



A HISTORIC RUIN – INTERVENTIONS AND THEIR CONDITIONS

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ABSTRACT: The effective protection of historical ruins, just as of other monuments, depends on their contemporary use. Adaptation of ruins to utilitarian standards requires preventive and preservative conservation, but also architectural interventions necessary for new functions. The principles of dealing with ruins were included in the Charter of Historical Ruins adopted by Polish National Committee ICOMOS in 2012.

The characteristics of objects known to the conservation and architectural community, carried out against the background of the Charter, allowed to distinguish, apart from the traditional methods of preventive conservation, four types of intervention consisting in the introduction of additions to the historic ruins, in different scope and scale - ranging from the filling of defects to consolidate the destructed walls, through addition of "small architecture" items, to utility objects and cubic additions in the place of the unpreserved fragments of the original mass of the building.

Evaluation of the intervention methods allows to define their conditions and to confront them with recommendations of the Charter of Historical Ruins. The confrontation of the Charter's recommendations with examples of transformations of selected objects confirms the accuracy of the Charter's provisions and their usefulness in the conservator's assessment of the transformation of ruins and preservation of their historic values.

The interventions which enable the use of ruins are in accordance with social expectations and the aspirations of their owners, and most importantly, they significantly increase the chances of restoration protecting the ruins from destruction.

KEY WORDS: Historic ruin, historic ruins charter, interventions, conditions

Introduction

Historic ruins are the remains of structures destroyed by natural disasters, warfare, or lack of user. Abandoned and unused, they often underwent many years of deterioration. There have been various reasons for the lack of interest in reconstruction and renovation of ruins - from changes in ownership and geopolitical transformations to the amount of necessary investment in view of their decreasing usefulness, location, construction and functional solutions.

Today, historical ruins are most often associated with picturesque remains of castles, palaces and mansions fixed as dominant features of the landscape. However, the number of historical ruins corresponding to their definition is much larger and constantly growing. They come from every past epoch of construction and architecture representing different typological groups of monuments. These include the ruins of defensive buildings erected from the early Middle Ages to the mid-20th century, which became useless with the development of warfare techniques; large-scale, often post-industrial buildings and complexes located in peripheral areas, or railroad station buildings, a significant part of whose premises ceased to be needed with the development of digital techniques of railroad traffic handling. In the face of the rich architectural heritage, the value of deteriorating rural buildings, including dilapidated farm buildings, barns and farm buildings for livestock from the 19th and 20th centuries, is overlooked. For obvious reasons, the documentary value of medieval ruins is special.

In different categories of monuments, the application of the principles of dealing with ruins should be determined by the uniqueness of their documentary content (value attributes, the carrier of which is the ruin). This raises the question that needs to be answered in a separate discussion - do different typological groups of monuments in ruins require different rules of conduct?

The condition for the preservation of architectural heritage is the use of historic buildings ensuring their constant monitoring, preventive maintenance, and user safety. Historic ruins are subject to this principle, which requires - apart from conservation measures - interventions in the material and spatial structures that adapt them to modern conditions and usage standards. The key issue here is the choice of a functional programme adapted to the specificity of the ruin - not limiting its exposure and requiring minimal interference.

The principles of dealing with ruins were formulated in the Charter of Historical Ruins (hereinafter: Charter) adopted by the General Assembly of the Polish National Committee of the International Council for Monuments Preservation ICOMOS in December 2012. Among other things, the Charter contains provisions concerning the conditions that should be met by interventions and additions related to the conservation and adaptation of ruins to utilitarian functions. According to these provisions:

- new additions must not dominate the authentic substance;
- additions should be clearly distinguishable from the historic fabric and construction;
- the condition of permissible interference is to preserve the existing exposure of the ruin in the landscape (the significance of the ruin in the landscape is a determinant of the permissible interference);

- works should be carried out in accordance with the principle of minimum interference;
- transformations should be reversible.

These recommendations can be used to assess the impact of the planned adaptation transformations on the historic values of the ruin, but also as criteria for critical evaluation of the completed adaptation investments. Such criteria were adopted in the following part of the study in the evaluation of selected objects transformed to various degrees and extents. The objects chosen for this study are those known in the conservation and architectural circles, some of which have received awards and are popularized as models of behaviour.

The aim of this study is an attempt to systematize the types of interventions that complement the destruction of historical buildings, taking into account their degree and scope, and to assess the conformity of conservation effects with the principles set out in the Charter of Historical Ruins.

Examples of transformations of historical ruins

CASTILLO MATRERA (Spain, Villamartin, ruins of the tower, 9th century)

The transformations were aimed at stopping the progressive destruction of the ruins by consolidating them while restoring and authenticating some of the tower original (Fig. 1).

The completed fragments of the tower were covered with lime plaster referring (according to the author of the project) to the authentic details found on the spot. The consolidation additions are clearly distinguished from the historic fabric and structure, dominating over their remains - mainly due to the contrasting colors. The regular form has changed the previous exposure of the ruin in the landscape. In further view openings authentic fragments of the tower lost their legibility, and the existing ruin of the castle is perceived as a fragment preserved in its entirety, regular in form. The effects of consolidation are not always determined by their scale in relation to the authentic fabric.

The regularity of the form and material characteristics created as a result of consolidation may dominate the historical destruction, even to a small extent. The framework of minimal interference was exceeded and was subordinated to making the tower's shape and form more legible. The additions with contrasting white plaster meet the condition of distinguishability from the authentic tissue, although the composition and color coherence of the whole raise doubts. The aesthetics of the rear exposition of the ruin leaves much to be desired. The consolidation transformations, in principle, are irreversible. Reduction of the contrast between the new restorations and the authentic tissue is possible due to the long-term aging process of the material used for the consolidation.

The work was negatively evaluated by some residents, and was described in press publications as "neo-brutalist". However, it was nominated for two international awards in the category of architectural protection, winning in the public vote.

Type of intervention: consolidation of fragmentary preserved walls to ensure the stability of the ruin through restoration - without introducing a functional programme.



Fig.1 Castillo Matrera, ruins of the tower before and after the transformation;
source: <https://www.medieval.eu/matrera-castle-vilharigues-tower/> - DOA 20.10.2020

KALO CASTLE (Denmark, Castle Ruin in East Jutland, 14th century)

The aim of the intervention was to make the ruin safely accessible for tourists, providing exposure of the interior of the ruin and external viewing openings, including the well-defined outline of the outer castle walls (Fig.2).

Stairs leading to different viewing levels were introduced into the interior of the ruin, based on a steel frame with structural supports at four points. Their design does not dominate the ruin. The wood and steel stairs have contemporary, ahistoric features that clearly distinguish them from the historic fabric and structure. Located inside the ruin, the structure does not interfere with the external perception of the ruin.

In further exposures, the view bridges are not legible, thus ensuring that the existing exposure in the landscape is fully preserved. The structural independence of the addition fully respects the principle of minimum interference and reversibility of transformation.

The implementation meets the recommendations of the Charter. The project was nominated for the European Mies Van der Rohe Prize in 2017.

Type of interference: architectural additions in the form of small architectural items allowing safe exposure of the interior of the ruin and use as a viewpoint.



Fig. 2 Kalo Castle – a ruin with an addition; photo by the author

THE RUINS OF IŁŻA CASTLE (Poland, IŁŻA 14th century)

The interventions were aimed at ensuring the structural stability of the tower, safe access for tourists to the scenic exposition from its top storey and providing the ruin with a usable cubature (Fig. 3).

Inside the tower, reinforced concrete ceilings were made to strengthen and at the same time stiffen the structure, as well as additional bracing elements in the form of peripheral reinforced concrete towers. An external spiral staircase was added as well as a contemporary roofing on the top floor of the tower, protecting its crown from rainfall. The usable cubature was added to the reconstructed wall in the courtyard.

The additions did not dominate the authentic fabric, although the form of the roofing of the tower's crown is questionable. The added pavilion, using a building material reminiscent of the authentic one, differs from its historic surroundings in that it is not in a state of disrepair. The ahistoricity of the pavilion is evident in the form of its mass and the features of its canopy visible from the top of the tower. The pavilion, hidden behind the wall, does not affect the external, existing exposure of the ruin. The landscape exposure was preserved with a slight disturbance of the regularity of the reconstructed fragment of the wall. The solutions that stabilize the construction of the tower according to their purpose are not reversible.

Type of interference: consolidation of the ruin by structural reinforcement of the vaults, ceilings and walls associated with the provision of rooms; addition of a small volume object and small architectural elements allowing the use of the ruin.



Fig. 3. Ilza, additions to the castle ruins; source: 3a.- <http://www.ilza.turystyka.pl/zamek-w-ilzy/> 3b.- <https://plus.echodnia.eu/radomskie/tajemnice-naszyc-zamkow-ilza-wideo-zdjecia/ar/13341797>, DOA: 20.10.2020

TORRE DE VILHARIQUES (Portugal, Vouzela, 13th-14th century, tower located on a hill overlooking a town situated in a valley)

The aim of the intervention was the structural stabilization of the preserved fragments of the tower and the introduction of useful cultural and exhibition functions into the ruin (Fig.4).

An ahistoric metal and glass construction with a division into three storeys was inserted into the original interior of the tower with partially preserved walls. Despite the scale of the addition, the balance between the new structure and the historic fabric was maintained. The materials used in the restoration clearly distinguish it from the historic fabric and structure. The main, previous landscape exposure of the ruin from the side of the city did not change.

The juxtaposition of the contemporary architectural detail of the restoration with the stone relics of the tower ensures the legibility of the ruin in its close exposure from the side of the unpreserved fragments. Despite the transformations, the significance of the ruin in the landscape has been maintained. It can be assumed that the interference in the historic fabric is minimal, and the transformations made are reversible.

Due to the scale of the restoration, the project has met with few critical voices.

Type of interference: ahistoric, cubic architectural addition to the ruin with the introduction of a utility program into the ruin.



Fig. 4 Torre de Vilhariques, tower ruin before and after transformation, source: <https://www.medieval.eu/matrera-castle-vilharigues-tower/>

RUINS OF A CHURCH (Czech Republic, Neratov, 1733, located on a hill in a small settlement near the Polish border)

The aim of the works was to secure and stabilize the ruin with simultaneous restoration of its historical function and extension of its cultural functions (Fig. 5). The ruin was cleaned, conserved, and covered with a glulam construction with a cross-shaped glass roofing section to protect the authentic fabric from weathering and to allow year-round use of the interior. The new roof addition does not dominate, but at most is in balance with the preserved perimeter walls of the church. The unambiguously contemporary design of the roof and its glazing emphasises the authenticity of the church walls in the interior, reinforcing their exposure with natural light that changes throughout the day.

The new, minimalist interior design emphasizes its added value to the historic ruin. Covering the ruin with a roof was equivalent to recreating the original body of the church in the landscape. The location of the church on a hill means that the external views are dominated by the walls of the ruin, while the new roofing is almost invisible. The exterior faces of the walls have been restored, which is a significant departure from the principles set forth in the Charter. This has caused the ruin to lose its genetic characteristics and cease to be perceived in the landscape, as opposed to the interior, as a historical destruction.

The transformation of the spatial structure of the ruin can hardly be defined as minimal interference. This condition is fulfilled by the approach to the interior of the ruin - the conservation of the inner face of the walls, the protection of the crown of the walls and its adaptation to the fixing of the roof structure. Reversibility of transformations is possible, but not justified.

The location of the ruin in a settlement with about 60 inhabitants, far from human settlements, did not warrant its protection. Restoration of regional utility functions (sacral and cultural events) created a chance for permanent preservation of the object.

Type of intervention: restoration in place of the unpreserved cubic fragment of the building to authenticate its original mass and restore its original functional potential.



Fig. 5 Church of the Assumption of the Blessed Virgin Mary, Neratov; source: 5a neratov.cz; 5 b-d photo by the author

KOLDINGHUS - castle ruin (Denmark, Kolding in southern Jutland, history dates back to 13th century)

The aim of the works carried out was to secure and stabilise the ruin with simultaneous adaptation for cultural and exhibition functions together with reconstruction of the castle (Fig.6).

The ruin was cleaned and conserved while preserving the authenticity of the ruins. In places of unpreserved fragments of the building, additions were made to recreate the original shape of the castle and to restore the elements of the interior to their original functional potential. On the new foundations inside the ruin, pillars made of glued laminated timber were erected to support the roof, mezzanines and suspended footbridges. Non-preserved fragments of walls were supplemented with light wooden walls suspended on the roof structure with external cladding of oak shingles and contemporary brick. The additions to the body of the castle - the defects in the

walls and the unpreserved roof - did not dominate the authentic fabric. There might be doubts about the architectural form of the pillar structure, which with its aggressiveness dominates in the interiors, while the preserved walls form the background for the bold architectural creation. The distinctness of the preserved original remains has been fully maintained. The additions made are clearly distinguishable from the historic fabric and structure. A significant effect of the transformation is the reconstruction of the castle's mass in the landscape with the legibility of its authentic remains. Thus, the object lost the features of a historical ruin exposed in the landscape - which is a significant departure from the Charter's provision. However, this does not change the fact that its documentary significance has been maintained.

The independence of the construction of the additions in relation to the surviving fragments of the castle meets the condition of minimal interference in the structure of the monument, and its theoretical - in this case - reversibility.

Type of interference: introduction of contemporary additions in the places of the unpreserved fragments of the building in order to authenticate its original form and restore its utility potential.



Fig. 6 Koldinghus – castle ruins after restoring its original shape and form; source: <https://www.ubc.net/content/koldinghus>; <https://pl.qaz.wiki/wiki/Koldinghus>; DOA: 20.10.2020

Conclusions

Historic ruins are subject, to a varying degree and extent, to conservation and adaptation measures ranging from consolidation and consolidation of masonry, additions in the form of small architectural features and utility objects, to cubature additions in the places of unpreserved fragments of historic buildings. Individual or related interventions may include:

- consolidation of fragmentary preserved walls ensuring the cohesion and stability of the ruin through consolidation restorations - without the introduction of a utility program;
- consolidation of the ruins by structural reinforcement of the vaults, ceilings and walls, with the aim of providing access to or obtaining usable rooms;
- introduction of small architectural devices allowing accessibility and exposition of the ruin for tourists;
- introducing ahistoric, small, cubature architectural restorations enabling the use of the ruins;
- introducing contemporary additions in the places of the unpreserved fragments of the cubature buildings in order to emphasize the original shape of the object and restore its original utility potential.

Consolidation of the walls which are losing stability and structural integrity is to stop the destruction and prevent the building disasters that are inevitable sooner or later. These interventions do not contribute directly to the introduction of utility functions, but are often necessary to ensure the safety of tourists visiting the ruins. An important prerequisite for such interventions is the proper selection of consolidation materials, their technical properties and colouring.

The applied principle of material compatibility of authentic ruins with consolidating or cubature additions is variously, and often - literally interpreted. In the name of compatibility, building material from destroyed parts of the same object or from the same source (e.g. quarry) is used. As a result, the condition of distinguishability of restorations is not fulfilled. This also applies to added volume restorations.

Dominating the ruins by the scale of consolidation restorations with contrasting materials and colors may cause, especially in a distant landscape exposure, the loss of genetic features and perception of the building as a historic ruin.

Structural reinforcements, restorations of ceilings, vaults and walls stop the destruction and prevent building disasters. In practice, such works are often motivated not so much by the need for preservation as by the acquisition of mostly small, enclosed usable cubatures. This means that the developed fragment ceases to be a ruin, but the small scale of transformations does not change the ruin status of the entire structure.

“Small architecture” items are additions that interfere only slightly with the historic fabric, especially if the structure is independent from it. They serve to make the ruin safely accessible to tourists, expose the interior, surroundings, and landscape values. Lightweight, contemporary in form, the constructions of stairs, footbridges, observation platforms, railings, information boards and lighting are obvious furnishings of the ruins.

Cubature consolidations and additions are most often a condition for the use of ruins and contribute indirectly to their conservation. The conservation correctness of such consolidations requires that several conditions be met. They should not be visible in the external exposition of the ruin and limit the legibility of its internal structure. Architectural features and forms should be neutral to destructions using contemporary materials.

The condition of reversibility of cubature additions determines their construction and building solutions that do not interfere with the historic substance and allow for the restoration of the original state of the ruin in the event of changes in the utility program. A comparison with "furniture" inserted into a historical structure with the possibility of its removal comes to mind here.

These conditions require from the designer-architect the awareness of the documentary significance of the ruin and the responsibility for preserving its contents. Creative ambitions of the designers sometimes trigger the desire to change the priorities: the designed volume - treated as an architectural work - ceases to play the role of supplementing the historical structure, and this structure becomes a supplement - a scenography for the designed object. This is contrary to the Charter's recommendation that contemporary interventions should not dominate the historical document with their scale and architectural form.

Interventions that consolidate, stabilize, and properly design small-scale cubature additions are not contrary to the spirit of the Charter.

Additions in places of unpreserved cubature fragments of the building to recreate its shape and dimensions and functional potential completely change the form of the building. Evaluation of such transformations is complex. Restoration of the destructed elements (ceilings, partition walls, window and door frames, etc.) and recreation of the historic form of the building in the landscape means that it loses its status of a ruin, even though the destructs are still preserved and legible. If the historic values are maintained, this type of transformation may be considered acceptable.

In Poland, attempts at similar transformations of ruins remain mainly at the conceptual stage (e.g. St. Nicholas Church in Głogów, the parish church in Gubin). The implementation of such concepts requires high expenditures - although they indirectly contribute to the effective protection of the historic fabric, they cannot be financed from the budget funds allocated for the protection of historic buildings.

The use of ruins is consistent with the social expectations and aspirations of their owners, and most importantly, it significantly increases the chances of conservation repairs, and thus preservation of the ruins. The development of historical ruins integrated with the protection of their documentary value must combine the conservator's knowledge with properly understood architectural creation, subordinated to the principles of heritage protection, consistent in composition with the historical ruin. Appropriate location, proportions in relation to the historic fabric, architectural form, building materials, and colors of the additions will determine the acceptance of the intervention.

The additions as an added value to the historic remains of the site may aspire in the future to be recognized as a document requiring protection in dealing with historic ruins in the 21st century.

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