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**Publisher:** University of Belgrade – Faculty of Architecture

Prof. Dr. Vladan Djokić, dean

ISBN XXXX-XXXXXXXXXXXXXX



# What is DANUrB Project?

**DANUTB** - a regional network building through tourism and education to strengthen the "Danube" cultural identity and solidarity. Cultural network aims to strengthen the Danube regional cultural identity and to create a common brand by fostering transnational cultural ties between the settlements along the Danube, and by exploring the unused or hidden cultural and social capital resources for a better economic and cultural return



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## 0. INTRODUCTION

Prof. Dr. Aleksandra Djukić

The Faculty of Architecture – University of Belgrade has got a long history of cooperation with local Municipalities and Faculties from Serbia and abroad on different projects within the studio courses. The results from this cooperation, in the form of visions and scenarios for future development, as well as Master projects and urban design, are useful for development new ideas and could be used as a background for new urban and action plans.

The cooperation within DANUrB project has been realised with Golubac and Smederevo as Associated partners, and it included the involvement of local authorities, stakeholders and citizens. The students from obligatory course Methodology of Urban Design from the Master course Master of Integrated Urbanism did the research and projects for Golubac and students from the last semester of the same Master course did their Master thesis and Master projects for Smederevo. The process of research and design included the research of documents and materials, in situ work and meetings with stakeholders and all interested parts in city development. As the main topic of the research was strengthening of the cultural identity and solidarity along the Danube, students In their project's tried to find the answers on the research questions: what the cultural identity is. how can we defined it and how we can use it in urban development, regeneration and promotion of a city. They are also searching the answers about the authenticity and uniqueness of local cultural identity and its use in forming the urban brand and the part of a new "Danube cultural promenade".

# Research polygon - the Iron Gates and Golubac Towns.

Golubac is a small town located along the Danube with rich and valuable natural and cultural heritage. Although, the town has been shrinking during the past half century and it suffers from the luck of accessibility and infrastructure, and facing many socio-economic challenges today, it has a lot of potentials for development of tourism regarding the medieval Golubac Fortress nearby, which has been recently reconstructed and the entrance of Iron Gate next to it. The newest incentives and investments have made little influence to overcome this situation.

On the other hand, the Iron Gates are a

large transboundary protection area, with "Đerdap" National Park in Serbia and "Porțile de Fier" Natural Park in Romania. The entire region presents a huge and rich ecosystem, with four inner gorges and three inter-valleys. The landscape is characterised with many specific and different segments of scenery. Small towns and villages along the Danube in Iron Gate have got a different impact across the gorge. The most important change that was done during 1970s is the formation of large Iron Gates artificial lake, which lead to the flooding the lowest part of the gorge with all previous islands and the reallocation of several settlements (Orşova, Donji Milanovac) and the most valuable heritage sites (Tabula Traiana, "Lepenski Vir" archaeological site), leaving old settlements to be flooded.

However, there are many (>50) localities of immovable cultural heritage that are protected by Serbia and even more that are

Accordingly, formation of the lake formed a

new riverside, too.

preliminary protected or even not included in official protection lists. These localities are sprawled across the gorge, so they can play the role of nods in the prospective spatial development of network for cultural tourism in cultural routes

Golubac municipality has developed a lot of planning and strategic plans for the most attractive areas within its territory. It has enacted 12 important spatial and urban plans, urban design projects and strategic documents. More than half of these documents are mostly essentially orientated towards tourism.

The Spatial Plan of Republic of Serbia and the Spatial Plan of Municipality of Golubac are strategic plans and incorporated both strategic and regulatory elements by law. The Spatial Plan of the Republic of Serbia 2010-2020 is an umbrella document in territorial planning Serbia. Landscapes are well-elaborated in this plan in two major topics – 'nature and ecology' and 'sustainable use of heritage'. They are also represented in all sections of the plan, from planning objectives till the implementation at the end of the plan.

The main intention of the Spatial plan of Municipality of Golubac is strengthening of tourism development, in accordance with valuable cultural heritage and, particularly, the possession of Golubac fortress as a special cultural asset as well as preserving the natural heritage and identity.

The General Urban plan is focused on the built area within the town and supports mixed-use and mixed-density development in the part of the town along the river, where a mix of non-residential facilities is planned. This is also the area where the main concentration

of tourist infrastructure is placed as well as the bicycle route and pedestrian path along the riverbank.



Fig. 1: The first national workshop in Golubac: students and teaching staff from the course "Methodology of urban design" and local experts (source: B. Antonić)

# Expectation from the project and contributions

The relationships between cultural heritage, specific patterns, identity on one side and different concepts, approaches and instruments of urban development on another one was investigated. The focus was on development of regional network through tourism, education, strengthening cultural identity and solidarity.

The expected results were development of the region and Municipality, incitement of cultural identity, connecting the existing settlements and creating common brand, as well as research of not recognised and hidden cultural capital.

The results should contribute to development of spatial – cultural network "Danube cultural promenade", which would connect all the settlements.

## 1. METHODOLOGY

Prof. Dr. Aleksandra Djukić

The course Methodology of Urban Design is the obligatory course at second semester of Master Academic studies - program at Master of Integrated Urbanism. The course takes place for hours per week.

The course goals are to introduce the students with the methodologies of urban design and to accept the general methodology recognised by RIBA, which could be described as a process in four phases: analysis, synthesis,

appraisal and decision, that pass through a series of linked decisions. The focus is on the training of students for work in the field of urban design, i.e. the development of their abilities to understand, systemise and implement the different methods of urban design, as well as to use acquired knowledge in practice – in urban plans and urban design projects.

# The course consists of theoretical part and theoretical lessons.

Theoretical part includes the following topics:

- Introduction in the methodology of urban design;
- The review of research methods and techniques which are used in the field of urban design;
- Implementation of different methods in urban design, Dialectical process;
- Adequate organisation of research;
- Definition of criteria for the evaluation of optimal solution.
- Practical part includes the practicing of acquired knowledge in situ, i.e. on two selected polygons: the historic core of Smederevo and Golubac Fortress with the central part riverside of the town, through following steps;
- Analysing the concrete polygons by the different methods and techniques of urban design, In situ research;

- Defining the problems that should be examined:
- Organising of the entire research;
- Creating a design concept;
- Defining the programme for the concept evaluation:
- Developing and presenting planning scenarios
   development scenarios, with outcomes;
- Checking previous steps and outcomes on the selected polygons.

Teaching is conducted through interactive and multimedia lectures (ex-cathedra lectures, discussion, surveys), through group work during practical classes and through the elaboration of acquired knowledge by its presentation (colloquia).

Work in situ is necessary part of practical work as well as use of methods and techniques presented in theoretical part of the course, such as mental mapping, space syntax, research data on internet.

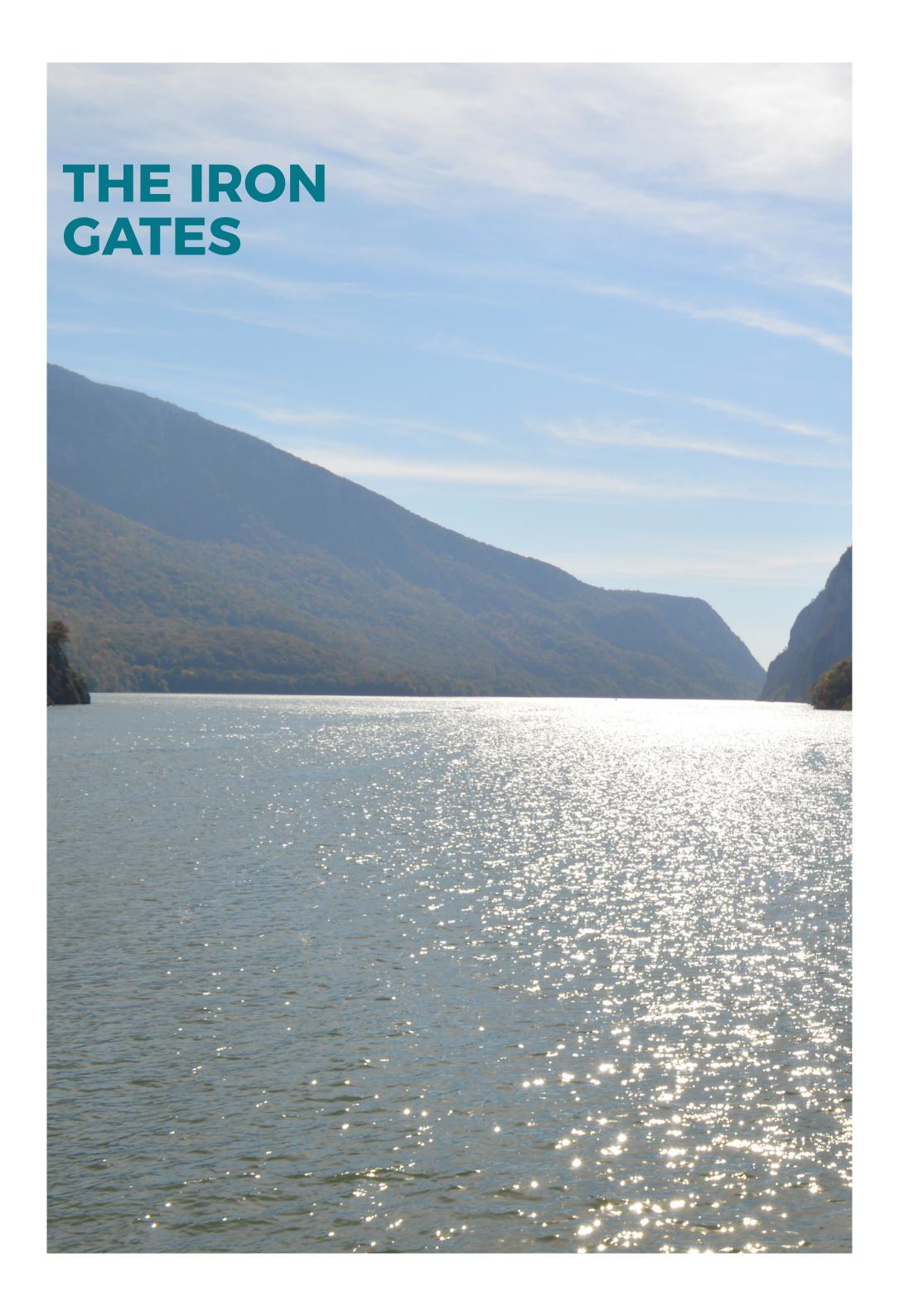
The main aim of colloquia is the audit of the student implantation of obtained knowledge in a concrete site.

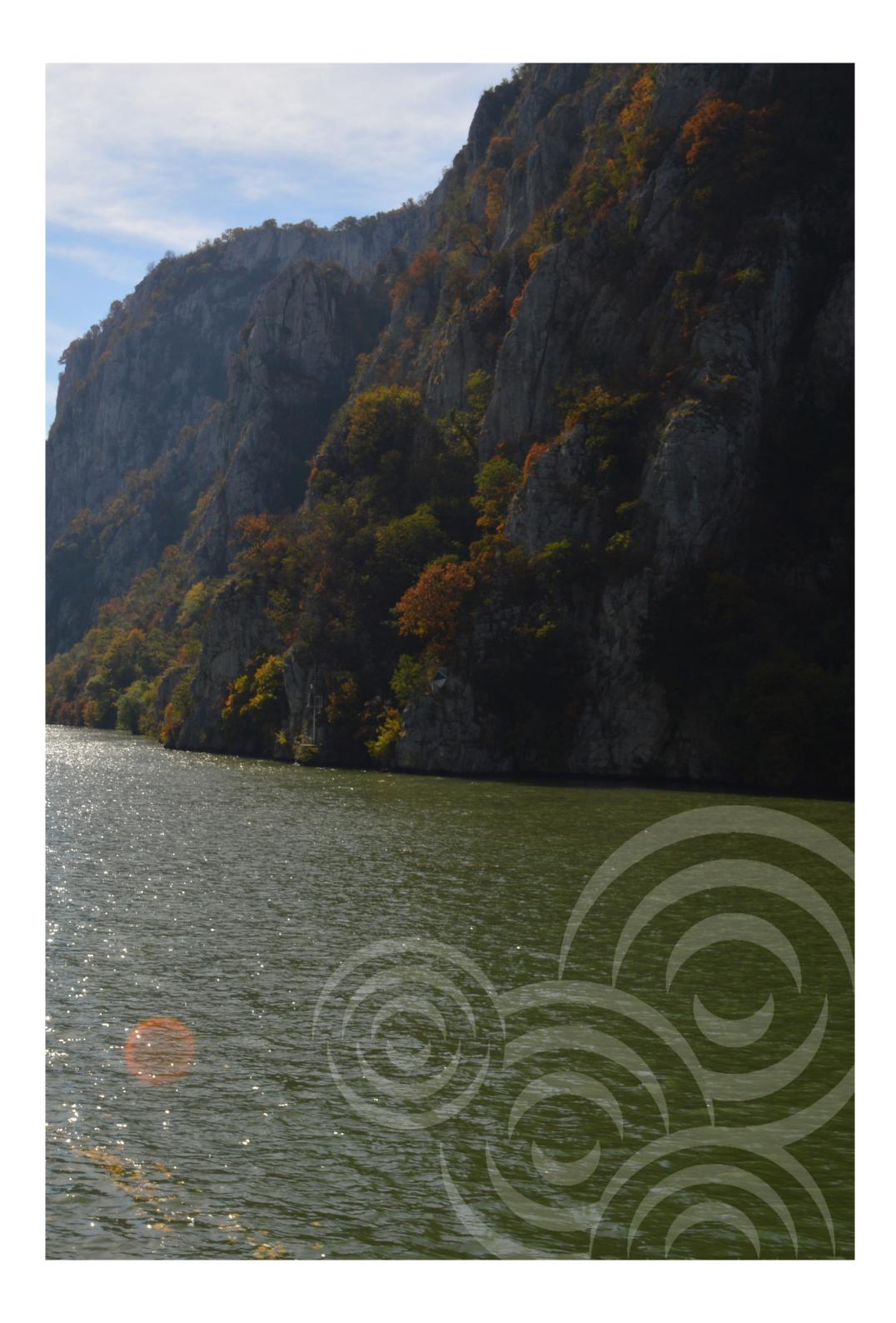
#### Learning outcomes of the course

Attending lectures and acquiring presented information, students should:

- Obtain their knowledge about the different methods of urban design and the possibilities of their use in practice;
- Develop their ability for work in the states of both wide autonomy and active collaboration;
- Expand their capacities to link and combine theory and practice in urban design and
- Improve their skills in the various types of communications (verbal, written, graphical and digital).







# 2. THE IRON GATES MACRO-REGION

Milica Cvetanović, PhD student

The Iron Gates is a gorge in Southeast Europe. It is located at the lower Danube and is a boundary space between Serbia and Romania. On both sides, it is protected due to its natural and cultural significance – in Serbia as a national park, and in Romania as a natural park. In Serbia, the location of the gorge is in its eastern part.

With a length of 100 km, the Iron Gates Gorge crosses the Carpathian ranges and connects Panonian Basin with the Pontian Basin (Marković & Pavlović, 1995). The Danube valley in this gorge is composite, which means that narrower and wider parts change.



Fig. 1: Veliki and Mali Kazan with the narrowest part in the Iron Gates Gorge – 180 m (source: B. Antonić)

The Đerdap National Park was declared in 1974. It spreads along the right bank of the Danube, from Golubac to Karataš near Kladovo. It is the largest national park in Serbia, and by its characteristics is the most complex. This park is known by great natural diversity and numerous cultural and historical monuments (Jovičić, 2009). Three municipalities – Golubac, Majdanpek and Kladovo manage this national park. The area of the gorge is actually accumulation Đerdap Lake, which was created after the construction of the hydroelectric power plant Đerdap I in 1972. It is the largest artificial lake in Serbia.

In terms of river traffic, the gorge has a good position since it is on the route of the Danube Corridor or Corridor 7. It has positive effects in attracting tourists on cruisers. State roads 34 and 35 (smaller part) pass through the gorge. Via state road 33, the road 34 is connected to the most important road in Serbia - the highway A1, which is part of the E75 road (connects Greece and Norway). However, the land traffic position is not enough transparent so most foreign tourists still come by river road.

Natural heritage of the Iron Gates in Serbia is characterized by numerous geomorphologic features and plant species. The borders of the national park that separate it from the rest of Eastern Serbia are the mountains: Miroč (768 m), Veliki Greben (655 m), Šomrda (806 m) and Liškovac (803 m). The mountain area of the Đerdap National Park is dissected with the valley of the Porečka River (Jovičić, 2009). The territory of the Đerdap National Park is situated on the border of two different floristic regions: the middle-European region of temperate forests and the Ponto-South Siberian or steppe-forests floristic region (Stevanović, 1996). In this area there are more than 1.100 plant species, and especially forests of beech and oak forests are known. The fauna of this area is also rich and various (Jovičić, 2009). It is thought that at least 200 bird species visit this area throughout the year. Numerous species of mammals are present, including: wildcat, bear, wolf, jackal, chamois, deer, otter and others. A great number of species of insects, amphibians and reptiles also inhabit this territory (Macura at al., 2012). The cultural and historical significance of the Danube banks in the Iron Gates Gorge is big. Historical data on the right, Serbian bank speak about periods thousands of years

before the new era. The Iron Gates is best known for Mesolithic and Neolithic culture and historical settlements such as Lepenski Vir, Vlasac and Padina. Roman, Byzantine, Slavic and Ottoman cultures also lefted great significance. There used to be many more archaeological sites, cultural and historical monuments. By raising the dam due to the construction of the hydroelectric power plant on the Danube, most of these sites from various periods have been submerged.

Municipalities Golubac, Majdanpek and Kladovo have made a decision to proclaim a geopark whose beginning will be near Golubac, in the part of Usije-Vinci. Currently, it is being labeled, and some parts of the geopark will coincide with the borders of the national park.

In the geomorphological and geological view stands out the Boljetin River canyon, which is also part of the nature reserve. It is recognizable by its visible layers of sediments that date back to the time of the Tethys ocean. This canyon is one of the most valuable objects of geo heritage in this part of Serbia and also an inevitable place for adventurers. Among the narrower and wider parts of the Danube valley in the Iron Gates, by its beauty stands out the gorges Veliki and Mali Kazan (also known as Danube Boilers), 19 km long. The width of the Danube at this point is 180 m, which is the smallest width in the entire gorge, and the biggest depth in this part is 68 m. In several places in the gorges there are karst springs. The remains of Trajan's Road can be seen, as well as the monument in the rock - Tabula Traiana (Trajan's board). (Stanković, 2008). On the Romanian side of this part of the gorge there is the famous statue in the rock - the face of Decebalus, king of Dacia, but the view on it is possible from the Serbian side.

Lepenski Vir is considered to be the home of the oldest European civilization. The locality is dislocated, moved 100 meters away from the original location. It is estimated that it is about 9000 years old and that the culture of Lepenski Vir lasted about 2000 years. During that period, the look of the houses in Lepenski Vir has never changed.



Fig. 2: Archaeological site Lepenski Vir was a prehistoric urban settlement (source: B. Antonić)

The inhabitants of Lepenski Virwere fishermen and had some knowledge of nature. They had developed religious-magic and ritual practices. The characteristics of the space were similar to all the early settlements - a large compactness in a small area, enclosed with stone or wooden fence (Đorđević, 2009). The houses were trapezoidal structures with lime plaster floors containing numerous large stone sculptures and other symbolic artefacts (among other finds), together with a record of complex burial practices associated with the structures and the areas between them (Bonsall at al., 2008). Today the archeological site is the central part of the museum of Lepenski Vir. It is a modern building with an archeological site in the central part, an impressive museum exhibition and media

contents. However, tourist signaling to the site could be improved.

**Tabula Traiana** (*The Trajan's board*) is the best preserved monument of the Roman culture in the Iron Gates Gorge. It is a sign in Latin that speaks of the great undertaking of building a Roman road through the gorge, during the regency of Emperor Trajan. The road was completed at the beginning of the second century. The inscription on the board is engraved in a rock (Petrović, 2004). During the construction of the hydroelectric power plant Đerdap I (1963-1972), the Roman road was sunk, and Tabula Traiana was cut from the rock and re-set 21.5 m above the former site. Today is visible from the river.

Medieval **fortress Golubac** is located at the entrance to the Derdap National Park. It is one of the most recognizable fortresses on the lower Danube and attracts a large number of visitors. During the last years the fortress was renovated and reconstructed, and the road that had previously led through the fortress was displaced. Near the site, there is a modern visitor center and a dock. The construction of an ethno complex near the fortress is also planned.

The area of the National Park is in general poorly populated and it is also characterized by absence of larger industrial plants in the surrounding environment and lower level of construction of transport infrastructure (Jovičić, 2009). The process of depopulation and aging of the population spreads beyond the borders of the national park. The largest number of settlements in the gorge is rural (with the exception of Golubac, Donji Milanovac, Kladovo and partly Tekija). Still, urban settlements are smaller centers and the process of urbanization is actually a bit

slow. Agriculture is limited, in certain places and prohibited. There are potentials for the development of viticulture. The main initiator of the development of this region is tourism. Due to the sensitivity of the area and its protection, tourism must be sustainable and environmentally oriented. Cultural tourism should be established as the primary because in its frames it would include visits to natural resources, since all cultural motives of the Iron Gates are in a unique natural environment.

The intermixture of various ethnic groups - Serbs, Romanians, Czechs, Turks, Germans, Hungarians. etc. - in the area of the Đerdap National Park has produced a richness of ethnography and folklore traditions passed from generation to generation (Patroescy & Vintila, 1997).

Spatial plan of the special purpose area of the international waterway E80 - Danube (Pan-European Corridor VII) mentions construction of docks and marinas at priority locations, such as border sections. It was also said that the direct positive effects of the corridor development of the Danube waterway and its surroundings are expected from tourism. According to plan, Danube is recognized as an important tourism route, but mostly for luxurious tourism. The plan mentions new waterway development projects in the municipality of Golubac such as a cruise pier at Golubac Fortress and a renewed marina next to the center of Golubac Town, as well as marinas in Lepenski Vir, Tekija and nautical center in Poreč bay. The small settlements like Usije, Vinci, Dobra, Brnjica are included among potential locations for small marinas. (IAUS & IUV, 2015). Most of the priorities from this plan related to the area of the Iron Gates Gorge are still not fulfilled.

Spatial plan of the special purpose area of the Derdap National Park foresees the adoption of the Law on the Đerdap National Park and the program of protected area management. Priority activities that are planned: protection, presentation and controlled use of the area, preservation of natural areas, protection and improvement of the state of immovable cultural goods, construction and arrangement of new contents in the function of tourism (marinas, docks, visitor centers), development of rural tourism, development of hydropower, construction and modernization of the road network (construction of a bypass at Golubac Fortress), arranging of mountain, excursion, hiking, fishing and bicycle trails (bicycle trail on the Eurovelo 6 route). In addition the basic environmental protection priorities, intensification of trans-national and international cooperation is also planned cooperation at the local level with Romanian municipalities on the Danube (IAUS, 2012).

The opening of the reconstructed fortress is planned for the spring 2019, but the tourist infrastructure in Lepenski Vir is not fully completed. The biking trail on the Eurovelo 6 route starts from the settlement Vinci to Golubac fortress and is still not completed due to lack of finance. About 70% of the trail is done, but for the rest the help of European funds is necessary. Spatial plan of the special purpose area of the Derdap National Park says about the Law on the National Park and the program of protected area management. The law is not passed, but it is the Management Plan of Đerdap National Park. The most important is that the future development of the Iron Gates Gorge and Đerdap National Park must be exclusively sustainable

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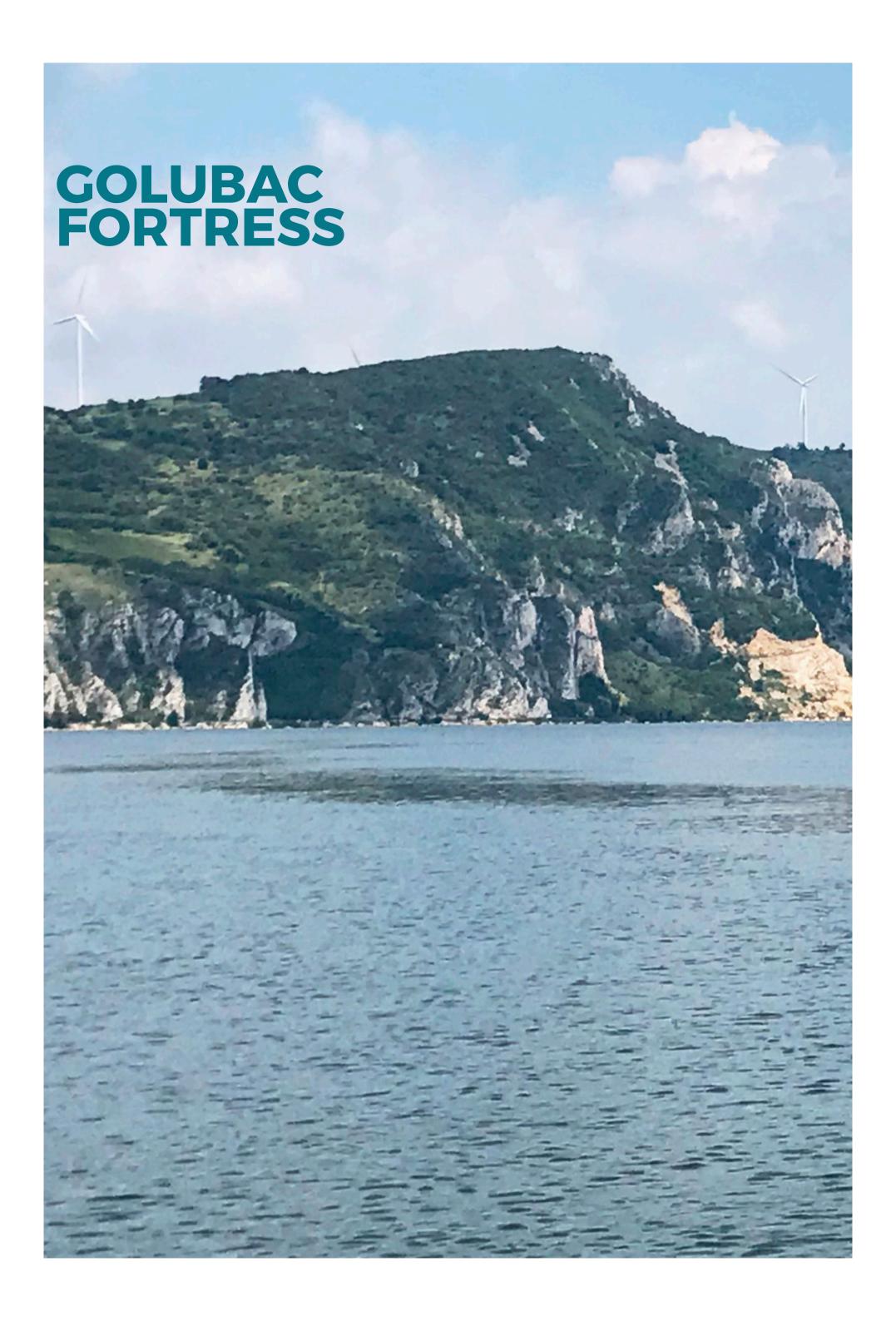
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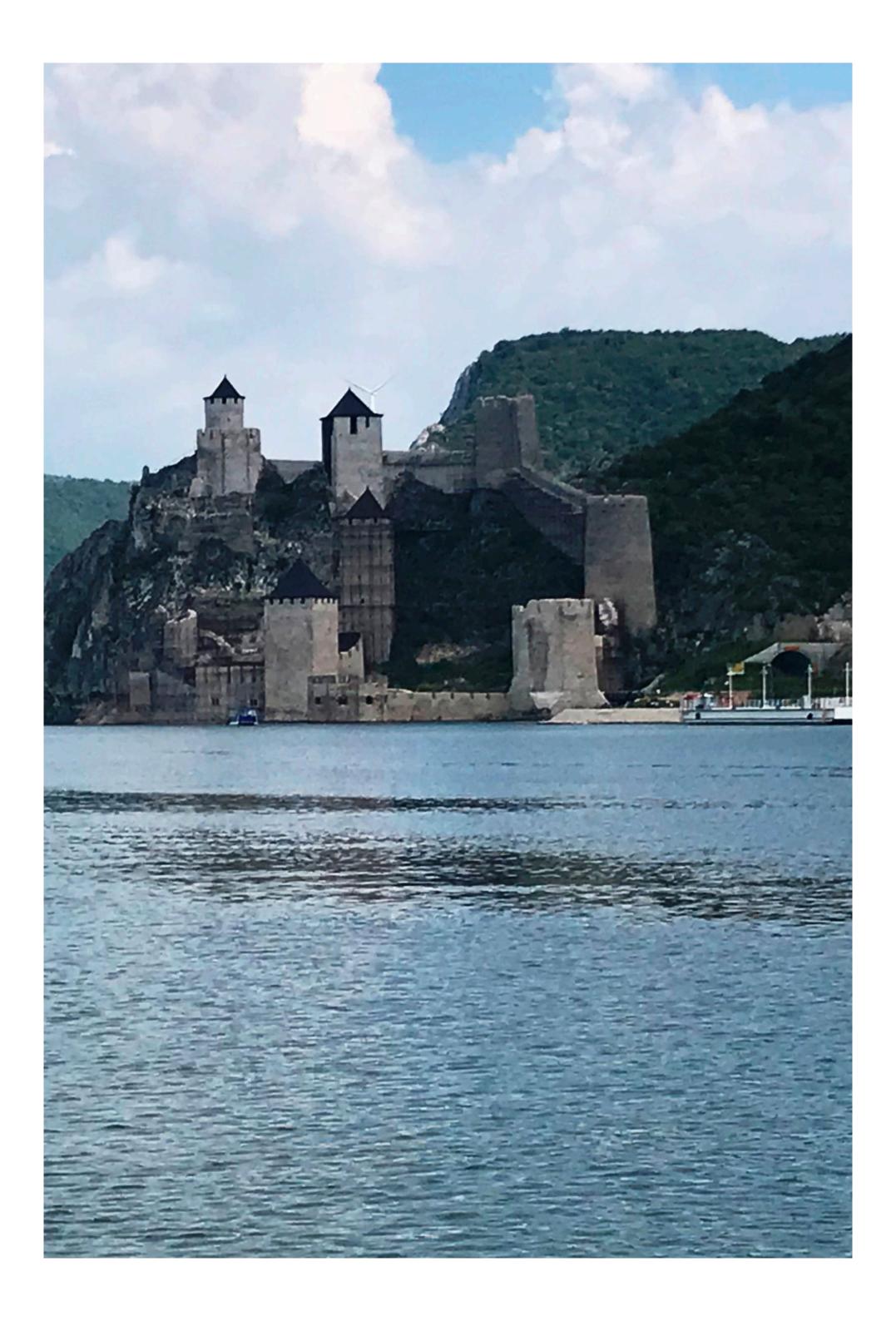
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# 3. THE GOLUBAC MICRO-REGION

Dr. Branislav Antonić, teaching assistant

The location of student investigations and design was Golubac Micro-region. Golubac is a town and municipality in the Braničevo District, in Eastern Serbia. It is located on the right side of the Danube River. Considering its location in the Iron Gates Region, Golubac Municipality makes its western third, towards Pannonian Plain to further west.

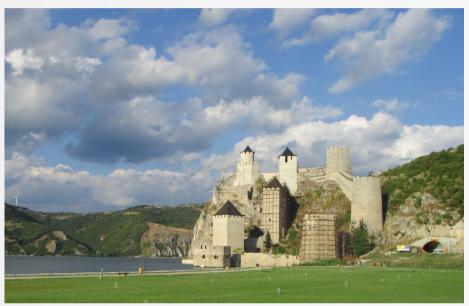


Fig. 1: Golubac Fortress in July 2017 (source: B. Antonić)

Golubac is mainly known by Golubac Fortress, one of the most important medieval fortresses in the country and a major tourist attraction in the Danube Region in Serbia (Fig. 1). It is located 4 km east from Golubac Town. The fortress is founded in 13th century on a strategically important position at the western entrance of the Iron Gates Gorge. In the following centuries, many realms battled for and possessed the fortress: Byzantines, Hungarians, Bulgarians Serbs, and Turks-Ottomans. The last ones, Ottoman Empire were rulers during several centuries, making it one of their strongholds against Habsburg Empire across the Danube as a border (Đidić, 2008). During this period, the fortress got its shape; it consists of an inner and outer fortification, built in irregular form due to its position of a rock above the river. In total, the fortress has nine massive towers, with so-called "Hat Tower" at the top of the rock as the most impressive one (Cunjak & Jordović, 2002). In early 19th century, Golubac Fortress lost its military function and started to fade. It was officially protected after the World War II, as a cultural monument of exceptional importance. Nevertheless, its reconstruction and revitalisation has been carried only since 2010.

The significance of Golubac Fortress would not be noticed without knowing its position. It is a "guardian" on the western entrance of the Iron Gates. It demarcates the scenic gorge with mountainous hinterland on east from the docile landscape of southeastern Pannonia on west. The first narrow part of gorge, east of the fortress, is known as Golubac Canyon (Stanković, 2002). The Danube is very narrow in the canyon, just 200 m wide. Further east, there is Liubcova Valley, where Dobra Village is located. This eastern part of the municipality is part of the Đerdap National Park, which imposes protection under the gorge space, considering its all values: geology, geomorphology, hydrology, and biodiversity. Locations with the most valuable natural heritage are under a strict protection regime (Maran Stevanović, 2017). Such example is Bosman-Sokolac Natural Reservation at the eastern border of Golubac Municipality.

The dichotomy between the gorge and lowland also defines Golubac Municipality; its eastern half with only two villages (Dobra and Brnjica) belongs to the gorge and all other settlements (22 of them) are located in western, lowland half. Golubac Town and Fortress are positioned at this, natural border between two regions.

This division is visible in all aspects of local economy and life. Agriculture is the main economic activity in western half, while eastern half is more attached to livestock breeding and limited forestry. The only other source of local income is a tourism, which is mainly developed in five Danubian settlements of the municipality: Golubac Town, Vinci, Usije, Brnjica and Dobra villages 2011). Nevertheless, (ARHIPLAN, economic prospects are still weak - Golubac Municipality is officially enlisted among the critically underdeveloped municipalities, where the level of development is under 50% of national average (SORS, n.d.).

Table 1: Comparison of the main population data for Golubac and upper levels, according the last three national censuses (source: SORS, 2014).

Nat. census	Census	Census	Census	Difference
NUTS/LAU*	1991	2002	2011	2011/1991
Golubac Town	1,995	1,896	1,653	-17.1%
(LAU 2)				
Golubac Municipal- ity	12,513	9,913	8,331	-33.4%
(LAU 1)				
Braničevo District	253,992	200,806	183,625	-27.7%
(NUTS 3)				
Southern and East- ern Serbia	1,940,252	1,753,004	1,563,916	-19.4%
(NUTS 2)				
Republic of Serbia	7,822,795	7,498,001	7,186,862	-8.1%
* NUTS - Nomen- clature of Territorial Units for Statistics				
* LAU - Local admin- istrative unit				

Economic difficulties have been profoundly reflected in demographic sphere at local level. The lagging of both Golubac Town and Municipality is evident if they are compared with upper levels. This can be explained through the Table 1:

The rapid demographic population loss in

Golubac is also connected with the other demographic and social problems, such as: rampant ageing at the first place, but also under-average education attainment, high level of unemployment. When demographic data are transferred in space, the other issue emerges. The average size of a settlement in Golubac Municipality is just 347 inhabitants per settlement (Census 2011). Then, the overall density is very challenging - just 22.6 inhabitant/km2 (Census 2011), which is the lowest among all Danubian municipalities in Serbia. Similarly, with less than 2,000 inhabitants, Golubac Town is among the smallest municipal seats in Serbia. Therefore, it is very complicated to plan any kind of the future communal service and infrastructure with these limiting demographic figures and trends (ARHIPLAN, 2011).

Socio-economic difficulties at municipal and regional level have mirrored in the physical state of Golubac Town. The town has a unique position at the widest part of the Danube in its entire flow – the river is more 6 km wide in the front of Golubac. The other advantage of the town is that this is the only settlement in the Iron Gates Gorge with preserved historic core and several valuable buildings from the 19th century under state protection (Fig. 2)

The other settlements are rather new ones, built in the 1970s, after the flooding of old settlements by the lake of Iron Gates Dam Hydro Plant 1. Although some important parts of the town has been refurbished in the last decade, such as the main square (Fig. 2) and quay with a cycling-pedestrian path, many parts and buildings are in pretty neglected state. Then, the town itself is not under protection regime, which limits the possibilities to preserve the characteristic ambient of historic core by its many segments.

The main driving force of local development is currently tourism. Aside of Golubac Fortress, a key attraction for local level is Tumane Monastery, situated 9 km south of the town Hence, cultural tourism is the most promising type of tourism for Golubac. Interestingly, the most of tourist capacities are located in Golubac Town and suburbia (Usije and Vinci in its western part), despite the main attractions are in vicinity. The small-format tourist entities (guest-houses, lodging houses, restaurants, cafes) are present across the urban zone and they contribute greatly to the vibrancy of Golubac during summer season. In contrast to them, the largest accommodation in the town, "Golubački Grad" Hotel from 1980s, is in bad state. Retail sector is also alive, especially in small pedestrian zone around the main square and the town park.

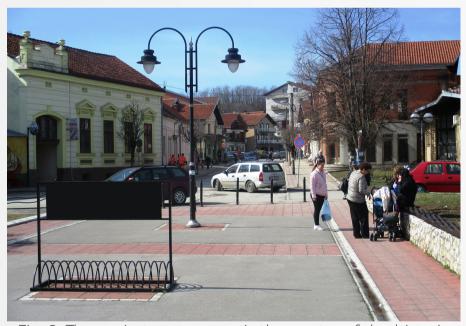


Fig. 2: The main town square is the centre of the historic core of Golubac Town (source: B. Antonić)

Nevertheless, many things in Golubac tourism still wait for revision and new development. Just to mention that strategic framework is still traditionally oriented, without innovative approaches (Djukić, Djokić & Antonić, 2017). Many problems are related to the general lack of big-format capacities (high-quality hotel,

bigger supermarket, the town museum/ gallery), as well as to supplementary offer in culture, retail and transportation. Despite these challenges, tourist sector has proven to be agile last years. The key stimulus was certainly the reconstruction and revitalisation of Golubac Fortress. The reconstruction is also important, because it included visitor centre with large parking lot and a pier for cruisers on the Danube (ALBO, 2009). More than 80 thousand tourists visited Golubac Fortress in 2018. Furthermore, the offer of tourist accommodation has been doubled in the last three years. New capital projects are in preparation or in progress. This is the case with the town marina, the renewal of the town beach in Vinci weakened zone, and the extension of the town quay to the fortress. These tendencies wake up hope that there is a better future for Golubac.

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## 4. PLANNING AND STRATEGIC PERSPECTIVE

Dr. Branislav Antonić, teaching assistant

Serbian territorial planning system is based on an operative Law on Planning and Construction of the Republic of Serbia. The law recognises two types of territorial plans: spatial plans and urban plans. The later ones consider settlements and their parts, while the former ones are related to above-settlement level – regions and municipalities. The planning system generally follows the territorial development that respects the horizontal and vertical coordination of plans (PS, 2009-2019, Art. 3).

The organisation of plans by their vertical coordination (PS, 2009-2019, Art. 11):

- Spatial plans:
  - 1) Spatial Plan of the Republic of Serbia;
  - 2) Regional Spatial Plan;
  - 3) Spatial Plan of the unit of local administration:
- 4) Spatial Plan of the region of special use. Urban plans:
  - 1) General Urban Plan;
  - 2) General Regulation Plan;
  - 3) Detailed Regulation Plan.

Additional urban and technical documents, which follow spatial and urban plans, are (PS, 2009-2019, Art. 13):

- 1) Urban design project;
- 2) Design project of re-allotment and allotment;
- 3) Design project of correction of borders of adjoining lots.

All enlisted documents include both textual and graphical content.

Any new document in Serbian planning system should be created to be harmonised with the Spatial Plan of Republic of Serbia. Currently, the operative plan is for the period 2010-2020 (Fig. 1).

Apart of the planning documents, in recent years, ministries and local self-governments (cities and municipalities) strategic documents have adopted numerous strategies. However, the legislative framework regarding strategies is still in progress, so their mutual coordination, as well as coordination between planning and strategic documents is still a challenging issue in Serbia.



Fig. 1: The title page of the Spatial Plan of the Republic of Serbia 2010-2014-2020 (source: RAPP)

#### Planning and strategic perspective for the Iron Gates Region and Golubac Town (Table 1)

For the purpose of this report, two types of territorial plans are especially important, because their coverage do not reflect official administrative borders between settlements and municipalities; there are shaped with special purposes, to enable the special regime of organisation, use and prospection of a certain territory (PS, 2015). This is the spatial plan of the region of special use at spatial/regional level and detailed urban plan at urban/settlement level. These plans

are thereby optional and their purpose is to better coordinate the development of the territories that are divided between different administrative units and with different ownership rights. Typical examples are spatial plans for Đerdap/Iron Gates National Park or for Danube Corridor in Serbia, as well as the detailed regulation plan for Golubac Fortress.

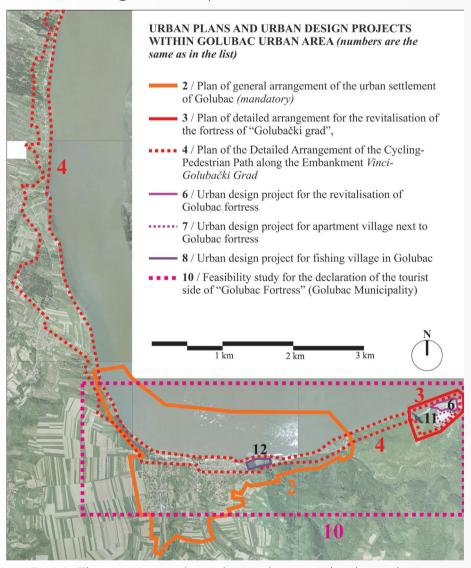


Fig. 2: The coverage by urban plans and urban design projects in the area of Golubac Town (source: Djukić, Djokić & Antonić, 2018)

The other plans are generally prescribed by law and their creation and enactment are obligatory. In the case of strategic documents, the most important ones are those that refer to tourism development. Such example is the Master plan of "Donje Podunavlje" Tourist Destination (Donje Podunavlje = Lower Danube).In the case of

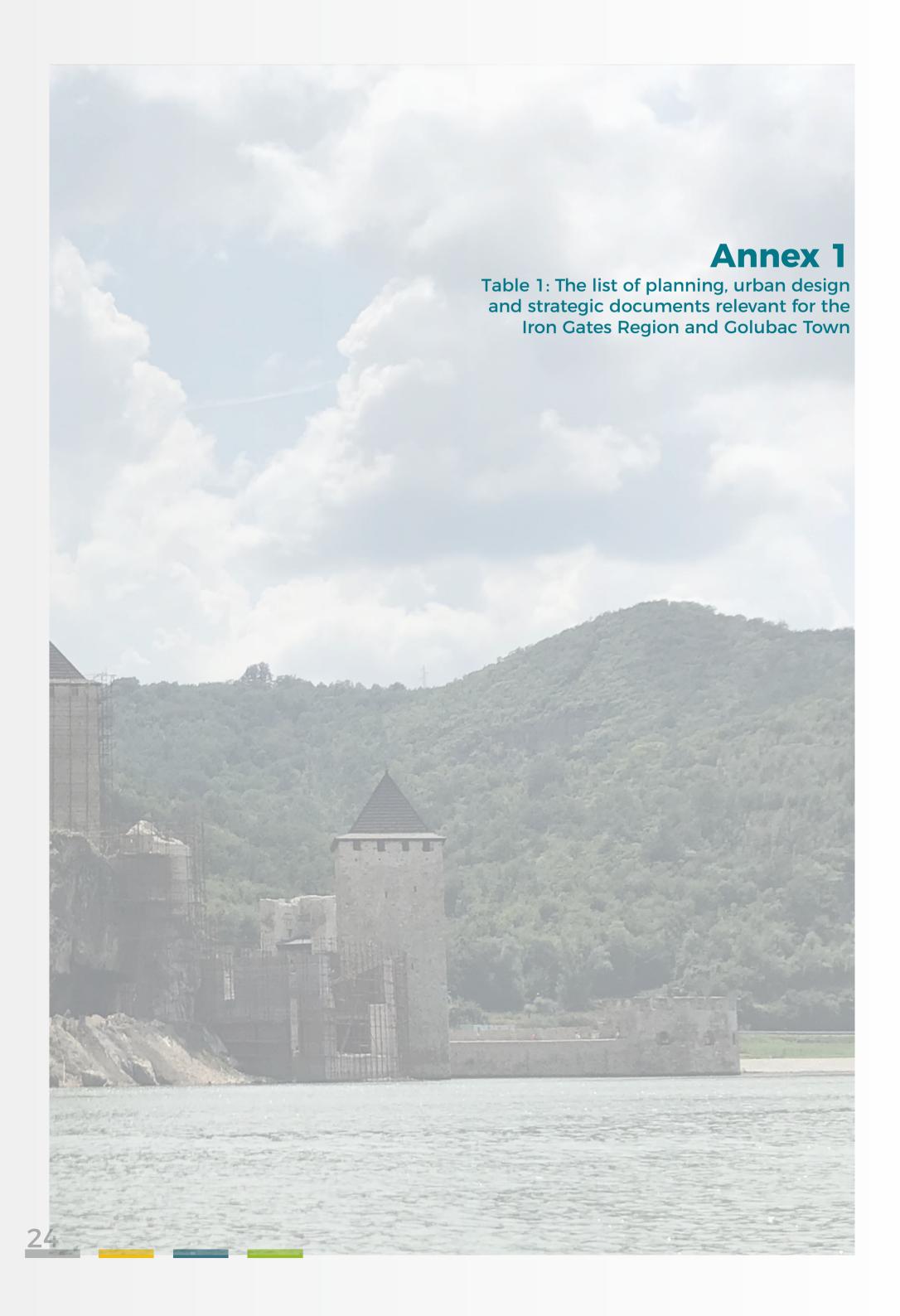
Golubac Municipality, the most of planning and strategic documents covers the area of Golubac Town and Golubac Fortress (Fig. 2):

#### **References:**

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Official / Serbian name	English name / translation	Year of	Relevance (order by importance)
		enactment	
NATIONAL LEVEL - SPATIAL PLANS			
Закон о просторном плану Републике Србије од 2010- до 2020- године	Law on the Spatial Plan for the Republic of Serbia 2010- 2020	2010	General territorial development, tourism, heritage, culture
Просторни план Републике Србије од 2010. до 2020. године	Spatial Plan for the Republic of Serbia 2010-2020	2010	General territorial development, tourism, heritage, culture
Просторни план подручја посебне намене међународног пловног пута E80 — Дунав (Паневропски коридор VII)	Spatial plan of special-purpose area of E-80 international waterway - the Danube (Pan-European corridor VIII)	2010	Danube region
NATIONAL LEVEL - STRATEGIES			
Стратегија просторног развоја Републике Србије 2009-2013- 2020	Strategy on spatial development of the Republic of Serbia 2009-2013-2020	2009	General territorial development
Стратегија развоја водног саобраћаја Републике Србије од 2015. до 2025. године	Strategy on development of water transport of the Republic of Serbia 2015-2025	2015	Internal waters and ports
Стратегија развоја туризма Републике Србије за период 2016. — 2025.	Strategy of tourism development of the Republic of Serbia 2016-2025	2016	Tourism
Стратегија Европске Уније за Дунавски регион (на српском)	Strategy of European Union for Danube region (in Serbian)	2010	Danube region
REGIONAL LEVEL - PLANS AND STRATEGIES (Iron Gate/Đe	erdap Region, Braničevo District, Podunavlje District)		
Мастер план туристичке дестинације "Доње Подунавље"	Master plan of "Donje Podunavlje" tourist destination (Donje Podunavlje = Lower Danube)	2007	Local-self-government unit of Gol- ubac
Регионални просторни план за подручје Подунавског и Браничевског управног округа	Regional spatial plan for area of Podunavlje and Braničevo Districts	2015	Local-self-government units of Golubac
Регионална развојна стратегија Браничева и Подунавља 2016- 2020.	Regional development strategy  Braničevo-Podunavlje 2016 - 2020	2016	Local-self-government units of Golubac
Просторни план подручја посебне намене Националног парка "Ђердап"	Spatial plan of special-purpose area of "Đerdap" National plan (Đerdap = Iron Gate)	2009	Local-self-government unit of Gol- ubac
План управљања Националним парком "Ђердап"	Management plan for "Đerdap" National plan (Đerdap = Iron Gate)	2017	Local-self-government unit of Gol- ubac
LOCAL LEVEL - GOLUBAC MUNICIPALITY - PLANS AND DE	SIGN PROJECTS		
Просторни план општине Голубац	Spatial plan of Golubac Municipality	2011	General territorial development
План генералне регулације	Plan of general regulation of urban settlement of Golubac	2011	Urban development of Golubac
градског насеља Голубац		0010	
План детаљне регулације за ревитализацију тврђаве "Голубачки град"	Plan of detailed regulation for revitalization of the fortress "Golubački grad"	2010	Golubac fortress
План детаљне регулације приобаља Дунава, од туристичког насеља Винци до тврђаве "Голубачки град"	Plan of detailed regulation of the Danube riverside, from Vinci tourist village to the fortress "Golubački grad"	2011	Danube riverside in Golubac urban area
План детаљне регулације комплекса манастира Тумане и споменика природе "Бигрена акумулација"	Plan of detailed regulation of complex of Tumane monastery and "Bigrena akumulacija" natural monument	2011	Tumane monastery and "Bigrena akumulacija" natural monument
Урбанистички пројекат ревитализације Голубачке тврђаве	Urban design project for revitalisation of Golubac Fortress	-	Golubac Fortress
Урбанистички пројекат апартманског насеља код тврђаве "Голубачки град"	Urban design project of apartment village next to Colubac fortress	2009	Tourism
Урбанистички пројекат рибарског насеља у Голупцу	Urban design project of fishing village in Golubac	2013	Tourism
LOCAL LEVEL - GOLUBAC MUNICIPALITY - STRATEGIES			
		2010-14	General development
Стратегија локалног економског развоја општине Голубац	Strategy of local economic development of Golubac municipality	201011	<u> </u>
		2015	General development
Стратегија локалног економског развоја општине Голубац  Стратегија одрживог развоја општине Голубац за период од	nicipality  Strategy of sustainable development of Golubac municipal-		

# 5. EXPLORING GOLUBAC

Prof. Dr. Eva Vaništa Lazarević

The process of student investigations and design in Golubac Micro-region in studio generally followed the explained curriculum of the course "Methodology of Urban Planning and Design". In line with this, studio work and supplementary theoretical lectures passed through several phases during the summer semester 2016/2017.

The introduction of Golubac Micro-region was the first phase. Students got to know the region and collect the data from on-site research (Fig. 1) and the data available from provided plans and strategies and general literature and internet.



Fig. 1: Discussions between students and local experts at the second national workshop in Golubac (source: B. Antonić)

Thematic research is carried parallel with the introductory part. All students were organised in 2-3 member groups. Ten student groups investigated specific topics that bridge spatial development, culture and tourism: historic development, cadastre and ownership, geodata based on photography, natural and built heritage, spatial and urban patterns, functions and activities, mapping of visitor tours, networks and infrastructure, and Golubac in news, forums and blogs.

The second-phase research was developed

on two well-established theories: (1) the theory of the city image, developed by Kevin Lynch, and (2) space-syntax theory, based on the analysis of spatial configurations. Student conducted independent on-site research based on both theories, which both were customised to the purposes of the course.

The last phase in the first part was SWOT analysis, as an assessment of the current state of Golubac Micro-region. All groups made the SWOT analyses on their thematic topics, which were eventually merged in a final, comprehensive SWOT analysis. Upon this phase, the first colloquium was completed and orally presented in the first decade of April.

The phases that belong to design process were included in the second colloquium. From the early beginnings, all students were focused on the central core f Golubac Town. Group work was preserved till the end of the studio work.

The two phases, a concept and programme, were mainly interconnected. The concept was a link between the current assessment/SWOT analysis and new proposals for Golubac. The fundamental elements, settled by the concept, were then elaborated through programme, which actually detailed all possible functions, activities and facilities in urban space.

Then, these basic design postulates were used and additionally checked through design scenarios. Each member of a group created one scenario with a unique logo, motto or catchword, proposed actions and their graphical presentation in the space of central Golubac. After that, all groups chose their most appropriate scenario.

The last phase was the concrete design of

a small open space in central Golubac as one of key actions proposed by the chosen scenario. This phase was done as a typical urban design project, including drawings and spatial models.

The described student studio work was "disrupted" by four student workshops. Two of them were national workshops, conducted in Golubac, and the other ones were regional, conducted abroad and in international atmosphere, with students from the other DANUrB universities from Vienna, Budapest, Bucharest, Bratislava, Krems/Donau, and Novi Sad.

The first national DANUrB workshop was in Golubac on March 2, 2017. Teaching staff and students had discussions with local experts from spatial development, heritage, cross-border cooperation, and tourism. They also have fieldwork in Golubac Town, measuring spatial syntax and surveying the issues important for the city image theory.

The second national DANUrB workshop was happened in May 29, 2017 and it was in form of the second colloquium. Students orally presented their design proposals to local experts, who gave them remarks and comments how to further improve them for the final design solutions (Fig. 1). Aside of this major event, students and teaching staff visited Golubac Fortress in reconstruction as a short cultural tour.

Apart of the national workshops, the best students from Belgrade participates in two international DANUrB workshops in Wachau, Austria (March 2017) and Esztergom-Šturovo, Hungary-Slovakia (June 2017). They shared their research and ideas about Golubac to the other students from the above mentioned faculties from Danubian countries, making

partnership and synergy about solutions for the Danube towns and regions (Fig. 2).

Both studio work and four organised workshops showed students how to finalise their studio projects during July 2017.

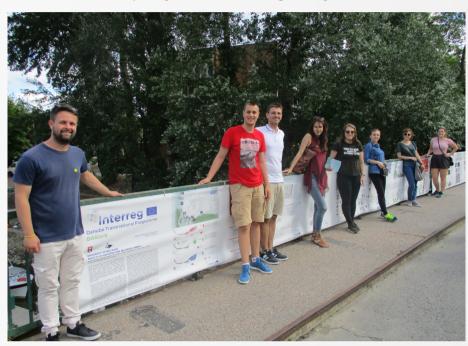
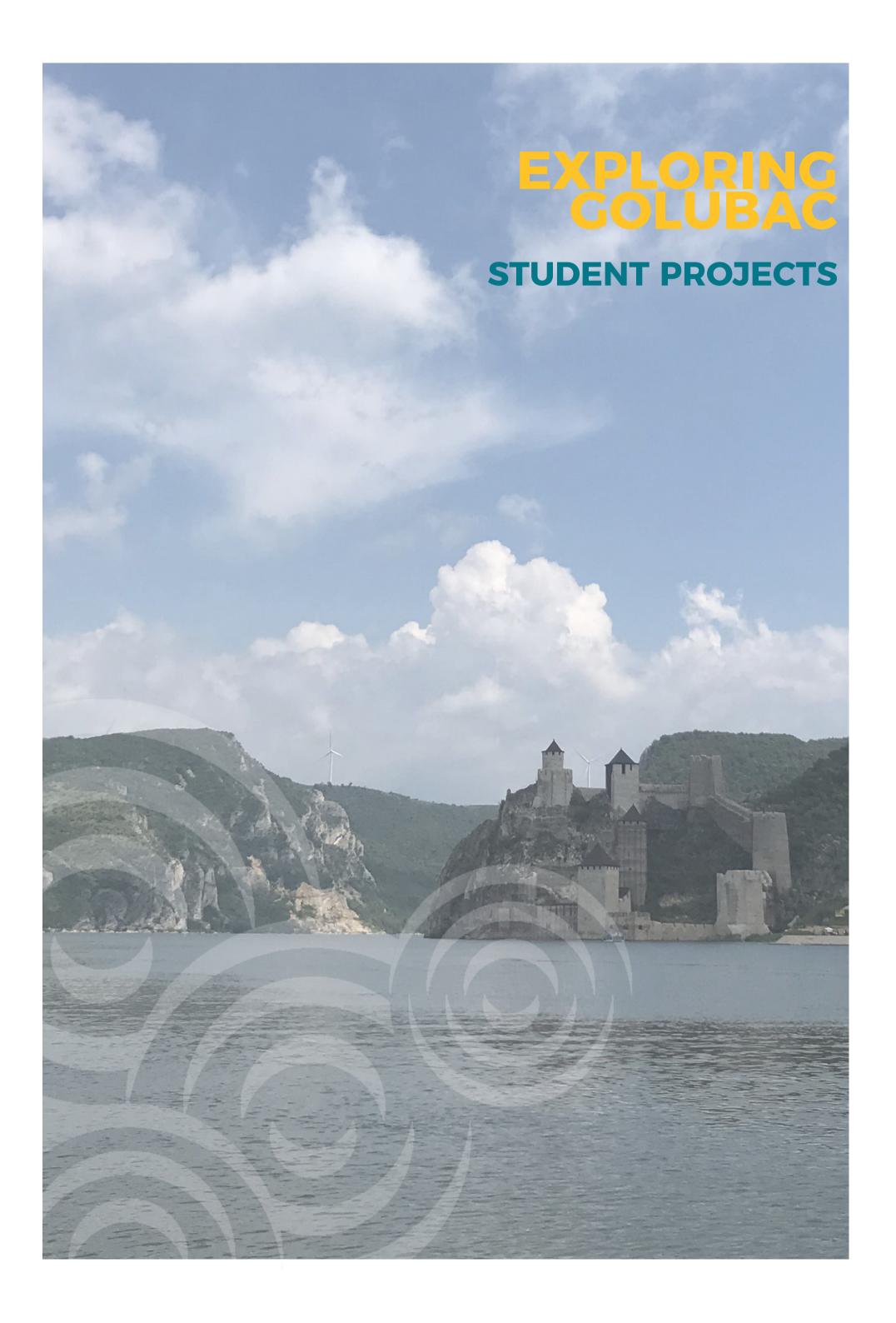


Fig. 2: Students from Belgrade in the front of their posters at international DANUrB workshop in Esztergom (source: B. Antonić)



# LOCATION **GOLUBAC FORTRESS** BELGRAD Layout of Colubac Municipality, Republic of Serbia, and layout of Golubac Fortress in the lower course of the Danube River

Golubac Municipality belongs to the south-east part Golubac Municipality belongs to the south-east part of Central Serbia, to Braničevo District. It is 130 km or 2 hours' drive from Belgrade. It is situated on the right bank of the Danube river, in its lower course though Serbia, at the place where the river is widest in its entire course (it reaches a width of 6,500 m). It belongs to LOWER PODUNAVLJE (LOWER DANUBE REGION) tourist destination area (Veliko Gradište, Golubac, Majdanpek, Negotin, Kladovo), which strives to consolidate its offering. The Fortress itself is located on the 4th km from the town, at the very entrance to the Iron Cates.

#### ID card of the cultural monument: Country: Serbia

Municipality: Golubac Town: Golubac Type: Cultural monument

**GOLUBAC FORTIFIED TOWN** 

Degree of protection: Cultural property of exceptional importance

Type: Fortified town Owner: Republic of Serbia Competent institution Regional Institute for

Protection of Cultural Monuments in Smederevo Seat: Smederevo

HISTORICAL DEVELOPEMENT AND

CONTEMPORARY LOCAL CONTEXT

#### **ESTABLISHMENT OF THE SETTLEMENT**

The earliest material evidence in the area of Golubac Municipality belongs to the Middle Stone Age - the Mesolithic period (between 7000 and 6000 BC).

Multilayer site Padina, at the easternmost point of Golubac territory bears its roots from the period after the Ice Age, time of changes in the nature and the way of life of human communities.

In this area, in the Late Bronze Age, Dubovac - Žuto

The Early Iron Age was marked by the Triballi and then by the Celts, by mixing of which the Scordisci tribe was formed.

The remains of the Celtic Fortress from the 1st and 2nd century BC were found at the site of what later was to become Roman Fortress called Cuppae (above the present day Golubac).

After the Scordisci, this area, rich in minerals, was taken over by the Romans, who consolidated their power in the area and Romanised the population.

On the right bank of the Danube, they formed limes, an integral delimiting system (a series of small and large forts, watchtowers, partition walls, crafts centres nected by the road they constructed also through



In the 9th century, the **Bulgarian state** grows stronger and spreads administratively to the area of the present day East Serbia and the Danube region

In the 11th, and even more so in the 12th and 13th centuries, this area represents a highly unstable border territory packed with troops, over which cru-saders pass, the conflicts of interests arise between Byzantium, Hungary, Bulgaria, and, by late 13th

#### **ESTABLISHMENT OF THE FORT**

The tactical position of the fortification strongly affected its future life, characterized by constant wars and conflicts between the Hungarians and Turks, Serbs and Turks, and Serbs and

The completely reliable historical data on the establishment of fortifications are not available.

According to a group of experts, the Romans erected fortifications on the town site, on both sides of the Danube - Vicus Cuppae, in which emperor Diocletian resided in 299

Golubac Fortress, the remnants of which we see today, was most probably erected by the Serbs, in late 13th or early 14th century, as a strategic border fortification.

However, it is first mentioned in documents in 1335, as a stronghold with a Hungarian garrison



There are two legends describing its origins:

The first legend is about the erection of the town itself which, according to it, lasted 80 years, and the workers carried the stones from a nearby quarry in their bare hands to the construction

The second legend is about a Byzantine empress Helena, who, imprisoned in the tallest tower, used to feed pigeons – after which the town was named.

#### **DEVELOPMENT OF THE FORTIFICATION**

#### STAGE 1

Erected in the late 13th and early 14th century as a border fort, constructed by the Serbs. The important strategic position - on a high, inaccessible rock, it secured control over the Danube to its pro-

The history of the Fortress/town is characterized by constant wars and conflicts between Hungarians, Turks and Serbs. - The first stage of construction of the town, the beginning of which, according to the historians dates back to the 13th century, was probably initiated by King Dragutin. - The erection of the upper Fortress was completed before 1335, when the northern territories of the Serbian state, including Golubac, were



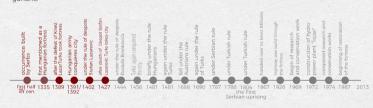
In the years to come, the town was alternately Serbian and Hungarian. - From 1355, it was probably under Hungarian rule.
- It was ruled by Prince Lazar when the Battle of Kosovo took place, but after the defeat of the Serbian army,

to comes under rule of Bayezid 1.

- In 1391-1392, the Hungarian army conquers the town.
- In 1402, following the Battle of Akara, Despot Stefan Lazarević was bestowed Golubac from Hungarian
King Sigismund. - In 1427, after the death of Despot Stefan Lazarević, Golubac fell under the Turkish rule.

During the rule of Despot Stefan, the second stage of construction of the town was also completed.

- During the rule of Despot Stefan, the second stage of construction of the town was also completed, namely the lower Fortress and the palace. - The years after the death of Despot Stefan Lazarević were marked by the conflicts between the Hungarians and the Turks in Golubac surroundings. - King Sigismund built a new town on the other side of the Danube - Laszlovar, or the city of Saint Ladislaus. - The Hungarians attacked the Fortress from all directions and from the water. The cannons were firing at the town from Laszlovar and severely damaged it. The Turkish army occupying the town seeks aid, which is provided by the Beylerbey of Rumelia, commanding a huge number of Turkish troops. - The large Turkish army filled the Hungarians with panic and they flee away even before the battle starts. Sigismund concludes a truce with the Turks who, irrespective of that, take advantage of the situation and attack the Hungarians.



STAGE 4

After the Hungarian defeat, Golubac fell under rule of the Turks and was under their control until 1444,

when Serbian Despotate was restored by the Peace of Szeged, comprising Colubac as well under the rule of Đurad Branković.

In 1456, after the death of Đurad Branković, it was seized by the Turks. - In 1481, the Hungarians man-aged to conquer it, only to abandon it soon after. - Since then, until 1867, Colubac is almost continuous

From 1688 to 1690, it was shortly ruled by the Austrians.

- The Fortress was under the rule of Serbian rebels during Koča's frontier and the First Serbian Uprising. Gradually, to the South West of the fort, a suburb evolved, which was inhabited by mid 19th century.

In 1867, after it was handed over to Prince Mihailo, Golubac was abandoned.

Danube, the river level nearby Golubac rose, flooding the lowest parts of the town



## **CONTEMPORAR LOCAL CONTEXT**

#### **TOURISM POTENTIAL**

The following sights are located up to 50km from the Fortress:

- Iron Gates gorge Đerdap Lake
- Z Đerdap Lake
  3 Lepenski Vir
  4 Silver Lake
  5 Traian's Plaque from the early 2nd century is located at a distance of 90 km.

#### **RECONSTRUCTION PROJECT**

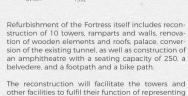
- Restoration of the Fortress 10 towers and the palace;
  Construction of a new ring road and a
- ception of tourists;
- Construction of river dikes and a wharf; the site of the present day quarry



The objectives of the Master Plan for the "Lower Danube Region" also include a consolidated tourist offering of the Lower Danube Region creation of "Golubac Fortress" tourism brand.







other facilities to fulfil their function of representing the cultural and historical heritage. The project includes relocation of the existing road running through the Fortress, and construction of a new tunnel outside the Fortress and a new ring road. In this manner, traffic will be relocated from the Fortress and a provided that the control of the fortress and a provided that the control of the fortress and a provided that the control of the fortress and a provided that the control of the fortress and a provided that the control of the c

The project also envisages construction of a visitor The project also envisages construction or a visitor centre in the immediate vicinity to the Fortress, which also includes bungalows for overnight accommodation. Renovation of the old quarry is planned, and its transformation into an amphitheatre with a seating capacity of 5,000, while the old stone crusher will become an artists' pavilion.

It has also been planned to construct a wharf for tourist boats in extension of the embankment by

tourist boats in extension of the embankment, by the visitor centre.



In 1907, after It was framed over to mine William, couldar, was aballudined.

In 1926, immediately after the WW I, a trunk road was cut through the rock atop of which the Fortress seats, and which runs through the Fortress, making use of both main cart gates of the Fortress. This road is a shortcut between Serbia and the eastern parts of the Balkan Peninsula, so that it frequently happens that semi-trailer trucks struggle through Fortress, which can hardly pass through the gates.

- From 1969 to 1987, research and conservation works took place. - In 1974, due to construction of Derdap Hydroelectric Power Station on the

University of



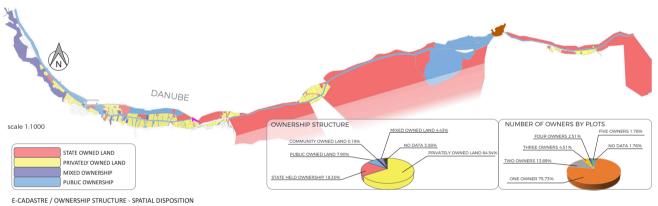
Supervisor

Milica Ristović, Milica Đurđević, Stefan Hadži Arsenovi prof. dr Aleksandra Đukić, as. Ivica Nikolić, Branislav Antonić, Tamara Rad









#### AREA AND OWNERSHIP

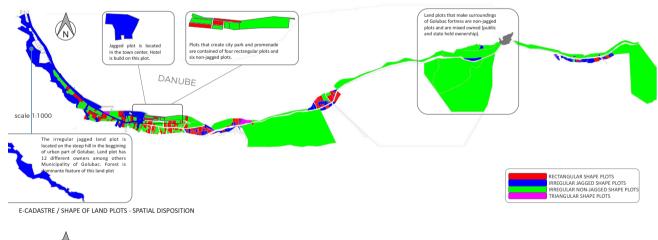
AREA AND OWNERSHIP

The private plots are predominant in the town centre. They are crossed by roads that are manifested as public property. The peripheral parts of Golubac are specific for mixed ownership, where several types of owners are overlapped (Derdap Hydroelectric Power Plant, Agricultural Cooperatives, Golubac Municipality, Srbijasiume Public Company), Large plot areas towards the Golubac Fortress are owned by the state of Serbia and Srbijasiume Public Company owns the right to land. An exception is the area around the Golubac Fortress, which is surrounded by publicly owned land plots. The land plots that are located in the riverside of the town centre are medium-sized land plots (from 500 to 3000 m2). A new land emerged due to the riverside embankments and land expansion on the account of the river. Its area capacity can be used for building purposes, but it is located in a zone of the National Park of Derdap. Therefore it is necessary to further consider the land purpose.

#### SHAPE OF LAND PLOTS

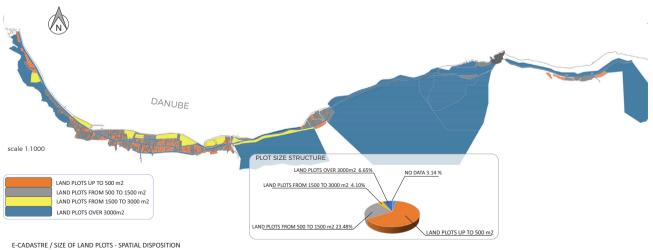
Most of the plots in the town centre are of regular rectangular shape with residential buildings without any associated recreational facilities. Several triangular plots that exist are a result of land subdivision and two plots are located in the town centre, while the others are located in the riverside area at the exit from the town. Irregular non-jagged land plots are large agricultural lands that are situated in the hinterland of Golubac. The irregular jagged land plots have been created by dividing large agricultural land in small parts.

The jagged land located on the sloped terrain at the entrance to the urban centre of Golubac from Belgrade direction. The land plot is divided between 12 different owners including the state and the municipality. The forest predominantly covers the land plot. The land plots that make the town park and quay on the Danube bank. A hotel is located at the land plot. The land plots that make the town park and quay on the Danube consist of four regularly-shaped land plots and six irregular non-jagged land plots. The land plots that make a wide area of Golubac are irregularly shaped (non-jagged) and have mixed ownership (public and state)



#### SIZE OF LAND PLOTS

The current plots meet the basic needs of the population of Golubac. The land plots of up to 500 m2 dominate the town centre, which are suitable for residential construction. Bigger investments in the form of hotels and business incubators are impossible because of the lack of adequate area of land plots in the town centre. The peripheral parts do not restrict the area capacity for construction, but the morphology of the terrain significantly increases the financial costs of construction.



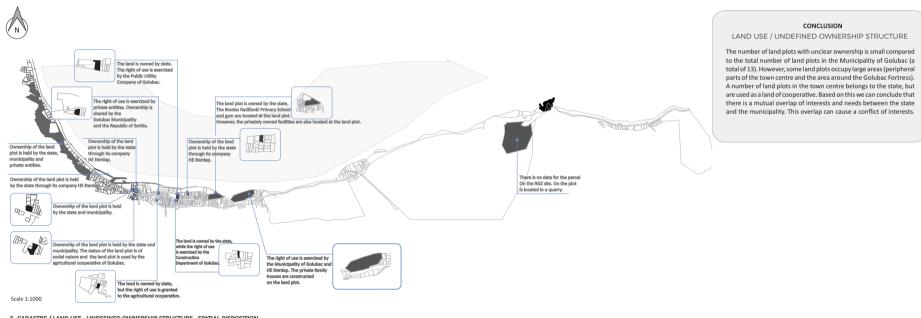




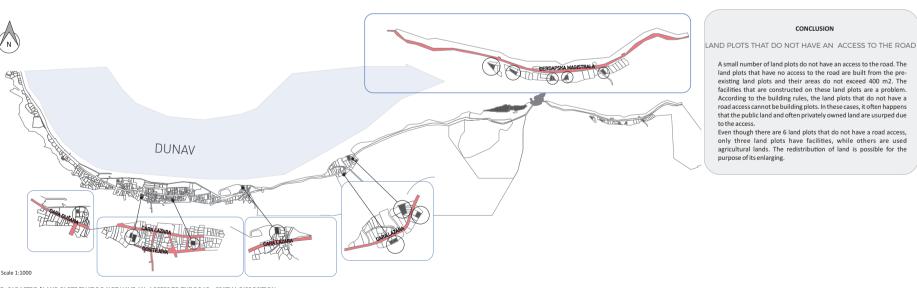
Mladen Kostadinović 22011/16; Mandić Nevena 22019/16; Mićanović Srđan 22011/16 Aleksandra Đukić; Ivica Nikolić; Branislav Antonić; Tamara Radić Academic year: 2016/2017







#### E- CADASTRE / LAND USE - UNDEFINED OWNERSHIP STRUCTURE - SPATIAL DISPOSITION



#### E- CADASTRE / LAND PLOTS THAT DO NOT HAVE AN ACCESS TO THE ROAD - SPATIAL DISPOSITION



OPPORTUNITIES

#### WEAKNESSES

- A large number of small land plots in the town centre.
   A large number of irregular land plots (peripheral parts of the
- square).Plots of large areas are not suitable for the construction
- (peripheral parts of the town / sloped areas).
   A small number of land plots are suitable capital investments.

# Undefined ownership structure of the land plots in the riverside zone (mixed competence). Undefined use of the land (primary school and residential buildings on the same land plot)

THREATS

#### CONCLUSION

The current status of the cadastre and land policy of Golubac meets the

The current status of the cadastre and land policy of Golubac meets the basic housing requirements.

The areas of most plots range up to 500 m2 and this requirement is prescribed by the regulation on dividing, regulating and building land plots. A minimum width of land plots of 12 m that is prescribed under the regulation on dividing, regulating and building land plots is not met in the most cases given the fact that many land plots have a width below the prescribed minimum.

Many small land plots in the town centre are a restriction due their small.

prescribed minimum. Many small land plots in the town centre are a restriction due their small area. The land in the peripheral parts of the town can be redistributed provided that it is owned by the same owners or the land ownership is redistributed.

reastronuted.

In order to further develop Golubac, it is necessary to create large land areas for capital investments (hotels, sports and recreation centres, business incubators), because the current area capacity is unattractive for investments due to the lack of land and manpower.

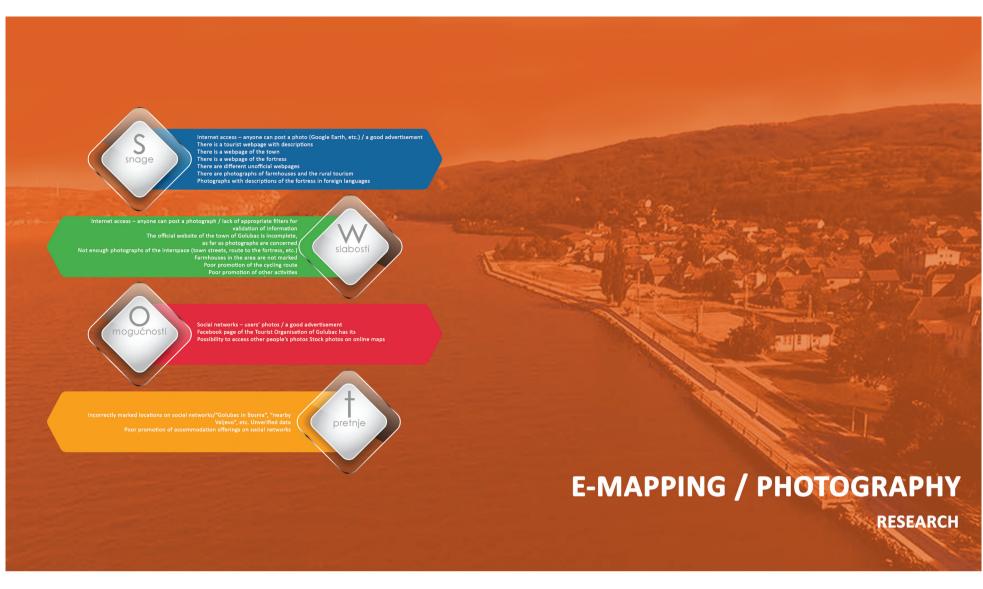
#### University Belgrade University of

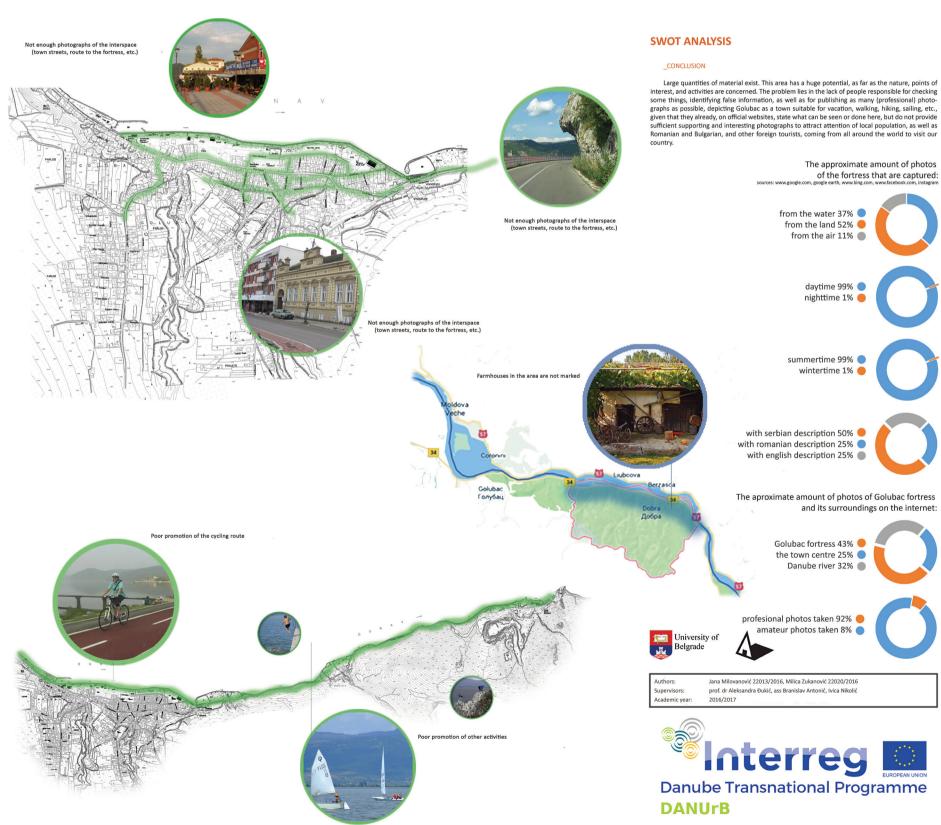


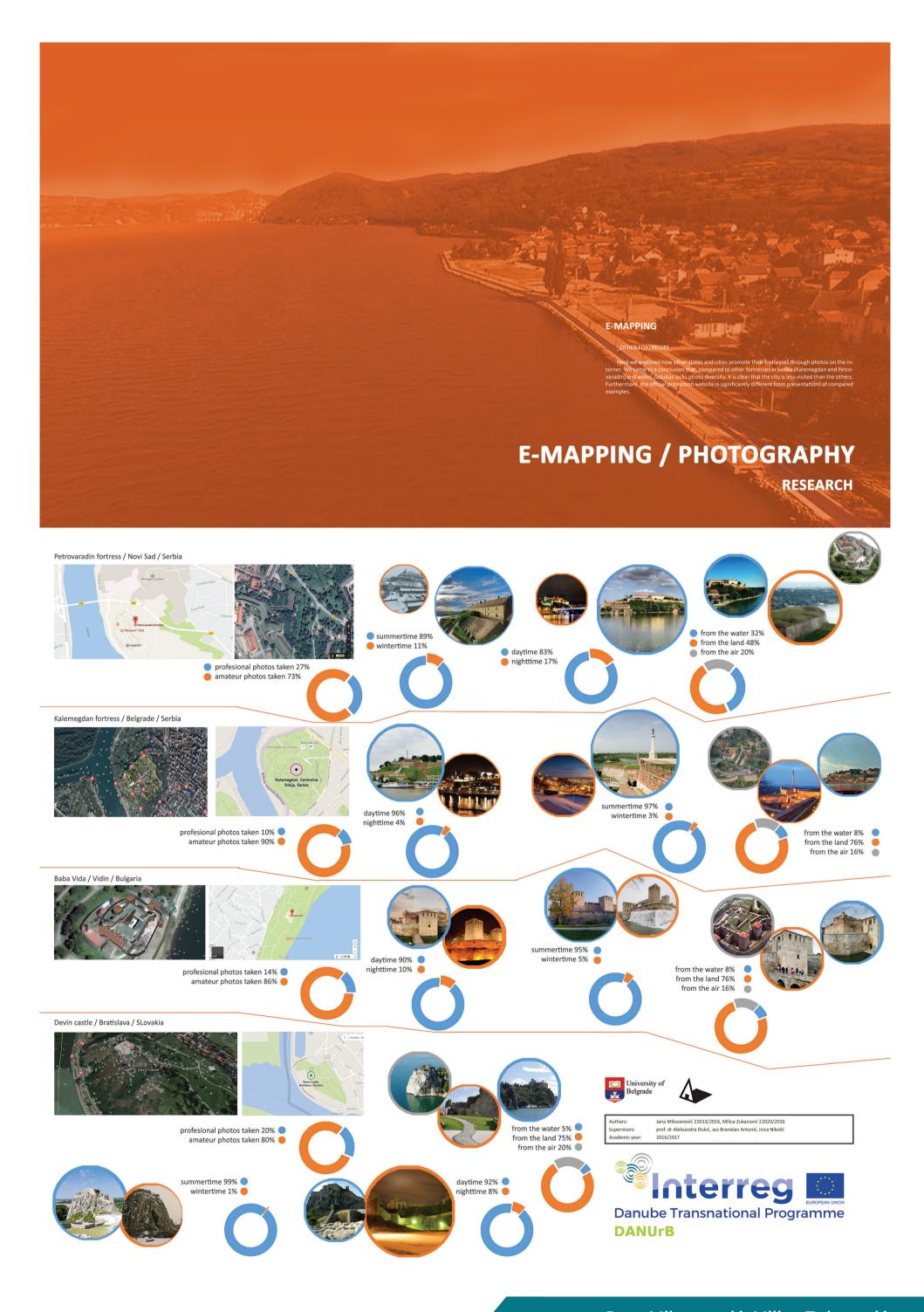
Supervisor Academic year:

Nevena Mandić 22019/16, Kostadinović Mladen 22011/16, Srđan Mićanović 22010/16 Aleksandra Đukić, Branislav Antonić, Ivica Nikolić, Tamara Radić









#### BUILDING HERITAGE THROUGH THE REGULATORY FRAMEWORK

#### 2.1. Sustainable Development Strategy 2015-2020 of Municipality Golubac

TOURISM

In the municipality of Golubac there are a number of positive tourism potentials

1. Fortress "Golubac fortress":
- Since 1948 under the protection of the Institute for Protection of Cultural Monuments, in 1979 declared a cultural monument of

great importance;

Located on the territory of the Djerdap National Park;

Due to the extremely favorable geographical position, throughout the centuries has been a target for many conquerors and scene

or many connects;
Is ongoing revitalization of the fortress, which is financed from pre-accession fund IPA 2011;
Is ongoing revitalization of the fortress, which is financed from pre-accession fund IPA 2011;
By the project is planned: reconstruction and conservation of the fortress, funnel construction and relocation of the highway, the construction of the visitor center, construction of necessary infrastructure, necessary archaeological research, construction of

Medieval monastery "Tumane":
 Located only 9km from Golubac;
 Built in 14th century;
 Blit in the Serbian-Byzantine style;
 Surrounding the monastery represence accumulation.

3. Archeological sites:

- Umka- Kuzmin hill - fort;

- Vinci; - Brijica - fort, necropolis;
- Livadica - Fort, Golubac;
- Mala Orlova - necropolis, Golubac;
- Bosamanska reka - fort, Dobra;
- Gospodin vir - settlement, fort, church, Dobra;

SLOR ACTION PLAN OF GOLUBAC MUNICIPALITY 2015-2020

Specific objective 3.1. Developed municipal and transport infrastructure and improvement of urban planning

1. The construction of the harbor and landscaping the complex of the fortress "Golubac fortress" (with equipping facilities): -INDICATOR: Built harbor in the complex "Golubac fortress" and equipped complex "Golubac fortress";

2. Rehabilitation of the old quarry and reconstruction of the crusher:
- INDICATOR: rehabilitated quarry, built arena, rebuilt crusher and obtained exhibit space.

#### CONCLUSION

The municipality uses a variety of resources such as:

- Historical monuments (Golubac fortress, Tumane monastery), which are also a prerequisite for the development of

infrastructure;
- The rich history and diverse cultural heritage;
- Completion of reconstruction of the Golubac fortress (new facilities)

for further development of the municipality, especially tourism

#### 2.2. The cultural richness of the region of Southern and Eastern

1. What are the cultural routes?

one of the leading trends in cultural tourism today;
the unique cultural and tourism products that thematically connect more attractions and interesting destinations in one or more countries;
promote the common cultural heritage of Europe and the world, increasing awareness of the necessity to preserve it, point out the

unique destination;
bring much more profit than individual cultural destination;
brand the certain regions;
the main advantage of this type of tourism is imaginative, creative use of cultural heritage;
along the routes are organized various events related to the theme of the route: festivals, conferences, exhibitions, poetry evenings,
concerts, theater performances, fairs, workshops, etc.,
a lure for attracting large numbers of visitors.

2. How to make a cultural route?

a. nuw to make a cultural route?
- all successful routes are created around one theme, which makes a recognizable brand and easy positioning route on the tourist market;
- The Institute for the Study of Cultural Development mapped out the potential cultural routes in the region of Southeastern Serbia, singled interesting topics that can connect other regions of Serbia as well other European countries;
- in the region of Southern and Eastern Serbia have so far developed three cultural routes: Roads of Roman Emperors, Fortresses on the Danube and Wine Routes.

#### CONCLUSION

- themed gathering of material heritage to a unique tourist offer becomes interesting enough to attract more visitors; - underline the uniqueness and authenticity of the remote destination, local knowledge and traditional skills; - one of the best solutions for the sustainability of cultural heritage, cultural and economic development of the entire region; - local culture and inheritance may be the main resources in the development of entire region; - bring much more profit than individual cultural destination; - provide cooperation and networking at the international, regional and local level, as well as interagency and intersectoral





#### 2.3. The project of revitalization of Golubac fortress

TOURIST POTENTIAL OF GOLUBAC FORTRESS AREA





Project value: 6.6 million euro
Source of financing: Fund IPA 2011
Project for revitalization of Golubac fortress is part of a larger project "Socio
development of the Danube region in Serbia, Component 5: Infrastructure".



#### THE IMPORTANCE OF THE PROJECT

- Employment of local population

Cultural and historical:
 Cultural events — exhibitions, concerts, theatre plays, art colonies;
 Preservation of cultural and historical heritage.

#### PROJECT IMPLEMENTATION

Restoration of the fortress - 10 domes and the palace;
 Construction of a new road bypass and a new tunnel next to the fortress;
 The construction of the visitor center for tourists;
 Construction of embankments and harbor.



restoration of wooden elements and roofs, palace, the conversion of existing tunnels, as well as the construction of the amphitheater with 250 seats, the viewpoint and walking and cycling paths;

After the reconstruction, towers and other facilities will see the construction.

cultural and historical heritage



After World War I, in 1926, tunnel was constructed and road through the fortress which

destroyed the main gate;
Therefore the fortness is endangered and became inaccessible to tourists;
The project involves the relocation of the existing road that runs through the fortress, the construction of a new funding the fortress and the new bypass road, this will move traffic from the area of the fortress.





3. The construction of the visitor center for tourists:

The project includes the construction of the visitor center near the fortress, also will be constructed harbour for tourist boats.  $\frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} \left( \frac{1}{2} \int_{-\infty}^{\infty} \frac{1$ 

4. Construction of embankments and harbon



#### 2.4. Feasibility study to proclaim tourist area Fortress "Golubac fortress"

 One of the most important and best-positioned fortification in this part of Europe;
 Dominant and extremely favorable geographical position on the Danube, which is at the same time a powerful boundary, but also the river and connecting Ominant and extremely favorable geographical positions with the clinic cause in this area a continuity of settlement from prehistoric to the present time; increase in this area a continuity of settlement from prehistoric to the gorge of rich natural and cultural characteristics;

- Situated at the Danube traffic corridor and on the M-25.1 highway;

- Situated at the Danube traffic corridor and on the M-25.1 highway;

- There can be seen ways of fighting and defense by cold weapon and the first cannonis;

- There can be seen internal communication, organization of residence in some of the high towers, as well as more luxurious interiors of the palace;

- There are no reliable historical data about the origin of Golubac Fortress, it is believed that the town was built in the second half of the 13th and early 14th

century by Serbs;

Fortress is fan-shaped built and consists of three parts: the front, the rear and the upper part (with the citadel);

It consists of 30 towers and 2 large vehicular entrances;

In front of the town is the front wall (!) which forms the outer part of the trench, which was probably full of water because it is connected with the Danube, which was probably filled it.

- Spatial cultural, historical and natural unit Golubac Fortress is unique and indivisible functional unit of natural (nature reserve Golubac fortress) and man-made resources (medieval fortress and archaeological sites next to the fortress), having the value of importance for tourism, the area that due to its characteristics, values and priority tourism purposes requires a special regime of organization, development, use and proirion, where the reconstruction the fortress is priority project of national interest, and that meets the statutory requirements and criteria for obtaining the status of a tourist area.







#### REVITALIZATION OF THE "GOLUBAC FORTRESS"

safe visitors sightseeing and getting around;

- Conservation involves the consolidation and protection of the existing state of the tower and parts of the rampart in order to prolong their duration;

- Partial reconstruction implies conservation works providing, based on existing data, reconstruction of the protrusions on the towers and ramparts, embedding beams and floors in places where they originally existed, reconstruction of statis and armapart paths, with the modern serience floors;

- The reconstruction involves the conservation and full restoration, but above the towers would be constructed roofs, floors inside the tower and the ramparts;

- In order to restore and present Golubac fortres it is necessary to foresee the relocation of the highway;

- The first stage of the reveitalization would be construction of the bypass road, parking space, a large quarry rehabilitation, rehabilitation of the area around the crusher and construction of the visitor center;

- The second state is the reconstruction of the facilities and fortification walls and work on the research and consequent on the area around the

crusher and construction of the visitor center;

The second stage is the reconstruction of the facilities and fortification walls and works on the research and conservation of the archaeological park, the construction of a pier for boats, riverbank landscape, building apartment complex with a central facility;

The Spatal Plan for National Park Djerdap provides the following facilities: museum, harbor, archaeological park, an information point, visits to the National Park, catering facility, parking:

Natter Plan of tourist destinations Lower Danube within the investment project "Thematic cultural and historical center Golubac Forttress" foresees: swimming, fishing, sailing, entertainment, 80 beds, restaurant, café-bar with terrace, shops and souvenirs, harbour, panoramic sightseeing roads, walking and biking trails, amphitheater, visitor center of the National Park and the tourist information center.

the National Park and the tourist information center.

According to the proposal in the preliminary design as a result of the reconstruction in renewed facilities would be implemented different programs:

- In the restored palace is envisaged to locate the museum and room for conservators and curators;

- The Tower 5 is aimed for gallery space for temporary exhibitions and workshops;

- Amphitheater-shaped auditorium is set on the slope of the fortress front entrance;

- In the guardhouse 2, which is next to the stage, there are wardrobes of the performers;
- In the guardhouse 1 is located room for souvenirs and guides;

- Cafes are placed in the "Cafeteria", which is built in the Tower 1, and in the areas of Underwall 1-4, while in the areas below the Underwall plate are planned realists and drough.

Outside the fort, the area of Undertown is planned parking and oposite parking a harbor for boats and berths for small boats;

- In front of parking toward the fortress is situated facility of the visitor center, with a toilet block for visitors, tourist information points, a hall for exhibitions and presentations and office, and in another wing is the resturant with a large terrace overlooking the water;

- Between the two wings is the amphitheater for the presentation of the first information about the monument and from there lead two paths to the fortress - one by water, the other between a rest area and archaeological park;

- The only building that will not be removed is the crusher, which will be adapted for painting studios with housing.

CONCLUSION Existing resources in this area is necessary to preserve, improve and bring to the purposes of future development of tourism. "Golubac Fortress", as settled thematic cultural and historical complex provides conditions for a harmonized system of research, protection, conservation and tourism offer of the medieval fort "Golubac fortress" and its attraction and contributes to urban planning and development perspective of Golubac Municipality and Djerdap region, ensuring quality of life of its population.

#### 3.1. Strategy of the Danube development

- The variety of natural and cultural heritage along the Danube is enormous;
- There are many castles, ruins, medieval fortresses and varied nature making the landscape of the Danube flow rich;
- Many cities along the Danube reflects the turbulent historical past;
- Rich cultural heritage stands as evidence of many occupants who inhabit the region over the centuries;
- More than ten landmarks along the Danube is on the list of UNESCO World Heritage.

GETTING TO KNOW THE COUNTRIES AND CULTURES The strategy encourages hiking tourism along the Danube, which has allowed several benefits between partner count

The strategy encourages hiking tourism along the Danube, which and organizations sing facilities along the Danube;
- networking of existing facilities along the Danube;
- Danube Hiking intertnet portal;
- Cross-border offer;
- Common standards for this type of tourism;
- Online map routes;
- Online map routes;
- International Danube Hiking Conference;
- The cooperation of national, regional and local representatives;
- Cross-Border Cooperation.

 Castle was built at strategic position – on the top of the cliff and above the mouth of Morava and Danube; Location for centuries served people – Celts, Romans, Goths; Today, the remains of the fort give visitors a breathtaking view of the Danube



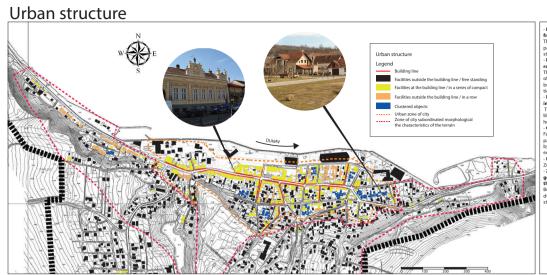
Danube HIKI







#### **INTRODUCTORY RESEARCH - BUILDING PATTERN**



### Swot

strength	weakness
Urbanized city structure Preserved building heritage in the central part of the city Protected Goliube fortress and Tumane monastery Existence of catering facilities with adequate capacity to receive guests Great variety of building heritage, as well as the potential for tourism the existence of the sports hall offers sports and recreational opportuni- ties in addition to tourism	Floors not exceed G + 1 as the reason of the lack of urbanization of the city Not protected entire building heritage, only fortress Golubac Tuma Monastey and some buildings in the city center The rural part of the city is built urplamed, which can be perceived through the positioning of facilities, anatomy and urban structure through the positioning of facilities, anatomy and urban structure and the control of the city of the control of the city of the city of building heritage of Golubac, city downtown and fortress Golubac. Golubac, Tuman Monastery and some of the facilities in the city downtown
opportunity	threat
Building heritage through tourism network of Golubac Protection and enhancement of the building heritage by the participants Bringing investors in city of Golubac as tourist potential for investment.	Inadequate reconstruction and revitalization of building heritage. The morphological characteristics of terrain prevent further spread of the urban core urban core lillegally constructed buildings in the area of national parks lillegally constructed buildings in the rural part of the city violate the identity and type of construction

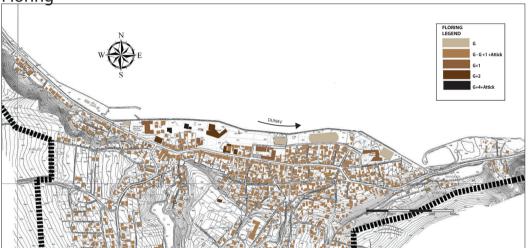
#### **Block tipology**



- Closed blocks Include urbanized where facilities ar

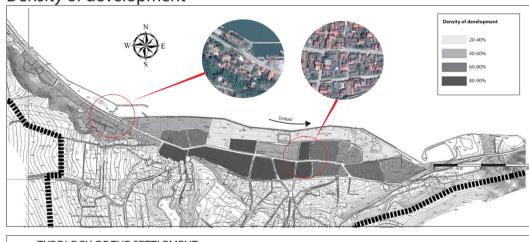


#### **Floring**

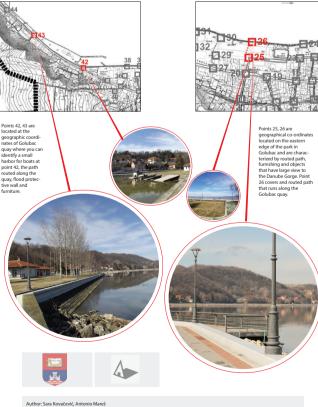


The square is rectangular, with diagonal traced pedestrian paths, with large flowerpots on whose walls are sitting benches. Square surrounded by faciliti mainly intended for commercial purposes and public buildings, modern buildings (the hotel) and old architecture

#### Density of development



SPACE SINTAX



#### TYPOLOGY OF THE SETTLEMENT

Golubac is a small town in eastern Serbia, positioned near the old town (Fortress Golubac), exposed Eastern, while along Danube Gorge and it makes "astigit" (bazara), which includes the heart of the town, while the peripheral part of the town mostly forms structure that is subordinate to the geomorphological features of the terrain.

ORIGIN OF NAME "WORDSCK" (SMALL TOWN)

MORGIN OF SMALL TOWN)

HISTORY OF SMALL TOWN

HISTORY OF SMAL

City Location of town Golubac TYPOLOGY OF COUNTRYSIDES TIII Raz Poluzbijeni šumadijski tip 0 Ušoreni mačvanski tip Razređeno-zbije Potpuno zbijeni timočki i južnomoravski tip

Interreg

**DANUrB** 

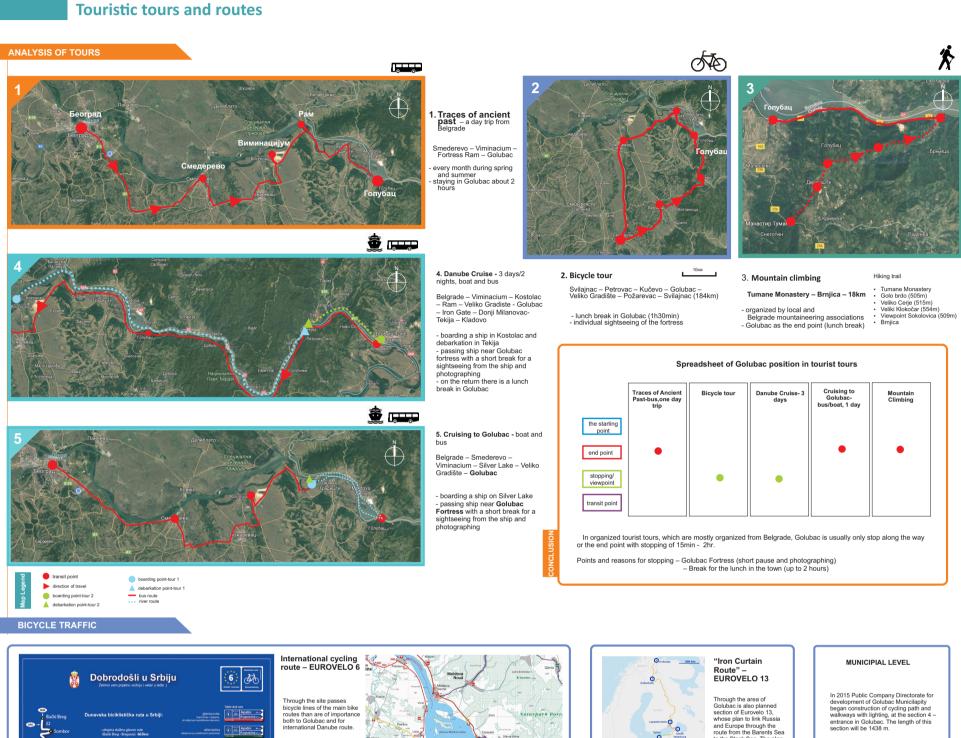
**Danube Transnational Programme** 

#### **METODOLOGY OF URBAN DESIGN**

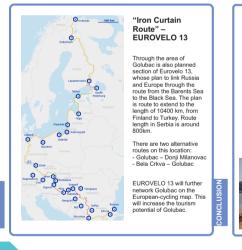
#### **GOLUBAC: CITY OF EXTREMES**

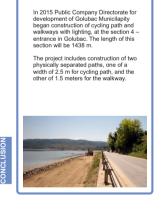
**Thematic reseraches** 

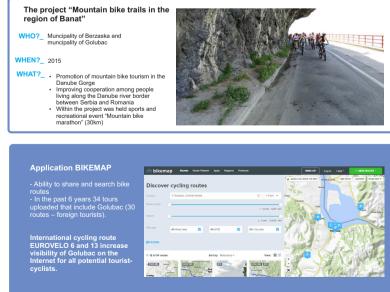


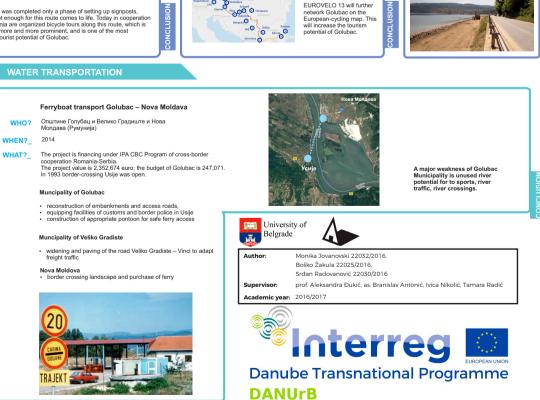










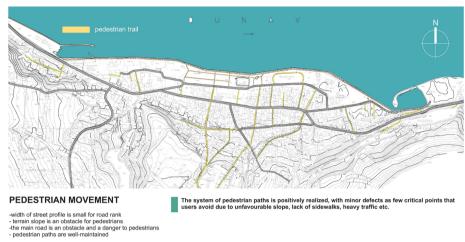


#### **METODOLOGY OF URBAN DESIGN**

## **GOLUBAC: CITY OF EXTREMES**

#### Thematic reseraches

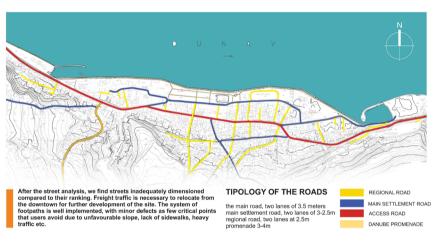
#### PEDESTRIAN TRAFFIC



The system of pedestrian paths is positively realized, with minor defects as few critical points that users avoid due to unfavourable slope, lack of sidewalks, heavy traffic etc.

#### TERRAIN SLOPE MAP

Terrain in the city of Colubac is considered steep and unappealing to pedestrian traffic. This map serves as an argument to spatial analysis by Kevin Linch and shows the advantages the city needs to use. Plateau by the river is a great place for developing tourist facilities.



#### MAP OF THE PASSANGER TRAFFIC DISTRIBUTION



The map shows the coverage of long-distance (blue) and local (green) passenger traffic.

By reading the maps we came to know that there are surrounding villages which are not included in the network of passenger traffic and that there is a potential resurgence of Colubac.

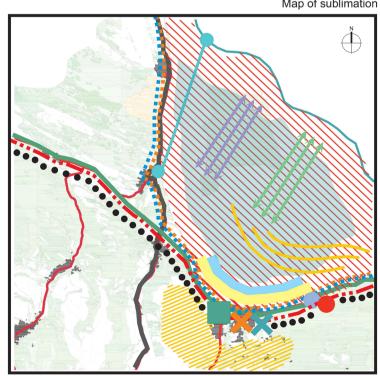
Another thing that is noticeable is the neglect of the other highway road, normal to the Danube. Lack of good connections with central Serbia is an economic problem, which is characterized by smaller tourist offer, exchange of goods etc.

The third drawback is the neglect of Colubac fortress as long-distance and as a local bus station.

## **SWOT ANALYSIS**



## Map of sublimation



## CONCLUSION

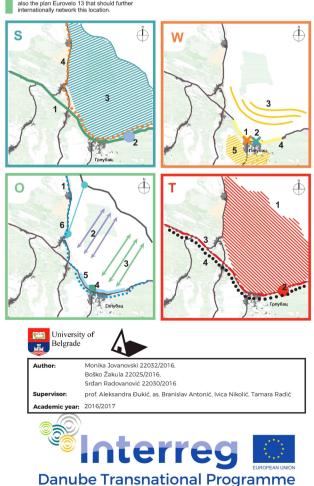
Golubac position with its international potential as well as cultural and historical heritage are the main advantages of this location. The Danube bicycle route and river routes ensures the circulation of people and goods that need to be used largely both on the narrow and wider territory of location.

Weaknesses of locations come from the national level of administration, including inconsistency in the implementation of plans, incomplete approach to development strategies, lack of funds etc. In addition to systemic deficiencies of planning and realization, the weakness of enforcement is the morphology of the terrain hat requires significantly more investment is a major obstacle, especially for the economic status of Braničevo district.

Possibilities for better use the potential of Golubac were stopped by infrastructure and that is primary field of interventions where should operate. Waterway transport is limited with the features of the existing marina; system of bike trail is incomplete as well as additional services such as bike services and storeroom. Opportunity for development of the site is also the plan Eurovelo 13 that should further internationally network this location.

**DANUrB** 

Threats of the location reflect in high freight traffic, which creates a negative impact on the entire territory, both to infrastructure and to users. In addition to the human factor, natural characteristics of the Danube complicate development and seasonally threaten coastal region.





- In relation to the current basic land use, the land is divided in building, forest, water and agricultural land.

- 2 The agricultural land occupies 21.49 ha, or about 6% of the territory covered by the plan and these are the mainly the peripheral areas in the eastern and southern border of the plan.

Current condition

- The Branko Radičević Primary School was built in 1986. The school occupies around 0.80, 82 ha (a part of the cadastral parcel no. 682,00 ha (a cadastral barcel no. 682,00 ha (bac Cadastral Municipality) and is attended by 433 pupils with the department in Dobroj) from Golubac and surrounding villages.

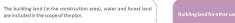
- village:

   Sports fields, on the banks of the Danube, between the park and children's institution and occupy an area of 1,23.97ha;

   Football field "Derdap" FC, with additional facilities in an area of

- 2 Park area between the building of the municipal administration and the Danube, which builds on the square in front of the hotel and occupies an area of 07.40 and and institution and the national part of the municipal administration building (which has not yet been landscaped, because the fuel station has not been completely removed) occupying an area of 0.43.52ha.

## Approximately planned condition



The area of use of the planned and current condition shows that the forest land has decreased by 0.15%, while the other areas minimally increased. Therefore, no major changes in the current condition are

The building land approximately covers 144.26 ha. In accordance with the land use regime, the building land is divided in land for public and other use.

The building land for public use occupies 41.59 ha, or 29% of the building area. The building area for other use occupies 102.66 ha or 71% of the building area. The building land consumption rate is approximately 627m per capital, which can be assessed as optimal given the nature of the village and the current construction status.

- Housing development involves completion of the construction of the units whose construction has been initiated, while the largest areas are planned in the villages Parlog and Proiste. In the hilly part, housing will aminish the character of family housing, except that in the coming period, it would be desirable to focus on houses in rows, semi-detached houses, etc. in addition to the independent buildings. Taking into account the existing multi-family housing at the Cara Lazara and Cara Dusnas retests, it is reasonable to allow an increase in the vertical regulation of buildings and construction of multi-family housing of an optimum number of floors GF+3.
- 2 In the riverside zone, the port construction, landscaping of the promenade with a cycleway, reconstruction of embankments and landscaping of the area around the sailing club and the "lower marine" (fishing village) create conditions for the guality receipt of tourists who arrived by water, as well as for tourists and residents. The potential site that can be is transformed in tourist accommodation capacity in this area is the existing bus station (after the construction of a bypass road and the relocation of the bus station to the new location).

# 3,59.37 building land

144,26.21

36,30.60

PDR\_Land Use Table

PGR\_Land Use Table



4 water land

1	building land	23,00	6,05
2	forest land	2,55	0,65
3	water land	354,15	93,30

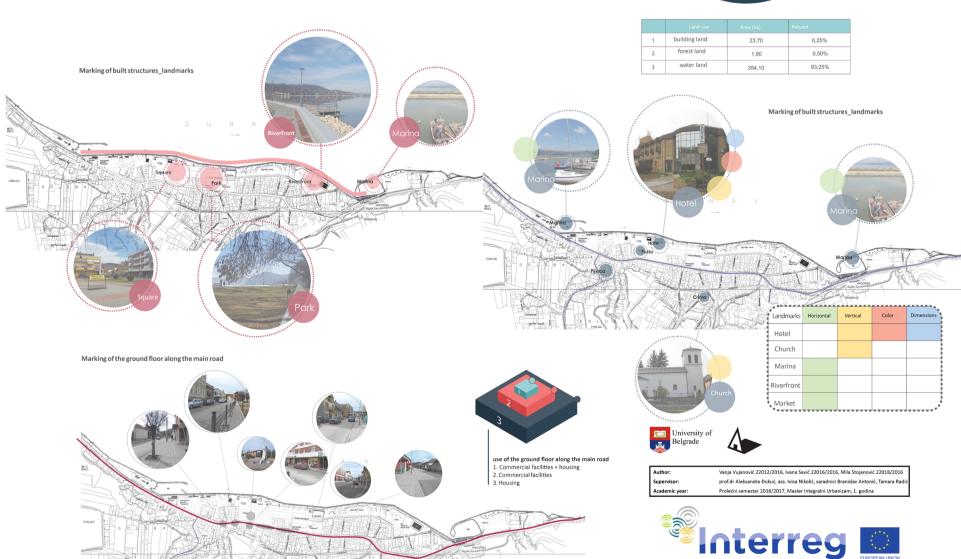
## **DOCK OF CULTURE**

## **DOCUMENT ANALYSIS AND LANDMARKS**



**Danube Transnational Programme** 

**DANUrB** 





# 6. SURVEYING THE IMAGE OF GOLUBAC

## Marija Cvetković, teaching assistant and PhD candidate

In accordance with a plenty of information and instructions to conduct a survey by a questionnaire, theoretical focus to form a survey and a questionnaire was done by customisation of the principles of City image theory. It is created by Kevin Lynch, famous American urban planner, and published in the book "The Image of the City" in 1960. Accoarding to Kevin Lynch there is a public image of any given city which is the overlap of many individual images. Such group images are necessary if an individual is to operate successfully within his environment. This analysis limits itself to the effects of physical, perceptible objects. There are other influences on imageability, such as the social meaning of an area, its function, its history, or even its name. The theory describes that a city image in the eyes of an observer is formed by five physical forms as its elements (Lynch, 1960):

- 1. Paths are the channels along which the observer customarily, occasionally, or potentially moves. They may be streets, walkways, transit lines, canals, railroads. For many people, these are the predominant elements in their image.
- 2. Edges are the linear elements not used or considered as paths to the observer. They are boundaries between two phases, linear breaks in continuity: shores, railroad cuts, edges of development, walls.
- 3. Districts are the medium-to-large sections of the city, conceived of as having two-dimensional extent, which the observer mentally enters 'inside of', and which are recognizable as having some common, identifying character. Always identifiable from the inside, they are also used for exterior reference if visible from the outside.

- 4. Nodes are points, the strategic spots in a city into which an observer can enter, and which are the intensive foci to and from which he is travelling. They may be primarily junctions, places of a break in transportation, a crossing or convergence of paths, moments of shift from one structure to another, or even simple concentrations.
- 5. Landmarks are another type of point reference, but in this casethe observer does not enter within them, they are external. They are usually a rather simply defined physical object: building, sign, store, or mountain.

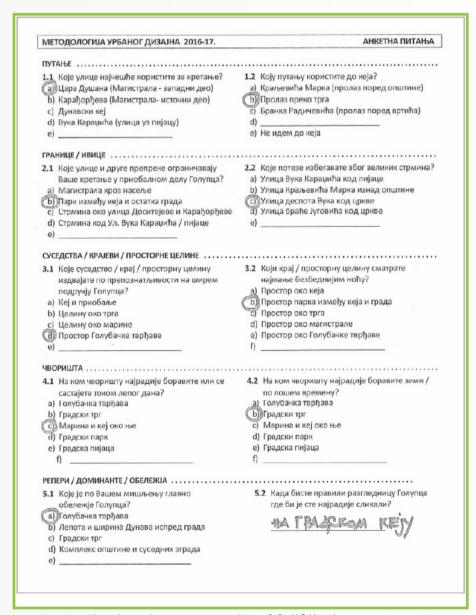


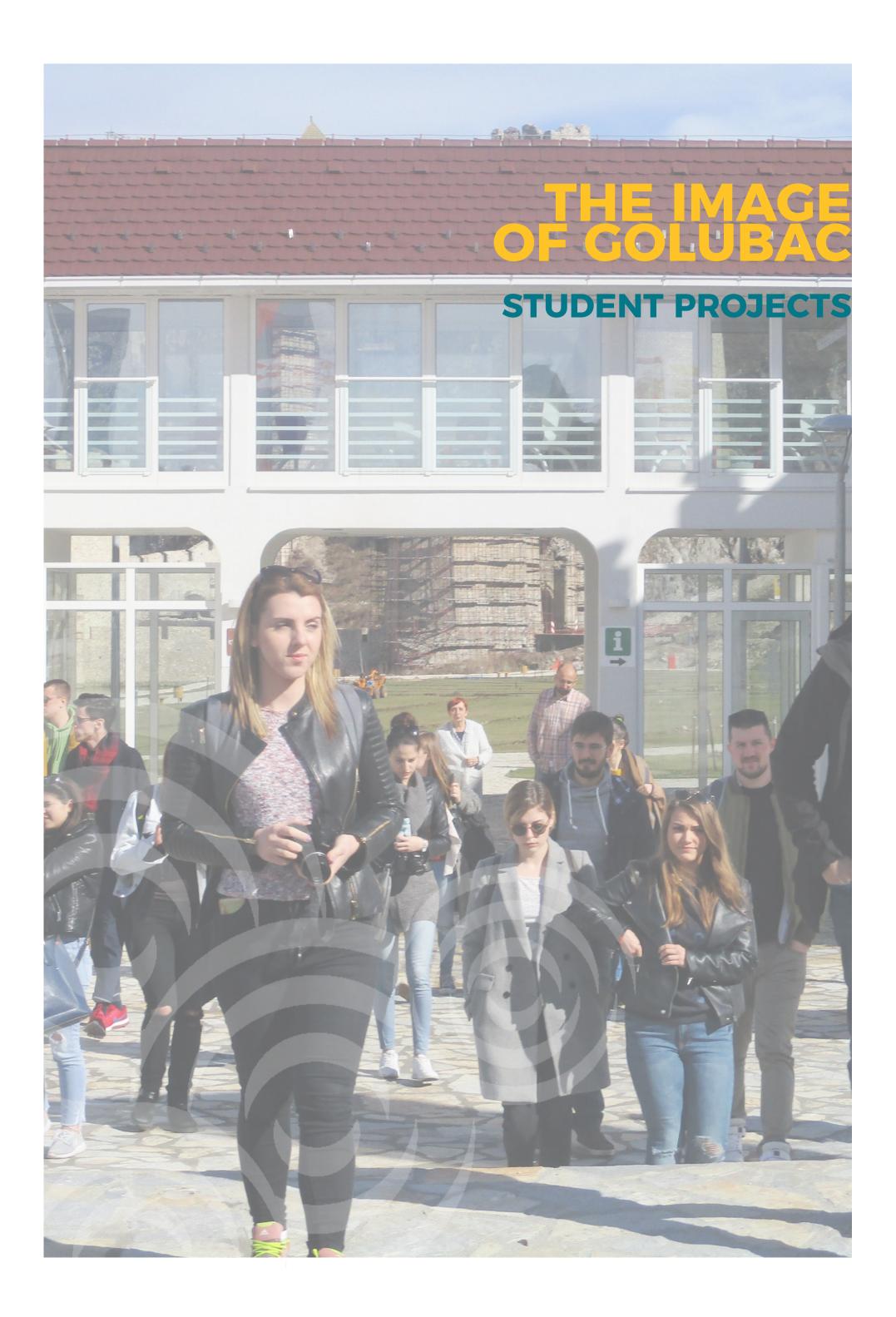
Fig. 1: The hardcopy sample of fullfilled questionnaire.

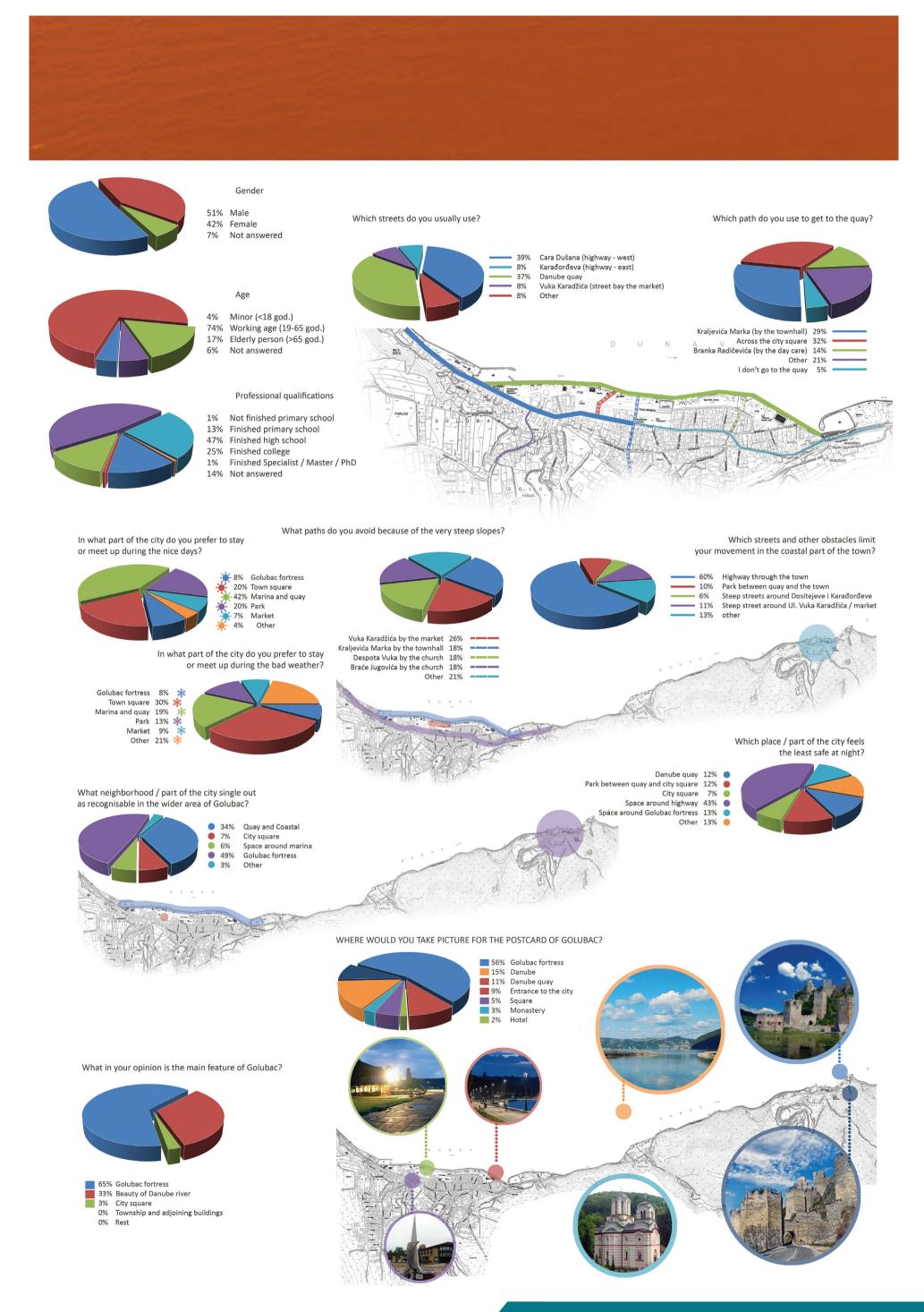
Landmarks distinguish in this group, because they are the only elements to be external and utterly symbolic; the other ones are more spatial elements for an observer. Furthermore, according to K. Lynch (1981), the concentration of landmarks in urban space is greatly important for dynamic city image – maximal distance between landmarks should be 200-300 metres.

SURVEY WITH QUESTIONNAIRE: A survey is a well known and very common method in social sciences as well as in the scientific disciplines where social sciences are applied as theoretical foundations. Urban planning and design are among them. The survey in Golubac was planned by staff with a simplified and shorter questionnaire, where every element of city image theory was a base for two questions. A special aspiration was made to make the questionnaire understandable and receptive for the wide range of respondents. The targeted threshold was 10% of permanent town population (or >150 respondents). Almost all questions are thereby shaped as semi-closed, where several concrete choices, well-known physical elements in Golubac, are given and the last one was left as a blank for additional and unexpected choice. Respondents could choose just one choice. The last question was different, because it was settled as a specific "synthesis" of the previous ones. Hence, there were no given choices in the question and a respondent could give one answer on his/her OWN.



Fig. 2: The survey with questionnaire in Golubac (source: B. Antonić).





# 7. FORMING THE SPACE SYNTAX OF GOLUBAC

Jelena Marić, teaching assistant and PhD student

In order to plan and design cities first we need In order to plan and design cities first we need to understand them. Different techniques are used to achive a better and more comprehensive understanding of a city, its patterns, movement and development. One of the new, but rather effective technique is the space syntax. Built on mathematical algorithms and geospatial computer technology, space syntax provides for analysis of spatial configurations. As a very significant tool it has presented an improvement used in different fields, such as: architecture, urban design, planning, transportation and interior design (Al Saved et al, 2013). The idea was firstly introduced by Bill Hillier, a professor at The Bartlett School of Architecture, University College London (UCL 20 years ago. Together with Julienne Hanson he wrote a book called "The Social Logic of Space" (1981) (Jacoby, 2006).

Spatial syntax is an analysis of spatial configurations measured during one or more selected characteristic periods. In space syntax, the spaces are understood as voids such as streets, squares, rooms and fields, between walls, fences and other things that restrain pedestrian movement or the visual field. In the case of urban research, it consists of the following steps (Hillier, 1999): 1) selected urban area as a network broken into nods; 2) the analysis is based on the choices of users' movement throughout the area: 3) choices of the users are represented in schematic maps (Hiller, Stonor, 2010). However, space syntax cannot measure the character of a city or a building; it also lacks the 3D perception (Ratti, 2004). While this method is a useful tool for detecting different kind of spatial changes and characteristics, the interpretation of the results from this analysis

must be done in accordance with the social aspects considering human behavior in open spaces (van Nes, 2014).

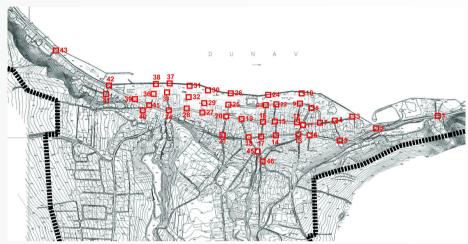


Fig. 1: Spatial syntax: network of nods selected for the counting

Regarding the case of Golubac, a space syntax method was conducted in March 2, 2017, by the programme staff and 21 students. First, the urban fabric of Golubac centre was divided into 44 nodes in total representing street intersections. The date for the research was intentionally chosen because it was the only market day in Golubac in a week, thus enabling high concentration of people in the centre and the biggest pressure on urban fabric. The counting of pedestrians, cyclists, cars and long/heavy road vehicles was conducted in two 60-minutes periods. After successful measurement were taken, all of the gathered data was processed using statistic tests in MC Excel programme and an online platform for data collected in situ. The next step required from students to set-up the numbers for all investigated issues and form the thematic maps.

During the research different limitations were observed such as: 1) the offer and variety of "leisure and free time" related activities are usually problematic in small towns such as Golubac; 2) the day of investigations was in March, i.e. out of summer holyday and tourist

season and 3) important locations, such as Golubac fortress, were excluded because they do not belong to the city centre. Analysing the gathered data results showed some places are significantly more used by people (pedestrians, cyclist, drivers, and passengers) than others. The most frequent street in Golubac is that which concurs with the state road No IB34 along the Danube, which connects Lower Danube region in Serbia with rest of the country. One of the least occupied place is the area along the Danube quay due to limited access for vehicles. Western half of Golubac centre is much more used than eastern part, even though this part is closer to Golubac fortress. The other subjects are more present - car and pedestrians are almost the same by numbers in many cases. However, there was a huge gap between pedestrians and other subjects. Cyclists and all types of vehicles tended to use the state road, which is also the widest street in the town. At contrary, pedestrian movement make much more complex and dispersed network. In the main street and, especially, in its part around the main square with the highest concentration of central facilities, the number of pedestrians and other observed subject is usually equal.

Fig. 2: Spatial syntax: the volunteer (right) counts pedestrians, cyclists and vehicles in the middle of related crossroad.

These results were useful and significant for the overall study of the Golubac city area and provided some qualitative data that can be used in different development strategies and urban regeneration projects.

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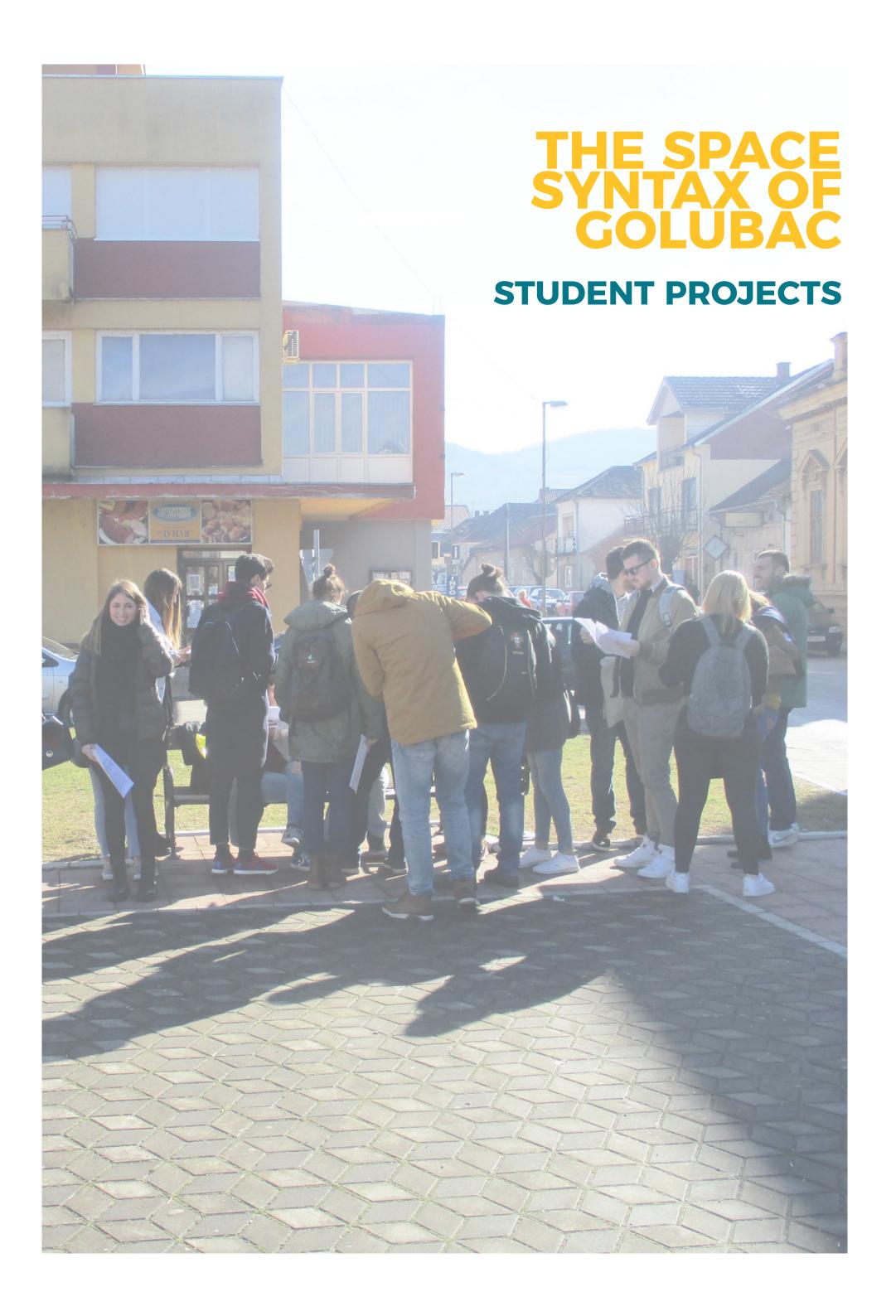
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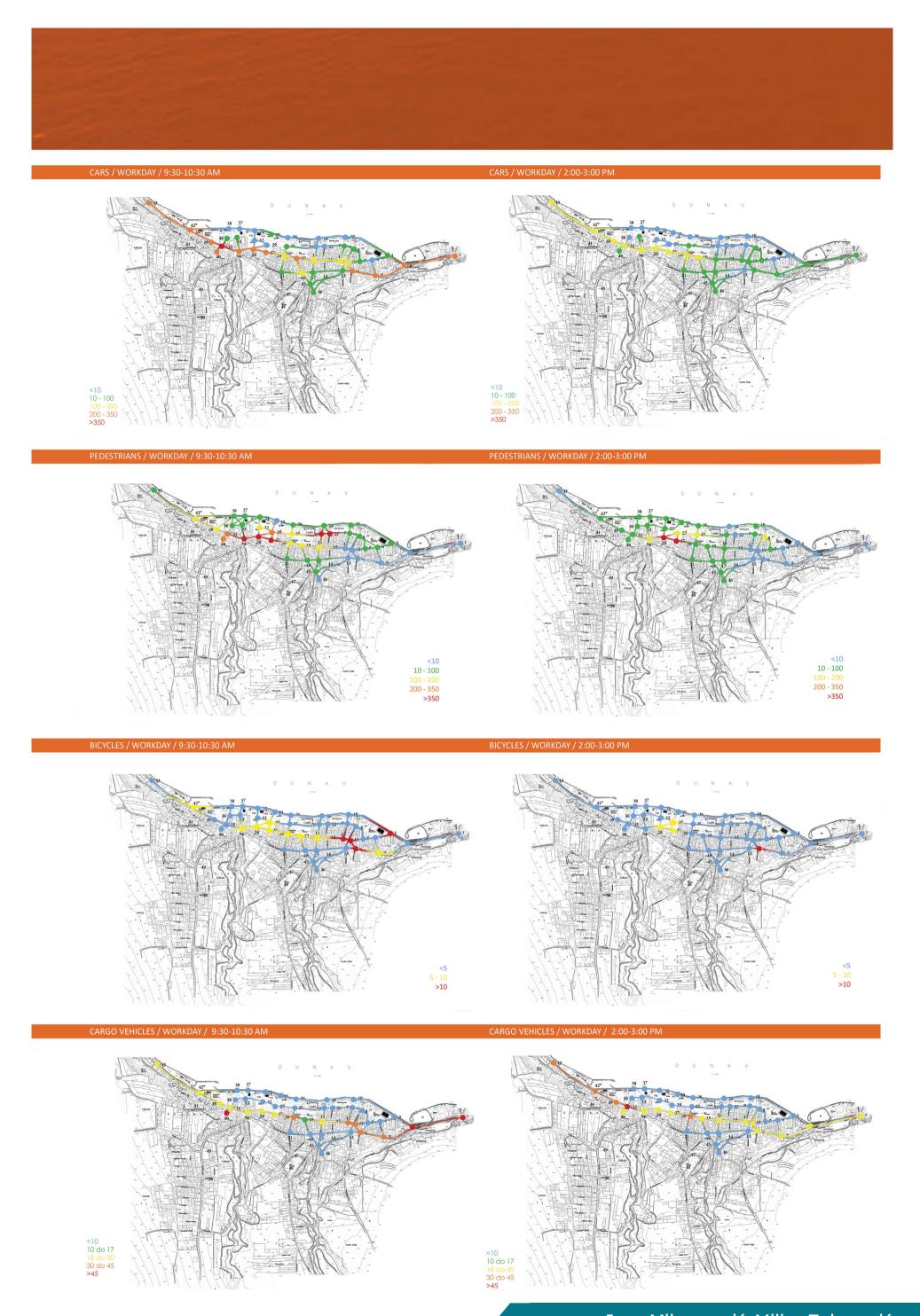
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# 8. SUMMING IN SWOT ANALYSIS

Dr. Branislav Antonić, teaching assistant

The assessment of current state of Golubac Town and its vicinity was given in the form of SWOT analysis. The SWOT analysis is a well-known method derived from economics science, but it has become prominent in urban studies and planning (Mu, Xiaoguang & Ming, 2007). It is a strategic planning technique. It is based on the determination of four types of features that influence on the planning and, eventually, competiveness of a certain entity (Dess, 2018):

- Strengths: advantageous features of the entity;
- Weaknesses: disadvantageous features of the entity;
- Opportunities: features in the environment of the entity that it could exploit to its advantage; and
- Threats: features in the environment of the entity that present a disadvantage for it.

In the case of student research in Golubac Micro-region, two steps of SWOT analysis were conducted. In the first step all student groups formed their own SWOT analyses, derived from their thematic research. The implemented approach enabled the mutual differentiation between SWOT analyses and an aspect-based assessment. However, this approach made these SWOT analyses rather sector-oriented. This was an obstacle for the next step, to start the design process through the settling of the design concept. Therefore, the second step was the joint formation of a final, comprehensive SWOT analysis from all thematic analyses. The explained twostep SWOT analysis fulfilled all elements of the proper assessment of the current state of Golubac.

Both steps were further spatially elaborated through mapping, which was customised for SWOT analysis in urban studies. A special task in this process was how to adequately map all included features in one drawing. The features from environment (opportunities and threats) were particularly challenging to spatially determine due to their 'external' character.



Fig. 1: Discussion between students and local experts in Golubac about the most significant challenges in local urban developments. This discussion was important for forming SWOT analysis (source: B. Antonić).

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## **OVERALL SWOT ANALYSIS**

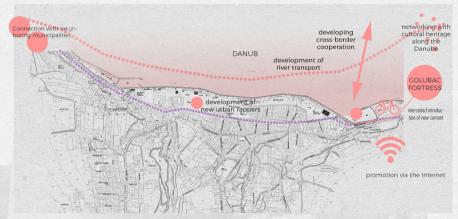
## **GOLUBAC**

TOPICS:	STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS	ASPECTS OF INFLUENCE
CULTURAL AND NATURAL HERI- TAGE	- Golubac Fortress as a cultural property of an exceptional importance - the vicinity of Derdap national park  - WEIGO	inactive and inadequate presentation of the cultural and historical heritage in the Golubac municipality insufficient cooperation and networking of municipalities in the Braničevo District the Fortress is situated outside the settlement and has poor connections with the Golubac municipality	introduction of this content during revitalisation of the Colubac Fortress     connecting the Fortress with the old core areas of the municipality by blke paths     a possibility of inclusion into international projects related to revitalisation of cultural heritage alongside the Danube     promotion of natural richness     the Danube and the Iron Gates	- preservation areas limit possible interventions - vanishing of the old crafts	- development of tourism - local economic development - development of creative industry - urban regeneration and reha-
MAPPING OF PHOTOGRAPHS	- internet access - anyone may publish a photograph - existence of a tourism website with descriptions - existence of the town's website - existence of a dedicated Fortress' website - existence of arious unofficial websites - existence of motif photographs of farmhouses and rural tourism - photographs with descriptions about the Fortress in foreign languages	- internet access - anyone may publish a photograph/ there is no adequate filter to check the validity of information - the official website of the town of Colubac is incomplete, as far as photographs are concerned not enough photographs of the interspace (town streets, route to the Fortress) - not enough photographs of the hospitality facilities	- social networks - users' photographs / good promotion - existence of the facebook page of the town of Golubac - lots of tourists use Instagram - there is a possibility to access other people's photographs - existence of stocks of geotagged photographs on online maps	- incorrectly marked locations on social networks – eg. "Colubac in Bosnia", "Golubac nearby Valjevo" - untrustworthy data	- development of tourism - place branding
PURPOSE OF LAND AREAS	recognisable town landmarks variety of content along the trunk road cultivated riverbank cultivated green areas existence of commercial service facilities in the core area of the town	- punctual layout of administration facilities - the trunk road separates the residential part of the municipality from the core area of the town - vicinity of the industrial zone with its sports com- plex and the arable land - unexploited potentials of plots, few floors in the residential area	potential for restoration of the urban landmarks     determination and erection of new urban landmarks     open fields for investments in commercial and recreational facilities	- competitiveness of the adjacent municipalities - lack of planning documents - unprepared investment location - terrain configurationa	- improved urban physical structure - sustainable distribution of space and content - mixed-purpose development - improved readability - improved investment climate
SIGHTSEEING TOURS AND SECTIONS	- existence of the trunk road - existence of Golubac Fortress, as an important historical site and tourist attraction - an immediate vicinity of the Danube, as the most important Europe's waterway - the Pan-European Corridor 7 - the EuroVelo 6 international cycling route passes through the site	- non-existence of administration at the local bus station - non-existence of an adequate database of sight-seeing tours - unexploited waterway potential of the Danube along the Colubac municipality - morphology of the terrain as an obstacle for further construction and development of the town of	tracing and activation of the EuroVelo 13 international cycling route     strengthening cross-border relations with Romania     strengthening tourism collaboration with Romania     possibility of construction of a marina with a pontoon dock for larger yachts	- position of the Danube as a threat to development of the immediate vicinity of the riverbank due to large differences in water level, as well as the seasonal erosion by ice - continuous devastation of the Fortress due to vicinity of the trunk road - unfavourable influence of freight traffic to the condition of the trunk road	- local economic development - development of tourism - improved attractiveness - introduction of compatible content - development of alternative types of traffic
NEETWORKS, INTERCONNEC- TIONS, AND THE INFRASTRUC- TURE	- well-developed street network /interconnections with the trunk road	- undeveloped passenger and freight water trans- port on the Danube - the Pan-European Corridor 7	- networking possibilities with surrounding municipalities - possibilities of developing passenger and freight water transport on the Danube - the Pan-European Corridor 7 - cross-border cooperation	- morphology of the terrain - the trunk road as a barrier for the development of connections between the core area of the municipality and the hinterland / - lack of planning in the development of utility infrastructure	- improved mobility - improved investment climate - development of tourism - local economic development
E – CADASTRE	- most of the plots have access to communications - a significant number of plots are suitable for residential construction (up to 500 m2) - artificially created construction land for the purpose of increasing construction capacity - a significant number of plots are the property of a single owner (which facilitates property-rights	- a significant number of fragmented plots in the core area of the town - a significant number of plots of irregular shape (perimeter segments around the square) - plots of larger areas are not suitable for construction (peripheral parts of the town/highly sloped terrain) - few plots suitable for capital investments	relinquished state-owned plots for construction of cycling routes (through a concession) in the river- bank area	- undefined ownership structure over the plots belonging to the riverbank strip (mixed jurisdictions / Public Water Management Enterprise / state / Derdap Hydroelectric Power Station ) - undefined use of land ("Branko Radičević" Compulsory School and a residential building on the same plot)	- improved e-Government system - improved land management - improved investment climate
PATTERN MAPPING IN CONSTRUCTION	issues) - an urbanised town centre layout - preserved architectural heritage in the core area of the town - the existence of hospitality facilities of an adequate capacity for reception of guests (five-storey, i.e. CF+ 4 buildings) - a wide variety of architectural heritage - the existence of a sports hall provides for sports	- number of floors does not exceed two storey buildings ((CF-1) - the reason for an insufficient urbanisation of the town - protection of cultural heritage does not cover the entire architectural heritage, instead it is limited to the Golubac Fortress, Tuman monastery, and certain buildings in the town centre - the rural part of the town has been built without proper planning tectural heritage of Golubac town centre and the landscape of Golubac Fortress	- promotion of architectural heritage through the tourism offerings of the town of Colubac - preservation and improvement of the architectural heritage by all the actors - attraction of investments into the Colubac municipality through promotion of its tourism potentials	- inadequate reconstruction and revitalisation of the architectural heritage - morphological characteristics of the terrain prevent further expansion of the core area of the town - illegally constructed buildings in the national park areas - illegally constructed buildings in the rural part of the town, corrupted identity and architectural style	- local identity creation - improvement of ambient values - a clear vision of spatial devel- opment - an improved readability
TOURISM AND HOSPITALITY	- the identity of the Colubac Fortress - situated at a stretch where the Danube is at its widest point - the vicinity of the Iron Cates - the existing events / 'Danube Fair', sailing regatta_/ - construction of a wharf - well-developed offer of extreme sports	- small capacities of hospitality and tourism offerings - poor rating of the facilities - lack of web presentations - insufficiently developed tourism offer - location unappealing to investors	- connecting with other towns and municipalities nearby the Danube, and inclusion into the network of tourism offerings along the Danube - connecting with municipalities in the region, by creating an ethno-tourism network of Eastern Serbia possibilities for organisation of international events collaboration with Romania, extension of the offering to the other bank on the opposite side of the widest stretch of the Danube	- state's indifference to invest in the development of tourism in Colubac and the surrounding municipali- ties - insufficient number of tourists - insufficient numbers of qualified professionals in tourism organisations - legal regulations which impede the development of hospitality and tourism offerings	- local economic development - revitalisation of cultural and historical heritage - urban regeneration

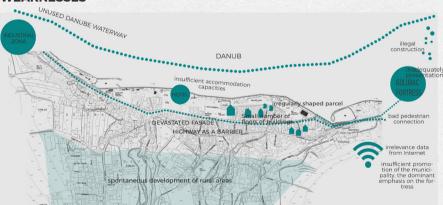
## STRENGTHS:



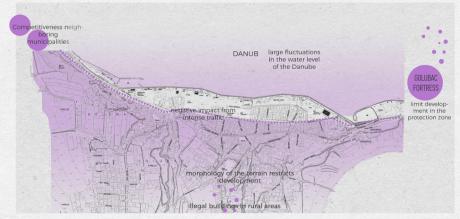
## **OPPORTUNITIES**



## WEAKNESSES



## THREATS:





Author: Milica Ristović, Milica Đurđević, Stefan Hadži Arsenović
Supervisor: prof. dr Aleksandra Đukić, as. Ivica Nikolić, Branislav Antonić, Tamara F
Academic year: 2016/2017



# 9. SETTING NEW DESIGN CONCEPTS & SCENARIOS

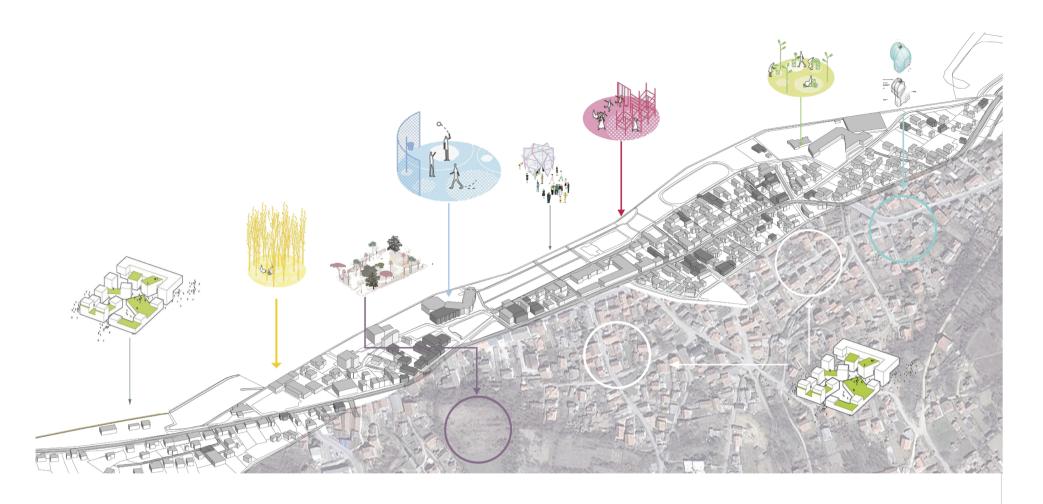
Dr. Branislav Antonić, teaching assistant

The design process was narrowed to the central core of Golubac Town with the long Danube Riverfront as a polygon. This historically valuable and functionally and physically diverse urban space allowed the variety of ideas and approaches in student projects.

The first phase in student design process had two steps: a design concept and design programme. The first one was the concept. It refers to the set a vision and to further develop it through aims and their basic spatial presentation - a matrix-look proposal of new links, networks, nodes, and neighbourhoods, without losing genius loci. The vision is scrutinised in a catchword of the proposed design project. Students were innovative and space-sensitive in this task; some of their visions pointed Golubac as the "treasure of the Danube", "Dock of culture", "City of Extremes" or "Smart". Their widely specified visions enabled extensive sets of aims that targeted the economic, ecologic, and social sustainability of Golubac.

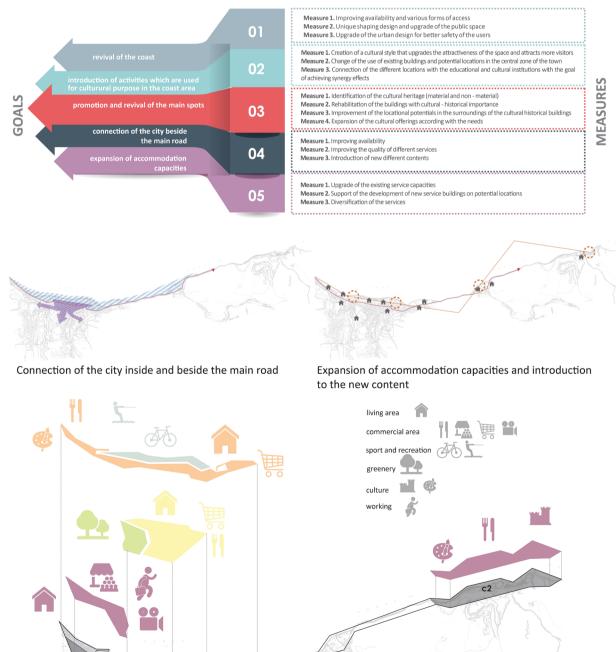
The second phase was programming, where it was expected from students to develop a comprehensive programme of proposed all urban functions, activities and facilities as their spatial representations that are applicable for central Golubac. The programme did not mean to simply enlist them, but to make a reasonable network or patchwork that would work in urban space. The most of students recommended a mix-use development with the special respect to culture, retail, tourism, leisure, and housing in their programmes. Similarly to the concept, the design programme also included the mapping; students finished this phase by presenting their programmes as networks in the urban space of central Golubac





## **DOCK OF CULTURE**

## VALUES, PROBLEMS, GOALS, MEASURES AND SPATIAL ZONING



#### **VALUES**

#### 1. Diversity of cultural - historical heritage

versity of cultural - historical heritage
\_ Golubac fortress as important part of the cultural - historical heritage
\_ Vicus Cupae (in the place of nowadays town of Golubac, not started archeological
excavations but remains dated from the Roman period)
\_ Zaviša Cru (monument of the Polish knight, located in foothill of the Golubac fortress)
\_ Medieval monastery Tuman (12km south of Golubac, foundation of Miloš Obilić)

#### 2. Danube

Marinas as docks in the river corridor

\_ Manina sa Success in the Net Control

\_ Bycicle route EUROVELO 6

\_ Danube through the municipality represents part of the corridor 7, river route Rhine

Main – Danube – Black Sea 3. Rich agricultural land

goatkeeping

## 4. Diversity of natural inheritance

\_ National park Đerdap \_ Cayon of Brnjička river (12 km east side of Golubac – mountain paths) \_ Black Hill (the highest mountain hill in municipality Golubac, 7 km south side of Golubac)

## **PROBLEMS**

## 1. . Insufficinet connection of the contents inside of the town

\_ Main road passing through the central area of the tow \_ Lack of cultural buildings and cultural content \_ Devastation of public spaces

## 2. Insufficient accommodation offerings

3. Disrepair and insufficient usage of the main spots

#### Unrecognised main spots 4. Lack of safety in the places

Insufficient quality of the urban design which directly affects the lack of safety in the places

## **PROGRAM**

## **DESCRIPTION OF THE AREAS**

\_a1\_subzone a1 is part of the A area, situated by the river, used for walking , with different

\_a\_success at large to the A real, studied by the river, used to waiking, with uniferent contentents for a better use of the area \_a2\_subzone a2 is a part of the A area, which is used for buildings with mixed purpose, for extra contents of culture and education and commercial purpose

\_b1\_subzone b1 is part of the B area that is used as a living area, as well as commercial area, with the purpose of activation of the area beside the main road \_b2\_subzone b2 is part of the B area that is used for the greenery, and represents the passage between the commercial and living area

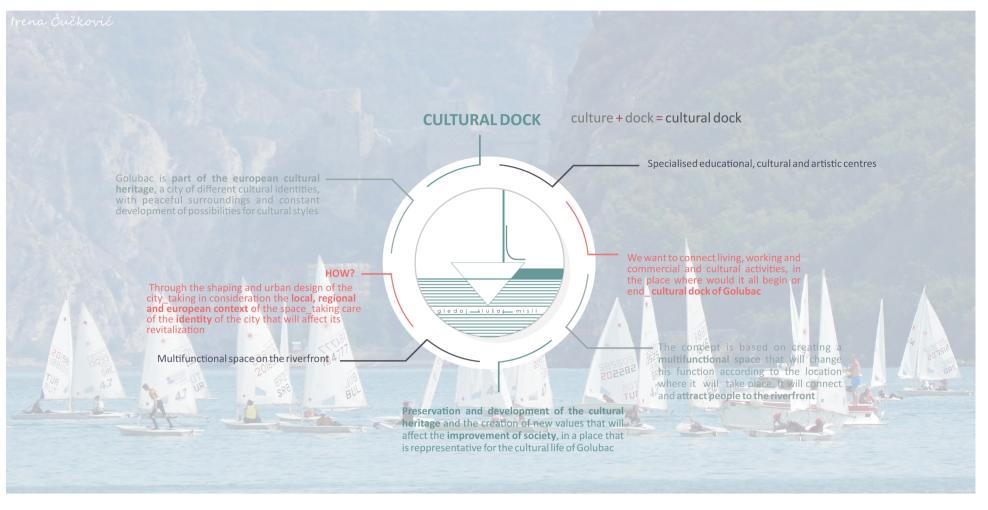
\_c1\_subzone c1 is part of the C area that is used for commercial and working purposes \_c2\_subzone c2 is part of the C area where the Golubac fortress is situated, with mixed use, since it connects historical heritage and other commercial purposes





Vanja Vujanović 22012/2016, Ivana Savić 22016/2016, Mila Stojanović 22018/2016 prof.dr Aleksandra Đukuć, ass. Ivica Nikolić, saradnici Branislav Antonić, Tamara Rad Prolećni semestar 2016/2017, Master Integralni Urbanizam, 1. godina





## **DOCK OF CULTURE**

#### **VISION AND SCENARIO** Golubac should become a place that encourages cultural life, satisfies the needs of its citizens, affects the feeling of togetherness and cultural PROBLEMS identity and develops through the cooperation with local and international stakeholders. The goal of the scenario is to improve the existing Golubac-1. Clear segregation of the living area and the centre of the town 2. Disconnection of the existing and identified landmarks 3. Main road passing through the central area of the town 4. Devastation of the public spaces 5. Users that aren't interested in the good function of the public space 6. Poor economical situation 7. Unidentified river transport 8. Low collaboration with the surrounding municipalities 9. Lack of interregional collaboration structure of contents, to connect the urban area of the town, overcoming the physical barriers, as the identification and encouragment of the connected neeting points and landmarks. PRIORITETI Improvement and finalisation of the infrastructure Improvement and intermediate in the impact of the impact o Improvement of the life quality 4.1 Reducing the traffic influence on the environment 4.2 Modernization of the existing contents 4.3 Improvement of attractiveness public spaces in the central area of the town 4.4 Creating new green spaces 1.1\_local level\_public sector 1.2\_local level\_public sector 1.3\_national + local level\_public sector 1.4\_local level\_public sector 1.5\_local level\_public sector **PROBLEMS** 2030 3.2\_local + national level\_public + civil sector 3.3\_local level\_public sector 4.1\_local + national level\_public + civil + private sector 4.2\_local + national level\_public + civil + private sector 4.3\_local level\_public + private sector 4.4\_local level\_public + private sector 2.1\_local level\_public sector 2.2\_local level\_public + private sector 2.3\_local level\_public sector 2.4\_local level\_public + private sector 1. Viewpoints The goal of the scenario is to support the development of culture and education. In the riverfront area of the municipality of Golubac, there are some buildings that are abandoned, as as well some unbuilt areas that should be reactivated. The dinamical topography of the ground (denivelation of the hinterland of the riverfront) contributes to the uniqueness of the environment, that is located on the south side of the river Golubaccultural Danube. This type of surrounding is incentive for young artist to promote their work. riverfront PROBLEMS Providing new spaces that are totally equiped for the new artistic concepts 3.1 Selection of free spaces (activation of the riverfront, main park, marina,...) 3.2 Creation of the list of active creators and their professional field 3.3 Production of the preliminary and main projects Strategical establishment of the ideas and projects and investment in spaces and buildings that are intended for culture 1.1 Maping the spaces, analysing the choices for the further production 1.2 Production of the technical documentation for the capital investments 1.3 Encouragment of the investors PTIMUM Modernization with the purpose of following the new cultural trends, practicies and expression 4.1 Outdoor exhibitons (park, riverfront, public square) 4.2 Workshops in new cultural areas 4.3 Creating summer camps on the other side of the main road Existance of artistic ateliers that can be used by artists from different areas of activity and other users 2.1 Maping of the spaces 2.2 Creating the criteria for the usage of the spaces 2.3 Creating the criteria in the purpose of granting the spaces VALUES 2. International river corridor 2025 2030 International level 2.1\_lokalni nivo\_public + private sector 2.2\_lokalni nivo\_public + private sector 2.3\_lokalni nivo\_public + private sector 4.1\_local level\_public sector 4.2\_local level\_public sector **National level** The town has to focus on its potentials and values. The challange of the old towns is to adapt to the needs of the contemporary way of living

Scenario points the participation of the town in investing in its citizens, that makes it liveable. This needs to be taken in consideration on different

Cultural rise of the town
4.1 New festival in the park and marina area connected on the international level
4.2 International exhibitions and workshop in new open areas of the town
4.3 National developing centres for improvement in the central area
4.4 Development of the creative industries through the new creative cultural district

+ civil + private sector

4.2\_local + national + international level\_public
+ civil + private sector

4.3\_local + national level\_public + civil + private sector

4.4\_local + national\_public + civil + private sector

2035

c.a\_ioxcai + national
level \_ public + private + civil sector
2.z\_lokalni nivo\_public + private sector
2.3\_lokalni nivo\_public + private sector
2.4\_local level\_private + civil sector 2.1 lokcal + national

PRIORITETI

2025 2.4\_local level\_public + civil sector 2.3\_local level\_public + civil sector 2.3\_local level\_public + private sector 2.3\_local level\_public + private sector 2.4\_local level\_public + civil sector 2.1\_local + national

3.1\_local+ national level\_public+ private sector
3.2\_local+ national level\_public+ private sector

Golubac-

hub

contemporary

2017

(A)

levels (from the local to the international).

2.1 Displacement of the main road from
 2.2 Displacement od the bus station
 2.3 Creation of the underground garage
 2.4 Reduce of the number of private tran

1.1\_local + national

Keeping the local citizens and attracting the new ones 1.1 New festival in the area of marina connected on a national leve 1.2 Creating a cultural district through new spaces of culture 1.3 Creating new parks in the suburban areas 1.4 Creating new viewpoint in the hills around the town

O'

## SCENARIO 1 - GOLUBAC\_CONNECTED TOWN

- 1. Clear segregation of the living area and the centre of the town

- 1. International river corridor 2. Diversity of cultural heritage
- 3. Existence of spatial capacities
- 4. Dinamical topography of the ground5. Diversity of natural inheritance

## SCENARIO 2 - GOLUBAC\_CULTURAL RIVERFRONT

- 1. Abandoned cultural buildings
- 2. Lack of cultural buildings 3. Devastation of public spaces
- 4. Lack of cultural contents 5. Problem of the unidentified landmarks
- 6. Insufficient collaboration and synchronization of the cultural stakeholders (local, regional, national and international level)
- 2. River nearness

## Existance of cultural heritage Existance of spatial capacities

## SCENARIO 3 - GOLUBAC\_CONTEMPORARY HUB

- 1. Main road passing through the central area of the town
  2. Lack of cultural contents and buildings
  3. Riverside that is unrecognised potential
  4. Devastation of public spaces
  5. Lack of connection of the contents inside the town
- 6. Lack of cultural contents

## 7. Lack of accomodation

- 1. Marinas as docks inside the river corridor
- 3. Diversity of cultural heritage
- 4. Existance of spatial content 5. Dinamical topography of the ground 6. Diversity of natural inheritance

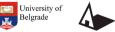
## **PARTICIPANTS**

PUBLIC SECTOR\_European developmental fonds
 PRIVATE SECTOR\_Investors\_Developers\_Private companies
 CIVIL SECTOR\_NGO

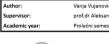
1. PUBLIC SECTOR\_ Ministry of Finance\_Ministry of Culture\_Public of

## Local level

I. PUBLIC SECTOR\_Municipality of Golubac\_Public companies\_ komunalno javno preduzeće Golubac\_JP Direkcija Golubac 2. PRIVATE SECTOR\_Investors\_Developers\_Private companies 3. CIVIL SECTOR\_Citizens of Golubac\_Visitors\_NGO







Vanja Vujanović 22012/2016, Ivana Savić 22016/2016, Mila Stojanović 22018/2016 Prolećni semestar 2016/2017, Master Integralni Urbanizam, 1. godina







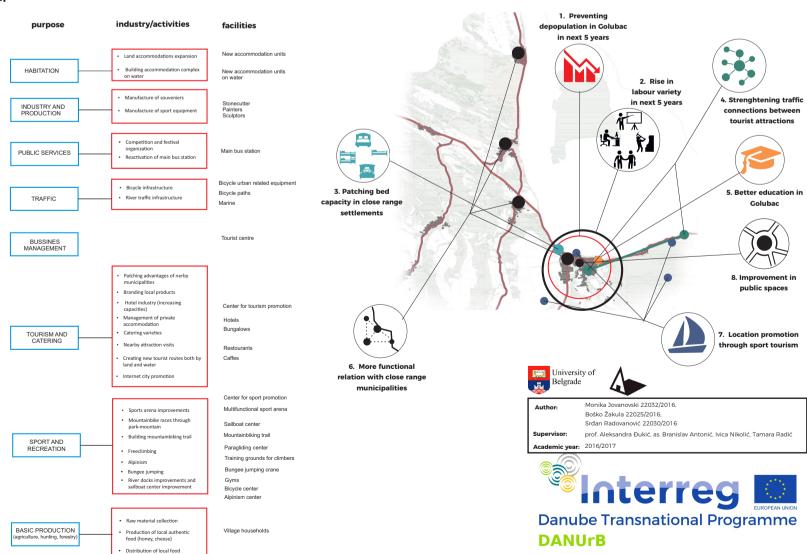
#### CITY OF EXTREMES CONCEPT

Position of the Golubac city and its rough terrain lead us into thoughts about using it as advantage for creation of the new city identity - the city of extrems. Possibilities of development in the field of extreme sports, habitation and gastronomy makes the brighter future image for Golubac. With constant changes in life dynamics and a lack of spare time, demand for extreme activities that provoke adrenalin rush gain on demands among human population.

Following the rise of extreme activities in town we also expect extreme rise in mainly tourist visits. This is esspecially expected during diverse manifestations that we are planing to develop in Golubac. Rise of visits would lead to urgent rise in bed capacity which is exactly what city needs to start devenoping in a positive manner rappidly. Cultural and historical legacy of Golubac has very strong identity which could be used as a strenght in promotion of the city by synchronising such identity with activities that take place in the area.

**MAP OF GOALS** 

## The PROGRAM





#### **SCENARIO 1 - Monocentric scenario**

#### **MEASURES**

M01 Hotel adaptation and expansion in the city centre

- M02 Park renovation and lighting system set up
- M03 Building of High school near kindergarten
- M04 Building of culcture and sport manifestation centre
- M05 Building of skate and parkour park at location near stadium
- M06 Building of floating apartments on water

**SCENARIO 2 - Polycentric scenario** 

**MEASURES** 





M01 Renovation of existing transport infrastructure to tourism attractions

M02 Construction of housing units on the water off the western marine

M03 Building a climbing center and training grounds near quarry M04 Building a restaurant on the cliff near Golubac fortress

M05 Building a mountinbiking trail in the woods and in the city











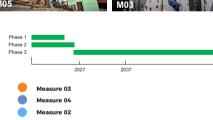
**CIVILIAN SECTOR** 



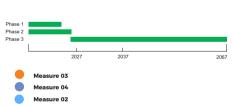












## **SCENARIO 3 - Linear scenario**

- M01 Urban planing of river coastline in marine area
- M02 Adaptation of existing marine with dock M03 Opening a sailing center inside marine
- M04 Building a pool complex near marine
- M06 Setting up a crane for bungee jumping

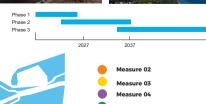


•••••









Measure 01 •••• Measure 05

#### **DEVELOPMENT SCENARIOS**

#### SCENARIO OF MONOCENTRIC DEVELOPMENT /"HOT SPOT"

Phase 1/ZUZ?
Development of Colubac in the nearest city of main square has a goal to focus activites in one main spot and rapidly improve its development. Hottel adaptation and expansion allows higher number of visitors due to improved accomodation capacity. Lighting system has been placed in the park to lead people to use new pedestrian routes during night. Building the centre for sports and cultural manifestation opens up new possibilities for Colubac activities through the whole year.

Phase 2/2037
Investments of foreign embassys in Golubac are helping park improvements to follow active trends. Due to clearly formed of the core of the city new urban contents are appearing. New work places bring in younger people tolive and form families in here. Extreme sports organizations through town are creating the new identity of Golubac and pulls up creation of new urban courts as kind and parkey urban.

Phase 3/2067

City centre of Colubac is following current trends in every way and the space identity becomes recognizable even on the international level. Due to large number of organized competitions, with a goal of giving the different variety of accomodation capacities, floating accomodation units were built near the marine. Central zone of Colubac became one of the most recognized manifestation symbols on the national scale. Local population with highschool qualifications stay living and working inside Colubac in large percentage.

#### SCENARIO OF POLYCENTRIC DEVELOPMENT

Natural division of Golubac which brings challenges of rough terrain, after polycentric content and infrastructure management, today is seen as attractive entity tich with challenges. Expected rise in number of visitors during the next ten years has attracted investments for building of floating accomodation on Donau. Also periferal settlements are investing in modernization of private accomodation for rent according to prognosis about organizing international events in Golubac.

There are extreme paths for mountain biking opened deep in the land part of Golubac and lead users through forests and steep streets of town. For these paths there is public transport organized and new road infrastructure. In close range of mountain biking paths new free climbing club has been opened and is already free climbing on nearby steep cliffs from medium to advanced level of difficulty. Following trends of thrill and excitement throughout location, new ambition activities are appearing. Among these is the new restaurant on the cliff that has been opened near fortress of Colubac and even famous international 24 kitchen chanel is promoting it.

Decades behind existing accomodation capacities are constantly occupied with the increasing, number of people interested in owning and renting their private accomodation. Certain number of ı activities that were experimentaly organized on teritory of Golubac, has integrated and became ! tradition, such as catching giant cat fish from pool filed with murky water, sleeping over in imitation of medival dungeons close to fortress and similar. Whole city became interesting over reportation and very evenly deveoped which enables stay in accompdation on different relations from centre of the town without losing attraction.

## SCENARIO OF LINEAR DEVELOPMENT OF GOLUBAC

Development of river bank of Golubac allows organization of new events which attract intere groups for which this town hasn't provided much in the past (17-40 years of age). Opening of saliboat centre allowa organization of more adequate competition in saliing which attracts other, events during its duration like concerts and exhibition of nautical equipment. Newly built marine is capable of accepting bigger tourist boats and there is rise in number of tourists that come via Donau. Swimming pool complex near hotel attracts swimming sports in national scale and becomes popular place for teams and individuals preparing themselves for competitions sequentialy, there is diver's club for advanced training, extreme paths for running and a continuous linear contents that are being attracted by development of this part of the town (restaurants, shops interact contents that are being attacked by development of this part of the town (restaurants, shops souvenir shops, galleries). Experimental events such as bigger international competition in saling bycicle racing slong Donau and first thriatlon are showing potential to stay and become tradition of the town

With identity of the town and terrain characteristics, extreme sports are concentrating even more sports are concentrating even more sports.in this town. River banks of Golubac became symbol of extreme competitions. After 10 years of traditional sailboat festival it has become ordinary for internatinal broadcasters to report from Colubac. During festival days, extreme number of visits is being reported. Hotel capacities have become insufficient, which provoked expansion of hotel complexes and also rise in number of private accomodation rents. Location attracts large foreign intvestors.

Golubac becomes well urbanized town with high quality infrastructure, highly developed rive a "must visit" place. It is especialy recognizable as place for extreme sport fans because it has wide attraction of town on high level.





Boško Žakula 22025/2016, Srđan Padovanović 22030/2016

prof. Aleksandra Đukić, as. Branislav Antonić, Ivica Nikolić, Tamara Radić Academic year: 2016/2017



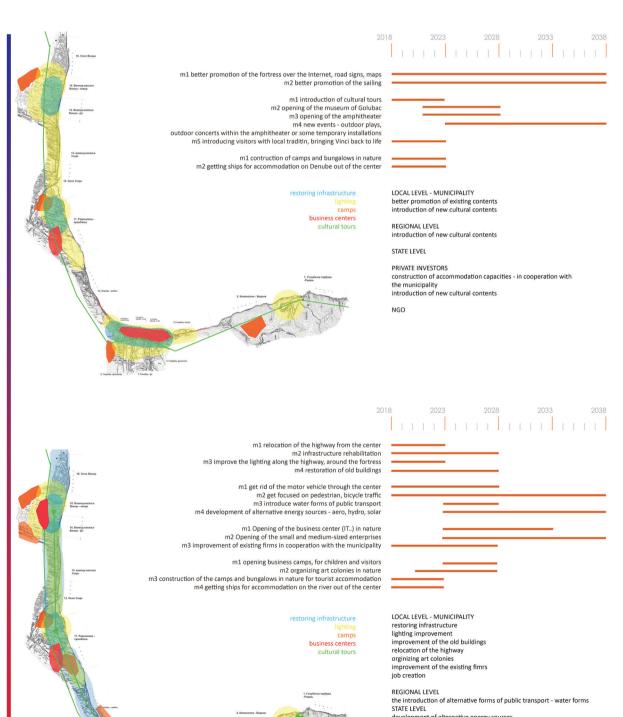


ustainable modern rtistic eliable o w n



## **GOLUBAC - SUSTAINABLE, MODERN, ARTISTIC AND RELIABLE**

**ARTISTIC & RELIABLE** 



development of alternative energy sources

the municipality orginizing art colonies opening of the business and childrens' camps

job creation contruction of the new accommodations- in cooperation with

PRIVATE INVESTORS

#### **SCENARIO GOALS**

#### CREATIVE CITY GOALS

better promotion of the fortress over the Internet, road signs, maps better promotion of the sailing

the introduction of new cultural content - to use the potential that Golubac offers for tourism, tourists, foreign as well as domestic submit bids that are affordable and organized, so there would be

introduction of cultural routes

amphitheater opening new events- outdoor plays and concerts inform visitors with local traditions, bring farms back to life

organizing art colonies - the nature, the Danube, legacy, potentials that can be used for organiz-ing poetry and art colonies that are looking for peaceful and quiet places, instead of a typical accom-modation in hotels, offering accommodation in camps and in that way stand out from other products contructions of the camps and bungalows

getting ships for accommodation

safe environment - the idea is to provide a safe environment for residents and tourists, in which they will be able to feel comfortable and pleasant relocating the highway out of the center restoring infrastructure improve the lighting along the highway, around the fortress restoring old buildings

healthy environment - except the security, residents also need healthy environment in which they will be able to enjoy in nature without harmful gases get rid of the motor vehicle through the center

get focused on pedestrian, bicycle traffic

introduce water forms of public transport development of alternative energy sources - aero, hydro, solar

job creation - how to attract people to come to live in Golubac, if the creative city worth as an inventent, the next step forward in the development would be the creation of an environment that people come to live and work in, not just as tourists opening of the business center (IT..) in nature

opening of the small and medium-sized enterprises improvement of existing firms in cooperation with the municipality

alternative forms of accommodation - because of the lack of the hotels as accommodation for

would produce a sense or commercing with nature opening of the business, children's camps and for tourists orginizing art colonies in nature contruction of the camps and bungalows in nature as accommodation for tourists getting ships for accommodation out of the center

University of Belgrade



Jana Milovanović 22013/2016, Milica Zukanović 22020/2016 prof. dr Aleksandra Đukić, ass Branislav Antonić, Ivica Nikolić







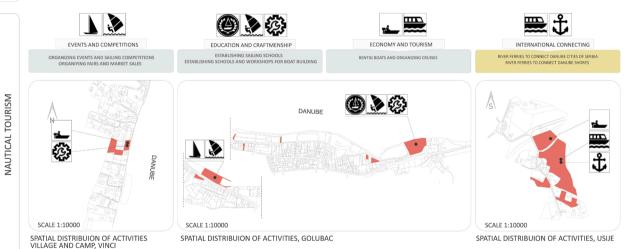
#### CYCLING

construction of the bicycle lines is the first phase that is being implemented (0-5 years) and it's implemented by Municipality Golubac and the state of Serbia. Linking Eurovelo6 track with southern part of municipality, at a would be further incentives for the local population and to use the municipality itself.

2. The construction of the parking spaces for bicycles is the first phase of which is being implemented (0-5 years) and implemented by the Municipality Golubac. The possibility of realization of this action is reflected in the large number of undeveloped plots, both in the center of the city and in large enough plots around the main square and the city park

3. Service, sale and bike rental is the first phase of which is being implemented (0-5 years) and it's implemented by the Municipality Golubac and private entrepreneurs in the framework of a public-private partnership. The possibility of, as well as for the space for parking facilities, is reflected in the transfer of a space which are abandoned and trough private-public partnership can regulate and can be used by the bicycle clubs and private companies.

4. Upgrading the network of public transport is the first phase of which is being implemented (0-5 years) and it's implemented by the Municipality Golubac in co-operation with the private bus operator through public-private



## NAUTICAL TOURISM

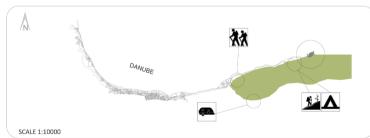
 Implemented within the first phase of the plan and the stakeholders of the implementation are Municipality of Golubac and private companies through a public-private partnership. Through the action, the number of tourists could rise and economy in general. The locations for such events are all around Golubac. Some of them are areas of both marina, as well as the space at the city park next to sport fields.

The action is implemented in the first phase of the (0-5 years) with option of growing in later stages of development. The holders of the implementation are Municipality of Golubac in co-operation with the state of Serbia and private companies. The school would be located on the main road towards Golubac fortress on undeveloped public plot.

3. The space should incorporate workshops for repairing and constructing boats. These workshops could employ a certain number of the local population. It's implemented within the first phase of the plan and the stakeholders that could be interested in implementation are Municipality of Golubac, Sports clubs and private companies through a public-private partnership

4. The action is closely connected with the implementation of the new marina in the eastern part of the city. Such actions, could contribute to the development of the trade and tourism as well as increasing number of wvisitors. Implementation is in the framework of the first and the second phase of the plan and the stakeholders of the implementation are Municipality of Golubac, state of Serbia and the International Organization for crossborder concertion.





SPATIAL DISTRIBUION OF ACTIVITIES, GOLUBAC

## HIKING AND SIGHTSEEING

1. This action is implemeted within the first phase of the plan and the stakeholders of the implemetation are Municipality of Golubac and private companies through a public-private partnership. Golubac is situated on order of National Park Djerdap, and construction of facilities are not possible at the the hills around Golubac. It is necessary to regulate the already existing track which are used by mountaineers. In addition, it is necessary to create conditions which are prescribed by the law of National parks for rest area, (tents, tables, trash disposal...)

2.This action is immplemented within the first phase of the plan and the stakeholders of the realization are Municipality of Golubac and private companies through a public-private partnership. The inclusion of the Cyclinghiking club of Golubac in action, and using of their knowledge. The inclusion of the other mountaineer associations from nearby towns.



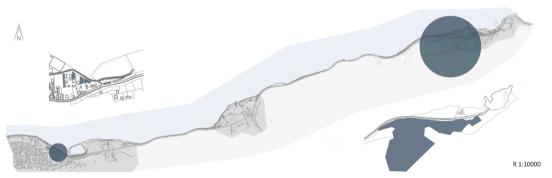


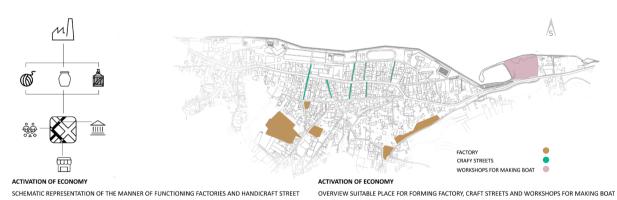
Author: Supervisor: Academic year:

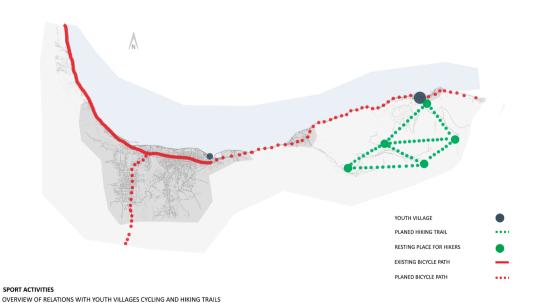
Mladen Kostadinović 22011/2016 Aleksandra Đukić











The aim is to activate the production in Golubac, where the main items are produced in the factories and home workshops. In order to produce closer to the camp participants and other interested parties workshops are planed where the products are made on the traditional way, the way it was done by our ancestors.

#### YOUTH VILLAGE

Forming Youth's villages / camps. For starters, the camp will be located on two sites. One camp will be formed near the Golubac fortress. Due to the specific location and protection measures that are defined in the vicinity of the fort, camp will be made of natural materials in accordance with the prescribed rules. Camps are connected with the city center by bus lines and cycling path on the main road.

Second camp's location is planned within the city center, near the school.

## **ACTIVATION OF ECONOMY**

It's planned to open a factory or home workshop for the production of ceramics, textiles and crafts, whose products are intended for local and regional market. Continued development and improvement of production is planned for product placement and on the international market in the next 5-10 years. Opening the workshop is planned as part of the family house or within facilities that are currently not in operation.

To turn the visitors of the camp and other stakeholders in the process of production is planned to open a workshop where they will be with the help of trained workers maintain courses for making objects in the traditional way.

To activate as many city space, includes building is forming a "craft street". Within the craft street, there would be workshops where the participants of the camp as well as other interested parties had the opportunity to participate in the production process. The workshops are intended for the generation of decorative ceramic items and handicrafts. In addition to pottery, there will be a workshop where they will be intrigued to learn how to use traditional objects for weaving as well as how to make a product at their discretion. In addition to workshops within the craft streets being and sales facilities where they sold products have resulted in workshops and factories.

The aim is to involve young people in sports activities. It is therefore necessary to achieve favorable conditions for the construction of sports fields and landscaping already existing. In this way it will be possible and the organization of sports competitions within Golubac. It is necessary to:

It is necessary to:

- Construction of bicycle paths and networking with Eurovelo 6 trail. Connecting youth camps with trails enable active participation of young people in cycling.

- Regulation of the existing hiking trails and the erection of temporary rest areas that will create the conditions for active hiking in the hills around the Golubac. Organizing courses hiking and navigating in the countryside will bring users the camping hiking as one of the

interesting aspects of recreation.

In addition to these sporting activities, introduction course for gliding would allow visiters to camp after the training participate in existing events and competitions in sailing.

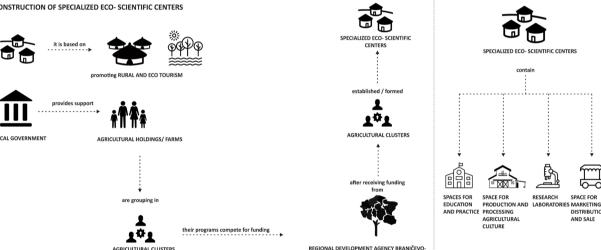






OVERVIEW FREE PLANTS AVAILABLE FOR BUILDING THE YOUTH VILLAGE

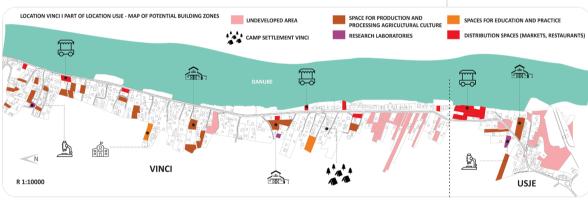




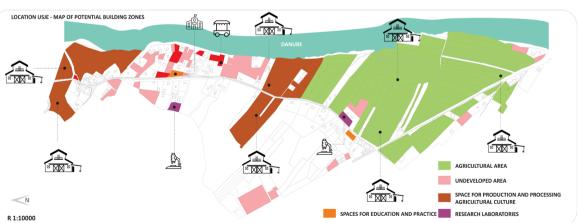
- engaged or may be engaged in tourism in the country, categorized and uncategorized their potential advantages and disadvantages)
- Participation and promotion of rural tourism in the region unified at all similar fairs or exhibitions, with special emphasis on pre-defined priority markets.
- Approaching the information to all potential future rural tourist households of procedures, legal decisions, agencies dealing with categorization, presentation,

Encouraging eco scientific centers of the local economy would have more financial incentives from whose financial income to form settlements around the camp and in the Golubac, and would be based on tradition and local culture

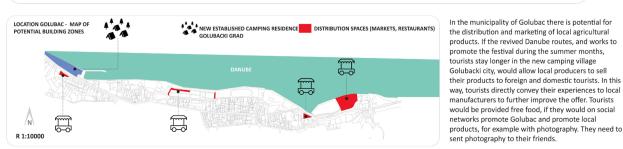
Camping village to host tourists during the various thematic festival, there would be the possibility of free food if local tourists to adequately promote Golubac on social  $networks. \, This \, would \, be \, the \, only \, one \, of \, the \, measures \, that \, need \, to \, be \, coordinated \, and \,$ complementary to other content on the local level



Basic infrastructure (roads, water, sewer) is in a satisfactory condition. Modernization is needed, which design the new methods of irrigation area, in order to accelerate the production of agricultural crops. Within the camp village Vinci, tourists can use local agricultural products, provided that during the stay in the location, they need to make photography of the location and post on social networks. Under existing households that are already engaged in agriculture to build additional facilities that would enable further development of the household. Spaces for education and training, areas for processing agricultural crops and research laboratories would be located in the rear of the village, in the context of existing households. In the coastal area, we would be content with the primary function of the distribution and marketing of local agricultural products. Location Vinci is significant because it is currently used as a camping resort and attracts tourists, so tourists are in direct contact with nature, and this way of presentation of local products can further contribute to increasing the number of tourists. Distribution and marketing take place in the second phase (5-year and 10 years). In the first phase, formed areas that would be enable the production of local crops. Holders of development would be Golubac Municipality in cooperation Regional Development Agency Branicevo - Podunavlje



Location Usje has a serious potential for the construction objects of a large volume (factory, plant). Large areas are available, suitable for building, well-connected infrastructure. This location can be a serious investment potential, with the possibility of certain tax incentives for investors who are interested to invest long term while working to promote local products. New construction can start immediately in the first phase (0-5 years), given that all the prerequisites for further development. The holder of this kind of project can be a Regional Development Agency Braničevo-Danube in cooperation with the Municipality of Golubac. The supervisor should be the state authorities, JP Srbijavode, as potential sites located on the banks of the Danube and needed their overall analysis. Along the coastal area it is possible to realize the commercial potential (hotels, restaurants), it is necessary to connect the recreation zone Vinci hiking and cycling routes with Golubac, to the contact zone of the Danube revived.

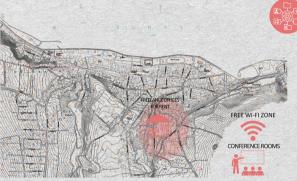


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2016/2017

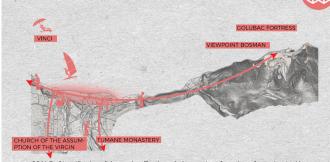




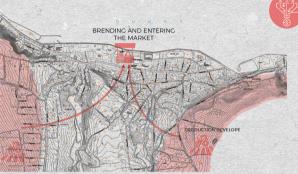


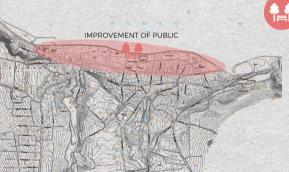


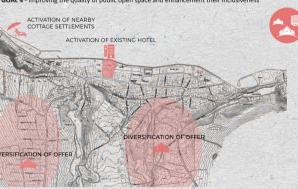
GOAL 5 - Increasing the number of facilities and activities on the Danube and the expansion of the tourist offer development of nautical tourism, as well as access to the town from the international



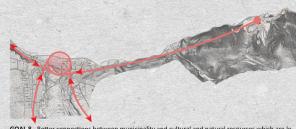
GOAL 7 - Diversification of the tourist offer through the creation of a variety of tours inspired by local heritage and natural resources with the unique offer of events which present the identity of the city







GOAL 6 - Increasing accommodation capacities, diversification of offer and the creation of the concept of overall service



## **CREATING A VISION - GOLUBAC**

Vision for the development of Municipality of Colunac is based on defined goals for improvement of quality of life and encourage of sustainable development of local community. Coals are defined according to basic problems and oportunities which are identificated in the area of municipality and they tend to develope Colubac with approach based on unique local identity and great natural and cultural wealth.

districtdistrict	Branicevo
area	368km²
populationdistance from capitol	about 10.000
distance from capitol	130 km



52 KM stratification

**PROBLEMS** depopulation aging population undeveloped local economy lack of central functions poor educational structure

OPPORTUNITIES
position on the Danube
Colubac fortress
agricultural areas
historical stratification
forest resources
Djerdap national park
rich multicultural heritage

V

Djerdap National Park

Colubac is the city that lives on the Danube and from it forming of unique ambience of riverside, offering many facilities which provide different scales and ways of the expirience of the Danube. Beside the taming city coast. Colubac offers the expirience of the Danube in its whole freedom, along the Iron Cates gorge, which is the biggest demonstration of its forces along the entire course.

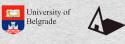
course.

Golubac is the city of live streets
with many facitlities in the public place which encourage the development od social
life of local community and whose ctizens gladly spend most of their free time
outdoors, strengthening the community spirit. Golubac is the city of trade with the
market as a place for meeting, trade and exchange of experiences, which is significent
part of genius loci.

Golubac is an exciting city of hospitality
which is an unavoidable destination for nature lovers, thrill seekers, nautical
enthusiasts, and devotees of cultural and historical contents, permeated with many
historical, and mithological leyers. It provides the possibility of direct experience of life
in the local community, in the modern time and through historical development, with
many events throughout whom the local natural cultural, historical and gastronomic

in the local community, in the modern time and through historical development, with many events throughout whom the local natural, cultural, historical and gastronomic wealth is presented. As a city of adventure, Colubac provides invaluable experience of staying in untouched nature through a number of activities for all ages.

Colubac is the city where tradition and inovation meet eachother which has developed local manufacturing culture, based on traditional activities with a favorable climate for contemporary activities of young freelancers and start up companies. It successfully integrates lokal entrepreneurship and modern economic trends, creating conducive investment environment.



Milica Ristović, Milica Đurđević, Stefan Hadži Arsenović prof. dr Aleksandra Đukić, as. Ivica Nikolić, Branislav Antonić, Tamara I Academic year 2016/2017

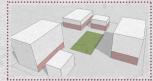


### **PROGRAM**

#### **SCENARIOS**

#### Let's **start up** Golubac

Part of the program which includes, not only start up companies and freelancers, but also driving the local economy, especially incitement development of small and medium-sized enterprises. It is based on the existing local production. development of markets for local products and incitement self-employment in the field of production itself and the branding of the city.



USE



Let's **meet** Golubac

Part of the program which includes introducing visitors to the city, tourism development and introducing citizens themselves to the resources that are in their immediate environment, making them interested in issue of protection and presentation of heritage. The development of turism itself is based on the formation of the concept of active holiday and different types od networking the city with sites as Golubac fortress, National park of Djerdap, Tumane monastery, Lepenski vir etc., and these sites with eachother.

Scenarios are conceived as a phases, the first one (use) can be the base for second (improve), bat it is not necessery. They can also be used separatly in different filds (start up, meet, tasts), so the flexibility is achived in several directions. But also, parts of program are connected so the develope of one will outomaticly drive another two parts.

**IMPROVE** 

MAXIMIZE

	USE	ACTIVITY	FACILITIES
ممو	HOUSING	- Building of new housing capacities	- mix use objests - multi-family residential building - single-family residential building
		- Creative industries	- Art incubators - Coworking spaces
胚	INDUSTY AND PRODUCTION	- Production in fild of soft industries	- Final processing of products - Equipement for quarry - Production of agricultural equipment and suplements
0	PUBLIC	- Forming the sevices which will help and advice producers and young people in variety of filds	- Service for help in aplications for international and domestic funds
SERVIC	SERVICES	- Increasing the use of modern technologies	- Forming and conecting GIS data base
1	TRAFFIC	- improvement of the existing road network - building of new transport infrastructure	
<u>اُلْاَن</u> ُ	BUSINESS	- Selfenployment - Creative Industries	Start up companies in field of brending of local prodactrs     Start up companies in the field of traditional manufactural production     Start up companies in IT     Start up companies in field of tourist
TOURISI	TOURISM AND	- Developing conections between the city itself and sites in its immediate environment	- Information offices and maps in the city center
	CATERING	- Expansion snd diversification of accommodation capacities	- Forming the camp - Concept of hosting - acomodation in local households
ネガ	SPORTS AND RECREATION	- Promotion of navigation, extreme sports and recreation of untouched nature, close to the city	- Nautic centre
-	PRIMARY SECTOR	- Developing local agricultural production, forming cooperatives, and brending products	- Cooperatives - Common treatment plant

## Let's **taste** Golubac

Part of the program which is based on encouraging the local production and brending of local products such as honey, cheese, herbs, fish and venison, spreading on the wider market, but also producing for the specific turistic offer in within municipality area (hotel, local restaurants and shops)

#### I SPATIAL DISTRIBUTION OF PROGRAM



I USES, ACTIVITIES AND FACILITIES DEFINED BY PROGRAM

## **GOLUBAC - TREASURY OF THE DANUBE**

SCENARIO 1: USE

SCENARIO 2: IMPROVE

## **PROGRAM AND SCENARIOS**

LEGEND

LEGEND:

specialized shops for the sal center for tasting local

I SPATIAL DISTRIBUTION OF SCENARIOS

## Let's **start up** Golubac

#### Let's meet Golubac

#### Let's taste Golubac

Reduction of taxes and fees for IT companies which start up bus

Construction of a new hotel on the location of the existing, with modeling which would fully connect the town with the river and make the continuity of riverbank (public sector / local government, private sector / private companies).

Placement of products in the tourist offer /hotel and existing restaurants/(public sector/local government, Municipal tourism org)

Branding of agricultural products and total design for the market (public sector / local government, town agricultural department)

Establishing of an agricultural center with common cold storage, warehouse, space for processing and space for presentation and education (public sector / local gov., town agricultural department.)

Developing the center for management and services branding and product placement on the market (public sector / local government

Organizing of practice for farmers, high school students and colleg-students. (public sector / local gov., private sector / private compan Organizing Agricultural Fair in the city (public sector / local gov.

## SCENARIO 3: MAXIMIZE LEGEND: Area planned for transformation construction of a new construction of a nautic center infrastructure developme tasting and sale of products restaurants local cuisin with local products

## University of Belgrade



Milica Ristović, Milica Đurđević, Stefan Hadži Arsenović prof. dr Aleksandra Đukić, as. Ivica Nikolić, Branislav Antonić, Tamara R

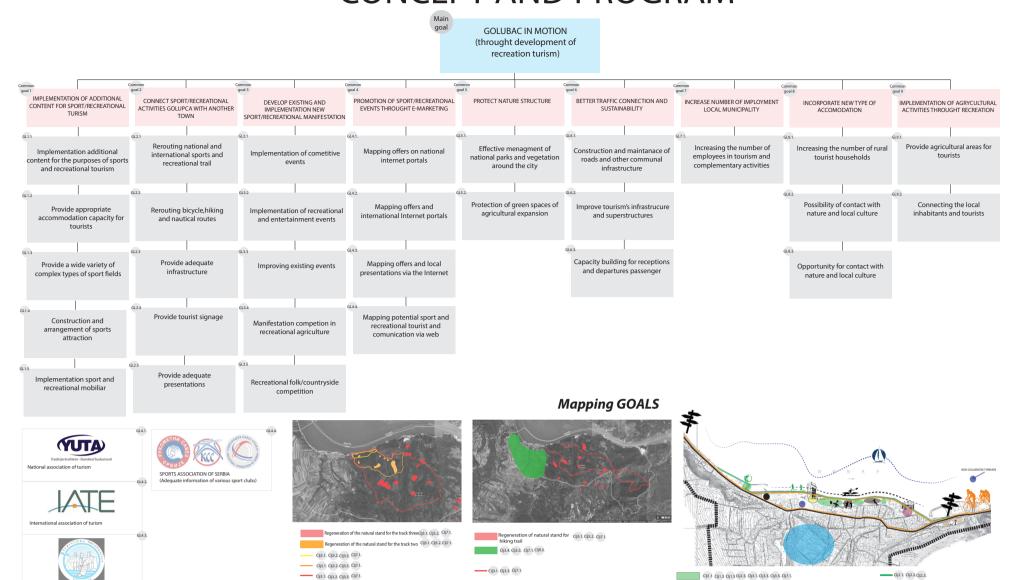


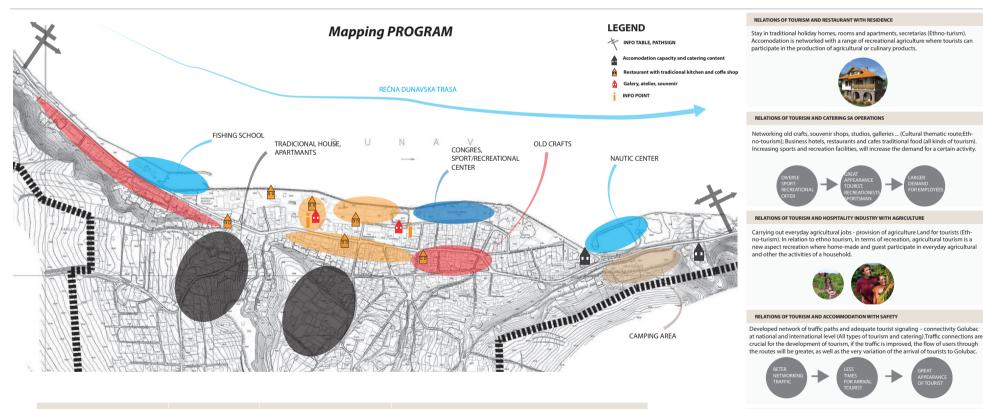
**DANUrB** END OF PROCESS

**CREATING A NEW VISION** 



## **CONCEPT AND PROGRAM**





PURPOSE	SUBPURPOSE	WORKS AND ACTIVITIES	CONTENT
	CULTURAL-THEME ROUTES	Festivals; fun; gastronomy; creative workshops and seminars; cultural events; tours	Cultural and historical heritage; studios; galleries; hotels; restaurants With traditional cuisine; bars; Adequate infrastructure (roads, benches, selling places); Tourist signaling (info table, road signs, marks); adequate presentation (info counters, guide services, locality maps);
	NAUTICAL TOURISM	sailing; kayak rides; river cruise; tour around the place; sport fishing; cultural and sporting events; entertairment	all facilities of nautical infrastructure (marine, gasoline stations, numerous moorings and piers at the site of interest); noutical center: sailing camp; sailing school; sailing teom for the preparation of representatives and organization of competitions; weighing and storage hangars for sailboat; fishing school; boarding school; accommodation capacities and hospitality
TURISM AND CATERING	ETHNO-TOURISM	walking; jogging; cycling; sports activities (volleyball, football, fitness); sightseeing nearby destinations and cultural and historical attraction; workshops; doing everyday agricultural activities	cultural and natural heritage; traditional products; national creativity; pld crafts; souvenir shops; restaurants and other catering facilities for traditional food preparation; traditional holiday houses, rooms, apartments, camps; bowery; appropriate infrastructure (road network, the post office)
	ECO-TOURISM	sightseeing of the local wildlife and wildlife; visit national parks; getting to know local culture areas; educating the passengers about significance	naturally preserved spaces; following cultural objects from the past and present; Infrastructure developed in accordance with the environment; simple accommodation facilities; decorated walk track with markings; tourist signaling
	TOURISM MANIFESTATIONS	visit manifestations of cultural, artistic, entertaining, and sporting of similar character and content; festi- vals local communities;	hotels; congress and sports-recreation centers; camps; adequate infrastructure (roads, runways, selling places); towist signaling (info table, road igns, marks)



Dealing with various sports activities in nature, biking and cycling through natural areas (ethno-turism, eco-tourism), sightseeing of the local plant and animal life areas (eco-tourism). Vegetation is a crucial factor for human health, especially when it comes to recreation and sports tourism, where we make our own initiative more effort and where we can not be risk factors such as viruses, bacteria, dust, etc.

Clj2.1, Clj2.2, Clj2.3, Clj3.3, Clj6.3.

CIj6.1.

Clj3.3. Clj7.1.

Clj1.2. Clj6.2. Clj7.1.

Clj1.1. Clj1.3 Clj1.4. Clj1.5 Clj2.3 Clj3.1. Clj3.5. Clj7.1.

CIj7.1.CIj8.1.CIj8.2.CIj8.3.CIj9.2

Clj1.2. Clj7.1

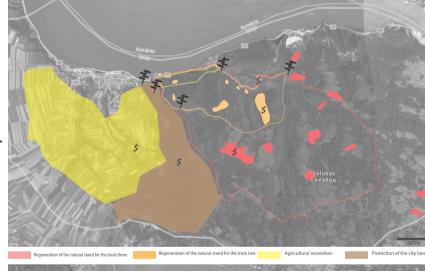
## scenario: GOLUBAC U POKRETU - GOLUBAC IN MOTION

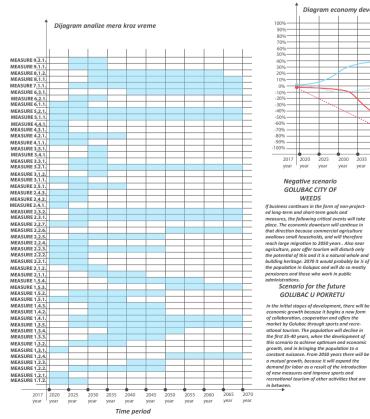


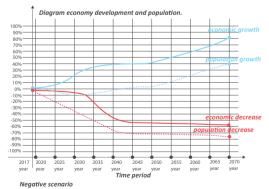




## Mapping priorities / measure The state of the s Jul.

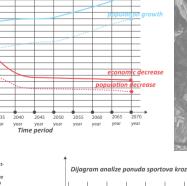


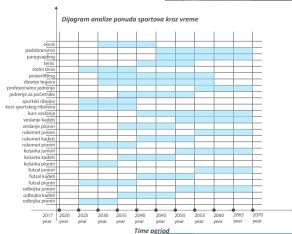




WEEDS

ners and those who work in public Scenario for the future GOLUBAC U POKRETU









4

# 10. DESIGNING NEW SOLUTIONS FOR GOLUBAC

Dr. Branislav Antonić, teaching assistant

The last phase during studio work in Golubac was a concrete design for a small open public space in central Golubac as one of key actions proposed by the chosen scenario. Moreover, the design did not limited students to give up from architecture and building design; many of them integrated these elements in their final solutions for urban space in central Golubac. Interestingly, some of them also included the Danube River as a polygon for their solutions. Therefore, this phase was done as an urban design project with architectural segments, with presentation in both 2D drawings and spatial modelling.



Fig. 1: The presentation of draft student projects in Golubac in May 2017 (source: A. Djukic).

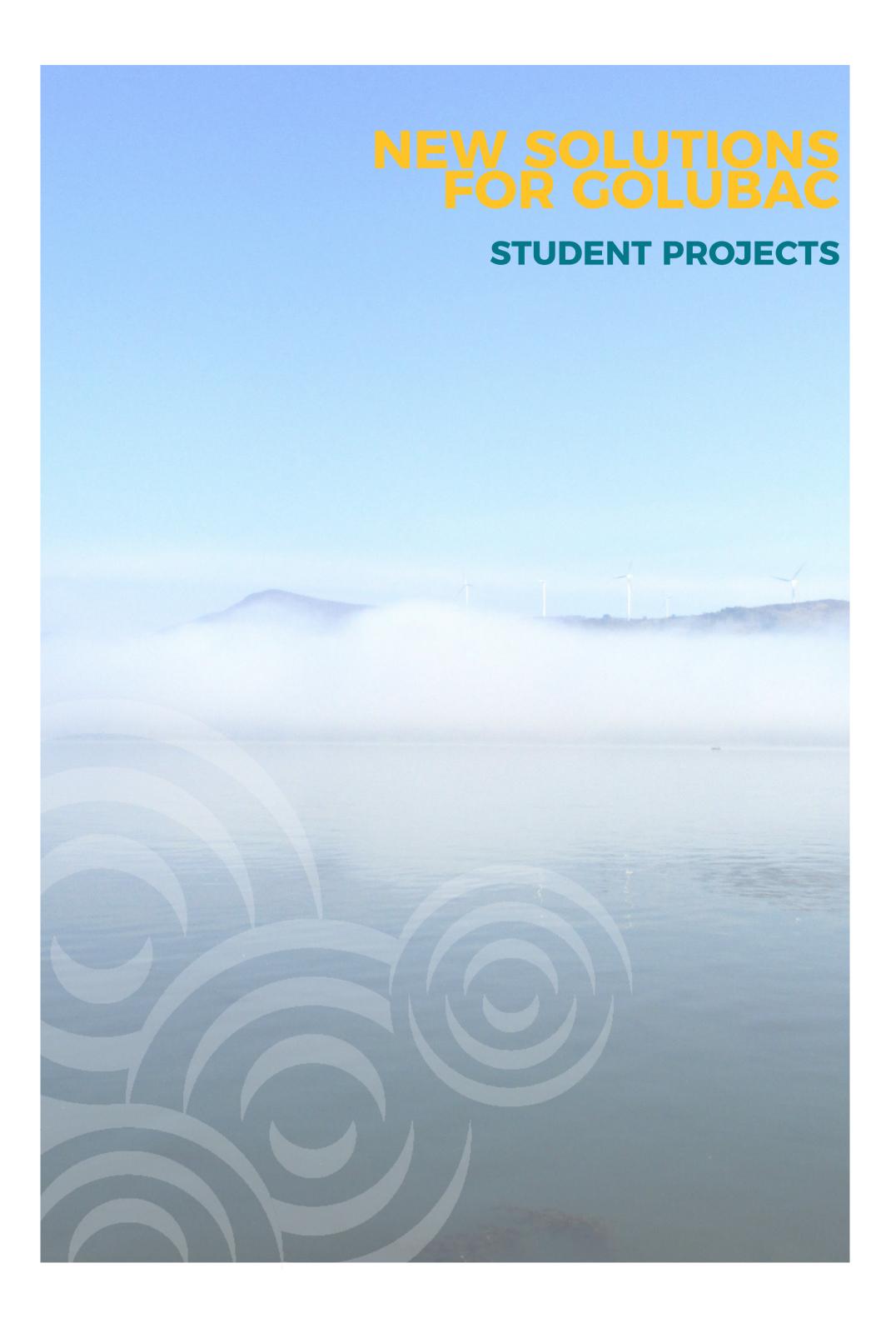
The ideas and character of student design projects indirectly emphasise the potential of Golubac Town. Some students opted for balanced mix-use design without clear preference to any function or activity; the other ones were strictly attached to new places for culture, socialisation, innovative housing on water, or new tourist and accommodation capacities.

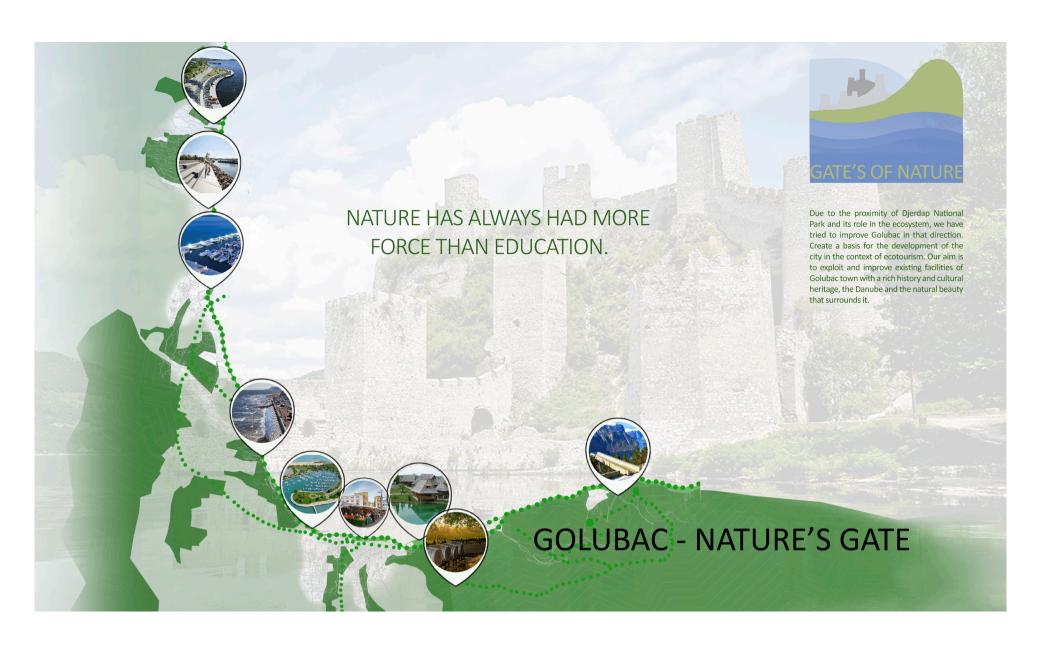


Fig. 2: The presentation of draft student projects in Golubac in May 2017.

This mixture is also preserved in the locations of their design projects in central Golubac. Some of students chose to further develop or enlarge the main town square as a focal point in the town; the other ones tried to form new spaces for gathering at the edge of the centre of Golubac; the last ones got into the river and created water structures in the front of the town centre. However, for all of them could be concluded that the Danube was their inspiration and constant for their design projects in Golubac regardless they directly touched the river in their projects, indirectly included the view on it or symbolically involved the Danube as a motive in their designing process.



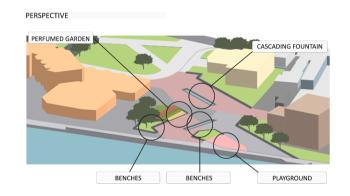






## CITY SQUARE MASTER PLAN

The new space market is designed to Old market connects directly to the Danube quay and space at existing residential buildings. Fontana which is directed diagonal movement towards the area of the Danube quay. There are no obstacles that could disturb Visual direct views towards the coast of the Danube itself. Visually opening to the area of the old market perceive you to see the old core of the Municipality of Golubac, hotel Golubački grad and Retail Poste Serbia and make this space unique physical and functional.











IVISUALIZATION



VISUALIZATION

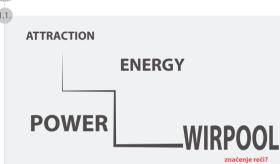




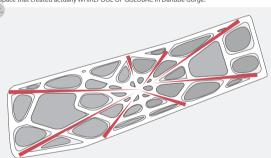
Author: Nevena Mandić; Mladen Kostadinović; Srđan Mlčanović
Supervisor: Aleksandra Đukić; Ivica Nikolić; Branislav Antonić; Tamara Radić
Academic year: 2016/2017



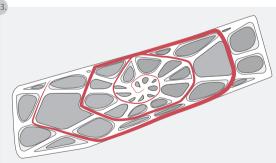




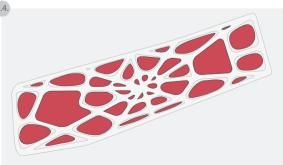
Whirlpool illustrate power, energy and atrraction, which is sport area crucial concept of development, where power and energy have built and where its content attract users to return again. Whirlpool also an integral part of the natural phenomena which are connected to the concept of space that created actually WHIRLPOOL OF GOLUBAC in Danube Gorge.



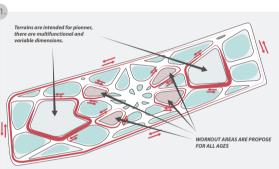
Analysis of the resulting depth and radiating finger structure



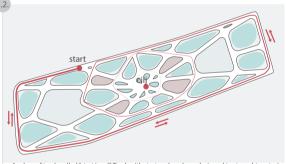
Analysis to obtain a spiral shape and depth (symbolism of whirlpool)



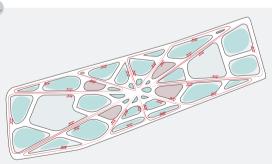
Analysis to obtain amorph shape and depth (symbolism of water moleculs)



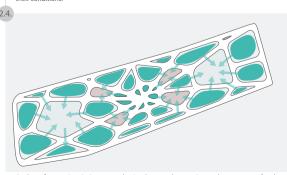
Analyse of possible paths for the heating before training. Main paths that sourrounds the concept which is used for fitness training, while other tracks that frame the workout areas used for heating before training.



Analyse of track called "start/goal". Track with start and goal, are designed to strenght motorical and mental capaty, where spiral shape guides the users to continually changes direction and thereby strenghten joints and mental dexterity and dynamic of its practice.



Analyse tracks variable lenght. Tracks of variable lenght offer different degrees of fitness training, and both will offer the possibility of seperating athletes on various tracks in relation to their conditions.



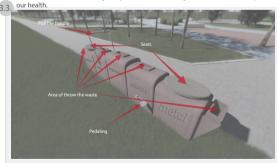
Analyse of vegetation. Its important that implemented vegetation are heterogeneus (local deversified) vegetation framed workout areas, because its emits negative ions that impact by: Clean pollution, like dust, viruses, bacteria. Improve people brathing who have respiratory problems (allergy, bronchit), hay fever). Strenghten the immune system and positively affect on human glands and cell in the body. Increase the level serotina (happines hormone), which prevent depression. Reduce tiredness, improving mental ability of organism.



Radiating finger structure can achieved widespread system views, where in the points in space that are known analyzing the at least line of sight along the walkway with the deep penetrations by city and by coast.



Candelabra is one of the segments that strengthen the identity of this concept because the solar panel with stand is set to symbolycally represent the winner holding his trophy. Also net with natural landscape of Golubac is achieved with a birdhouse in the top of the candelabra, thus we save flora as an ecological cycle where birds eating insects which transmit protects our health



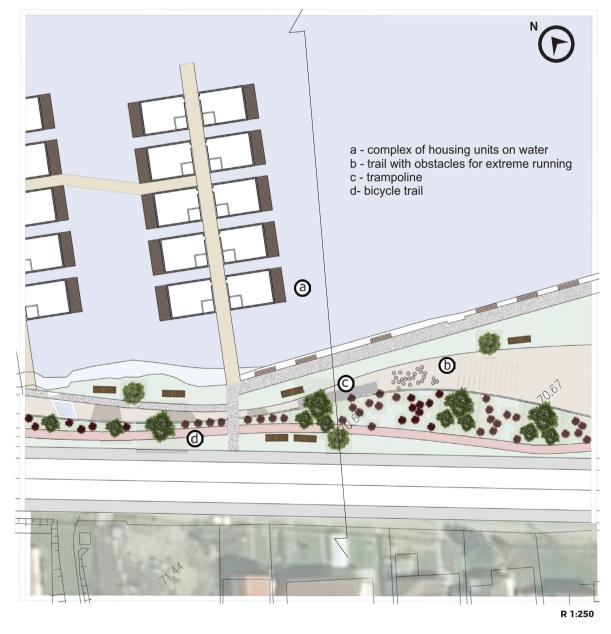
Eco-multifuncional garbage is also one of details that strenghtens identity of space. The shape represents ship sailing throught Golubac Gorge. Recreational concept is achieves by users who metal and plastic trash animate with recycling, which they have to do a certain function to pressing waste.



Author: Sara Kovačević, Antonio Mareš Supervisor: dr. Aleksandra Đuklić, Ivica Nikolić, Branislav Antonić i Tamara Radić Academic vear: 2016/12

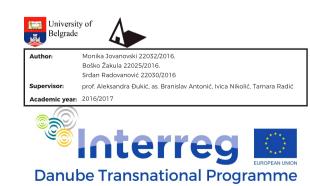




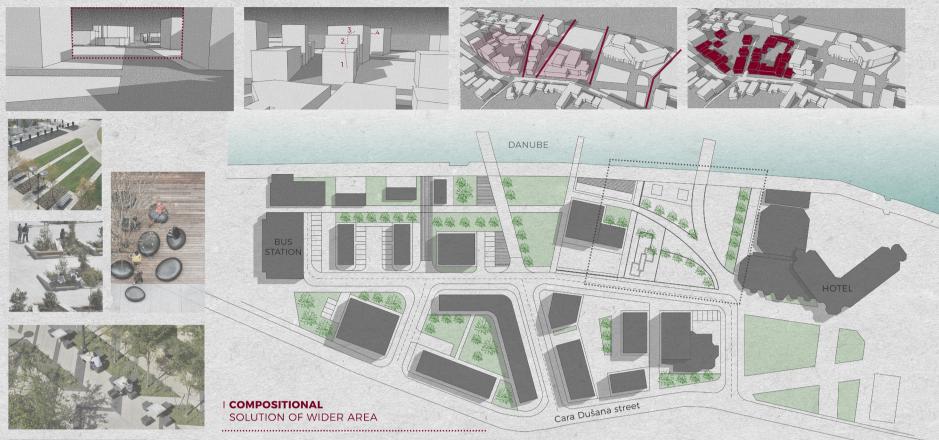


MICRO LEVEL SCENARIO





**DANUrB** 



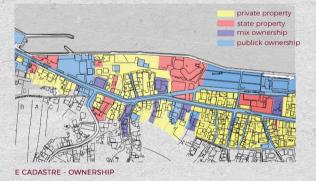
CITY OF LIVE STREETS



## **GOLUBAC - TREASURY OF THE DANUBE** FORMING A NETWORK OF PUBLIC SPACES - PLANNING NEW CITY SQUARE

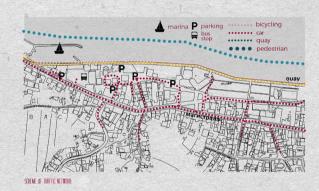


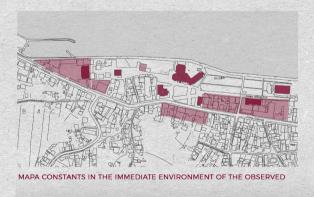
GENERAL REGULATION PLAN OF URBAN SETTLEMENT GOLUBAC - LAND USE





MAP OF CONTEXT OF THE CONCERNED LOCATIONS





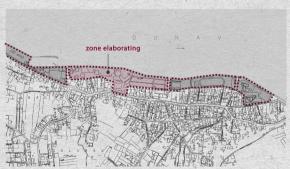
new

square

transformation in mixed city center

square

existing square



ZONING SPECIFIC UNIT MOVE ALONG THE COASTAL ZONE





CREATING A PUBLIC SQUARE

STEP 1 ANALYSIS PLANNING DOCUMENTATION:
General Regulation Plan urban of settlement Colubac:
- the general regulation did not clearly defined center zone with mixed purpose and lack of clear formation of a network of public spaces
- there are not enough diversified uses of land and buildings in costal zone and in the central zone the central zone is not compact but it is fragmented and does not form a clearly defined environmental entities
- the identity of the space is too monotonous and subordinated to the existing situation, the plan does not foresee significant changes in order to improve the quality of urban space.

Detailed regulation plan from the Danube coastal tourist village Vinci to the fortress 'Golubac city':

- plan of the entire area along the Danube is viewed as a unique offshore whole so there are not defined as different ambience and functional subunit

STEP 2 ANALYSIS OF CADASTRE

- insufficient updating of cadastre leads to the confusion and complicates the property rights and complicates the process of buying, selling and construction on the property

- on all parcels, in the monitored zone, there are buildings and the most of them

are are privately owned, more then 60% - great potential for development is a zone between the coast, the bus station, the highway and the park, which is a unique subgroup within the coastal belt, but now mostly used as a parking space

## STEP 3 ANALYSIS OF TRAFFIC NETWORK

STEP 3\_ANALYSIS OF TRAFFIC NETWORK:
By analysis of the transport infrastructure and the movement of the user's on
the location, we conclude:
- the highway represents a significant barrier separating the residential zone on
one side and the market zone on theg other
- lack of cross-linking coastal areas and residential areas over the highway
- the space between mail, hotel, quay and the bus station is predominantly designed for the movement of cars. although the path from the bus station to the
building of the municipality is of great importance for pedestrians

STEP 4\_ANALYSIS OF CONTEXT: From the analysis of the context in which there is room for future square, we

From the analysis of the context in which there is room for future square, we conclude:
- clearly stands out flight path from the bus station to municipalities and public spaces that are grouping around the extensions along this direction - lateral connections passing around important structures that represent attractors in space - existing public spaces are the park zone, green zone on the other side of the hotel and the existing square - important buildings that characterize this area are: bus station, hotel, post office, the municipality and the library - This space represents the relationship between residential zone on the other side of the highway and the coast, but at the same time it represents the core of the central zone and potentially the most significant public space

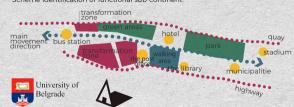
\*\*STEP 5\_MAPPING SPACE CONSTNTS:

After previously performed analysis we form the map of constants - key elements for the formation of the space square, such as: facilities for public use, with the hotel / library, bus station, municipalities and mail / park. Danube expressed highly research. quay and highway

#### lack step 6\_defining position of the location in the coastal zone: In order to make a good and used publick space on this location it was neces-

sary to analyze the whole municipalitie and especially the area of the coast so we can see what is the main role of the new square.

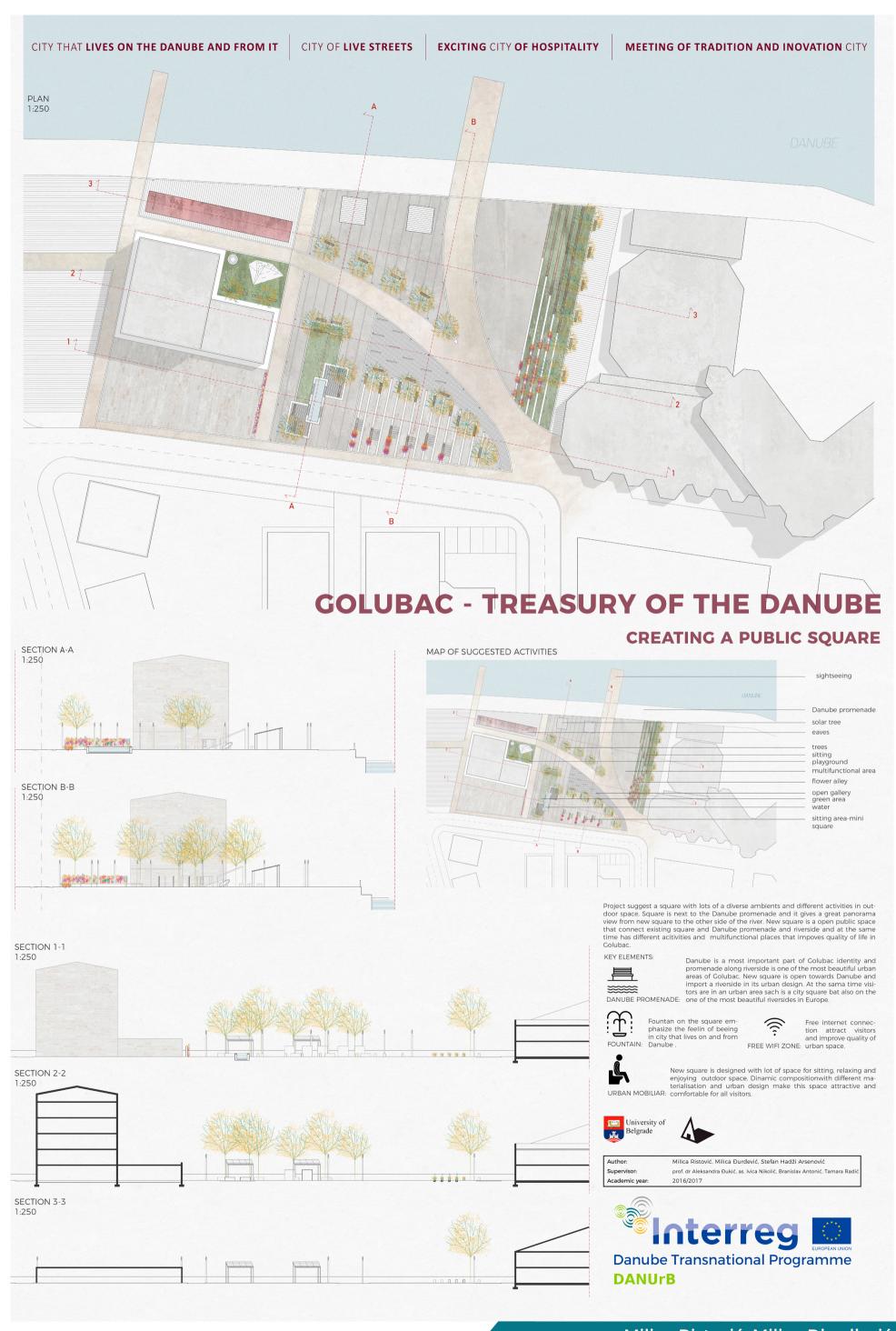
Scheme identification of functional sub-continent:



existing

Milica Ristović, Milica Đurđević, Stefan Hadži Arsenović prof. dr Aleksandra Đukić, as. Ivica Nikolić, Branislav Antonić, Tan



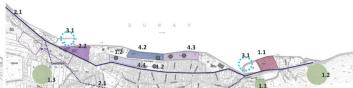




MAPPING OF THE PRIORITY GOALS FROM THE SCENARIO 1 GOLUBAC\_CONNECTED TOWN  $\,$ 



MAPPING OF THE PRIORITY GOALS FROM THE SCENARIO 2 GOLUBAC\_CULTURAL RIVERFRONT



MAPPING OF THE PRIORITY GOALS FROM THE SCENARIO 3 GOLUBAC\_CONTEMPORARY HUB







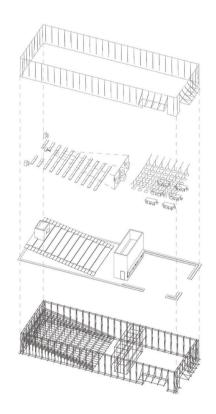
## **DOCK OF CULTURE**

GROUND FLOOR OF THE RIVERFRONT, R = 1:500

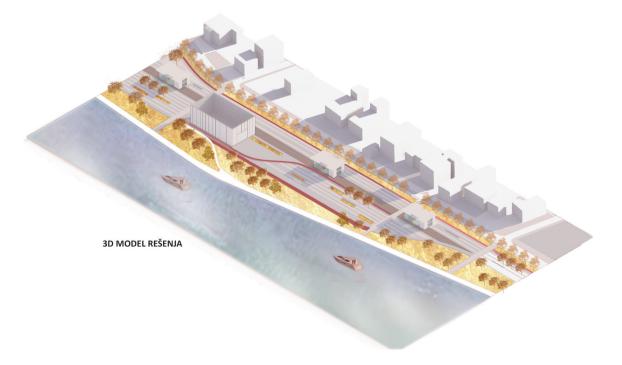




AXONOMERTY OF MULTIFUNCTIONAL PAVILION



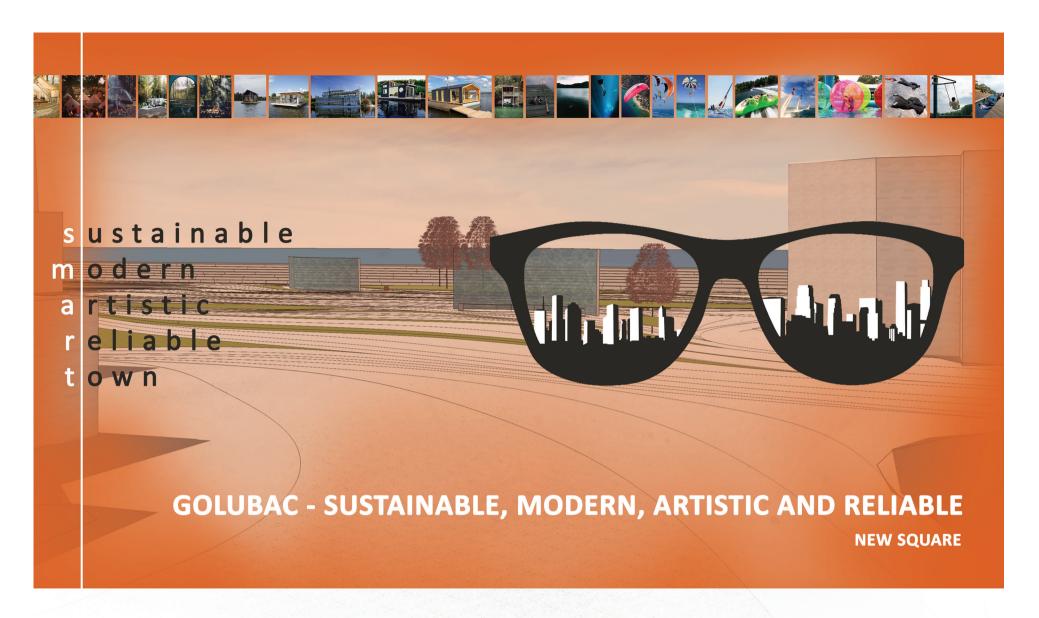
VIEW, R = 1:500

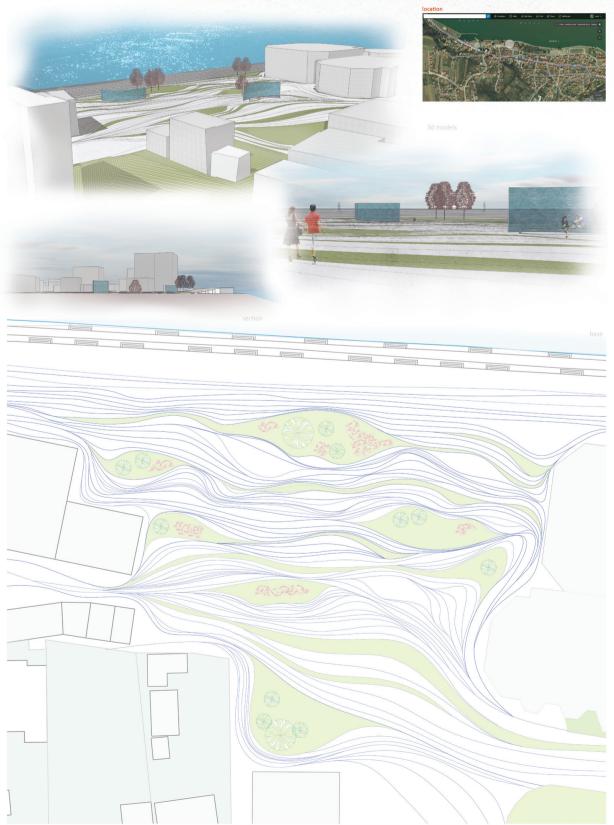








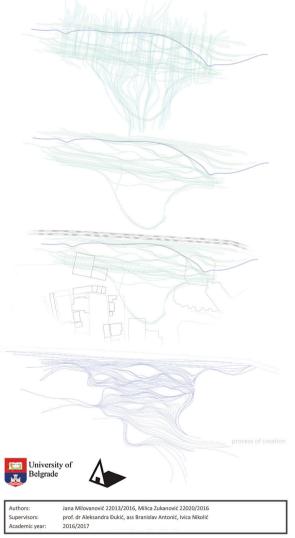




#### **PROGRAM GOALS**

\_\_NEW SQUARE
The space of the square in the transition between the two environments, water and land, conceived as intersfera, transient layer that contains elements of both sides, so treated, indication of new concept in the design of public spaces in this city. The ground floor is divided on curved surfaces which alternate with greenery in a direction parallel to the shore. This tangle of curves that are expanding and contracting in some places came from the basic idea of "expansion" of the river - curved areas suggestive of waves that are pushed into the depth of the square.

Within this grid is a pair of centers, defined as larger contiguous areas that are narrower at the ends and passes to said network. They are gathering places for residents and visitors, further emphasized furniture and materialization. "Water walls" are part of the vertical division of the space of the square to its transparency and design contribute to the vitality of the neighborhood. This network of green and paved area with clear rallying point represents a new and different space in the city.



## **ACKNOWLEDGEMENTS**

The editor of this catalogue wants to thank to the following representatives and experts from Golubac:

## Municipality of Golubac

- · Nebojša Mijović, president
- · Saša Bogićević, local development

## Tourist Organisation of Golubac

- Jelena Petrović, director (2017)
- Milen Bogojević, director (2018)
- · Biljana Dautbašić
- · Snežana Arsić Rakić
- · Sanela Stevanović
- Dragana Ćirković
- Aleksandar Djukić

## Golubački Grad" Public Enterprise

• Iskra Maksimović, director

## Golubac Town library:

- Jasmina Glišić, director (2017)
- Slavica Ilić, director (2018)

## "Lepenski Vir" Public Enterprise

· Vladimir Nojković, director





