PROSTOR

32[2024] 1[67]

A SCHOLARLY JOURNAL OF ARCHITECTURE AND URBAN PLANNING ZNANSTVENI CASOPIS ZA ARHITEKTURU I URBANIZAM

UNIVERSITY OF ZAGREB FACULTY OF ARCHITECTURE SVEUČILIŠTE U ZAGREBU ARHITEKTONSKI FAKULTET

ISSN 1330-0652 https://doi.org/ 10.31522/p CODEN PORREV UDC 71/72 32 [2024] 1 [67] 1-186 1-6 [2024] 156-167 VLADIMIR BOJKOVIĆ

DEVELOPMENT OF THE CITY OF NIKSIC THROUGH THE PLANNING DOCUMENTATION OF CROATIAN ARCHITECTS

SCIENTIFIC SUBJECT REVIEW HTTPS://DOI.ORG/10.31522/P.32.1(67).13 UDC 711(497.16 Niksic):72(497.5)



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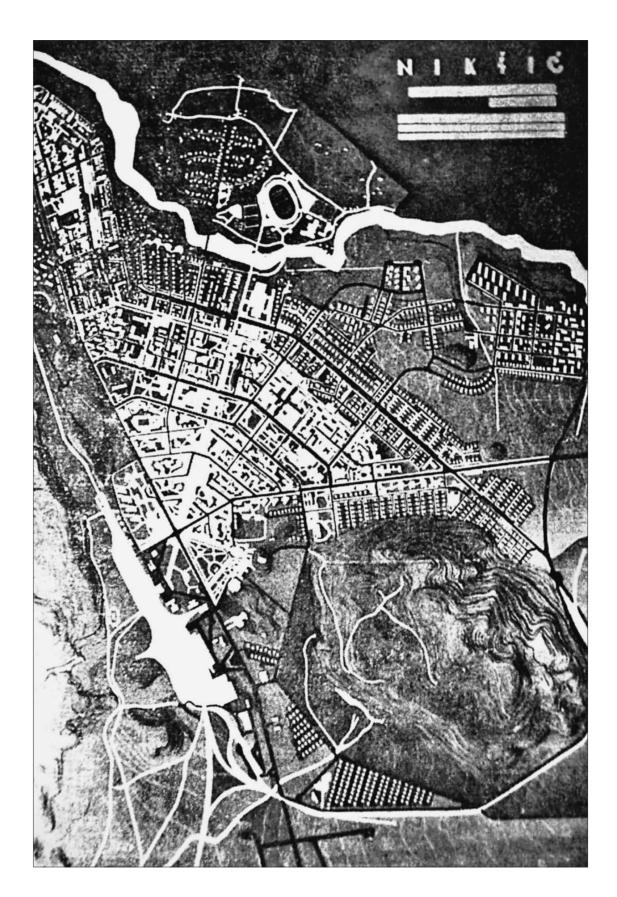


Fig. 1 Model of the Seissel's Plan from 1958

Scientific Paper 32[2024] 1[67] PROSTOR 157

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SCIENTIFIC SUBJECT REVIEW

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UDC 711(497.16 NIKSIC):72(497.5)

TECHNICAL SCIENCES / ARCHITECTURE AND URBAN PLANNING
2.01.02. — URBAN AND PHYSICAL PLANNING

ARTICLE RECEIVED / ACCEPTED: 29. 2. 2024. / 10. 6. 2024.

DEVELOPMENT OF THE CITY OF NIKŠIĆ THROUGH THE PLANNING DOCUMENTATION OF CROATIAN ARCHITECTS

NIKŠIĆ, MONTENEGRO SEISSEL, JOSIP SLADE ŠILOVIĆ, JOSIP URBAN PLANS

The task of this work is to present three key urban plans, courtesy of which the city of Nikšić developed during its modern history. After liberation from the Ottoman Empire in 1877, Nikšić received its first regulatory plan, prepared by the architect Josip Slade Šilović (1828-1911) in 1883. The city developed according to this plan until the Second World War. After the Second World War, Montenegro became part of the Socialist Federal Republic of Yugoslavia as a republic, and Nikšić became the city with the highest degree of urbanisation in that federation. This rapid urbanisation was directed

by the second urban plan, carried out by the Urban Planning Institute of the Faculty of Architecture, Construction and Geodesy, Zagreb, in 1954-1958. The author of this plan was professor and architect Josip Seissel (1904-1987). The third urban plan of importance for the city was carried out by the Urban Planning Institute of Croatia, Zagreb, in 1984 and was adopted in 1986. This urban plan enabled a logical upgrade of the previous two plans. A result of these three urban plans by Croatian architects is Nikšić's unique form and urban identity.

INTRODUCTION

rom the standpoint of the settlement's periodisation, Niksic's past can be divided into several periods: Illyrian, Roman, Gothic, Slavic, Ottoman, the period of liberation from the Ottomans, and the modern development of the city. Each of these historical stages has yielded different urbanistic and architectural perceptions of the city's design and function. The result is a city with a multi-layered spatial and cultural structure (Bojković, 2020: 190). This paper deals with research on the modern development of the city, which is inextricably linked with urban plans. It is interesting that the key urban plans for Niksić were all drawn up by Croatian architects.

With the first regulatory plan from 1883, prepared by architect Josip Slade Śilović (1828-1911), the city of Nikšić gained the basis for its development as a modern city. The first regulatory plan enabled the positioning and formation of a specific urban architecture which, today, shapes the urban identity of Nikšić.

After the Second World War, Montenegro became part of the Socialist Federal Republic of Yugoslavia as a republic, and Nikšić became the city with the highest degree of urbanisation within that federation. Rapid urbanisation called for the adoption of new urban plans, which impacted the inherited urban form of the city. In this context, the General Urban Plan of Nikšić is the most important plan, and it was carried out by the Depart-

ment of Urban Planning of the Faculty of Architecture, Civil Engineering, and Geodesy (Zavod za urbanizam Arhitektonsko-gradevinsko-geodetskog fakulteta)², in Zagreb, in 1954-1958. The author of this plan was professor and architect Josip Seissel (1904-1987), assisted by architects Dragan Boltar (1913-1988), Boris Magaš (1930-2013) and Bruno Milić (1917-2009).

In the mid-1980s, the Municipality of Nikšić engaged the Urban Planning Institute of Croatia (*Urbanistički institut Hrvatske*)³ to prepare the Spatial Plan of the Municipality of Nikšić and the General Urban Plan of Nikšić. These documents enabled further development of the city.

The first regulatory plan formed the basis for the modern urban development of Nikšić which would supplement the general urban plans from 1958 and 1984 in a logical manner with responses to the demands of the dynamic social and economic changes of the time. We can follow by Croatian architects the continued urban development of Nikšić alongside the formation of a recognisable architectural urban identity through three key urban plans.

Nikšić, from being a small town with barely more than 4,500 inhabitants before the war, developed rapidly in the postwar period. In the period from 1921 to 1941 the growth in the population was only 20%, while the growth in the period from 1941 to 1961 was 338%, or 17 times faster. The degree of urbanisation of Nikšić was correlated to the growth of the population, so in 1953 it was 22.1%, increasing to 35.1% in 1961 and 49.5% in 1971. The degree of urbanisation and the population growth were conditioned above all by political and management decisions regarding the development of the city, mainly its industrialisation. Thus, the percentage of the population that was employed in industry and mining in 1953 was only 6.07%, increasing to 34.0% in 1961 and reaching its maximum in 1971 when it was 44.0%.

If we consider, by decade, the movements of the number of inhabitants in the city itself and the Municipality of Nikšić, we come up with the following figures: at the end of the 1940s the municipality had 38,359 inhabitants, 6,013 of whom lived in the city. By the end of the 1950s the municipality had 46,589 inhabitants while the city had 10,236 inhabitants. At the end of the 1960s the municipality had 57,399 inhabitants while the city had 20,166. At the end of the 1970s, the inhabitants in the municipality numbered 66.815, while the number for the city was 28,527. At the beginning of the 1980s, the municipality was home to 72,299 people, while the figure for the city was 50,399 and this was the period which required the adoption of a new General Urban Plan of the city. At the end of the 1980s, the city of Nikšić had about 56,000 inhabitants, while the municipality had around 74,500. During the 1990s, the number of inhabitants remained relatively constant and in the municipality there were 74,706 inhabitants and in the city 56,141. There were small changes in the number of inhabitants and during the 2000s, in the municipality there were 76,677 inhabitants and in the city 59,179. Already in 2011 the population had

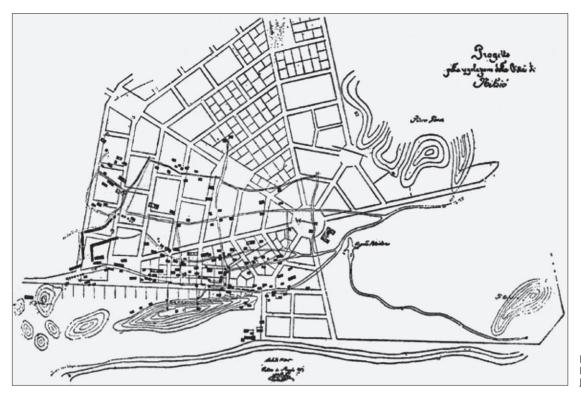


FIG. 2 REGULATORY PLAN OF NIKŠIĆ 1883, ARCHITECT DR JOSIP SLADE ŠILOVIĆ

fallen, whereby in the municipality there were 72,433 inhabitants and in the city 56,970. (Bojković, 2019: 20)

- After World War II, more precisely in 1956, the decision was taken to divide the Technical Faculty into four independent faculties: the Faculty of Architecture, Civil Engineering and Geodesy; the Faculty of Mechanical Engineering and Shipbuilding; the Faculty of Electrical Engineering; and the Faculty of Chemistry and Food Science. By decision of the Croatian Parliament in 1962, the Faculty of Architecture of the University of Zagreb was established as an independent scientific and teaching institution. According to the statute from 1964, the faculty consists of five chairs, six departments and three cabinets. One of the departments was the Department of Urban Planning of the Faculty of Architecture, Civil Engineering, and Geodesy. (https://www.arhitekt.hr/hr/o-fakultetu/kontekst/ on 12 May 2024)
- The Urban Planning Institute of Croatia was established by the decision of the Ministry of Construction of the People's Republic of Croatia on 27 December 1947, tasked with the professional studying and solving of all urban planning problems of cities and settlements. In the first seven years of this activity, the Urban Planning Institute of Croatia operated within the State Authority, that is the Ministry of Construction. In 1954 it became an institution with independent financing. (http://uih.hr/o-nama/ on 20
- Evans claims that the Lower Town is a medieval construction, firstly on the basis of its layout and quadrangular shape, then on the basis of the characteristic towers which the town had at its corners and in the area of the town ramparts, and finally according to the construction of the lower parts of the town walls, which he states are undoubtedly medieval. The Lower Town was not the work of Ottoman builders, but was actually the medieval town of Onogost rebuilt by the Ottomans (Ivanović, 1986: 45).

THE FIRST REGULATORY PLAN FOR THE NEW NIKŠIĆ - THE BEGINNING OF A MODERN CITY DEVELOPMENT

After a decisive victory over the Ottoman troops, the successor of the Petrović dynasty Prince Nikola (1841-1924) occupied Trebiesa Hill near Niksic at the end of July 1877. Montenegrin troops liberated the city on 9 September 1877. The liberation of Nikšić had major repercussions in all the South Slavic countries (Pavicevic, 1972: 25).

Sir Arthur John Evans (1851-1941), the famous British archaeologist, was present when Nikšić was liberated by the Montenegrin Army. In a diary entry for 23 September 1877, he wrote that the city had suffered terribly from the bombardment. Evans wrote that the city had three sections: the citadel; the inner part of the city – called the Lower City – which was surrounded by city walls; and an expanse outside the walls where the market and the main streets were found. Evans was particularly fascinated with the inner, older section of the city, which had the layout of a Roman castrum. "The central tower of each wall has a round archway beneath which the street runs, and it seems as if in the original town two main streets intersected each other at right angles, as they should in a Roman 'Chester'." (Evans, 1878: 63)4

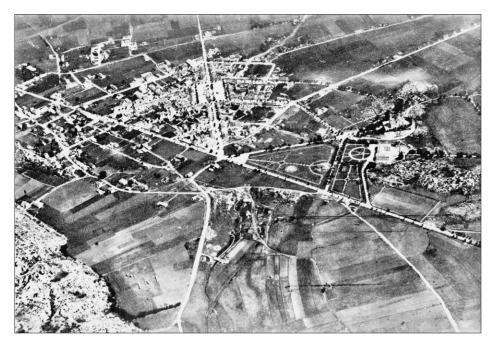


Fig. 3 View of the city in the 1930s, old postcard

Within only a few years after the city was liberated, the city still kept the same overall morphology that it had had under the Ottoman Turks. At the proposal of citizens to obtain space in order to erect the new city, Prince Nikola came to Niksic in the spring of 1884, bringing with him the plan of the new city drawn up by Dr Josip Slade Šilović in 1883.5 In March of 1883, Josip Slade Šilović came to Nikšić to record the current situation and started drawing up a regulatory plan for how the city would look in the future. The design included simple, clear shapes, a city open to the sun and nature, a place with optimal living and working conditions for its future inhabitants (Šakotić, 1996: 112).

It was intended that the plan would provide housing for about 10,000 residents. The way that the streets were designed, the city could be expanded multiple times – with appropriate changes – but would still remain a modern city in terms of its organisation and traffic. Slade apparently took great inspiration from the Renaissance ideas of the urban layout of the Italian town of Palmanova, which he probably visited, as it is near Padua, where he was engaged on his doctoral studies (Fig. 2). The future city was to be built around a large quadrilateral plaza, with four other smaller plazas in other parts of the city, linked by broad, straight streets, radiating outwards from the centre. The plan stipulated that green areas, essential city infrastructure, sewerage and a water mains had to be built, as well as singlestorey and two-storey buildings on the boundaries of the urban zones (Maksimović, 1961:

15). The depth of the urban blocks was 95 m with a double row of plots of land. According to the plan, the construction of buildings with a basement, ground floor and two upper floors was foreseen, and typification of the buildings was also carried out. A system of "edge buildings" was implemented, with outer and inner construction lines. The depths of the buildings varied from 8 m to 14 m. Behind the houses, gardens were planned (Mitrovic, 2019: 124).

A famous chronicler of that time, Bekica Śobajić, described in early 1884 that the construction of the city's main plaza was planned to be completed rapidly. Vicko, an engineer from Trogir (Rubinoni), divided up the entire area designated as streets into flat parts — plots. The army was engaged on the construction and each plot was allocated to a battalion which completed the work (Śobajić, 1899: 24).

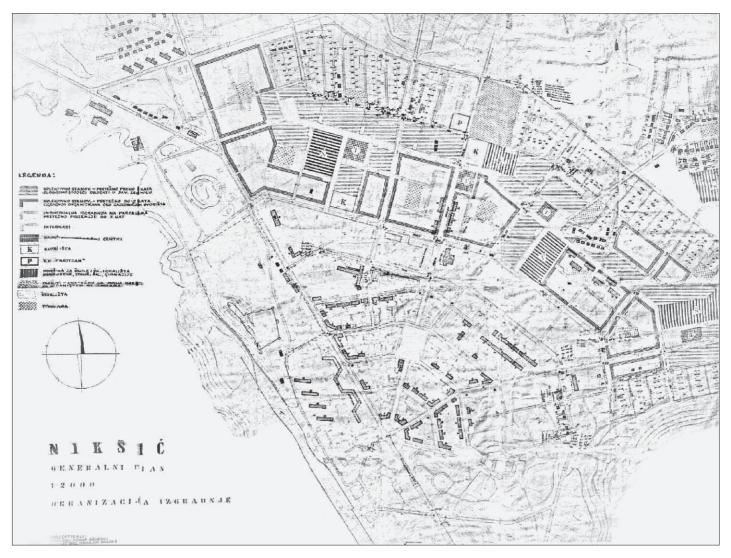
Three plazas, out of five, were built according to this plan. The quadrangular plaza in the middle of the town was constructed first (today's Freedom Square). At a distance of 180 metres from this plaza is another plaza, this time eight-sided (today's Sava Kovačević Square), which was realised on the basis of Slade's design. The third, five-sided, plaza is right next to the Cathedral Church (today's Sako Petrovic Square). The visual effect that Slade created in these plazas placed the greatest emphasis on the main edifice located on it. Thereby, the main, central edifices (the Cathedral Church and Prince Nikola's Castle) were aesthetically improved and emphasised (Bojkovic, 2023: 20).

According to the first regulatory plan, Nikšić was constructed according to the first regulatory plan until 1941 and all the postwar urban plans were established on the basis of this plan's concepts. It should be noted that the construction discipline of that time was very strict and did not allow any deviation from the established plan (Ivanović, 1986: 47; Fig. 3).

GENERAL URBAN PLAN OF NIKŠIĆ, 1954--1958 – JOSIP SEISSEL, DRAGAN BOLTAR, BORIS MAGAŠ AND BRUNO MILIĆ

Niksic's postwar development required a rapid implementation of urban planning. There was no institution dealing with the implementation of urban plans and controlled construction of the city after the Second World War. The organisation of the urban planning service was implemented gradually (Bojković, 2018: 42).

The Department of Urban Planning of the Faculty of Architecture, Civil Engineering, and Geodesy in Zagreb carried out the second postwar urban plan for Nikšić in 1954-1958.6 The author of this plan was professor and ar-



chitect Josip Seissel, assisted by architects Dragan Boltar, Boris Magaš and Bruno Milić⁷ (Fig. 4).

The general urban plan of Niksic from 1958, as the first applied postwar urban plan, can be viewed through three aspects. The first aspect refers to the boundary of the plan, the second refers to its characteristics themselves, and the third aspect concerns the relationship to the inherited urban structure of Slade's regulatory plan.

The general urban plan had boundaries that extend from Duklo Bridge on the River Zeta, then along the River Bistrica to the eastern fence of the Boris Kidric Ironworks, crossing the Nikšić-Šavnik road. Then it went by a straight line to the bank of the River Gracanica and from there along the right bank of the river, including the settlement "Budo Tomović" to the bridge over the River Gracanica, from this bridge to the road to Ozrinići in front of Trebjesa and then to the source of the River Mrkośnica, then along this river to the Small Bridge. From the Small Bridge along the ironworks' industrial spur line to the main line of the railway, and from this railway line to the Petrovic houses. Then via the foothills of Studenacke glavice to the place where the railway line and the Niksic-Trebinje road cross, and from there along the main railway line

Fig. 4 The General urban plan from 1958, J. SEISSEL, D. BOLTAR, B. MAGAŠ, B. MILIĆ

Josip Slade Šilović, a native of Trogir, studied architecture in Split, and was awarded a doctorate at the University of Padua (Bojković, 2019: 19).

According to the enacted 1958 General Urban Plan, the residential zone of Nikšić covered an area of 11.25 km² and contained 11 residential urban units (Ivanović, 1977: 93).

In one of the new city zones, Milić designed one of the first multi-apartment high-rise buildings, the Meander Building, construction on which began in 1958 (Bojković, 2018: 42).



FIG. 5 URBAN BLOCK WITH THE MEANDER BUILDING (B. MILIĆ) – UNION BUILDING AND RESIDENTIAL TOWER (Đ. MINJEVIĆ), POSTCARD FROM 1962

along the River Zeta to Duklo Bridge (Ivanovic, 1972: 47). This urban plan for the first time clearly defined and determined the wider and narrower construction area of the city (Fig. 1).

This plan has some similarities with Slade's plan regarding the central green belt in which the construction of social, public and civic facilities was foreseen. Seissel's plan also foresaw the central part of the city remaining as it



FIG. 6 A DEPARTMENT STORE, A VIEW FROM EAST SIDE AND WEST SIDE. THE DEPARTMENT STORE WAS BUILT ON THE AXIS OF THE STREET FORESEEN BY THE URBAN PLAN FROM 1958.

had been built according to Slade's plan. In addition to the green zone, Seissel's plan also had a zone of multi-apartment high-rise blocks, where workers from the industrial zone of the city lived.

After this zone, a zone of mixed residential buildings – collective and ones for individual families – followed, and after this zone, there was a peripheral settlement of single-family residential buildings. The industrial zone was located outside this settlement, but had direct connection with the city and transit traffic. Territorial expansion of the city was planned towards the River Bistrica in the north, and in the northeast and east to the industrial zone. In the city, the limits of constructions with business and commercial facilities would still be retained.

This plan did not contain the detailed planned construction, and there were only some partial solutions, without surveying the terrain and without the very important economic analyses that were necessary for the reconstruction of certain parts of the city. Although this plan originally envisaged that there would be buildings with two upper floors and ones with one upper floor, city planners subsequently reconstructed a series of buildings where some had three or four upper storeys and others had five or six upper storeys (Fig. 5).

After the development of this urban plan, the Municipality of Nikšić entrusted the revision of the plan to a special expert commission made up of the architects Miloš Somborski (1902-1983), Stojan Maksimović (1934-2024) and Mihailo Radovanović (1899-1973), who concluded that the plan should be complemented with a preliminary project of city levelling, a sewerage and water supply system.

If we consider the General Urban Plan of Niksic through the prism of its relationship to the in-

- 8 The contract of works for the Spatial Plan and General Urban Plan was signed in 1982. The local monthly newspaper "Niksicke Novine" in an article tiled "Implementation of the new urban plans contractied" wrote that the decision to entrust the implementation of the Spatial Plan and General Urban Plan to an institute from Croatia was one more form of how two areas were being brought closer, but was also the continuation of work that had been started long ago when Niksic had its first urban plan in 1883, which was carried out by Croatian architect Josip Slade Śilović (Niksicke Novine, 700: 25).
- 9 The 1984 General Urban Plan foresaw the following five spatial units which would be the focus of urbanisation: 1. The central district, with an area of 410 ha; 2. The northern district, made up of the settlements of Dragova Luka and Čemenca, with an area of 276 ha; 3. The southern district, made up of Kličevo, with an area of 403 ha, and Straševina, with an area of 171 ha; 4. The western district, made up of Kočani and Uzdomir, with an area of 374 ha; and 5. The industrial zone The Boris Kidrić Ironworks, with an area of 160 ha (Radojičic, 2010: 567).

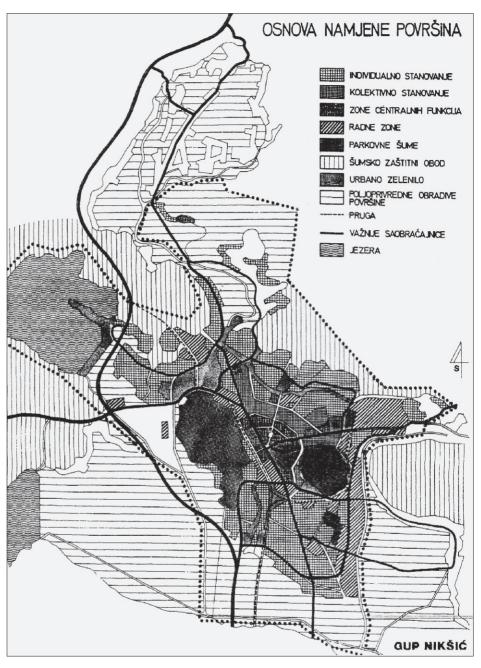
herited urban structure of Slade's plan, we can see its full contribution. The quality of this urban plan is reflected in the fact that it fully accepted the solutions and basic principles of Slade's regulatory plan as the basis from which the modern city evolved. Also, the guality of this plan is reflected in the suitable positioning of buildings of social significance in the continuous zone along the historical core.

SPATIAL PLAN OF NIKŠIĆ MUNICIPALITY AND GENERAL URBAN PLAN OF NIKŠIĆ, 1984-1986 - URBAN PLANNING INSTITUTE OF CROATIA, ZAGREB

The adoption of the Spatial Plan and the General Urban Plan of Nikšić required the municipality to decide to include the surrounding villages into the urban area. This decision was necessary because a large number of houses were built without any planning permission in these villages, which had nearly 18,000 inhabitants living in them, while in the city itself there were about 38,000 inhabitants. The 1958 plan envisioned the city having about 56,600 inhabitants. This phenomenon was due to land outside the city's real estate district being inexpensive, because they did not require any expenditure on communal infrastructure. The expansive development of the city in the period from 1960 to 1980, accompanied by rapid population movements in the peripheral parts of the city and the nearest villages, caused the unplanned development of these parts (Radojicic, 2010: 320).

The local administration of the Municipality of Niksic decided to engage the Urban Planning Institute of Croatia from Zagreb for the preparation of the Spatial Plan and the General Urban Plan of Nikšic.8 These plans were finished in 1984 and their implementation started in 1986. The contract for making the plans was signed by the president of the Institute's Board of Directors, Neven Kovačević, and the president of the Nikšić Municipal Assembly, Velisav Vuksanovic. The planning coordinator was Antun Paunović. The architects who worked on the conception of the plans were Antun Paunovic, Radovan Muck and Ninoslav Dusper.

The General Urban Plan envisaged the division of the city region into five subareas9: the central, northern, southern, western and industrial zones. The central area was a completely urbanised area that aspired to preserve the authentic urban forms. It was envisaged that the replacement of single-storey houses with multi-storey ones would not disrupt the existing ambience. The system of streets and plazas was fully retained. For the northern area, the planned arrangement of



green areas along the River Bistrica was proposed. This part of the city was intended for the construction of individual housing. The southern area envisaged the shaping of the suburban settlements located in this area. The western area, like the northern one, also envisaged the construction of individual housing units. A green belt was planned along the River Zeta, as was the reconstruction and arrangement of the existing transport infrastructure (Fig. 7).

The importance of the General Urban Plan was reflected in the protection and improve-

Fig. 7 General Urban Plan of Nikšić, 1986

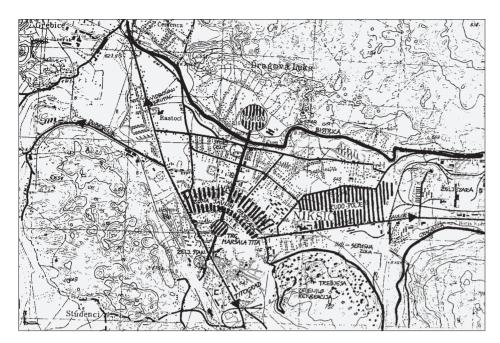
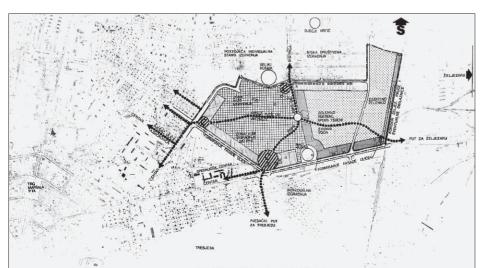


FIG. 8 DETAILED URBAN PLAN OF THE RUDO POLJE ZONE, PROGRAM PROPOSAL — THE RELATIONSHIP BETWEEN THE SETTLEMENT AND THE CITY

ment of green areas. One other important characteristic of the General Urban Plan is respecting the inherited urban setting that arose according to the directions of the previous urban plans in the first line of the 1958 General Urban Plan, which logically built upon the urbanistic legacy of the first regulatory plan. In the implementation of the urban plan, there were some inconsistencies that had a greater impact on the city. One of the major failures was the construction of a department store in the early 1980s, which thwarted the vision of the 1958 plan to shape the so-called green belt by linking the streets of the eastern part by a boulevard to the western part of the city (Fig. 6).

FIG. 9 DETAILED URBAN PLAN OF THE RUDO POLJE ZONE, PROGRAM PROPOSAL — PRELIMINARY SPATIAL DISTRIBUTION OF FUNCTIONS IN THE ZONE



The Urban Planning Institute of Croatia also prepared the detailed urban plan for the future Rudo Polie settlement in 1983 (Fig. 8). The observations and analysis that the authors of the urban plan stated in the Proposal of the Detailed Urban Plan are interesting. The authors stated that one of the main characteristics of the new construction of Niksić was the loss of standard street dimensions and the spirit that this fostered, which were present in the old part of the city centre. That is why the city had not managed to form a tangible urban environment in the previous development phase, but remained with an abstract space with a multitude of unarticulated intermediate areas. Therefore, one of the first tasks of urban planning in Nikšić was to create the conditions for the formation of urban physiognomy. The creation of a new housing structure in Rudo Polje was also to be directed along these lines (Paunovic, Muck and Dusper, 1983: 66; Fig. 9). The detailed urban plan of the Rudo Polje settlement paid special attention to the programme of housing construction. The plan envisaged the construction of a maximum of 700 apartments of different typologies. The plan suggested avoiding the impersonal constructions from earlier periods that neglected the elements of the city's identity. The plan envisaged the construction of buildings that would contribute to the accommodation of three-generation families, but also the construction of buildings that could, in a certain number of cases, also have commercial areas (Fig. 10).

THE SIGNIFICANCE OF URBAN PLANS FOR THE DEVELOPMENT OF NIKŠIĆ

During the period from the implementation of the first regulatory plan from 1883, up until the end of World War II, the city developed slowly. The economic basis was not sufficiently developed to enable the foreseen urban structure of the first regulatory plan to be completely formed. However, the achieved construction provided the foundations for further directions of development of the city structure. Looking at the realisation of Slade's plan today, one can see that Niksic is laid out with connected communities arranged around it radially, reminiscent of Renaissance-inspired city layouts. This is an unusual shape for a city, even among developed environments in Europe. A radial layout is especially suited to the conceptual design of small or medium-sized cities (Dokic, 2004: 215).

As is the case with any other city layout, a radial layout has its benefits and disadvantages. Most of the benefits relate to the way the centre of the town and the suburbs are con-

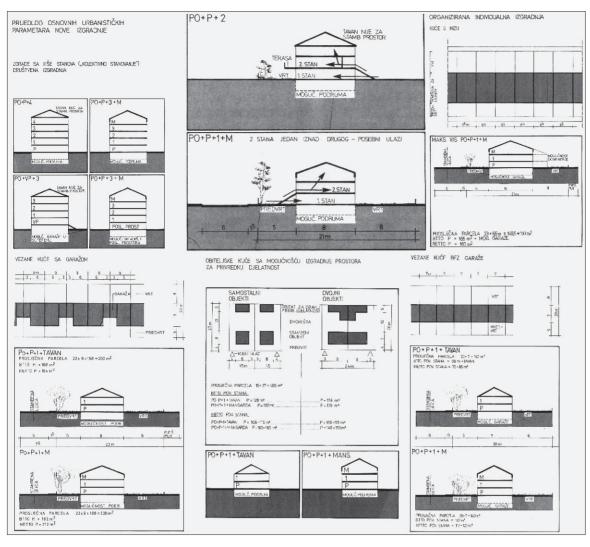


Fig. 10 Proposal of typological examples of residential buildings

nected, the hierarchical position of buildings and the functions within the town's structure. However, the radial form has its downsides. The awkward orientation and the way that the main spokes coming out of the centre have insufficiently defined intersections with the streets they run perpendicular to, which does not permit clear and rational functional-physical assemblages to be formed. All the mentioned characteristics can be seen in the first regulatory plan of Niksic.

The physical structure of Nikšić through the first regulatory plan is seen in its infrastructure, green surfaces and in the buildings, as the most significant constituent parts that define the basic structure. The positioning of individual buildings and groups of buildings, the extent to which they match the regulatory or construction layout, the way these buildings are connected by roads, then way the buildings are grouped in the form of residential suburbs or smaller residential units — all

these elements constitute the basis of the urban structure (Radović, 2009: 56).

Before anything in a city is physically constructed, the shape of the city must be put onto paper, which is where the urban plan comes in. Josip Slade's design brought together all these features into a suitable configuration of urban elements, as well as the positioning of the buildings. The first regulatory plan of Niksić is one such example containing everything mentioned above, a fact which only adds to its value. As such, the first regulatory plan became the base from which all future postwar urban plans will be developed.

When Yugoslavia formed after the end of World War II, Montenegro was among the least developed republics. Thanks to the socialist system which demanded equal growth of the economy and industry in all regions of the country, Montenegro had a particularly advantageous chance in this context. Nikšić was singled out as the city where the indus-

trial development of the republic would be initiated. Altogether, Nikšić is the example on the basis of which we can understand how the development of cities went after World War II.

The municipal services for urban planning and architecture had only recently begun to be formed and did not have enough trained architects, civil engineers or geodesists. The first Montenegrin architects, in the main, finished their education at the architectural faculties in Zagreb or Belgrade, and gained experience mainly by designing structures of public significance, while more complex urban plans were drafted by experts from more developed areas, mainly from Zagreb and Belgrade.

The first postwar urban plan of Niksic from 1958, which was drafted in Zagreb, responded to two important requirements. The sudden development of Niksic's economy had caused a growth in the population, which demanded major changes in the existing structure of the city. One of the most important demands was related to accommodation, so the need was indicated for designing and building a large number of apartment buildings of different typologies for multiple families. It was necessary to build structures in new urban blocks and provide all the necessary amenities and functions, such as kindergartens, schools, health facilities, shops and cultural buildings.

The stark contrast that was present between the modern setting and the preserved remains of the previous periods of construction were toned down in the 1958 Urban Plan through the logical formation of a visible spatial continuity of construction through transitional zones. In this way, the basis of the city's architectural urban identity, which would be augmented by the next Urban Plan of 1984, was established.

The most significant city landmarks built in this transitional zones are: Olga Golović Primary School (1957), by architect Dorđije Minjević, the Health Centre (1976), by architect Dušan Duda Popović, the Investment Bank (1975), by architect Slobodan Vukajlović (1934-2006), Hotel Onogošt (1982), by architect Ivan Štraus (1928-2018), Home of the Revolution (1977), by architect Marko Musić (1946), the Municipal Court (1963), the Faculty of Philosophy (1962), Nikšić City Hall building (1962), by architect Dorđije Minjević, and the Administration Building of the Construction Company (1958), by architect Periša Vukotić (1899-1988; Bojković, 2019: 42-59).

The 1984 General Urban Plan considered Nikšic's problems at that time and provided

solutions for them through the foreseen traffic infrastructure and the arranged communal network for all parts of the city. The plan featured usage of maximum protection and increase in green areas, as well as of the construction heritage from the previous periods. The general plan particularly featured the need to construct accommodation facilities and other buildings of a more modern architectural appearance.

Today, when we look at the parts of Nikšić which were built in line with the urban plans from 1958 and 1984, we notice that, over time, they have justified their function and spatial recognisability, and that they have given a special urban quality of life to the citizens.

CONCLUSION

Although in Montenegro there is still no systematic and organised research into the country's rich urban and architectural heritage from the end of the 19th century and for the whole of the 20th century, this paper aims to present the work of Croatian architects and urban planners in the city of Nikšić, despite insufficient material being available in the State Archive of Montenegro and Archive Department of the city of Nikšić. It should be noted that to this day it is not known where the original copy of the first regulatory plan is, while the General Urban Plan from 1958 is presented only in fragments and in bad condition in the Nikšić City Archive.

The realisation of the concept of an ideal city, which architect Josip Slade Silovic presented only schematically, was in the end very difficult to fully implement, since, after all the wars, Montenegro was left very poor. The unique case of the construction of the city of Niksic deserves to be studied further. In order to get a more complete picture of the phenomenon of the development of the city of Niksic through the planning documentation of Croatian architects, it is necessary to conduct more intensive research of archival materials in Zagreb both about the planning documentation (after the Second World War) and about individual authors.

The idea of those who drew up postwar urban plans was to ensure that the city could expand logically, beginning with Nikšic's first regulatory plan. The extent to which the construction of the city developed in continuity is a direct consequence of how successfully the postwar plans were adhered to. This is where these plans show their particular quality.

[Proofread by Peter Stonelake]

BIBLIOGRAPHY AND SOURCES

- BOJKOVIĆ, V. (2018) 'The Meander Building by Architect Bruno Milic; The Beginning of Modernism in the City of Niksic', Prostor, 26 (1/55/), pp. 40-51. https://doi.org/10.31522/p.26.1(55).3
- 2. BOJKOVIĆ, V. (2019) Arhitektura i urbanizam Nikšića nakon Drugog svjetskog rata. Beograd: Zadužbina Andrejević.
- 3. BOJKOVIĆ, V. (2020) 'Workers' Settlements in the Former Industrial City of Nikšić, Montenegro', *Periodica Polytechnica Architecture*, 51(2), pp. 189-195. https://doi.org/10.3311/ PPar.15275
- BOJKOVIĆ, V. (2023). 'Characteristics and significance of the work of Russian architects in the city of Niksic in Montenegro, the end of the 19th and the first half of the 20th century' *Architecture and Engineering*, 8, pp. 19-33. https://doi.org/10.23968/2500-0055-2023-8-4-19-33
- 5. ĐOKIĆ, V. (2004) *Urbana morfologija: Grad i gradski trg*. Beograd: Arhitektonski fakultet.
- 6. EVANS, A.J. (1878) *Illyrian letters*. London: The Royal Society.
- 7. IVANOVIĆ, Z. (1977) Nikšić, urbano-geografska studija. Beograd: SANU.
- 8. IVANOVIĆ, Z. (1986) Razvoj gradova Crne Gore kroz urbanističke planove prije Drugog svjetskog rata. Nikšić: NIO "Univerzitetska rijeć".
- 9. MAKSIMOVIĆ, M. (1961) 'Prvi regulacioni plan Nikšića', *Komuna*, 9(17), p. 15
- 10. MITROVIĆ, S. (2019) Arhitekta Josip Slade Śilović, Graditeljska djela u Knjażevini Crnoj Gori 1877-1900 (Architect Josip Slade Śilović, Construction Works in the Kingdom of Montenegro 1877-1900). Zagreb, Podgorica: Nacionalna zajednica Crnogoraca Hrvatske, Ministarstvo odrżivog razvoja i turizma Crne Gore.
- PAVIĆEVIĆ, B. (1972) 'Oslobodilački ratovi od XVI-XX vijeka'. In: KALEZIĆ, D. (ed.) Monografija Nikśić. Zagreb: Grafički zavod Hrvatske, pp. 25-38
- 12. RADOJIČIĆ, B. (2010) *Opština Nikšić, priroda i društveni razvoj.* Nikšić: Filozofski fakultet.
- 13. RADOVIĆ, R. (2009) Forma grada, osnove teorije i praksa. Beograd: Građevinska knjiga.
- 14. ŠAKOTIĆ, V. (1996) *Nikšić u knjaževini (kraljevini) Crnoj Gori*. Nikšić: Unireks.
- ŠOBAJIĆ, B. (1899) Odzivi prijatnih uspomena. Nikšić.

ARCHIVE SOURCES

- 1. Nikšicke Novine (1982), *Ugovorena izrada* novih urbanistickih planova. Nikšic: Centar za informativnu djelatnost, 700, pp. 25.
- PAUNOVIĆ, A.; MUCK, R., and DUSPER, N. (1983) Detaljni urbanistički plan Rudo Polje. State Archives of Montenegro, Archive of Nikšić, Building section, box 1983.
- SEISSEL, J.; BOLTAR, D.; MILIĆ, B., and MAGAŚ, B. (1958) Generalni urbanistički plan Nikśića. State Archives of Montenegro, Archive of Nikśić, Building section, box 1958.

INTERNET SOURCES

- Arhitektonsko-Građevinsko-Geodetski (AGG)
 Fakultet [Online]. Available at: https://www.
 howandwhentoreference.com/ [Accessed: 12
 May 2024].
- Povijest, Urbanistićki institut Hrvatske [Online]. Available at: http://uih.hr/o-nama/ [Accessed: 20 April 2024].

ILLUSTRATION SOURCES

FIG. 1 IVANOVIĆ, 1977: 111

FIG. 2 Monografija Nikšić, 1972: 125

FIGS. 3, 5, 6 Private archive of author

FIG. 4 State Archives of Montenegro, Archive of Nikšić, Building section, box 1958

Fig. 7 Radojičić, 2010: 123

FIGS. 8-10 State Archives of Montenegro, Archive of Nikšić, Building section, box 1986

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