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Revitalisation of K.u.K Fortifications in Trebinje

Design Sample: Fort Kličanj

DIPLOMARBEIT

Revitalisation of K.u.K. Fortifications in Trebinje Design Sample: Fort Kličanj

ausgeführt zum Zwecke der Erlangung des akademischen Grades
eines Diplom - Ingenieurs
unter der Leistung

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E253/4

Institut für Architektur und Entwerfen, Hochbau und Entwerfen

eingereicht an der Technischen Universität Wien
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Најрај посветијем мојој науци и својој
заједничкој несебичној подршци током мојих студија и будућег живота.
Љуба Рокић!

Acknowledgment

I would like to thank O. Univ.Prof. Dipl. - Ing. William Alsop for accepting the mentorship over my work and for his help during the project development.

Also, I want to say thank you to Ao.Univ.Prof. Dipl.-Ing. Dr.techn. Caroline Jäger-Klein and Em.O.Univ.Prof. Cuno Brullmann for taking part in the examination process.

Last, but not least, I would like to dedicate this work to my mother and my brother for their generous support during my studies and life in general.

Thank you!

Summary

The main topic of this thesis is research of the fortification system in Trebinje and its revival with a new purpose and identity. Work gives an short historical overview of the micro region and displays the struggle of different cultures to take power over it. This tangle of historical circumstances led to massive construction undertaken by the Austro-Hungarian government after the annexation of Bosnia and Herzegovina in 1878. In order to preserve the power over the town of Trebinje, an important strategic place, Austro-Hungarian monarchy started to fortify the town and the surrounding areas. As the troops from Montenegro never tried to penetrate the border towards Trebinje, fortification system was never put in real use. After the

First World War, these buildings started to deteriorate. Nowadays ruins, these buildings still have a great potential, which has been overlooked for decades. Trebinje is growing into a well recognized tourist destination, and these buildings could find a new use through their conservation and future revitalization as the new touristic landmarks.

The goal was to show the potential of the location and the individual buildings, through the project of revitalization of Fort Kličanj through the attempt to deliver an approach where the new designed elements would be clearly defined against the background of both the natural and the built pre-existing elements with the use of all the benefits of the Mediterranean climate.

Kurzfassung

Das Hauptthema dieser Arbeit ist die Erforschung des Befestigungssystems in Trebinje und seine Wiederbelebung mit einem neuen Ziel und einer neuen Identität. Die Arbeit gibt einen kurzen historischen Überblick über die Mikroregion und zeigt den Kampf der verschiedenen Kulturen, um Macht über sie zu nehmen. Dieses Gewirr historischer Umstände, nach der Annexion von Bosnien und Herzegowina im Jahre 1878, führte der österreichisch-ungarischen Regierung zu einer massiven Bauvorhaben. Um die Macht über die Stadt Trebinje, ein wichtiger strategischer Ort, zu bewahren begann die österreichisch-ungarische Monarchie, die Stadt und die umliegenden Gebiete zu befestigen. Da die Truppen aus Montenegro niemals versuchten, die Grenze von Trebinje durch zu dringen, wurde das Befestigungssystem niemals wirklich genutzt.

Nach dem Ersten Weltkrieg begannen sich diese Gebäude zu verschlechtern. Obgleich Ruinen, haben diese Gebäude noch ein großes Potenzial, das seit Jahrzehnten übersehen worden ist. Trebinje wächst zu einer anerkannten touristischen Destination und durch ihre Erhaltung und zukünftige Revitalisierung als die neuen touristischen Sehenswürdigkeiten könnten diese Gebäude einen neuen Nutzen zu finden.

Das Ziel war um das Potenzial des Standortes und der einzelnen Gebäude, durch das Projekt der Revitalisierung von Fort Kličanj, durch eine klare Defrenz der neuen Struktur gegen die natürlichen Elemente und die Ruinen zu zeigen und aller Vorteile des mediterranen Klimas zu nutzen .

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INTRODUCTION

In order to better understand the historical influences of different cultures and long tradition of fortification building in Bosnia and Herzegovina, as well as the micro region I am closely dealing with, this work gives a short historical overview of the most important historical periods, starting from Illyrian to the Austro – Hungarian period. Thus, we will be able to comprehend the strategic importance of the region of Trebinje and see the way in which all these cultures influenced the development of a nowadays city.

Trebinje, as it is today, was mostly shaped during the Turkish (Ottoman) and Austro – Hungarian period. As both period could be seen as a time of the foreign government it is not difficult to understand why they were characteristic by a strong and dominate fortification architecture. The parallels between these two very different cultures can be easily found within the philosophy of the urban development of Trebinje. Both systems developed in parallel civil and military architecture, to the point

where their relationship and interweaving are so frequent that it is sometimes very difficult to make the distinction where starts one and finishes the other. The Austro – Hungarians followed the same principles of fortifying the town as the Turks did before them, but the new government elevated this idea to a much more advanced level.

The fortification system outside the town, consisted of the net of individual forts, has been stigmatized by the historic connotations of the occupation of Bosnia and Herzegovina in 1878 and the First World War. Although these buildings have great potential and can be utilized for the purpose of contemporary city needs, they are left to decay. By respecting the burden of the past, this project aims to draw attention to the possibility of future interventions and methods of revitalization of these individual buildings.

Development stages from
Illyrian to Austro-Hungarian Period

01 CHAPTER



*Fig. 1:1 - 1 Radial fortification of
Illyrian city Daorson*

1.1 Illyrian Period

Whether there was an old Trebinje at the time of the Illyrians, which later continued to live in a form of the Roman *Castra Romana*, we cannot say with certainty. Professor Ante Figurić in his work "*Trebinje nekada i danas*" gave a very interesting statement, which can somewhat later, be found in the works of Vojislav Korać. Specifically, certain archaeological findings on the territory of the present settlement Gradina, revealed the existence of stairs, carved in stone, along the river Trebišnjica with remnants of stone bases, most likely from a bridge. When we talk about these findings, Professor Figurić gave a probable assumption of the existence of the Illyrian *Adzizium*, that the Romans commonly called *Urbus Opima*.¹

However, whether the "*Illyrian's Trebinje*" could be seen as a single urban agglomeration or group of individual nonaffiliated settlements, it is impossible to determine without a very detailed and comprehensive archaeological survey of the site. Bearing in mind that throughout its history Trebinje continually expanded and developed, there is a real possibility that some of the findings, if they existed, were forever lost. However the existence of these indigenous Balkans and their architecture on the territory of nowadays Herzegovina can be seen through the remains of castles and fortifications that these ancient peoples built on high ground hills. At the local level as the most representative and most important Illyrian cities we can talk about two, Daorson fortification near Stolac and the other one

1. Figurić, Ante - *Trebinje nekada i danas*, Ljubljana, 1930.



Fig. 1.1 - 2 Entrance in the Illyrian city Daorson near Stolac, Bosnia and Herzegovina

in Zavala, near Trebinje. Daorson was composed of three parts, of which the central Acropolis fortress was surrounded by "Cyclopean" walls, made of massive stone blocks (similar to those at Mycenae in Greece). This structure housed all major administrative, public and religious buildings. Defensive wall that stretches from the southwest to the northeast had the gates and towers at both ends. It was 65 m long, 4.2 m wide and between 4.5 and 7.5 meters tall.²

The cult of sepulchral architecture was highly developed. That was the reason why it was culturally more important than secular architecture. Builders would pay more attention and use better material when building sepulchral building, than in the case of buildings for everyday use. In the Illyrian culture we can make distinguish between two types of tombstones; the first one is called "Mogile", where ashes of deceased were found and "Humke" such as those around the village Mosko, in which, apart from the bones of the deceased, bronze made objects were found.³ In addition to these tangible evidence of the existence of Illyrians on the site of the Herzegovina, their traces can be found in the toponym Dalmatia. An interesting fact is that this toponym for the territorial region, which borders transcended its current, was given by the Romans after numerous Illyrian tribe Delma, with which they were in frequent conflict until 78 g. BC.

2. Wikipedia, the free encyclopedia, Wikimedia Foundation, Inc 22 July 2004. Web 10 October 2016, <https://en.wikipedia.org/wiki/Daorson>

3. Figurić, Ante - Trebinje nekada i danas, Ljubljana, 1930.

1.2 Roman Period

228 BC was crucial year for all subsequent developments on the Balkan Peninsula since this was the year when the first Legion of the Roman Empire came to its soil.⁴ The turbulence with the local inhabitants began almost immediately, and one should not lose from the sight that the Romans greatly differed from indigenous in sense of their cultural and technological development. A new culture has brought major changes in farming practices of locals, but the need for the control over natural resources and strategic positions that had been held by Illyrians only lead to the first conflict over supremacy on Balkan Peninsula. Technical powerful and prosperous Roman army, slowly but surely, made Illyrian population to obey the process of romanization. The disobedient tribes were simply destroyed.

When speaking of Trebinje (*Asamum*) in Roman times, there are certain assumptions that Roman camp existed on the site of nowadays Trebinje. Yet we cannot speak about its exact location, but we can mention two possible locations. The first is an area where in the recent past, during the Ottoman Empire, Old town of Trebinje was formed, which means that it was built upon foundations of the Roman and later Slavic, medieval settlement, and the second location is upstream, in the zone of today's settlements Police on one side and the Gradina on the other side of the Trebišnjica river. This would mean that Romans developed their camp on the basis of the aforementioned Illyrian Adzizium.⁵

4. Korać, Vojislav J., Trebinje, Istorijski pregled i period do dolaska Turaka, Zavičajni muzej Trebinje, Trebinje, 1966.

5. Figurić, Ante - Trebinje nekada i danas, Ljubljana, 1930.

The fact that the archaeological excavations in the territory which belongs to the city of Trebinje were partial and selectively made caused that we still didn't form a complete picture of this region in Roman times, which is somewhat understandable given the character of archaeological research and the fact that it is territorially a very challenging and large area. The continuity of life in this zone dates back to the distant past, the prehistoric period. Archaeological findings implemented around Trebinje show it as a very lively and densely populated area. This is confirmed by the remains of Roman estates, with housing villas within them. One of the best examples of such findings is Villa Rustica in the village Bihovo, precisely at the site Mirine, near Trebinje.

Villa Rustica is a term that comes from the period of ancient Rome and applies to residential buildings, houses of the Roman landowners in rural areas of the empire. Rustic is a term that was supposed to, in typological terms, make a distinction between an urban and rural residential buildings.

Although the comprehensive archaeological excavations in the territory concerning this period of our history were never done, we can still conclude that it had very intense flow of life. Numerous sites with rustic villas are the testimony that agricultural and livestock production were well developed.

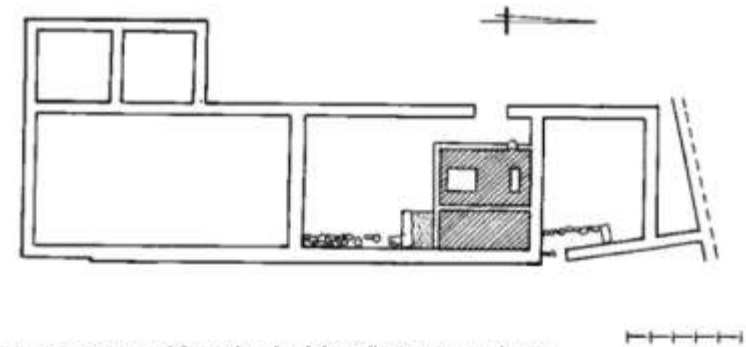


Fig. 1.2 - 3 Ground floor sketch of the Villa Rustica at the site Mirine, prof. Veljko Paškvalin, Mirine-Bihovo-Trebinje, 1975.⁶

6. Busuladžić, Adnan - Villa rustica u Bihovu kraj Trebinja, VAMZ, 3.s., XXXV 191-196 (2002)

1.3 The Arrival of Slavic Tribes and Middle Ages

With the invasion of Slavs in the Balkan region, this territory has been exposed to yet another major transformation. Sixth century should be used as the ground zero period from which it is reasonable to speak of the Slavs and their existence in the Balkans. However, the expansion of the Slavic tribes on the entire Balkan Peninsula happened gradually, so they fully mastered the entire territory in the first half of the seventh century. These dramatic changes have altered the ethnic card and Balkan in general.

For the modern inhabitants of the Balkans, and especially Herzegovina region, an important moment occurs with organization of Travunia or Tribunia authorities. Already in the tenth century, from the priest Dukljanin chronicle, we can see that Trebinje has been formed as an urban settlement. It was part of the Travunia region, which consisted of several parishes. In the 10th century, in his travelogue through Balkan region Constantine Porphyrogenitus writes about five towns in the region of Travunia, one of which is Trebinje. It is known that these were administrative centers that had established relations with the coastal cities, but when it comes to Trebinje, then we are talking mainly about neighboring Dubrovnik. Since the first half of the tenth century, Dubrovnik had to pay tribute to the Duke of Trebinje and Zahumlje for using his trade roads. Due to its very favorable position slowly but surely Trebinje takes precedence between the other towns of Travunia. As it becomes the main center, the name Travunia starts to fade away and this area begins to be known as the region of Trebinje. This period in Travunia's history, and later in Herzegovina in general, was interwoven with a number of very interesting and very dynamic historical events.⁷

7. Korać, Vojislav J., Trebinje, Istorijski pregled i period do dolaska Turaka, Zavičajni muzej Trebinje, Trebinje, 1966.



Fig. 1.3 - 4 Brankovića kula, part of the Medieval Trebinje; before and now



Fig. 1.3 - 5 Brankovića kula, part of the Medieval Trebinje; before and now

As it was already noted the continuity of life in the Trebinje region can be traced back to the prehistoric period and the late Middle Ages. Medieval Trebinje is a historical fact that is substantiated with many written and physical evidences. Medieval region of Trebinje was extremely important trading station. The strategic position has often been one of the main reasons why the various people and cultures were determined to gain the administrative rule of the certain territory in order to build their own strongholds. This is why many local medieval Lords had confrontations between each other in order to grab power over Trebinje and its surroundings. The proximity of the coastal centers, Mediterranean climate, fertile plains, richness with water, made this region an ideal place for the development of urban settlement.

The Republic of Dubrovnik has been one of the major trading partners with Trebinje. This is evidenced by at that time very alive trade route from Dubrovnik, over Trebinje towards the countryside. The main trade road used to go by nowadays one of the oldest building outside the city walls of the Old town of Trebinje. That building so called Brankovića kula is one of the oldest preserved examples of medieval architecture in Trebinje's urban area. It was built of cut stone, treated carefully and precisely laid. The base is square, from which rises cylindrical, distinctly vertical structure. The tower was covered with stone slabs and because of the circular base, the roof had a shape of a flattened cone. When we talk about the usage of this structure, then, given the form and growth in height, it would be logical to conclude that the tower was a part of the fortification system of the settlement or the town.

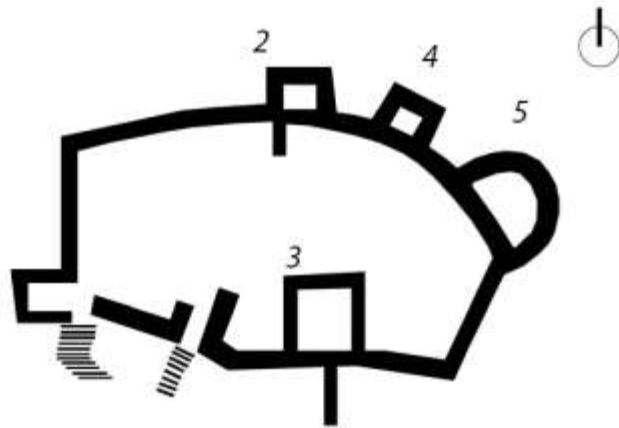


Fig. 1.3 - 6 Ensemble of the castle of Mičevac⁹

Medieval castles Mičevac and Klobuk are one more proof how important it was to have administrative control over the region of Trebinje. It is assumed that the castle of Mičevac was firstly built by Romans, but there are no valid archaeological findings. The exact date when this building was built has never been established. It played a very important role in controlling the earlier mentioned trade route. With the fall of the Trebinje under the Turks, this fortress lost its importance, what led to its continuous decline and collapse. On the 11 March 1998, this monument is placed on the Provisional List of National Monuments under serial number 709. In March 2003 the Commission for National Monuments Preservation decided that the architectural ensemble of the medieval town of Mičevac near Trebinje is hereby designated as a national monument of Bosnia and Herzegovina. In this way, the monument is placed under the strictest level of protection.

*"The city is situated in a karst plateau, whose southern side descends steeply to the Trebišnjica River, on the spot where the river forms meanders. From this, relatively low hill it was possible to control the entire region. The ramparts encircled the area of 1,300 sq m in the shape of an irregular rectangle. Dimensions of the city are: 58 m in length (east - west); width - the maximum in the middle of 23 m, 16 m at the eastern and about 10 m on the west end. Its size is adjusted based on the located and the function. The main defense points were located along the north wall, which was about 59 m long and 1.7-1.4 m thick. There are four massive towers that were built directly on the city's walls. Arrangement of these towers is quite regular. In the middle was the most massive tower (No. 3), on the east and west side were two smaller rectangular towers (No. 2 and 4). In the northeastern part we can find a massive, semicircular, tower base (No. 5)."*⁸

8. Commission to Preserve National Monuments - „Obrazloženje“, tačka dva - „Opis spomenika“, Srednjovjekovni grad Mičevac, građevinska cjelina

9. Kreševljaković H. i Kapidžić H., Stari Hercegovački gradovi, Naše starine II, Republički zavod za zaštitu spomenika kulture Bosne i Hercegovine, Sarajevo 1954.



Fig. 1.3 - 7 Medieval town of Klobuk near Trebinje, archaeological site

The story of medieval architecture on the territory of Travunia should be rounded up with a few details about the medieval town of Klobuk, once alive and relevant fortification, firstly governed by medieval Slavic landlord and then Turks. It occupies an area slightly greater than Mičevac, and within its walls we can still find ruins of the buildings which formed the inner town core. Evliya Çelebi visited this castle during his travels in the second half of the 17th century and described Klobuk as a small solid fort, with 20 stone houses with the house of Jusuf beg, town lord. Çelebi mentions a small Mosque, baths (hamam) and almost destroyed Han. In addition to the facilities listed by Çelebi, inside the walls we could find the Captain Tower, 5 water wells and watchtower called Azizija.¹⁰

"Old Town Klobuk covers an area of 13,650 m². Klobuk varies from other medieval and later fortifications from the Ottoman period by its unique space organization. It is yet unknown how large area did the town once occupy. Some remains from the Middle Ages were established during the last research in 2002 and 2005, but at this stage of exploration the data of the medieval fort Klobuk are insufficient to talk about it, although the Citadel is mentioned from the 10th century onwards. In the late Middle Ages this place was the center of the parish with the prince and Castellan. During the last excavation some pieces of pottery dating from the early Middle Ages were found, and that the east wall of the mosque is based on the medieval church apse.

*Since many defense and other objects are covered with rocks and vegetation and the fact that the comprehensive archeological excavation have not been done, we still don't have a layout of the fortification. The organization of the fortification has been adapted to the terrain. It occupies an entire rocky plateau in the shape of an irregular rectangle. The terrain gradually descends from north to south, with a distance of about 140 m, and the difference in level of 25 m. One can identify the two main levels and parts of the city - the north and south. On three sides the plateau is framed with steep cliffs. The most fortified part of the city was the west part, where the main entrance stood. The gate was destroyed, along with an inscription that stood over it. Remains of the towers have approximately circular and square base."*¹¹

10. Kreševljaković, 1954, 18-19; Hasandedić, 1990, 298-301

11. Commission to Preserve National Monuments - „Obrazloženje“, tačka dva – „Opis spomenika“, Srednjovjekovni grad Klobuk, the architectural ensemble

1.4 Turkish Period

After Herceg Stefan Kosača lost his possessions in the region of Trebinje to Turks, they began to establish the foundations for a very long period of their existence in this area.¹²

With the arrival of the new master came the establishment of a new political system and high turbulence. Medieval Trebinje slowly but surely started to fade, and ones important trade routes, from which depended the survival of people, lost their importance. Military, political and above all the strategic importance once attached to the Trebinje region began to be undermined. This had an enormous influence on the continuity of urban life development, which was interrupted. Of course, when it comes to the discontinuity of urban life, this does not mean a complete absence of any settlements or life in general, but it led to a great stagnation of development of existing towns and complete disconnection from all social and cultural movements that happened throughout the European continent. Bosnia falls into the Ottoman hands in 1463, and three years after that "the Turks appeared in antique Trebinje"¹³

12. Korać, Vojislav J., Trebinje, Istorijski pregled i period do dolaska Turaka, Zavičajni muzej Trebinje, Trebinje, 1966.

13. Figurić, Ante - Trebinje nekada i danas, Ljubljana, 1930.



Fig. 1.4 - 8 Old Town of Trebinje, Ottoman architecture



Fig. 1.4 - 9 Settlement Krš in Trebinje, Ottoman architecture



Fig. 1.4 - 10 Old Town of Trebinje, Ottoman architecture



Fig. 1.4 - 11 Settlement Krš in Trebinje, Ottoman architecture

One important reason for the urban stagnation on the territory of the Trebinje was the fact that until the beginning of the eighteenth century, Trebinje has not been recognized by the Turks as a place of great strategic importance. Borders of empire were on the coast, which meant that Trebinje found itself behind the borders. Strategically more important place for the Turks was the town of Herceg Novi that had direct access to the sea, from which Ottomans could control the Bay of Bokakotorska. The Venetian Republic has repeatedly tried to take the city from the Turks, and they were able to do so in 1687. After the Turks were forced to retreat and escape into the interior, Trebinje and its surroundings regained its strategic position.



Fig. 1.4 - 12 First from the right, Residential house of Osman paša Resulbegović, Ottoman architecture



Fig. 1.4 - 13 Old Town of Trebinje, Ottoman architecture



Fig. 1.4 - 14 Settlement Krš in Trebinje, Ottoman architecture



Fig. 1.4 - 15 Old Town of Trebinje, Ottoman architecture



Fig. 1.4 - 16 Arslanagića bridge, Ottoman architecture

Year 1616 can be taken as the beginning of the development of Trebinje, as we know it today. This year is related to the existence of a small fortification that was located on the site of today's Old Town. Defector Turks realized a need for extension of the existing fortification, to meet their needs for a longer period of time. In the spring of 1706 Osman aga Resulbegović started the construction of the new town walls. The town had a simple, but well developed defense system, which was comprised of the walls with four towers and three bastions. In 1715, the excavation of the defense channel around the city walls took place, and in this way the city was additionally protected. Historical data show that so called Hendek (*turkish word for a ditch*) was built by builders from Dubrovnik, and was 460 meters long, five meters deep and ten meters wide. This fortification channel existed until 1910, when it was partially filled in, and completely filled in in 1932.

The period of Ottoman rule on the territory of Balkan Peninsula stretches from 15th century until 1878, when a new foreign Emperor enters the political scene of Bosnia and Herzegovina in form of the Austro-Hungarian monarchy.

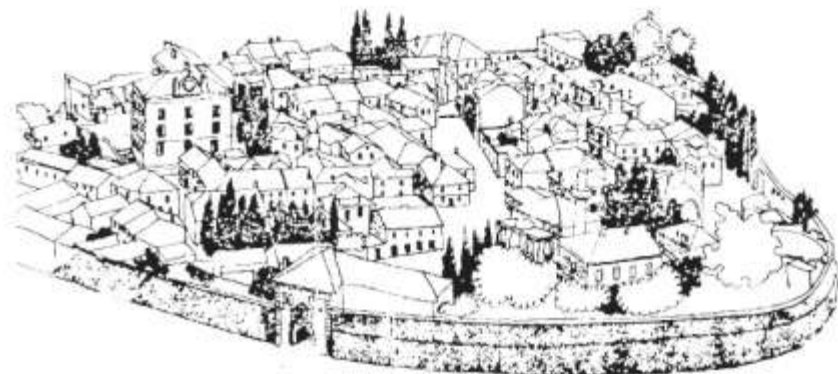


Fig. 1.4 - 17 Old town of Trebinje axonometric representation



Fig. 1.4 - 18 Old town of Trebinje (Kreševljaković H. i Kapidžić H., *Stari Hercegovački gradovi, Naše starine II*, Republički zavod za zaštitu spomenika kulture Bosne i Hercegovine, Sarajevo 1954.)

1.5 Austro-Hungarian Period

After the Berlin Congress, for the umpteenth time in its long and turbulent history, Trebinje and its inhabitants, found themselves under new and foreign administration. It is known that the reason for the organization of this Congress was to find a peaceful solution and completion of the Russian - Turkish war. This session separated Bosnia and Herzegovina from the Ottoman Empire and gave it to the Austro-Hungarian monarchy to govern it. Shortly thereafter, in 1908, Austria-Hungary annexes Bosnia and Herzegovina within its own borders.

Trebinje became a part of the Mostar region and was divided into 25 rural municipalities and the town of Trebinje. After the Berlin Congress, once again, Trebinje found itself between two fires and as such has become a strategic military stronghold of the Austro-Hungarian monarchy in this part of the Balkans. Due to the sensitivity of the whole area and the proximity of the Montenegrin border, in the city and around it, new government deployed enormous military presence. Gendarmerie forces were organized for better security. Trebinje became heavily fortified town, surrounded by new walls and many military barracks. Around the town, on the top of the every bigger hill and mountain individual fortifications were built.



Left
Fig. 1.5 - 19 The map of
Trebinje and its surrounding
area in 1899

Although slow, economic development of Trebinje after the arrival of the Austro-Hungarian government was notable. Development of road infrastructure, which is reflected in the construction of Eisenbahn railway traffic on the route Trebinje - Hum - Čapljina, which was later connected with Dubrovnik, favored the development of the economy of Trebinje. As once the ancient Rome, so did the Austro-Hungarian authorities recognize the preconditions for the development of viticulture in Trebinje and almost immediately upon their arrival they tried to interest the local population to accede to the cultivation of grapes and other Mediterranean cultures.

Right
Fig. 1.5 - 20 Railway Station Hum, near Trebinje

Down
Fig. 1.5 - 21 New school building in Trebinje



The production of tobacco became so important and widespread that the new government declared a state monopoly over the production and built a huge tobacco factory in the town. The development of the economy, contributed to the expansion of the town, but also to the influx of population, not only from the surrounding areas, but also Austrians, Hungarians, Italians and Czechs came here and stayed to live.

Fig. 1.5 - 22 The map of Trebinje in 1899.

Legende

- 4-10 Rohr-Caliber in Millimetres
- 5 Brunnen m. const. Auslaufe
- 2 Brunnen m. Sparseschleife
- * Projectile Brunnen
- Project Brunnen im D. Lager
- ## Cisternen u. bestehende Brunnen
- FR Feuers-Hydranten
- GM Gärten-Hydranten
- + Abwasser-Schieber
- △ Cisternae
- Abgabe-Rayon Radius 7500 m.

Grenze des großen
kleinen Bräu

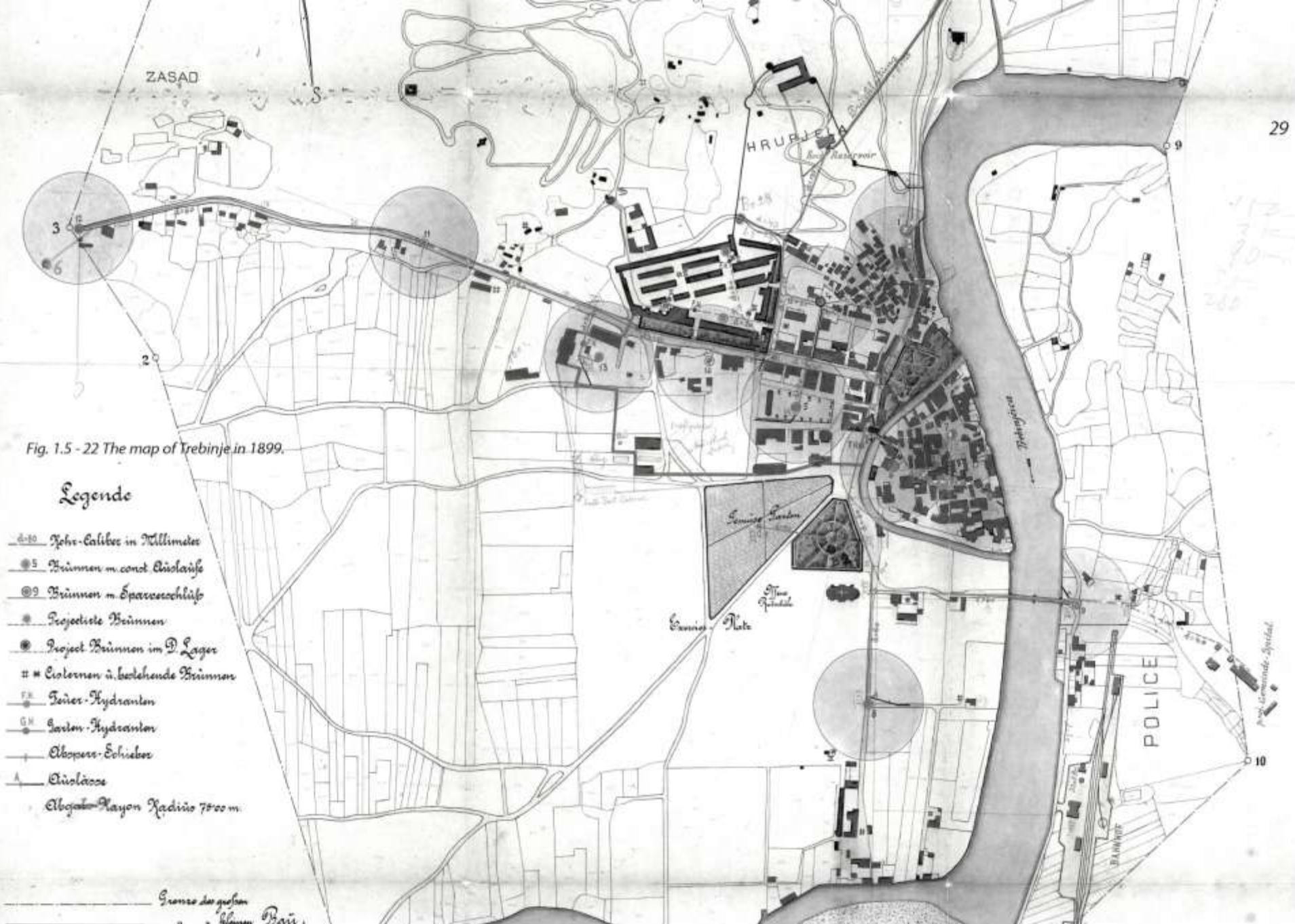




Fig. 1.5 - 23 The main street in Trebinje

The new government made the effort to organize the schools, and they opened the first joint school for all the citizens of Trebinje, regardless of their religious affiliation. Resistance was inevitable, so the government had to force the local population to send their children to this establishment with a decree. After that, first secondary school was opened. It was the Trade school, which gradually began to turn into lower Gymnasium.


Arbitrary annexation of Bosnia and Herzegovina in 1908, and generally complicated political situation in the Balkans, led to the Balkan War in 1912. It should be noted that the turbulences in Herzegovina, and primarily its eastern part, have begun to appear much earlier, caused by the forced implementation of the so-called Military Law, which recruited the locals in Austro-Hungarian army. Four years after, the First World War had begun.

Development of the new fortification system in Trebinje

02 CHAPTER

Fig. 2.1 - 24 The main square in Trebinje





2.1 Development of the city with the foundations of fortification

Even before the Berlin Congress and the arrival of Austro-Hungarian Monarchy in Bosnia and Herzegovina, Trebinje and its surrounding area had an important geo-strategic position. Different cultures have influenced this small area and every single one of them left their own marking in the form of rich archeological findings. It is these findings that allow us to observe the cultural development of these individual cultures, their way of life and their military skills.

As it was previously mentioned Austro-Hungarian forces were not the first foreign element that tried to dominate this region, although their military force was superior in every way. The main reason this, already huge Empire made an interest in backward county, devastated by the centuries of Ottoman rule, were the natural resources Bosnia and Herzegovina never lacked. Thus, the Emperor found it crucial that Berlin Congress should not end only with the story about Russian – Turkish war, but that Ottoman Empire should be punished by taking Bosnia and Herzegovina out of its borders. This led to Austro – Hungarian arbitrary annexation of Bosnia and Herzegovina in 1908. But annexing did not come as a surprise, because from the first moment Monarchy came within Bosnian borders, it was clear they came there with a plan to stay.

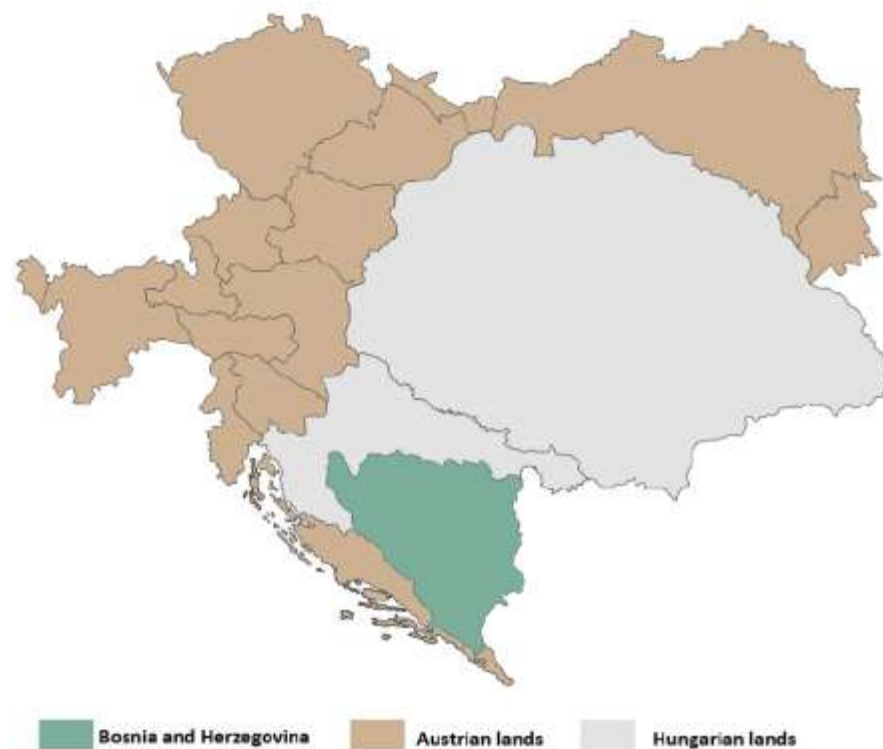


Fig. 2.1 - 25 Map of Austro - Hungarian monarchy and position of Bosnia and Herzegovina.



Fig. 2.1 - 26 Map of Bosnia and Herzegovina in Austro - Hungarian monarchy 1895.



Fig. 2.1 - 27, 15.07.1901. Opening of the railway station in Trebinje

The region of Bosnia and the region of Herzegovina are geographically two opposite areas. Bosnia is on the north, with continental climate, rich with forests and mineral resources, while Herzegovina is on the south, with Mediterranean climate, long and dry summers, ideal for good quality wine and tobacco production. In order to make the way to speedy and efficient extraction of these resources, country had to be equipped with infrastructure. Centuries of Turkish rule in Bosnia and Herzegovina resulted with the fact that it stayed trapped in the 15th century. Road infrastructure was of poor quality, if it all existed and the local inhabitants were engaged exclusively in traditional agriculture and in cattle raising.



Fig. 2.1 - 28 Archduke Franz Ferdinand of Austria arrives in Trebinje

The first bigger infrastructural project of the new Government was to establish the railway system, which will connect Vienna with every strategic place. Trebinje was no different. On the 15th of July 1901 the new railway station was opened and five years later it hosted Archduke Franz Ferdinand of Austria, who came to Trebinje to examine the progress. Railway station Hum, near Trebinje, was one of the biggest railway junctions in Bosnia and Herzegovina from the moment of its making until 1973, when it was put out of service.



Fig. 2.1 - 29 North military camp with the west entrance in the town and the Tobacco factory

In the first years of Austro – Hungarian rule, Trebinje started to develop not only its road and railway infrastructure, but also local economy. Tobacco and wine production started to be more and more important. In order to make the regulations within this production a new tobacco factory and vineyard settlement were formed. Agronomists from Hungary came to work and live in Trebinje in order to help locals set a new Imperial vineyards, which produced the wine directly for the Court in Vienna. Tobacco from Trebinje was also highly appreciated and sought.



Fig. 2.1 - 30 Vine station Lastva near Trebinje

The most important person for urban development of Trebinje during the 19th century was General Djuro Babić. He was born in 1826 in Sveti Rok (Lovrenac), nowadays Croatia. He entered the army as a young officer and was involved in various wars. Immediately after the occupation of Bosnia and Herzegovina, Babić came to Trebinje as a colonel. There he became a general and operated the military and the civil administration of the town. For the good work he did in Trebinje, the Court awarded him with the title of Baron. Later, Baron Babić left Trebinje and moved to Budapest, where he died in 1890.



Fig. 2.1 - 31, Serbian Orthodox Cathedral

Some of the most important dates in Trebinje's urban development are:

1880 - Construction of the northern military camp and later on the east and the south military camp

1880 - Construction of the bridge on the river Trebišnjica for better road connection with Dubrovnik

1881 - Opening of the first elementary school in German language

1883 - Opening of the new hospital

1884 - Construction of the Catholic Church in Trebinje

1885 - Routing of the main street

1885 - Construction of the Municipal Council

1889 - Development of the main square

1889 - Opening of the first public toilet

1892 - Fire department was established

1894 - Public lighting with 74 lanterns

1894 - Opening of Trade school in Trebinje

1898 - Construction of the railway line

1899 - Construction of municipal water supply system

1901 - Opening of the railway Čapljina-Trebinje

1908 - Completion of the Orthodox Cathedral...

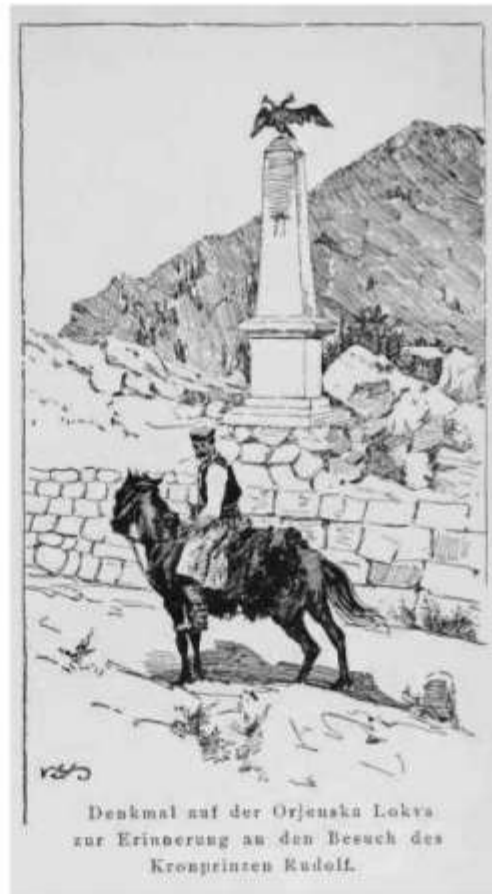


Fig. 2.1 - 32 The monument in memory of Crown Prince Rudolf on the border towards Montenegro

How important this part of a country was for Austro-Hungarian monarchy can be seen from the fact that on 25th of July 1888 Trebinje was visited by Crown Prince Rudolf. During these first years, Bosnia and Herzegovina was constantly visited by many Austrian travelers, who found the country very inspiring as a topic for their books. From these books we can get a decent picture about the life of people in the regions they visited, as well about the changes that were happening all over the country.

In 1910 Trebinje had 4589 civil inhabitants and 3000 soldiers within its borders. Almost immediately after their arrival, the new government started to fortify the town. This fortification system can be separated into two elements.

- The first one is the fortification of the town itself with the system of military camps and a new town walls with guardhouses and controlled gates.
- The second one is the system outside the town, on the top of the surrounding mountains. The second system is consisted of individual fortifications which are not physically, but visually connected.

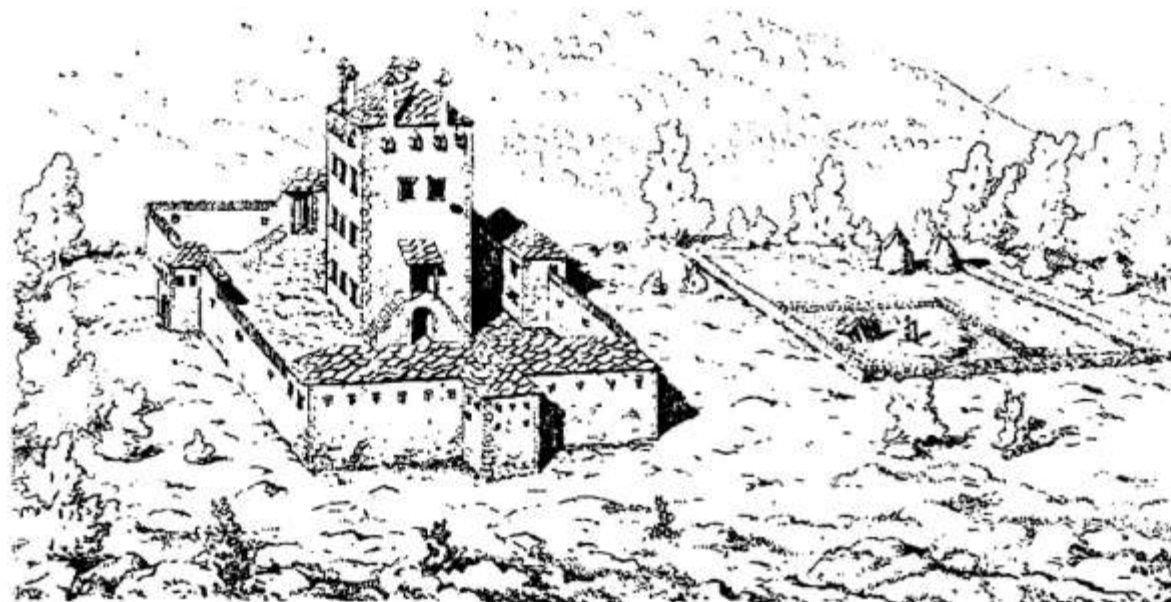


Fig. 2.1 - 33 Reconstruction of the typical
turkish Kula in Bosnia and Herzegovina

The history of fortifications building in this region has a long tradition. The Austro-Hungarian forces found an existing net of Turkish fortifications, so called Kula (tower), which were used as a form of guardhouses. But even before that, in the Middle Ages feudal lords lived in the stronghold courts, which had a form of fortification. These buildings were demolished or transformed after the Turkish occupation. On their estates, Turkish feudal lords built special stone buildings with high towers and used them for living and as an defense fort. Nowadays mostly ruins, these buildings can be found all over Bosnia and Herzegovina in different forms. The top floor of Kulas was always vaulted with a domed or barrel vault made of travertine. These buildings were built mainly of finely cut limestone. Kulas are covered with a pyramidal or gabled roof with a larger overhang. In Bosnia, the roof is covered with shingles and in Herzegovina with stone plates.¹⁴

The history of Austro-Hungarian fortifications can be traced back to the Napoleons wars and the fact that in his campaign of 1809 Napoleon traversed Bavaria and followed the stream of the Danube river brought the majority of his forces to the confluence of the rivers Danube and Traun near Linz, making the bridge over Traun at Edelsberg, a site of a fierce battle. It was Archduke Maximilian who, in 1819, became the mastermind of a campaign which will once for all put a stop to the fears that Napoleon could once again use the Danube route and enter the Austrian soil. His plane was to protect the city of Linz and block the passage along the Danube river by fortifying the city of Linz. His design marked a new era and brought a revolution in the fortification building.¹⁵

14. Kreševljaković, Hamdija; „Kule i odžaci u Bosni i Hercegovini“, Naše starine II, Godišnjak Zavoda za zaštitu spomenika kulture SRBiH, Sarajevo: 1954

15. Rolf, Rudi; Festungsbauten der Monarchie, Die k.k. – und k. u. k. Befestigungen von Napoleon bis Petit Trianon eine typologische Studie. Middelburg, 2011.

His design introduced a cylindrical system of individual towers that surrounded the city of Linz. For the first time, these buildings were not mutually connected by a wall which could prevent the enemy from entering the city, but by the artillery fire alone. Additionally, these individual towers were dug into the soil, so they appear to be smaller and harder to notice. The original design of these multi-storey guarded towers, can be found in the Montlambert's region, developed before Napoleon's time. This multi - storey building was formed of concentric circles and was used as a Defence platform. The diameter of the Maximilian's circular stone towers was 35 meters.

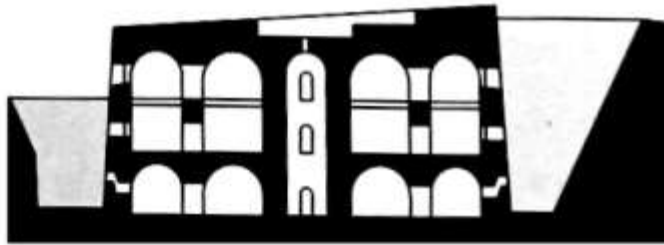


Fig. 2.1 - 34 Normal tower - Fortification of Linz



Fig. 2.1 - 35 Segment towers - Fortification of Linz

In order to make sure that the new system would function as predicted, in 1828 Archduke Maximilian had to build an experimental fort with his own money, under the understanding that the Imperial Treasury will repay him in yearly installments. When an experimental tower was built and exposed to a heavy artillery bombardment the army was convinced and the plan was approved. The construction of the fortress started in 1831 and by 1838 the ring of towers was completed together with a fortress (citadel) on Postlingberg, a hill west of the town, where the defenses headquarters were stationed. Fort's aim was double: to protect the city from the enemy and to protect the authorities from revolutionary citizens. Towers were between 12 and 13 meates high, devided on three stories. Ground floor was used as the warehouse for food and ammunition, while the upper floors we used by soldiers. The platform hosted the cannons with the ammunition that could reach the distance of 1000 meters, which was the distance of the neighboring tower.¹⁶

When it comes to French army, its mission was a failure. After 1813 French armies never again appeared in this part of Europe and the fortress became obsolete. It was decommissioned in the early 1860's.

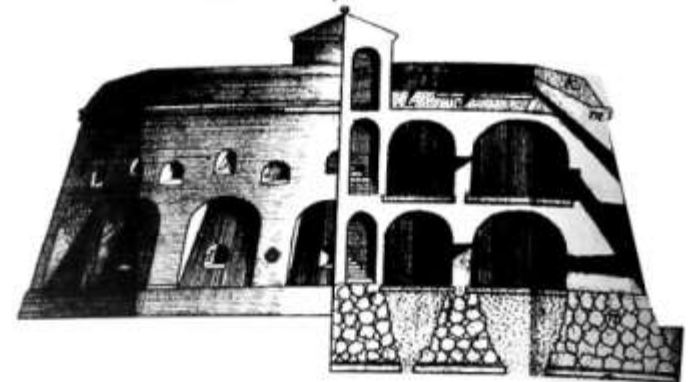


Fig. 2.1 - 36 Section and Elevation of the tower - Fortification of Linz

16. Wagner, Wilhelm J. Österreichs reale Utopien. Viel geplant und nicht verwirklicht, Wien/München 2000

Maximilian Fortifications of Linz



Fig. 2.1 - 37 Experimental fort, Fortification of Linz



Fig. 2.1 - 38 Fort IX
Fortification of Linz



Fig. 2.1 - 39 Fort VI
Fortification of Linz

2.2 Fortification system within the town

The initial idea for the developing a massive military and civil building project can be traced back to the memorandum that was sent to the ministry of War in Vienna on the 21th of December 1881 by the Governor of Dalmatia Stjepan Jovanović (*Stephan Freiherr von Jovanović*), who states that the only way lasting peace in Dalmatia and Bosnia and Herzegovina can be established is through strong Austro – Hungarian influence. At first, that influence should be a strong military presence, which could later be transformed into a civil administration. Massive construction undertakes should be put in place in order to upgrade still undeveloped road infrastructure, build schools and develop industry. This project started to implement within a few months with over 3 million Gulden assured by the ministry for the general command in Sarajevo.

Parallel with the formation of the civil architecture, outside the walls of the Old Town, new government starts to build a net of military buildings in order to protect its own position in this area and to control the local population. This was the core or nucleus of the administrative rule. The old town was already well fortified with a huge stone walls and a water channel around it. As the new town centre was being constructed outside these walls, General Babic makes the decision to enclose it all with the new wall that connects 3 major military camps. On the top of the hill Hrupjela, overlooking the town centre they built the Hrupjela Defense Barracks for one hundred soldiers and regimental orchestra.

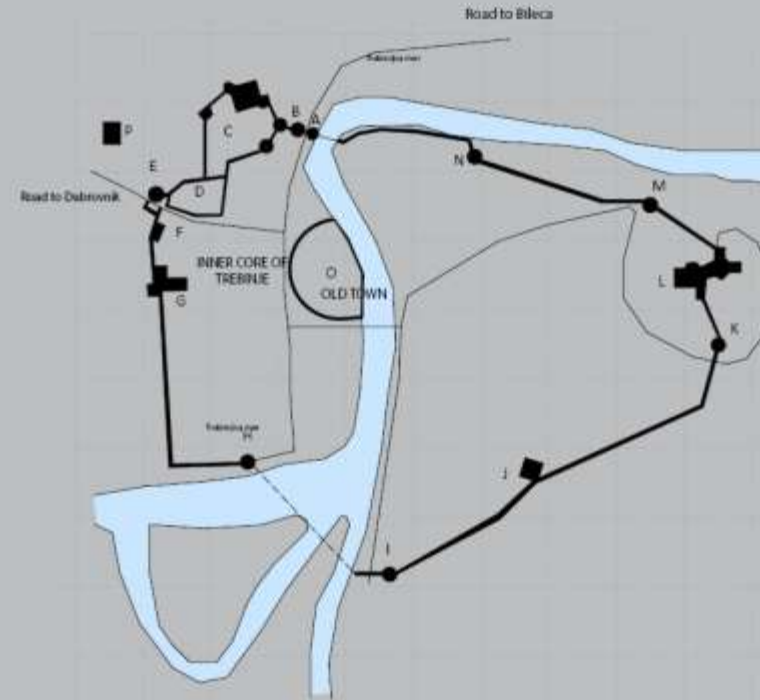


Fig. 2.2 - 40 Fortification system within the town

- A - Hrupjela barracks water supply bunker B - North gate - Bilećka kapija
- C - Hrupjela barracks D - Defence barracks E - West gate, Dubrovačka kapija
- F - Tobacco factory G - Albrecht barracks H - Watch house Bregovi
- I - Railway watch house J - Defence barracks Police K - South watch house Crkvina
- L - Fort VI Crkvina M - North watch house Crkvina N - Watch house Donje Police
- O - Pioneer barrack P - Watch house Pogača

Fig. 2.2 - 41 The map of Trebinje in 1899.

On the west edge of military training ground Albrecht barracks were created and this camp accommodated two hundred soldiers. One of the biggest barracks inside the town is the North camp and it was built in three stages, in 1879, 1882 and 1883/4. The complex consisted of, military dormitories, officer's dwellings, bakery, stables, warehouses, kitchen and administration building. It was built on the north - west edge of the main street, along with many private houses. This place hosted 5 infantry troop and several other departments. Two main town entrances were protected by the bunkers and fortified gates. The old town was covered by Pioneer barrack with a station for carrier pigeons. Nowadays this station is the only preserved building of that kind in Bosnia and Herzegovina.

Fortification of the town of Trebinje,
 1 - Albrecht barracks;
 2 - Tobacco factory;
 3 - North camp;
 4 - Hrupjela barracks;
 5 - Defence wall;
 6 - West gate "Dubrovačka
 kapija";
 7 - North gate "Bilečka kapija"

2.3 Fortification system outside the town

System of fortification buildings that was applied in Trebinje was designed by the military commander of Zadar (Croatia) Colonel Karl Wahlberg in 1882. His general plan was to build three different types of fortification buildings, where the form would follow the function. The first and the smallest form would be a watch / guard house. The best example of this building in Trebinje is the watch house Petrina. These buildings had a simple concept, which consisted of an internal courtyard with a main building. The second is a larger structure with more complex defense concept. It consists of the internal courtyard, the main building and defense platform. Bigger forts can have more than one platform e.g. fort Kravica, which had two. The third element is the defensive barracks. This building consists of the internal courtyard, barracks building and the defense towers. The best example of this structure in Trebinje is the defensive barracks Hrupjela, which is part of the defense system inside the town.



Fig. 2.3 - 42
First type - Watch house
W.H. VII Petrina

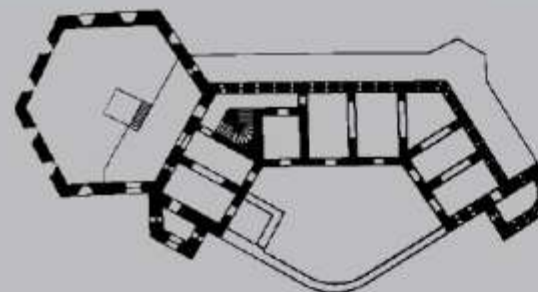


Fig. 2.3 - 43
Second type - Platform fort
Fort I Kličanj

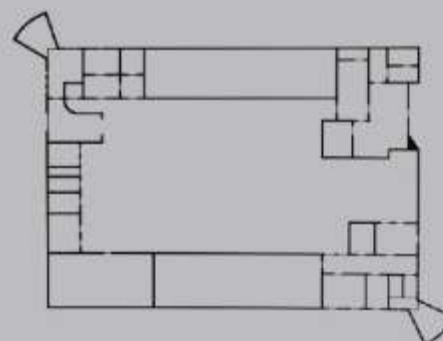


Fig. 2.3 - 44
Third type - Defensive barracks
D.B. Hrupjela

1:1000
Entwurf des Defensionskonzepts bei Karl Hrupjela, Trebinje

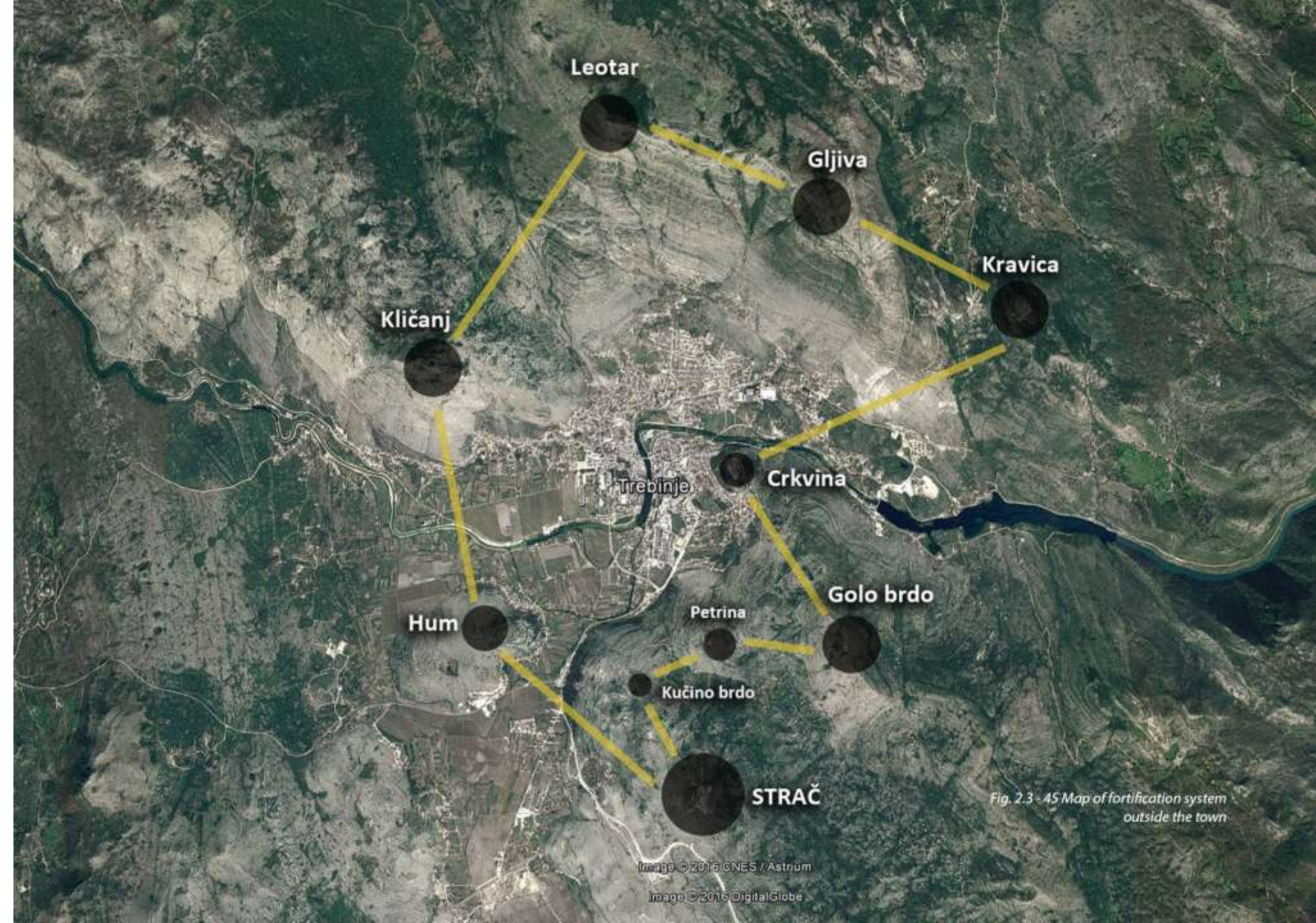


Fig. 2.3 - 45 Map of fortification system outside the town

In other to make the fortification system more operational it was divided into five defense districts.¹⁷

47

Defense district 1	Defense district 2	Defense district 3	Defense district 4	Defense district 5
Town of Trebinje	Kula Tvrdoš Kula Dražindo Fort I Kličanj	Fort II Leotar Fort III Gljiva Jovanovića Battery Fort IV Kravica Battery Kravica	Fort VI Crkvina North battery Crkvina South battery Crkvina Fort VII Golo brdo Battery Golo brdo Watch house VIII Petrina Watch house Kučino brdo Panzer fort IX Strač	Fort X Hum Kula Hum Kula Gluva smokva Kula Sparožići Kula Drijen

As we could previously see, the concept of fortifying the town was centralized and all the elements were mutually dependent. The principle of the system outside of the town can be seen as more decentralized and formed of individual objects that are not physically connected. This concept can be related to the one from Linz, which was previously mentioned.

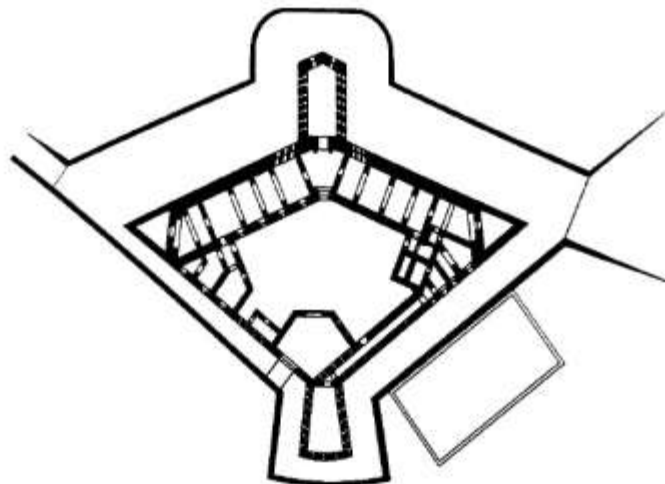


Fig. 2.3 - 46, Fort IX, Fort Hum, ground floor

Fortification system outside the town encloses Trebinje and its surrounding area in a circular form. The strongest part of the system was oriented towards the Montenegro borders, which had been seen as a potential threat. These fortifications were built on the top of the hills and mountains that surround the town and are a great observation point of the entire region and the Adriatic coast.

Forts Kličanj, Golo brdo, Gljiva, Kravica and Leotar had a form of the platform fortification. Panzer fort Strač was built much later, just before the First World War and represents the most modern fortification of the time built from reinforced concrete. It was built in 1913, with a plan of erecting two more on the site of the older Fort Golo brdo and Fort Kravica. The war stopped all these plans from ever being realized.

As we can see from the sketch left, Fort Hum was one of the most interesting examples of the fortification architecture in Trebinje, along with the Panzer fort Strač. The layout of the building had a form of a rhomboid, which was emphasised by a big inner courtyard and two caponieres on the opposite sides of the building. The entire form was surrounded by a big ditch. The two flanks hosted the officers' lodgings, an ammunition magazine and front barracks. The entrance to the building was organized in the form of the "Eingang mit Zwinger"¹⁸

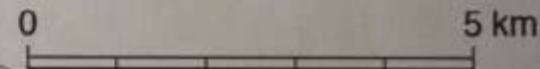
17. Rolf, Rudi; Festungsbauten der Monarchie, Die k.k. – und k. u. k. Befestigungen von Napoleon bis Petit Trianon eine typologische Studie. Middelburg, 2011.

18. Ibid.

Trebinje



Fig. 2.3 - 47 Fortification system outside the town
Source: Rolf, Rudi; *Festungsbauten der Monarchie, Die k.k. – und k. u. k. Befestigungen von Napoleon bis Petit Trianon eine typologische Studie.*
Middelburg, 2011., page 141



Trebinje and Fortifications Today

03 CHAPTER



Fig. 3.1 - 48 Panorama of Trebinje from the hill Crkvina plateau where Fort VI originally stood

3.1 Trebinje Today

City of Trebinje, as it is officially named, is the southernmost municipality and city in the entity Republika Srpska, Bosnia and Herzegovina. It is the administrative, economic and cultural centre of the East Herzegovina region and has a population of about 40 000 people. The exact coordination is 42.712°N 18.346°E. It covers area of 854,5 km² and has 178 settlements. The name of the city comes from the Slavic word "treb", which means sacrifice. Architecture in Trebinje is the most characteristic for its blend of Oriental, neo-renaissance and Mediterranean architecture.

It is located below the mountain Leotar, on the edge of Trebinje field in the valley of once Europe's largest subterranean river Trebišnjica. The sea is about 27 km away by the road to Dubrovnik, or about 38 km by the road to Herceg Novi. Trebinje is located at 275 m above sea level. Trebinje's landscape is dominated by rocky fields and Dinarides mountain range.

Climate in Trebinje is Mediterranean with a short mild winters and long hot summers. The average annual temperature is 16.6 °C, the coldest month is January with average temperature of 8.3 °C and the hottest is July with temperature around 30°C. The city has about 260 sunny days a year.¹⁹

19. Wikipedia, the free encyclopedia, Wikimedia Foundation, Inc 22 July 2004. Web 19 November 2016, <https://en.wikipedia.org/wiki/Trebinje>

3.2 Trebinje, urban analyze

Mediterranean element in the architecture of Trebinje

The largest number of buildings which nowadays define most of European cities in terms of architecture, were designed during the 19th century. Architecture that arises from this historical period has been developed on the principles of neoclassical architectural practice, with a strong and dominant reference to previously established norms of architectural aesthetics. In that sense, Trebinje is no different from any other, larger or smaller, European city, designed in the same historical moment. History of architecture will show that for the modern Trebinje one of the most important moments in his transition from tight, introverted, oriental shells into a modern urban area, which will form the basis for any future upgrades, was turbulent transition from the 19th to the 20th century.

The newly formed and carefully designed urban nucleus with prominent neo-Renaissance architectural motifs, seemed from today's point of view, created relatively mild transition from oriental to european urban tissue. The buildings are of a simple architectural expression, with rarely monumental facade and often reduced form, built on the experiences of traditional construction method, enhanced by, for the time modern technological solutions. Sensibility with which a new street profiles were formed and high quality spatial bearing of one building in relation to a neighboring one, makes the newly formed city blocks successful architectural solution. The use of stone and the understanding of the local climate predisposition will lead to advancement and additional emphasis on the Mediterranean architectural physiognomy of some of the most representative buildings built in this historic period. Mediterranean element in Trebinje's architectural expression had peaked during the main street shaping, in the form of family houses which create the street front. The introduction of carefully proportioned and aesthetically finished arched portals, roof cornices and representative balconies, gave these houses the character of Mediterranean Palaces or Villas, and greatly increased the level of urbanity of the city as a whole.

Although the representative examples of Mediterranean architecture in Trebinje were centralized and developed on the micro plane, their adaptation was so successful that it continually strengthened Trebinje as a city with a strong Mediterranean flair. Polemics about the city that so-and-such character needs to nurture and further strengthened ubiquitous in the local architectural discussion to this day.



Fig. 3.2 - 49 Architectural heritage complex - Hadžiahmetovića kula sa dvorima in Trebinje - Ottoman architecture



Fig. 3.2 - 50 Old Town of Trebinje, riverfront - Ottoman architecture embedded into the traditional stone architecture praxis of Herzegovina

Unfortunately, the use of all positive preconditions that can be found in the foundations of the original Mediterranean cities, but also the Mediterranean philosophy of life and attitude to it, to this day remains at the level of theoretical discussions which, unfortunately, did not have the strength to be materialized through the construction of new city blocks and settlements in general. But let's take a few steps back and take a closer look on what is generally meant by the term Mediterranean architecture.

Mediterranean architecture as stylistic trend has been developed over the centuries under the inviolable influence of the Mediterranean climate. It is not uniformed nor unified but diverse and regional. Mediterranean architecture is architecture of region, customizable to specific location and needs of man. It is not time limited, has no specific beginning or end, but is a product of constant adjustment and improvement by expanding cultural influence, a regional approach to the already customized building praxis. It combines different architectural forms along the entire coast of the Mediterranean Sea, created and developed spontaneously during different periods of time. Although, geographically, they can be of significant distance, each of the individual regional architecture practises is linked to each other by single understanding of space and the way that it should be developed. Common to all of them is that the classical Mediterranean settlements are built in groups, often accompanied by a certain slope, strictly taking into account the orientation in order to make better use of all the climatic advantages such as ventilation, lighting and etc.

Ottoman architecture was created in the 14th and 15th century, and has emerged as a combination of the influences of the continental Edirne and Mediterranean Bursa with very similar climate characteristics. It is as such an integral part of a series of regional interpretations of the building methods of the Mediterranean area. Ottoman architecture is in its original form part of the Mediterranean architectural expression, which developed and took on the spreading influence of different cultures with which it came into contact, and in the final stage become a symbiosis of architectural traditions of the Mediterranean and the Middle East.

Orientalism (ottoman architecture style) as an architectural expression is in some parts of Trebinje strongly and spatially represented. It should be borne in mind that the oriental architecture in Trebinje is not of classical format and of the typical form. It is immersed in the character of a traditional Herzegovinian stone architecture and is a symbiosis of two cultural influences, which resulted in one authentic ambient value from which one can draw many lessons and positive experiences that should not be put under way, but used and displayed as an additional potential and the richness of cultural diversity, strengthening the Mediterranean character of Trebinje.



*Fig. 3.2 - 51 Old Austro- Hungarian road to
Jovanovića battery and the valley of Trebinje*

Fort I - Kličanj

Speaking about the issues that exist in the architecture of cities of today is impossible without reference to the cultural upheavals that have, directly or indirectly, led to them. People's attachment to the land which was the main source of their livelihood and which formed the basis of any economic activity of society as a whole, suddenly loses all the meanings and breaks by the industrial revolution. It gave rise to the foundation of the Cultural Revolution and changed the mindset and attitude of man towards the area they were living in, but also about social community, that has a man as its basic element. With these changes physical and psychological bonds, which formed a reference point by which people were tied to a particular group or community, which eventually resulted in the phenomenon of identification to a specific place, were permanently disrupted. Although the industrial revolution made a huge leap forward in terms of technological advances that have improved people's quality of life in cities, it could be said that the process that it initiated in the field of architecture represented the beginning of its dehumanization. Unification of architectural structures is gaining strength by awakening of a new approach to building understanding and living space. The twentieth century gives rise to the style known as Modernism, which preaches a completely new architectural expression, resulting in the break with the past and creation of a common style using modern materials and new technology. During this period cities are expanding rapidly, often at the expense of primary urban structure, which is absorbed by eliminating its character and creation of a completely new architectural philosophy.

*Fig. 3.2 - 52 Ottoman Kula in Trebinje
combination of defence building and
residential complex*

Trend of standardization of the cities in the former Yugoslavia, caused by rapid industrialization after the Second World War is incarnated by number of soc-realist and brutal buildings by whose expansion the original uniqueness, formed over the centuries by careful materialization, volumetric and climate awareness of local builders was getting lost. The importance of the architect's opinion is put to the background, while the desires and needs of too often ignorant investors, prone to quick money, play an increasingly important role. Compromises at the expense of the architecture are frequent and often are a global phenomenon, which can be seen not only in the economically depleted countries, resulting in the overproduction of "bad architecture."

Emphasizing commercialization of architecture through the past few decades, profit is placed in the first and often the only plan, while aesthetic is being marginalized and banished. This led to the formation of entire city blocks and entire settlements, with uniformed building physiognomy, questionable architectural value, and limited life span, compromising inherited and long cultivated authenticity and originality of the urban nucleus.

Mediterranean zone has historically always been considered one of the most active cultural and creative environments, whom other areas gravitated or looked up during their development. Unfortunately, today this region is the picture of how an area can rapidly lose its own uniqueness by unplanned and sudden transformation of the space people had been developing throughout centuries. This spatial content might be the best test subject in order to comprehend, what can happen to a region when it is introduced with a new styles, substantially different from the



local practices and cultural background, to which a free hands were given to transform the area without any contact and dialogue with the inherited natural and urban contexts. A direct consequence of this approach to development and expansion of the city is the emergence of the phenomenon of "anti-space", a place without character, with entire suburbs that are not identifiable by anything. This leads to the problem of lack of identification and difficult orientation because the settlement as a place in nature no longer exists and the buildings are no longer elements that reflect individuality and a sense of belonging.

In the cities, like Trebinje, that still draw the quality of its architecture from inherited urban areas with a strong, clearly defined, widely recognized quality of urbanity, any new architectural entity or individual object becomes, for a reason or not, criticized or praised based by standards that were previously established and aesthetics that is embedded in the consciousness of people. Perhaps, before trying to get out of the vicious circle of theorizing about the spread of Mediterranean spirit from Trebinje's city center towards the periphery and whether should such thing be recognized as a need, it would be important to answer the question what is the Mediterranean architecture of the 21st century? What are the real needs of the cities of today and what is the way in which the use of the experiences of the past and contemporary architectural tendencies can lead to better quality of newly formed building ensembles?

Firstly we need to answer the question of where is nowadays possible to find traces of cities with original Mediterranean matrix on whose foundations settlements, that have for centuries been role models for the newly created cities, were developed. The common denominator, as well as essential cultural diversity of the Mediterranean can be best seen through the prism of individual Arabic, Turkish, Balkan and some Western European settlements on the territory of three different continents linked by the common sea. The main feature of the settlement with clear Mediterranean character, which major aspect has always been a constant and diffuse process of transformation with the anthropic formation of the natural surrounding, were the manually formed environments, where human intervention has never been invasive, but formed in a way to highlight the diversity of natural characteristics and to intensify specific locations. From this we can see that we should not look into large scale urban settlements, but rather look for the places that were not consummated by trends of globalism that destroys independence. It is paradoxical that the so-called. "Marginal places" are those that today best portray synchronized relationship of man and the environment in which he lives. The most important element for certain kinds of recovery and use of resources of different Mediterranean landscapes are the basic and positive values of Mediterranean culture itself.

The fact is that nowadays Trebinje is multifunctional urban tissue in every sense of the word. Current architectural practice testifies to the fact that the city is increasingly turning to its geographically and climatically atypical, the continental character, both in architectural as well as in the urban context. I am convinced that the undefined nature of the new urban settlements developed after the Second World War until today, is the perfect training ground for the creation of a new quality of buildings, which will be the markers of uniqueness and distinctive contemporary architecture of the new urban conglomerations that Trebinje realistically lacks. Creating a hybrid element, which will be formed on the positive postulates of inherited building practices, can engender new architectural volumes with distinctive structure, and recognizable stylistic values adjusted to the specific location, mentality and to the needs of the space consumer.

Summarizing all the above it is clear that the architectural picture of Trebinje is of heterogeneous character. Different cultural influences have been mixing all over Balkan Peninsula for centuries, which led to mingling of styles that have shaped Trebinje as we know today. Building on this foundation contemporary architectural practice should arise, the one that will draw strength from all that the time marked as good quality by filtering it through a sieve of modern architecture and understanding of people's needs. The city is built for a man, so the quality and aesthetics of the current and future architectural praxis should be far more humane than it is today!

Fig. 3.2 - 53 The view from the fortification Kličanj in Trebinje

Fort III - Gljiva

Fort VII - Golo brdo

Panzer fort Straž

Watch house VIII
Petrina

Watch house VIIIa
Kučino brdo

Fort IX - Hum

Fort VI - Crkvina





Fig. 3.3 54, the rest of the west gate with the control bunker

3.3 Fortifications Today

As these buildings have always been seen as a depiction of occupation by Austro – Hungarian monarchy, their destiny after the First World War was not bright. After the Austro – Hungarian army left, people started to demolish them in order to use the stone to construct some other, mainly private buildings.

After the Second World War, for short period of time, Yugoslav army used some of the Forts as military exercise fields, warehouses or watch houses. As these were outdated military buildings, the new army did not have any use of them, so they were left to decay. Panzer fort Strač, as the most modern and the largest of them all, was built from reinforced concrete and massive steel construction. More over this fortification had several steel made dome howitzers, immersed in concrete. In order to finance some infrastructural projects, after the Second World War, the authorities decided to mine the fort Strač in order to sell the steel from its construction. In this way, most of the floor and roof slabs were destroyed.

*Fig. 3.3 - SS, Fort Platform,
Fortification Kličanj*



Fig. 3.3 - 56, Fortification Kličanj



Fig. 3.3 - 57, Fortification Golo brdo



Fortification Leotar is completely destroyed and on its place Broadcast relay station was built. Fort Crkvina was also completely destroyed and nowadays on its place stands the monastery complex of Hercegovačka Gračanica. Fort Kravica, Fort Hum and watch house Petrina are almost completely destroyed, only fragments of the former buildings are still standing. In 1944 Fort Kravica suffered strong bombing by the Allied Armed Forces, because Italian occupation army used this fort as one of their strongholds.

Other individual buildings are ruins and are not in any kind of use. From all, Fort Kličanj, fort Golo brdo and panzer fort Srač have the most potential to be restored and put in use by giving them a new purpose such as touristic, cultural or educational buildings.

Fortification system within the city had a different destiny, mainly because of its position within the urban area. Most of these buildings were built in the nowadays prime and centralized locations. Albrecht barracks continued for years to be used by military. Few years ago this space was given to the city and was transformed into student campus. North camp was used by the Yugoslav army for a short period after the Second World War. This complex is now privately owned with the plan to be demolished. Defense barracks Hrupjela is also privately own with the plan to be transformed into a hotel. Pioneer barracks in the old town of Trebinje serves as the Museum building, owned by the city of Trebinje.

This project deals with fortification Kličanj and includes the concept of potential method of revival.

3.4 Architectural Survey Sheets

Architectural survey has been done upon five individual fortification buildings, which are part of the system outside the town. These are:

1. Fortification Kličanj - Fort I
2. Fortification Gljiva - Fort III
3. Fortification Golo brdo - Fort VII
4. Watch house Kučino brdo - WH VIIIa
5. Panzer fortification Strač

In order to better understand the architectural value of these buildings this survey is dealing with the architectural building worthiness, their valorisation and brings a comprehensive description of their current status and potentials for future revitalisation.

General data	The basic building informations		Building constuction informations	
	Building: <i>Fortification KLIČANJ</i> City: <i>Trebinje</i> Ownership: <i>State/city</i> Number of floors: <i>2 (two stories)</i> Original building purpose: <i>Military fortification</i> Current building purpose: <i>abandoned building</i> Construction period: <i>1883-1884</i> Investitor: <i>Ministry of War, Austro - Hungarian Monarchy</i> Architect: <i>Unknown</i> Architectural style: <i>A - H fortification building style</i>		Slab structural system: <i>Steel and concrete</i> Walls: <i>Traditional massive stone walls</i> Original roof construction: <i>Wooden</i> Facade: <i>Exposed cut stone</i> Original roof tiles: <i>Italian brickwork Pasiano di Pordenone</i> Original stairs constuction: <i>Concrete and steel</i> Original doors and windows: <i>Wooden and steel</i>	
			<i>Older example of the fortification architecture, platform fort with the main building. The main building is damaged, platform is in good condition, but in need of repair.</i>	
Current building condition	Building condition	Infrastructural equipment	Valorisation	
	Load bearing walls: <i>damaged as a result of many years of exposure to the elements</i> Partition walls: <i>- II -</i> Roof construction: <i>does not exist</i> Roof cladding: <i>does not exist</i> Facade: <i>damaged as a result of many years of exposure to the elements</i> Interior: <i>does not exist</i>	Water supply: <i>cistern - rain water colection</i> Electricity: <i>does not exist</i> Telephone network: <i>does not exist</i> Sewerage system: <i>septic tank</i> Possibility for current use: <i>not usable in current condition, ruine</i>	Architectural value: <i>medium</i> Heritage value: <i>high</i> Ambiental value: <i>high</i>	
Interventions	Changes		Planned interventions	
	Building disposition : <i>no</i> Facade: <i>yes, partially</i> Roof construction and roof cladding: <i>yes</i> Doors and windows: <i>yes</i> Structural system: <i>reconstruction of the walls and a new structural system for the newly designed elements</i> Usage: <i>yes</i>		Proposed purpose : <i>education, tourism, culture</i> Conservation and restoration works: <i>- rehabilitation of infrastructure</i> <i>- rehabilitation of facade</i> <i>- rehabilitation of load bearing and partition walls</i> <i>- foundations strengthening</i>	



Fig. 3.4 - 58 Road to Fort Kličanj



Fig. 3.4 - 59 Inner courtyard of the Fort Kličanj



Fig. 3.4 - 60 Entrance, Fort Kličanj



Fig. 3.4 - 61 Stone vault, Fort Kličanj

General data	The basic building informations		Building construction informations	
	Building: Fortification GLJIVA City: Trebinje Ownership: State/city Number of floors: 2 (two stories) Original building purpose: Military fortification Current building purpose: abandoned building Construction period: 1883 Investitor: Ministry of War, Austro - Hungarian Monarchy Architect: Unknown Architectural style: A - H fortification building style		Slab structural system: Steel and concrete Walls: Traditional massive stone walls Original roof construction: Wooden Facade: Exposed cut stone Original roof tiles: Italian brickwork Pasiano di Pordenone Original stairs construction: Concrete and steel Original doors and windows: Wooden and steel <i>Older example of the fortification architecture, platform fort with the main building. The main building is heavily damaged, platform is in better condition, but in need of repair and removal of later added elements for former broadcast relay station</i>	
Current building condition	Building condition		Infrastructural equipment	Valorisation
	Load bearing walls: heavily damaged as a result of many years of exposure to the elements and demolition Partition walls: - II - Roof construction: does not exist Roof cladding: does not exist Facade: heavily damaged as a result of many years of exposure to the elements and demolition Interior: does not exist		Water supply: cistern - rain water collection Electricity: does not exist Telephone network: does not exist Sewerage system: septic tank Possibility for current use: not usable in current condition, ruine	Architectural value: medium Heritage value: high Ambiental value: high
Interventions	Changes		Planned interventions	
	Building disposition : no Facade: yes, partially Roof construction and roof cladding: yes Doors and windows: yes Structural system: reconstruction of the entire structural system or interduction of the new one Usage: yes		Proposed purpose : tourism, paragliding sport center Conservation and restoration works: <ul style="list-style-type: none"> - rehabilitation of infrastructure - rehabilitation of facade - rehabilitation of load bearing and partition walls - foundations strengthening - removal of later added elements for former broadcast relay station 	



Fig. 3.4 - 62 East tower, Fort Gljiva



Fig. 3.4 - 63 Defence platform, Fort Gljiva



Fig. 3.4 - 64 Entrance gate FJ I 1883, Fort Gljiva

General data	The basic building informations		Building construction informations	
	Building: <i>Fortification GOLO BRDO</i> City: <i>Trebinje</i> Ownership: <i>State/city</i> Number of floors: <i>2 (two stories)</i> Original building purpose: <i>Military fortification</i> Current building purpose: <i>abandoned building</i> Construction period: <i>~1887</i> Investitor: <i>Ministry of War, Austro - Hungarian Monarchy</i> Architect: <i>Unknown</i> Architectural style: <i>A - H fortification building style</i>		Slab structural system: <i>Steel and concrete</i> Walls: <i>Traditional massive stone walls</i> Original roof construction: <i>Wooden</i> Facade: <i>Exposed cut stone</i> Original roof tiles: <i>Italian brickwork Pasiano di Pordenone</i> Original stairs construction: <i>Concrete and steel</i> Original doors and windows: <i>Wooden and steel</i>	
Current building condition	Building condition		Infrastructural equipment	Valorisation
	Load bearing walls: <i>damaged as a result of many years of exposure to the elements and demolition</i> Partition walls: <i>- II -</i> Roof construction: <i>does not exist</i> Roof cladding: <i>does not exist</i> Facade: <i>damaged as a result of many years of exposure to the elements and demolition, overall status good</i> Interior: <i>partially preserved, damaged</i>		Water supply: <i>8 connected cistern - rain water collection</i> Electricity: <i>does not exist</i> Telephone network: <i>does not exist</i> Sewerage system: <i>septic tank</i> Possibility for current use: <i>not usable in current condition, ruine</i>	Architectural value: <i>high</i> Heritage value: <i>high</i> Ambiental value: <i>high</i>
Interventions	Changes		Planned interventions	
	Building disposition : <i>no</i> Facade: <i>no</i> Roof construction and roof cladding: <i>yes</i> Doors and windows: <i>yes</i> Structural system: <i>reconstruction of the entire structural system</i> Usage: <i>yes</i>		Proposed purpose : <i>astrological observatory</i> Conservation and restoration works: <i>- rehabilitation of infrastructure</i> <i>- rehabilitation of facade and roof</i> <i>- rehabilitation of load bearing and partition walls</i> <i>- foundations strengthening, overall static stability</i>	



Fig. 3.4 - 65 Fort Golo brdo, North - West facade



Fig. 3.4 - 66 Fort Golo brdo, access road



Fig. 3.4 - 67 Fort Golo brdo, interior

General data	The basic building informations		Building construction informations	
	Building: Watch house KUČINO BRDO City: Trebinje Ownership: State/city Number of floors: 1 (ground floor) Original building purpose: Military watch house Current building purpose: abandoned building Construction period: ~1887 Investitor: Ministry of War, Austro - Hungarian Monarchy Architect: Unknown Architectural style: A - H fortification building style		Slab structural system: Steel and concrete Walls: Traditional massive stone walls Original roof construction: reinforced concrete slab Facade: Exposed cut stone Original roof tiles: concrete slab Original stairs construction: none Original doors and windows: Wooden and steel <i>Older example of the fortification architecture. The main building is damaged by mining or bombing, the walls are in relatively good condition, the roof collapsed. Identical design was used for watch house Golo brdo (WH Villa)</i>	
Current building condition	Building condition	Infrastructural equipment	Valorisation	
	Load bearing walls: damaged as a result of many years of exposure to the elements and demolition Partition walls: - II - Roof construction: does not exist Roof cladding: does not exist Facade: damaged as a result of many years of exposure to the elements and demolition Interior: exposed, does not exist	Water supply: cistern - rain water collection Electricity: does not exist Telephone network: does not exist Sewerage system: septic tank Possibility for current use: not usable in current condition, ruine	Architectural value: low Heritage value: medium Ambiental value: high	
Interventions	Changes		Planned interventions	
	Building disposition : no Facade: no Roof construction and roof cladding: yes Doors and windows: yes Structural system: reconstruction of the entire structural system Usage: yes		Proposed purpose : catering, tourism Conservation and restoration works: <ul style="list-style-type: none"> - rehabilitation of infrastructure - rehabilitation of facade and roof - rehabilitation of load bearing and partition walls - foundations strengthening, overall static stability 	



Fig. 3.4 - 68 Watch house Kućino brdo



Fig. 3.4 - 69 Austro - Hungarian access road to WH Kućino brdo



Fig. 3.4 - 70 Entrance gate of the WH Kućino brdo

General data	The basic building informations		Building construction informations	
	Building: <i>Panzer fort STRAČ</i> City: <i>Trebinje</i> Ownership: <i>State/city</i> Number of floors: <i>7 floors + underground facilities</i> Original building purpose: <i>Military fortification</i> Current building purpose: <i>abandoned building</i> Construction period: <i>1910 - 1916</i> Investitor: <i>Ministry of War, Austro - Hungarian Monarchy</i> Architect: <i>Unknown</i> Architectural style: <i>A - H fortification building style</i>		Slab structural system: <i>Steel and concrete</i> Walls: <i>reinforced concrete walls</i> Original roof construction: <i>reinforced concrete slab</i> Facade: <i>Exposed concrete</i> Original roof tiles: <i>concrete slab</i> Original stairs construction: <i>reinforced concrete</i> Original doors and windows: <i>Wooden and steel</i> <i>Example of the newest Austro- Hungarian fortification architecture and one of the best examples of the fortification architecture from the beginning of the 20th century. Equipped with two 10 cm M09 Howitzers, two 6 cm M10 Cannons and twenty four 8mm M07/12 MGs</i>	
Current building condition	Building condition		Infrastructural equipment	Valorisation
	Load bearing walls: <i>damaged as a result of many years of exposure to the elements and demolition by mining</i> Partition walls: <i>- II -</i> Roof construction: <i>partially preserved</i> Roof cladding: <i>partially preserved</i> Facade: <i>damaged as a result of many years of exposure to the elements and demolition by mining and bombing</i> Interior: <i>partially preserved</i>		Water supply: <i>cistern - rain water collection</i> Electricity: <i>existed, but no longer</i> Telephone network: <i>does not exist</i> Sewerage system: <i>septic tank</i> Possibility for current use: <i>not usable in current condition, ruine</i>	Architectural value: <i>high</i> Heritage value: <i>high</i> Ambiental value: <i>high</i>
Interventions	Changes		Planned interventions	
	Building disposition : <i>no</i> Facade: <i>reconstruction</i> Roof construction and roof cladding: <i>reconstruction</i> Doors and windows: <i>reconstruction</i> Structural system: <i>reconstruction of the entire structural system</i> Usage: <i>yes</i>		Proposed purpose : <i>education, museum, tourism, culture</i> Conservation and restoration works: <i>- rehabilitation of infrastructure</i> <i>- rehabilitation of facade and roof</i> <i>- rehabilitation of load bearing and partition walls</i> <i>- foundations strengthening, overall static stability</i>	



Fig. 3.4 - 71 Barracks facade of the Panzer fort Strač



Fig. 3.4 - 72 Cast steel dome of the Panzer fort Strač



Fig. 3.4 - 73 Interior, Panzer fort Strač

PROJECT - FORT KLIČANJ

04 CHAPTER

4.1 Comparative analyze

Italy is one of the countries with possibly the best examples of the Austro – Hungarian fortification buildings. Some of the best examples of this kind of fortification architecture can be found in the northern Italian regions, which have been part of the Austro – Hungarian monarchy, especially around the cities Venetia, Verona, Mantua, Trento...

The region of Trento started a massive, decade long project called "Great War Project" with the intention to revoke a memory on the tragic stories of the First World War and to start a comprehensive revitalization and conservation work on the Trento fortification system. One of the most important ideas behind this project was the intention to connect the individual buildings into the single unit under the supervision of the Department for Cultural Heritage of the Autonomous Province of Trento.

The fact that these buildings have a tremendous potential and huge architectural value can be best seen from the 2013 campaign by the State of Italy to nominate the Trento fortification system as the UNESCO protected architectural heritage. For its successful adaptation to the natural surroundings as well as the approach to their protection and revitalization, Trento fortification system can be seen as a pioneer for the overall connection and protection of the entire Austro – Hungarian fortification heritage and creation of the unified network of the European forts.

Concerning the richness and diversity of Austro – Hungarian fortifications in Bosnia and Herzegovina, this country should try to apply some of the methods and approaches that can be seen in Italy. Trebinje region is one of the most important sites of these kinds of buildings in Bosnia and Herzegovina and as such should be a starting point in formation of the comprehensive network of the fortification - architectural heritage. Stigmatization and burden of the past, these building carry, should not be the reason to allow their destruction and slow decay, but should be transformed into the bastions of peace through their overall rehabilitation and contemporary function.

Forte Belvedere in Lavarone



- Built between 1908 and 1912 and designed by the Lieutenant of the Army Corps of Engineers Eng. Rudolf Schneider .
- Modern function - First World War Museum

Forte Corno



- Built between 1890 and 1892, 54 rooms accommodate up to 160 soldiers.
- Modern function - First World War Museum and the exhibition space

Forte di Tenna



- Built between 1884 and 1885
- Since April 2009 extensive restoration work has been carried out on behalf of the Autonomous Province of Trento

Left, from left to right
Fig. 4.1 - 74 Forte Belvedere
Fig. 4.1 - 75 Forte Corno
Fig. 4.1 - 76 Forte di Tenna

Down, from left to right
Fig. 4.1 - 77 Forte San Biagio
Fig. 4.1 - 78 Forte Pozzacchio
Fig. 4.1 - 79 Forte Larino
Fig. 4.1 - 80 Forte di Fortezza

Forte San Biagio



- Built between 1880 and 1882
- Between 2012 and 2014 extensive reconstruction works have been carried out
- Modern function - Museum

Forte Pozzacchio



- Built between the nineteenth and early twentieth century
- In 2010 began extensive restoration and redevelopment program
- Modern function - Visitors centre, exhibition space

Forte Larino



- Built in 1860
- From 2006 to 2008 extensive restoration and redevelopment program were carried out
- Modern function - Education and exhibition centre

Forte di Fortezza



- Construction begun in 1833
- The restoration by the architects Markus Scherer and Walter Dietl
- one of the locations of Manifesta 7, the European Biennial of Contemporary art in 2008.

Fig. 4.2 - B1 Fortification Kličanj, inner courtyard



4.2 Concept of Revitalization

As the fortification complex was built for defense purposes, the character of these buildings is strictly functional, almost bare, without any additional architectural details. The older fortifications are made of finely cut stone blocks, which are left exposed, so the building would blend into its surrounding more successfully. When we talk about character of these military buildings, we can talk about more or less repetitive design with some variations. Almost all of them are platform forts, with some differences in the organization of barracks, but the idea behind them stays the same.

Nowadays, we can talk about these buildings only as ruins, fragments of the former building. Some of them are in better, while some are in very bad condition, but they all continue to deteriorate. One of the best preserved ruins is the one of the former fort Kličanj. This building has the most attractive position, with the ability to oversee the entire region of the city of Trebinje, as well as the Adriatic sea of the neighboring Croatia, and the mountains of Montenegro. Therefore this building has been chosen as a sample for a possible revitalization of the other forts that can be preserved and utilized, like the fort Golo brdo, Panzer fort Strač and the watch house Kučino brdo.

Trebinje is a place that has been recognized as an attractive tourist destination, which is attracting more and more people from all around the world. The fact is that not all the resources are put in use or even recognized. Mediterranean climate allows this region to use the open spaces almost throughout the year. Because of its attractive position, and interesting scenery, fortifications are one of the Trebinje's best kept secrets. In that sense, Trebinje should try to find the way to put these building into use, by transforming them into the facilities that Trebinje lacks.

4.3 Fort Kličanj - Intervention

This fortification is the most prominent and the first one to be seen when arriving to Trebinje. As such this building has been recognized as the one that will take the role of the prime fort, the one that would tell the story about the system as an unit, but in a way that would be saddle, and leave enough room for the building to be as multifunctional as possible.

Thus, the concept of revitalization is based on the introduction of the new form, the one that will contrast the original, but in the way that would respect and keep the ruins in the existing conditions by the method of conservation. The design brings in a "body" without a rigid boundary, working independently of the existing structure but it uses it as a support. The main building is the fort itself, which is being seen as an open element, exposed to its surround. The building is treated as a monument, sculptural memory of the different cultural influences that carved Trebinje the way it looks today. The ruins are being crisscrossed by the net of pathways, materialized with the corten steel plates. The construction was designed as a continuous abstract object, which has the ability to change with the characteristics of the site. Rusted pathways are the representation of different centuries-long cultural influences. Some pathways lead to a certain point and have a functional purpose, while some are a dead-end. These are the representation of all the futile attempts to dominate this region and its people throughout the history. In the end it is also a representation of the very fortification system that has been proven to be futile waste of energy and resources, what is best reflected through the ruins that surround these pathways. The pathways are intended to be informative, by allowing visitors to get a different kind of information about the building, the fortification system as a whole and the history during the Austro - Hungarian rule.

As an extension of the old towers, a contemporary form is introduced. These extensions allow the creation of platforms from which visitors can enjoy a panoramic view of the landscape. All the construction was made using lightweight metal structures which can allow a clear distinction of the new object from the existing structure and, at the same time, the reversibility of the operation. The west tower has a form of the lookout, while the east tower serves as a lift

and an observation point. Sculptural form of intervention allows the building not to have a strictly defined function, but to be adaptable to different kinds of performative events. Most of the existing rooms are left to be shallow and bare, completely exposed, so it could be used as an adaptable gallery space.

By putting a focus on the Mediterranean climate and all the benefits that it brings, this design tries to erase the difference between the outdoor and the indoor space. Fortification is to be surrounded by a big plateau, in the form of the square. The square is planted with a Plane trees. Since the very beginning of Austro - Hungarian rule in Trebinje, the new government started to plant Plane trees along the streets and squares in the city. Since then this tree has become a symbol of Trebinje, which creates a unique atmosphere and gives a city special charm. By using the differences in height of the plateau, the square can be separated into two areas. To work as a connector between these areas, a cafeteria was designed, thus, proving an additional element to attract visitors to the area. To highlight its connection to the overall intervention, the cafeteria was built using a metallic structure and finished with corten steel panels in combination with a cut stone blocks.



Fig. 4.3 - 82, Fortification Kličanj



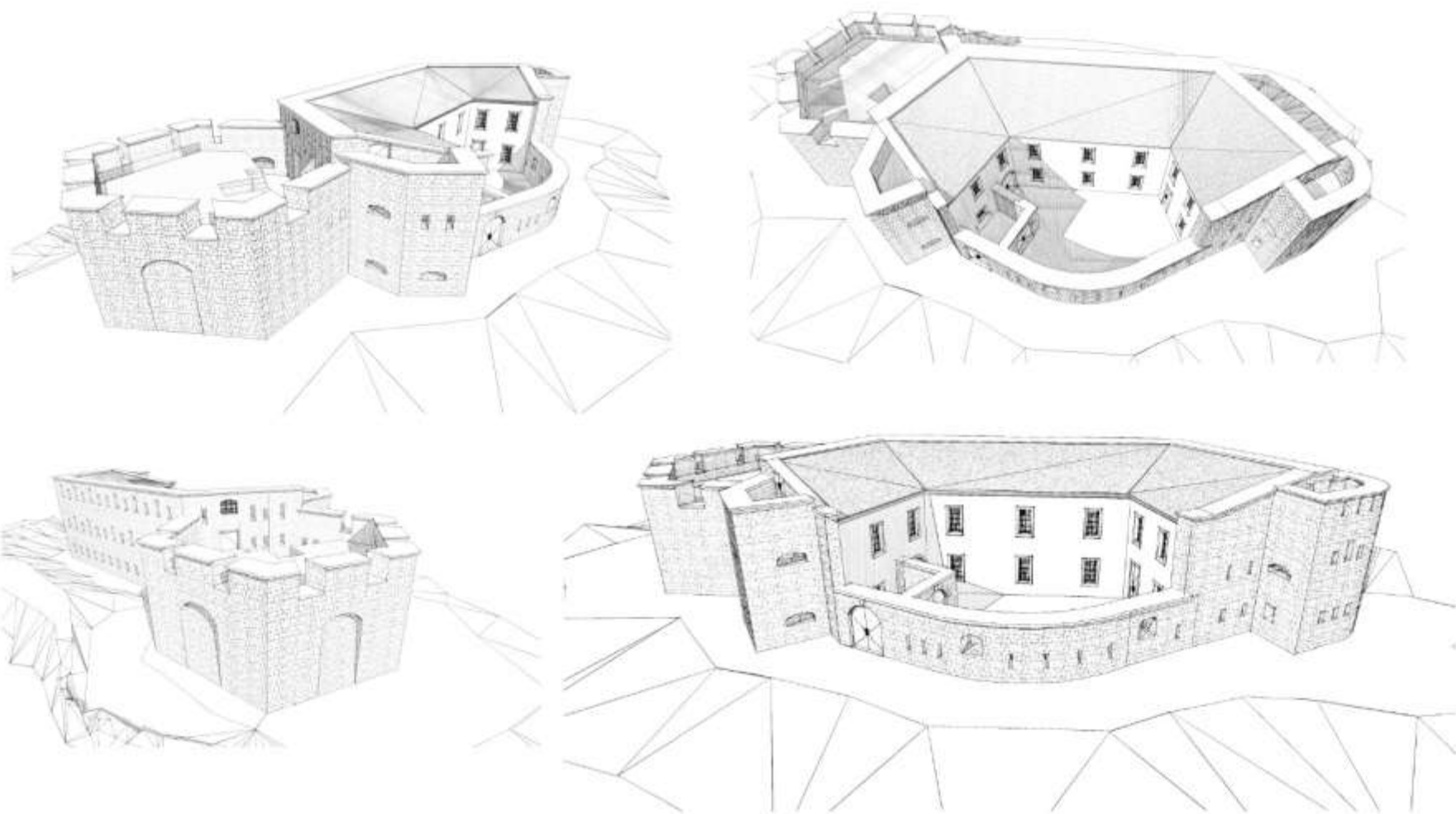
Fig. 4.3 - 83, Watch house Petrina

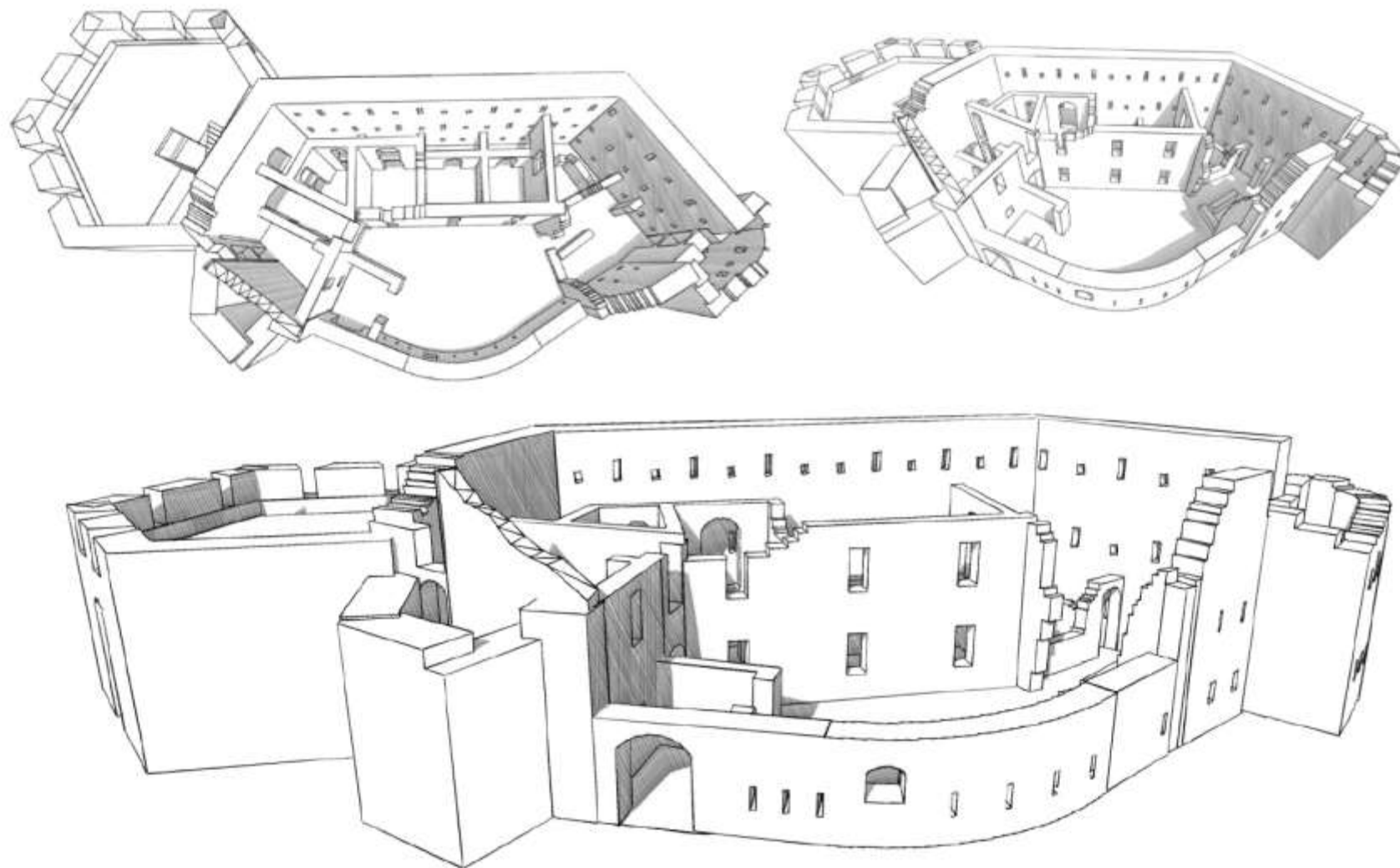


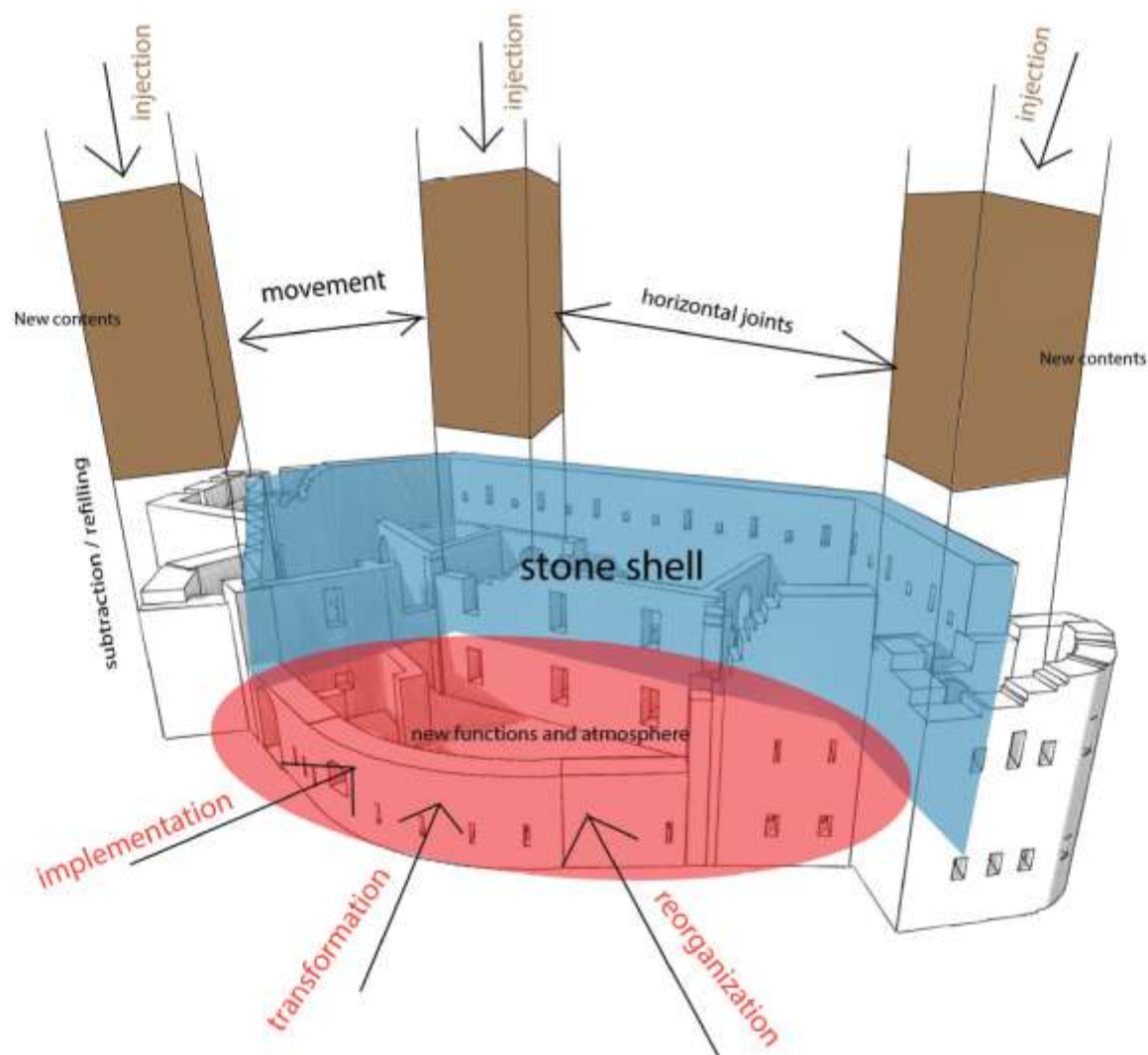
Fig. 4.3 - 84, Fortification Kličanj

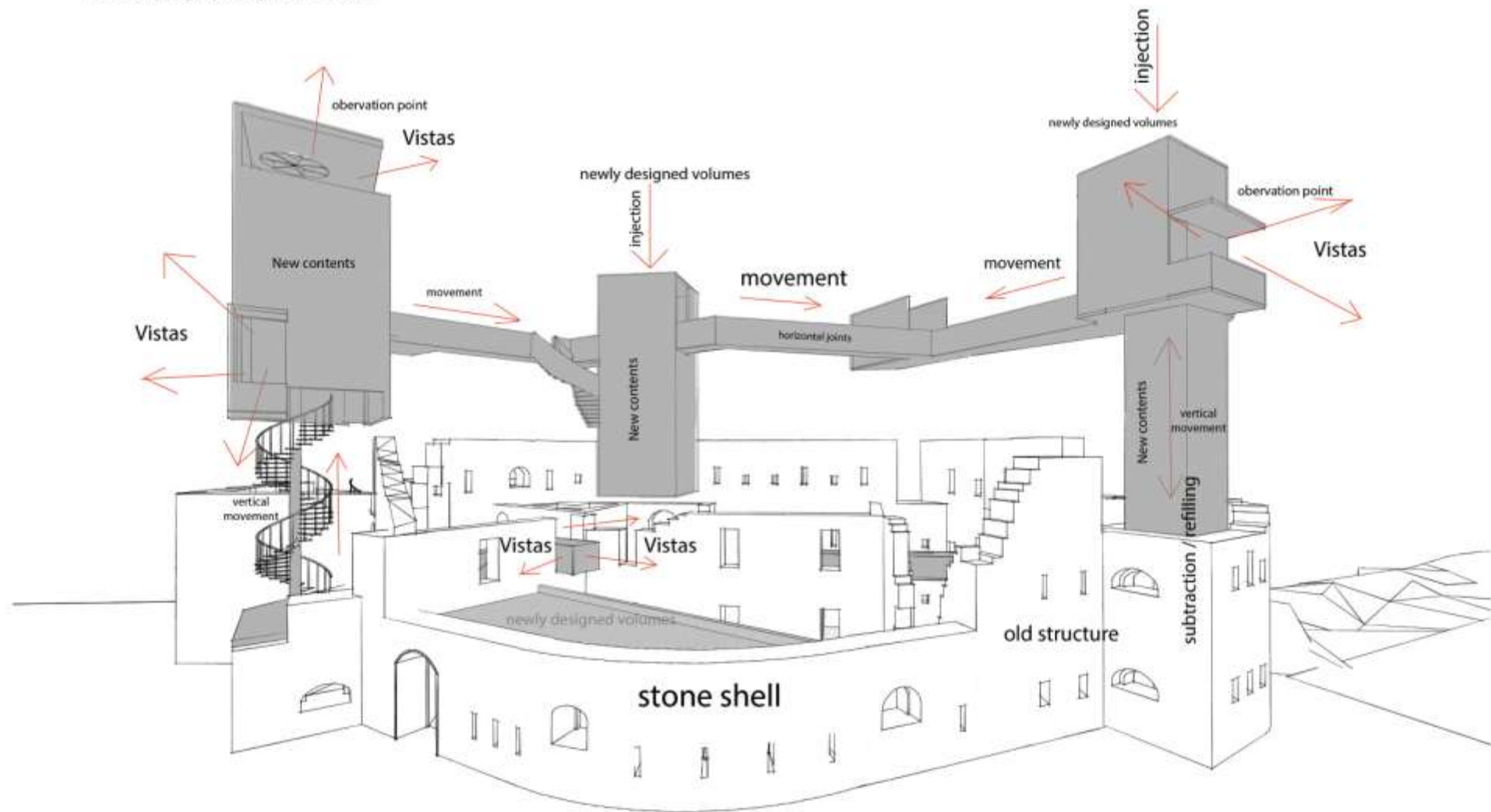


Fig. 4.3 - 85, Watch house Petrina









PROGRAM:

First group - FORT SPACE

Reception / information desk 35 sq m
 Staff entrance 13.6 sq m
 Office space 37 sq m
 Flexible area 40 sq m
 Multifunctional inside space 52 sq m
 Multimedia space 17 sq m
 Inner courtyard 70 sq m
 Exhibition / gallery space 80 sq m
 Technical support 127 sq m
 Observation platforms 28 sq m
 Pathways 97.6 sq m

Second group - OPEN SPACE

Shop area 100 sq m
 Entrance plateau - 740 sq m
 Sloped auditorium 206 sq m
 Plateau under porch 170 sq m

Third group - SERVICE SPACE

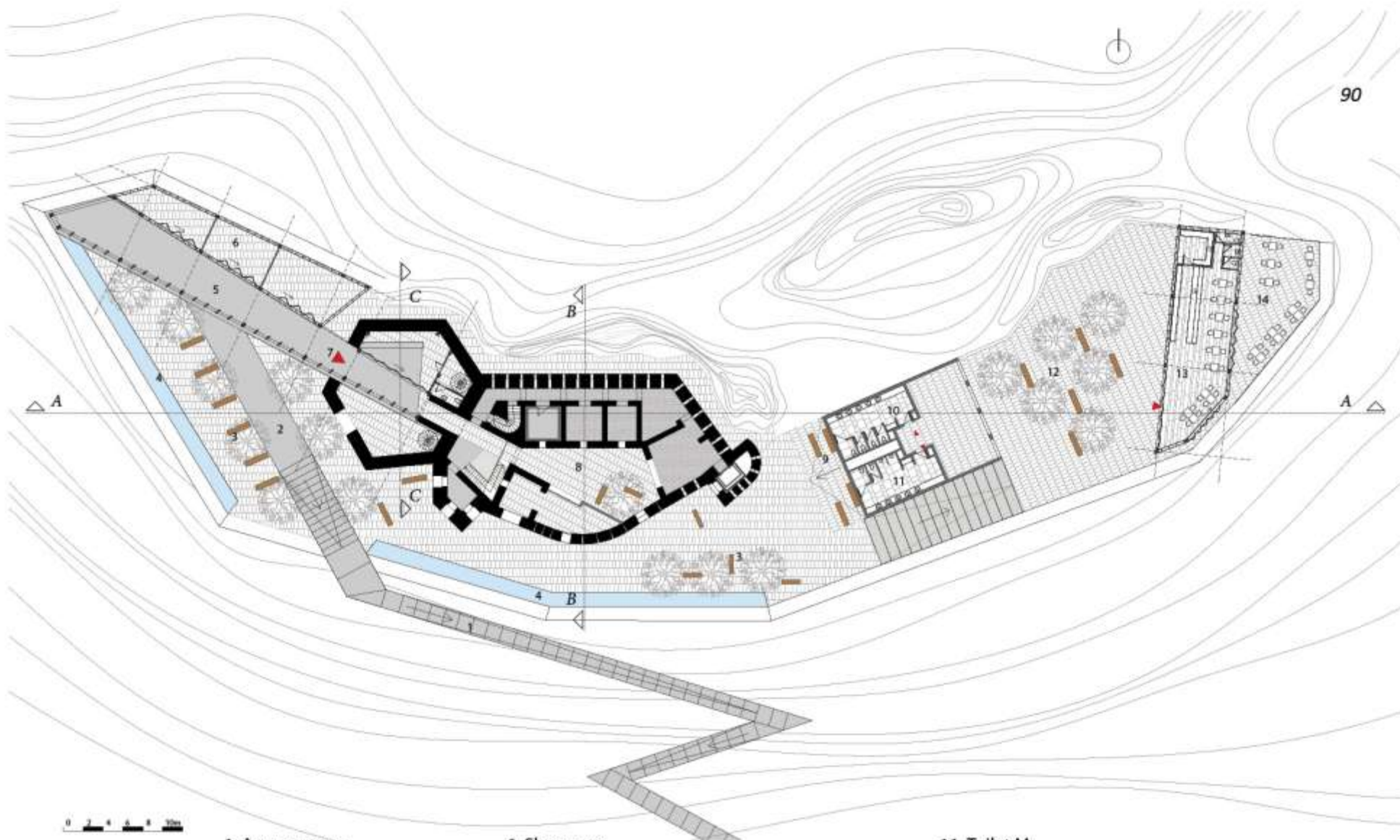
Toilet M 36 sq m
 Toilet F 36 sq m
 Lower square 400 sq m
 Restaurant / cafe 127 sq m
 Observatory terrace 100 sq m

Target user group

As the concept of the building's design follows the idea of transformability, adaptivity and multifunctionality, this a place can be used by wide range of people. First of all it was meant to be used and organized in a way that would complement the city of Trebinje and the needs of its inhabitants. It should be seen as a new landmark of the city, a place that provides the facilities that the town currently lacks and revives the untapped potential of the location. As it was meant to be an informational place, and a place of memory, it can be equally attractive destination both for locals and tourists, eager to learn something about the area they are visiting. Since it is located on a hill, it is ideal for hikers, people looking for physical activity, adventurers and nature lovers. It's a place for the people who want to respite and escape from the everyday stress and find a break in a natural environment.

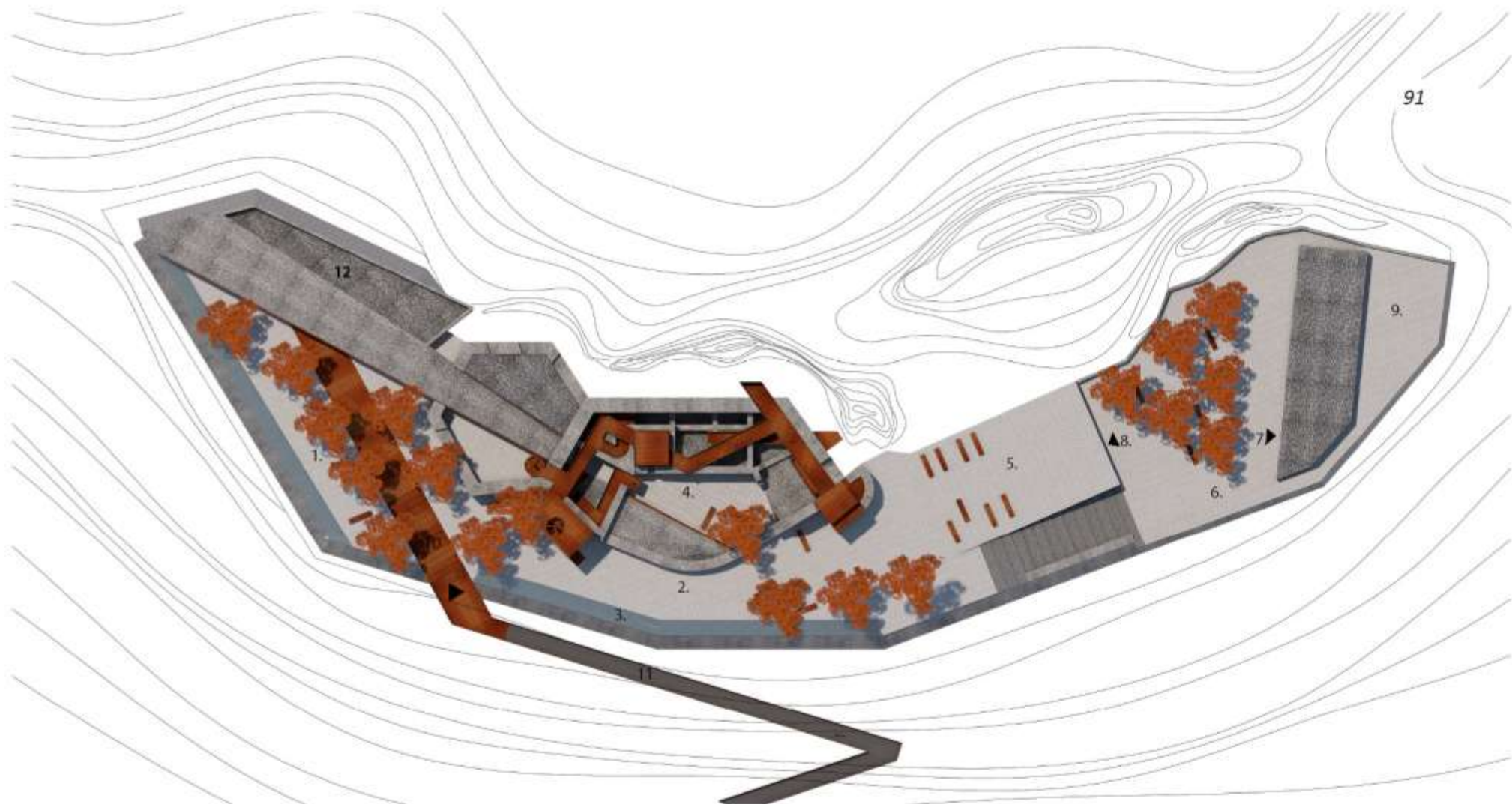
Accessibility

Accessibility is ensured by adapting the existing network of the Austro Hungarian roads that should be rehabilitated and become primarily used as hiking trails, and with the possibility of car access to a specific area. Because of the easy gradient, paths are accessible and for those with diminished physical abilities.



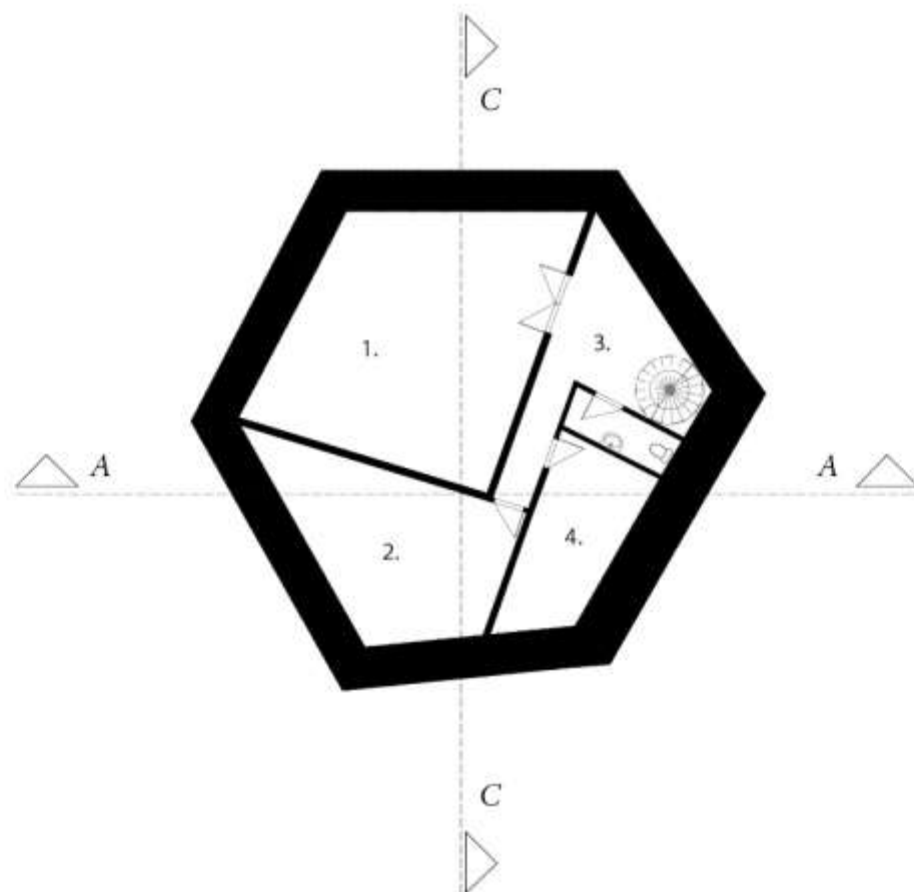
SITE PLAN
M 1:500

- | | | |
|---------------------------------|---|---|
| 1. Access ramps | 6. Shop area | 11. Toilet M |
| 2. Main square with plane trees | 7. Main entrance | 12. Lower square with plane trees and sitting areas |
| 3. Sitting area | 8. Courtyard | 13. Restaurant / cafe |
| 4. Water surface | 9. Sloped square - auditorium; open air theatre | 14. Panorama terrace |
| 5. Shaded area - sun protection | 10. Toilet F | |



SITE PLAN
M 1:500

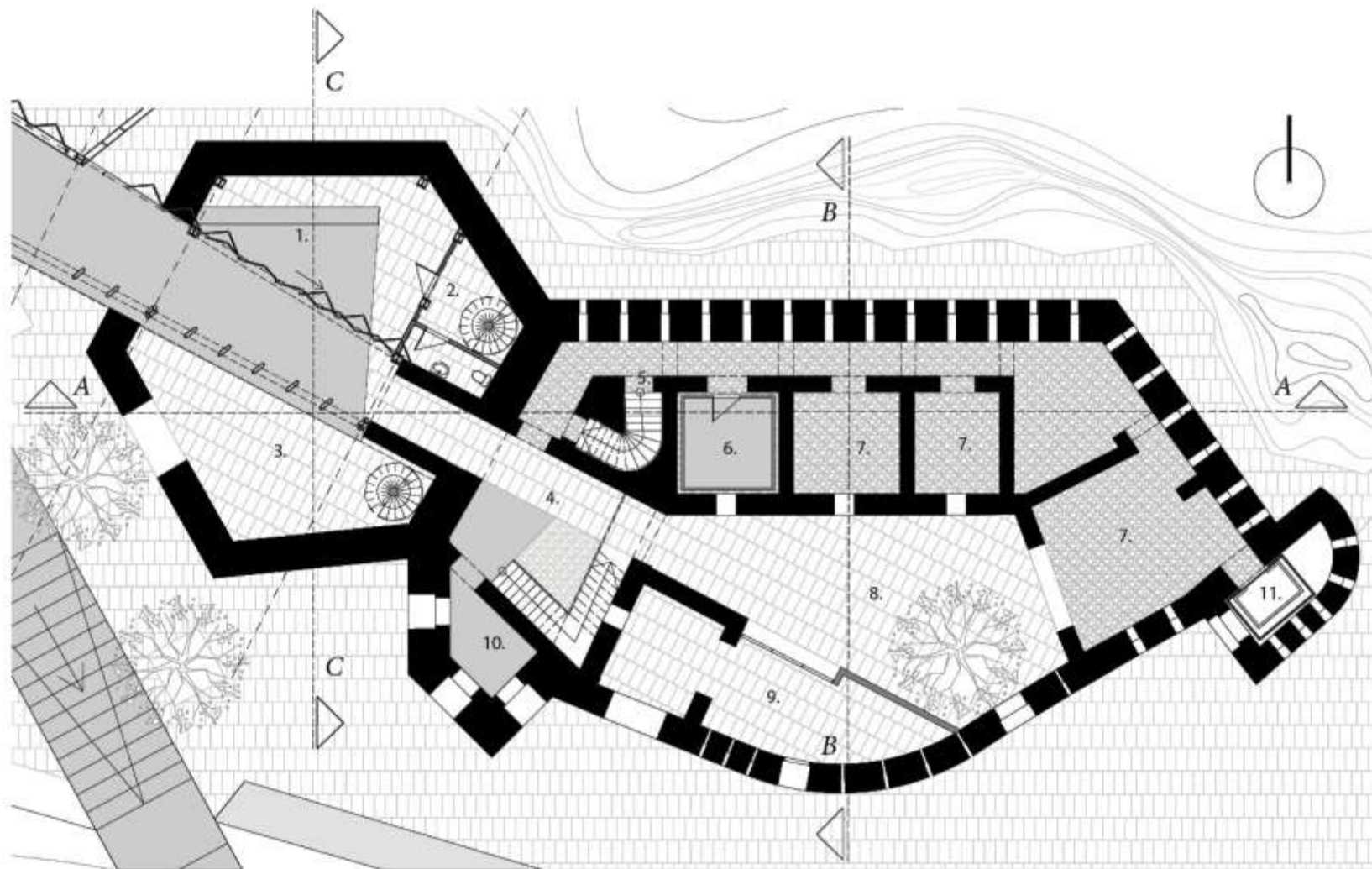
- | | |
|---|-----------------------------|
| 1. Open space - Main square with plane trees | 7. Cafe / restaurant |
| 2. Open space - Square No. 2. | 8. Toilets |
| 3. Water surface - fountain | 9. Observation terrace |
| 4. Fort building | 10. Entrance to the complex |
| 5. Sloped square - auditorium; open air theatre | 11. Access ramps |
| 6. Open space - Lower square with planetrees | 12. Shop area |



0 2 4 6 8 10m

BASEMENT LEVEL
M 1:200

- 1. Technical premises 56 sq m
- 2. Warehouse / Archive 30 sq m
- 3. Entrance area
- 4. Surveillance 15.5 sq m

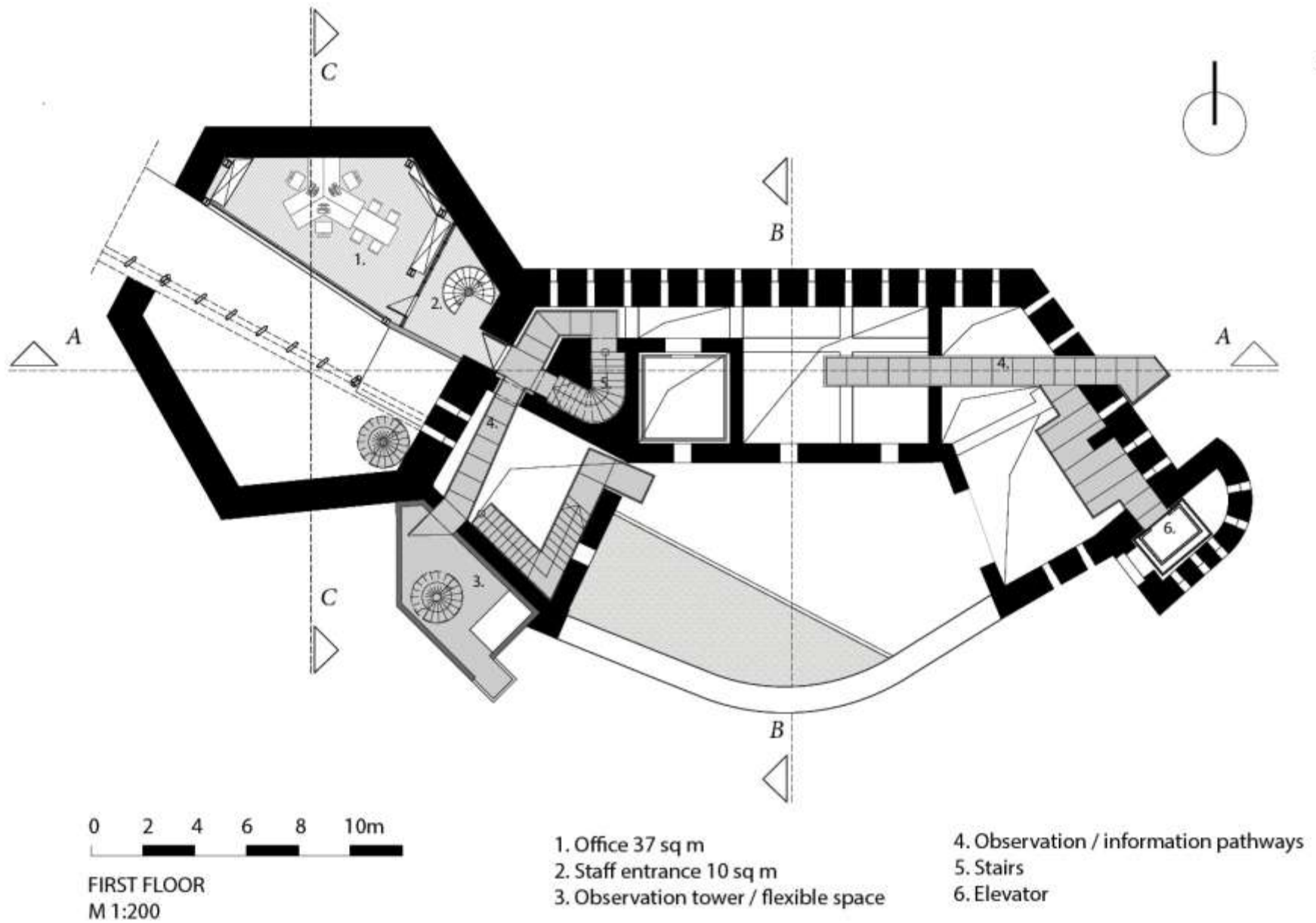


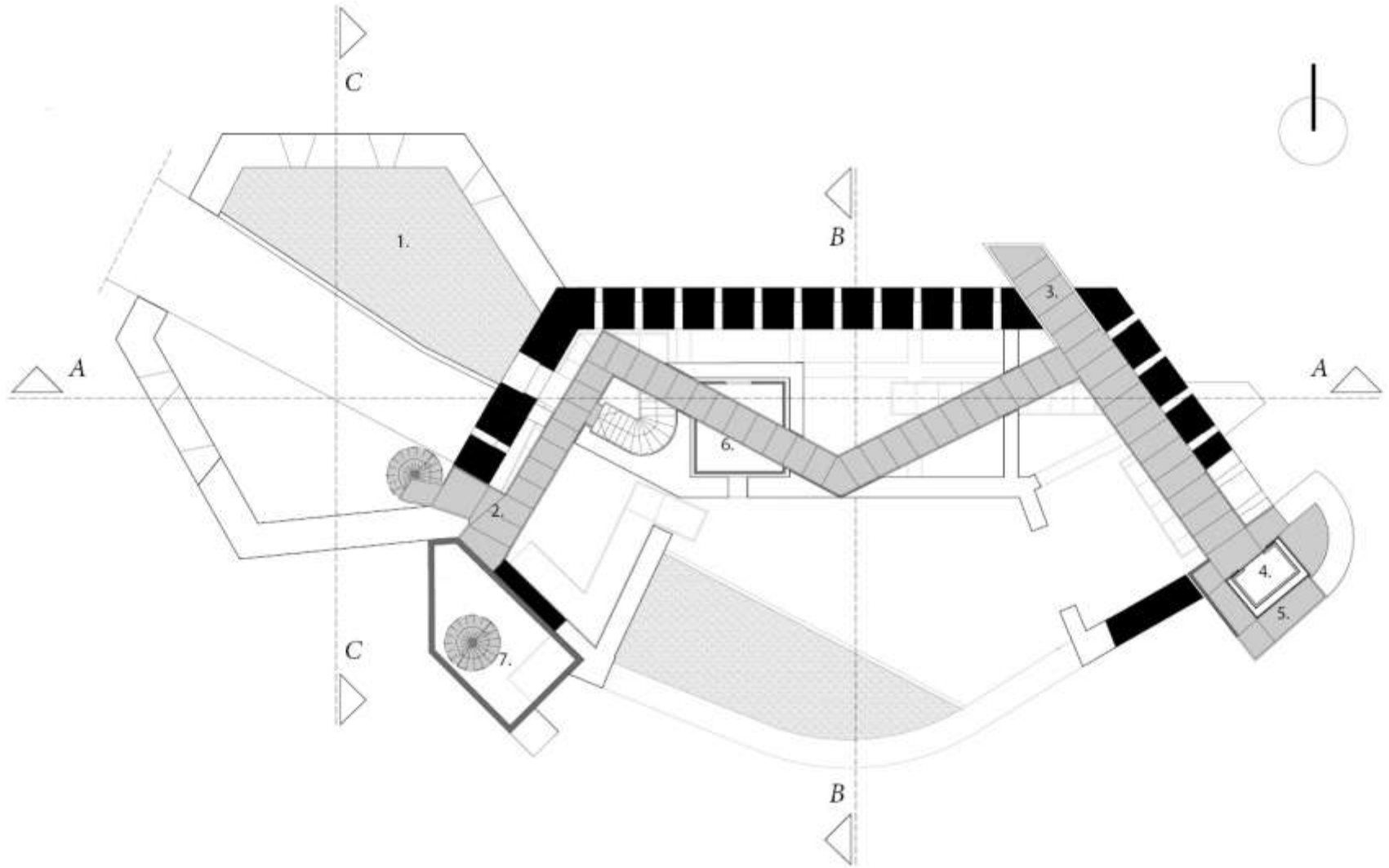
0 2 4 6 8 10m

GROUND FLOOR
M 1:200

- 1. Information desk / tickets 35 sq m
- 2. Staff entrance 13.6 sq m
- 3. Flexible area 40 sq m
- 4. Flexible courtyard 31 sq m
- 5. Stairs
- 6. Multimedia room 10 sq m

- 7. Examination space 90 sq m
- 8. Inside courtyard 70 sq m
- 9. Multifunctional space 35 sq m
- 10. Multimedia room 7 sq m
- 11. Elevator



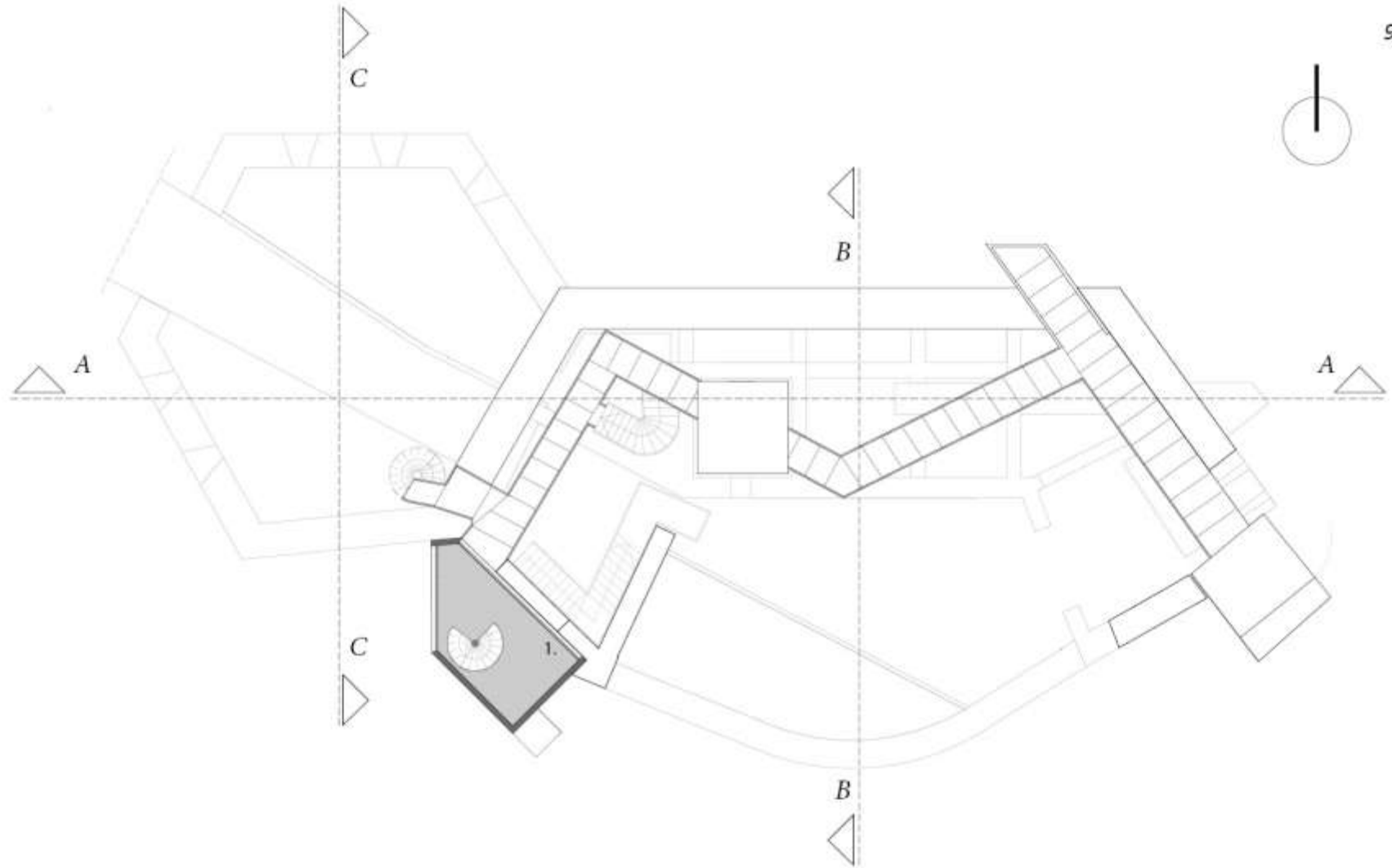


0 2 4 6 8 10m

SECOND FLOOR
M 1:200

1. Roof terrace 48 sq m
2. Observation / information pathways
3. Exhibition steel plates
4. Elevator

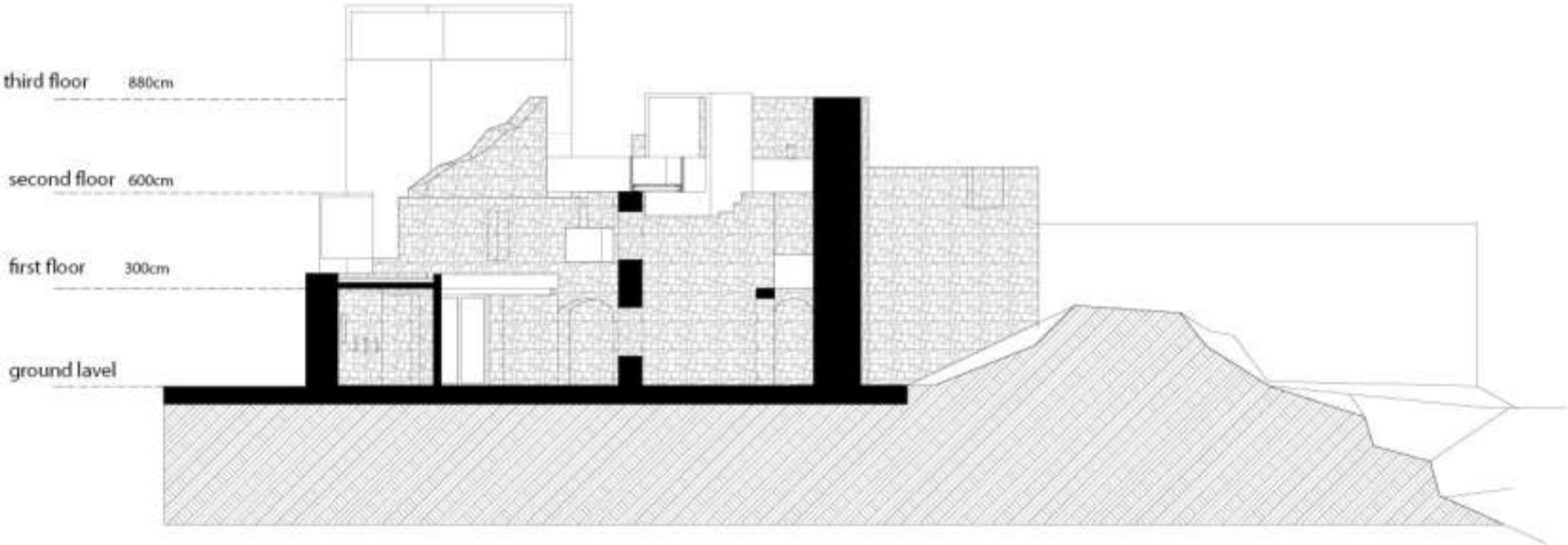
5. Observation platform
6. Information box
7. Observation tower stairs -
Flexible area



0 2 4 6 8 10m

THIRD FLOOR
M 1:200

1. East tower - observation platform

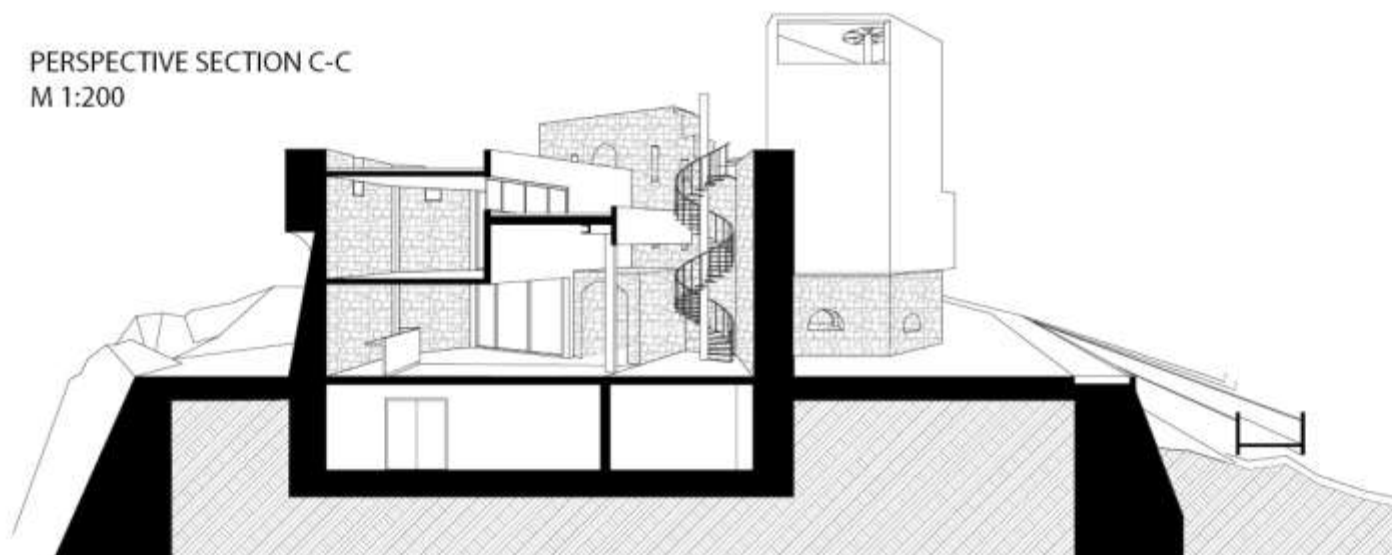


SECTION B-B
M 1:200



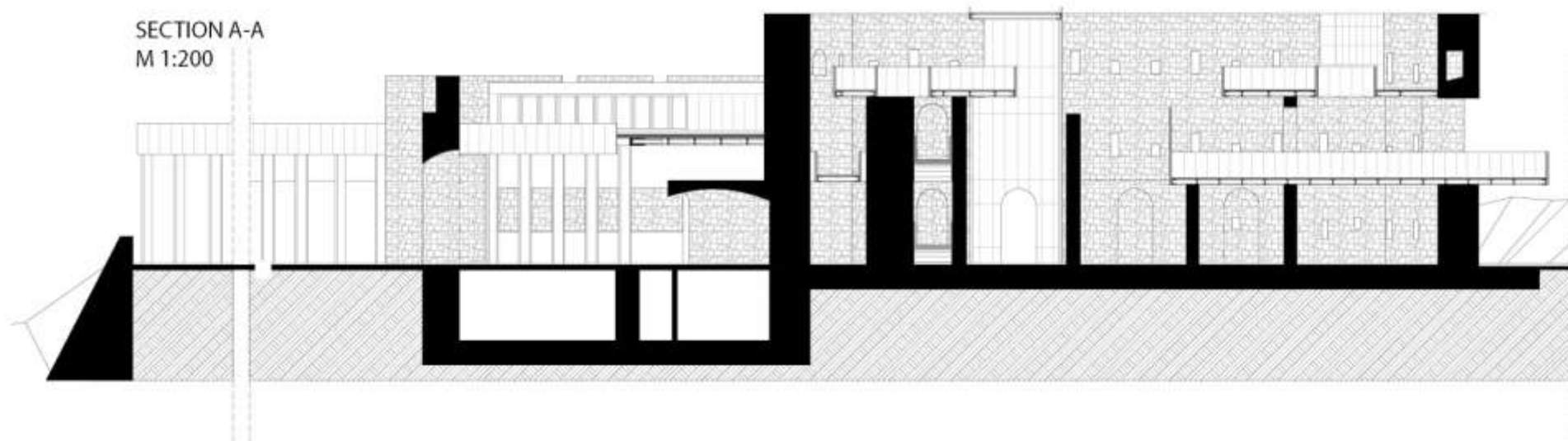
SECTION A-A
M 1:500

PERSPECTIVE SECTION C-C
M 1:200



0 2 4 6 8 10m

SECTION A-A
M 1:200

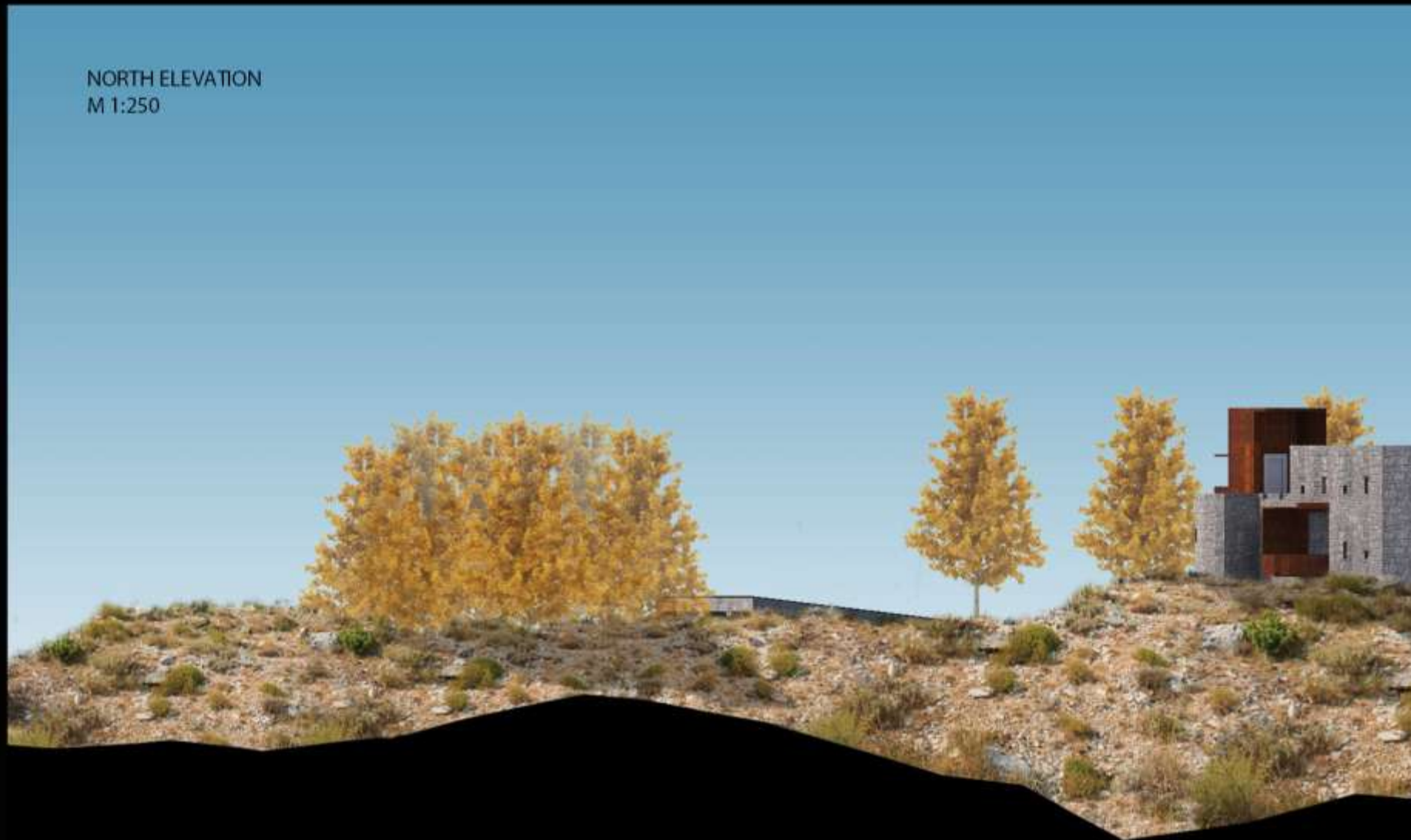


SOUTH ELEVATION
M 1:250





NORTH ELEVATION
M 1:250





WEST ELEVATION
M 1:250



EAST ELEVATION
M 1:250























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Fig. 1.2 - 3 Ground floor sketch of the Villa Rustica at the site Mirine, prof. Veljko Paškvalin, Mirine-Bihovo-Trebinje, 1975.

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Fig. 1.3 - 7 Medieval town of Klobuk near Trebinje, archaeological site, https://jovanvidakovic.wordpress.com/2016/08/22/klobuk/klobuk_28/

Fig. 1.4 - 8 Old Town of Trebinje, Ottoman architecture, personal archive

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Fig. 1.5 - 19 The map of Trebinje and its surrounding area in 1899, personal archive

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Fig. 2.1 - 37 Experimental fort, Fortification of Linz, https://de.wikipedia.org/wiki/Datei:Linzer_Turmlinie_Probeturm_Freinberg.jpg

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