but are moved or transformed. As a result, they can be reused, recycled or dumped as waste, depending on the value that is attributed to them” (Reyniers et al. 2024, 18–35). In a reuse process, pragmatic reasons, such as the cost of transportation and crafting of materials, greatly boost the reuse of building components and materials from demolished or unused buildings (Plevoets 2022, 145–159). At the same time, building components reuse sometimes could also reach beyond their “pure material value” (Esch 1998, 876–883) to the point of acquiring symbolic or political meanings (De Lachenal 1995), and allow the collective memory to interpret the traces of the material culture (Zatta, Condotta 2020, 113–121).

The latter usually appears in the *spolia*, the word originated from the Latin word *spolium*, which means “spoils” just like the armour that is stripped from a defeated enemy, but it was not until the sixteenth century that the Italian cognate, *spoglie*, was used for the first time to describe the reuse of architectural elements. It was the so-called *Raphael Letter to Pope Leo*

X in the second decade of the 16th century that first refers to *spolia* in the modern sense, and later, Giorgio Vasari and Sebastiano Serlio repeatedly mentioned *spolie* and *spoglie* in *The Lives of the Most Excellent Painters, Sculptors, and Architects and Seven Books of Architecture* respectively. Then the use of *spolia* was gradually applied widely and often implied a mixture of the concepts of ruins and spoils, and refers to the fragments which are often taken from the old buildings and reused for new purposes, such as the artistic monuments to the victor in ancient times. The modern study of *spolia* began in the last century with the research of Hans Peter L'Orange and F. W. Deichmann, focusing on *spolia* and its later environment. Arnold Esch published his milestone article in 1969, making the research focus of *spolia* no longer limited to the material level. He indicated that *spolia* is a distinctive cultural practice, and pointed out five types of *spolia* intentions, namely material usability, profanation and exorcism, Christian interpretation, political legitimacy, and aesthetic admiration (Esch 1969, 1-64). Since then, influenced by Esch, a large number of studies have begun to focus on understanding the immaterial functions of *spolia*. Recently, Hans-Rudolf Meier understands *spolia* as “intentionally and therefore usually visibly reused building elements” usually associated with “specific design and/or semantic intentions” (Meier 2020), exploring the core issues of the attribution of meaning and spatial practice of *spolia*. Therefore, although sometimes the interpretations of *spolia* alternate between ideology and pragmatism, which could coexist, it usually includes both the pragmatic utility of the material, the artistic and architectural intention, and attitude of the fragment from the prior life, and the vision and action for its future.

In the Arch of Constantin (Fig. 1), the luster of the late imperial heritage is maintained by dismantling and reassembling a considerable number of second-hand components: the frieze panels from the Trajanic in the central passage and the attic; the four pairs of Hadrianic roundels on the main facades; the four pairs of panels on the attic from another arch for Marcus Aurelius, etc. Although it took the risk that it may be seen as a compromise solution with many dimension problems in detail brought by *spolia*, the Arch would rather promote reusing components to try to identify Rome's new ruler with the previous emperors. This appropriation is no longer just a consideration of pure material resources, but an attempt to utilize the imperial legacy left on the old components to lend new monument value to the arch.

“Clear testimony to this is afforded by the works in sculpture and architecture produced in Rome in the time of Constantine, notably in the triumphal arch made for him by the Roman people at the Colosseum, where we see, that for lack of good masters not only did they make use of marble reliefs carved in the time of Trajan, but also of spoils brought to Rome from various places” (Vasari 1996). Although Giorgio Vasari complained in his book and pointed out the Arch of Constantine as a confession of inferiority to the past because the reuse of secondhand components evidenced a decline in skill and the demise of artistic capability at that time, it is clear that the choose and reuse of building components here transcends the economical despoilment, and is endowed with artistic and ideological judgment. His words also prove that the *spolia* here values the immaterial value of these decorations rather than only their practicality. The audience of the Arch was meant to see its reused ornaments “in a new, original late antique composition ... in which [their] first significance ... was re-evaluated in the sense of the present situation” (L'Orange, von Gerkan 1939). Dale Kinney states that this kind of appropriation was intended as “an



Fig. 1. The Arch of Constantine, Rome (Zhengwen Zhu, 2025)

act of renovation,” through which “an artifact considered obsolete was transformed into something relevant and useful” (Kinney 1997, 117–148).

Therefore, since *spolia* could reach the aspect of human cultural appropriation, it is impossible not to consider the identity construction of the objects’ issues that need to be faced in appropriation, and how contemporary *spolia* play a role in the adaptive reuse of buildings. The building adaptive reuse is rooted in the long history of heritage conservation, and now it is often interpreted as a process of transforming the building in the functional absence. This creates a partial collapse of the building’s own cultural identity. A cultural fortress whose current identity is shaken in the transformation and is no longer stable enough is bound to accept at least part of the new identity to complete the process of adaptive reuse. As Radolfo Machado has proposed, “if an original building is considered as a first discourse that conditions future formal discourses to be inscribed upon it, then remodelling can be conceived of as rewriting” (Machado 1976, 46). Therefore, if the *spolia* in adaptive reuse are uncritically viewed as a mere material use, without focusing on their transformation as heritage, their immaterial value impact on their new context, and the dimensions of identity and meaning they bring, then the potential of *spolia* as a cultural practice is overlooked, limiting the perspective of adaptive reuse.

From the perspective of building adaptive reuse, the sources of contemporary *spolia* can be categorized into two types according to their sources. On the one hand, the reuse of buildings inevitably requires the demolition and dismantling of at least some elements within existing buildings to achieve functional and spatial transformation. These discarded

components often await being sent to the landfills for degradation. However, in *spolia* practices, this construction waste has become a direct source of component reusing. In this type of *spolia*, building components preserved from the site are often directly repurposed within the building itself, but in a new way. On the other hand, *spolia* can also be sourced externally. This type of contemporary *spolia* is often salvaged from the inventory of second-hand component suppliers in the surrounding area, or even elsewhere, or purchased from nearby second-hand component shops or related individuals in the absence of a large-scale second-hand market. These different sources of *spolia* set the stage for the unfolding of different narratives. Because the former one from the site itself inherits the building's own stories and memories, the challenge for the building is how to confront its own past. The *spolia* from exterior carries unfamiliar identities and heterogeneous elements, and how to transform them into part of one's future is what needs to be considered in such building adaptive reuse.

Sala Beckett's adaptive reuse demonstrates how *spolia* can be used as its own source of memory nourishment. The building is located at the Calle Pere IV in Poblenou, which has become an area of an industrial hub in the past, followed by a rapid decline, but now the entire area has begun a transformation from a labor-intensive to a knowledge-intensive economy. It was the Pau i Justícia Workers' Cooperative that lived in this building and provided necessities as well as cultural and recreational activities for the working-class community. But now it has become the stage for the Sala Beckett theater, which is known for the smaller, experimental theatre. The important design in what Flores & Prats Architects did in the building's adaptive reuse is the *spolia*. The collective memory of the industrial community is realized by salvaging the old components in situ and reusing them in an unexpected montage way. Flores & Prats sensed the responsibility of considering the past as potential new possibilities when they were faced with the seemingly worthless ruin site. They took inventory of all the components scattered in the building and drew these past existences in detail in proportion, waiting to reactivate them at an unknown time in the design process. "From there we can go on to restore the warmth offered by the various elements we salvage. Thus, facade and interior correspond: when you enter a building with an old appearance, you find an interior with traces of the different programs that have occupied it" (Flores, Prats 2020).

The door previously connected the former cafe to the former vestibule on the first floor is now the main entrance of the bar on the ground floor. The new identity was achieved through the assembly of new components around it and unified painting on the frame, while surfacing the memories by preserving its formal characteristics. The two pairs of windows were previously on a wall of the former toilet on the first floor, but now they are above the start of the stairs on the ground floor, and make the bar visible from the lobby (Fig. 2). The paving from the former classroom and the former cafe spreads along that wall in the central hall from the front to the back of the plot. The flooring hydraulic tiles enhance the memory value through the organization of the paving pattern, calling up the past atmosphere. The ceiling roses salvaged from the former theater on the first floor were placed on the wall as a memory reminder with original traces on the surface. These broken ceilings, dusty doors, windows, pavements, tiles, etc, are regarded as the carriers of community memories to play an important role in the adaptive reuse. A complex hybrid of the past and the present is presented by the interpretative arrangement of the *spolia*.



Fig. 2. The Window above the Stairs in Sala Beckett, Barcelona (Zhengwen Zhu, 2024)

The K.118 project in Winterthur is the adaptive reuse of a previously abandoned brick building, formerly part of the 19th-century Sulzer foundry, which ultimately closed in the late 1980s. By *spolia* salvaged from the external, baubüro in situ constructed a red beacon on the existing building's volume. By extensively reusing second-hand components from other locations, the three-story building was transformed, with an upward extension creating three floors to house studios and workshops. From the steel girders, steel stairs, and facade panels to the radiators and sinks on the roof, as well as the windows and doors, a large number of building components on the upper three floors come from demolished buildings in the Winterthur region. The form and dimension of the expansion areas will be determined by the components they have already salvaged, such as the height of the floors and windows will be determined. This means that while the *spolia* does not directly contribute to the spatial transformation of the existing brick building, it fully dominates this extension, effectively shaping the building's future identity through the reuse of these external building elements.

For example, a steel skeleton that once supported a distribution center on the Lysbüchel site in Basel forms the supporting structure, which preserved the Traces of surface paint being scratched and rust in the past. The steel staircase on the northwest facade was from the Orion building, while its stair landings determine the floor heights of the top three floors. Especially in the facade, the metal sheeting on the facades comes from the Zieglerprint shop in Winterthur, and they were not trimmed but overlapped, in different profiles and shades of red depending on what happened in their last life cycles, like the duration of

exposure to sunlight. The facade's windows and doors come from two different buildings. The windows from the Orion office building are arranged in landscape rows by groups of two and three sashes, equipped with external venetian blinds. At the same time, the floor-to-ceiling windows from the Sulzer Plant were overlapped in portrait format. The windows from different sources do not appear chaotic due to their different characteristics. Instead, they give the facade a new identity according to their combination, while echoing the window pattern of the existing building below, that is, almost the same window spacing and composition division (Fig. 3).



Fig. 3. The Facades of the Extension and the Existing Building in K.118 Project, Winterthur (Martin Zeller, 2021)

Whether in the case of in-situ *spolia* in Sala Beckett or the extensive use of external *spolia* in the K.118 Project, both involve shifts in the contextual meanings of architectural elements before and after their reuse, as well as the corresponding strategies of adaptation. In the context of building adaptive reuse, the former type of *spolia*, which is sourced locally within the building, carries with it the memories and narratives associated with the building's previous life cycle. This gives in-situ *spolia* an inherent advantage and legitimacy from a heritage perspective. As embodiments of the building's past, they can be readily appropriated without the need for excessive justification, serving as memories projected into the future. The latter type, however, is composed of elements originating from diverse external sources, each bearing cultural genes unfamiliar to the host architecture. These elements, often appearing in an unfamiliar guise, are reintroduced through adaptive reuse. The legitimacy of appropriation lies in how it can preserve its own distinct characteristics while establishing new interactions with the existing building, even sometimes, the new cultural identity created by these foreign *spolia* overwhelms the building's original identity. It is evident that in the adaptive reuse of buildings, *spolia* also faces a series of practical

challenges stemming from realistic considerations. There is often a conflict that, on the one hand, it is necessary to preserve cultural characteristics and the unique features of the secondhand components themselves; on the other hand, the uncertainties and defects arise from issues such as their physical properties, material decline, and incompatibility with current building codes. The procurement, transportation, storage, cataloging, and qualification of components may present logistical and regulatory challenges, especially when components are salvaged from unregulated demolition sites or lack standardized documentation. Furthermore, the high degree of flexibility required by *spolia* may reverse or disrupt the traditional design and construction processes. The new process must be flexible enough to adapt to the availability of second-hand components and various possible contingencies. These various practical factors, further including customer concerns and the lack of existing legal protections, indicate that in adaptive reuse, the cultural dimension of *spolia* is not merely a matter of cultural aspirations itself, but a complex process of negotiation with other dimensions such as technology, law, and society.

Contemporary *spolia* must confront the industrial transformations and cultural absence brought about by modern society in the realm of architectural component reuse. In the past, the immaterial intentions behind *spolia* were often closely tied to political and religious agendas. For example, the reuse of architectural elements in the Arch of Constantine was intended to appropriate the symbolic power of the ruling class embodied in those fragments. By contrast, the intention of contemporary *spolia* has become far more diverse and often constitutes an aesthetic statement in itself, one that is closely related to the act of reuse. In other words, due to the long-term dormancy of material culture, contemporary *spolia* practice itself can constitute a design issue that reawakens material culture, and is closely linked to carbon reduction and resource recycling in the current sustainable development agenda, rather than merely a continuation of historical practices. *Spolia* elevates sustainability to the level of design decisions and value judgments in the field of reuse, thereby promoting the construction of a sustainable architectural culture in the era of circularity. It combines the ecological responsibility of architecture with the identity and narrative of its components, making sustainability no longer just a quantitative indicator, but a perceptible and interpretable immaterial value.

A major reason for this shift is that the objects of the *spolia* have transformed from prestigious architectural fragments into more commonplace, mundane elements, even what the modern construction industry considers waste or demolition debris. Moreover, whereas traditional *spolia* brought together elements of different styles and eras to serve a unified architectural order, this is no longer a required principle. Especially in building adaptive reuse projects, *spolia* distinguishes itself from both the preserved portions of existing buildings and the new interventions proposed. As a third element, it adds another layer of heterogeneity and complexity to the building, often inserted in a fragmented, discontinuous manner. Beneath this phenomenon lies a fundamental shift in how people relate to history through contemporary *spolia*. The cultural and historical meanings it preserves are often understood from a more micro and democratic perspective, shared within the local community. Rather than imposing a singular interpretation, contemporary *spolia* provides a fertile ground for ambiguity and multiple understandings, allowing for pluralistic and open-ended views of the past and future of the building's adaptive reuse.

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