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## ADAPTED REUSE OF HERITAGE ENSEMBLES AND BUILDINGS. ARCHITECTURAL CONVERSION

BY

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**Abstract.** Conservation does not only mean restoration, rehabilitation, revitalization, but also regeneration. From this point of view, the most important procedure is the reuse of old buildings, by adapting them to new programs, different from those in which they were originally associated. The change of function is a natural step in the evolution of many buildings. The dynamic nature of occupation and ownership determines that any building can have many types of uses throughout its life. The conversion process allows the owner or occupant to reach the maximum potential of the building, offering the means to model it spatially and functionally to adapt to the changing needs of the occupant.

The paper presents the main methods, methodological approaches and practices used in the rehabilitation and regeneration of heritage buildings and buildings assemblies. Carried out from the perspective of the architectural conversion operations, the analysis focuses on the main adapted re-use modalities of heritage buildings, on the current theoretical and practical approaches in the E.U. and in Romania, on the methodological approach and the management of interventions.

**Keywords:** rehabilitation; heritage; conversion process; management of interventions.

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## 1. Introduction

The increased use of cars and the construction of large highways have stimulated the tendency of cities to expand to their outskirts, directing the focus of the society from the centers to the suburbs. Historic centers, sites, ensembles and in particular heritage buildings are no longer a rehabilitation process priority. Due to its cultural meanings that justify their recognition and protection, understanding the importance of a certain space is a vital first step before acting. Cultural significance is the transmission of aesthetic, historical, scientific, social or spiritual values from past to present or future generations. On top of all these five values – attributes of heritage architecture – are the processes that led to the current state of the object. Even if architecture can pass more than 2000 years old information about the civilization degree of a society, connection with the past is a perpetual process – the buildings are the permanent subject of the transformative processes of history and time. The danger of self-demolition (caused especially by abandonment and lack of appreciation) may lead to an increase of interest given to heritage conservation and restoration.

## 2. Definitions of the Immovable Cultural Heritage

Revitalization, regeneration, restructuring, remodeling and reconversion - methods of architecture and urban rehabilitation, bring with them a large variety of possible interventions applicable within historical areas, with the purpose of reintegrating the built heritage in the contemporary time. In order to write about converting and appropriate reuse of heritage assemblies and buildings, defining heritage and highlighting its role in the cultural development of the society represent a priority. As a determining factor in shaping the specificity of a region or area, the heritage contributes and primarily reflects the cultural identity of the community.

The immovable cultural heritage is the most valuable component of cultural heritage, both in terms of direct material value and in relation to the wide array of possibilities of embedding extra-cultural components. The immovable cultural heritage designates "historical monuments" (as it is called in generic terms), a category that includes not only monuments, but also historical ensembles and sites. All these delimitations and definitions are clearly established through a complete and coherently formulated body of norms, which takes into account the entire set of operations (research, evidence, conservation, rehabilitation and valorization) - constituent measures of protecting the immovable cultural heritage.

Terms of heritage, and particularly historical heritage, refer to the idea of a monument. The Convention concerning the Protection of the World Cultural and Natural Heritage adopted by the UNESCO General Conference at its seventeenth session in Paris, on 16 November 1972, states that *monuments*

*are architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of outstanding universal value from the point of view of history, art or science* (UNESCO General Conference, 1972).

The categorizing judgement of a building as a historical monument is based on aesthetic, historical, cultural and scientific values that the architectural object has. All these aspects influence the enhancement of the heritage object by restoration, reuse, renovation, restructuring or reconversion - each of them being a part of the complex process of architectural rehabilitation. Regardless of the rehabilitation nature, the objective of the interventions is to reintegrate the monument in contemporaneity, by adapting it to the new requirements and programmatic needs, thus protecting it from the risks of decommissioning.

Architectural heritage includes (Drury and Wolferstan, 2010):

1) monuments: all buildings and structures of conspicuous historical, archaeological, artistic, scientific, social or technical interest, including their fixtures and fittings;

2) groups of buildings: homogeneous groups of urban or rural buildings conspicuous for their historical, archaeological, artistic, scientific, social or technical interest which are sufficiently coherent to form topographically definable units;

3) sites: the combined works of man and nature, being areas which are partially built upon and sufficiently distinctive and homogeneous to be topographically definable and are of conspicuous historical, archaeological, artistic, scientific, social or technical interest.

### 3. Heritage Values

Sometimes, inevitable wear and the passing of years could change the materials, but this would not reduce the significance of heritage. That is why, in the evaluation process, it is important to assess the value of the heritage in its current state, and not in a hypothetical phase of the past. As previously mentioned, in order to establish the quality of a building as a historical monument, it is necessary to identify the values embedded in the architectural object (International Council on Monuments and Sites, Australia ICOMOS. 1999):

- *Aesthetic value* - historical sites may have certain aesthetic qualities, resulting from their picturesque and evocative state. Aesthetics refers to our human senses and the way we respond emotionally to a place, due to its beauty and its symbolic qualities.

- *Historical value* - ruins are sometimes the only physical evidence left after significant historical events, activities or ways of life. If a place has been destroyed or changed as a result of a significant event, its subsequent state will contribute to its significance.

- *Scientific value* - many places have the potential to provide important and new information about particular aspects of the past. This is often possible by investigating materials and locations. Certain items in special places may have investigative value. Researching a place can say a lot about a whole class of places.

- *Social value* - strong and special links between a community or cultural group and a place are the essence of every society. Such attachments are felt by people, and often continue to exist for generations.

- *Spiritual value* - can include places with symbolic, ceremonial, sacred and religious meanings. For an appropriate approach to heritage sites, it is essential to have a good knowledge of the meanings of the place and to define how these values can be preserved, taking into account key factors such as the current state, availability of resources and the legal requirements.

The survival of the cultural heritage and the identity foundations of the local communities is affected by the public mentality. The main fundamental factor of its degradation is manifested by a series of actions, extended throughout Romania, classifiable according to their destructive nature: abandonment, arson, uncertain property regime, poorly educated local population and administration, compositional change of local communities, “officially” abandoned historical monuments, the absence of an effective support for the conservation of the rural cultural landscape, aggression through restoration or inappropriate interventions, falsification of a monument through restoration, aggression of monuments through infrastructure improvement works, absence of statistical evaluation of degradation, the errors in the conservation-restoration activity (S.C. Agora Est Consulting SRL, Quattro Design SRL – Arhitecți și urbanişti asociați, 2014).

Among the measures considered appropriate to avoid the destruction of the built heritage are capitalizing the current context in which the European Commission places heritage and cultural diversity as premises of European cohesion, the alignment with European provisions and conventions in the field (which Romania has assumed, once becoming a Member State), the adaptation of the legislative systems and of the national regulations to the conservation of the architectural and natural heritage exigencies, training of specialists in the field of heritage protection, as well as the saving the endangered traditional trades.

#### **4. Methodological Approaches in the Rehabilitation and Regeneration of Heritage Ensembles and Buildings**

Five different approaches of a site with heritage value are generally accepted: revitalization, return to the original condition, conservation, maintenance without interventions and demolition; sometimes, a combination is needed, other times a unique but more developed perspective.

a) *Revitalization*

Remnants do not always remain ruins. Sometimes there is a desire or a need to bring them back to life. Due to economic reasons or social circumstances, abandoned places can be restored by finding a new compatible form of use or an activity that can bring the space back to life, thus generating funds for maintenance, without having a negative impact on the symbolism of the place.

b) *Return to the initial state*

There are cases when a historic site is very important or has been created to be visited by the public; therefore, restoration or reconstruction will most likely be needed. This approach involves restoring a previous state of the site. Restoration or reconstruction can reveal more clearly the heritage values of a site; although, its form and function may not be clear in the current degraded state, by reconstructing the elements of the place, the general public can witness the interpretation and the understanding of its meanings. The revelation of the "former glory" of a cultural heritage space can be an aspect that generates satisfaction for users and the community. In practice, the larger the scale of restoration or reconstruction, the rarer they will be, due to the indispensable resources and of the permanent need for broad consensus on any proposals. Such work requires accurate information about the previous condition of the site to ensure accuracy.

c) *Conservation*

For some sites, the best solution is to keep it in ruins evoking the past. This involves maintaining the structure in its existing state, but delaying its deterioration. This is the best approach for situations where not enough information about the previous state is known. Preservation involves periodic protection of the site. Repairs can be made, but with minimal intervention, and the risks of unexpected damage can be reduced by regular inspections. This approach is appropriate if resources are limited and the current state of the site presents the best value of the heritage. Conservation is based on doing what is necessary, both in terms of site management and physical interventions to prevent further damage. Any construction is changing over time, so in the long run deterioration is inevitable.

d) *Maintenance without interventions*

e) *Demolition*

It is preferable when there are too many risks for a building to be maintained or when important parts can be eliminated in order to preserve other important elements.

## **5. Practices Commonly Used in the Rehabilitation and Regeneration of Heritage Ensembles and Buildings**

In Europe, the need of reconstruction after two devastating World Wars led to the emergence of a large number of theorists and practitioners of built heritage regeneration. Considering the fact that restoration, regeneration and revitalization are aspects of the same process, the concept of the historic city is widely applied in the conservation policy. In contemporary Europe and America, it is generally accepted that the regeneration policy based on finding new uses for old buildings is only a fraction of the solution, the big picture showing the imperative need to integrate these interventions into the systematization policies of the city. According to the European approach, the architect is required to have a solid historical and archaeological knowledge, to show a greater humbleness in the act of conception - more respect for the past. In certain circumstances, the reconstruction / restoration of missing elements has a particularly important role in preventive conservation. Proposals for protective structures or direct interventions on monuments must be based on the respect for the essential values stated above and on ensuring the integrity of a historic site and its component structures. However, proposals involving permanent construction on multi-layered historic sites will inevitably have a negative impact. In these situations, the long-term negative aspects and the benefits of the project must be carefully weighed.

### ***A. Rehabilitation***

Rehabilitation is defined as the act or process of making possible a compatible use for a construction through repairs, modifications, additions, while preserving the characteristic portions that transmit its historical, cultural or architectural values. In order to preserve them, a first step in the rehabilitation works is the identification of the characteristic architectural forms and details that are defining the historical character of the building. The character of a historic building can be defined by the shape and exterior details, such as masonry, wood, ironmongery, exterior features such as roofs, porches, windows, but also by interior features, such as stairs, room configuration and spatial relationships. After identifying these relevant and important characteristics in the rehabilitation process, the protection and maintenance procedures follow. As the rehabilitation action involves both the correction of non-values and the recovery and highlighting of values, a relationship is formed between conservation and modification, with the desired result being of optimal balance.

A quality rehabilitation must follow these minimum requirements:

- Regardless of whether the object subject of rehabilitation undergoes a change of function or not, minimal changes will be made in terms of materials, aesthetic characteristics and spatial relationships;

- The historical character will be preserved by avoiding the removal of distinctive materials or by altering the characteristics of spaces or spatial relationships;
- Each site is a physical record of the history and changes it has witnessed stretch over the centuries. Changes that create a false sense of historical development must be avoided;
- Most sites change over time, so those changes that have acquired historical significance must be determined and preserved;
- Distinct materials, specific characteristics, finishes and construction techniques that characterize a construction must be preserved;
- Damaged historical features must be repaired, not replaced. If the degree of damage requires replacement with another element, the latter one will have the same design, color, texture and, where possible, material. Replacement of missing features will be justified by documents and physical evidence;
- Physical or chemical treatments must be performed carefully, eliminating any possibility of damaging historical materials;
- Archaeological remains must be preserved, as far as possible, in situ;
- New additions, exterior modifications or new constructions must not destroy the historical materials, characteristics or spatial relationships of the site. New works must be highlighted compared to old ones, but compatible in terms of historical materials, characteristics, size and proportions to protect the integrity of the site;
- New adjacent or related constructions must be made in such a way that in the event of a future removal, the shape and integrity of the historic site are maintained. Rehabilitation is appropriate when damaged parts need to be repaired or replaced, when changes or additions are planned for a change of function, or when operational safety is not ensured.

### ***B. Restoration***

Restoration is the process in which an older object is brought by certain techniques to the initial parameters; practically, it is understood as bringing the work of art to the initial qualities. The restoration itself is an operation of consolidation and completion of architectural works in order to be preserved and valued, an operation carried and guided by rules established by specialists. In some cases, the restoration becomes reconstitution (if it also includes completely restored parts).

The process of restoring a building has two stages:

1) *Conservation* - means the entire series of measures aimed at keeping the building in good condition, consequently, prolonging its life to maximum. Preservation includes a wide range of works, from simple maintenance and repair operations to complicated consolidation measures. Conservation does not aim to change the appearance of the work, but to maintain its state.

2) *Practical restoration* involves those categories of works that, once the objectives of conservation are achieved, seek to restore either the initial aspect of the formal continuity or an acquired one during a certain valuable stage of its existence. A correct program on the policy of conservation and restoration of historical monuments should take into account the fact that there is not a single objective past, but several subjective interpretations of it. Consequently, the selection criteria are not "objective", eternal, but they reflect the meanings today's social actors give to monuments.

### ***C. Re-construction***

Although it is difficult to specify exactly in which situations the reconstruction is suitable (any proposal of this kind requires adaptation to the existing conditions and specific needs of the site and the context), but there are certain guiding principles. As a general rule, the older the ruins, the more potential problems arise in trying to make authentic reconstructions or to restore lost elements. The degree of documentation, drawings and written information usable in the reconstruction works is continuously being destroyed over time, surviving only the physical evidence of the structures. For this reason, reconstructions also involve a certain degree of speculation and should be carried out only in special circumstances, in order to satisfy specific objectives of conservation the object. Reconstructing a part of a monument is sometimes carried out to facilitate its use. For example, the seats in ancient Roman and Greek theaters are often rebuilt, in part or in full, to create a proper environment for modern performances. The use of different materials would make it easier to highlight the modern insert.

### ***D. Protection with the help of new constructive structures***

Many historical sites show vestiges and deep traces of the past. They require special protection and care, due to their significant and vulnerable architectural details. In these cases, the solution can be a set of constructions with a protective role, which ensures the preservation of the vestiges, opening them, at the same time, to the general public.

### ***E. Conversion***

Conservation is not only understood as restoration, rehabilitation, revitalization, but also as regeneration: its most important process is the reuse of old buildings by adapting them to new programs, different of those originally invested with. Changing the function is a natural step in the evolution of many buildings. The dynamic nature of occupation and ownership determines that any building can have several types of uses throughout its existence. The conversion process enables the owner or occupant to reach the maximum potential of the building, thus providing the means to modify it for meeting the continuously changing needs.



In the first instance, any conversion process is determined, by the existence of a goal. The promoting element is the generating factor of the intervention, which can be of a political, economic, legal or religious nature. Each of these factors can define a type of investor, usually private or public, who will order a complex study, followed by the diagnosis of the area proposed for conversion.

This previously mentioned study can be viewed from two perspectives:

- the theoretical approach concerns the study of the area from an urban and historical point of view. The operation and the particularities of the intervention on a building will be influenced by the specific characteristics of the area and the historical profile of the building. After the study, it can be decided whether the intervention is necessary and what are the criteria according to which the conversion process will take place. The documentation will also include a sociological and impact study. The analysis of the current and future needs of the occupants can influence the new function (resulting from the conversion), while the impact of introducing new volumes will determine the compositional image of the existing building and the possible extensions. These studies will also take into account the offered potential by the building and how the changes will impact the local context.

- the practical approach refers to the field work, to the measurements and technical expertise performed on the site, to the possibilities of technical interventions that could be performed within the conversion process. Following the study, a diagnosis specific only to the analyzed area is formulated; this one points out the problems and the possible solutions. According to these aspects, the approach strategy will be defined, and this will dictate the architectural concept - the basis of the conversion process. This stage is also accompanied by a cost-benefit analysis, and the financial considerations referring to the source of investments and to the possibility of local, governmental or international contribution. Also, the feasibility of the investment in the given context will be analyzed, taking into account the future maintenance and operation costs, the legal profile of the building and the status of the land (concessioned, rented building, public property, private property etc.) and the reversibility of the conversion process.

The dialogue with the population represents the core approach of formulating the objectives and the means of intervention, within a conversion process. The public consultations will integrate in the discussion all the actors involved (community, architects, historians, sociologists, local administration, beneficiaries). Whether they are members of civil society, specialists or investors, the participants can influence the beginning and the approach of the

project, through collaboration or, on the contrary, through opposing to the intervention. This consultative moment, carried out in the form of a negotiating act, should demonstrate its productivity through a detailed presentation of the project, through the transparency of the information - an attitude directed towards the problems raised by the society, a structured discourse moderated by professionals and based on clear rules, accepted by all participants (Foret and Porchet, 2001).

## 6. Conclusion

Restoration is not a simple act of beautifying an architectural monument, but a permanent action “*to emphasize the presence in history of a building or a site, a nuanced decipherment of the document character that the architectural monument has*” (Draguț, 1975). The preservation and transmission of monuments to future generations is the only way to highlight their cultural identity - a proof of solidarity between generations for the preservation of the cultural heritage.

Cultural heritage can be an important source of income, both from taxes and economic activities, thus contributing to the increasing quality of life. In Romania, although there are many problems, in recent years there has been a change in the approach of assessing the impact of cultural heritage conversion - it is worth noting the potential of historic centers and the benefits of their operation based on strategies tailored to the needs of the city. Their purpose is to establish measures for the protection, conservation and sustainable use of the built cultural heritage and historical monuments, by capitalizing on their potential and by consolidating the local cultural identity.

The preservation of historical constructions also means a preservation of the memory of the place (Kazmer, 2003), especially by maintaining a spatial coherence. The conversion of a building is, in fact, a remodeling of content or function, based on the idea of continuity. The conversion process must take into account the memory of the building that must be protected and emphasize both present and future use, keeping alive the memory of its first function - a true testimony of the history of the place. Of the various types of urban and architectural rehabilitation, the conversion process is closest to the essence of the contemporary reintegration of a building. On one hand, this kind of interventions balance the presence of different architectural images and add value to the building, bringing it closer to the community. On the other hand, through conversion, the quality of the space of an abandoned building is enhanced in another dimension, within other functions, adapted to the needs of society.

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## REUTILIZAREA ADAPTATĂ A ANSAMBLURILOR ȘI CLĂDIRILOR DE PATRIMONIU. CONVERSIA ARHITECTURALĂ

(Rezumat)

Conservarea nu înseamnă numai restaurare, reabilitare, revitalizare, ci și regenerare. Din acest punct de vedere, cel mai important procedeu este reutilizarea clădirilor vechi, prin adaptarea la programe noi, diferite de cele în care au fost asociate la origine. Schimbarea funcțiunii este o etapă firească în evoluția multor clădiri. Natura dinamică a ocupării și a proprietății determină faptul că oricare clădire poate avea mai multe tipuri de utilizări de-a lungul vieții sale. Procesul de conversie dă posibilitatea proprietarului sau ocupantului să atingă potențialul maxim al clădirii, oferind mijloacele de a o modela spațial și funcțional pentru a se adapta nevoilor în schimbare ale ocupantului. Lucrarea prezintă principalele metode, abordări metodologice și practice

utilizate în reabilitarea și regenerarea ansamblurilor și clădirilor de patrimoniu. Realizată din perspectiva operațiunilor de conversie arhitecturală, analiza se focalizează asupra principalelor modalități de reutilizare adaptată a clădirilor de patrimoniu, asupra abordărilor teoretice și practice actuale în U.E. și în România, asupra demersului metodologic și gestionării intervențiilor.