

Remaining Architectural Heritage in Kosovo, Their Durability and Sustainability

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This paper work aims to response the request for immediate intervention of cultural heritage preservation in Kosovo, with the aim of protection against the harmful consequences of insufficient knowledge leading to a misuse of technology and to ill-considered approaches. The DGT (dwelling-garret type) is an important vernacular study case. The DGT is a historic building of 18th century, located in the core of Lebusha Village, Municipality of Peja, an architectural construction characterized by two concentric volumes at rectangular layout, very dynamic at horizontal composition, obtained by the movement of two differently constructional materials volumes, stone masonry and timber assembly, and covered with roof clay tiles. In view of its esthetic and artistic values, its important role at developing chain of Kosovo's rural dwellings typology, and its method of construction, the building should be listed as a monument under state protection. Hence, immediate protection interventions, such as conservation of wooden and stone envelope, improvement of walls and finish works, and drainage infrastructure, are considered as the minimum requirement.

Keywords: architectural heritage, DGT (dwelling-garret type), durability, sustainability

Objective

The general objective in this paper is to indicate how to conserve and restore architectural heritage buildings, preserving their inherent expression and to develop a methodology for renovation of the vernacular buildings based on durability and sustainability concepts. The essential basis for successful reconstruction of a historical building, e.g., at a study case, DGT (dwelling-garret type), is a proper conservation plan described in the following steps: analysis of durability, a record of damage and weak construction points; observation and survey of construction for creating a site and building recording measures; and demand for new techniques in respect of sustainability, economic, social-cultural, and environmental impact.

The overall objective is to involve the active participation of professional authorities into the updating process of education, law, and standardization process and into the hierarchy of stakeholder authorities; hence their connoisseur role is irreplaceable when the preparation of conservation plans, in particular when the process of reconstruction and revitalization of buildings is significant and immediate. Thus, the aim of this paper might encourage responsibility of Kosovo Government and society to look after the devastating events in a structural way, while this approach will enhance effectively and efficiently when settling down the level of environmental performance of buildings, emphasizing the buildings of cultural heritage of Kosovo.

Therefore, the main objectives of this paper are to provide appropriate analysis and proposals to the Significant Guidelines for safety preservation which will be leading towards sustainable vernacular buildings, including overall heritage buildings within Kosovo.

Further development of the proposed guide in this paper could be funded by the Kosovo tax payers under the auspices of the State Authority of Kosovo towards Public Professional Commission, proposed in this paper. The directives and/or advices do not necessarily have to be approved or disapproved by the Commission, nor has the Commission to consider the accuracy of adequacy of the information in the directives. Contents are provided for general education and informational purposes only. The actual suitability and applicability of this information for a given use depends upon a host of project-specific considerations. The Commission should strongly encourage the users to consult with a construction professional and/or product supplier before applying any of this information to a specific use or purpose. The involved parties, its employees, contractors, and subcontractors could make no warranty, express, or imply, and assume no legal liability for the information in guidelines, nor does any party represent that the use of this information will not infringe upon privately owned rights.

Introduction

The Paris Declaration on Heritage as a Driver of Development adopted at UNESCO (United Nations Educational, Scientific and Cultural Organization) headquarters, in December 2011, states clearly that the first aims are to measure the effects of globalization on communities and heritage. It will then identify the actions needed not only to protect heritage, but also to ensure its use, promotion, and enhancement; and its economic, social, and cultural value is harnessed to the benefit of local communities and visitors. Finally, it will assess the ability of heritage and its inherent values to inspire and to build tomorrow's societies, curbing the negative effects of globalization.

It is now widely agreed that heritage—with its value for identity, and as a repository of historical, cultural, and social memory, preserved through its authenticity, integrity, and “sense of place”—forms a crucial aspect of the development process. The challenge of integrating heritage and ensuring that it has a role in the context of sustainable development is to demonstrate that heritage plays a part in social cohesion, well-being, creativity, and economic appeal, and is a factor in promoting understanding between communities.

Furthermore, the European Charter for the Architectural Heritage, adopted in Amsterdam, 1975, announced that the architectural heritage includes not only individual buildings of exceptional quality and their surroundings, but also all areas of towns or villages of historic or cultural interest. For many years, only major monuments were protected and restored and then without reference to their surroundings. More recently, it was realized that, if the surroundings of monuments are impaired, then those monuments can lose much of their character. Today it is recognized that entire groups of buildings, even they do not include any example of outstanding merit, may have an atmosphere that gives them the quality of works of art, welding different periods and styles into a harmonious whole. Such groups should be preserved. The architectural heritage is an expression of history and helps us to understand the relevance of the past to contemporary life.

Thus, the architectural heritage is a capital of irreplaceable spiritual, cultural, social, and economic value; hence each generation establishes a dissimilar reading of the past and proceeds new inspiration from it. This capital has been built up over centuries: The destruction of any part of it leaves us poorer since nothing new that we create, however fine, will make good the loss. The architectural heritage will survive only if it is appreciated by the public and in particular by the younger generation. Therefore, the educational programs for

all ages should increase the attention to this subject.

The architectural heritage in Kosovo is bedrock for the sustainable development, which ensures continuity of the buildings history and their usage, thus continuity of civilization endeavor from the past towards the future. Their durability and sustainability requires a quick and efficient impact to draw the attention to the understanding of the legal and administrative mechanisms which are responsible for managing the protection, as well as its main features, hence the architectural heritage today have been found to be in a precarious and most vulnerable situation from the process of normal ageing and decaying, gravitated by environmental pollution, and structural failures caused by significant neglect of protection and preservation.

The early stages of damages in the older vernacular buildings of Kosovo, further examination in the case study, often go unnoticed until the falling debris manifests a crack or displaced envelope, including wall cladding, roof, doors, and windows. The concern for public safety is raised and partial refurbishment, such as windows, net plastering, or roof canopies is often installed. Measures may be even taken to remove loose debris from the interior of the building such as timber flooring, water, and electrical supply system, but addressing the wall claddings, the support system, and the source of failure does not typically follow.

Therefore, the durability concepts addressed in this typical case with its significant scope of damages, ambitious restoration attempts, and consensus conclusions associated with funders and professional authorities, are the imperative to society in order to ensure theory, education, and practice to sustainable development based on durability and life-cycle.

Unfortunately, the damage within the structure at this point is likely massive and the restoration scope and requirements are poorly understood. Determining the extent of damages and restoration requirements with a level of tolerance for structural safety that will provide a scope of works can sometime bring difficulties. Options are to direct financing towards a thorough investigation with reduced resources and to address the problem or conduct a reduced investigation, focusing the finances on the repair work. Matching sufficiently an option depends on the level of the scope of work confidence that is suitable to those dealing with it.

Vernacular Buildings Within Architectural Heritage

The Venice Charter, Article 1 said:

The concept of an historic monument embraces not only the single architectural work but also the urban or rural setting in which is found the evidence of a particular civilization, a significant development, or an historic event. This applies not only to great works of art but also to more modest works of the past which have acquired cultural significance with the passing of time. (Retrieved from <http://www.gdrc.org/heritage/vienna.html>)

In this regard, the vernacular architecture is a term used to categorize methods of construction which use locally available resources and traditions to address local needs and circumstances. It tends to evolve over time to reflect the environmental, cultural, and historical context in which it exists. It has been often dismissed as crude and unrefined, but also has proponents who highlight its importance in current design. It can be contrasted against polite architecture which is characterized by stylistic elements of design intentionally incorporated for aesthetic purposes which go beyond a building's functional requirements.

R. Brunskill has defined the ultimate in vernacular architecture as a building designed by an amateur without any training in design; the individual will have been guided by a series of conventions built up in his/her locality, paying little attention to what may be fashionable. The function of the building would be the dominant factor, aesthetic considerations, though present to some small degree, being quite minimal. Local

materials would be used as a matter of course, other materials being chosen and imported quite exceptionally.

The Encyclopedia of Vernacular Architecture of the World defines vernacular architecture as comprising the dwellings and all other buildings of the people related to their environmental contexts and available resources they are customarily owned or community-built, utilizing traditional technologies. All forms of vernacular architecture are built to meet specific needs, accommodating the values, economies, and ways of life of the cultures that produce them.

Sustainable recovery and re-use of vernacular buildings in Kosovo requires careful evaluation of the real reuse potential of the structures within architectural context. The solutions put forward the need to have a result based on careful examination. It is therefore necessary to carry out a detailed analysis of the state of rural buildings within the same area, so as to: make it possible to devise coherent restoration guidelines; implement the proper restoration of the building; provide guidelines in order to reduce to a minimum impact of supply systems on traditional buildings; decide which are the necessary interventions in order to enhance the value of the landscape and upgrade it; set up, for each geographical area, an inventory of the necessary and available traditional building materials and explain how to use them; promote training courses for workers and make them more aware of the issue; make workers and public opinion aware of the wealth and lineament of this heritage and its importance in the designation of our cultural identity; and introduce the notion of recovery of traditional rural buildings into the educational system.

Undoubtedly, the rural buildings in Kosovo are a direct testimony of human activity in a certain place and different time, and if they are left to decay, part of our past will be lost forever. That is to say that the landscape, the environment, the land, and the people are part of one and the same unit, and this heritage should be preserved not only as a memory of the past but also as a resource for future development. The development of alternative tourism can have an impact on the sustainable development of the country. This can contribute to the preservation of vernacular rural settlements and vernacular architecture. In addition, it is the only way for economic revitalization and improvement of living conditions in rural regions.

Today, those responsible for this continuing damage to the rural landscape are the politicians and the so-called specialists. They are incapable of understanding the real and deep-rooted value of the experience of vernacular architecture and do not do enough to conserve these worthwhile sites and buildings that still exist, or to preserve the traditional values through engaging professional commissions and/or educational methods and instruments.

Moreover, the Kosovo's objective to quick accession into the European Union is an opportunity to intensify efforts to preserve and make the most of our vernacular architecture sustainable and durable. This also means a proper implementation of the ESDP (European Spatial Development Perspective), the GPSSDEC-CEMAT (Guiding Principles of the Sustainable Spatial Development of the European Continent), the Venice Charter: International Charters for the Conservation and Restoration of Monuments and Sites (1964), European Charter of the Architecture Heritage (1975), Declaration of Amsterdam (1975), Burra Charter: The Australia ICOMOS (International Council on Monuments and Sites) Charter for the Conservation of Places of Cultural Significance (1999), and others.

Overview of Study Case

General Information

Creation of organized spaces depends on destination, historical volatility, and the reality of living needs. Older rural localities in Kosovo are distinguished by natural settlements and are built mostly with local

materials/in situ and with exquisite architecture sensitivity to size and as such approach represents examples of synthesized nature with human.

The DGT building is in Lebusha village, rural part of Kosovo and is one of few remained vernacular's finest examples of stone structure enclosed partially with wooden structures (see Figures 1-2). Built in 18th century, it can be properly classified as vernacular heritage building where the structural support is carried by a wooden frame, while the building envelope is built of massive stone masonry and wooden enclosure. The successful restore of a heritage building, in our case an architectural type of vernacular architecture, the DGT, includes the understanding of behavior and aging of the structural systems and its construction elements to determine how the materials react to each other in the presence of a changing environment.

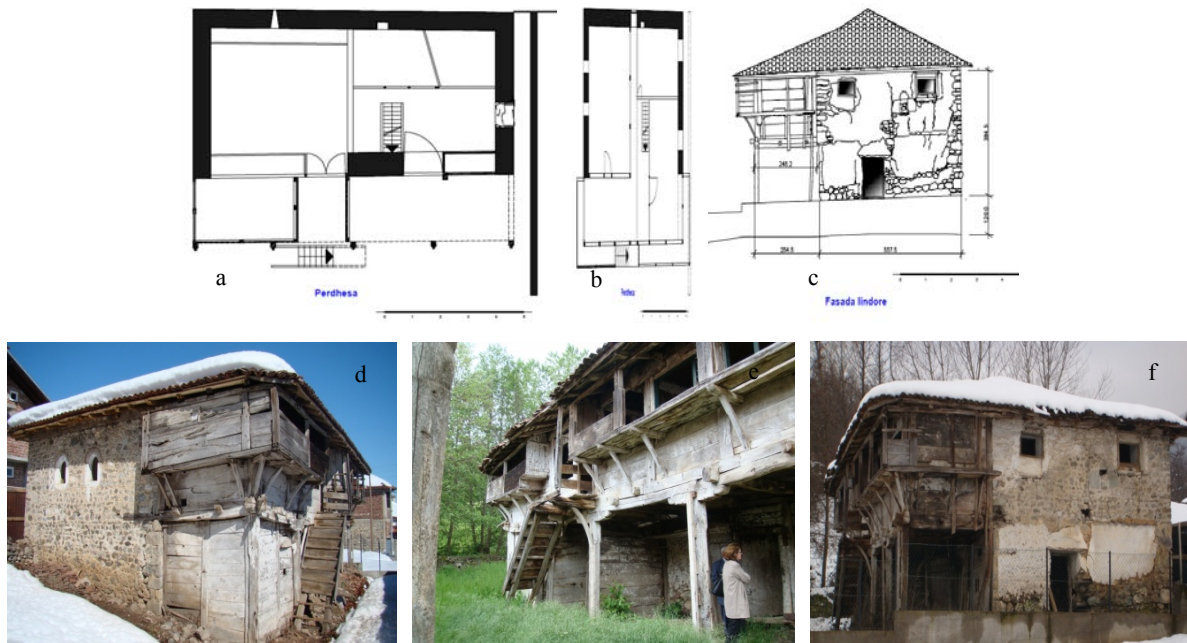


Figure 1. The DGT in Lebusha, Kosovo. a. ground floor layout; b. first floor layout; c. east elevation; d. west-south view; e. south view; and f. east view.

The main fact about the settlements is to acquire a source of any kind so the community could survive and fulfill their needs. Just like the settlements, the decision for required area for a house is decided by the needs of the family and the area is bordered for construction of the house. At this point, the relations with the street, or in other words, “the community”, is shaped and formed (Tanaç, 2007).

Each residential neighborhood represents a small world organized by themselves and independent, where you can meet key needs of citizens (Shkodra, 1984). The traditional autochthons construction—the house—has been laid down as a result of certain conditions. These are firstly builder's requirements, basic needs deriving a simple functional spatial settlement and constructive technology (Petrović, 1981).

As the town dwellings are located on irregular shaped plots with spatial properties reaching an extraordinary degree of free composition, the later ones returned to fenced-wall gardens and detached from the streets, ensuring users from citizens' inquisitiveness, the rural settlements are created spontaneously, with an irregular spatial form and intended in stiff agglomerations with high environmental values, with serpentine roads, enhancing free movement of space, and with a rich treasure of architectural heritage.

Diversities of the rural settlements at the Region are rather expressed by their geographical position and/or number of dwellings than by their architectural urban features. Rural village housing complex, apart from the apartments along with accompanying functions, constitutes a holding yard of economic area, which has an irregular form of functional structures listed on the circum fenced walls, facing towards the center and forming a set of exceptional value, where the users lived and worked at the same time. Residential facilities in general are back faced to the roads, having a direct connection with roads through the portals; characteristics found not just for the rural settlement but for the urban settlement in Dukagjini Region as well (Nixha, 1998).

Regions of Kosovo still maintain a popular architectural heritage with more varieties and rich content to which excellent skills of popular craftsmen are accessible to achieve harmony between content, form, and function and use, material, and mentality of the residents. Those villages as a whole represent urban ensembles, richened with unique and unrepeatabe vernacular architecture, and assembled by spontaneous reoccurrence of structural units of dwellings. One of them is Lebusha village, contenting a lot of dwellings, narrow streets, and a small square, and having DGT in the middle of it. It is important to be mentioned that next to the DGT, alongside to north-west direction, flows a narrow streamlet, with more water flow during winter seasons.

The Lebushe is located beside regional road Peja—Deçan, 2.5 km north from Deçan. It is a rural cumulate settlement, mainly field land, not far from mountains, and habituated by families: Kastrati, Gashi, and Lokaj. It has been said that it is the earliest settlement in surroundings, even earlier than Deçani Monastery (14th century). There are two early settlements on the west side and one on the east-north side.

Furthermore, there were found by traces of the old roads, where have passed the caravans with supplies of goods. The location Lëbusha is also mentioned in Deçan's Manuscript of year 1330, as well as on cadastral defter of Shkodra Sanxhak, in the years of 1485 and 1582 known as Luboshta/Lubusha and afterward as Lubishta/Lubushta, as a habitant settlement has been recorded in Austrian map of 1689. The Archbishop Karaqiqi, in 1725, mentioned it as Libuscia village. Finally, the Lëbusha is named and got registered in the vilayet's sallnamet of Kosovo in 1893, 1896, and 1900 (Osmani, 2005).

The Architectural Description of DGT

The range of overall creativity of popular craftsmen in Kosovo is shown in the building, DGT as the one among other links into the evolutionary process of streamlining apartment settlement in the area. The DGT's importance lies in the fact that this type of the building is disappearing more and more and regretfully every day, since this is the one of six remained in Lebusha. So, the Ahemtaj's dwelling type represents crystallized phase, mellowed, building lobby, and available content of architectural functionallity, stressing exited wooden gallery, which constitutes the essential opened and extended structure across the forehead.

The DGT defines a period of traditional building during the time when traditional load bearing masonry construction evolved into a hybrid of a structural wooden frame combined with massive stone masonry and is the most appropriate type of vernacular building. Construction over time evolved further to shedding the massive stone masonry and developed into a structural wooden frame with a lightweight veneer or other cladding, such as plaster netted with willow and soil. The vernacular buildings present the most significant level of damaged architectural heritage of Kosovo today.

The DGT is a historic building of 18th century located in the core of Lebusha Village, Municipality of Peja, a stone masonry constructed on an orthogonal plane, approximate dimension 12 m × 9 m covered with roof clay tiles.

Its architectural formed construction is characterized by two listed together and concentrated different materialized volumes within rectangular layout, very dynamic at horizontal composition, and obtained by the movement of these volumes. Massive building's volume with larger proportions is built with stone material and placed beyond the main façade of the building, including arranged rooms at two floors, which represent the residential premises parts of the reception and living room upstairs, and livestock areas downstairs. Another rectangular volume, a structural and architectural frontal part of this house, is lightweight and smaller size, built mostly by timber frame structure, which looks like as a representative front façade opening. Its structural treatment, spatial and architectural composition, and open-end structure constructed by wood, in contrast to the volume of the posterior wall of stone, makes this part to be more transparent and characterized by a lively and two sides enclosure of a strong stone and cold mass of masonry, so that gives the house a warm character and richness. In functional terms, this timber volume creates enough space needed for the rural home, because the dwelling's owners were dealing with agriculture. In this section, the porch and lobby were used for drying the agricultural goods or for other work carried out by various household.

These functional architectural contents are related to each other in the horizontal plane by communication through doors and in the vertical plane by communication through two staircase areas, independently for two volumes which clearly differentiate the house areas into two parts with two different purposes, the "intimate" and "public" functionality. Those positions make easier and efficient movement possible while performing household tasks and ensuring a complete intimacy of the family (Nixha, 1998).

Traditional masonry construction has proven to be resilient to the damages over time. Durability over time and mainly few damages in most of the enclosure parts where ensured by the usage of proved construction techniques reinforced multilayer stone masonry with timer joist (see Figure 2e), having both functional characteristics: structural support and building enclosure. The desire to build higher structures and the constraint of supporting significant mass of upper elevations leads to the development of having a primary structure element to support the secondary elements, a concept which is almost used today.

It is now known that a significant drawback of the vernacular building's period was embedding the structure—typically wood—in the familiar mass masonry element without realizing the long-term consequences of rot. These consequences are caused because of the mass stone masonry absorbed and retained the moisture, similar to the original wall of mass masonry construction today, depositing it against the wooden members which are vulnerable to moisture. Moreover, the massive masonry draws the moisture towards the primary structure, and the increased volume of corrosion produces a displacement of the tightly fit masonry, causing cracking and eventual dislodgement. This damage allows more moisture into the wall system and constitutes a destructive cycle that can cause significant damage to the cladding, and ultimately at primary structural elements. Hence, these structures often require a regular base maintenance towards a long-term durability.

Recent Condition of the DGT

The focus of the observation and survey was done recently (see Figure 2) which showed that the building was almost completely damaged due to the lack of complex factors, such as lack of managing the preservation: survey and analyses, making and evaluating proposals for conservation plans, project implementation of any restoration plan lately; causes of decay; climatic causes, biological and botanic causes, natural disasters, human being; and a lot of misapplied environmental services and structure conservation.



Figure 2. a. Damaged internal wall constructed by clay reinforced with timber willows; b., c., and e. deterioration of a timber elements at ceiling/flooring and staircase structure; d. pour maintenance of planking envelope; f. misapplied of structural conservation.

The pictures show a lot of decay and failures on structural elements and construction materials too. Mainly the decay is caused by water. While the roof structure damage is caused by heavy rain, the damages of the lower section of the walls are caused by ground water and rainwater splash. As well, the ground water is often penetrated and dispersed to the highness of the wall, up to the timber ceiling/flooring structure and timber envelope of the dwelling. Furthermore, most structures depend on triangulation for stability (Orbasli, 2008). The loss or deterioration of an element may be the cause of structural instability and consequent movement in the building. Stresses in a timber structure are concentrated around joints and deterioration around joints, especially affected floors and ceilings joists. Other defects, such as waned knots, distortion, or splits weakened the timber enclosure structure and internal and external timber staircases.

Rehabilitation and Repair Strategies

Historic buildings are precious and finite assets; they are our powerful reminders of the construction styles and techniques and the way of life of earlier generations. To ensure that future generations can enjoy the past as much as we can, their refurbishment must be carefully controlled in order to protect their special architectural or historic interest. The preservation of the building heritage assets requires a carefully planned approach so as to prevent damage to the buildings and to ensure that the final results meet the aesthetic and structural requirements. Such work requires sympathetic repairs, using traditional materials and methods and minimal invasive work.

Different heritage policy document, such as The Venice Charter, International Charter for the Conservation and Restoration of Monuments and Sites (1964), European Charter of the Architectural Heritage (1975), Declaration of Amsterdam (1975), Resolutions of the International Symposium on the Conservation of Smaller Historic Towns (1975), Convention for the Protection of the Architectural Heritage of Europe (1985), Charter for the Conservation of Places of Cultural Heritage Value (1992), The Nara Document on Authenticity (1994), The Burra Charter: The Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (1999), Charter on the Built Vernacular Heritage (1999), International Wood Committee Charter:

Principles for the Preservation of Historic Timber Buildings (1999), the ICOMOS Charter on Cultural Routes (2008), and others, supports and/or provides legislation, policy, and guidelines with common conservation approach of the architectural heritage which requires inputs from a wide range of professionals and conservation practitioners, based on skills gained in traditional professional training, working together as a team.

For our study case, it is suggested to give the priority to traditional techniques when planning appropriate strategies to achieve best practices for repairing the DGT, but when they prove inadequate, then we suggest proposals as it refers in Article 10, Venice Charter: “The consolidation of a monument can be achieved by the use of any modern technique for conservation and construction, the efficacy of which has been shown by scientific data and proved by experience”. As well, it is also suggested, as in Article 12, Venice Charter, that “Replacements of missing parts must integrate harmoniously with the whole, but at the same time it must be distinguishable from the original so that restoration does not falsify the artistic or historic evidence”. Furthermore, the Burra Charters, Australian ICOMOS, Article 4, clearly suggests that techniques employed should be traditional but in some circumstances they may be modern ones for which a firm scientific basis exists and which have been supported by an experienced body. This could be illustrated by the possible example, in which contemporary architecture matches in a venture vernacular form (see Figure 3).

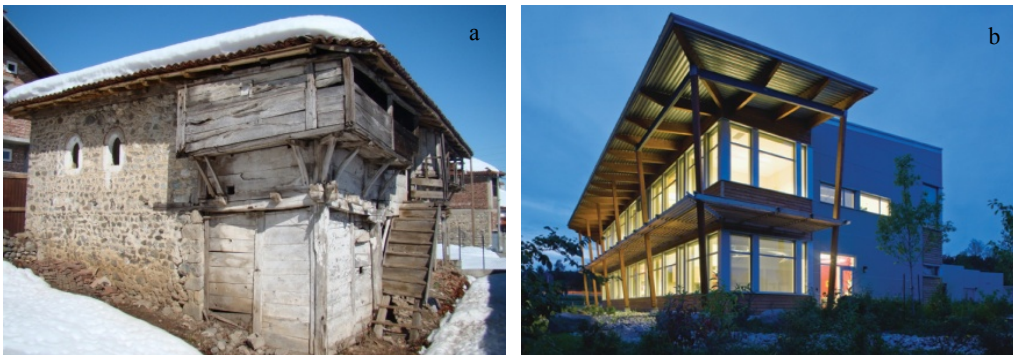


Figure 3. The opposite symmetry in context of time and place, both proofing life cycle: a. Vernacular Architecture, DGT in Lebusa and b. Contemporary Architecture, Rideau Valley Conservation Centre, Christofer Simmonds Architect, LEED rating: Gold, is an exemplary project managing energy, water and resource consumption. Source: Retrieved from <http://calculatelca.com/resources/sample-projects/rideau-valley-conservation-centre-rvcc/>.

In architectural conservations, no two situations are the same, and each preservation action or challenge requires an equilibration in judgment based on sound professional/conservation knowledge and an understanding of the building and its physical and historic context. However, to describe a standard solution for the conservation is impossible, as describing a standard methodology for design is based on the best informed and value-based judgment that will vary from case to case.

The rehabilitation and repair strategies for the DGT, including the external scope: drainage; structure and architectural content of the envelope: doors and windows, stone masonry wall, timer structural cladding, and clay mortar and its refurbishment; internal conditions: timber structural floors, planking partition walls and ceiling, clay-based finish flooring and internal walls, and electrical, water, and other mechanical supply systems; staircases and their further final treatment: painting, cleaning, etc., should be done by following integrity of the principle and techniques of repairs as per their nature, context, and environmental consequences based on the durability and sustainability towards increasing life cycle of it.

Durability and Sustainability Aspects

General Information

In the past two decades, the sustainable development has become the anchor of the integrate approach to global policy. Over time, the concept was extended by adding the environmental politics including economic and social dimensions, and in recent years it focused mainly on the cultural and educational aspect of sustainable development.

In order to ensure as far as possible a common understanding between environmental requirement, including durability and sustainability concept within existing buildings in context of Kosovo, there is a need to increase a social awareness and persistence of Professional Commissions to State Authorities, as well as among the states authorities themselves as to how the guide building users to operate towards remaining heritage building, the competent services of the Professional Commission, and assuming the hierarchy where its influence might be efficient. The Commission may issue a series of Guidance Papers dealing with specific matters related to the practical implementation and application of the Directives, where should be clearly emphasized the importance of durability and sustainability of cultural heritage within context of Kosovo, thus implementation of reconstruction, preservation, or revitalization develops effectively.

Hence, the durability is dependent on building type, design, use, installation, and maintenance; the guide fact sheet will provide building owners, designers, and builders of affordable vernacular housing with criteria for evaluating their durability of building materials and systems, examining the categories of criteria for evaluating durability and its relationship with maintenance issues. Historic buildings are inherently sustainable; they were traditionally designed with many sustainable features that responded to climate and site, therefore preservation should maximize the use of existing materials and infrastructure, reduce waste, and preserve the historic character of older vernacular techniques, hence sustainability begins with preservation. When effectively restored and reused, these features can bring about substantial energy savings. Taking into account historic buildings' original climatic adaptations, today's sustainable technology can supplement inherent sustainable features without compromising unique historic character.

Preservation keeps our nation's history and culture alive and we learn much from the methods and practices of those who came before us. With our threatened environment, it is imperative that we make sustainable living a part of our lives. Product durability continues to be one of the most difficult aspects for most designers, developers, and builders of sustainable buildings to grasp. There is no standard or widely accepted methodology for evaluating durability of building materials. Comparisons across product lines are difficult, because aesthetics, cost, and architectural appropriateness are usually considered to be at least as important to material selection as durability. Despite this lack of an accepted evaluation system, there are criteria that building owners, designers, and builders can use to ensure that the materials selected for a project will be the most durable and the cost of effective systems appropriate for a given project.

Durability Criteria

Guides and standards, whether voluntary or mandatory, provide instructions and guidelines for building practitioners. A number of international guideline documents have been produced in the recent past including: (1) Japan, The English Edition of: Principle Guide for Service Life Planning of Buildings, Architectural Institute of Japan (AIJ); (2) Britain, Guide to Durability of Buildings and Building Elements, Products and

Components, British Standards Institution (BSI); and (3) Canada, Draft Standard S478-1905: Guideline on Durability in Buildings, Canadian Standards Association (CSA).

The Guide to Durability of Buildings produced by BSI gives guidance on the durability required and the predicted services and design life of buildings and their elements. The objective of further development of guidelines is into the ISO (International Organization for Standardization) and CEN (European Committee for Standardization) standards, initiating development of standards for assuring that the design life of a building under the anticipated environmental actions will be archived, and to provide a basis for maintenance management. Essentially, the purpose of this document is to provide guidance to: designers and planners on methods for assessing the expected life of a building and assuring that its design life will be met; product manufacturers on information they provide to assess the life of a building; maintenance engineers and building owners on information they need in order to carry out the maintenance required to achieve the design life; and standards and code bodies on the need for improved standards and codes, toward management for the service life of buildings.

Sustainably Benefits to Cultural Heritage

The definition of sustainable development was given at United Nations report A/Res/42/187, in 1987: “development that meets the need for the present without compromising the ability of future generations to meet their own needs” (Retrieved from <http://www.un.org/documents/ga/res/42/ares42-187.htm>). The definition was later criticized because of insufficient clarity of the concept, since then sustainability has been an evolving concept and constantly subjected to changes but has not changed for over two decades. According to the report, the main characteristics of sustainable development are spatial dimension-global policy and long-term temporal dimension; its purpose is to support the progress of humanity, refers to inter-generational equity, does not have absolute limits, and must meet the basic need of all inhabitants of the Earth so that everyone can cultivate their aspiration for a better life.

Thus, it harmonizes the relationship between man and nature. In reality, there is no single definition of sustainable development, since the concept has a multidimensional nature. The report also defined the three pillars of sustainable development: environmental, social, and economic. The U.N. Conference on Environment and Development, Rio de Janeiro, 1992, aimed to define more princely and to establish it as a fundamental principle of all international environmental policies. Beside numerous clarification and updates regarding the vision, another important principle is that of equity and it refers to access at the natural resources and the preservation of the natural and cultural heritage; therefore, the principle of fairness is a common assumption, but differentiated between countries; and cultural development of people is the fundamental instrument in the fight against poverty, so it is the main instrument for achieving a truly sustainable development. The emphasis on culture as a key element to a truly sustainable development makes the culture become recognized as a fourth pillar of the sustainability issues.

Implementation of Durability and Sustainably for Rehabilitation

There is no list of materials and systems that will always be the most durable. For each restoration project and building type, different products will need to be evaluated and decisions to be made regarding initial cost, operating costs, maintenance requirements, and compatibility with other systems in the building.

In keeping with good project management practice for the rehabilitation project, the project management team should perform a lessons-learned analysis at the closing of each project. The results from this effort

should be maintained in a historical database that Institution, explicitly the Professional Commission, can recall them while designing future projects. This database can then be used to evaluate the problems, issues, and constraints that arise with the different systems used and will become an important resource determining durability issues on future projects. The lessons learned should, at a minimum, contain the following information regarding materials and systems used in the project: types of systems and materials used; variances from project budget and schedule directly related to systems or materials; and change requests required to meet installation requirements of any system or material and training of installation crews to speed learning curve for specific systems or materials.

In addition, all construction-related policies are founded in general politics for sustainable development. Without a base knowledge of this subject, we cannot understand neither the dynamic in the field of building legislation nor the importance of these changes.

Conclusions

Against the harmful consequences of insufficient knowledge leading to a misuse of technology and to ill-considered approaches, the immediate intervention of cultural heritage preservation in Kosovo is required. Based on esthetic and artistic values and its method of construction of the case study, the vernacular architecture is an important developing chain of Kosovo's rural dwellings typology, and the building should be listed as a monument under state protection, thus increasing the value of vernacular architecture within entire Cultural Heritage of Republic of Kosovo.

The preservation of the building heritage assets requires a carefully planned approach so as to prevent damage to the buildings and to ensure that the final results meet the aesthetic and structural requirements. Such work requires sympathetic repairs, using traditional materials and methods and minimal invasive work. The choice of minimum intervention and regular maintenance of historic buildings is an ecological and environmentally sensitive approach to building conservation in order to increase their sustainability and durability. The fact that beside the fundamental sustainable development issues such as environmental, social, and economic aspects are added the cultural development of people, as a fundamental issue too, for fighting against poverty, gives Kosovo a right and opportunity to approach in a sustainable way and find appropriate paths towards the preservation of the natural and cultural heritage.

In order to ensure as far as possible a common understanding between environmental requirement, including durability and sustainability concept within existing buildings in context of Kosovo, there is a need to increase social awareness and persistence of Professional Commissions to State Authorities, as well as among the states authorities themselves as to how the guide building users operate towards remaining heritage building, and the competent services of the Professional Commission, assuming the hierarchy where its influence might be efficient. The Commission may issue a series of Guidance Papers dealing with specific matters related to the practical implementation and application of the Directives, where should clearly emphasize the importance of durability and sustainability of cultural heritage within the context of Kosovo, thus implementation of reconstruction, preservation, or revitalization processes effectively.

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