

WP4

Platy limestone as cultural heritage

Supplement 3.I

Cultural heritage and limestone. – General overview

Appendix 3.I.8

Final report for the project area in Herzegovina

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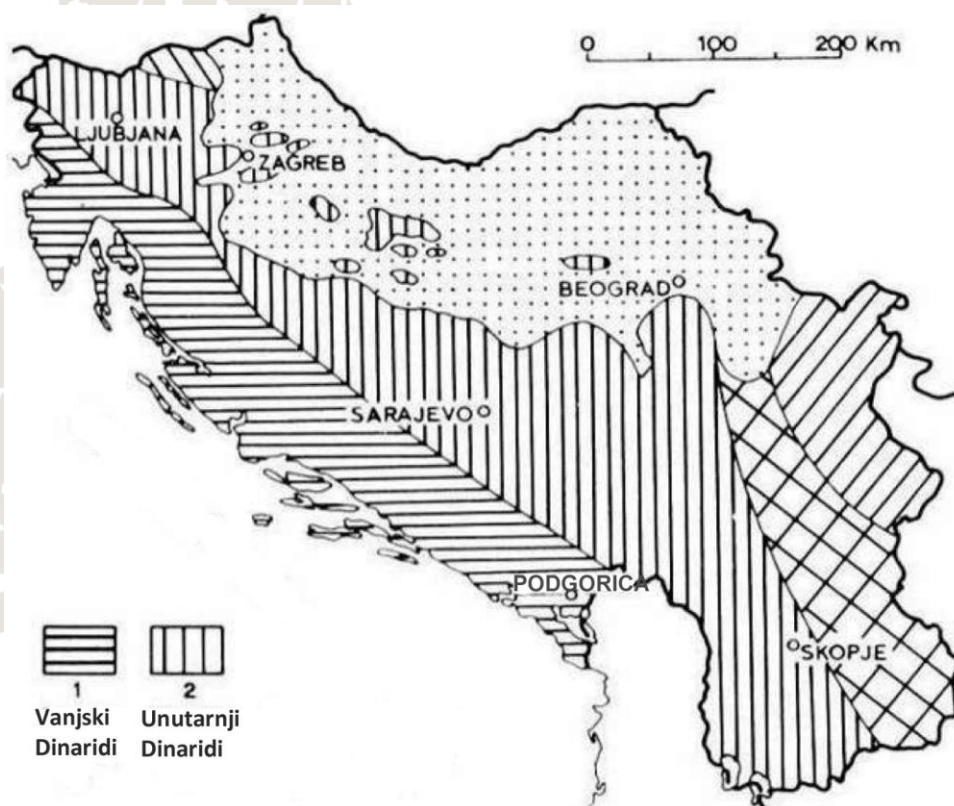
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1. Introduction about the local project area: Short outline of the research area

The project “Cultural Heritage and Limestone – General Overview” whose aim was to promote the correct choice and sustainable use of building stone in the area of central Herzegovina – with the emphasis on platy limestone – is concerned with central Herzegovina, specifically on the West-Herzegovina region (Županija zapadnohercegovačka – ŽZH) and the Herzegovina-Neretva region (Hercegovačko-neretvanska županija – HNŽ).

Herzegovina is located among the Dinaric mountains, maritime in the south and mountainous in the north. The region along the Neretva river under Čapljina is no more than 5-6 m above the sea level; however, only 60 km to the north the mountain Pločno (Čvrsnica) rises to 2228 m. Historically and geographically Herzegovina measures 12276 km² (24 % of BiH); according to the 1991 census it has 511.855 inhabitants (12 % of BiH), while the two specified regions measure 5.763 km². Structurally and tectonically Herzegovina mostly belongs to the *Outer Dinarids* (Mihevc et al. 2010, 14, Fig. 7). The most important rock groups are **granite**, **gabbro** and **basalt**, while the most common sedimentary rocks are **limestone** and **dolomite**. The most striking metamorph rock is **marble**. Territorially, limestone is the most common stone in the area of Herzegovina (almost 80%) and is also by far the most commonly used type of stone (Šaravanja 2013, 41).



Pic. 1. Dinarids relief

The aim of this elaborate is to analyse the use of stone in Herzegovina in history, to describe cases of good and bad practice, to define characteristics of platy limestone as a natural material in building, to analyse the origin of stone used in individual buildings, to establish the location of stone deposits, to set up conditions for sustainable use of rock as a natural resource, to establish grounds for joint legislature, do educate the interested public for optimal use of building stone and promote the use and protection of cultural and natural heritage through cases of platy limestone.



Pic. 2. Herzegovina as a region

2. State of the Art in the research on limestone and cultural heritage in the area

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3. Glossary of jargon terms

Dialect – jargon – official term

Avlija, dvorište
Basamak, stuba,
Bigar, sedimentna šupljikava stijena uz vodu
Bilac, vrsta vapnenca
Breča, klastična sedimentna stijena, kršnik
Brina, provalija ili draga u kršu
Bunja, rupa za gašeno vapno
Campin, alatka slična krampu
Civare, drvena nosiljka za kamenje
Čatrnja, cisterna za vodu
Čapadur, dlijeto za odvajanje kamenih ploča
Čemerjenje, zidanje svodova
Čošak, vanjski ili unutarnji ugao kuće,
Ćurak, kamen koji stoji (ćuri) na zemlji
Duvar (tur.), zid
Gabro, vrsta crnoga vulkanskog kamena
Ganjak, hodnik
Gradac, vrsta kamena
Izba, podrum
Jablanit, građevinski kamen
Jara, štala
Kalcit, mineral kalcijeva karbonata
Kaldrma (tur.), kameno popločanje
Kamen, prirodno, ručno, strojno ili eksplozivno odvaljeni komad stijene
Kamenar, obrađivač kamena
Kamenica, udubina u kamenu
Kamenolom, ležište kamena
Kantinela (rom.), letva za krov
Karnica (rom.), domaća žbuka
Klačina (rom.), vapnenica
Klak (rom.), vapno
Kljenak, vrsta kamena
Krov na dvi vode, dvostrešni krov
Krov na jednu vodu, jednostrešni krov
Kuk, velika stijena
Kužina, kuhinja
Lapis (rom.), zidarska olovka
Lapor, sedimentna stijena od kalcita i gline
Lastavica, trkutasti bočni zid na koji se oslanja krovšte

Explanation

Courtyard
Stairs
Porous Rock
Type of Limestone
Breccia
Profound in Karst
Lime-Hole
Tools like Pick
Litter for Stones
Cistern
Kind of Chisels
Masonry Arches
Corner
Small upright Stone
Wall
Black volcanic Rock
Corridor
Types of Limestone
Cellar
Architectural stone
Stall
Calcite
Cobble pavement
Stone
Stonemason
Panhole
Quarry
Lath
Local Mortar
Limekiln
Calx
Types of Limestone
Gable Roof
Mono-pitched Roof
Cliff
Kitchen
Mason Pen
Marl
Gable

Lipovit , kamen iz Lipovice	Architectural stone
Maca (rom.), teški čekić	Hammer
Macola (rom.), klesarski čekić	Stonecutters hammer
Majdan , kamenolom	Quarry
Mala (mahala, tur.), zaselak	Hamlet
Mašklin , trnokop, kramp	Pickaxe
Meljta , vapneni mort	Lime Mortar
Mertek , krovna greda	Rafter
Miljevina , sitnozrnasti vapnenac	Fine Grain Limestone
Mistrija (rom.), zidarska žlica	Trowel
Na jedan boj , prizemnica	Storey House
Na dva boja , dvokatnica	Two-storey House
Na jednu ruku , zidovi s izradom samo jednoga lica	Unilateral Finish
Na dve ruke , zidovi s izradom oba lica	Two Faces Finish
Naplov , krov za skupljanje kišnice za cisternu	Roof Rainwater
Nastrešnica , nadstrešnica, zaklon iznad vrata ili prozora	Eaves
Odlito , klesarski pribor	Chisel
Okamina , fosil	Fossil
Osoje , vrsta kamena	Types of Limestone
Piljak , kamenčić	Jack Stone
Pločara , kuća s pločastim krovom	Kind of House
Pločasti vapnenac	Platy Limestone
Plova , tanak plosnat kamen	Thin Flat Peeble
Poduminta , temelj	Fundament
Pojata , štala	Stall
Pola , litica	Crag
Pritorak , ograđeni nenatkriveni prostor	Cattled Pen
Pržina , sitan šljunak za gradnju	Building Sand
Rujan , vrsta kamena	Types of Limestone
Sedra , porozni travertin od kalcita	Calcareous sinter
Siga , rječna ili pećinska tvorevina	Speleothem
Sivac , vrsta vapnenca	Type of Limestone
Slivac , kameni žlijeb za odvod vode	Gutter Watter
Solar , (rom.), terasa okrenuta prema suncu	Solarium
Somić , zabat kuće	Gable
Sopa (tur.), kamena klupa	Stone Bench
Stina , kamena gromada	Rock
Stupa , naprava za pranje sukna i vune	Local Wash Machine
Suvozidina , suhozid	Dry Wall
Šaloš , spremište za kukuruz i žito	Granary
Šamatorje (rom.), groblje	Cemetery
Škalja (rom.), sitniji kamen	Small Stone
Škatula (rom.), kutija	Box
Škriljac , sedimentna stijena	Slate
Špica (germ.), željezni klin	Iron Wedge
Štrika , krovna letva	Batten
Tavanjača , greda na tavanu	Attic Beam

Tenelija, vrsta kamena (Mostar)

Tokmak (tur.), teški veliki čekić

Trapanj (tal.), veliko dlijeto za bušenje rupa

Vaca, Vacada, blokovi za gradnju, klesanci

Vangla (germ.), zidarska zdjela

Vapnenac, Kamen CaCO_3

Vinčanica, greda u sastavu krova

Vinklo (germ.), kutomjer

Zid na bunju, zid zidan ispučenim vacama

Zubača, oruđe za obradu kamena

Živac, nepomičan kamen

Type of Limestone

Heavy Hammer

Chisel

Carved Stone

Mason Bowl

Limestone

Rafter

Protractor

Convex Wall

Stone Tools

Stationary Stone

Abbreviations:

tur. Turkish

rom. Romance

germ. German



4. Limestone quarries

Through centuries stone was basic building material in the in Dinarids, either in fortifications or housing objects – and even graves under tumuli. In the history of building stone was recognized as one of the most common materials. Geological structure of Herzegovina soil is undoubtedly marked by Mesozoic rocks, primarily Cretaceous sediments that make up more than 70% in the geological structure of Herzegovina. These Cretaceous sediments are mostly limestone and dolomite; they developed in a number of different facies in Herzegovina. Structurally the Herzegovina area belongs to the external Dinarides and partly to the transitional zone. Layers are typically thick and represented in big folds with paleogenic deposits in depths, while the ridges are often deeply eroded, broken and almost universally drawn onto synclinal parts (Glamuzina 2010, 29).

The most important types of eruption rocks are granite, basalt and gabbro, while the most famous types of sedimentary rocks are limestone and dolomite. The most famous metamorphic stone is marble. Territorially the most prevalent rock in Herzegovina (nearly 80%) is limestone which is most used in the construction industry. In the high karst zone Triassic formations were discovered in small spaces, under thick sedimentary complex Jurassic and Cretaceous deposits were discovered. They build the core of large Mesozoic anticlinals such as as Čabulja, Velez and others. In this zone Triassic layers are displaced on the surface and discovered in small areas with large dislocations in the Mostar basin at Sujice, Posušje ... Mainly carbonate sediments are represented, limestone and to a lesser extent dolomite as well as limestone breccia, to a much lesser extent marl and sandstone (Šaravanja 2013, 41).

Localities with plate limestones are located in one of the most famous sites of this kind - Podveležje area, and the other much less known sites - Crnopod and Mostarska Vrata in the municipality of Ljubuski, Zvirovići and Dretelj in Čapljina municipality, Kolojanj in the municipality of Neum, Grabova Draga, Dobrich and thorn in the municipality of Siroki Brijeg, Tepčići in Citluk and Žovnica and Miljkovići in the municipality of Mostar. The largest number of sites (Crnopod, Mostar Gate, Podveležje, Žovnica, Miljkovići, Dobrich, Zvirovići, Dretelj and Kolojanj) containing slabs of limestone belong to the Upper Cretaceous age, while the sites Tepčići and Grabova Draga belong to the Eocene and the locality of Trn to the Miocene.

4A. QUARRIES OF PLATY LIMESTONE

Mostarska Vrata

The area (locality) of Mostarska Vrata in the municipality of Ljubuški comprises several old or abandoned quarries of platy limestone. These plate limestones are essentially lithological lenses, which are the majority within the dolomite series made up of mostly early diagenetic dolomite within an upturn and tight Dinaridic elongated anticline.

Crnopod

In the area east of Crnopod, to the village Miletine, shoots of gently sloping limestone plates occasionally occur exploited mainly privately, in a very small area. Unlike the stone previously presented in Mostarska Vrata, this platy limestone is lighter in colour, less dolomitic, and remarkably contains abundant macrofossils.

Zvirovići and Dretelj

These two sites are located on the same Dinaridic elongated zone with plate limestones representing the same horizon or the sedimentary body that covers all of the weeds on the southeast over Zvirovići until Crnopod the northwest. In this zone, one might say, plate limestones can largely be exploited, but only in the local framework.

Podveležje

The Podveležje area is a broad and vast zone of platy limestone widely recognized and exploited in the area of Mostar since the earliest periods; strikingly, all Middle-ages Ottoman houses next to the renowned Old Bridge in Mostar were originally covered with platy limestone from Podveležje.

Žovnica and Miljkovići

In these two localities platy limestone was locally harvested; here, in the Žovnica quarry, deposits of extremely well preserved early Cretaceous shellfish were recently discovered belonging to the *Chondrodonti* species, as well as the radiolite rudists in Miljkovići above Mostar Blato.

Dobrič

North of the Dobrič village, on the right side of the road leading to Grabova Draga, there is a smaller yet nalazi geologically very attractive quarry (majdan) of a well layered platy limestone.

Kolojanj

This locality made it to magazine covers in 2012 because the limestone plates yielded fossils of fish, by far the most valuable discovery on display in the Neum museum.

Tepčići

Between the villages of Vidovići and Tepčići in the eastern part of the Čitluk municipality there is an interesting deposit of platy limestone in a relatively small area between the villages. This platy limestone was almost exclusively used by local residents.

Grabova Draga

Like in Tepčići, the village of Grabova Draga features platy limestone from the Eocene, located in a very narrow zone.

4B. QUARRIES ACTIVE AND INACTIVE

name *latitude/longitude*

"Cerov dolac, quarry inactive", 43.4803904; 17.3877096
"Crnac, quarry inactive", 43.4328368; 17.6036596
"Daupovina, potential quarry area", 43.1716331; 17.6428843
"Daupovina, quarry active", 43.1718600; 17.6392901
"Dretelj, potential quarry area", 43.1310881; 17.7003479
"Drinovci, potential quarry area", 43.3401925; 17.3265553
"Drinovci, quarry -active", 43.3567950; 17.2917080
"Grabova draga, potential quarry area", 43.3968158; 17.6735258
"Grabova draga, quarry inactive", 43.3969522; 17.6738530
"Gradac, quarry active", 43.3794444; 17.6675606
"Kapulari, quarry active", 43.1717035; 17.6447296
"Kolojanj, quarry inactive", 43.0079737; 17.7182865
"Lazine, quarry inactive", 43.2149035; 17.5540012
"Mikuljaca-Zovnica, quarry inactive", 43.3384446; 17.7322984
"Miljkovici, potential quarry area", 43.3188710; 17.7587128
"Miljkovici, quarry active", 43.3188710; 17.7584982
"Mostarska vrata, quarry inactive", 43.2084446; 17.5706363
"Pec-Mlini, quarry inactive", 43.3406139; 17.3267913
"Podvelezje, potential quarry area", 43.3106276; 17.9169846
"Podvelezje, quarry active", 43.3117673; 17.9209757
"Proboj, quarry inactive", 43.2295391; 17.5236225
"Radisici, quarry inactive", 43.2228785; 17.5418615
"Slipcici, quarry inactive", 43.2312901; 17.7965212
"Tepčići, potential quarry area", 43.2158418; 17.7491641
"Tepčići, quarry active", 43.2288824; 17.7816296
"Vitina, quarry inactive", 43.2529549; 17.4892902
"Vrdi, quarry active", 43.5031182; 17.7419329
"Zvirovici, quarry active", 43.1550739; 17.6723671



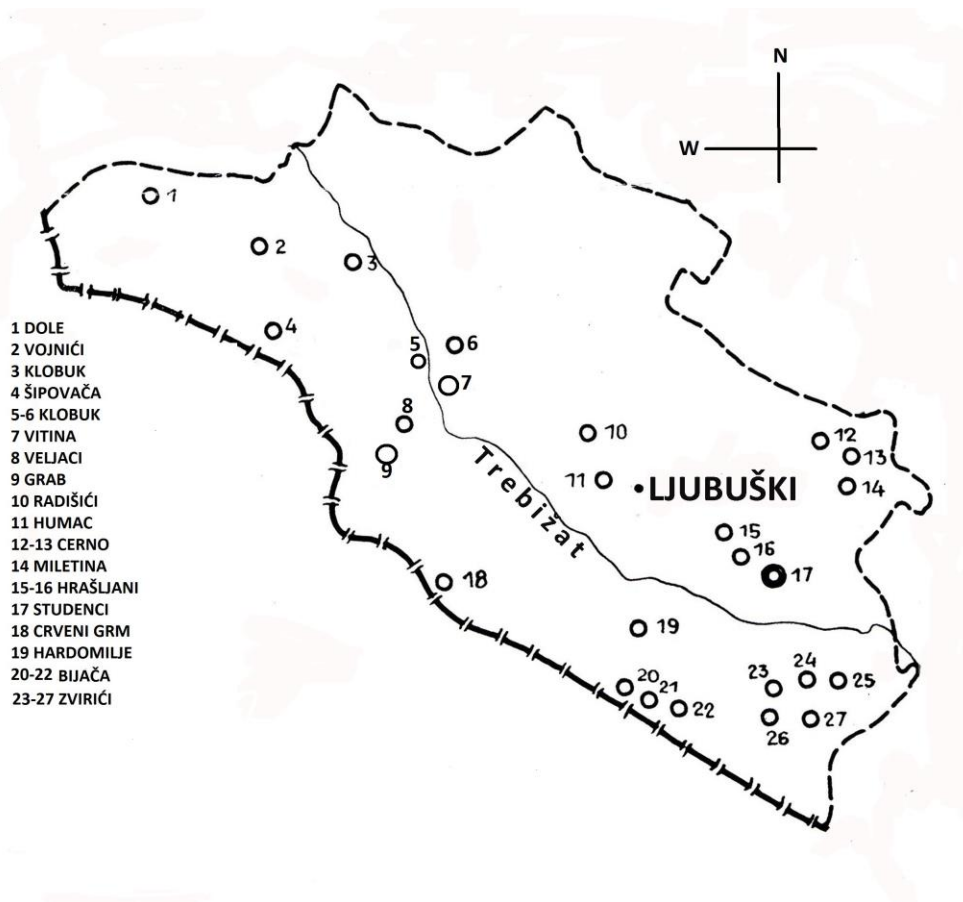
Pic. 3. Platy limestone quarries in Herzegovina



Pic. 4. Senjarica quarry, Zvirovići (Čapljina)



Pic. 5. Inactive quarry, Drinovci (Grude)



Pic. 6. "Bilizi" in Ljubuško – potential quarries

5. Main types and characteristics of karstic architecture

The oldest human settlements were probably suitable caves in the karst areas of Herzegovina. Above the bed of the river Bregava in Stolac, on the site Badanj, there is the oldest drawing in the stone of Herzegovina, dated to the early Palaeolithic (13,000 to 12,000 BC), probably a figure of a horse attacked by arrows. In the old Drinovac hamlet of Peć, over the spring of the river Tihaljina, there is the Ravlića cave, known in archaeological literature as the most important prehistoric site in Herzegovina, where people have lived continuously from the early Neolithic to the middle Bronze Age (5700 to 1500 BC). The Zelena Pećina cave is situated at the spring of the Buna in Blagaj, on the west side of high cliffs over the water. This site dates back to the Early Neolithic, about 4200 BC.



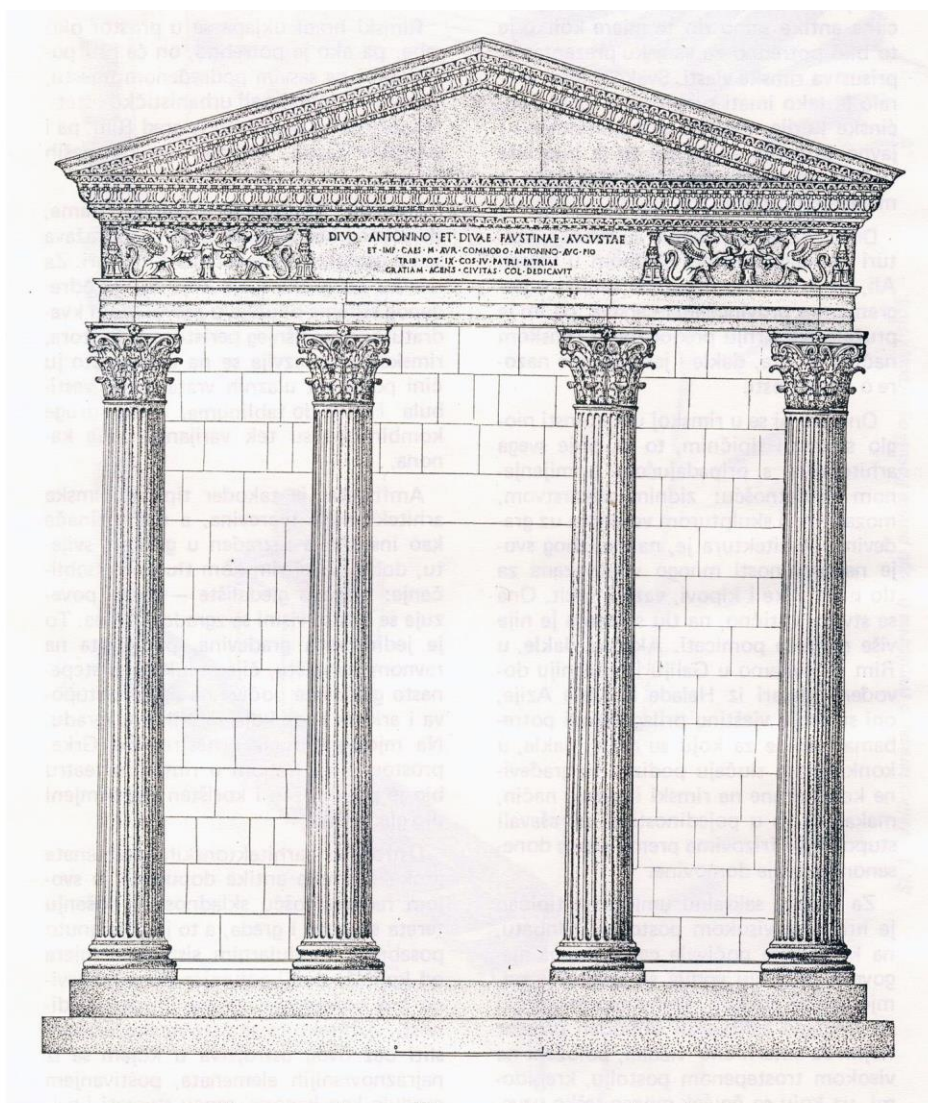
Pic. 7. Prehistoric stone mound, Zvirovići

The most remarkable remains from the Bronze and Iron Age are the stone drywall formations called “gradine”. Their primary function was defense. In terms of construction they were built from broken stone, bound with clay, to a height of about one meter. Within the “gradine” there could be a settlement, usually with space for shelter and protection of goods. Archaeologists have recorded a large number of forts in the area of the Illyrian, Delmatian and Pannonian ethnicity. Individual “gradine” could have taken up large spaces. The Vrsnik gradina in the Donji Poplat (Stolac) had three defensive rings in dry wall, with defensive of 7.8 hectares. According to the calculations of the mining Captain Vaclav Radimsky from 1890 some 34,940 cubic meters of stone were built into the hill fort! It stands alongside the ruins *Ograđ* in Hodbina, Mostar (elevation 379m). There are defensive walls and the defended area of more than three hectares, and the diameter of the external defensive walls is 397 x 117 meters. On the vast plateau of the dominant hills in the upper deposit, above the village of

Dobrich, the municipality of Mostar, there are remains of a well-established prehistoric fort (elevation 620m). Locals refer to it as *Zvonigrad*, attributing its construction to king Zvonimir. The best preserved are the remains of the defensive wall, which is from the top down from the north to south at a length of 250 meters (Dodig 2010, 10). Other significant ruins in Central and Western Herzegovina were *Kamenak* (Čule, Mostar), *Kičin* (Malo polje), *Nečajno* (Posušje), *Mokro* (Š. Brijeg), *Mandina gomila* (Grude), *Sitomir* and *Žuželj* (Ljubuški), *Osoje* (Zvirovići), *Velika gradina* (Čapljina)

The beginnings of urbanism in Herzegovina can be related to the Hellenistic period (3rd–1st century BC). Above the Vidovo polje in the village of Ošanići three km northwest of Stolac, on a steep ridge over the field and river Radimlja lie the remains of a powerful fortress with Cyclops walls. According to archaeological and historical research, it is assumed that the fortress and the village on the Banje plateau belonged to the Illyrian Daorsi. In Daorson, cyclopean wall surrounding the citadel, built in the last quarter of the fourth or the beginning of the 3rd century BC and consists of a large trapezoidal stone blocks, with rustic face and smooth surface on the composition of the blocks. At both ends of the wall there is a rectangular tower, near the north tower there are wide doors over which there is a the sharp arch.

At the time of Roman rule art created in Herzegovina is provincial Roman art. With Roman culture soldiers and colonizers came to Illyria. Among the architectural monuments from the 2nd century the terraced complex sanctuary in Gradac near Posušje stands out, which was built on top of the hill, which is reached via a wide staircase. It was built of white marble from Korčula with elaborately carved cornices and canopies. During the period which lasted from the 4th until the late 6th century, the classical culture has undergone a significant transformation, e.g. the invasion and settlement of barbarian tribes in the territory of the Roman Empire, but also the change in man's relation to the state, religion and art. Among the buildings from late classical antiquity the mausoleum in Šipovo near Jajce is worth mentioning as well as the villa in Mogorjelo near Čapljina.



Hram u Posuškome Gracu, 2. st.

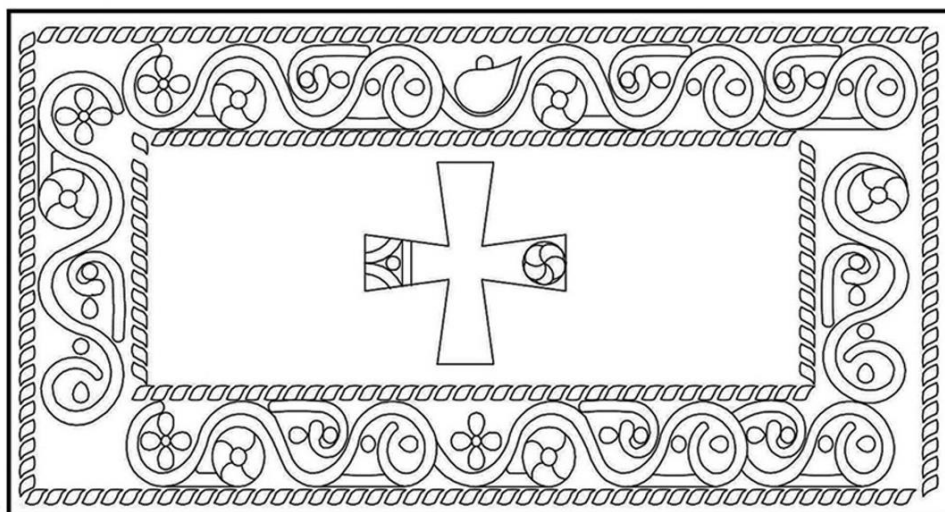
Pic. 8.

Romanesque impulses entered Bosnia and Herzegovina from the Adriatic and from the territory of the Hungarian-Croatian state. Since these regions constitute the periphery of the West, they served as a kind of filter in the expansion of ideas, styles and tastes. The **Gothic** style was also present in the territory of present-day Bosnia and Herzegovina. The oldest preserved building in this style is the former Dominican church of St. Anthony, today Fethija mosque in Bihać. Among the monuments of cultural heritage in the NW Balkans monumental tombstones from the Middle Ages take a special place. They are particularly numerous in Bosnia and Herzegovina; Bosnia and Herzegovina is actually their homeland.

The fortified cities in Bosnia and Herzegovina have come to be in the period from the 12th to the 15th century; they were either introduced in this period or renovated and expanded to locations of fortifications from earlier periods. They were built on sites that offered natural protection: the rock above the current two basins or river, in a sharp bend of the river, on top of a steep hill, or on a mountain plateau.

5A MIDDLE AGES TOMBSTONES – “BILIZI”

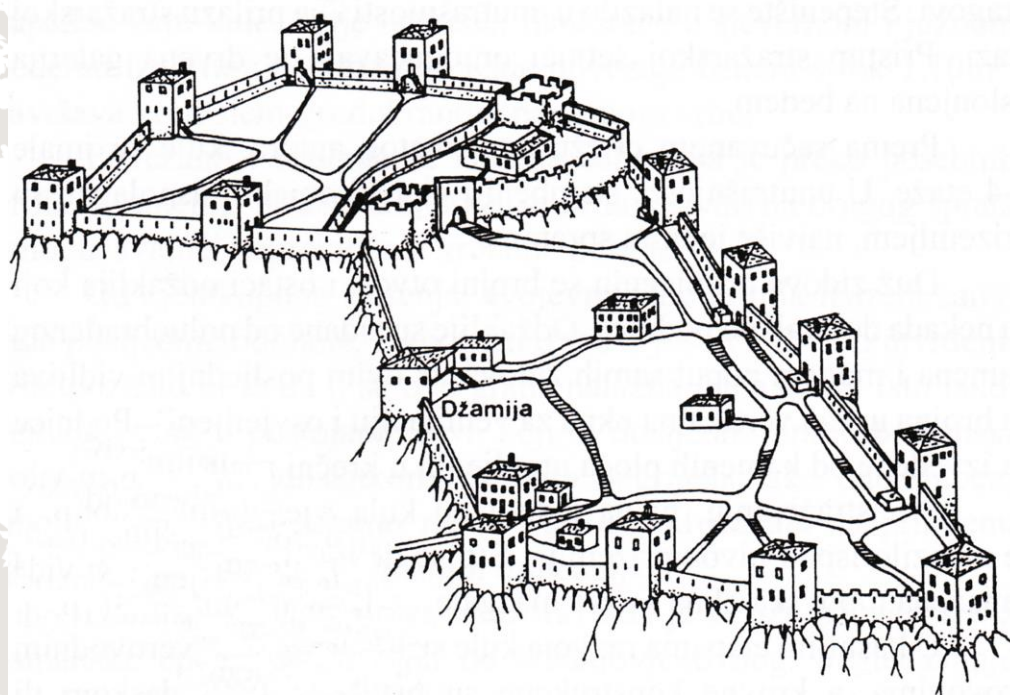
Herzegovina is homeland to bilizi (tombstones), of which only former district Mostar had more than 30,000 copies. With almost every graveyard there was a local quarry, from where masons transported stone for monuments. In terms of form, there are two groups of “bilizi”: horizontal (plates, chests and ridges) and vertical (columns and crosses). In order to fully understand the problems of Middle Ages bilizi we should highlight them in archaeological context. Unfortunately, few graveyards have been systematically explored. Certain features of grave architecture and burial method have been extrapolated from the known material: Biskup (Konjić), Grborezi (Livno), Gnojnice (Mostar) Veličani (Popovo Polje), Ravanjska Vrata (Kupres), Ričice (Imotski), Bisko and Maljkovo (Sinj) and Zagvozd. There are two basic types of burial - the deceased were laid in either earthen grave or in stone tombs, formed from raw stone slabs (linings), covered with stone slabs or not.



Pic. 9. Bilig (tombstone) from Bijača, Ljubuški

5B ORIENTAL ARCHITECTURE

In the mid 15th century the Ottoman army entered the territory of Bosnia and later of Hum. Bosnia, Herzegovina and other provinces emerged as military and administrative units within the Ottoman Empire. By 1463 medieval feudal society in Bosnia and Herzegovina was structurally damaged. In these new circumstances, a significant proportion of former feudal lords, especially petty nobles, quite rapidly and successfully adapted to the Ottoman Landowner and Timar feudal system. If by the term "city" one refers to a village from the Ottoman period in BiH that consists of office, commercial and shopping center (the bazaar - *čaršija*) and several housing buildings (*mahale*), then the term applies only partially. Generally Turkish army was located mostly outside the conquered settlements in the existing, pre-Ottoman, medieval fortresses, or in the outskirts villages near rivers; cities (*kasaba* and *šeher*) had no significant influence of the military component, because in Turkish military organization they weren't defended from external or internal enemies.



Pic. 10. Orijental Stolac, groundplan

5C. INHABITED CITIES

Ottoman administration divided cities in the Empire into fortified and open cities. There were three categories of fortified cities: **kala** (or **kale**), **hisar** and **palanka**.

Kala (arab, *fortification*) is a large fortification made of hard materials (rock and brick), with towers and palisades.

Hisar (arab, *fortification, town, castle*) was a smaller fortification made of tough materials, but with no more than one tower and no palisades.

Palanka was a small fortification made of weaker materials (wood and dirt). Open cities were called **varoš**, **kasaba** and **seher**. The Hungarian term “varoš” applied in the Ottoman Empire to suburbs and open cities in general.

Kasaba is a Muslim hamlet, usually open, whose citizens generally occupy themselves with small business; the town has boundaries, its own territory, a mosque, mekteb (school), shops etc.

Šeher is a larger open hamlet of a predominantly Muslim population, several mosques and other institutions (schools, *tekija*, *hamam*, *karavansaraj*, *čaršija*). Open cities were divided into **džemat** (groups) and further into **mahala** (districts). These hamlets were mostly suburbs to bigger cities.



Pic. 11. Konjic 19.-20. century

6. Architectural elements and decoration in karstic architecture – typical features

6A. BRONZE AGE GRAVES



Sl. 12. Bitunjani, Zvirovići

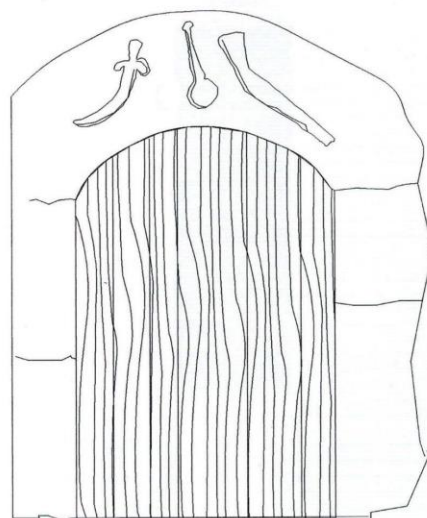


Sl.13. Kašteli, Zvirovići

6B. ARCHED ENTRANCE OPENINGS



Sl. 14. Počitelj



Sl. 15. Ljubuški



Sl. 16. Mostar

6C DRYWALLS



Sl.17. Crveni Grm, oko 1900.



Sl. 18. Međugorje, 2006.

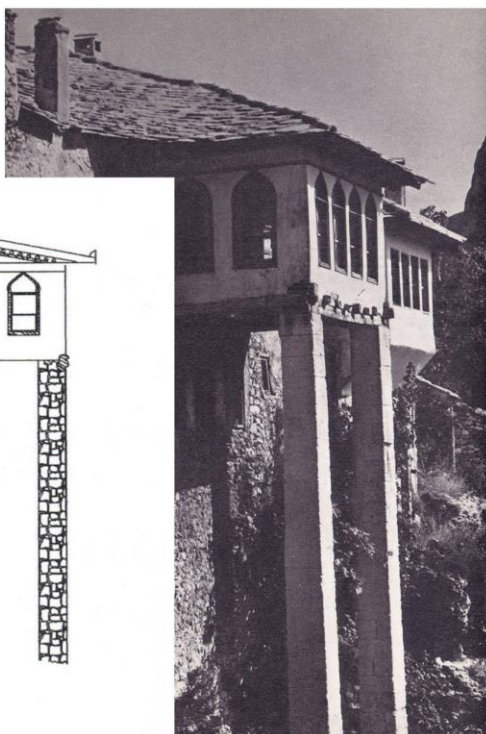
6D – WALKWAYS, NASTREŠNICA, PUŠKARNICE



Sl.19. Blagaj



Sl.21. Počitelj



Porch, side view

Mostar Sl.20.



Sl.22. Ljubuški

6E POČITELJ



Pic. 23. K. Liebscher, Počitelj, 1897.

"In the fort there is the house of the commander (dizdar), granary (ambar) and a small mosque in a small tower; all buildings are covered with slabs" (E. Čelebija, Putopis, 464).

7. Materials and techniques

Flat-plate limestone in Herzegovina was mostly used to cover buildings. Given the structure and shapes, roofs can be divided into several groups: conical roof, the roof on a ladder, a gable roof and polygonal roof or hipped roof. Conical roof is characteristic of Istria and Croatian islands; they are not encountered in Herzegovina. Residential houses are only a square floor plan, and are covered with small range pent roof which people often called "the roof for one water". The design is simple. The "roženice" are based on two parallel walls on beds (argat). Depending on the roofing material "roženice" are more or less dense. In stone slab roofs (*tabulae*) the "roženice" are 25 to 60 cm apart. In more complex constructions "roženice" are up to one meter apart, so that the so-called "žilnice" are nailed perpendicularly, called "rime" or "rimice" (Freudenreich, 141-150).



Pic. 24. Dvor Ali-age Rizvanbegovića, Trebižat (Čapljina), 1900.

Gable roof is the most used form of roof in karst areas. The simplest structure has a ridge purlin under "roženice" propped up on both sides. The more complex is with the "roženice" on the crest looking over each other without purlins. In short, the roof structure has the following elements:

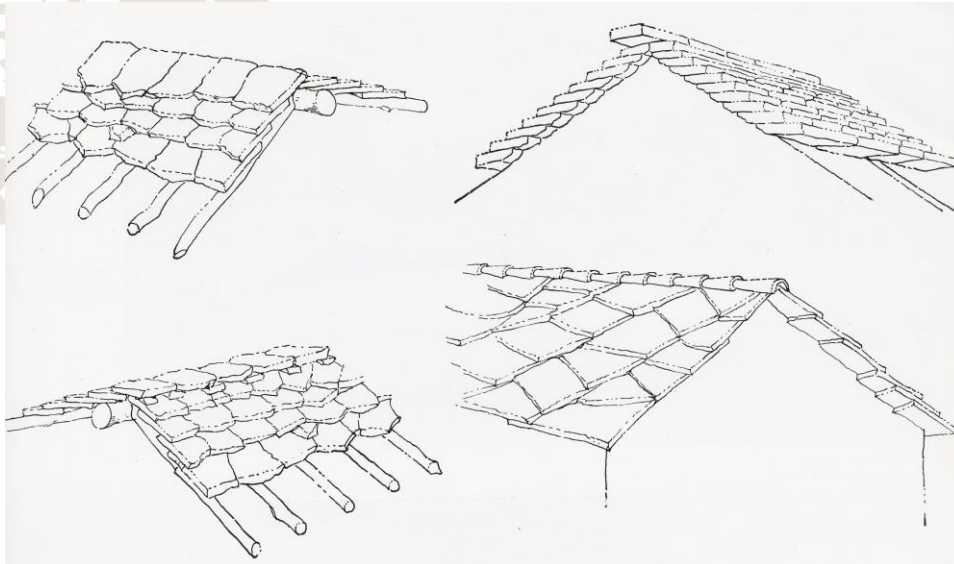
1. On the walls rest roof supporting blocks ("planje")
2. They support the "roženice" (mitoglavci), which may be supported under the ridge by purlins,
3. Each "roćenice" is linked to the roof by battens ("bragijera")
4. "Žile" are nailed to "roćenice" in the distance of 1 m,

5. "Rime" or "rimice" are fastened to "žile".

Polygonal roof is not usually used in popular residential construction in karst terrain because it requires more wood and stone materials. It is typical of oriental architecture.

Different techniques are used in roofing limestone slabs. The material is naturally extracted from the earth and the plates of different thicknesses, sizes and colours. They measure 20 x 20 cm and up to one sq. metre in size. Plates could be laid dry, but durability and stability could be secured with mortar. Stone that served as cover was left a few years out after removal to be tested in the adjustment to test for frost. Dry covering was most enduring, because the stone soaked from all sides dried fastest. Roofing with stone is a particularly demanding job. Given the complexity of setting stone slabs, single, double and multi-layer overlap can be distinguished.

In some parts gables are semi-inclined. Such a structure does not reflect the spirit of folk architecture characterized by great simplicity. In places where compact way of building prevails, the facilities can not be spread horizontally, but rise in floors, using the pan and attic.



Pic. 25. Roof constructions from platy limestone



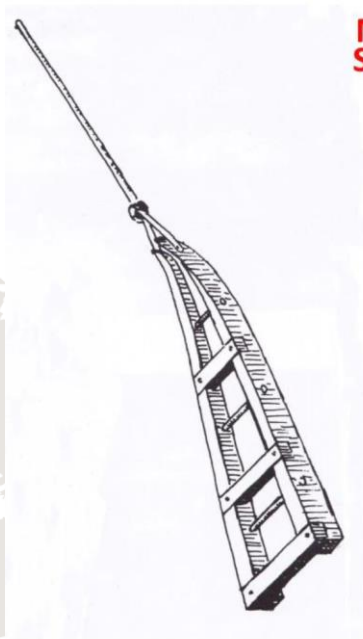
- | | |
|----------------|---------------------|
| 1. Velika pila | 13. Glita (Dlijeta) |
| 2. Mala pila | 14. Bapka |
| 3-6. Čekići | 15. Odbijač |
| 7-9. Pilice | 16. Metar |
| 10. Metlica | 17. Blanja |
| 11. Šetka | 18. Tesla |
| 12. Turpija | 19. Lamba (Blanja) |
| 20. Škvadar | |

Pic. 26. Stone carving tools of Petar Jukić, Livno, 19th cent.

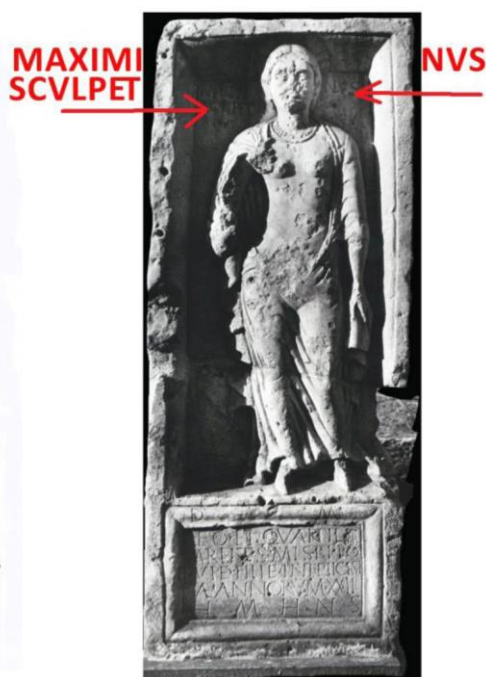
8. Limestone and craftsmanship

8A. THE OLDEST KNOWN MASTER MASONS IN HERZEGOVINA

1. Maximinus, Roman period, (stonecutter), Sovići, Grude, 2. st.
2. Magister Marco Pribislai (refiner from Dubrovnik), 15. st.
3. Grubač, blacksmith (stonecutter and writer), Stolac, 15. st.
4. Miogost (stonecutter), Stolac, 14-15. st.
5. Krilić (stonecutter), Stolac, 14-15. st.
6. Semorad, dijak, Stolac, 14-15. st.
7. Dragoje (stonecutter), Podrinje, 14-15. st.
8. Ugarak (stonecutter), Vrhbosna, 15. st.
9. Veseoko Kukulamović (stonecutter), Lašva, 14-15. st.
10. Vukašin (stonecutter), Lašva, 14-15. st.
11. Bratjen (stonecutter), Tribunija, 14-15. st.
12. Miogost (stonecutter), srednja Bosna, 15. st.
13. Petar Prvičić, stonecutter, Livno, 15. st.
14. Mate Radnić Baja, stonecutter, Livno, 19. st.
15. Ivan Bandov, stonecutter, Livno, 19. st.
16. Filip Galić, stonecutter, Livno, 19. st.



Pic. 27. Ladder („saonice“) for transport of „biligi“



Pic. 28. Roman tombstone of master Maximinus, 2nd century

8B. MAIN EXPLOITERS IN HERZEGOVINA:

ALPINE BAU d. d., Banja Luka: Jablanica,

DUBINT d. o. o., Kočerin, Široki Brijeg: Ivankovića Dolac

GRANIT g. d., Jablanica: Granit

INKA g. d., Ljubuški: Crveni Grm

KAMEN DENT g. d., Mostar: Mukoša, Sirge-Raška Gora i Dračevo, Čapljina

LUBURIĆ d. o. o., Ljubuški: Radišići, Greda 2

NIŽIĆ d.o.o., Ljubuški: Crveni Grm, Krčevina

POGLED g. d., Ravno: Orahov Do

PUŠIĆ d. o. o., Čitluk-Mostar: Slipčiči

RAJA d. o. o., Grude: Lipovica

SEDIMENT g. d., Posušje: Borićevac

SZR STONE ART, Trn, Široki Brijeg: Kusačko Brdo

T.A.J.M. d. o. o., Široki Brijeg: Osoje

UKRASKAMEN d. d., Posušje: Ćesića Draga, Sovija Draga, Krstače, Konjovac, Previja, Begiči, Sutina Rakitno.

8C. ACTIVE QUARRIES IN THE WESTERN HERZEGOVINA REGION

1. quarries in the area of Posušje (Ćesića Draga and Borićevac)
2. quarries in the area of Gruda (Lipovica)
3. quarries in the area of Ljubuško (Inka and Krčevine, Crveni Grm)
4. quarries in the area of Široki Brijeg (Osoje and Tvrdi Ljut).

8D. POTENTIAL QUARRIES IN HERZEGOVINA

LJUBUŠKI: Dole

GRUDE: Ploče

ŠIROKI BRIJEG: Ljubotići, D. Crnač, Kušanovac, Širića Draga, Jardoč, Bare 1 i 2, Borićevac, Kljenak, D. Konjovac,

POSUŠJE: Studena Vrla, Blekava, Bovan, Tonkići, Vlaka, Tolina litica, Bosiljina

ČITLUK: Hamzići 1 i 2.

(Bilopavlović 2012, 121-134)

9. Catalogue of representative objects

MOSTAR 5 objects

NUMBER OF OBJECT IN RoR DATABASE:		Status as heritage:	National monument	Evidence number in Register CH:	
NAME OF BUILDING (OFFICIAL AND LOCAL):	BIŠČEVIĆ HOUSE Bišćevića kuća/Bišćevića čošak				
ADDRESS AND LOCATION:	Bišćevića ulica b.b., Stari grad, Mostar; +387 (0)36 550 677				
TYPE:	profane/ sacral profane				
SHORT DESCRIPTION OF BUILDING (GROUNDPLAN, ELEMENTS, CHRONOLOGY) :	Ottoman residential complex from 18.-19. ct. House is surrounded by high walls with courtyard and two floors				
USE (ORIGINAL):	Residential		USE (CURRENT):	Ethnological and touristic monument	
PLATY LIMESTONE PRESENT IN: (AND THEIR STATE OF CONSERVATION):	Roof, reconstruction in 19.-20. ct.				

NUMBER OF OBJECT IN RoR DATABASE:		Status as heritage:	UNESCO National monument	Evidence number in Register CH:	29 COM 8B.49 07.1-02-903/03-29
NAME OF BUILDING (OFFICIAL AND LOCAL):	HALEBIJA TOWER KULA HALEBIJA				
ADDRESS AND LOCATION:	Oneščukova b.b., Stari Grad, Mostar				
TYPE:	profane/ sacral Profane				
SHORT DESCRIPTION OF BUILDING (GROUNDPLAN, ELEMENTS, CHRONOLOGY) :	Halebija tower on the right bank of the Neretva near Old Bridge, constructed in 15. ct., renewed several times, last time 1999-2004.				
USE (ORIGINAL):	Defense of the Bridge	USE (CURRENT):		Historical Monument	
PLATY LIMESTONE PRESENT IN: (AND THEIR STATE OF CONSERVATION):	Roof of platy limestone, wholly conserved 2003-2004.				

NUMBER OF OBJECT IN RoR DATABASE:		Status as heritage:	National Monument	Evidence number in Register CH:	
NAME OF BUILDING (OFFICIAL AND LOCAL):	Koski Mehmed-Pasha Madrasa Koski Mehmed-pašina medresa				
ADDRESS AND LOCATION:	Mala tepa b.b., 88000 Mostar				
TYPE:	profane/ sacral Sacral				
SHORT DESCRIPTION OF BUILDING (GROUNDPLAN, ELEMENTS, CHRONOLOGY) :	Madrasa (Religious school), built around 1620. year; Groundplan in the shape of the letter "L"; one-story house.				
USE (ORIGINAL):	Religious school		USE (CURRENT):	Space of Islamic Religious Community	
PLATY LIMESTONE PRESENT IN: (AND THEIR STATE OF CONSERVATION):	Roof – reconstruction in 1979.				

NUMBER OF OBJECT IN RoR DATABASE:		Status as heritage:	Local Monument	Evidence number in Register CH:	
NAME OF BUILDING (OFFICIAL AND LOCAL):	Mosque of Ahmed-aga Lakišić Džamija Cernica				
ADDRESS AND LOCATION:	Mostarskoga bataljona b.b., Cernica, Mostar				
TYPE:	profane/ sacral Sacral				
SHORT DESCRIPTION OF BUILDING (GROUNDPLAN, ELEMENTS, CHRONOLOGY) :	Mosque with a stone minaret and a thomb of legendary mayor of Mostar Mujaga Komadina.				
USE (ORIGINAL):	Sacral object		USE (CURRENT):	Sacral object	
PLATY LIMESTONE PRESENT IN: (AND THEIR STATE OF CONSERVATION):	Mosque was built 1651. Roof, wholly reconstructed in 1997.				

NUMBER OF OBJECT IN RoR DATABASE:		Status as heritage:	Local Monument	Evidence number in Register CH:	
NAME OF BUILDING (OFFICIAL AND LOCAL):	House in Stari Grad Fortuna zgrada				
ADDRESS AND LOCATION:	Kujundžiluk, Stari Grad b.b., Mostar				
TYPE:	profane/ sacral Profane				
SHORT DESCRIPTION OF BUILDING (GROUNDPLAN, ELEMENTS, CHRONOLOGY) :	The Building was a private trade from 1860; Object with two floors.				
USE (ORIGINAL):	Trade		USE (CURRENT):	Tourist office	
PLATY LIMESTONE PRESENT IN: (AND THEIR STATE OF CONSERVATION):	Roof, wholly reconstructed at the end of 20th ct.				

POČITELJ 5 objects

NUMBER OF OBJECT IN RoR DATABASE:		Statusas heritage:	National Monument	Evidence number in Register CH:	
NAME OF BUILDING (OFFICIAL AND LOCAL):	Gavrankapetanović Tower Gavrankapetanovića kula				
ADDRESS AND LOCATION:	Počitelj b.b., 88305 Počitelj, Bosnia and Herzegovina				
TYPE:	profane/ sacral profane				
SHORT DESCRIPTION OF BUILDING (GROUNDPLAN, ELEMENTS, CHRONOLOGY) :	The fort of Počitelj was built in the 15. ct. Central tower has an octagonal base with additions from the Ottoman period				
USE (ORIGINAL):	Defensive role		USE (CURRENT):	Historical Monument	
PLATY LIMESTONE PRESENT IN: (AND THEIR STATE OF CONSERVATION):	Roof, reconstruction from 1971.				

NUMBER OF OBJECT IN RoR DATABASE:		Status as heritage:	National Monument	Evidence number in Register CH:	
NAME OF BUILDING (OFFICIAL AND LOCAL):	Han (Inn) of Šišman Ibrahim-paša Han				
ADDRESS AND LOCATION:	Počitelj b.b., 88305 Počitelj				
TYPE:	profane/ sacral Profane				
SHORT DESCRIPTION OF BUILDING (GROUNDPLAN, ELEMENTS, CHRONOLOGY) :	The han was built around 1665. It had many changes and adaptations. Exterior dimensions were around 28 x 13 m. The object was renovated in the 1970s and 2000s, with some remains of the original.				
USE (ORIGINAL):	Inn		USE (CURRENT):	Multimedia Center and Restaurant	
PLATY LIMESTONE PRESENT IN: (AND THEIR STATE OF CONSERVATION):	Roof, reconstructed ca. 2000.				

NUMBER OF OBJECT IN RoR DATABASE:		Status as heritage:	Not in Register	Evidence number in Register CH:	
NAME OF BUILDING (OFFICIAL AND LOCAL):	Private House Kapić Privatna kuća				
ADDRESS AND LOCATION:	Počitelj b.b., 88305 Počitelj				
TYPE:	profane/ sacral Profane				
SHORT DESCRIPTION OF BUILDING (GROUNDPLAN, ELEMENTS, CHRONOLOGY) :	Typical Stone House				
USE (ORIGINAL):	Residential house		USE (CURRENT):	Residential house (occasional)	
PLATY LIMESTONE PRESENT IN: (AND THEIR STATE OF CONSERVATION):	Roof, reconstructed ca. 2000.				

NUMBER OF OBJECT IN RoR		Status as	Not in	Evidence number	
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DATABASE:		heritage:	Register	in Register CH:	
NAME OF BUILDING (OFFICIAL AND LOCAL):	Private House Ibrulj Privatna kuća Ibrulj				
ADDRESS AND LOCATION:	Počitelj b.b., 88305 Počitelj				
TYPE:	profane/ sacral Profane				
SHORT DESCRIPTION OF BUILDING (GROUNDPLAN, ELEMENTS, CHRONOLOGY) :	Typical Stone House				
USE (ORIGINAL):	Residential house	USE (CURRENT):	Residential house (occasional)		
PLATY LIMESTONE PRESENT IN: (AND THEIR STATE OF CONSERVATION):	Roof, reconstructed ca. 2000.				

BLAGAJ 5 cases:

NUMBER OF OBJECT IN RoR DATABASE:		Status as heritage:	National Monument	Evidence number in Register CH:	
NAME OF BUILDING (OFFICIAL AND LOCAL):	Velagić Mill in Blagaj, 1776. Velagića mlin, Blagaj iz 1776.				
ADDRESS AND LOCATION:	Velagićevina, 88201 Blagaj				
TYPE:	profane/ sacral profane				
SHORT DESCRIPTION OF BUILDING (GROUNDPLAN, ELEMENTS, CHRONOLOGY) :	Part of the mill building stands on the river bank, with the greater part on the branch of the river Buna. The mill forms an irregular rectangle, with the north side 6.83 m wide and the south side 6.15 m wide, with a length of 17.62 m.				
USE (ORIGINAL):	Mill		USE (CURRENT):	Touristic object	
PLATY LIMESTONE PRESENT IN: (AND THEIR STATE OF CONSERVATION):	Roof, restored in the 20. ct.				

NUMBER OF OBJECT IN RoR DATABASE:		Status as heritage:	National Monument	Evidence number in Register CH:	
NAME OF BUILDING (OFFICIAL AND LOCAL):	Tekke in Blagaj, 16.-17. ct. Tekija u Blagaju, 16.-17. st.				
ADDRESS AND LOCATION:	Izvor Bune, Tekija, 88201 Blagaj				
TYPE:	profane/ sacral sacral and touristic				
SHORT DESCRIPTION OF BUILDING (GROUNDPLAN, ELEMENTS, CHRONOLOGY) :	The natural and architectural ensemble of the Tekke also includes musafirhana with turbe and imaret (public kitchen). Object reconstructed in 19. and 20. ct.				
USE (ORIGINAL):	Religious and residential building		USE (CURRENT):	Religious and touristic object	
PLATY LIMESTONE PRESENT IN: (AND THEIR STATE OF CONSERVATION):	The roof is slightly curved, which is unusual for a stone-clad roof.				

NUMBER OF OBJECT IN RoR DATABASE:		Status as heritage:	National Monument	Evidence number in Register CH:	
NAME OF BUILDING (OFFICIAL AND LOCAL):	Mekteb of the Careva Mosque, Blagaj Mekteb careve džamije, Blagaj				
ADDRESS AND LOCATION:	Careva džamija, 88201 Blagaj				
TYPE:	profane/ sacral Profane				
SHORT DESCRIPTION OF BUILDING (GROUNDPLAN, ELEMENTS, CHRONOLOGY) :	The mekteb of the Careva mosque was built before in 17. ct. It was restored at the end of 19. ct. The mekteb is a single-storey building with two rooms, rectangular in ground plan, measuring 9 x 5.5 m.				
USE (ORIGINAL):	Educational building		USE (CURRENT):	Educational object	
PLATY LIMESTONE PRESENT IN: (AND THEIR STATE OF CONSERVATION):	Roof partially reconstructed in the late 20. ct.				

NUMBER OF OBJECT IN RoR DATABASE:		Status as heritage:	National Monument	Evidence number in Register CH:	
NAME OF BUILDING (OFFICIAL AND LOCAL):	Orthodox Church of St Basil of Ostrog in Blagaj Pravoslavna crkva sv. Vasilija Ostroškog, Blagaj				
ADDRESS AND LOCATION:	Crkva sv. Vasilija Ostroškog, 88201 Blagaj				
TYPE:	profane/ sacral sacral				
SHORT DESCRIPTION OF BUILDING (GROUNDPLAN, ELEMENTS, CHRONOLOGY) :	the Church of St Basil of Ostrog in Blagaj is a single-naved church with parvis, nave and altar area. The church is rectangular in plan, with sides of approx. 9.00 and 16.75 m on the outside. The bell tower is approx. 15 m in height				
USE (ORIGINAL):	Church		USE (CURRENT):	Church	
PLATY LIMESTONE PRESENT IN: (AND THEIR STATE OF CONSERVATION):	Roof, Reconstructed in the beginning of the 20th ct.				

NUMBER OF OBJECT IN RoR DATABASE:		Status as heritage:	National Monument	Evidence number in Register CH:	
NAME OF BUILDING (OFFICIAL AND LOCAL):	The House in the Bazaar of Blagaj Kuća u trgovačkom dijelu u Blagaju				
ADDRESS AND LOCATION:	Branilaca Bosne b.b., 88201 Blagaj				
TYPE:	profane/ sacral Profane				
SHORT DESCRIPTION OF BUILDING (GROUNDPLAN, ELEMENTS, CHRONOLOGY) :	Rectangular single-story from the stone and wood.				
USE (ORIGINAL):	Trade (?)		USE (CURRENT):	Memorial Room	
PLATY LIMESTONE PRESENT IN: (AND THEIR STATE OF CONSERVATION):	Roof, in poor condition, from the 19th ct.				

STOLAC 5 cases:

NUMBER OF OBJECT IN RoR DATABASE:		Status as heritage:	National Monument	Evidence number in Register CH:	
NAME OF BUILDING (OFFICIAL AND LOCAL):	Čaršijska mosque Čaršijska džamija				
ADDRESS AND LOCATION:	Ada b.b., 88360 Stolac				
TYPE:	profane/ sacral Sacral				
SHORT DESCRIPTION OF BUILDING (GROUNDPLAN, ELEMENTS, CHRONOLOGY) :	The Čaršija mosque was erected in 1519., destroyed in 1993. and renewed in 2006.				
USE (ORIGINAL):	Mosque		USE (CURRENT):	Mosque	
PLATY LIMESTONE PRESENT IN: (AND THEIR STATE OF CONSERVATION):	Roof, wholly reconstructed in 2006. The architectural ensemble with the mosque consisted of the mosque, its courtyard and ancillary facilities, the musafirhana, the pavilion with scales on the Tepa shops, and the kiraethana.				

NUMBER OF OBJECT IN RoR DATABASE:		Status as heritage:	National Monument	Evidence number in Register CH:	
NAME OF BUILDING (OFFICIAL AND LOCAL):	Ćuprijska Mosque Ćuprijska džamija				
ADDRESS AND LOCATION:	Ul. Kraljice Katarine b.b., 88360 Stolac				
TYPE:	profane/ sacral Sacral				
SHORT DESCRIPTION OF BUILDING (GROUNDPLAN, ELEMENTS, CHRONOLOGY) :	The Ćuprijska Mosque mosque was erected in 1736., destroyed in 1993. and renewed in 2010. The interior space of the mosque measures 8.76 x 7.97 m and the minaret is 18.13 metres high.				
USE (ORIGINAL):	Mosque		USE (CURRENT):	Mosque	
PLATY LIMESTONE PRESENT IN: (AND THEIR STATE OF CONSERVATION):	Roof, wholly reconstructed in 2010.				

NUMBER OF OBJECT IN RoR DATABASE:		Status as heritage:	National Monument	Evidence number in Register CH:	
NAME OF BUILDING (OFFICIAL AND LOCAL):	Šarić House Šarića kuća (Galerija Branka Šotre)				
ADDRESS AND LOCATION:	Ul. R. Boškovića b.b., 88360 Stolac				
TYPE:	profane/ sacral Profane				
SHORT DESCRIPTION OF BUILDING (GROUNDPLAN, ELEMENTS, CHRONOLOGY) :	The house was built in 1735. The architectural ensemble consists of the main residential building, a number of outhouses in the courtyard and a fountain.				
USE (ORIGINAL):	Residential		USE (CURRENT):	Gallery	
PLATY LIMESTONE PRESENT IN: (AND THEIR STATE OF CONSERVATION):	Roof, wholly reconstructed in 2013.				

NUMBER OF OBJECT IN RoR DATABASE:		Status as heritage:	National Monument	Evidence number in Register CH:	
NAME OF BUILDING (OFFICIAL AND LOCAL):	Mehmedbašić Millestones Mehmedbašića mlin (Ćuprija mlin)				
ADDRESS AND LOCATION:	Ul. Banovinska b.b., 88360 Stolac				
TYPE:	profane/ sacral Profane				
SHORT DESCRIPTION OF BUILDING (GROUNDPLAN, ELEMENTS, CHRONOLOGY) :	In the past Stolac had about 22 mills each with eight or so mill wheels. Ćuprija mlin measures roughly 22,00 x 5,10 m and has ten arches. Inside the mill are nine mill wheels and the miller's room at the end of the mill.				
USE (ORIGINAL):	Millestones		USE (CURRENT):	Ethnographic Monument	
PLATY LIMESTONE PRESENT IN: (AND THEIR STATE OF CONSERVATION):	Roof, wholly reconstructed in 2013.				

NUMBER OF OBJECT IN RoR DATABASE:		Status as heritage:	National Monument	Evidence number in Register CH:	
NAME OF BUILDING (OFFICIAL AND LOCAL):	Tucaković Millestones Tucakovića mlin				
ADDRESS AND LOCATION:	Ul. Banovinska b.b., 88360 Stolac				
TYPE:	profane/ sacral Profane				
SHORT DESCRIPTION OF BUILDING (GROUNDPLAN, ELEMENTS, CHRONOLOGY) :	The Tucaković mill measures roughly 14.60 x 5.40 m and has five arches.				
USE (ORIGINAL):	Millestones		USE (CURRENT):	Ethnographic Monument	
PLATY LIMESTONE PRESENT IN: (AND THEIR STATE OF CONSERVATION):	Roof, wholly reconstructed in 2013.				

LIUBUŠKI 5 cases:

NUMBER OF OBJECT IN RoR DATABASE:		Status as heritage:	National Monument	Evidence number in Register CH:	
NAME OF BUILDING (OFFICIAL AND LOCAL):	Lalić Tower House, 1774. Lalića kula, 1774.				
ADDRESS AND LOCATION:	Mostarska Vrata b.b., 88320 Ljubuški				
TYPE:	profane/ sacral profane				
SHORT DESCRIPTION OF BUILDING (GROUNDPLAN, ELEMENTS, CHRONOLOGY) :	The tower house is a building with a high ground floor and two upper floors. It is rectangular in plan, with sides of 6.00 x 6.35 m.				
USE (ORIGINAL):	Fortified residential property		USE (CURRENT):	Ethnographic monument	
PLATY LIMESTONE PRESENT IN: (AND THEIR STATE OF CONSERVATION):	Roof, completely renovated in the early 21st ct.				

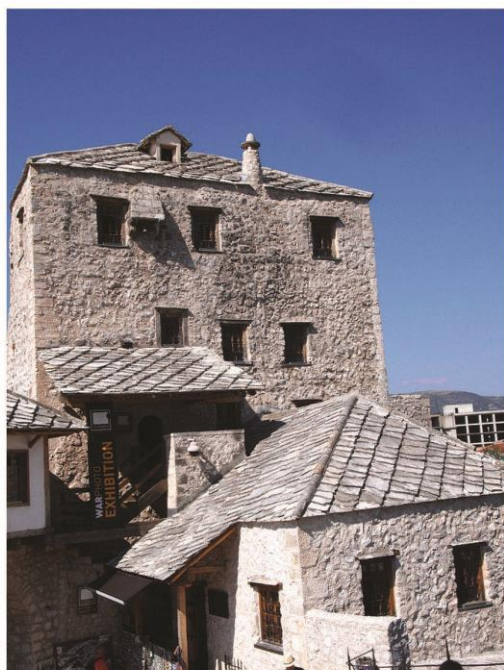
NUMBER OF OBJECT IN RoR DATABASE:		Status as heritage:	National Monument	Evidence number in Register CH:	
NAME OF BUILDING (OFFICIAL AND LOCAL):	Ali-beg Kapetanović Mosque in Vitina, 1858. Kapetanovića džamija, 1858.				
ADDRESS AND LOCATION:	Kapetanovića džamija b.b., 88326 Vitina				
TYPE:	profane/ sacral sacral				
SHORT DESCRIPTION OF BUILDING (GROUNDPLAN, ELEMENTS, CHRONOLOGY) :	the Ali-beg Kapetanović mosque in Vitina belongs to the type of single-space mosque with open portico. It has a polygonal roof concealing a wooden dome. The stone minaret was built separately from the mosque itself. The mosque was built between 1856 and 1858.				
USE (ORIGINAL):	Mosque		USE (CURRENT):	Mosque	
PLATY LIMESTONE PRESENT IN: (AND THEIR STATE OF CONSERVATION):	Roof, completely renovated in the early 21st ct.				

NUMBER OF OBJECT IN RoR DATABASE:		Status as heritage:	Not registered	Evidence number in Register CH:	
NAME OF BUILDING (OFFICIAL AND LOCAL):	Rašić House Rašića kuća				
ADDRESS AND LOCATION:	Radišići, Put za Vitinu b.b.				
TYPE:	profane/ sacral profane				
SHORT DESCRIPTION OF BUILDING (GROUNDPLAN, ELEMENTS, CHRONOLOGY) :	A new small house for countryside, stoney storey				
USE (ORIGINAL):	House		USE (CURRENT):	House	
PLATY LIMESTONE PRESENT IN: (AND THEIR STATE OF CONSERVATION):	Roof, completely made in the 21st ct.				

NUMBER OF OBJECT IN RoR DATABASE:		Status as heritage:	Not registered	Evidence number in Register CH:	
NAME OF BUILDING (OFFICIAL AND LOCAL):	Vukšić Mill Vukšića mlinica				
ADDRESS AND LOCATION:	Studenci b.b., 88323 Studenci				
TYPE:	profane/ sacral profane				
SHORT DESCRIPTION OF BUILDING (GROUNDPLAN, ELEMENTS, CHRONOLOGY) :	A new complex with mill house on the floor and small mill on the east side.				
USE (ORIGINAL):	Mill		USE (CURRENT):	Mill	
PLATY LIMESTONE PRESENT IN: (AND THEIR STATE OF CONSERVATION):	Roof, completely made in the 21st ct.				

NUMBER OF OBJECT IN RoR DATABASE:		Status as heritage:	Not registered	Evidence number in Register CH:	
NAME OF BUILDING (OFFICIAL AND LOCAL):	Lučić House Lučića kuća				
ADDRESS AND LOCATION:	Mostarska Vrata, Ljubuški				
TYPE:	profane/ sacral profane				
SHORT DESCRIPTION OF BUILDING (GROUNDPLAN, ELEMENTS, CHRONOLOGY) :	A new small storey house on the base of older foundation				
USE (ORIGINAL):	House		USE (CURRENT):	House	
PLATY LIMESTONE PRESENT IN: (AND THEIR STATE OF CONSERVATION):	Roof, completely made in the 20st ct.				

MOSTAR



Halebija Tower



House in Stari Grad



Koski Mehmed-Pasha Madrasa



Bišćević House



Mosque of Ahmed-aga Lakišić

Sl. 29.

POČITELJ



Gavrankapetanović Tower



Private House Kapić



Gavrankapetanović House



Private House Ibrulj



Han of Šišman Ibrahim-paša

Sl. 30.

BLAGAJ



Tekke in Blagaj



Velagić Mill



Mekteb of Careva Mosque



Military Memorial Room



Orthodox Church of St. Basil

Sl. 31.

STOLAC



Čaršijska Mosque



Šarić House



Ćuprijska Mosque



Mehmedbašić Milestones

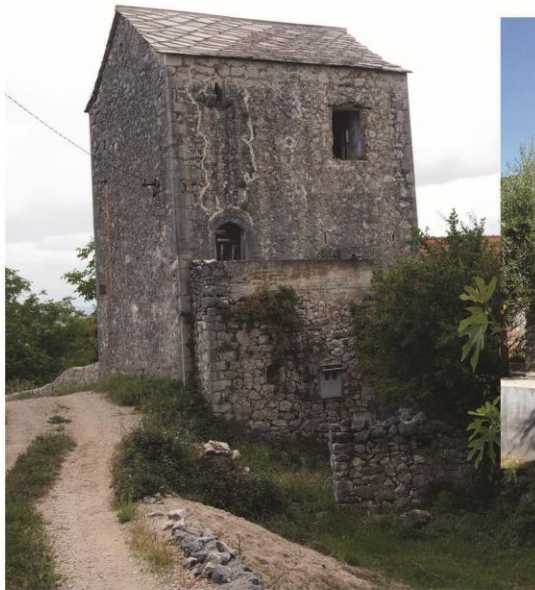


Tucaković Milestones

Sl. 32.

Limestone as the common denominator of natural and cultural heritage
along the karstified part of the Adriatic coast

LJUBUŠKI



Lalić Tower House



Rašić House



Vukšić Mill



Ali-beg Kapetanović Mosque



Lučić House

Sl. 33.

10. Selected case studies

01. MOSTAR

RoR description number	HERCEGOVAČKI KRŠ / HERZEGOVINIAN KARST	
CULTURAL HERITAGE		
Name (official and common):	"Bišćević House", Mostar	
Address (location):	Bišćevića ulica 13	
Cadastral number, community:	k. č. 3214-3215, k.o. Mostar	
Coordinates:	y=6485241.62 x=4799564.75	
Owner / contact:	Owner: Family Bišćević and Lakišić, 387 36 552 197	
Heritage status / protection:	National monument	
Use (original):	Dwelling house and tourist object	
Typology:	Ottoman residential complex	
Short description (ground plan, architectural elements, chronology):	The complex has remained relatively unchanged from 17. to 20. ct. and consists of two parts: <i>selamluk</i> (male yard or part of the house for the reception of guests and business talks) and <i>haremluk</i> (women's or family's courtyard, an intimate part of the building). The material used for building houses a local quarry stone. The wood is used for the pillars, floor and roof construction, as well as doors and windows.	
Special features:	The house is very boldly composite piece of residential architecture from the Ottoman period, with <i>divanhana</i> (room for talks), a garden and a protruding part with tall columns above the Neretva.	
Platy limestone in elements / state of conservation:	Great part of Roof is reconstruction in 20. ct. from local quarries of platy limestones. One part is not in good state of preservation.	
Notes:		
Descriptor:	Radoslav Dodig	
Date of fieldwork:	3.6. 2013. and 27.8.2013.	
GEOLOGY		
Selected limestone elements:	0 walls: <i>Eocene alveoline-nummulitic</i> 1 main roof: <i>Cretaceous albian-cenomanian platy limestone</i> 2 small roof: 3 small roof 4 entrance gate <i>Neogene marly limestone</i> 5 porch (doksat) 6 courtyard floor	
Quarries/excavation sites in neighbourhood:	Podveležje (Vicinity of Mostar); Ortiješ, Mostar	

02. POČITELJ

RoR description number	HERCEGOVAČKI KRŠ / HERZEGOVINIAN KARST
CULTURAL HERITAGE	
Name (official and common):	"Gavrankapetanović Tower", Glavna kula
Address (location):	Počitelj b.b., 88305 Počitelj, B&H
Cadastral number, community:	c. č. 2585 c.m. Počitelj
Coordinates:	y=6478573,06 x=4776802,36
Owner / contact:	Turistička zajednica Hercegovačko-neretvanske županije, dr. Ante Starčevića b.b., Mostar, +387 36 355 090
Heritage status / protection:	National monument
Use (original):	Historical monument /Defensive tower
Typology:	Ottoman fortification system
Short description (ground plan, architectural elements, chronology):	The fort of Počitelj was built in the 15. ct. Central tower has an octagonal base with additions from the Ottoman period, 17-18. ct.
Special features:	Stylistically, the residential architecture of city is a blend of Mediterranean and Oriental elements with certain local features. In Počitelj almost all buildings were built of stone
Platy limestone in elements / state of conservation:	Platy limestone in roof/ Reconstruction from 1971 and 2001.
Notes:	
Descriptor:	Radoslav Dodig
Date of fieldwork:	3.6. 2013. and 27.8.2013.
GEOLOGY	
Selected limestone elements:	<p>0 walls: <i>Upper Cretaceous lower senonian limestones</i></p> <p>1 Roof of the main Tower <i>Cretaceous cenomanian platy limestone</i></p> <p>2 Southeast entrance <i>Neogene marly limestone</i></p> <p>3 Western part of the tower</p> <p>4 Door belvedere</p> <p>5 Entrance to the tower</p> <p>6 Window on the south side</p>
Quarries/excavation sites in neighbourhood:	Podveležje (Vicinity of Mostar); Dretelj, Čapljina

03. BLAGAJ

RoR description number	HERCEGOVAČKI KRŠ / HERZEGOVINIAN KARST
CULTURAL HERITAGE	
Name (official and common):	"Velagić Mill"/Velagića mlinica, Blagaj
Address (location):	Velagićevina b.b., 88201 Blagaj
Cadastral number, community:	c.č. 1447, c.m. Blagaj
Coordinates:	y=6492377,80 x=4790250.04
Owner / contact:	Owner: Family Velagić, 88201 Blagaj, 387 062 532 518
Heritage status / protection:	National monument
Use (original):	Ethnological monument/Mill
Typology:	Ottoman economic complex
Short description (ground plan, architectural elements, chronology):	The facility has an irregular rectangular shape with dimensions: width on the north side is 6.83 m and 6.15 m in the south, while the length of 17.62 m. Under the first part of rammed earth. The walls are made of crushed stone thickness of 55-60 cm. The first part was living millers, while the second part contained five mills properly distributed.
Special features:	On the west wall, the inner side of the room where the mills, there is a stone fireplace whose stone chimney exits the roof.
Platy limestone in elements / state of conservation:	Roof of platy limestone. Reconstruction from 20. ct.
Notes:	
Descriptor:	Radoslav Dodig
Date of fieldwork:	3.6. 2013. and 27.8.2013.
GEOLOGY	
Selected limestone elements:	0 walls: <i>Eocene alveoline-nummulitic limestone</i> 1 main roof (west) <i>Cretaceous albian-cenomanian platy limestones</i> 1 main roof (east) 2 Way to the mill 3 Entrance to the mill 4 Hearth 5 Millstone
Quarries/excavation sites in neighbourhood:	Podveležje (Vicinity of Mostar); Ortiješ, Mostar

04. STOLAC

<i>RoR description number</i>	HERCEGOVAČKI KRŠ / HERZEGOVINIAN KARST
CULTURAL HERITAGE	
<i>Name (official and common):</i>	"Čaršijska mosque", Blagaj/Careva džamija
<i>Address (location):</i>	Ada b.b., 88360 Stolac
<i>Cadastral number, community:</i>	c. p. 2/219, c.m. Stolac
<i>Coordinates:</i>	y=6497068.38 x=4770950,40
<i>Owner / contact:</i>	Medžlis Islamske zajednice Stolac, Stolac +387 36 584 580
<i>Heritage status / protection:</i>	National monument
<i>Use (original):</i>	Religious needs /mosque
<i>Typology:</i>	Ottoman mosque with minaret
<i>Short description (ground plan, architectural elements, chronology):</i>	The mosque complex consists of a mosque, cistern, the harem of the mosque, a fountain in the portal axle, gusulhana and harem walls. It is one of the largest BH mosque built in the 16th century. Its size measuring 18.30 x 15.30 m
<i>Special features:</i>	The mosque is in the interior had 11 poles, five relied on by the central ceiling beams and 6 columns on which he relied mahvil. Dimensions columns were 20 cm x 20 cm to 25 cm x 25 cm.
<i>Platy limestone in elements / state of conservation:</i>	Roof of platy limestone on the mosque and on other objects. It's fully reconstructed in 2006
<i>Notes:</i>	
<i>Descriptor:</i>	Radoslav Dodig
<i>Date of fieldwork:</i>	3.6. 2013. and 27.8.2013.
GEOLOGY	
<i>Quarries/excavation sites in neighbourhood:</i>	Podveležje (Vicinity of Mostar); Ortiješ, Mostar

05. LJUBUŠKI

RoR description number	HERCEGOVAČKI KRŠ / HERZEGOVINIAN KARST
CULTURAL HERITAGE	
Name (official and common):	"Lalića tower house", Mostarska Vrata, Ljubuški/Lalića kula
Address (location):	Mostarska Vrata b.b., 88320 Ljubuški
Cadastral number, community:	c. p. 2718, c. m. Mostarska Vrata
Coordinates:	y=6464885,67 x=4784197.21
Owner / contact:	Obitelj Čerimović, M. Selimovića 12, Sarajevo, +387 62 346628
Heritage status / protection:	National monument
Use (original):	Housing and defense property
Typology:	Ottoman fortified residential tower
Short description (ground plan, architectural elements, chronology):	The tower is a tall building with a ground floor and two upper floors. The base is rectangular 6.00 x 6.35m. Height east wall is 8.50m northwest 7.50m. The total height of the tower is 10.35m.
Special features:	Access staircase has three stone steps leading to the entrance to the tower. Admission to the tower is on the west wall of the tower at its southern corner. Front doors are accentuated with stone frame with two vertical pillars and stone arch over them.
Platy limestone in elements / state of conservation:	Roof of platy limestone, completely renovated in the early 21st ct.
Notes:	
Descriptor:	Radoslav Dodig
Date of fieldwork:	4.6. 2013. and 28.8.2013.
GEOLOGY	
Selected limestone elements:	0 walls: <i>Cretaceous lower senonian limestone</i> 1 main roof: <i>Albian-cenomanian platy limestone</i> 2 front door 3 stairs <i>Middle Eocene sandstones</i> 4 cistern 5 loophole 6 wall shelf
Quarries/excavation sites in neighbourhood:	Mostarska Vrata (Vicinity of Ljubuški); Crveni Grm