

# CONTEMPORARY ADDITIONS TO HISTORIC BUILDINGS IN THE CONTEXT OF THE HISTORIC ENVIRONMENT OF THE CITY

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**ABSTRACT:** Contemporary architectural work created in close proximity to historic buildings is an increasingly used form of adaptation of unused and dilapidated historic buildings. However, additions, extensions, extensions and reconstructions of listed buildings must preserve the historic value while meeting the contemporary needs of today. The issue of the appropriateness of additions to listed buildings is a challenging one that requires detailed planning and careful implementation. This research seeks to analyse methods of adaptive access and specify the suitability of the solutions implemented. The analysis was carried out on selected buildings from historic city centres in Europe.

**KEYWORDS:** Historical environment, modern additions, reconstruction, composition, Europe

## INTRODUCTION

Architecture has a very rich history, reflecting the stages of human life. Every building is a reflection of its time and mirrors the spirit of the past for present and future generations. Historic buildings often fall into disrepair, most commonly due to economic factors and the associated lack of maintenance, neglect and abandonment, as well as social and cultural factors, technological and environmental factors, and, last but not least, legal and administrative obstacles. Preserving the historical value of buildings is essential for maintaining the spirit of the past, which is why it is necessary to work with them even when they have lost their functionality and beauty. Most European capitals have historic centers that are systematically protected and maintained as important parts of the city's cultural identity. However, there are cases within these areas where contemporary architecture is being implemented. These interventions often provoke a significant social response, both at the design stage and during the construction itself. The high level of emotional and intellectual engagement of the public in these cases highlights the importance of historical context and sensitivity to interventions in culturally valuable environments.[1]

The reconstruction and completion of dilapidated historic buildings require a sensitive and comprehensive approach by construction experts. This raises the question of how to integrate a modern extension into the historical and urban context in such a way that it does not degrade the historical value. When adapting a historic building for reuse, many issues must be resolved with various construction experts and also with heritage conservation organizations. Current interventions in historic buildings present opportunities for innovation in the field of ecology and sustainable design. "The challenge for architects when designing exterior additions is therefore to create and develop an approach that does not damage or disrupt the historical character of both the existing building and its surroundings, while at the same time creating an identity that is representative of the current period." [2] Modern construction systems and materials can be very helpful in the renovation of historic buildings, but also in the construction of new buildings in close proximity to historic structures.

This article focuses on examining various approaches to extensions in historic environments. The examination consists of creating an overview of buildings and comparing and evaluating the suitability of the intervention. In order for the evaluation to be objective, the evaluation factors are taken from the recommendations and requirements of international charters and agreements on architecture and heritage conservation.

## ANALYSIS OF THE ISSUE

The issue of contemporary additions to historic buildings in the context of the historic environment of a city has been the subject of intense interest among experts and the public for several decades. Since the second half of the 19th century, there has been a growing awareness of the historical and cultural value of older buildings and urban structures. Listed buildings began to be perceived not only as architectural artifacts, but also as bearers of identity, which plays a fundamental role in shaping the relationship of individuals and communities to a given place. [3] Current architectural practice in the field of additions to historic buildings oscillates between two basic poles: conservation and innovation. Every intervention in a historic environment has an ethical and aesthetic dimension that must be balanced between respect for the original substance and the need to respond to current social, economic, and technical conditions.

Currently, in the Czech Republic and abroad, historic buildings are increasingly being extended and renovated to adapt them to modern needs. The protection of historic buildings through conservation measures is a preventive measure against their degradation or destruction. In many cases, however, it is necessary to add new architectural elements that respond to the current demands of users in order to maintain their functionality. [4] However, these additions to historic buildings come into contact with organizations involved in monument preservation, which often have very restrictive conditions.

The issue of modern extension design is a challenging task that requires careful planning and execution. "Historical monuments and sites are complex artifacts whose significance and value depend on the legibility and authenticity of their components. Considering these components to be less important, replaceable elements only diminishes the historical significance of the whole." [5] Historic buildings bear traces of times past and reveal the ancient history of a place. Architects should find a balance between preserving the authenticity of a monument and adding new functional parts for the future existence of the building. Due to the high demands on time and finances, the conservation process is usually only applied to buildings of exceptional historical value. An alternative approach is adaptive reuse, which allows selected authentic elements of the building to be preserved while functionally adapting it to current requirements. [6] In a broader context, the issue of additions to historic buildings touches on the question of sustainability. The fundamental problem with historic buildings is their many years of wear and tear and the resulting need for maintenance. However, in order to preserve historic buildings economically, their continued use must be ensured. Adaptive reuse of buildings is not

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only an economically efficient solution, but also an environmentally responsible approach that minimizes the need for new construction. Preserving historic buildings and integrating them into contemporary city life contributes to the long-term stability of the urban structure and strengthens the identity of the local community. New additions can breathe new life into historic city centers, which currently serve mainly as backdrops for tourists. Principles respecting best practices in the field of interventions in historic environments emphasize that new architecture should coexist harmoniously with the historical context without imitating it. The apparent contradiction between the requirements of compatibility and distinctiveness is in fact complementary and allows for the creation of a high-quality dialogue between the past and the present. [7] The goal of modern architectural design in a historic environment should therefore not be to replace the past, but to interpret and develop it through the contemporary language of architecture. The question is how to approach additions so that they are both compatible and distinct? Overall, this is a complex issue that requires a multidisciplinary approach and careful consideration of all relevant factors. The literature shows a wide range of opinions and approaches, reflecting the diversity of historical and cultural contexts in which these issues are addressed.

## METHODS OF INVESTIGATION

The research includes initial data collection and site selection. It is important to select different types of historical environments from different periods of origin and with different levels of protection. At the same time, the site must include the integration of contemporary structural elements or extensions. This narrow selection allows for direct observation and analysis of the success and impact of these interventions. The research itself consists of personal visits to selected sites. Field surveys are an irreplaceable tool for a comprehensive assessment of the static stability and structural integrity of a building. At the same time, they allow the identification of potential technical or material deficiencies that must be reflected in the subsequent architectural design and reconstruction or extension process. [6] During personal visits to various locations, visual materials were created for the analysis of the compositions of both new and historic facades. The historic facade reflects the cultural features of the period in which it was built, just as the facade of a modern extension will reflect the present day. The facade consists of a set of architectural and structural elements, including, in particular, roof structures, window and door openings and fillings, plastic or ornamental details, and other expressive components. These elements differ in their morphology, material solution, and color, thus contributing to the overall aesthetic and compositional character of the building. The analysis focuses on compositional principles and the surface material used, as the material and color of the extension are important in terms of its high visibility and should be determined with regard to the structure and color of the historic building. The research method is based on assessing the compatibility of modern extensions with historic traditional buildings. This suitability is evaluated in accordance with the principles of international charters and agreements. A comparative analysis of selected case studies was used. The requirements and findings of the Athens Charter (1933), the Venice Charter (1964), the ICOMOS Charter (2003), the Valletta Principles (2011), and the NPÚ methodology were used for the research. Selected interventions in historic buildings are assessed and evaluated separately.

## WORLD HERITAGE INSTRUMENTS AND AGREEMENTS

The principles set out in charters and international documents emphasize respect for the original character of historic buildings. The Athens Charter (1933) requires that architectural values be preserved and under no circumstances supports the use of past architectural styles in the construction of new buildings in historic environments. It also encourages the use of modern technology to enrich the art of building. The Venice Charter (1964) emphasizes that additions are permissible if they respect all parts of the building, its traditional environment, the balance of the composition, and its relationship with its surroundings. Replacements for missing parts of a historic building must be harmoniously integrated, but new parts must be clearly distinguishable from the original without imitating it. The layout and decoration of a historic building must not be altered. New buildings that would change the ratio of mass and color must not be constructed. [9] The ICOMOS Charter (2003) emphasizes the integrity of all parts of a historic building and does not recognize the removal of internal structures with the mere preservation of facades. Any intervention in the building should be kept to a minimum so as not to damage its heritage value. It gives priority to repairs over replacements, but techniques must be considered and a less invasive method compatible with historical values must be chosen. [10] Similarly, the Valletta Principles (2011) respect historical values. According to these principles, new buildings should not be formally imitative, excessively contrasting, or appear fragmented. The mutual composition of the new and historical parts should be fluid and form a coherent whole, while respecting the scale of the site. [11]

The Czech approach, formulated in the methodologies of the National Heritage Institute (NPÚ), is based on the principle of preserving the authenticity and continuity of the historical environment while respecting its natural development. The assessment of new buildings in protected areas must be based on professional criteria derived from the urban, architectural, and historical context of the site. It is essential to respect the scale, height, mass composition, and material character of the buildings. New buildings should be recognizable as contemporary, but designed with a view to harmonious integration into the environment without imitating historical forms. The National Heritage Institute distinguishes between different approaches – from copies and paraphrases of defunct buildings to new original creations – all of which require an individual approach and sensitive consideration of the context. The methodologies also promote dialogue between conservationists, architects, and investors and strive for a balanced relationship between cultural heritage protection and contemporary architecture, thus building on the principles of international charters. [12] All these documents encourage sensitive interventions and respect for the historical value of the building and its surroundings.

## CASE STUDY

### Louvre Pyramid, Paris

The pyramid at the Louvre, designed by architect I. M. Pei, is one of the most famous examples of a modern addition to a historic building. The entrance area of the original historic building was insufficient in terms of capacity, so a new, larger entrance had to be created. This type of addition is located on the same plot as the original building, but is not structurally connected to it above ground level. This new part respects the original facade, which it does not physically interfere with. [13]

The pyramid, built in 1989, consists of a steel spatial truss structure and a glass shell made of triangular modules. The proportions of the pyramid respect the golden ratio, which also appears in the architecture of

the palace. The extension is located in an axially symmetrical composition in the center of the courtyard. This creates a subtle geometric dialogue between the historical symmetry of the Louvre and the modern transparent form. The historic Louvre is built of sandstone with a sculptural façade, rustication, and sculptural decoration. In contrast, the pyramid uses the minimalist language of modern architecture in a combination of steel and glass, without decorative elements. This contrast in materials is intentional in this case. Glass functions as a neutral material that does not aggressively reflect its surroundings, but rather mirrors and transmits the image. The clarity of the pyramid's glass supports the lightness of the object and does not overly compete with the historical part. The structure is independent, without direct contact with the historical building, thus respecting the principle of reversibility and independence of modern intervention in a historical context. The pyramid and its modern concept are clearly legible in the context of the entire space, and its form does not imitate historical styles. Its compatibility with existing values respects the hierarchy of the space and complements the functional and symbolic aspects of the complex.

The construction of the pyramid created a clear communication hub without the need for major interventions in the historical structures. At the same time, it acts as a transitional mass between the massive architecture of the palace and the open public space. Symbolically, the building has become a living symbol of Paris that attracts the public. However, the power of the extension also brought with it the risk of changing the perception of the monument, as current generations perceive the Louvre through the symbol of the pyramid, and thus the extension overshadows the original historical identity of the palace. The very location of the pyramid in the courtyard is dominant in relation to the main axis of the palace, creating the risk of visual dominance of the new building.



Fig. 1.: Louvre, Paris (Source: website, available from <https://www.isic.cz/clanek/kultura/nejslavnejsi-muzea-a-galerie-evropy/...>)

#### Museum of Military History, Dresden

The Military History Museum in Dresden underwent a radical reconstruction by American architect Daniel Libeskind in 2011. He cut through the original historic building with a massive wedge of concrete and steel as a reference to the cruel military history that cannot be confined within four walls. This structure creates a radical contrast in direct contact with the historic building. In this case, the extension is physically connected to and permeates the historic building, inevitably concealing part of the façade and changing the interior layout. In this case, the interventions are contrary to the recommended principles and requirements of international world heritage charters and agreements. From the point of view of the principle of reversibility, as defined by the Venice Charter (1964) and later theories of heritage conservation, Libeskind's intervention represents an irreversible intervention. The steel structure of the wedge penetrates the historic masonry and becomes a structurally and spatially inseparable part of the building.

The understanding behind this extension lies in the values that needed to be emphasized by a decon-

structivist extension. Similar to Daniel Libeskind's other work in Toronto, it can be said that the bold and completely different architectural addition to the historic building does not detract from its value. On the contrary, the contrast between the new and original parts emphasizes the authenticity of the historic building and clearly distinguishes the extension from the original structure. [4] The insertion of the wedge-shaped extension into the axially symmetrical historic façade obscures one part of the building, but this can be compensated for by observing the other half. The preservation of historical value is made possible by the human ability to mentally mirror the second, shaded part. Distinctiveness is present to the maximum extent, the historical mass of the museum remains clearly legible thanks to the preservation of the original facades, in contrast to which the sharply defined wedge of steel and glass stands out as a diagonal form that disrupts the original calm symmetry. From the point of view of semantic compatibility, however, there is a deep integration, with the new architecture complementing and at the same time reshaping the historical function and transforming the museum from an instrument of militaristic representation into a platform for critical reflection and memory. Such strongly conceptual architecture carries the risk of being read only as a gesture, not as the bearer of a deeper architectural dialogue. The benefit of this intervention is new visitor comfort and improved functional and operational quality of the museum. The new architecture is not merely a form, but a medium of communication, as it symbolically shows the tip of the iceberg. The benefits of this intervention include new visitor comfort and improved functional and operational quality of the museum. The new architecture is not merely a form, but a medium of communication, as it symbolically points the tip of the wedge towards the site of the bombing of Dresden, thus linking historical fact with contemporary ethical interpretation.



Fig. 2.: Museum of Military History, Dresden (Source: Veronika Schwarz)

#### Greyfriars Charteris Centre, Edinburgh

The former church, built in 1912, was given a new function as a community center during its renovation. The transformation was prompted by the closure of the church and the announcement of an architectural competition. Konishi Gaffney Architects respected the original layout and distinguished all new additions from the original structure. The windows on the front of the church were extended, and the interior was divided into several levels. The extension between the church and the office building does not compete with the historic church or the office building, as it has a similar scale and proportions. The intervention is not fully reversible, but it respects the original structure to a large extent. The intervention primarily affected the interior of the church, and interconnected functional elements of the staircase, entrance area, and reception were added in the new extension between the buildings. The new and old parts are clearly separated both visually and structurally, but they function in mutual dialogue. In terms of value compatibility, the intervention expanded the original values of the build-

ing with new useful and socially significant functions without devaluing its historical character. The center serves the community, providing space for culture, education, meetings, and social activities. The issue of barrier-free access has been resolved. There was a risk of a certain loss of authenticity, as the adaptation to a new function could lead to the interior no longer being perceived as a historic church, but rather as a community space, which changed the original spirit of the place.



Fig. 3.: Greyfriars Charteris Center, Edinburgh, (Source: website, available from <https://www.archdaily.com/986204/greyfriars-charteris-center-konishi-gaffney-architects>)

#### Mercat de Santa Caterina, Barcelona

Mercat de Santa Caterina is located in the historic heart of Barcelona and is one of the most important and characteristic markets in the city. The historic part, dating from 1848, underwent extensive renovation led by the renowned architectural studio Enric Miralles and EMBT Arquitectes Associats and was reopened in 2005. The iconic undulating roof is the main feature of the renovation, its dynamic and lively appearance sympathizing with the hustle and bustle and energy of the market itself. The interior is open and bright thanks to a large number of glass surfaces. The modern extension has optimized the market's interior space, improved operational efficiency, and created a better environment for both vendors and visitors. The revitalization of the market responds to the current needs of users and has strengthened its social and cultural function within the city. The new intervention complements the historic building not only formally, but also sensually, culturally, and functionally. In this case, the market has become a symbol of the city, and the new roof has added to the attractiveness of the space. The combination of traditional and modern materials represents a harmonious dialogue. The facade of the building is not particularly shaded, and the new roofing respects and enriches the original structure. Original historical elements, such as stone walls and wooden beams, have been carefully restored and preserved. These historical components have been complemented with modern materials such as glass and steel.

The resulting solution creates a balanced contrast between historical continuity and contemporary architectural expression without losing the original character of the site. However, in terms of the distinctiveness of the individual historical layers, the new building section is clearly identifiable and distinctly separated from the original structure. The architecture of the new intervention expresses a contemporary character, while at the same time creating a visual and semantic connection with the older part through the adoption and reinterpretation of characteristic elements. In terms of the principle of reversibility, the intervention is not fully reversible—significant parts of the historical structure have been preserved and the new construction is to a certain extent independent, but due to changes in function, internal reorganization, and integration of underground parts, the intervention disrupts the lay-

out of the building. In its new form, the market better serves its purpose, has become more attractive, and has contributed to the cultural enhancement of the historic building. However, the intervention has resulted in the loss of part of the original structure, and the new parking and internal reconstruction have caused an irreplaceable loss of the original interior. The facade of the original building is visually suppressed by the dominant roof structure.



Fig. 4.: Mercat de Santa Caterina, Barcelona, author: Veronika Schwarz

#### Rectory at the Church of St. Gotthard, Prague

The renovation of the Baroque rectory in Prague's Bubeneč district has brought out the original Baroque building and cleansed it of unsightly 20th-century additions. Architect Jan Kazimour had the existing additions modified and newly clad in beige marble, which harmoniously matches the Baroque part. The additions are directly connected to the facade of the historic building, but their mass does not compete with it and blends in with it. The intervention was designed with an emphasis on minimizing interference with the main historical structure of the building. The intervention consisted primarily of cleaning the original structure and adding extensions that only "touch" the historical parts, thus ensuring a certain degree of technical reversibility. Although it is possible to remove some of the new elements in the future without causing significant damage to the original structure, the internal modifications and the method of anchoring the new parts to the existing building limit full reversibility. We can therefore speak of partial or restructured reversibility. Nevertheless, the new intervention is clearly distinguishable from the historical volume. In terms of the distinguishability of individual eras, the intervention is designed so that the newly inserted elements are formally and materially legible. The use of contemporary materials and construction methods has resulted in a clear distinction between the new interventions and the historical structure, without imitating or stylizing them into a historical expression. In terms of value compatibility, the intervention brings new functional, social, and architectural qualities to the building, thereby contributing to the enhancement of its heritage value. The choice of discreet materials and the preservation of an appropriate scale for the new additions respect the compositional hierarchy of the original building and support the harmonious coexistence of the historical and contemporary layers. The benefit of the project is the preservation of authenticity and integrity, which consists in preserving the original substance and layout structure while incorporating new elements that do not overwhelm the character of the historic building. A potential risk to this delicate continuity is the future limited legibility of the distinctiveness of the different eras.



Fig. 5.: Parsonage at the church of St. Gotharda, Prague (Source: website, available from <https://www.archiweb.cz/b/rekonstrukce-fary-u-kostela-sv-gotharda>)

#### Red Church, Olomouc

The original Lutheran Red Church was closed in 1959 and used as a book depository. A new building was constructed to store the book collection, freeing up the original building for a new function. The architectural studio atelier-r undertook the reconstruction of the building. The new use of the church for cultural purposes also required the necessary operational facilities, so a new structure was built between the main nave of the church and the library headquarters, connecting the two buildings. From the point of view of value compatibility, the intervention represents a significant contribution to the preservation and enhancement of the building's value. The historical and architectural value of the church has been preserved and is not overshadowed by the new interventions; on the contrary, its cultural, symbolic, social, and functional role has been strengthened. The project has thus transformed the monument from a mere static historical building into a living cultural center that actively serves contemporary society. The extension respects sufficient distance from the historical parts and connects only to the extent necessary for connecting entrances. The shape of the structure is based on the floor plan of the church and the headquarters. The Red Church achieves a high degree of distinguishability between eras – the new extension is clearly separated from the historical part and does not imitate its style; the materials and scale respect the historical building as a dominant feature. The reconstruction of the Red Church is partially reversible. Most of the new interventions have been carried out sensitively and with regard to preserving the main historical structure;



Fig. 6.: Red Church, Olomouc (Source: website, available from <https://www.earch.cz/architektura/clanek/z-kulturni-pamatky-moderni-kulturni-centrum-olomouce-cerveny-kostel-ziskal-po-rekonstrukci-odvaznou-pristavbu>)

however, some internal and structural modifications represent permanent changes that limit reversibility in practice.

The project has enabled the return of a long-abandoned monument to active public space. The reconstruction has extended the life of the building and expanded the city's cultural infrastructure. It thus fulfills the principle of cultural monument sustainability through a new function. There is a risk of the new entrance becoming visually dominant, as the new volume, when illuminated in the evening, may compete with the vertical composition of the original tower in certain views. The conversion from a church to a cultural facility has irrevocably changed the spiritual character of the place. Although the space has remained reverent, the change in function has affected its original sacred identity.

#### Corso Karlín, Prague

Similar to other European cities, this industrial hall from 1890 lost its purpose. Ricardo Bofill Taller de Arquitectura, Ricardo Bofill Levi, and Jean Pierre Carniaux were responsible for its transformation. The abandoned building has been converted into an office building. The original brick historical part has been complemented with an airy and light superstructure made of glass and steel. The gable of the hall has been preserved in its original state, but the side walls have been opened up as much as possible, significantly brightening the interior space. A four-story building with a basement has been built into the volume of the hall. Corso Karlín can be described as a partially reversible intervention. The interventions were designed with a high degree of sensitivity and respect for the original structure of the building. The new part is inserted as a separate, but visually and structurally connected mass, which remains in principle separable from the historic structure. However, some modifications to the openings and the methods of anchoring the new elements limit the full reversibility of the intervention, and therefore only partial reversibility can be claimed. In terms of the principle of distinguishability between eras, the new part is clearly separated from the original historical mass. The new section respects the layout and rhythm of the original hall with its simple mass. The architectural design deliberately avoids imitating the historical style, creating a conscious, contrasting, yet harmonious dialogue between the old and the new. This approach ensures the legibility of both layers and allows for mutual understanding without losing authenticity. In terms of value compatibility, Corso Karlín represents a balanced addition to the historic building in both functional and aesthetic terms. The new architecture does not disrupt the identity of the original building; on the contrary, it strengthens and develops it within the current urban and cultural context of the city. The project thus contributes significantly to restoring the viability of the historical structure and its meaningful integration into the contemporary urban environment. The new function has saved the historic industrial hall from oblivion.



Fig. 7.: Corso Karlín, Prague, author: Veronika Schwarz

The Corso Karlín project has benefited the entire neighborhood, as it has become an urban catalyst for the transformation of the entire district. Its success inspired subsequent brownfield revitalizations and transformed Karlín into one of the most sought-after locations in Prague. The risk remains that some of the authenticity will be lost and that there will be pressure for commercial use. The insertion of new horizontal structures and office modules has partially destroyed the spatial generosity of the original hall, thereby reducing the original industrial scale.

#### Headquarters Lasvit, Nový Bor

The architectural studio Ov-a supplemented two historically protected buildings with two new buildings based on the proportions and scale of the original buildings. The addition to the complex harmoniously unified the composition of the entire block. The principle of distinguishable eras is evident in the new building. In terms of materials and form, it differs from the historic houses, but at the same time respects the historical context in terms of proportions and urban planning. The simple form of the glass house with a hipped roof replaces the original connecting neck of the historic buildings and creates a new central space for the company. The second building is similar in terms of mass; it is a black building because it is covered with black cement tiles. Both new buildings use tiles in the shape of slate tiles typical of the locality for cladding. The historic buildings have been renovated, cleaned, and sensitively adapted for the company's operations. The Lasvit headquarters project shows a relatively high degree of reversibility, as the new buildings are largely independent and the interventions in the historic building are minor in nature. The project strongly communicates with the region's glassmaking tradition, and the design of the new parts is an expression of contemporary craftsmanship and innovation.

It houses production presentations and exhibition spaces, giving the public an insight into the glassmaking craft and thus linking craft and culture. This positively enhances the cultural value and identity of the place. The extension and renovation supported the sustainability of the monument through active use, which increased the chances of its preservation in the future. At the same time, the intervention increased the visual attractiveness and architectural standard of the public space.



Fig. 8.: Lasvit headquarters (Source: website, available from <https://www.archiweb.cz/b/nove-sidlo-spolocnosti-lasvit-v-novem-boru>)

#### DISCUSSION

The use of common compositional principles often leads to successful integration, but this is not always the case. There are also extensions that contrast sharply with the original historic building, yet do not negatively affect it. These integrations must meet other aesthetic and conservation requirements that do not degrade the historic value. Modern additions can significantly improve the functionality of historic buildings and their adaptation to current needs, such as increasing capacity or improving accessibility. Ethical considerations include respect for the history and cultural value of buildings, which is essential for their long-term sustainability.

#### CONCLUSION

Modern additions to historic buildings represent a unique way to harmoniously connect history with the present in a single architectural structure. "Many historic buildings that have lost their original functions relevant at the time of their construction are now undergoing a process of 'adaptation for reuse' with a new function or extension." [14] This approach gives new life to dilapidated historic buildings and also creates a symbolic link between the past and the present, thereby strengthening cultural heritage and enriching the architectural context of cities and towns. However, integrating contemporary design elements into historic buildings is an extremely challenging task that places high demands on the skills and sensitivity of architects and urban planners. This challenge requires a deep understanding of the historical value and context of the building, as well as the creative ability to design modern elements that do not detract from the aesthetics and authenticity of the original structure.

The results of our research show that successful approaches to integrating these elements are based on respect for the original architecture and compliance with the rules and principles set out in international agreements and charters such as the Athens Charter, the Venice Charter, and others. Overall, modern additions to historic buildings represent a complex but inspiring process that requires a sensitive and informed approach. The successful integration of contemporary elements can contribute significantly to the protection and revitalization of historic buildings, which is essential for preserving cultural heritage and passing it on to future generations. This process requires not only technical and aesthetic skills, but also a deep respect for history and its role in today's world. The key to successful integration is the use of common compositional principles that ensure harmony between the old and the new. Examples from various projects around the world demonstrate that such an approach can lead to excellent results, where modern additions do not detract from the historical value of buildings but, on the contrary, contribute to their revitalization and contemporary use.

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