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Fig. 1 View of the town of Ploče, area of Lower Ploče

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Urban Genesis of a Modern Port-Industrial Town on the Adriatic from 1945 to 1990 — Ploče, Croatia

ADRIATIC PLOČE, CROATIA PORT-INDUSTRIAL TOWN URBAN GENESIS

Based on the urban planning historical and comparative method, the paper gives a concise overview of the urban genesis of Ploče, a new port-industrial town, built in the 1945-1990 period. As the youngest town on the Croatian part of the Adriatic coast, it developed after the demanding and extensive works on the regulation of the Neretva River and the construction of the Sarajevo-Ploče railway line to meet the needs of the port. Within the framework of social planning and

on the basis of urban development plans, which involved mostly Croatian urban planners, a new town was soon built on a previously undeveloped rocky and swampy area. 80 years after the idea of a new town, the urban planning of Ploče undoubtedly represents the urban heritage of Modernism. The specific spatial identity can be presented for the needs of tourism and used for sustainable development planning.

INTRODUCTION

n the long fact-oriented urban planning documents on urban settlements on the Croatian territory planned for more than 25 centuries¹ (Obad Ścitaroci, Bojanic Obad Ścitaroci, 2018; Karać, 2020: 217), there are still some cities whose urban genesis has not been sufficiently researched. That is why they have not been regarded as heritage and placed in the function of sustainable development.²

Cities which were planned and built in a relatively short time and were a result of strategic objectives are not a novelty on the Croatian territory and can be found throughout the history of urban development. The reasons of their creation may be a result of one or more factors (political-military or political-economic factors, transport or health tourism factors, religious factors, etc.). For example, Greek colonies on the Croatian side of the Adriatic founded new towns such as Vis (Issa), Stari Grad on Hvar (Pharos), etc. Pag and Ston were created later as planned towns. Karlovac (1579), Osijek (1712), Slavonski Brod (1715), Nova Gradiška (1748), Bjelovar (1756), Pula (1856), etc. were founded as military cities. Kaptol and Dakovo were founded for religious purposes. In the late 19th and early 20th century, the Croatian territory went through numerous modernisation processes and cities were founded for industry purposes. Among them are Durđenovac (1866), Belišće (1884), Duga Resa (1884), San Pietro / Uble on the island of Lastovo (1931-1936), Bata ville / Borovo near Vukovar (1931-1938), Mandre on the island of Pag (1936-1941), Raša (1936/1937), Pozzo Littorio / Podlabin (1940-1942). Lipik (1867) and Opatija (1882) were founded as health resorts. There were also planned reconstructions, such as the one after the Dubrovnik earthquake in 1667, marked by a new spatial structure (Karać, 2020). The urban genesis of the said towns has been more or less researched, and some of it has been recognized as valuable urban or architectural heritage and presented partially or more fully for the needs of tourism and/or sustainable development.

The planned construction of new settlements was not completed even after World War II, when Croatia was part of the socialist Yugoslavia. New cities were founded in each of the republics³, including Croatia. For the purposes of the military industry, a new town, Licki Osik, was planned and founded (Kranjčević and Božić, 2012, 2014), as was Ploče, which served as an Adriatic port (Fig. 1).

The issue of urban planning and technical-technological experiments in the urban planning and architecture of socialist Yugoslavia is still a very current topic that is also being researched abroad, as shown by the large exhibition on Yugoslav architecture (Toward a Concrete Utopia: Architecture in Yugoslavia 1948-1980) held in early 2019 at the prestigious New York Museum of Modern Art. The great interest of international experts and visitors only indicates that the urban and architectural heritage in which Croatia occupies an important place is still insufficiently researched and presented.

The aim of this paper is to research the urban genesis of Ploče as the youngest planned port-industrial town on the Croatian part of the Adriatic in the context of the 1945-1990 regional and urban planning, and to determine whether the urban genesis represents heritage, what valuable characteristics it has and whether it can win recognition and support development. Several methods were used to research the urban genesis of Ploče,

A scientific project entitled Heritage Urbanism, funded by the Croatian Science Foundation, was carried out at the Faculty of Architecture of the University of Zagreb 2014-2018, in which models of urban revitalisation were considered. The need for this type of research was indicated in the 1988 preface to Lewis Mumford's book The City in History, in which he stated that he was unfamiliar with the urbanism of the cities of Eastern European countries

² European Union, Cities and regions driving high-quality architecture 2023, https://data.europa.eu/doi/10.2766/833321. Accessed on 29/06/2024.

³ Velenje (Titovo Velenje) and Kidrićevo near Ptuj are the new cities founded in Slovenia. Novi Travnik

such as the urban planning historical and comparative method (to explain the construction of the port by providing the regional context and comparison with other cities) and the analytical method (for the analysis of the physical planning documentation, partially preserved in various institutions). The inductive-deductive method was used to form a conclusion in order to determine the urban genesis as heritage and to valorise it.

The research on the urban genesis of Ploce had certain limitations as there was no access to the spatial planning documentation. which was either lost or destroyed and which would have been used to gain a more complete insight into the creation of the town. Different names (now outdated) used for same-level urban development plans (e.g. directive basis, regulation plan) also represented a challenge. In addition, the archives of the Urban Planning Institute of the Socialist Republic of Croatia, which are located in the State Archives in Zagreb, have not been preserved in their entirety. The part missing is the one that refers to the period immediately after World War II. Another limitation is the fact that the Town of Ploce changed the scope of the town and the regional context due to the changes in socio-political and economic circumstances in the 1990s. Ploce often changed its name; during the Austro-Hungarian Monarchy it was called Porto Tolero ("transshipment port" in Italian), in the Kingdom of Yugoslavia up to World War II its name was Aleksandrovo (after King Alexander I Karadordevic), and during the 1943-1945 Italian occupation its name was changed back to Porto Tolero. During socialist Yugoslavia, its name was again changed several times; it was called Ploče 1945-1950, then Kardeljevo 1950-1954, Ploče 1954-1980, and Kardeljevo again 1980-1990. In 1990, its name was once again changed to Ploce, and has been in use ever since (Kovačević, 1996).

LITERATURE REVIEW

The urban genesis of the youngest town on the Croatian part of the Adriatic has surpris-

(formerly Pucarevo) and a large expansion of the prewar industrial city of Vogosće near Sarajevo were built in Bosnia and Herzegovina.

- 4 A discussion on the economic justification is noticeable in the listed publications, as is a discussion on the selection of the best quality solutions for the river regulation route and the railway line for the construction of the port.
- 5 Given that the regulation of the river, the construction of the railway line, the port and the city itself were capital investments, they took several decades to be realised. Despite the economic justification, the investments were halted with the two world wars.

ingly remained overlooked by both national and international researchers. As a result, there is a notable absence of papers that are at least tangentially related to its urban development. The first ideas on why the contemporary port of Ploce (Porto Tolero) should be built and its connection with the railway can be found in Austro-Hungarian magazines after the 1878 occupation of Bosnia and Herzegovina. The variants of the routes of the new railway line and the connection with the port can be read about in different publications from 1878 to 1973 (*** 1878a; *** 1878b; Žezula, 1898; *** 1905; *** 1911; *** 1912/1913; Wessely, 1973).4 The plans and the projects needed good-quality geodetic bases, so the delta/mouth of the Neretva River was surveyed during the second military measurement (1865-1896).5 In Croatia, the most important papers on the regulation of Neretva are the papers by Szavits-Nossan from 1939 and Vujasinović from 2008, which reveal information regarding demanding construction and reclamation works (Szavits-Nossan, 1939a, 1939b; Vujasinović, 2008). Geographer Curic's work mostly focused on the transformation of the seaside towns and villages under the influence of tourism of the Lower Neretva, including Ploce. Through his longitudinal research, he offered a review of the tourist traffic and the most important information on the natural and cultural heritage (Curic, 1989, 1994). As a passionate collector of the documentation on Ploce, Ante Kovacevic published various books on specific topics, including the development of the school system and the heritage of the surrounding towns, which also offered other information on Ploče (Kovačević, 1989, 1992, 1994, 1996, 2003, 2004); however, he did not cover the urban genesis of the new town. The most important papers regarding the port of Ploce and its regional context are papers by Jelinović from 1957, Dobrincić from 1959, Žuljić from 1978, Kojić from 1983 and Smoljan from 1996. Ivo Oreskovic pointed out the importance of the archival documentation of Ploce as an important source for various kinds of research, even though he created an inventory list of the remaining documentation of the Ploce archives (Oreskovic, 2020, 2022). Numerous civil engineers from Croatia participated in complex projects on the regulation of the Neretva, whose realization contributed to the improvement of the working and living conditions of the local population, such as Ante Celegin, Frana Hekman, Dinko Volarić, Viekoslav Vlašić, Branko Pejaković, Tomislav Ramljak and others (Martinovic, 2011). The potentials of the construction heritage of the rural areas of the Neretva Valley and the guidelines for their revitalisation

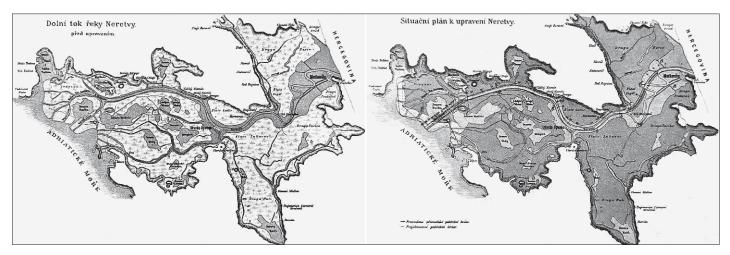


Fig. 2 The Neretva before (left) and after regulation (right)

were considered during the European project CO-EVOLVE (APE, 2019).

The starting points of the urban genesis of Ploče is an article published in 1955 in the magazine Arhitektura (*** 1955) and two books by the Urban Planning Institute of Croatia which contain an exhaustive list of physical plans which were made for Ploče but have not been found (Urban Planning Institute of the Socialist Republic of Croatia, 1987; Urban Planning Institute of Croatia, 1997).

ASSUMPTIONS AND CONDITIONS FOR THE CONSTRUCTION OF THE PORT AND ITS REGIONAL CONTEXT

Throughout history, the location of the settlements on the Neretva River delta was conditioned by various factors (geographical, political, economic, social, and cultural). Most often they were founded on the borders of fertile valleys. With the development of technology, certain settlements were founded along routes (waterways, roads, and railways). Those on the crossroads of various routes, such as Metković, obtained a larger role and importance.

With systematic and long-term regulation of the Neretva, its navigable route had been increasingly exploited, and the idea of building a port at the river's mouth into the sea developed. Simultaneously with the construction of the port, the idea of building a new town was being considered. The new city would become one of the centres of this area and bring significant changes to the region that previously had predominantly rural characteristics (Urban Planning Institute of Dalmatia, 1973; Curic, 1989, 1994).

Although the Neretva regulation plans date back to the beginning of the 17th century, they mostly deal with the navigability and the

flood defence system. In the late 19th and early 20th century, the Austro-Hungarian Monarchy was exploring the possibility of economic development of its southern parts (Dalmatia and Bosnia and Herzegovina) through the development of industry. However, various prerequisites needed to be fulfilled, which included those related to transport. The projects were interrupted by World War I. With the completion of the regulation of the Neretva in its lowest reaches, as well as with the construction of the railway line and the road to Ploce, the prerequisites for the planning of the new town were fulfilled. In addition to the regulation works, reclamation works were also carried out because they reduced the negative consequences of floods and therefore of malaria (Dobrinčić, 1959: 68; Smoljan, 1988, 1996; Vujasinovic, 2008; Fig. 2).

In 1936, between the two world wars, architect Boris Karakoz drew up the projects for the construction of the harbour operational coast in the bay of Ploce and the railway line to Ploce because Metkovic (20 km from the mouth of the Neretva) did not meet the conditions for a port town (Kojic, 1983; Curic, 1994; Kovačević, 1994; Smoljan, 1996). The construction of a narrow-gauge railway line from Metković to Ploče started in 1937. In 1942, during World War II, the Metković-Ploče narrow-gauge railway line was put into operation, and it was modernised in 1966 with the Sarajevo-Ploče broad gauge (Kovačević, 1996: 48-49). The port was serving the whole hinterland, an area in Bosnia and Herzegovina and the eastern part of northern Croatia, as

⁶ The Vladimir Gortan railway construction company from Croatia carried out the works on one part of the route through Bosnia and Herzegovina between the stops Gornji Grad and Ćelebica, as well as the construction of the railway junction in Konjic.

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well as a part of Vojvodina and Serbia (Dobrincic, 1959; Fig. 3). All this indicates that the building of Ploce should be viewed in a regional context (Vresk, 1990). With the development of the regional planning methodology, i.e. the coordination of different sectors (transport, physical planning, tourism, etc.) and after World War II, Ploce was viewed in a regional context. The works on the modernisation of the railway from Sarajevo to Ploce were done in early 1960s⁶ (Kukic, 1963; Staklarevic and Štefanac, 2015). Construction was also focused on the building of the Adriatic road which was the greatest investment in Croatia at the time (Jancikovic, 1965). Investment in the transport infrastructure and the port resulted in a sharp increase in freight transport and made Ploce one of the most important ports in the Socialist Federal Republic of Yugoslavia, right after the port of Rijeka and more important than Split and Koper (Kojic, 1983: 121).

The regional significance of Ploče was supported by the Regional Physical Plan of the Southern Adriatic (Regionalni prostorni plan Južnog Jadrana - RPPJJ; UN and Government of Socialist Federal Republic of Yugoslavia, 1968; Zeković, 1971; Vušović, 1971; Kostić, 1971). In that plan, the Neretva Valley was considered as one of the six subregions with the Sarajevo-Metkovic-Ploce centre. Due to the rapid economic development and population migration, towns and villages on the Neretva delta demonstrated a strong growth, and the 1968 RPPJJ planned that around 25,000 inhabitants would live on the territory of the then Municipality of Ploce in 2000. The development guidelines set out by the RPPJJ were taken into consideration in the next generation of state-level physical plans made in 1974 and 1989 (Republican Secretariat for Urban Planning, Construction, Housing and Communal Affairs of the Socialist Republic of Croatia, 1974; Republican Committee for Construction, Housing and Communal Affairs and Protection of the Human Environment, 1989), as well as in lower-level plans, such as the Master Plan of Ploce and the Physical Plan of the Municipality of Ploce (Urban Planning Institute of Dalmatia, 1973, 1982). The littoralisation, urbanisation and industrialisation processes resulted in the settlement of young and active population in the area. In just over 40 years, the population in Ploce increased by around 8.6 times (Table I).

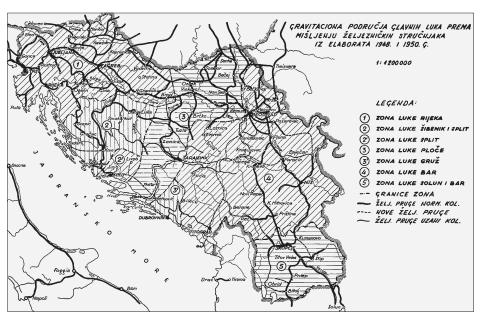


Fig. 3 Gravitational area of the ports of socialist Yugoslavia

TABLE I POPULATION FLOW IN THE TOWN OF PLOCE 1948-1991								
Year	1948	1953	1961	1971	1981	1991		
Number of inhabitants	727	1,657	3,102	4,405	5,318	6,324		

Note: In 1948 and 1953 the town was listed under the name Kardeljevo, in 1961 and 1971 under the name Ploče, and in 1981 once again under the name Kardeljevo. In 1991, the Ploce area was reduced by removing a part of the villages which became part of the Peracko Blato area. Source: Croatian Bureau of Statistics, Settlements and population of the Republic of Croatia 1857-2001. https://web.dzs.hr/Hrv/DBHomepages/Naselja%20i%20stanovnistvo%20Republike %20Hrvatske/Naselja%20i%2ostanovnistvo%20Republike%20Hrvatske.htm. Accessed on 28/06/2024.

URBAN GENESIS OF THE NEW TOWN

Geographically, Ploce is situated 43002'N and 17026'E, in a well-protected natural bay of the Neretva delta. The harbour is approached through a 100m-wide canal at Cape Bada or a 150 m-wide canal at Cape Višnjica. The depth of the harbour is 11.5 m.

On 15 July 1945, the Regional People's Liberation Committee for Dalmatia in Split reached a Decision on the Construction of the Town and the Port, which resulted in its fast planning and the construction of the new town (Kojić, 1983).7 During the process of designing the town, two concepts were considered; the linear and the homogeneous type of a town. Having taken into consideration its relief, routes of roads and waterways, as well as other limiting factors, the idea of a linear town was abandoned and the concept of a homogeneous town was chosen because of the natural ambience and functional connectivity of the town located on the southwestern slopes of Stražnica hill, which has a slight amphitheatre shape (Urban Planning Institute of Dalmacije, 1973). In order for the town to function, it was necessary to build electri-

Although the narrow-gauge railway line to the port was destroyed in several places during the war, in October 1945 it was reconstructed, and the reconstruction of the coastline was started to allow the arrival of cargo for the steelworks in Zenica (Bosnia and Herzegovina).

Year	Name of physical planning documentation	Responsible planner / Source		
1947-1948	Detailed Regulatory Plan of the Port and Town of Ploce	Tankred Lubinsky / *, **, *****		
1949-1952	Conceptual Urban Design of the Settlement (Priśnica), Ploče	Tankred Lubinsky / **		
1954	Historical-Urban Development Kardeljevo, studies – research	- /*		
1954	Conceptual Study of the Master Plan of the New Town	Branko Vasiljević; Branko Petrović; Miroslav Kollenz; model: Hasan Zukanović; photo: Zvonimir Barbarić / *******		
1954	Regulatory Basis for the New Town Ploce Port	Branko Vasiljević and Branko Petrović / *******		
1954	Conceptual Design of the Town Center with a Horticultural Solution for the Area and Space Around the Pier	- / **		
1957	Urban Development Plan of the New Town	- /**		
1960	Directive Urban Development Plan of Ploče I	- / ***, **** Box 6/26		
1960	Directive Urban Development Plan of the Town of Ploče II	- / Projekt Zagreb / ***, ***** Box 7/27		
1960	Urban Design V. and M. Milosavac (Residential Neighbourhood)	Projekt Zagreb / ***		
1963	Detailed Urban Development Plan	- / **** Box 16/46		
1964	Detailed Urban Development Plan of Ploce	- / **** Box 11/29		
1964	Regional Physical Plan of the Drvenik – Gradac Coastal Strip and the Bacinska jezera Area	_ /*, ***		
1967	Decision Replacing the Regional Coastal Area Plan of the Municipality of Metković	- /*,***		
1967	Ploče – Velike Bare Residential Neighbourhood	- / ****		
1967	Projects – Prišnica-Stražnica	- /***		
1967	Projects Mali Milosavac	_ / ***		
1968	Conceptual Design of the Gradina Center and Settlement	_ /**		
1970	Urban Design Project – Analysis of the Wider Area	- /**		
1971	Urban Design Project	- / **		
1973	Master Plan of Ploče	Berislav Kalogjera, Srđan Truta / ***, ****		
1980	Detailed Urban Development Plan for the Laguna – Jadran Tourist Resort on the Neretva mouth	HR-HDA-2039 Urban Planning Institute of Croatia, Box 720		
1982	Physical Plan of the Municipality of Kardeljevo until 2000 – Final report	***, ****		
1987	Amendment of the Physical Plan of Kardeljevo	Boris Fantella / ****		
1987	Amendment of the Master Plan of Kardeljevo	Boris Fantella / HR-HDA-2039 Urban Planning Institute of Croatia, Box 716 ****,		
1987	Spatial possibilities	Srdan Truta / Urban bureau of Split, URBS 1947-1967, 20 godina urbanisticke organizacije [20 Years of Urban Organisation], Split, 1967		
1987	Spatial Location of Kardeljevo as a Transport, Production, and Distribution Hub in the Central Adriatic	– / Urban bureau of Split, URBS 1947-1967, 20 godina urbanisticke organizacije [20 Years of Urban Organisation], Split, 1967		
1987	Detailed Urban Development Plan of Strażnice – Mali Milosavac	Germano Mitrović / ***** Box 51/114; URBS 1967		
1987	Detailed Urban Development Plan of Brist for Slakovac	- / *****, Project, Box 187/353		

Processed by authors. Sources: * Urban planning institute of the Socialist Republic of Croatia, monograph, 1987; *** Urban planning institute, 1997; *** Urban planning institute of Dalmatia, 1973; **** Matošić, 2012; ***** The town of Ploce, Archives; ****** Milas, 2011; ******* The Official Gazette (Narodne novine – NN), 1955

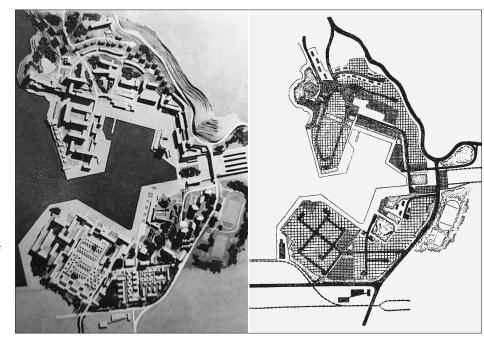
cal, water, sewage and telephone networks and introduce a waste collection system.8

The town is divided by the Crna Rijeka, a sidearm of the Neretva. To the south of the Crna Rijeka are the port and Prišnica, or lower Ploče, to the north Stražnica, and to the northwest the Milosavac peninsula, or upper Ploče.

The construction of the new town can be divided into two basic spatial areas, although they are interconnected in various ways: the port (later also industrial complexes) and the town. The port is located in the southern part of the town and in the flat part of the Neretva delta and occupies the largest area of the town. Adjacent to it, there are complexes which are in the function of the port and serve for storage, as well as industrial complexes. Massive cranes dominate the view of Ploce. In the northern part of that area, a ferry pier from which now operates the ferry line Ploče-Trpanj on the Pelješac peninsula was built. South of it is the current terminal of the Port of Ploce and the Port Authority. The expansion of the port, as an incentive for the creation of the new town, has not been realised to date, although the project for it was made back in 1966 (Smoljan, 1966: 169).

In the first decade after World War II, various kinds of plans were drafted for the new town (Table II) because the situation on the ground required certain changes during construction (Figs. 3-5). For example, the sports and recreation area originally planned east of Prisnica was realised on a regulated swampy area then called Bara (Pond). The streets of the new town were laid out on the southern slopes of Straznica following isohypses that are connected to each other by public pedestrian stairs. Although the plans included public and social buildings and buildings for sports and recreation, the construction of residential buildings was prioritised. The pace of the construction of the new town can be seen from comparative aerial photographs of the State Geodetic Administration taken in 1960, 1966, and 1968 (Figs. 6-8).

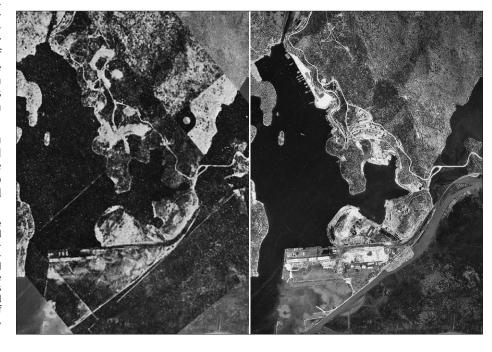
Few physical planning documents have been saved, namely those from the 1970s and 1980s. Those plans and the publication of the Urban Planning Institute provide insights into the process of the preparation of the physical



planning documentation presented in Table II. Projektno poduzeće Projekt from Zagreb was hired, along with the Urban Planning Institute which drew up plans for the town, for planning and designing the port and providing knowledge of the technical and technological process. During the 1970s, the Urban Planning Institute of Dalmatia was hired to draw up plans (Urban Development Bureau of Split, 1967; Urban Planning Institute of Dalmatia, 1973; Matošić, 2012).

Fig. 4 Photograph of the model of Ploče (left) and the first known town schema (right), 1954

Fig. 5 Comparative arial photographs, orthophoto, Ploče, 1954 (left) and 1960 (right)



⁸ The water supply network uses water from the Klokun source (minimum capacity: 150 l/s), and until 2000 its capacity met the needs of the growing population. In the event of the construction of new industrial plants, new water extraction locations would need to be explored. Electricity is supplied from the Opuzen electricity substation. The cemetery was planned along the Adriatic road, next to the small church of St George, and the landfill is located west of Ploce. See the Urban Planning Institute of Dalmatia, 1973: 138-140.





Fig. 6 Comparative arial photograph, orthophoto, Ploče 1966 (left) and 1968 (right)

According to architect Dinko Milas, the first concept of the town is associated with Tankred Lubinski from the Urban Planning Institute from Zagreb. He was the son of the prominent architect Rudolf Lubinski (Milas, 2011). In mid-1950s, architects Branko Petrović, Branko Vasiljević and Miroslav Kollenz, who were also employed at the Urban Planning Institute, worked on the urban development plans (*** 1955). With the strengthening of the Urban Planning Institute of Dalmatia, located in Split, the drafting of the new generation of physical planning documentation was entrusted to architects Srdan Truta, Berislav Kalogjera, Boris Fantella and Germano Mitrovic from Split (Urban Planning Institute of Dalmatia, 1973; Matosic, 2012). "Srbija projekti" from Belgrade worked on the detailed urban development plans.

FIG. 7 PHOTOGRAPH OF UPPER PLOČE (NORTHERN PART)

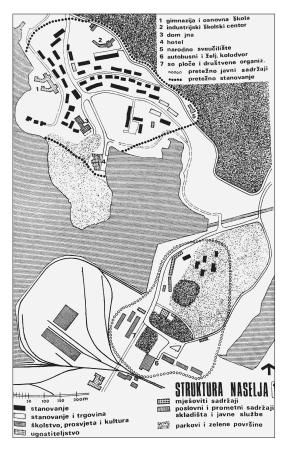


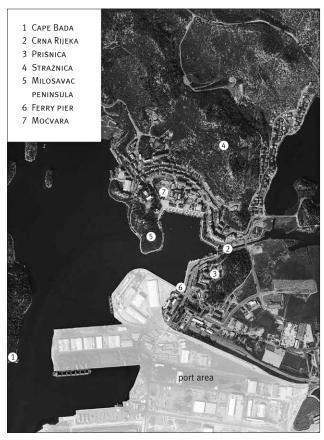
Due to the change in the character of Ploce and other towns and villages in the Neretva Valley in the late 1960s, further expansion of the town was planned. There was some consideration of a conurbation that never materialised. The first residential stone buildings in Ploče were built on Prišnica hill in 1947, south and above the Neretva side-arm, also known as the Crna Rijeka. In the northern part of the town, on Stražnica, a series of multi-residential buildings and public and social buildings were gradually constructed. The arrangement of buildings on the sloped terrain was designed to provide residents and users with open views to the south, towards Ploče Bay, in accordance with the principles of modern urbanism and architecture.

A series of longitudinal buildings of a smaller scale was being constructed parallel to the terrain contour lines, visible in aerial photographs from 1960 (Figs. 6-8). The arches of the winding streets, Vladimir Nazor Street and Rogotinska Street, or three zones of smaller residential buildings follow the terrain contour lines, i.e. the arch of the original bay, before shore embankment. A 1955 longitudinal high five-storey building by Ivo Gersić (T. Pl. /Premerl/, 1988), colloquially called Blok, dominates the area above the series of the small-scale residential buildings. Most residential spaces have open views of the port and the bay, and have a southern orientation, in accordance with the principles of modern architecture. Initial architectural research showed that projects in Ploce were made by prominent Croatian architects Ivo Vitic, Lovro Perkovic, Zoja Dumengjic, Ivo Geršić, Mladen Frka, and others.

The new town was faced not only with challenges in construction, but also social living conditions, which is why an important criterion in the planning phase was to find the optimal solution for the establishment of all functions to form a cohesive organism (Urban Planning Institute of Dalmatia, 1973: 97). The citizens of the rapidly growing town faced various challenges, which was especially evident in the 1960s, as there were no public or social amenities - shops, markets, cultural buildings, public spaces, etc. That is why sociological research was conducted in the early 1970s by surveying the local population about their needs (Urban Planning Institute of Dalmatia, 1973). In brief, due to the intensive construction of residential buildings and a growing population influx, the new town needed the construction of its social and

⁹ The Neretva Valley experienced a landscape transformation through the reclamation of agricultural land for the cultivation of citrus fruits, which was cofinanced by the FAO.





public facilities (health centre, schools, cinemas, shops, etc.), involving many Croatian architects.

CONCLUSION

Ploce, the youngest town in the Croatian part of the Adriatic, certainly has a specific urban genesis compared to other cities because its urban planning (and its architecture) is not defined by ancient, medieval, or other historical layers, but by its town, constructed in the second half of the 20th century with a very favourable geographical position. They town went through a big construction expansion after World War II, although the technical prerequisites for the construction of the new town (the regulation of the Neretva and the construction of the railway line) were fulfilled in the previous periods. The new town expanded on the previously empty, undeveloped, rocky and partially swampy land to the east and the north by initially relying on the port and later on industry. Thanks to great investments in the port of Ploce itself during socialism, the port became the second busiest port for cargo transport in socialist Yugoslavia.

80 years later, the urban genesis of Ploce can be considered urban heritage and potentially a cultural asset from the socialist period, while the architecture needs to be researched in more detail. Its urban value can be assessed through spatial and structural completeness, urban stylistic characteristics, landscape position, and town image. All these values give it a specific urban identity of a town that was built in the second half of the 20th century. As a town with a homogeneous concept, its stylistic characteristics are related to the period of Modernism, which is evident in its position in the landscape, the appearance of the town, and the arrangement of its streets and buildings.

In addition to previously fulfilled prerequisites (regulation of the Neretva and the construction of the railway), the construction of Ploce in the first two decades after the Second World War rapidly changed the existing landscape of the Neretva delta through the construction of the port and city, as well as agricultural areas.9

The urban concept of Ploce is still visible, although it was degraded with a number of interpolations in the last decade of the 20th century and with unsystematic interpolations in the first two decades of the 21st century. Therefore, it is necessary to go through a detailed process of documenting, researching

Fig. 8 Structure of Ploče

FIG. 9 TOPONYMS OF THE CITY OF PLOCE

and valorising the town because that is the basis of the future registration of the town as an urban heritage site.

In Croatia, Ploce is thematically comparable to Raša, Podlabin and Bata-villas (although they were built between the two world wars). Temporally it is comparable to Licki Osik and geographically to cities that emerged on river deltas or at their mouths, such as Solin at the mouth of the river Jadro, Omis at the mouth of the river Cetina, Rijeka on the delta of the Riečina, Šibenik on the river Krka, etc.

In the beginning, Ploce was developing mainly as a strong transport and industrial centre. and public and social facilities (a health centre, educational, sports and recreational facilities, shops, cultural centres, a market, a hotel, etc.) were built along with residential buildings. From the last quarter of the 20th century, tourism has been increasingly developing in the town and beyond thanks to the construction of hotels and people's recreation on nearby lakes and in nearby rural areas.

Ploce, like other new cities, was subjected to new economic conditions (profit) through competitiveness and sustainability. In the increasingly weak economic conditions of life and work, the history of the town is burdened by its political past, and not even its urban and architectural heritage, which can be used as a tourist attraction, is recognised. Considering that the urban development and the architecture of Ploce are the heritage that should be affirmed through the heritage of modern urban planning, it should be affirmed in the context of heritage and valorisation as a valuable part of the town's identity, as well as a contribution to its increased tourism. Like many other cities built or significantly expanded during socialism (1945-1991), Ploce is subjected to new conditions and its urban history seems to be neglected.

Although numerous UN and EU documents connect heritage and sustainable development, heritage has not been recognised as a tourist attraction and it has not been used in the recognition of the spatial identity of Ploce. The architectural heritage of Modernism is also a value yet to be researched and valorised. In further research, the goal is to research in more detail and valorise the architectural achievements of architects from Croatia and the surrounding countries who gave their contribution to Ploče.

New cities undoubtedly require new approaches, incentives and design proposals for their existence and further development. However, it is necessary to consider their specific geographical and spatial characteristics, as well as economic, social and cultural potentials.

[Translated by Prof. Ana Uglesic]

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- Figs. 7-8 Generalni urbanistički plan Ploče 1973 made Urbanisticki zavod Dalmacije (Urban planning institute of Dalmatia). Two letters were sent to the City of Ploce in May and June 2024. They did not respond and they are considered to be in agreement.
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