Restoration of a Traditional Montenegrin Stone House

The Site in the Village of Gačevići

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Abstract

The topic of this work is the site with traditional stone houses in the village of Gačevići, Montenegro. The village of Gačevići is located at the very border of the Region of Kotor - UNESCO World Heritage Site and the National park Lovćen. Currently the whole village is abandoned, and it has not been protected at the national level although it posses heritage values and potentials for the valorisation.

The aim of the work is to give the framework for the conservation project, integrated with the development and management of the site. After the fieldwork conducted and all necessary analyzes (stakeholders, risk, SWOT), taking into account conservation requirements and strategy, possible models for appropriate use are defined.

In order to analyze the site properly it was necessary to do additional researches about the complex Kapetanović to which the site belong and about the village of Gačevići itself. The village of Gačevići was never researched before. During the field work and researches we came to the new information about the village as well as the complex Kapetanović.

Since the site consists of two units i.e. houses (old and newer) with specific features, different conservation measures for them are proposed: the restoration of the old house with the dry stone walls and the straw (rye) roof and the reconstruction of the newer house that has been modified in recent period.

The proposal is to use the site as a pilot project - **venue for restoration work camps** that provide training on the restoration of the traditional stone houses by using traditional materials and crafts (dry stone walls, straw roofs, lime).

Special emphasis in the project is placed on the possibility to develop the model (scheme) for the integrated conservation and development process, applicable especially on the traditional rural houses.

Figure 1 | The site in the village of Gačevići

Background

The location of the site

The village of Gačevići

The village of Gačevići is located **above the Bay of Boka Kotorska**, at approximately 1000 m above sea level. Gačevići is located at the very border of the **UNESCO World Heritage Site - Cultural-Historical and Natural Region of Kotor**. Also the village is situated nearby the **National park Lovćen**, one of four National parks in Montenegro.

The village can be reached by a pedestrian path, approximately 2 km from the road Kotor-Cetinje That is an old Austro Hungarian road that connects two main cultural centres in Montenegro - **Kotor** World Heritage Site and **Cetinje** Old Capital of Montenegro. The village can be reached also by a hiking path that leads from the Boka Kotorska Bay. Nearby the village, within just 1 km, there is the peak Pestingrad, with one of the most attractive views of the Boka Kotorska Bay.

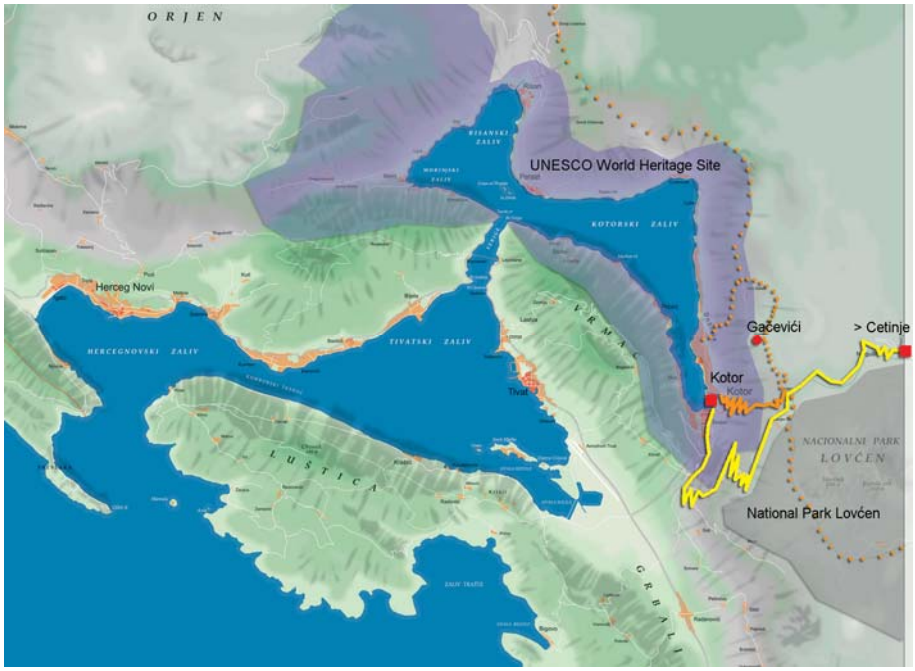

Figure 2 | The location of the site

The history of the site

The village of Gačevići

The village of Gačevići is part of the larger village of **Zalazi**. Zalazi is composed of a **chain of villages** situated in the mountains surrounding the Bay of Boka Kotorska. Zalazi consists of two villages, Veliki (big) and Mali (small) Zalazi. The two separate hamlets, Gornji (upper) and Donji (lower) Gačevići, belong to Veliki Zalazi. In the past, these two villages and hamlets formed one village with the common name Zalazi.

Zalazi was first mentioned in the **historical sources** in the 14th century. It was referred to in the charter of the Serbian emperor Dušan in 1351. As the head of the Serbian medieval state Raška, which was ruling Kotor at that time (1185-1371), Emperor Dušan bestowed Zalazi and some other neighbouring settlements to the town of Kotor. Under this name, Zalazi was mentioned in 1614 by Bolica, and later, in 1715, in the Venetian document listing refuges from Montenegro as a “comun di Zalazi”.

Due to its location, under the high mountain peaks of Montenegro surrounding the Bay of Boka Kotorska, Zalazi has always been situated, both geographically and historically, at the border between the **"Old Montenegro"** and **Boka Kotorska**.

Historically, Zalazi belonged to the territory of "Old Montenegro". This territory was divided into four *nahije* (regions). The *nahije* were composed of tribes, further divided into family clans. The family clan of Zalazi belongs to the tribe of Njeguši, one of the nine tribes of *Katunska nahija*. The Petrović ruling dynasty of Montenegro belongs to the tribe of Njeguši. The town of Cetinje, the former capital of Montenegro is situated in *Katunska nahija*. The inhabitants of *Katunska nahija* subsisted mainly on selling cattle and home-made products, while farming and hunting were practiced to a smaller degree.

Throughout the history, numerous rules and administrations succeeded each other in Boka Kotorska, beginning with the Illyrians and Romans, through Byzantium, medieval Slavic states of Duklja, Raška and numerous local rulers, to a long period of the Venetian rule (1420-1797), succeeded by that of Austro-Hungary (1797-1918). All these civilizations left indelible marks on this territory.

Although Zalazi was part of the territory of Old Montenegro, periodically it fell under the rule of Kotor (1351-1371). The two territories (Montenegro and Boka Kotorska) had been first united under the Temporary Government of Montenegro and Boka Kotorska – called the "Central Commission" (1813-1814), and again, following 1918, when they first became part of the Kingdom of Serbia, Croatia and Slovenia, then the Socialist Federal Republic of Yugoslavia, and finally, since 2006, part of Montenegro.

Figure 3 | The village of Gačevići

According to the tradition, the people of Zalazi, including **Gačevići**, have inhabited this area since the "earliest times". *They know and claim that they all originate from one family and that they are the oldest and the only inhabitants of the village. Their most distant ancestors that they know of are three brothers named Rs (Hrs), Drug and Gač.*

At the beginning of the 20th century, about 13 "houses" i.e. families were recorded in Gornji and Donji Gačevići: *Dančulović (2 "houses"), Kapetanović (5 "houses"), Lukrecija (2 "houses") and Proroković (4 "houses")*. In the mid 20th century, Gornji Gačevići was inhabited by Kapetanović, Padalica and Popović families. The Popovićs had settled in Gačevići at the turn of the 19th century.

All the villages in Zalazi are connected by footpaths. At the end of the 19th century, during the Austro-Hungarian rule in the Boka Kotorska, the construction of a macadam road started, which was designed to lead from Kotor-Cetinje road to Mali Zalazi and to connect it further with the network of roads built by Austria around Boka Kotorska, since in this zone there was a south border of the great Austro-Hungarian Empire. Although the macadam road was never completed, it went above the village of Gačevići and almost reached Veliki Zalazi.

After the Second World War, people living in the village started moving to urban areas, mostly to Kotor, and the village became completely abandoned around 1960.

The description of the site

The village of Gornji Gačevići is situated at 970 m above sea level, on the sloping rocky terrain. Below the village passes the old dirt road that links Krstac and Mali Zalazi, while the Austro-Hungarian macadam road passes above the village, at the height of 1000 m. The village is connected with these two roads by footpaths.

The village of Gornji Gačevići consists of **three groups of buildings (ensembles)**, containing about 10 houses. The Popović ensemble has two houses and is situated at the very entrance to the village, on the south, by the side of the old dirt road. From the Popović ensemble, a footpath leads north, to other two ensembles. The path comes to the Kapetanović-Padalica ensemble, which has four houses, and leads on to the Kapetanović ensemble, which ends with an old village "*gumno*" (threshing floor).

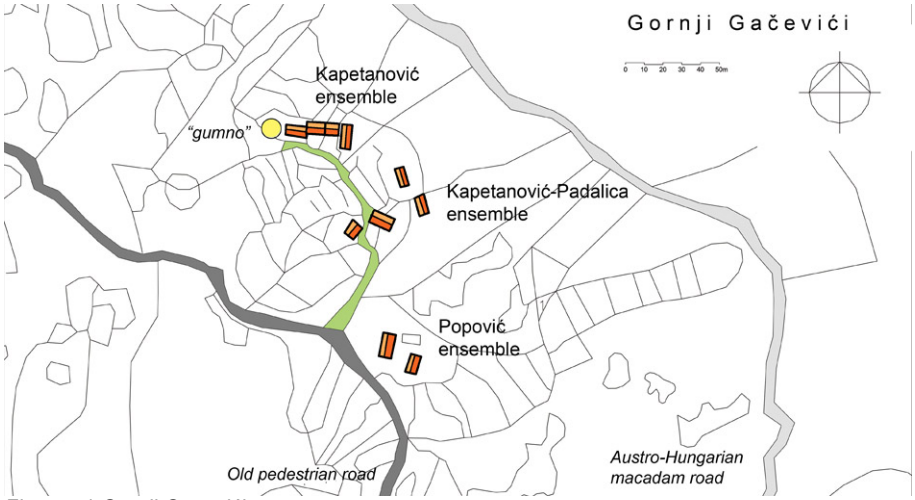

Figure 4 | Gornji Gačevići

Gumno is a circular area fenced by a stone wall and paved with stone plates, which was used for threshing grain, mostly wheat and rye. The stone wall is usually 40 cm high and also serves as a bench. As one of the most important common and open areas in the village, *gumno* had an important social and public role. Namely, it was used as a gathering place and the place for all important social events. *Gumno* was regarded as a common property although it was built by individual family clans or wealthier families.
"For the households of the Katunska nahija, gumno has always been indispensable, and in some ways, it has been regarded as a matter of prestige. Not everybody could afford to build it."[1]

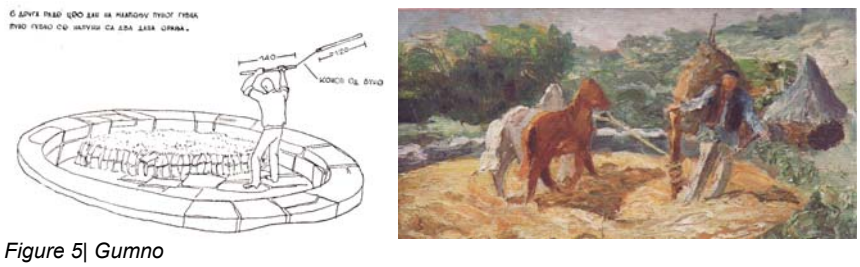

Figure 5| Gumno

[1] Tanja Vujović, Lovćenski katuni, 1997, 58

The ensemble of Kapetanović is situated on the sloping rocky terrain, bordering the arable land. The ensemble is oriented into an east-west disposition. The houses with enclosed courtyards give onto the village footpath. The plowed fields are usually situated below the footpath, while some smaller dales are scattered around the houses.

The ensemble has four houses. The central part of the ensemble consists of a row of three connected houses. The last house in the row, i.e. the western one, projects out. These three houses have elongated, rectangular ground plans, with the longer sides in parallel with the contour line. The fourth house is situated on the eastern side of the ensemble. Among the four houses, only this one has a diagonal position in relation to the terrain. The fronts of the houses that overview the arable fields face the south. On the north, towards the hill, the houses are dug into the ground, and their north walls rest directly on the rocks.

All the four houses are typical Montenegrin traditional houses; they are ground-floor houses, with a loft that was used for different purposes. Only the eastern house in the central raw has two floors – the ground (*konoba*) and the first one. A house "with a konoba" is also one of the typical forms of traditional houses, but it does not occur in Zalazi and Gačevići, which makes this house an exception.

The houses have front courtyards enclosed with stone walls. Only the house on the west, situated nearest to the *gumno*, has a raised plateau in front, which leads to the *gumno*.

Figure 6 |The ensemble of Kapetanovic

The chronology

The house on the east, laid diagonally in relation to the terrain is probably the oldest one. Then, the two central houses that are connected in the row were built. Although it has not been established for certain, they were probably built at the same time. On the western side, the youngest house is situated. Only for this house, we know the approximate period of the construction, i.e. around 1936.

The supposed chronology is confirmed by the following parameters: the thickness of the walls, the portion of the houses that is dug into the ground and number of openings on the houses. The oldest house is dug into the ground to the largest extent; it has only ¼ of the façade free, the walls are about 130 cm thick, built using the largest stone blocks and it is without windows. Two younger houses are dug into the ground on two sides, but since they are connected in the row, they have only one free façade. Their walls are 100 cm thick and have one window each. The youngest house is dug into the ground only on one side, while its three sides are free. Its walls are 80 cm thick, and in all probability, it had two windows.

The oldest houses were dug into the ground to the largest extent in order to use maximally the advantages of the location and to reduce as much as possible the work needed for their construction.

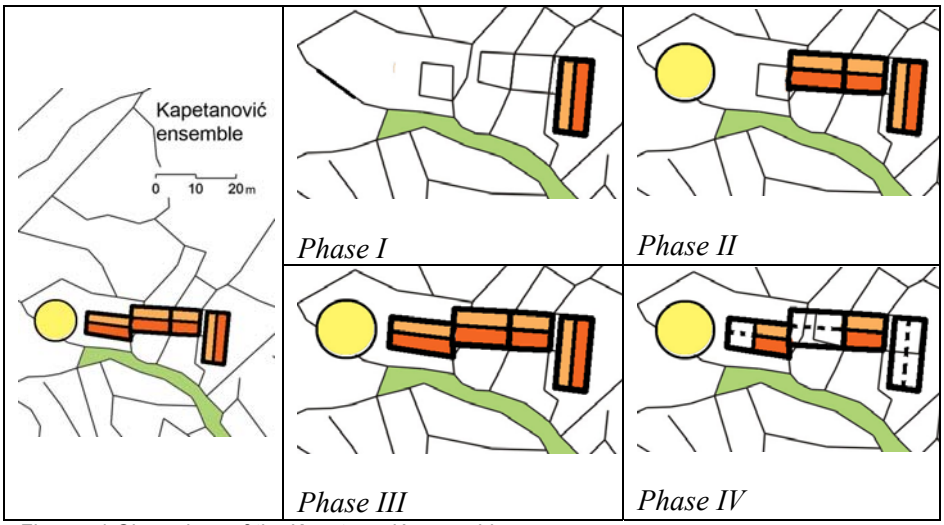

Figure 7 | Chronology of the Kapetanović ensamble

The topics of this work are two houses situated on the western side of the **Kapetanović ensemble**, closest to the village *gumno*.

These two houses have been selected because of the ownership reasons. However, in order to approach them in the right way, both through analyzing them and proposing the solutions, it is necessary to consider the whole ensemble of Kapetanović, as well as the hamlet of Gornji Gačevići.

In the further text, these two houses will be referred to as the **older and newer** one. The newer one is situated closer to the *"gumno"*, on the west side. The older one is on the east side.

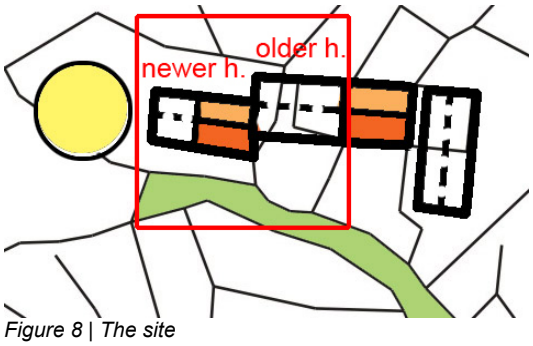

Figure 8 | The site

On the south side, the older house has the front courtyard enclosed with high stone wall. The newer house leans on the western wall of the courtyard. In front of the newer house is a terrace supported by a stone wall. The terrace was used as a courtyard, but it also had a public character to some extent since it lay on the footpath leading to the *gumno*.

Both houses have rectangular ground plans, with the longer sides in parallel with the landscape slope. Both are ground-floor houses, with a loft that was used for different purposes and a gable roof.

The inner dimensions of the older house are 4,2 x 8,9 m and the wall is 100 cm thick. The house is dug into the ground on two sides, while the natural rock serves as the western wall of the house. On the front, facing the courtyard, there is a door occupying approximately central position and a window on the east side. On the western gable wall, at the loft level, there is a door by which the loft is accessed from the outside.

The inner dimensions of the newer house are 4,0 x 8,2 m and wall is 80 cm thick. The house is completely dug into the ground on the rear side, while the lateral walls are only partly dug, to the half of their height. In the northeastern corner of the house, the natural rock serves as the wall. The newer house has undergone transformation over the time. Originally, it used to have a centrally positioned door, flanked by two windows. During later building interventions and due to the demolition of the western part of the house, these openings have been transformed and today, only a door can be found.

Figure 9 | The site – the older and the newer house

The function

Both houses belong to one family. In the beginning, the older house had been used for living until 1936 when the new house was built. From that time on, the new house was used for living, while the older one became a stable.

The inner space was organized in a way typical of a traditional Montenegrin house. Although the interior was not physically divided it had two distinctive functional areas: a hearth area, which was used as a kitchen and a dormitory area. Later on, these areas were partitioned in order to obtain two rooms: a kitchen with a heath and a *kamara*, i.e. bedroom. The loft was used for storing seasonal tools or conserved surplus food.

"Originally, the interior consisted only of one room supplied with suitable furniture. The area intended for sitting had a heath, pepeljak (for baking bread), chairs, table, dishes for preparing food and dishes for keeping raw food. The rest of the room served as a dormitory and, besides simple beds, it had wooden or metal racks on the walls for hanging clothes and keeping other items. As a kind of wardrobe there were simple chests or improvised open shelves of simple make."[2]

Figure 10| The interior of the newer house with the open fireplace

[2] Tanja Vujović, Lovćenski katuni, 1997, 57

Materials and techniques

The houses were constructed of local stone, without mortar, using dry stone method. In the traditional architecture, dry stone walls were used for the construction of houses, accessory buildings, boundary walls, supporting walls and terraces. The dry stone walls usually have three rows: two parallel rows of stone, i.e. outer and inner faces of the wall, composed of cut stone, and the space between them filled with smaller stones. Both rows are built up at the same time and the space between them filled with smaller stones. At intervals, large tie-stones are placed in order to span both faces of the wall. Stone block used for the faces of the walls are roughly cut, while for the openings and at the corners larger, finely hewn stones are used.

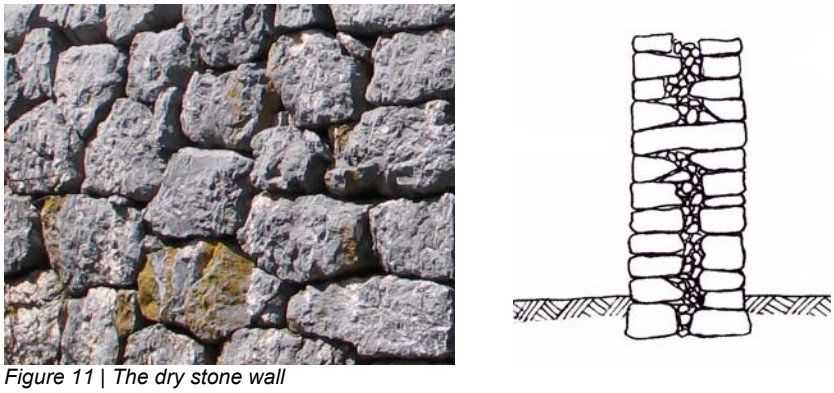

Figure 11 | The dry stone wall

The ceiling above the ground floor was made of wooden beams and covered with wooden planks. The remains of this construction are still visible. The older house is roofless now. Based on old photographs and existing documentation about traditional houses in this region, it is evident that this house used to be covered with straw (rye).

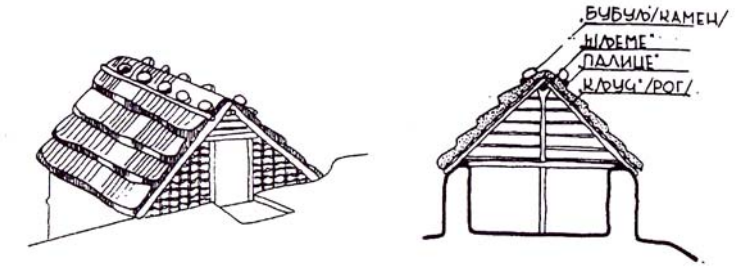

Figure 12| Scheme for roof covered with the rye

The newer house was also built using dry stone method. During the later interventions, grouts on the walls were filled with mortar. This was done in order to improve insulation characteristics of the walls and reduce the penetration of wind and moisture. The ceiling that divides the ground and first floors is made of wooden beams and covered with wooden planks. The house has a wooden roof construction, covered with ceramic tiles. The inner walls are whitewashed with lime. The existing door is a new one, made of metal and it replaced the older wooden door.

Current condition

The site is currently in very bad condition. The older has been without roof for decades, the wooded ceiling collapsed and only the walls remained.
The western part of the newer house fell down in 1980s. In the same period, the eastern part of the house was reconstructed. During the reconstruction, some inadequate interventions were done on that part of the house, such as a concrete door lintel, a metal door that replaced the old wooden one.
The site and the village in general have not been maintained and today they are overgrown with vegetation. The stone walls of now roofless houses, boundary walls and supporting walls, being exposed to the weather, rain and snow which occasionally falls in winter, are collapsing at a rapid pace. At the same time, vegetation influences the rapid disintegration of the stone walls.

Figure 13 | Deterioration of the site

Analysis

The values of the site

Values are not natural atributes of the things, they are social categories - the result of human thought defined in a cultural conext. Values do not exixt per se, they are always relative atributes of the things, and depend on the process of realizing comparisons or relationships between things.[3]

Evaluation must consider **all different actors and social groups - stakeholders,** which are connected with the heritage site. So, values must be seen not just from professional, experts point of view, but also from the point of those that are directly connected to site (local community) and those that will maybe use the site in future (visitors, managers…). Process of evaluation must always be seen at the same time and at **different levels**, **local as well as regional or national**.

The evaluation process for the site in Gačevići village has been done through the different levels and for the different social groups.

3 Jukka Jokilehto and Silvio Mendes Yancheti, Values and Urban Conservation Planning: Some Reflections on Principles and Definitions

Values / Level	personal	expert	tourists / visitors	Local		National
				l. community	l.government	
CULTURAL						
historical	+			+		
architectural		+				
ambiental			+	+		
ethnological			+	+		
crafts		+		+		
USE or SOCIO-ECONOMIC						
functional	+			+	+	
social					+	
educational		+	+		+	+
touristic			+		+	+
EMOTIONAL						
identity	+			+		
continuity	+			+		
.....						

Figure 14 | The matrix for the valorisation of the site

An historic building has architectural, aesthetic, historic, documentary, archaeological, economic, social and even political and spiritual or symbolic values, but the first impact is always emotional, for it is a symbol of our cultural identity and continuity - a part of our heritage.[4]

A special architectural value of the ensemble in Gačevići is that the older house, constructed using dry stone method, represents a typical example of the Montenegrin traditional house, enhanced further by the fact that it that has kept its most important characteristics despite its ruined state.

"When one says an "old Montenegrin village house", it usually means a small, one-room, ground-floor house built of roughly cut stones using dry stone method, usually built on a rock, with gable roof covered with stone plates or rye straw, without a chimney, with one small window and a low main door. Besides by means of a door and a window (in some cases non-existent), the interior of such a house is lighted up and heated by an open heath around which, on the stone paved or earthen floor, the meager furniture is arranged, while the attic is used for storing seasonal tools or conserved food surplus. In the past, one part of the house, divided by a transparent partition was used for cattle. Later, such houses were used solely for human habitation, while cattle was kept in separate building such as stables, sheds, enclosures, etc."[5]

Risk assessment

At this moment the site is in a bad condition caused by different kinds of influences and under the different threats.

Natural Threats

- Climatic factors (rain , wind, snow)
- Decay of materials (especially rye and wooden elements)

4 Bernard M. Feilden, Conservation of Historic Buildings

5 Tanja Vujović, Prilog tipologizaciji crnogorske tradicionalne arhitekture, 2000, 122

Lack of usage and maintenance
- Degradation of the site
- Vegetation growth

Structural destabilization
- Structural failure – deformations, collapse
- Loss of material, detachment

Development
- Abandonment of rural areas due to urbanization
- Loss of traditional crafts and techniques

Lack of administration and legislation
- Inadequate institutional support for protection of rural heritage
- Poor integration of heritage into development plans

Resources
- Lack of restoration skills for dry stone walls and for rye roof
- Lack of financial sources for maintenance and repair

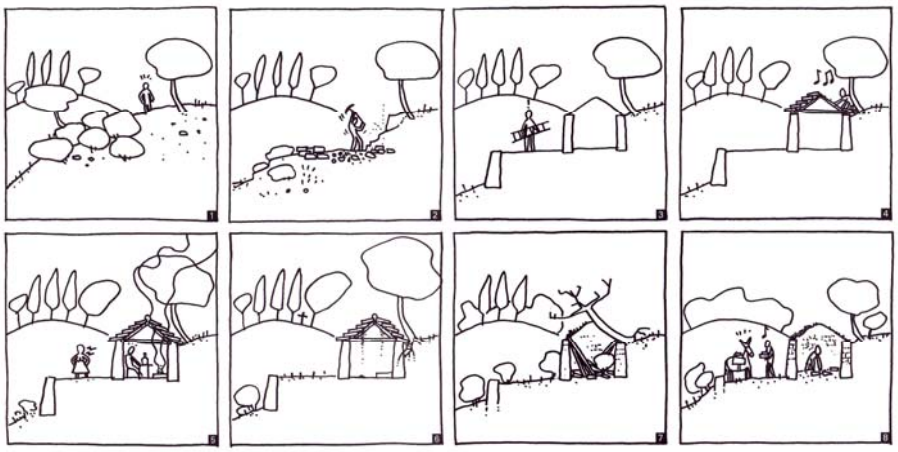

Figure 15| The "life circle" of a stone house in carst areas

SWOT analysis

Strengths
- Ambiental, architectural and other values of the site
- Good location - nearby the protected areas - UNESCO World Heritage Site and National park
- Hiking paths that are passing nearby

Weaknesses
- Abandonment of the village
- Degradation of the site
- Lack of maintenance and usage
- Vegetation growth
- Not direct connection with the road
- Lack of the infrastructure (water, electricity)
- Forgotten traditional crafts

Opportunities
- Trends in the tourist market - rural and eco tourism
- Trends in the activities related to hiking, free climbing
- International practices and guidelines, especially related to rural heritage and cultural landscape

Treats
- Uncontrolled development of the surrounding areas, including especially coastal region

- Trends of inappropriate construction in the rural areas
- Lack of awareness of local authorities for the proper valorization of rural heritage

Figure 16 | Threat - inappropriate construction in the surrounding, and opportunity – hiking paths nearby the site

Proposal

Conservation philosophy

In the restoration process of built heritage it usually necessary to meet conservation requirements and at the same time requirements for contemporary use of the site – including additions for modern facilities. It look like that that those two approach are in conflict, but that is actually not necessary.

Since the site consists of two units i.e. houses (old and newer) with specific features, different conservation measures for them are proposed: the restoration of the older house with the dry stone walls and the straw (rye) roof and the reconstruction of the newer house that has been modified in recent period.

The **restoration** of the old house needs to be done.

Restoration means returning the existing fabric of a place to a known earlier state by removing accretions or by ***reassembling existing components without the introduction of new material****.*[6]

The old house has traditional **dry stone walls**, which need to be kept. Even if it is roofless now, it used to be covered with **the straw (rye)** which will be restored. By analyzing examples of other houses of the same type, we can obtain information about other elements that cannot be found on the house any more – roof construction, doors, windows, pavement, plastering. Traditional materials (stone, wood, rye, lime…) must be used, as well as traditional building techniques. The interior and its decoration should be kept in its original form as much as possible.

The new house should be **reconstructed**

Reconstruction is appropriate only where a ***place is incomplete through damage or alteration****, and only* ***where there is sufficient evidence to reproduce an earlier state*** *of the fabric. Reconstruction means returning a place to a known earlier state and is distinguished from restoration by the introduction of* ***new material into the fabric****.*[7]

There has been the modification in this new house during the time, and north part of the house is demolished. The proposal for the appropriate reconstruction should be defined after all necessary more detailed analyses.

6 The Burra Charter, The Australia ICOMOS Charter for Places of Cultural Significance

7 The Burra Charter

In order make **adaptation** of the site **to suit the possible new functions** specific interventions must be implemented:

- The water supply system (traditional cistern for collection of rain water)
- Toilet (inside or outside the houses)
- Solution for electricity

Beside that safety requirements needs to be taken into account, as well as energy efficiency needs.

Vision of a development of the site and goals

Vision – The site in Gacevici that is restored through the restoration work camps, first example of authentic restoration of traditional dry wall stone house with ray roof in Montenegro; the site that is in use- for the workshops and facilities for hikers and climbers; the site that is maintainaned and that is sustainable (*održavanje – održivost*)

Goals

- Restoration of the site (prevention of future degradation)
- Revitalisation (usage) of the site
- Maintenance of the site
- Sustainability – sustainable development - of the site

Models for appropriate use

Following all necessary analyzes (architectural as well as stakeholders, risk, SWOT), and taking into account conservation requirements few possible models for appropriate use are recognised:

- Site could have a **touristic** purpose - bread and breakfast, rural tourism and sport tourism (hikers and climbers), and this can be important element for its sustainability
- Site could be used for smaller scale **workshops, seminars**, of EXPEDITIO and other partner nongovernmental organizations
- Site could be used as a pilot project - place for **restoration work camps** of traditional stone house by using traditional materials and crafts (dry stone walls, straw roofs, lime, …)

These three different approaches (models) are not in conflict, and they can very easy overlap at the same place. The approach with the **multifunctional** use can be very important for the sustainability of the site.

Figure 17 | Restoration work camps, that EXPEDITIO already organised

Special emphasis is placed on the last issue, i.e. **restoration work camps**. So far, in Montenegro, we have not had any example of the restoration of a traditional stone house using dry stone technique. The problem is that the

traditional dry stone method is not used in the construction of houses. It is mainly used for building supporting walls and boundary walls. In addition, the traditional technique of roofing houses with straw is almost completely forgotten. Only a small number of houses roofed in that way can be found in Montenegro, but they are decaying at a rapid pace because they have not been maintained. Only some older people are familiar with these techniques.

The idea is to use the house in Gačevići as a testing ground, i.e. a pilot-project for the restoration of a traditional stone house using dry stone and other traditional techniques and materials and through organizing a restoration work camp. Thorough the restoration work camp it will be possible to transfer knowledge about dry stone techniques and methods of roofing houses with rye straw, to those who are interested in this topic.

This project could serve as a pilot-project for other similar examples.

Activities

Due to the fact that the project is complex, it should be implemented **in the phases**, step by step. In the first phase some of the following activities will be implemented:

	Completing of the final design – complete conservation project for the older house of the site
	Assessment of possibilities for attracting investments – **fundraising** for the restoration work camps
	Preparation of the ray for the roof (grooving, harvest, ...)
	Organisation of the **first restoration work camp** on the older house with the topic – roof covering with the rye
	Preparation and printing of the **booklet** about traditional crafts – covering of the roof with the rye
	Analyzes, consultations, workshop in which the **restoration solution for the newer house** will be defined, paying special attention to ecological, bioclimatic and energy-efficacy factors; elaboration of the final design
	Organisation of the second restoration work camp on the newer house – with the topic dry stone wall
	Preparation and printing of the booklet about traditional crafts – building the dry stone wall
	Using of the site
	Development of the **Management plan**
	Necesary **conservation works**, in phases
	Development of **maintenance program and plan**
	Management and the maintenance
	Monitoring and review

All activities related to the usage, maintenance and management of the site, are very important for the protection and the development of the site but they will not be considered in the frame of this project.

Activity	**Timeline | year**					**Responsibility**
	1	**2**	**3**	**4**	**5**	
Completing of the final design – complete conservation project for the older house of the site						A.Kapetanović

Assessment of possibilities for attracting investments – **fundraising** for the restoration work camps						EXPEDITIO
Preparation of the ray for the roof (grooving, harvest, ...)						A.Kapetanović, with the collaborators
Organisation of the **first restoration work camp** on the older house with the topic – roof covering with the rye						EXPEDITIO
Preparation and printing of the **booklet** about traditional crafts – covering of the roof with the rye						A.Kapetanović, EXPEDITIO
Analyzes, consultations, workshop in which the **restoration solution for the newer house** will be defined, paying special attention to ecological, bioclimatic and energy-efficacy factors; elaboration of the final design						EXPEDITIO, and students of architecture
Organisation of the second restoration work camp on the newer house – with the topic dry stone wall						A.Kapetanović, EXPEDITIO
Preparation and printing of the booklet about traditional crafts – building the dry stone wall						A.Kapetanović, EXPEDITIO
Using of the site						EXPEDITIO and others....
.....						

Method

The Process

Special emphasis in the project is placed on the possibility to develop the model (scheme) for the integrated conservation and development process, applicable especially on the traditional rural houses. That scheme is also following that scheme during the work.

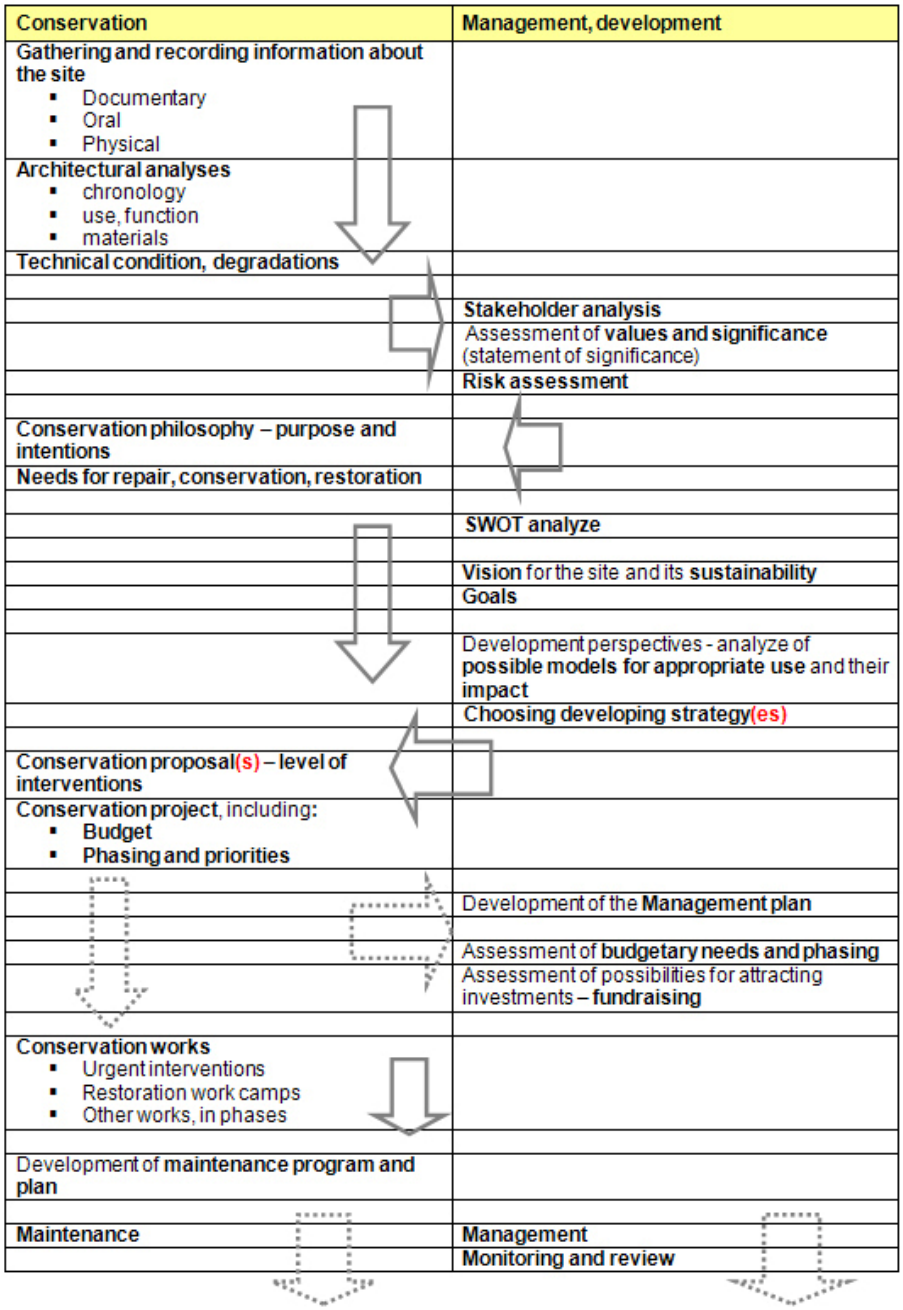

Figure 18 | Scheme for the integrated conservation and development process

Results/Current Status of the Work

Existing information

Existing information were scarce, so far villages and traditional house in this area of Montenegro have not been researched from the architectonic point of view. Considering the fieldwork only partly architectural survey has been conducted.

Fieldwork conducted

Field work

- Fieldwork on the site was done, including:
  - cleaning of the vegetation
  - architectural survey of the village and

  - architectural survey of the site
- Visit to another village in the Lovcen, where there is the house which still have straw roofs

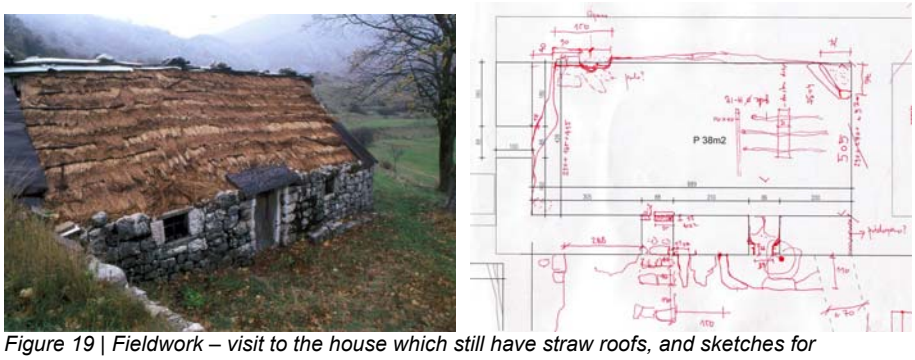

Figure 19 | Fieldwork – visit to the house which still have straw roofs, and sketches for architectural survey

Gathering of information about the site

Documentary information

- Existing literature was collected, related to:
  - the historical and cultural facts and development of the area
  - traditional Montenegrin architecture
- Cadastre plan of the village was found in the Governmental Agency for real estates
- Some old photographs, from those who use to live in the village, were found
- Some articles from newspaper, and other documents related to inhabitants of the village

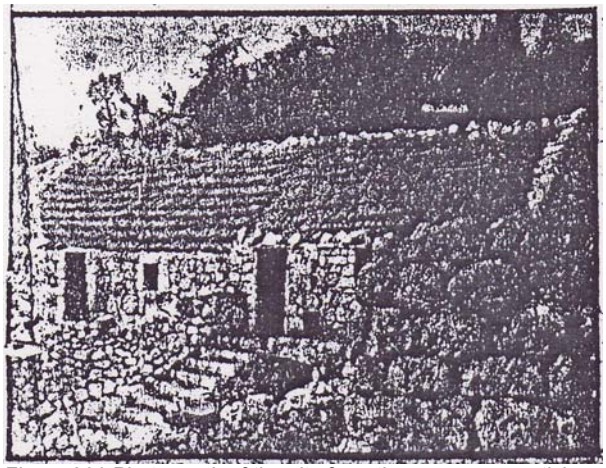

Figure 20 | Photograph of the site from the newspaper article

Oral

Interviews with the people who use to live in the village are done, especially with the relatives, father and uncle Drago. Also interviews with people about the traditional techniques (dry stone walls, and ray roof) are done.

Architectural survey

- The draft plan of the village, after on site survey and on the basis of the cadastre plan, was done
- The architectural survey of the site is completed, including neighbouring houses, courtyards and gumno
- The updated architectural survey of the houses is completed

Discussion & Conclusions

The process of revitalisation and restoration of the site in the village of Gačevići is started with this project.

The **research** work that was done for the project, including gathering of all related information and fieldworks, is very important because **new information** considering the village of Gačevići were found for the first time. The plan is to publish the results of this work in a special publication dealing with the history and culture of Boka Kotorska bay. On that way aware ace about the rural architecture of this area will be enhanced.

Even if the topic of the work is the site that consist from two houses, it was important to consider it in the wider **context**, the whole village of Gačevići and the cultural landscape.

Maintenance of **traditional crafts** is very important for the process of protection of built heritage and for keeping heritage authenticity. It is crucial especially when we are dealing with the rural heritage. The education about the traditional craft techniques and skills is especially important nowadays, because this knowledge is threatened. The experience with the **restoration work camps** show that it is good way for keeping and transferring the knowledge about the traditional crafts. So far, in Montenegro, we have not had any example of the restoration of a traditional stone house with dry stone walls and rye roof. The idea is to use the house in Gačevići as a **testing ground, i.e. a pilot-project** for the restoration of a traditional stone house using dry stone and other traditional techniques and materials and through organizing a restoration work camp. Thorough the restoration work camp, and afterwards through publishing the booklet, it will be possible to transfer knowledge about dry stone techniques and methods of roofing houses with rye straw.

Due to the fact that the project is complex, the **implementation** need to be done **in the phases**, step by step. First those activities related to the restoration of older house, and then those others related with the requirements for contemporary use of the site – including additions for modern facilities in newer house.

The next topic that will be elaborated is **restoration and energy efficiency** with the special emphasis on the rural architecture. One workshop with that topic, related to find best solution for the specific site in Gačevići, is plan to be organise.

The **sustainability** of the site it will not be easy to achieve, but that is the vision that we are trying to approach.

Figure 21| First flowers in Gačevići after the winter...

References

Vujović, Tanja

2000 Prilog tipologizaciji crnogorske tradicionalne arhitekture, Zbornik radova sa naučnog skupa "Tradicionalna narodna kultura u Crnoj Gori" (naučni skupovi, knj. 54, Odjeljenje društvenih nauka, knj. 24), CANU, Podgorica

Vujović, Tanja

1997 Lovćenski katuni, Simpozijum "Seoski dani Sretena Vukosavljevića" XIX, Prijepolje

Kovijanić, Risto

1963 Pomeni crnogorskih plemena u kotorskim spomenicima (14-15 vijek), knj. I, Cetine

Vuksanović, Dušan

1998 Tradicionalna arhitektura Crne Gore i bioklimatizam, Beograd

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EXPEDITIO

2005 Godinje - arhitektonska radionica, Kotor

EXPEDITIO

2006 Vrata u tradicionalnoj arhitekturi Boke Kotorske i njihova restauracija, Kotor