

# Architecture Created without Architects<sup>1</sup>

Mladen Divković  
Engineer of Multimedia and Communicology  
Varaždin, Croatia  
E-mail: m.divkovic@velv.org

## ABSTRACT

The paper is dealing with the conservation of the traditional construction heritage through its obtaining a new function (e.g. tourism), for which a radical reconstruction of the objects by means of new materials and new technology is necessary.

Through a series of examples from practice it will be shown how the original appearance of buildings and gardens can be conserved, paying thereby attention to the authentic construction elements and avoiding erroneous solutions when conserving and restoring the existing architecture in rural areas and, at the same time, combining new and traditional materials, raising the level of accommodation comfort and the energy efficiency of the objects.

The heritage is a testimony of survival of a people in time and space, an expression of homeland identity and cultural sovereignty. By sensible restoration of desolate objects of traditional heritage and by using new energy efficient materials, their originality would be conserved and a new impetus to their conservation within sustainable regional development would be given.

Keywords: traditional, rural, cultural, heritage, protection, materials, technologies, windows

## INTRODUCTION

Within the framework of total cultural heritage, the traditional art of construction represents an important part – both because of its uniqueness and singleness and as a testimony of survival in time and space. However, beside the fact that the very traditionally formed spaces represent the biggest part of the world's inhabited space in general, traditional architecture has all too often been underestimated and exposed to imprudent destruction in the name of "modernity".

Confronted with a series of circumstances that are threatening the survival of traditional heritage of rural areas (depopulation, absence of traditional materials,



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<sup>1</sup> The title is a paraphrase of a well-known expression of Davor Salopek and the title of his book "Architecture without Architect" (Arhitektura bez arhitekta, Zagreb 1974)

craftsmanship and skills, lack of funds and many others), we have to find ways to conserve it so that, on one hand, the protection of its authenticity will be ensured and, on the other hand, correspondence with modern demands of accommodation, energy and ecological standards will be enabled, making those areas attractive to live and work in, and also appealing for investment and conversion.

Respect towards heritage and agreement regarding the necessity of its survival are the measures of our modern values. The incorporation of modern advantages and aesthetic appeal of the vulnerable rural design and architectural heritage may contribute to the quality of the modern architecture in the service of modern life and modern demands on energy. Our ability to transfer this will also transform our future values.

## **TRADITIONAL HERITAGE CONFRONTED WITH THE CHALLENGES OF MODERNITY**

Actually, there is a consensus regarding certain issues: in the current process of rapid globalisation and economic fluctuations, ups and downs, all the existing means to strengthen the regional identity and cultural heritage for future generations should be used. It is a problem when this consensus is to be applied in practice and positioned in the one decisive context: the economy. The values of heritage must be carefully examined as a response to current development challenges such as reduction of harmful emissions, energy saving and other approaches with the aim of reaching an economic equilibrium in our societies.

Only when the existing importance of the heritage and its supposed intent meet, does a potential for the development of a local cultural, tourist, crafts and any other offer come into being. The population becomes interested in supporting projects that will improve their living conditions and environment. This is what is understood under the term „living heritage“, an idea that may transform the image of rural areas and redefine it. Only in this way does the heritage become a moving force of the regional development.



Why such a long introduction? Well, it is difficult to escape from the impression that an exaggerated purism in the approach to the protection of architectural heritage may impose an equal damage as the already mentioned unreasonable interventions, be that they are inadequate interventions or simple decline and destruction. The number of objects registered in a way as cultural heritage has grown in almost inflationary proportions in all the EU countries (e.g. in the neighbouring Slovenia in 1996 there were 1,390 such objects, whereas

in 2010 the number has increased to almost 29,000). The situation is certainly very similar in Croatia as well. The lists have been composed according to the regulations on various levels, from the national to the local and municipal ones. Authenticity is certainly the most important aspect when talking about the quality of the cultural

heritage object, but one must be aware that authenticity at any price may in no way be applied to all the objects on the list. Original materials, forms, colours and construction methods are of unquestionable importance, but the use and function are equally important. The original design has a great value, but changes and additions made in the course of time and during the current conservation are also valuable, if they are of appropriate quality.

With the aim of developing the architectural space in harmony and without creating conflict, modern architecture must pay attention to the existing dominant qualities of the object, be aware of the local specificities of the surroundings, of the form and the character of the building and the historical character of the place, still permitting the use of new and innovative materials and technologies which will increase the object's value.

Consequently, it is necessary to move away from the simple visual impression – which is still the most common approach – and move toward a more complex interpretation of the integral parts, the problem and the potential of the rural heritage and the general trends. It is of vital importance to conserve and implement the conveniences and conditions which will enable people to live in rural areas today and in the future.

## **EUROPEAN EXPERIENCES: SUSTAINABILITY CHALLENGES**

Nowadays, the architecture and landscaping in a broader sense can clash with the sustainability demands – this possibility demands a fundamental reevaluation of the role of the architecture in integrating its cultural and environmental responsibilities and the readiness to face with the inherited practice and technologies of the past. The rural architectural heritage in modern surroundings is, because of its very vulnerability and sensitivity, even more exposed to permanent challenges. Those challenges now have a new dimension: how to integrate the wide spectrum of cultural heritage with the urgent demands that we have established in the sustainable construction environment. The functionality must be ensured for the practical daily living. It must also contain the highest sustainability standards.

The European approach to this area has in the past several decades generated a whole series of documents, declarations, resolutions etc. on the international, and on national and regional levels. As much as they reflect – and must reflect the local specificities (in the new economic equation, in which the traditional materials and energy sources are less important than the human factor, the role of local areas compared to the global network may become much stronger), there is a great consent regarding the general principles and directions of action. The protection and promotion of heritage must reflect the identity of the population living in a certain region and be directed toward sustainable development. The conceptions of research, conservation and maintenance of cultural heritage objects must be an integral part of the regional development plans and programmes. The aspects of environmental protection and energy efficiency are thereby indispensable elements.

In the sense of making the decision on what is to be done with this heritage, what needs to be taken into consideration is the relationship toward time – time as a memory vector; relationship towards space – space as a geographic indicator and the relationship toward the group and the society – as the indicator of belonging. The

ethnological research emphasizes the ties between the rural heritage and the population, increasing its scope that is now becoming a group of material and immaterial components tied to the broad spectrum of areas: history, architecture, art, culture etc.

A benefit for the people and the heritage of rural Europe is also the ECOVAST mission, the European Council for the Village and Small Town. The organisation emphasizes the need to find balance, joint support and partnership between the heritage and the rural population. The ECOVAST's approach has been described in the „Strategy for Rural Europe“, where debate, exchange of knowledge and experience and practical action are encouraged.

Rural architecture has been the dominating topic of activity of the organisation since it was founded in 1984. Reports on traditional rural buildings have been published, national departments and members of the organisation are active in the conservation and finding new use for the heritage objects – residential complexes in Germany, monasteries in Russia and Poland, abandoned houses in Croatia, churches in Germany and Romania, cottages in Northern Ireland... All experience speaks in favour of the necessity to apply new materials and technologies, but also in favour of the possibilities to conserve and adapt the old ones. Rural heritage is not a simple collection of objects; rather, it contains the remnants of numerous functional systems. The traditional technical solutions are rarely out-dated; rather, they represent a wealth of valuable information and must be studied and reused parallel with the modern methods, adapted to modern living and working conditions, which are far apart from the hard labourer life that came up with such solutions. The traditional rural architecture will be preserved only if a new function in line with the time is found for it and if the logic of economy is applied. Thus, a series of principles and values are emphasized of which we will list only a few:

Economic value:

- Tourism as the center and promoter of regeneration

Ecological value:

- Reducing the energy consumption in the existing buildings, thus reducing harmful emissions, and healthier living and working conditions

When talking about the practical aspects, the problems of working on the concrete objects and complexes and their moving closer to the modern energy standards, again, the dominant ones need to be emphasized:

Technical aspects:

a) Insulation:

- A change in the structure of a house is sometimes inevitable and such interventions must be done as close as possible to the original idea
- The problem of thermal bridges

- Doors and windows: adaptation and repair of the existing ones is often not possible, nor is double glazing possible because of the original construction. When replacing, one should take into consideration building in windows made of new materials, paying attention to the sensible construction, installation and fitting in with the existing original solutions. There are numerous examples of successful interventions on this basis.
- Without the application of new know-how and technologies there is always the risk of poor ventilation which causes deterioration, decay and presents a health risk. Once again, today's requirements and conditions of normal living and working differ considerably from those in which the original solutions were created.

#### b) Sources of energy

- Combining energy sources must be adjusted for each individual case, and since we are talking about objects with a function in which people live and work and which do not represent museum exhibits, the original solutions are simply unsatisfactory, impractical and unacceptable. Therefore, certain interventions in the very structure of the building, especially the interior, are inevitable.

#### 4. The financial aspect:

- The intensive use of human labour increases the renovation price by at least 40%, the need to reduce expenses is chronic,
- Frequent unavailability and high price of traditional materials,
- Insufficient funds to train the skills necessary for the work on old buildings (e.g. in Great Britain, out of about 540,000 construction professionals only 500 have been accredited for conservation work; here the ratio is without a doubt far more unfavourable. At the same time, the increase in the scope of work on traditional buildings causes an increased need for skilled craftsmen and professionals specialised in the traditional techniques.

And finally, great difficulties, beside everything that has already been stated, are posed by the system being complex and chaotic (planning and construction control). If in the reconstruction of traditional architecture we stick to the extreme positions on the use of exclusively original materials and techniques, the result will most certainly be economic inefficiency, which will lower the interest of potential investors and in the end the scope of heritage protection; the reduced quality of living and working conditions in such objects will certainly not satisfy the modern dweller of rural areas (or the tourist, if we talk about an object with such a purpose) and, last but not least, the standards of energy efficiency of thus restored buildings will be significantly lowered.

The permanent nature of heritage, which is inalienable from its concept, demands that we rethink their use. Until they are treated as museum exhibits, the objects of heritage are predestined to evolve. Depending on the viewpoint, this may mean various types of activity: restoration, renovation, repairs, conversion etc. And, as long

as we intend to preserve the heritage for future generations, while paying attention to its function, development projects are the most favourable way to ensure their “living” future.

## **CROATIA: BUT IT DOES MOVE**

All the challenges that have been talked about are relevant for Croatia as well, perhaps even in a larger measure than that is the case for the EU countries. About



**Photo 1: a traditional house, the Adriatic area.**  
**Traditional material: stone**

90% of the territory of the Republic of Croatia with about 40% of the population belong to rural areas. Great wealth and diversity of rural architectural heritage, conditioned by various factors such as the climate and the microclimate, landscape, available construction materials, cultural and other influences, to mention only a few, have for decades been exposed to neglect and devastation. And again, just like in other countries, without a consistent strategy of conservation and restoration finding new possibilities of use for the objects of architectural heritage and new ways to move them closer to the modern way of living and working as well as to the up-to-date energy and environmental standards, all



**Photo 2: a traditional house, mountainous region (Dinara).**  
**Traditional materials: stone and wood**

declarative commitment to the heritage will be in vain. The economic aspect, as usual, can have a deciding role and the inclusion in the development project on the basis of sustainability has no alternative. Actually, the problems and challenges that we are facing are very similar everywhere: traditional, national, native knowledge and skills, activities and products which for centuries have contributed to the management and sustainability of the rural community are about to disappear. Weakening and disappearance of local economies results in low income and low standard of living – in many rural areas poverty is very present; the inadequate living standards and lack of many communal services in rural areas makes these areas unattractive for the return of young people which leads to a loss of social and cultural vitality and to a decrease of the capability of the local population to express its aspirations, to influence politics that pertains to them and to take initiative. Due to insufficient care for the areas, damage has been caused on the landscape, on the flora and fauna, the land and water systems.

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**Photo 3: a traditional house, the Panonic region. Traditional materials: brick, wood, stone**

How, then, is one to preserve the traditional values of rural areas through development in Croatia? As one of possible measures, the Ministry of Tourism of the Republic of Croatia has since the year 2000 implemented the Programme to encourage, protect, restore and engage the cultural and natural heritage in tourism in areas where tourism is not developed and since then many objects of native residential architecture, mills, forges etc. have been co-financed and restored for the needs of tourism. Thus, we are not talking about restoration and conservation but rather about restoring the function in the framework of a broader strategy of the local and regional sustainable development. At the same time, this has accomplished other important goals: the number of touristic providers in otherwise poorly developed areas has been increased; through the renovation of traditional objects old skills and craftsmanship has been renewed; new sales channels for domestic products and services have been opened, and many objects of construction heritage have been saved from further decay, which has increased the total value of the traditional architectural heritage.



**Photo 4: windows of artificial material on a renovated traditional object, northwestern Croatia**

In order to instill a new life in the traditional buildings and to enable a new function, it is, of course, necessary to overcome many practical difficulties and to ensure their proper renovation preserving as much as possible their original principles, but also introducing new materials and technologies which will enable reaching modern standards. For example, even though there are still quite a number of preserved traditional houses in Croatian rural areas, the majority of them are in a very decrepit condition and do not satisfy even the minimal standards of modern accommodation – this especially applies to the bathrooms, heating and energy efficiency in general. These very interventions show that it is impossible to reach the set goals without a certain encroachment in the very structure of the object – installations and radiators must be put somewhere, and the insulation of the walls will inevitably decrease the volume of the rooms and, when installing it, technologies and materials that have nothing to do with the traditional ones will inevitably be used.



**Photo 5: interior of renovated traditional object, northwestern Croatia**

When talking about windows and doors as an extremely sensitive part of the exterior appearance of the building, the technical challenges are also great and insisting too heavily on authenticity will either disable the renovation or definitely make it economically unjustified. Besides, in many cases it is necessary to penetrate new openings. Based on the already elaborated principles, where it is possible, the existing elements should by all means be renovated, but in a large number of cases it is possible, with proper sensibility in selection, work and installation to use new materials paying strict attention to the shape, size, division, texture and colour of new elements. Numerous examples from Europe on the use of modern PVC windows for that purpose, but also the stated Croatian experience, speak in favour of it.

Naturally, in cases of traditional houses with very small openings (and consequently small energy losses through them) such a way of replacing windows is neither appropriate nor necessary.



**Photo 6: windows of artificial material on a renovated traditional object, northwestern Croatia**

In a similar manner, one can – and must – justify the renovation and insulation of the truss, the central heating installation and many other interventions where modern materials are unavoidable. The traditional house will in this way, having preserved all the characteristic details making it unique, reach the highest standards of energy efficiency and comfortable living, reducing the losses in originality and authenticity to the smallest possible measure and being economically viable, too.

## **CONCLUSION**

The traditional rural architecture of the past, which evokes warmth in us and which today is greatly valued, is a result of meeting the living and economic needs of the population of a certain area or region. Architects, as a rule, did not participate in giving form to the traditional construction, but it is rich in a series of practical solutions and incomparable details which even today may serve as inspiration and as an object of admiration for a generation's creativity. In the same measure in which it represented the expression of cultural, aesthetic and social values of its age, properly protected and renovated, the heritage represents a way to creating a possibility to meet the economic needs of today's populations and also to use the modern technological potential on an energetically and ecologically sustainable basis.

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