

# The "green" castle: Cultural heritage revitalization challenge in the age of sustainable future.

Barbara Kulmer  
Zagreb  
e-mail: bkpegasusblue@gmail.com

Darja Radović Mahečić, Sanja Štok  
darja.mahecic@gmail.com, sanja.stok@gmail.com

## ABSTRACT

Castle Marković-Kulmer is a unique cultural landmark. Located at the historical crossroads of east and west, the medieval fort is the only city-castle redesigned in Baroque style in Slavonian middle mountain range with its floor plan conserved.

We are a group of professionals who **firmly believe** in fully restoring this castle through respecting its historical identity as well as incorporating sustainable methods and innovative design with respect to castles' new function.

This is an open project, a pilot project!

We are dedicated to our objectives:

- high-quality renovation, sustainability and concurrent functional needs
- cross-disciplinary project cooperation
- educational value recording each step of the way
- project book

Our efforts so far include:

- architectural measurement and redrawing
- preservation study
- state sponsored programs
- UNDP

## HISTORY

Castle Marković-Kulmer in Cernik, near Nova Gradiška, is a unique historical and cultural monument. This medieval fort is the only medieval city-castle redesigned in Baroque style in Slavonian middle mountain range that has had its floor plan conserved with its four wing base, four round towers and an inner courtyard.

Over time, the castle has been demolished and restored, but until today it has remained functional. This is the initial cause of our groups' formation. We commenced working together towards the goal of fully restoring this castle. The study of these phenomena raises many complex issues for both architectural history and contemporary conservation.

A few years ago the castle has been handed over from government to private property in poor condition. The castle has since been architecturally surveyed and

redrawn and from that a conservative study was produced with restoration plans. Aware that today's cultural heritage should be restored not only according to strict conservative principles, but having in mind the future life of the building in her new function as well as its importance in the local community, the objective of our group is, among other things, the promotion of energetic efficiency and controlling the energetic supply in the Cernik castle.

We would like to show through the example of Cernik, that architects, art historians, researchers, designers, economists, engineers, and other professionals as well as the general public can and should all be involved in the project with a goal to not only restore a building but also to use contemporary possibilities for an overall sustainability and future functionality.

### **The state of Croatian cultural heritage today**

**Case at point:** Castle Ratkay-Kajfež, Miljana, Croatia. Initially constructed between 1597 and 1603 by the Ratkay family and after the death of the families' last male member in 1793, the castle often changed hands. In 1980 it was finally acquired by dr. Franjo Kajfež, whose passion for preserving history resulted in full restoration of this castle. He then opened the castle to the public and initiated an exhibition space within. The Kajfež family inhabited the castle for almost three decades during which time the castle flourished as it was also the site of dr. Kajfežs' research lab. However, Mr. Kajfež passed in 2004 and his antecedents soon became well aware of much effort related to the castles' upkeep. Despite the many organized public events and activities relating to regional and castle history, the castle was placed on the market in 2006 for the asking price of 6 million Euros. It was finally sold four years later in August of 2010 for the price of 2.4 million.

**Case at point:** Castle Ottenfels, Bežanec, Croatia. Built in 17th century, the castle was initially property of the Keglević family. It too changed hands many times with its last owner currently being Mr. Siniša Križanec. While the structure itself was restored in the 18th century using classicist style, its full renovation was conducted in 1990 when the castles' current owner designed and fully financed the castles' metamorphosis into a hotel. The restoration work was, according to Mr. Križanec, done with respect to the Historic review boards' strict requirements and had anticipated various hotel program requirements within preservation limits, though expert opinions vary on the subject. As of 2008. castle Ottenfels is on sale.

**Case at point:** Summer residence Skočibuha, Šipan, Croatia. Dating back to the 15th century, the residence was built for the Skočibuha family, one of the better known Dubrovnik families. In 1992 it was purchased by the Marušić family. The residence was in extremely poor condition at the time of purchase and restoration work, financed solely by the owners, was then initiated. The renovation expert opinions in this case also varied. Two decades later the restoration is still ongoing while, yet again, the owners decided recently to put the residence up for sale. After a lengthy and arduous negotiation process with several different parties, the family decided that the castle remain in their possession after all out of, what seem to be, personal and reasons of principle.

There are over 1300 registered cultural heritage structures in Croatia today. They constitute castles, villas, townhouses, stately homes, defense posts, forts, summer residences, mansions, historic urban fabric - and they are **ROTTING AWAY!!!** No, not deteriorating, not fading, not dilapidating, not slowly diminishing in their power of presence; they are rotting! Badly damaged by dampness and mold or often finished off by the centuries of adverse weather conditions and lack of care, many of these formidable structures have even been demolished or destroyed to the point of no recognition and have thus been reduced to a pile of rubble and lost for ever.

We ask ourselves **WHY?** This is the most important question we would like to address here today. We ask you to look at the bigger picture! The issue here is sustainability, yes, but not sustainability in the mere sense of energy efficiency. Energy efficiency is what we are all trying to implement as we understand the general ecological benefits as well as an overall betterment in the quality of life of the buildings' occupant. However, energy efficiency in cultural heritage is a part of a much larger issue, and that is overall long-term sustainability of cultural heritage.

### **The 'restoration process' or how to effectively get a permanent migraine**

Anyone who has ever even attempted to restore a registered cultural heritage structure is acutely aware of the 'mission impossible' factor of this task. The fact of the matter is that a full renaissance of a specific heritage piece is a cross-disciplinary task which starts and ends with - money. As the unfortunate saying goes: 'money makes the world go round,' so does reviving a part of history take money - and a whole lot of it. This is, whether we admit it or not, one of the crucial reasons why preservation should not merely be about preserving.

The time of insanely rich individuals living in much over-sized, sometimes even gargantuan mansions for the simple pleasure of owning them is at an end - or to utter this in a different manner - there certainly are not nearly as many insanely rich individuals as there is heritage in need. What this means is that anyone contemplating a renovation of any kind must first have a sound long-term plan, a plan which includes a well thought out future function and project feasibility of the property in question. Namely, as can be noticed from the examples stated at the beginning of this paper, restoring a property to its former glory, and thereby preserving and 'freezing' a certain time period is simply **NOT ENOUGH**. Perhaps it used to be enough at some point in time, but the consumer of today is clearly not interested in merely experiencing history, especially when history can be experienced at almost every corner of the country.

The problem with having a plan of any kind, however, is the fact that ones' plan might not be in accordance with what the Historic review board has planned. This is a very common occurrence as, to put it in lay terms, one might be planning a renovation that supports a contemporary, concurrent way of life through buildings' function, while the preservationists are planning more along the lines of preserving the past **exactly** as it used to be. Hence, what one may definitively expect from the board on such occasions is a long and strict list of most-certainly-not-to-dos and a non-existent set

of anything else.

This in turn results in the most unfortunate conclusion that having a clear long-term plan is also not enough. **Heritage renaissance requires support:** city, province, public and/or governmental support in terms of incentives, financial aid, participation, barter, volunteering, state sponsored programs, provision of know-how, economic benefits, etc. In short, the task of renovating requires an entire support system that is a direct result of a **clear, long-term governmental policy program** and a **general plan strategy** for overall preservation of cultural heritage that is currently not in place. Without it, however, neither successful long-term preservation nor truly effective, energy efficient solutions can be implemented and the term that may be allotted to individuals who attempt such a comprehensive undertaking is enthusiastic crusaders at best.

Preserving cultural heritage for the long-term future is a comprehensive cooperation of many different sides who, in order for the project to come alive, must understand and respect the fact that collaboration of any kind is a compromise, a give and take of that which is negotiable and open for discussion and sometimes even that which is not. What we are suggesting here is that everyone look at the broader picture of not only how to incorporate energy efficiency into preservation of history, but rather, what stands in the way of successful preservation altogether.

## **OUR EFFORTS AND EXPERIENCE - PAST AND PRESENT**

### **Chronological order:**

09. Apr 2005	Site screening - building evaluation
Oct .2005	Estimated building value elaborate issued - court expert
11. Jul 2008	Official notification sent to Conservation Department in Slavonski Brod regarding architectural survey of the castle with the purpose of drawing up the renovation project
18. Aug 2008	Conservation Department in Slavonski Brod determined the conditions for the renovation process
20. Aug 2008	Official request sent to Ministry of culture – Conservation Department in Slavonski Brod for urgent protection funds. Funds not awarded.
11. Sep 2008	Official request sent to Ministry of Culture for Renovation funds (Program for Protection and Preservation of cultural Heritage, for Immovable cultural Heritage, year 2009.) Funds not awarded.
Aug 2008	Architectural survey initiated
Aug 2008	Geodetic surveying of buildings' reference points
02.Dec 2008	Repeated official request sent to Ministry of culture – Conservation Department in Slavonski Brod for urgent protection funds. Funds not awarded.
Apr 2009	Site screening with representatives of UNDP – Energy Efficiency Project Croatia

Jun 2009	Bill of quantities and cost estimate for the roof renovation
Jul 2009	Conservation Study Supplies
Jul 2009	Renovation and Conservation Project Supplies
20. Jul 2009	Official request sent to Ministry of Culture for the Renovation funds (Program for Protection and Preservation of cultural Heritage, for Immovable cultural Heritage, year 2010.) Funds not awarded.
Jul 2009	Official request sent to Ministry of Tourism for Project funds (Program for Encouragement of Protection, Renovation and Integration of cultural Heritage in Tourism, in tourism underdeveloped regions „Heritage in Tourism“) Funds not awarded.
Sep 2009	Architectural survey completed
Jul 2010	Conservation Study Supplies
2010-2011	Conservation Study
11.Sep 2009	Official Request sent to Ministry of culture – Conservation Department in Slavonski Brod for the Compliance for urgent protection
16. Sep 2009	Official notice sent to Ministry of culture – Conservation Department in Slavonski Brod regarding the initiation of urgent protective construction work being done on the castle
21. Sep 2009	Construction work initiated
05. Oct 2009	Official Request sent to Ministry of culture – Conservation Department in Slavonski Brod for the urgent protection funds as unforeseen damage occurred during protective construction phase
07. Oct 2009	Recommendation of the Conservation Department in Slavonski Brod to the Ministry of Culture for the awarding of urgent funds Funds not awarded.
Oct 2009	Wine festival in Cernik Castle
27. Oct 2009	Urgent protective construction work completed
Oct 2009	Meeting with Municipal Prefect regarding maintaining the castles' surroundings
19. Jul 2010	Official request to the Ministry of Culture for the Renovation funds (Program for Protection and Preservation of cultural Heritage, for Immovable cultural Heritage, year 2011.) Request pending.
2010-2011	Conservation Study and Renovation Project work in progress.
2010-2011	Energy Audit Supplies

**All work completed and currently in progress funded by the owner. No institutional funds awarded as of yet.**

## CURRENT STATE

### Basic data

Building: DVORAC MARKOVIĆ – KULMER, Cernik  
Owner: BARBARA KULMER, Zagreb  
Cultural Heritage Registration : Z-1279 (2003.)  
Authorisation: MINISTRY OF CULTURE  
Directorate for Culural Heritage Protection  
Conservation Department in Slavonski Brod  
Project work: „URBANA ARHITEKTURA d.o.o.“, Zagreb  
Art History : dr.sc. Darja Radović Mahečić, prof.  
Contractor: „IZGRADNJA POPOVAČKI“, Duga Resa

Total building net area	2295 m sq
Total building gross area	3850 m sq
Total window area (ground and first floor)	120 m sq
Total land complex area under protection and registered as cultural heritage according to land registry	23.882 m sq
It contains:	
-Total floor plan area	1.223 m sq
-Surrounding park area	17.211 m sq
-Undeveloped area	5.448 m sq
Neighboring land area (potential future use as park)	undefined
Land area pending denationalization	500 - 800 ha

Floor plan:	square with 4 edge towers and inner courtyard
Floors:	cellar / basement, ground floor, 1st floor, roof
Construction:	vaulting
Stair construction:	stone, wood
Materials:	indigenous amorphous stone, historic brick, wood, roof tile
Wall thickness max.:	1,7 m
Roof:	two edges, conical above towers, wooden construction
Cellar / basement:	barrel vault / historic brick
Courtyard:	water-well

Castles' current condition is very poor, decrepit, and the structure is decaying rapidly, due to atmospheric impact and lack of use. With urgent protective work done, castle has been temporarily protected.

## LEGISLATION

### Cernik Community Spatial plan conditions

According to the Cernik Community Spatial plan, castle land complex is a part of **building area within the settlement**. According to the special conditions of the Spatial plan, for this protected cultural area, drafting a **detailed plan is obligatory**.

Our proposal:

- not drafting the detailed urban plan**
- proposing a **detailed project** instead
- acquiring better results with the project instead of a detailed plan and ultimately presenting quality modern solutions for the **entire land complex**
- requesting official changes of the Spatial plan** is imperative
- initiation of detailed **cross-disciplinary project, including green project**

### Conservation Department in Slavonski Brod: renovation conditions summary

- I **urgent protection** (completed 27.10.2009.)
- II **roof reconstruction** (partly and temporarily done during the urgent protection phase; conditions presume the reconstruction of the **existing roof**)
- III **Conservation Study** (initiated),  
**Concept Design** (initiated),  
**Conditions** for the main project, building work and castle exploitation are going to be determined by the **Conservation Department** in Slavonski Brod.

**Our intentions:**

- completing **Conservation Study** and **Concept Design**,
- Concept Design inclusions:**
  - project for a modern roof reconstruction,
  - project for land complex
  - all civil engineering projects
  - neighboring land and possibilities for nature park use
  - determining an effective energy efficiency solution for the building itself as well as for the entire land complex.

The Concept Design will be sent to the Conservation Department in Slavonski Brod, but also to all institutions authorized to determine project conditions. With this approach we certainly have an obligation to obey many more conditions than with a simple current state preservation. On the other hand, we do want to include all of the participating sides, and to start immediately with all possible input.

## **Our proposal or would you kindly step off the breaks, please**

What we are proposing is not solely preservation. It is also not implementation of very limited sustainable options as determined by current legislation. What we are proposing is a package! We believe that cultural heritage, in our case a castle, can and must be made a generator of local economy. It is, thus, a central part of our project. However, it is also a single part of a much larger picture. We are proposing a pilot project which will benefit the local community, general economy, promote energy efficiency, and get everyone involved in this long-term process.

Our project primarily begins with sustainable preservation of the Cernik castle, our point of origin, but it also includes the park area with its once existing lake, the current surrounding urban fabric and the possible future site of sustainable urban development. The proposition is to create a large scale project that connects several pieces of a puzzle into one large self-sustainable, functioning whole and then ultimately serves as a practical example for possible future pursuits of such nature.

The purpose of our undertaking is also partly educational. It is to promote and interactively educate the public on inter-disciplinary collaboration, the importance of preserving our cultural heritage through contemporary means, sustainability in cultural heritage as well as in new construction, art and architecture and urban design. We believe that educating the public on the importance of this topic is crucial in instituting change. Our aim, therefore, is to document, record and present our every step of the way in various workshops, video conferences and seminars and to ultimately produce a process recording publication.

We are not aiming to draft a detailed urban plan of the land complex region, but rather to instigate change through the creation of a detailed project instead. Our package project is also aimed at resolving the problem of long-term project self-sufficiency. Namely, we realize that from its initial stages all through completion, the crucial issue behind any renovation attempt is not the preservation itself but primarily what happens afterwards, that is, whether the building is able to self-sustain in the future.

We are intending to preserve according to concurrent needs, to implement sustainable methods that will benefit the occupant and the buildings' immediate surroundings, to share and exchange opinions with the public, and ultimately to invoke overall positive economic change on a potentially larger-scale.

It is exactly for this reason that we would like to send out a wake up call! Our efforts and energy directed towards this project, or any other large-scale project for that matter, cannot and ultimately will not succeed without the cooperation and support on the part of local and state governmental institutions in terms of legislation, financial support, active communication, and provision of know-how. This precisely is what we are initially attempting to address as it is absolutely critical for any competent, comprehensive cultural heritage rescue, effective energy efficiency implementation, and an overall positive economic result.

We are not attempting a utopia as the foreign practice in countries such as France, Austria and Canada (i.e. green Olympic village development) clearly shows that



institutional support and collaboration between the public and private sectors on preservation and large scale, green development projects is more than feasible. We are, however, asking for some good will and willingness to change the existing.

## CONCLUSION

The Cernik project is a complex, comprehensive green urban development project that starts with a single sustainable preservation story - that of the Cernik castle. This project seeks to change the current practice, or lack thereof, with regards to cultural heritage preservation, existing legislation, green solutions implementation, and future experience. We are looking to instigate a positive economic outcome through allotting to the castle its natural role of local economy generator and to benefit the local community through green thinking, communication, education, general cooperation and any potential further growth and development. The project also requires strong governmental and institutional support and is attempting to actively address this issue as it is one of the critical points currently standing in the way of effective preservation, sustainability and an overall positive economic outcome.

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