

Historical and spatial analysis of Šibenik bunkers

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Abstract

This paper provides a historical overview of the emergence and establishment of a new defensive system during the first half of 20th century within the area of the City of Šibenik. Numerous field surveys, archival research and various new documentation made in recent years resulted in comprehensive analysis which details the construction phases of Šibenik bunkers, their typology based on the appearance and function, as well as their current condition.

The construction of bunkers represents the first serious investment in city's fortifications since The War of Crete (1645-1669), when the bastion-type fortresses of St. John and Barone were made. The first ideas about investment in new and modernization of the existing Šibenik fortifications came in mid-19th century, when Šibenik, along with Pula and Kotor, was considered one of the three main military ports of the Austro-Hungarian Empire. However, the actual realization and the construction of bunkers, the new fortification elements which defended the city, occurred in the Interwar period and during the Second World War. Numerous bunkers around Šibenik were built during the first Italian occupation (1918-1921), the Kingdom of SHS/Yugoslavia (1921-1941), during the second Italian occupation (1941-1943) and during the German occupation (1943-1944). After the end of the Second World War, the army of Socialist Yugoslavia built a series of military barracks, often using existing bunker infrastructure, making Šibenik one of the most heavily fortified cities in the region. Some of the bunkers were also used during Croatian War for Independence (1991-1995), especially during the attack on Šibenik in September 1991.

Keywords: Šibenik, bunkers, 20th century fortifications.

1. Introduction

European fortification architecture of the 20th century has been the subject of expert studies for a long time. They have provided good practice examples of valorisation, renovation and presentation, where bunkers and other structures were given other use, mostly a cultural one. Following these trends, interest in this topic is also being awakened in Croatia, especially when considering their primarily cultural and then economic potential.¹ The mouth of the river Krka, protected by many islands made Šibenik, since the earliest times, a great location for establishment of port infrastructure, while the city's hinterland could be safely observed from the hills around the city. Is not surprising that

Šibenik was home to several navies throughout the 19th and 20th centuries, and that due to its strategic importance, the wider city area has seen many recent battles (First and Second World War, Croatian Independence War). The dubious legacy of this era were hundreds of military structures, from simple trenches to imposing buildings, preserved in various forms to this day. One part of this infrastructure were concrete bunkers, an inseparable part of the cultural landscape of the city area (Fig. 1). Although they are currently completely derelict, they are the most numerous group of military facilities and a great cultural and economic potential for the future.

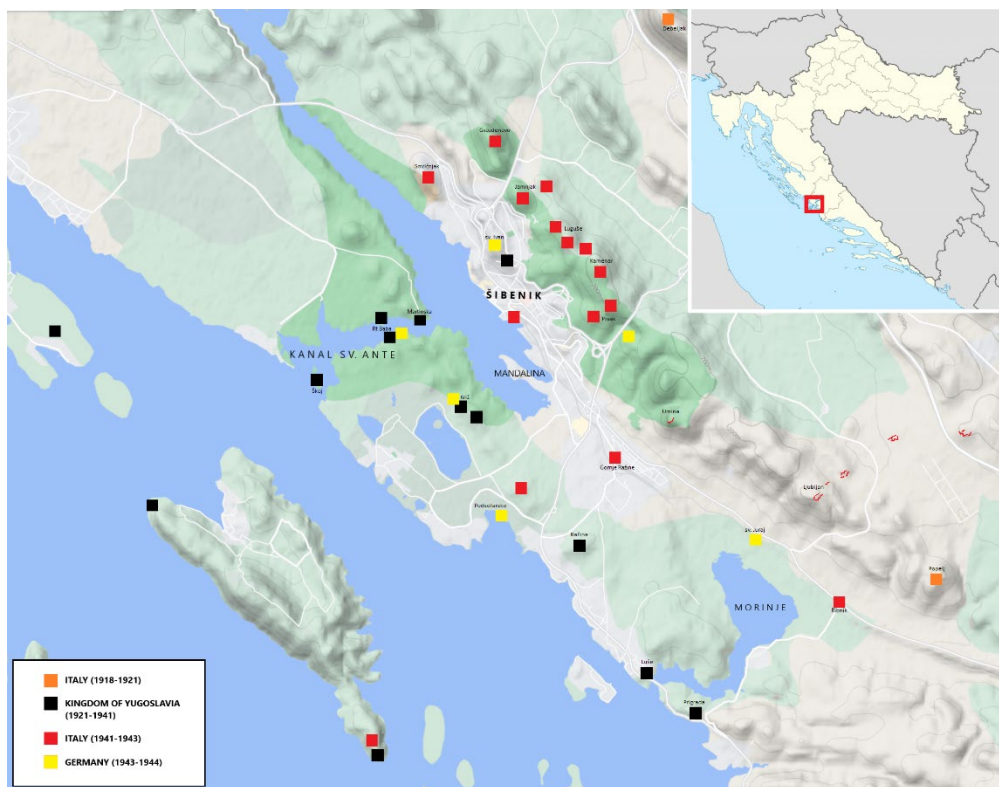


Fig. 1- The position of the bunker in the Šibenik area (graphic elaboration by Andrija Nakić, 2023)

2. From the Empire and the Kingdom to the Republic(s)

After the Cretan War (1645-1669), when Šibenik constructed the new bastion-type fortification system to resist the Ottoman attack (Pavić, 2019), no investments regarding the city's fortification architecture were made in the following centuries. Šibenik and its port regained the military importance at the beginning of the 19th century, after the establishment of the Austrian government (Isgrò, 2020). Along with Pula and the Bay of Kotor, Šibenik became one of the main naval centres of the empire. New military facilities were constructed on Mandalina peninsula and nearby coves Klobučac and St. Peter, in the southeastern part of Šibenik harbour. However, the defence of the harbour was still relying on the St. Nicholas Fortress, constructed in mid-16th century at the western entrance of St. Anthony Channel (Glavaš, 2017). Garrisons were also located on St. Michael's Fortress above the Old town (Glavaš, 2020) and St. John Fortress on a nearby hill (Glavaš, Pavić 2016). Šibenik was

considered a relatively secure port due to its location on the middle of Austrian-ruled eastern Adriatic coast. Thus, apart from the St. Nicholas Fortress and naval minefields between some nearby islands, the harbour was only protected by several cannon batteries located in St. Anthony's Channel and on Ražina hill (Zaninović, 2016). Unlike the one in Šibenik, the harbours of Pula and the Bay of Kotor were protected by a large number of newly built fortifications because they were located closer to the Empire's borders and more exposed to the open sea.

After the end of the First World War and the collapse of the old empires, Šibenik, like other Dalmatian cities, was for some 30 months (1918-1921) occupied by Italian Army (Grubišić, 1976). Some bunkers were made in that period and are still visible today. They are located on dominant hills, Debeljak near the village of Lozovac, and Popelj above the village of Donje Polje (Fig. 2), far outside the city centre. These are concrete half-buried bunkers with a horizontal opening for firing and monitoring. There may have been even

more bunkers from this period, but they could've been destroyed or adapted in later years. In mid-1921, the Italians withdraw and Dalmatia, with few exceptions, entered the Kingdom of Serbs, Croats and Slovenes, later known as Kingdom of Yugoslavia.



Fig. 2- Italian bunker on Popelj hill, Donje polje (Andrija Nakić, 2019)

Soon the Yugoslav Royal Navy initiated the construction of a series of well-fortified bunkers and cannon batteries along the coastline and on the islands. Unlike the Austrians, whose army had both offensive and defensive capabilities, the Yugoslav navy had a primarily defensive approach. In the event of maritime attack, it would rely on its fortified locations and powerful cannon fire. Similar strategy was applied to the defence of the land border towards Italy (Pachauer Volker 2014; Ajlec 2021).

In Šibenik area, fortifications and military facilities were raised on strategic locations, mainly hilltops overlooking the waterways between the islands of Šibenik archipelago. (Podrug et al. 2023). Between the city fortresses of St. John and Barone, several tunnels with overall length of more than 140 metres were carved into the rock, with enough space to accommodate personnel, equipment and weapons. One end of the tunnel, positioned towards the potential enemy, lead to the bunker equipped with rangefinder. Similar tunnels, with underground rooms and a rangefinder bunker, are located in two places on the slopes of the Križ hill, near the village of Zablaće, with cannon batteries and ammunition magazines nearby.

St. Anthony Channel was especially well-defended with many batteries on both banks and underground bunkers on the island of Školjić at the western entrance. A great number of bunkers

and trenches were built at the entrance of the strategically important Morinje Bay, which could provide protection for ships and seaplanes. Bunkers and batteries were also located on the already mentioned Ražina hill, as well as the islands of Zlarin and Prvić. Meanwhile, the most complex fortified concrete tunnels with the above-ground and underground batteries were constructed on the islands of Žirje and Murter.



Fig. 3- Yugoslav bunker on Križ hill, Zablaće (Andrija Nakić, 2022)

However, all these extensive fortifications did not help the Kingdom of Yugoslavia, which surrendered after just 12 days of fighting the German invasion in April 1941. Dalmatia, together with Šibenik, again fell under Italian occupation (Čulinović, 1961). The return of Italians marked the new, even more intensive phase in bunker construction.



Fig. 4- Italian bunker above the Crnica neighbourhood in Šibenik (Andrija Nakić, 2023)

The new bunkers were again constructed on dominant hills surrounding Šibenik, and were oriented towards the city's hinterland, the approaching roads and railway infrastructure. Various types of concrete bunkers in different sizes were placed to enable the visual communication. The two basic types were a large round bunker with a domed ceiling and a structure made of two smaller half-bunkers with an

elongated concrete chamber between them (Fig. 4). Such facilities were built on Smričnjak hill above the neighbourhood of Crnica, and Gvozdenovo hill above the neighbourhood of Meterize, both in the northern part of the city. Even more complex structures were made on the eastern approach towards Šibenik. Three round bunkers joined together by a concrete wall with loopholes were constructed on Jamnjak hill above the Šubićevac neighbourhood. The interior yard had a garrison. Similar complexes with four bunkers were made on the Groups of four bunkers connected by a wall are located on the nearby eastern hills of Luguše, Kamenar and Pisak. Their interior yards, along with garrisons, also had cannon batteries. Smaller bunkers or fortified trenches were set in the valleys between the hills (Oblak 2022). Railway infrastructure was especially important for the occupying power, so bunkers were also built along the railroad connecting Šibenik with other Dalmatian cities. A small round bunker can even today be seen 250 metres from Šibenik railway station (Fig. 5).



Fig. 5- Italian bunker near the railway station in Šibenik (Andrija Nakić, 2022)

After the surrender of Italy in the early September of 1943, the Šibenik was again occupied by the Germans, which remained there for 14 months. The city was liberated by the Yugoslav Partisan army on November the 2nd of 1944. (Barić, 2003). During that short period, the German army – besides using the existing bunkers – built their own defence structures. These were mostly *tobruk* bunkers, smaller concrete structures with a circular opening in the slightly domed ceiling (Ugolini, 2019). The new structures were set along the southeastern approaches to Šibenik, the area where a Partisan attack was expected (Vrpolje, Donje polje) but they were also placed along the coast to prevent a possible amphibious landing (Podsolarsko, Bilo). One *tobruk* bunker was built on Križ hill above the village of Zablaće

(Fig. 6), and another one within the western tip of the bastion on St. John Fortress in Šibenik. Apart from *tobruk* bunkers, Germans excavated hundreds of metres of trenches around Šibenik, again with the goal of monitoring the unavoidable Partisan approach. One of the most attractive structures is a 70-metre-long underground tunnel directly below St. John's Fortress, which again ended with a rangefinder.



Fig. 6- German *tobruk*-bunker on Križ hill, Zablaće (Andrija Nakić, 2022)

Another distinct facility that the Germans started to build is a torpedo boats hideout on the southern coast of St. Anthony's Channel (Fig. 7). It is a 150-metre-long tunnel with two entrances, and was allegedly finished by the Yugoslav Army after the end of war. The local population has, for many decades up to today, called the tunnel openings "Hitler's eyes".



Fig. 7- The view within "Hitler's eyes", St. Anthony's Channel (Andrija Nakić, 2022)

After the end of Second World War, the bunkers and other military facilities were taken over by the Yugoslav Army. The Italians were perceived as a serious threat for the next several decades, so the strategic importance of Šibenik continued. Many of the previously fortified locations in and around Šibenik were actively used from 1945 until the breakup of Yugoslavia in 1991. Šibenik

was also surrounded with many barracks and military warehouses. At the outbreak of the Croatian Independence War in 1991, Šibenik was attacked and besieged by Yugoslav National Army in September. The defending Croatian army occupied the old Italian bunkers on Smričnjak hill above Crnica, the artillery posts and barracks on the island of Žirje (Livaković, 2009), along with many other locations and successfully defended Šibenik. The war ended in 1995 and most of the bunkers were abandoned. Only the Kamenar hill bunker is partially functional today as a telecommunication base.

3. Conclusions

The topic of bunkers and similar recent fortification structures requires a systematic study of historical sources, but also material remains inevitably left behind by armed conflicts. As a response to the rapid development of artillery, and later aviation, military engineers have developed a whole spectrum of various defensive solutions which were improved, upgraded or even abandoned over time. Šibenik is a great example of different military doctrines (in response to various historical circumstances) designing the defence of strategically important area, adapting to local settings, such as the hilly terrain and the irregular coastline. The Šibenik area provides an

ideal terrain for studying the cultural landscape, using historical sources and combining it with archaeological findings. We have many examples today where bunkers are becoming heritage objects for public and cultural use, giving us the hope that these concrete relics of the past will never serve their original purpose again.

Notes

(1) One of the Croatian best examples of the revitalization of military infrastructure are the Zerostrasse tunnel in the city of Pula, the bunkers of the cities of Rijeka and Zadar presented within the REVIVAL, Interreg project of revitalization and reuse of lost heritage. Several other similar projects are waiting financial sources for realization.

(2) In order to give meaning to the fortification architecture of the 20th century of the city of Šibenik and its surroundings, the Public Cultural Institution Fortress of Culture has been conducting historical research and field survey of bunkers and other accompanying infrastructure for the last two years. This research resulted in a list of all the structures discovered so far, together with the found condition, GPS coordinates, the historical context as well as ground plan and cross section drawings that are still being made.

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