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Reconstruction of the Šoster's Watermill on the Roški Waterfall

On a particular example of one out of the six watermills operating in the mid 20th century on the Roški waterfall, the author explains the complexity of ethnographical reconstruction of a cultural heritage monument within the national park area. Apart from the basic requirement of the watermill retaining its original form and purpose, as much as it is possible, the reconstruction often demands a compromise which is not avoidable. In the technological sense this means applying new materials and tools, new techniques, while the tourist aspect requires adjustment of space for a museum presentation to a large group of visitors.

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There had been six operating water mills on the Roški waterfall until the 1960s, which since that time had been slowly shutting down, one by one. The reason for that was that more people had started to work in the public sector, abandoning a tradition of growing crops, such as corn, barley and wheat. Now days the wheat for baking bread is bought in the stores, and small amounts which are being produced at the fast electric mills serve as livestock food.

The last watermill in the set (looking in the direction of the water flow), or the first watermill closest to the water (lake), under the waterfall and next to the dock where the tourist boats arrive, was the so called 'friars' mill', the mill in the ownership of the Visovac monastery. Other water mills had been privately owned by several families from Miljevac. Some of the mills had been damaged in terms of their original construction during their functioning time, and some had started to deteriorate after they had been shut down, which is usually the case.

The Roški waterfall is a part of the Krka National Park since its founding in 1984. Ever since its establishment, and in accordance with legal obligations imposed on national and nature parks, the Public Institution of the Krka National Park cares for its cultural heritage as well the natural water phenomenon. Several water mills have

been reconstructed at the Krka waterfalls (also known as Skradinski buk), which now serve as a museum and a cafe/restaurant for tourists. A contract was signed with the Franciscan monastery of the Lady of Mercy (Gospe od Milosti) in Visovac, in 2001, according to which the Park got the temporary concession for the mill at the Roški waterfall, which is now being reconstructed. All four milling wheels are being reconstructed, while the rooms are being redecorated to serve as tourist premises such as souvenir shop, a cafe and a weaving workshop.

Several years ago the Park bought a rather ruined water mill from the Šoster family, which stands next to the reconstructed friars' mill. The Park management insisted to reconstruct the Šoster water mill in accordance with the conservationist practice, and avoid previous mistakes in reconstruction and presentation, which have been pointed to them by ethnologists.

Condition of the watermill before reconstruction

The current construction of the Šoster water mill consists of three functional buildings, built in stone and leaning on each other. The western construction is also a housing of the milling device ('mlinica' – also a name for the whole building housing a mill), with four milling drives. Rustic stone stairs used to lead from the main room to the kitchen, the room with the fireplace, where the food had been cooked and served, and where people had gathered around the fire in the cold weather. The kitchen had been used by the miller and the people who had waited for milling, which had sometimes lasted several days. The kitchen door had lead to the north side of the mill, which enabled controlling water bolts on the grooves, and to the miller's room on the first floor of the middle building. The ground floor of the middle (and the tallest) building had served as livestock barn, for horses and donkeys of the people who waited for milling. Above the miller's room there was a high attic room, used for storing various spare parts of the mill. In the eastern and the smallest building there was a basket for twirling linen.

The condition of the western construction (the mill) in 2006 (when the reconstruction was in the pipeline) was poor; it had no roof or ceiling, the stone walls had cracks, while the western wall had to be provided with support in order not to collapse. Remains of the stone roofing had been preserved on the canopy, and the four mill housings had been discovered during the clearing of the construction. The middle building with the barn in the ground floor and the miller's room upstairs had been the only preserved integrated set of the whole mill construction. The one-piece wood window lids as well as some wood shelves (*škancija*) had been also preserved.

As for the low eastern building with the single canopy roofing, only the half meter tall stone walls had been preserved.

Reconstruction program

The objective of the Krka National Park Management is to reconstruct the water mill in a way which will enable it to serve its new, tourist purpose, while at the same time implementing the conservation principles of the cultural heritage reconstruction. For that purpose an informal Working Group of professionals had been formed: Ms Nataša Zaninović, archeologist and a Park employee, Mr Zdravko Živković, BArch and a conservationist, and Ms Manja Horvat, ethnologist and a conservationist. The approach of this group was to reconstruct the building following as closely as possible its original construction, and to furnish rooms with original furniture and tools in order to recreate a miller's life and work in the old times. As this alone would not be enough to attract tourists, the Working Group recommended that the rooms at the mill serve as an exhibition display which should not repeat already existing presentations of the Krka waterfalls (Skradinski buk) and the Roški waterfall. One of the suggestions was to present the culinary heritage of this region. Daily cuisine of the region would be displayed in the kitchen, and the festive cuisine in the miller's room. A scene from the farm life which concerned food production could be displayed on the ground floor of the middle building (wine making, cheese, olive oil production).

It was necessary to collect data on the original appearance of each room as well as of the construction as a unit. No technical or photographic documentation had been kept from the operational period of the mill. All information which had been available on the site was documented for reconstruction and preservation purposes. Information gaps were filled by a witness (teller), Mr. Željko Šoster from Miljevci, who had spent some time at the mill as boy, with his father who was a miller, in the 1960s. These two sources of information were sufficient to successfully reconstruct the mill building.

Explaining the whole reconstruction project in this paper would be dull and unnecessary, so only the relevant information in regards to the mill reconstruction will be introduced, such as conservational doubts, necessary compromises, etc.

In the western building of the water mill the canopy and some adjoining stone roofing have been preserved, which means that this water mill is unique by its stone roofing in the Krka waterfall (Skradinski buk) and the Roški waterfall area. Four housings of the milling devices have been uncovered during the clearing of the construction, and have been subsequently documented, the actual milling devices have been long gone.

The stone walls of this building had been completely preserved, however, with many cracks and sloped, therefore needed replacement. The same stone was used to produce the copy of the wall, with certain technical improvements. One of the doubts was certainly to what extent and number should the milling mechanisms be recreated – whether to reconstruct all four of them, as it had been done at the friars mill, standing only a few meters away with a display for visitors – an operating water mill like in the old days. Considering the price of such reconstruction, it had been decided to completely reconstruct two milling drives, and for the other two to reconstruct only the housings. This way a full impression of an operating water mill will be possible,

while the two housings could serve as an information desk for visitors. The former stone set of stairs which had led from the ground floor upstairs to the kitchen and the miller's room had been over the time replaced by concrete stairs. It had been decided to return the stone stairway, but the width of the grating is too small according to the technical requirements of the Work and Safety procedures. As we wanted to keep the stairway as close to the original as possible, and it being a cultural heritage, a request has been sent to the Ministry of economy, work and entrepreneurship to make an exception to the rule. The whole atmosphere of the place has been recreated by special stone surfacing of the floor and mill housings.

Seemingly small, but from a conservationist point of view a big success was getting the poplar logs for ceiling beams and the roofing ('roženice'), which had traditionally been used in this region, around the Krka and Čikola rivers. Wooden boards 3, 5 cm thick have been used for the flooring, respecting the tradition, although such measures are different from today's standards. The poplar beams have been mounted by using mostly poplar branches. An old stone plate with patina, taken from an old kitchen was used for the roofing.

A fire place (*komin*) was recreated in the kitchen, and above it, on the southern roof plate (according to the teller), the most primitive 'chimney', with only a somewhat raised roof plate. Wherever there was not enough reference on original appearance of a particular detail which was being reconstructed, the existing knowledge of traditional water mill building of the region was used, as the Roški waterfall mill itself belonged to this tradition.

As far as the middle, barn building was concerned, with the miller's room upstairs and a high attic room, the conservationists did not have many doubts as the building had been preserved in its whole volume. The cracks in the walls were filled by injections, additional re-walling to some extent, and filling of gaps on the inside and outside walls. Old ceiling beams were replaced by the new ones the same way it was done in the mill building. The existing rutted-brick roof, dating from the World War 2 period, was replaced by the hollow (rounded) brick, typical for the Mediterranean buildings. The high attic of the middle building (above the miller's room) served as storage of the spare parts of the milling mechanisms. As this area had not been used on daily basis, the ladder had been placed through the hole on the miller's room ceiling. Its new function (as a staff room and similar purposes) required normal vertical movement. Several versions of traditional stairways (*skale*) have been suggested, but due to the miscomprehension between the contractor, the monitoring and the executing parties, the chosen version is unsatisfactory. However, this omission can be corrected.

The eastern, smallest and most damaged building, housing a stamping mill (*stupa*) has also been reconstructed. The preserved parts of the wall and remains of the roof on the middle building on which it had been leaning were the only, but sufficient elements for its reconstruction.

At reconstructing this sort of buildings it is very important to pay attention to the doors, windows, protective iron bars in the windows, iron bands, etc. These elements

have been reconstructed according to the available samples of old doors and windows. Some compromises had to be made, but to a small extent only. The reconstruction of interior walls was also important, considering that the facility had been out of use for over forty years it was difficult to see the original wall texture. Other watermills have been used for comparison, where the interiors of the mills had stone walls with gaps filled with chalky mortar, and rubbing of cement in wide strokes, the same way it was done with outer walls. The only painted room was the miller's, in one layer with a mason spoon (*mistrija*), with visible flows in the wall. Since there were stones everywhere, as the most common and available material, people got bored with it, and wanted to at least paint the interiors of the house, which was also part of the tradition.

Interior furnishing

As the lower mechanism of the mill is not visible to visitors, and it would be difficult to explain its function in plain words, a scheme of the milling mechanism has been placed on the wall. A typical for the Krka region stone bench standing by the wall across from the mills (left from the door) was also reconstructed. It had served as a sitting bench but also as a place to manipulate the wheat sacks, as it was easier to lift them on the shoulder from a 50 cm height. The kitchen is furnished with traditional furniture and fireplace tools, such as bread baking tools, objects for cooking, sitting, eating and similar. There is also a barn with three partitions where different sorts of flour: barley, wheat and corn used to be stored. The atmosphere of the kitchen is not complete without smoky walls and a specific smell created by the fire burning. However, it takes years to darken the walls, so this will be done using museum tricks.

Miller's room was equipped with necessary furniture – a bed, a table with chairs, a small chest for food storage, shelf for dishes, sink, mirror and a hanger.

In the former barn in the middle building, a rack has been reconstructed, as the only element which would remind of the past in the room which will serve as an exhibition space, where the farming life of the region would be on display.

It is important to note that only traditional, original objects were used in the furnishing of the mill, which has been collected in the neighboring villages, courtesy of good will on the side of Nataša Zaninović, a Park employee. This was the objects have been 'saved' from possible neglecting and getting lost for good.

In the end, and on behalf of the Working Group which was assigned this project, I feel glad with what has been achieved, with some minor omissions. There have been some repetitions and corrections. This is due to not always favorable regulations of the Public procurement law, according to which to a contract is awarded to the cheapest bidder, who meets the formal requirements, but is not always able to fulfill the obligations of reconstructing a cultural heritage facility.

Translated by Marija Kondres