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## SUSTAINABLE RE-USE, PRESERVATION AND MODERN MANAGEMENT OF HISTORICAL RUINS. RUINS' TOOLS & GUIDELINES

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**ABSTRACT:** Owners and managers of the thousands of medieval ruins around Europe face the challenge of preservation despite limited options for modern use of their sites. The RUINS project develops approaches that help managers to find contemporary, social uses for old ruins while keeping historical heritage intact. Research and evaluation of various sites will create a basis for comprehensive management plans.

A lack of functionality of medieval ruins leaves limited opportunities for establishing a viable economic future of these sites. Giving new functions to ruins can result in broad, economically profitable ways of using the medieval ruins.

The aim is finding the balance between the needs of stakeholders and public expectations concerning use of medieval ruins on one hand, and on the other hand preservation of authenticity and historical value of medieval ruins.

The individuation of the new function requires a specific knowledge of the building in all its aspects, but also considerations regarding socio-economic values of the context that identifies its historical meaning and artistic value. The approach is to find new aims to monuments, but in harmony with the characteristics that give value and meaning to them.

Within the INTERREG Central Europe project RUINS, is developing an handbook that supplies an operational tool useful to guide owners and managers of the thousands of medieval ruins around Europe toward a sustainable re-use, preservation and modern management of historical ruins.

The work follows an outline composed by 5 chapters that will try to respond in an exhaustive way to the aims related to contemporary use of historical ruins.

**KEY WORDS:** Historical ruins, conservation, sustainable re-use, management

## **1. Introduction**

The conservation of monuments is always facilitated by making use of them for some socially useful purpose (1964 Venice Charter, Art. 5).

In order to ensure the survival of monuments, the possibility of new uses of ancient monumental buildings should also be examined, when these are not incompatible with historical and artistic interests (1972 Italian Restoration Charter).

Each State commits itself to adopt a general policy which aims to give the cultural and natural heritage a function in the life of the community (1972 Convention Concerning the Protection of the World Cultural and Natural Heritage).

Every place can be defined as unique for its own characteristics and signs, which have stratified in space and time. The thick texture of materials, memories, relationships and objects that make up these peculiar features represents the authenticity of a place.

The correct approach is to respect the authentic features - aesthetic, functional, and cultural - of a place and make them again vital in the present.

It has been proved that historic buildings can be given new functions which correspond to the needs of contemporary life (1975 Declaration of Amsterdam).

The individuation of the new function requires a specific knowledge of the building in all its aspects, but also considerations regarding socio-economic values of the context that identifies its historical meaning and artistic value. The approach is to find new aims to monuments, but in harmony with the characteristics that give value and meaning to them.

Heritage has to play a key role in the context of sustainable development relate to social cohesion, well-being, creativity, economic appeal, and promoting understanding between communities. Through participation of local communities, the use of cultural heritage becomes an important resource of protection and maintenance. Active participation allow citizen and users to recognize historical and cultural memory as values; a resource that will activate economical sustainability through the attribution of new intended use of the building.

Cultural functions (Archaeological park; site-museum; museum; permanent exhibitions; location for cultural events; stages of cultural routes; etc.) are the mostly used and the ones that better responds to the criteria of authenticity and compatibility.



Fig. 1 Literature and religion come back to converge in the Selexyz Dominicanen: a bookstore located in Maastricht

The ruined sites can return to play a role of reference for the social and cultural life of the community, but also become a point of tourist attraction. But not only for cultural functions ruins are used: in some cases they can host educational and/or commercial and/or residential uses. In most cases, the presence of several functions, more or less interconnected, is found within the same ruined site. The choice of the poly-functionality makes it possible to expand the possibilities and opportunities for using the monument, also according to the seasons.

## **2. Best practices handbook. Transnational model form of socially useful use of medieval ruins**

The handbook supplies an operational tool useful to guide owners and managers of the thousands of medieval ruins around Europe toward a sustainable re-use, preservation and modern management of historical ruins.

Closely interconnected and coordinated with the other two handbooks provided for by the INTERREG Central Europe Ruins project (one related to the issue of conservation and preservation, the other to contemporary management), it is thought of as an operational document available to all stakeholders who are involved in the decision process of re-use a ruined historical site. It is therefore not a scientific text but a real operational guide, containing practical examples of intervention and several case studies at international level. In many cases, tools and methods for the development of the individual phases of the elaboration of a project of re-use of historical ruined sites are summarized and described.

Important theoretical references are the most consolidated theories of restoration and use of historical heritage at the international level, with a strong background linked to the Italian restoration school, which has long debated the theme of the re-use of historic buildings.

Some general principles guide the whole document and outline the correct procedural approach to the re-use project, namely:

- **Preservation of Authenticity:** A project of use and re-use of historical ruined sites must respect the basic tenets of authenticity in the spirit of the Nara Document (1994). According to this document, conservation of cultural heritage in all its forms and historical periods is rooted in the values attributed to the heritage.
- **Planning for Sustainability:** A project of sustainable use and re-use of historical ruined sites must respect the basic tenets of sustainability in the spirit of the ICOMOS "Declaration of Paris on Heritage as a Driver of Development". According to this declaration cultural heritage has to play a key role in the context of sustainable development relate to social cohesion, wellbeing, creativity, economic appeal, and promoting understanding between communities.
- **Determining a viable new use:** Finding the most appropriate function within the context is crucial in order to preserve the cultural significance of the heritage building. It is always necessary to start from the characteristics of the ruined site, checking the cultural and physical parameters of "compatibility".
- **Identification of contemporary uses:** The forms of use and re-use of historical ruined sites might be different according to the specific characters of buildings and contexts. Each site has its individuality and therefore requires an independent approach.
- **Quality of architecture and design:** The project of adaptation and transformation of historical ruined sites must be able to define a virtuous relationship between the ancient and the new building. A high-quality, architecturally-creative solution is the most appropriate approach.
- **Accessibility and visitor services:** Historical ruined sites, as places of memory and precious spaces for the community, must be accessible and welcoming to everyone. Accessibility is not limited to the purely physical point of view but also includes the aspects of cognition and usage.

- Maintenance and management: Good management and maintenance are crucial to the long-term care of heritage sites, collections and assets – which means having the right skills and procedures to ensure that they are looked after. Poor management and maintenance puts heritage at risk, and can lead to higher costs in the future.

The work follows an outline composed by five chapters that will try to respond in an exhaustive way to the aims related to contemporary and socially useful use of historical ruined sites.

Chapter one reports the general objectives of the document, in relation to the specific purposes of the European project INTERREG Central Europe Ruins.

Chapter two offers a concise historical overview of restoration theory and the concept of *utilitas* of cultural heritage - and therefore also of ruined historical sites - in Europe. The chapter provides the theoretical bases of reference for approaching the theme of the re-use of medieval ruins. In fact, throughout history, ruins have been interpreted in different ways, depending on the historical moment and the consideration of the past and of the passing of time and on the relationship that man has established over the centuries with the mutilated remains of past eras. At the same time, the approach to the use of the ruins has undergone various oscillations of thought. The theoretical discussion on adaptive re-use as a way to preserve historic monuments started in the 19th century. In recent times new reflections arise about the relationship between conservation requirements (documentary proof of the ruin) and those that are defined in the project, but also - a theme that has so far been neglected in the archaeological and restoration domains - on the use of these artefacts: it is no longer understood as a matter of materials, not even as a simple pretext for setting up singular "invented ruins", rather than re-contextualizing the ruin that from the past migrates into the present as a "form of life" as a resource that is responsible for new responsibilities.

Chapter three is dedicated to the actual guidelines for the development of a socially useful project of contemporary use and re-use of historical ruined sites based on sustainability. The fundamental conceptual and design steps are highlighted and summarized in the various paragraphs.

The first phase described in the re-use process is the knowledge. It represents the indispensable stage for the correct interpretation of the site and for delineating a project of sustainable restoration and re-use. The knowledge phase includes both the analysis of indirect sources (bibliography, iconography, historical cartography, etc.), and the direct approach to the artefact through the different forms of survey and diagnostics. Lastly, a careful analysis of the constraints (physical, normative, managerial) that insist on the ruined site is part of the cognitive phase.

The second phase is related to the decision-making process that leads to the choice of a solution (or more scenarios to choose from) for the new use of the ruined site. This process, supported by the previous knowledge phase, develops starting from the study of the characteristics of the landscape, socio-economic and cultural context etc., in which the historical site is located. In fact, finding the most appropriate function within the context is crucial in order to preserve the cultural significance of the heritage building. Adaptive re-use of a heritage building is a

challenging process since the heritage values, physical characteristics and potentials of the heritage building should be well analyzed holistically. The decision on the new use should be based on an analytic and scientific method in order to find the most appropriate strategy for the re-use project. It is necessary to involve all the stakeholders (owners, responsible for conservation and protection, politicians, etc.) and organize some moments of involvement and participation of the local community in order to achieve a credible and shared choice for the new use.

Furthermore, the financial and economic feasibility of the reuse project should be assessed in advance, using methods such as cost-benefit analysis and decision support systems.

Finally, some general examples of potential new uses are provided which are compatible with the main typologies of medieval ruins spread throughout Europe (fortified buildings, religious buildings, town walls, residential buildings, etc.).



Fig. 2 Castle of Urquhart in Scotland, currently used as site-museum

The third phase concerns the actual re-use project and can basically be directed towards: a use of the ruin as a ruin or a transformation of the ruined site through a contemporary project that respects its characteristics as a historical monument. In the first case, the ruin is used mainly as a site museum, and the needed interventions concern - apart from those related to safety and security, restoration and consolidation of the monument - those strictly necessary to make the place accessible.



Fig. 3 Stage performance, Old castle Celje, Slovenia

These interventions include the design of road and tourist signage, accessibility systems and basic plant systems linked, for example, to lighting, sanitation and water. This type of use of the ruined sites may also include temporary uses such as locations for cultural events such as concerts, festivals, historical re-enactments, etc.

In particular, on the issue of accessibility, the approach known as "Design for all" or "Universal Design" was explicitly defined, ie the design of spaces, environments and objects that can be used by a large number of people regardless of their age and psychophysics ability. An environment is accessible if any person, even with reduced or impeded motor, sensory or psycho-cognitive skills, can access it and move in safety and autonomy. Making an "accessible" environment therefore means making it safe, comfortable and qualitatively better for all potential users. Accessibility should therefore be understood in a broad way as the set of spatial, distributive and organizational-management characteristics able to ensure a real use of the places and equipment by anyone.

Within the overall enhancement process the aspects related to fruition and communication have to take on a primary role, for the elaboration of which it will be appropriate to refer to the objectives and principles recommended by the ICOMOS "Charter for the Interpretation and Presentation of cultural sites". The contents of the communication, identified in the scientific project, will have to find means, tools, operative choices functional to transmit to a wider public than that of the specialists what constitutes the essence and the specificity of the historic site.

In the case of the transformation of the ruined site to accommodate functions of various kinds (cultural, touristic, commercial, residential, etc.) the project of re-use is obviously much more complex, and must provide a careful dialogue between the new and old volumes. A successful adaptation is one that respects the existing building and its historic context and add a contemporary layer to the heritage building rather than destroying its character. The architectural

project, guided by a historical-critical and aesthetic analysis, as well as by the principles of conservation, should provide solutions respectful of the values, both tangible and intangible, of places. The restoration and re-use intervention must be distinguishable, in a discrete and controlled manner, with respect to the previous construction phases of the historical ruined site. Furthermore, the materials used for the restoration and re-use intervention should preferably be eco-sustainable and possess physical-chemical and aesthetic requirements compatible with the existing materials, as well as being durable over time. Plant and technological adaptation must be included in the rigorous national regulatory framework and tend to pursue the current standards of comfort and safety. Solutions that are possibly non-intrusive should be found, considering the use of modern technology too.



Fig. 4 Light show projected onto the ruins of Saint Mary's Abbey, York (England)

Within this chapter, an in-depth study was developed on the use of Information and Communication Technologies that allow an innovative and inclusive approach to the use of historical ruined sites. The visualization of places of historical interest closed to the public or no longer existing or the re-contextualization of historical or archaeological objects represent only some of the potentials of these tools that can be made available to the users.

Chapter four is dedicated to the importance of the management and the periodic maintenance of the ruined site. A good maintenance plan is a structured and documented set of tasks that include the activities, procedures, resources and the time scale required to carry out maintenance. It is essential that quality maintenance work, undertaken on a periodic basis after regular inspections (on a cycle of at least five to ten years) and employing traditional and compatible techniques and materials, be advised and specified. Furthermore, particular emphasis has been placed on the development of the visitor management plan as an essential aspect for respecting the livability and sustainable use of historical sites. An interesting tool outlined is that of assessment of the

Tourist Carrying Capacity, understood as the maximum number that a certain destination can accept without compromising its cultural value and its physical consistency.

The last chapter puts in light the main possible uses for medieval ruins proposing good and bad practices of intervention. This collection of case studies was made thanks to the contribution of all project partners and represents a source of great interest for both stakeholders and professionals who can go into the details of individual Projects and find inspiration or vice versa to understand what may be wrong approaches to the re-use project.

The bibliography collects all the texts used for the development of the handbook and provides useful materials for further documentation.

Here below a framework of the contents afforded in the handbook.

Title: *Transnational model form of socially useful use of medieval ruins*

Contents:

1. Objectives of the Publication.
2. Use and re-Use of Ruins.
  - 2.1 Cultural Heritage purposes;
  - 2.2 Re-use of European ruins throughout the history;
  - 2.3 Approaching to ruin's re-use project design;
3. Guidelines for a Socially Advantageous re-Use of Medieval Ruins.
  - 3.1 Communities and Cultural Heritage;
  - 3.2 Reference principles: Authenticity, Compatibility, Sustainability;
  - 3.3 The phase of knowledge;
    - 3.3.1 Understanding the value of the ruined site;
    - 3.3.2 Historical knowledge;
    - 3.3.3 Topographic and architectural survey;
    - 3.3.4 Diagnostic for Cultural Heritage;
    - 3.3.5 Regulatory framework;
  - 3.4 Decision-making process.
    - 3.4.1 Territorial framework analysis;
    - 3.4.2 Role and participation of the stakeholders in the decision-making process;
    - 3.4.3 Involvement of local communities;
    - 3.4.4 Cost-benefit analysis and decision support systems;
    - 3.4.5 The choice of the use: a catalogue of potential uses related to building typology;
  - 3.5 The re-use project;
    - 3.5.1 Conservation of the ruin in its authenticity, shape and mutilate image;
      - 3.5.1.1 Interpretation and display: On-site museum;

- 3.5.1.2 Accessibility;
- 3.5.1.3 Facilities and infrastructures: Heating, lighting, energy systems and signage;
- 3.5.1.4 Security and safety systems;
- 3.5.2 Reintegration of the image with contemporary design;
  - 3.5.2.1 Plant design and installation;
- 3.5.3 Multimedia and technologies for the virtual and immersive use of the ruins;
- 3.6 Management plan;
  - 3.6.1 Maintenance plan;
  - 3.6.2 Visitor management plan and assessment of the carrying capacity of the site;
  - 3.6.3 The management system;
  - 3.6.4 Financial plan;
  - 3.6.5 Marketing and communication plan;
- 4. Good and Bad Practices: Case-Studies;
- 5. Bibliography.

### **Author Contributions**

This paper is the result of exchanges between the authors. The paper aims to present the contents of the handbook in drafting progress.

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