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Architecture, Landscape and Territor in Yugoslav Modernism

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2024 Special Issue

Architecture, Landscape and Territory in Yugoslav Modernism

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ii - iv Introduction by Guest Editor

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YUGOSLAV MODERNISM BEYOND THE CITY

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YUGOSLAV MODERNISM BEYOND THE CITY

In 1957, two important and seemingly unrelated events encouraged a metaphoric step into the uncharted territory of Socialist Yugoslav architecture and urban planning theory - the territory. The sixth conference of the Yugoslav Union of Urbanists' Societies focused on the theme of "regional planning" as not only the emerging challenge to the profession but also the stake of the entirety of the Yugoslav economy [1]. In this same year, Dušan Grabrijan's and Juraj Neidhardt's book Architecture of Bosnia and the Way to Modernity [2] was published, postulating the possibility of the systematic architecturally-minded inquiry into the space of the geographic-historical region. The insight and self-esteem necessary for Yugoslav architecture and urbanism to address the complexity and vastness of the spaces beyond the city were coupled with historical political-economic and technological imperatives of the 1950s - in the words of Slovenian architect and urban planner Marjan Tepina, urbanism's classical area of operation, the city, has become too tight [3].

The implications of the Socialist Yugoslav state project of social emancipation on Yugoslav modern architecture have been, by now, well traced. The elaborate social welfare system, self-managed workers' organizations, ideas of pan-Yugoslav brotherhood and non-aligned nations' political unity profoundly influenced the conditions, processes, forms and quality of architectural work [4]. The great majority of questions, however, posed by inspired architecture historians and other researchers have been formulated, analyzed and answered within the urban referential framework. It seems that, after more than a decade of architectural-historical scholarship focused on Socialist Yugoslav modernism,¹ the confines of the city, to use Tepina's words, have become too tight. The widening of the scope is necessary not only to enrich our understanding of this architecture's values and appreciate more fully the visionary capacity of its social role but also to start addressing the other yet under-explored "direction" of the fundamental causality that defines the scholarship on Yugoslav modernism: the way in which the built environment influenced the prospects of this state project.

This special issue of AGG+ takes this pioneering step by mapping a range of historical themes that have in common the exploration of the Socialist Yugoslav territorial scale and quality. Vladimir Kulić's guest essay, which opens the collection, establishes one end of the spectrum of these themes by identifying the broadest thematic frame of world spatial governance and planning. A glimpse into Kulić's research-in-progress, the essay outlines the prominent and unique agency of Croatian architect, spatial planner and CIAM member Ernest Weissman, presented as an "intellectual entrepreneur" of the "small world network" of postwar urban planning.

¹ The researchers in architectural and art history of the ex-Yugoslav region have started focusing on Socialist Yugoslav architecture and urbanism in the 2010s, one of the first notable publications internationally being [5].

The other end of the spectrum is defined by Slavica Stamatović Vučković's and Danilo Bulatović's "zooming" into the Montenegrin stone modernist building. Their meticulous review of an impressive number of works convincingly establishes that the "territorial identification" of Montenegrin modernism can be found in its materiality: the usage of stone as a building material uniquely suited to the "dry, rugged Mediterranean landscape that extends all the way to the central part of Montenegro."

In between these two markers of scale and content: planning and networks on the one end and architecture and material on the other (inconspicuously paralleling two historical questions of 1957 that opened this introduction) lie the remaining five articles that wave together a close-to-exhaustive selection of key readings of the territory. Timotej Jevšenak explores if and how the Socialist Yugoslav space was institutionalized in architecture through his groundbreaking presentation of the Borba Award, the utmost recognition for architectural design excellence in Socialist Yugoslavia. Una Okilj and Luka Skansi take the relationship between Yugoslav People's Liberation War memorials and the landscape seriously by giving due attention, not only to the semantic representation but also less frequently asked questions on the role of the memorials in the regional development and how "the perception, interpretation and use by people in periods succeeding their construction" constituted the place. Aleksandar Bede describes a triptych of territorial modernization "projects" of Vojvodina, the emblematic lowland and agricultural region of Socialist Yugoslavia. The "experimental" approach of describing, in one breadth, the networks of water canals, railways and memorials yields a range of intriguing and unexpected conclusions involving narratives, authorship and institutional agency in the conception and execution of territorial projects. Jelica Jovanović takes up the challenge of describing one of the most charged and historiographically yet unresolved relationships between the urbanist and his masterwork in the Socialist Yugoslav architecture history -Nikola Dobrović's planning of "New Belgrade in Greater Belgrade." Dobrović's propensity for "deductive reasoning" across scales is reflected in his background questioning of "Belgrade's place in the region, republic, federation and Europe," not only in terms of infrastructural links but also the imperative to express the strategic importance of its unique geographic situation that the planned networks would only enhance. Finally, Maja Pličanić presents the case of the large-scale suburban project of Film City in Sarajevo, discussing it in relation to the planning and industrialization of the Sarajevo region.

The visual essay that concludes this special issue represents the "Landscape of the Krajina monuments." During the last 30 years, these abstract forms commemorating Yugoslav peoples' anti-fascist struggle have lingered in the background of the cultural heritage preservation policies and practices of Bosnia and Herzegovina and the larger ex-Yugoslav region. The dozen photographs that constitute the essay imply a somewhat surprising conclusion: instead of dying out in the midst of official neglect, the monuments, embraced by the shrubs, treetops and fogs of the Krajina region, gained in this way a new kind of legitimacy.

This very material blending of modernist forms and regional biological and climatic processes permits us to read the essay not only as an advocacy for recognition of an important genre of cultural heritage and its commemorative content but also as a symbolic representation of an immediate unity between built forms and life itself. From world governance through spatial planning, networks of memorials, railways and waterways to materiality-determined architectural practices, the new kinds of questions posed in this

collection compel us to consider how the most fundamental dimensions of this unity are to be sought in the history of the territory.

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vi-xi Introduction essay

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PLANNING NETWORKS: ERNEST WEISSMANN AND THE INTERNATIONALISATION OF URBANISM IN YUGOSLAVIA

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PLANNING NETWORKS: ERNEST WEISSMANN AND THE INTERNATIONALISATION OF URBANISM IN YUGOSLAVIA

The title of this text is deliberately ambiguous. On the one hand, it points to a common object of planning: networks of various kinds, whether infrastructural, transportation, communication, or others, which feature prominently in the practice of professional planners. However, an alternative reading would suggest that planning itself is a networked activity, connecting practitioners and knowledge into formal and informal networks. As architectural historian Mark Wigley has argued, in the late 1950s, these two aspects underwent a simultaneous surge, exemplified by the activities of the Greek architect Constantinos Doxiadis and the British planner Jaqueline Tyrwhitt. Their journal *Ekistics* and the annual meetings they ran at the Greek island of Delos, known as the Delos Symposion, studied cities as networked systems and, at the same time, actively connected planners from around the world [1]. Seeing planning as a networked activity can surely be expanded beyond Doxiadis and Tyrwhitt's endeavours. For example, one of the most influential organisations in the history of modernist urbanism, CIAM (Congrès internationaux d'architecture moderne), was a social network par excellence, which connected individual practitioners across national borders and allowed for broad circulation of knowledge between them [2], [3]. However, like in most social networks, its members were not all equally linked, and some emerged as especially powerful connectors (or "hubs" in the parlance of network science). Sociograms can be useful in making these social links visible, but individuals who function as network hubs are often identifiable even without graphic aids because of their constant presence in the key events of a particular field.

One such individual was the Yugoslav architect Ernest Weissmann [4].² An active member of CIAM, Le Corbusier's one-time collaborator, a successful architect in prewar Yugoslavia, a member of the international committee for the design of the United Nations Headquarters in New York, a high official of the UN, a scholar at the Institute of Social Studies in The Hague, and a member of the Yugoslav Academy of Sciences and Arts (JAZU) in Zagreb, among other roles, Weissman was even at first glance an exceptionally well-connected person. However, just like the Actor-Network Theory (ANT) stipulates [5], the true extent of his networking capacities can only emerge if we meticulously trace his interactions on the smallest scale. Indeed, at close inspection, his prodigious network-building capacities become clearer. Weissmann used his vast roster of contacts to disseminate urban planning knowledge across the world, motivated by his life-long left-wing commitment to building a more egalitarian global society.³ He was also the central character in the exceptional internationalisation of planning in Yugoslavia after World War II, which allowed for a tremendous influx of urban planning expertise, as well as for its further transmission around the world. Weissmann operated on a global scale, which renders the task of tracing his network-building efforts

² For Weissmann's early career, see [4].

³ Scholars have recently started discussing CIAM as a network; see [6].

daunting, but even without an exhaustive study, a few episodes can illustrate their outsize impact on postwar planning both internationally and in Yugoslavia.

1. EPISODE 1

In January 1954, Jaqueline Tyrwhitt, at the time in between stints at the University of Toronto and Harvard, assumed the position of UN Technical Assistance Advisor to the Indian Government in New Delhi, where she consulted on an exhibition about low-cost housing [7]. While there, she also served as Director of the UN Seminar on Housing and Community Planning, the first in a series of events that the UN would organize in the recently decolonized countries. It was at the seminar that she first met Constantinos Doxiadis, who had just started his planning company Doxiadis Associates (DA) with the ambition to acquire projects for planned development in the Global South. The rest was history: the ensuing partnership between Tyrwhitt and Doxiadis was one of the most influential forces in postwar urbanism, whose significance is difficult to overstate. It promulgated what Doxiadis called *ekistics*, a purported "science of human settlements aimed at the planned emergence of a single planetary city on Earth". From the time they met in 1954 until Doxiadis's death in 1975, the pair closely collaborated on the publication of the journal *Ekistics*, which Tyrwhitt edited and which functioned, in Wigley's words, as a "networking instrument" that aggregated and republished cutting-edge knowledge for further dissemination [1:92-93].

Ernest Weissmann was also present at the seminar in New Delhi in his capacity as the head of the UN's Housing, Town and Country Planning Section (HTCP). But more importantly, it was he who nominated Tyrwhitt for the job in India, thus facilitating her encounter with Doxiadis. Weissmann had been linked to both future partners through his various positions at UN, albeit separately. Doxiadis was the leader of the Greek delegation at the UN founding conference in 1945, whereas at the same time, Weissmann worked for the United Nations Relief and Rehabilitation Administration (UNRRA), and it is likely that their contact dated back to that time. In 1953 Doxiadis was just embarking on a career as a global development expert by establishing Doxiadis Associates, a planning company with the ambition to enter the emerging development market, for which his prior association with the UN must have been useful.⁴ By that time, Tyrwhitt was already one of the key members of postwar CIAM, but it appears that was not the way she had met Weissmann.⁵ Rather, their connection dated back to 1952, when Weissmann appointed Tyrwhitt to the UN-funded project Habitation pour le plus grand nombre [7:151]. The initiative eventually fell through, but the following occasion was successful, leading to Tyrwhitt's appointment in New Delhi and to her encounter with her lifelong professional partner. Weissmann's mediation in that encounter illustrates his centrality to the "small world network" of postwar urban planning and the outsize role he played in it.

2. EPISODE 2

Ernest Weissman was vacationing on the island of Mali Lošinj in the Adriatic on July 26, 1963, when a devastating earthquake struck the Macedonian city of Skopje. The disaster attracted global attention, followed by an outpouring of aid from every corner of the world.

⁴ For an overview of Doxiadis's international career before Delos, see [8].

⁵ See [7:125]. Weissmann was at the time no longer directly active CIAM, even though he hoped to involve it in UN-sponsored programs. He was apparently disappointed by CIAM's repeated rejection of his progressive ideas; see [6:11]. See also [9].

Weissmann was at the time Assistant Director of the UN Economic and Social Council (ECOSOC), while at the same time running the newly formed Housing, Building, and Planning Council (HBPC). It was in that capacity that the UN Secretary-General U Thant quickly dispatched him to Skopje to survey the situation.⁶ The instructions laid out in the resulting report served as the basis for the entire reconstruction [9:33]. Weissmann also oversaw the entire process as Chairman of the International Board of Consultants, and his role would be later described as "the principal architect and ideologue of aid obtained from the United Nations."⁷

The story of the reconstruction of Skopje has been told many times over, but the UN's role in it can be summed up as managing the international influx of various kinds of expertise, from seismic research and construction technology to urban and regional planning. Dozens of specialists from around the world were brought to the city, including Doxiadis, whose company DA was hired to devise the city's new master plan, and the Japanese architect Kenzō Tange, who won the competition for the city centre. By this time, DA already had many projects in the Global South under their belt, sponsored by the UN, the Ford Foundation, and various governments, putting into practice the developmentalist agenda of the industrialised West. However, the Yugoslav government, then at the height of its nonaligned orientation, had its own networking ideas: in order to establish geopolitical balance in the planning team, it required that Doxiadis collaborates with the Polish company Polservice and the chief architect of Warsaw, Adolf Ciborowski. Skopje thus became a literal meeting ground for specialists from around the world or, as architectural historian Ines Tolić has argued, a "city as a network" of international solidarity [10:21-62].8 Of course, Weissmann was not the only mastermind responsible for that project, but the outcome very much matched his own ambition to transform Skopje into a "world city" that could function as an "epicentre of knowledge that, in spite of the Cold War, would promote peace, understanding and collaboration [12]."

The effects of such a vision greatly exceeded its original site. The success of the internationalised planning of Skopje served as a blueprint for further involvement of the UN in Yugoslavia, most notably the so-called Adriatic Projects, three interlinked regional plans for the Adriatic coast, coordinated by the UN under the management of Adolf Ciborowski [13]. This, in turn, created a mindset among Yugoslav planners that favoured internationalism, leading to further exchanges. By the 1970s, it was common for Yugoslav planners not only to consult with foreign colleagues (typically in the West), but also to seek education abroad. Despite having officially retired from the UN by that time, Weismann travelled on various assignments around the world more than ever, but also continued to be involved in his home country by providing contacts and advice.

3. EPISODE 3

Just a couple of months after the Skopje earthquake, the young Slovenian architect Vladimir Braco Mušič found himself in New York as one of the first Yugoslav architects on a Ford Foundation grant for graduate studies in the US.⁹ He was supposed to attend an urban

⁶ For a detailed account of Weissmann's role in the reconstruction of Skopje, see [9:32-43].

⁷ See [10] cited in [9:33]

⁸ Scholars have more recently studied the reconstruction of Skopje through the lens of the Actor-Network-Theory; see [11].

⁹ Mušič recounts the entire anecdote in [14]. For Ford Foundation's presence in Yugoslavia, see [15].

design program at one of the less highly-ranked American universities. Having attended CIAM 9 in Aix-en-Provence as a student, however, Mušič had his eyes on Harvard, whose Graduate School of Design (GSD) was at the time filled with CIAM luminaries. While in New York, he stopped at the UN Headquarters to visit Weissmann, a family friend, and he took the opportunity to share his desire to attend GSD. As luck would have it, Jaqueline Tyrwhitt—by then a Harvard professor—was in the building, and Weissmann called her on the spot. She remembered Mušič from Aix, and he was promptly admitted to Harvard, the heart of the American scholarly establishment. Apart from Tyrwhitt, Mušič would also study under other prominent CIAM members, such as Sigfried Giedion, Josep Lluis Sert, and Eduard Sekler, and he also encountered other influential intellectuals, such as the MIT professor Kevin Lynch. Cambridge was at the time also home to the Harvard-MIT Joint Centre for Urban Studies, a Ford foundation-sponsored think-tank that exemplified the paradigm shift in urban planning from a design-based approach to an open-ended, research- and policy-based process that accounted for user feedback [16].

Weissmann was thus once again the matchmaker for an encounter with far-reaching consequences. Had Mušič not gone to GSD, it is difficult to imagine that he would have had the intellectual breadth, confidence, and contacts to successfully co-direct the American-Yugoslav Project in Urban and Regional Studies (AYP), one of the most significant international ventures in Yugoslav planning that came on the heels of Skopje's reconstruction.¹⁰ Hosted at the Urban Planning Institute of Slovenia in Ljubljana between 1966 and 1975, the project was a brainchild of Mušič and the US geographer Jack Fisher under the sponsorship of the US Department of State, Yugoslav government, and, until 1970, the Ford Foundation. It facilitated the import of the latest quantitative techniques in regional planning from the US, contributing precisely to the kind of shift pioneered at the Harvard-MIT Joint Centre, from physical planning to a more comprehensive and interdisciplinary approach. As a direct result, planning institutions in major Yugoslav cities like Belgrade and Novi Sad started using cybernetic quantitative methods, and leading universities developed graduate programs in regional planning. In addition, AYP functioned as a veritable networking instrument that facilitated contacts among planners from the United States, Yugoslavia, and other European countries like Czechoslovakia, Italy, West Germany, Romania, and Sweden.¹¹ Unsurprisingly, Weissmann remained connected to AYP; he served on the project's US Advisory Committee alongside other networking wizards of the American academic establishment, such as the planner and the University of Pennsylvania president Martin Meyerson. He thus continued to contribute to the project for which he laid the groundwork through his savvy networking.

4. AN INTELLECTUAL ENTREPRENEUR

Among planning historians, there is a tacit understanding—bordering on a myth—of Weissmann's significance for the postwar period. His name repeatedly appears in the accounts of the most important events and the biographies of widely known characters, but his own role remains reduced to that of a supporting actor who somehow always escapes the spotlight.¹² One of the reasons for such obscuring is the fact that Weissmann replaced

¹⁰ For AYP, see [16] as well as [17] and [18].

¹¹ For AYP as a networking instrument, see [15].

¹² Among other sources, see [7], [19], and [20]. Only recently has Weissmann received more focused attention; in addition to Bjažić Klarin's groundbreaking book [4], which covers his early years. See also [6] and [12].

the highly successful architectural career of his prewar years with the less visible role of a UN bureaucrat after World War II. Instead of continuing to design cutting-edge buildings, he moved behind the scenes, which allowed him to promote far more effectively his vision of architecture as a means of achieving a more just society, the defining motivation of his entire career.¹³ By replacing the drawing board with organising, managing, promoting, assessing, and connecting, he took advantage of the powerful platform of the UN to scale up his playing field to the entire globe. Weissmann thus emerged as what is today more or less casually termed an "intellectual entrepreneur:" someone who networks among individuals, disciplines, and institutions to pool various kinds of resources for the production and dissemination of knowledge. The term may evoke a distinctly neoliberal mindset that fetishises entrepreneurship for business purposes and requires everyone to adopt an entrepreneurial persona, but in Weissmann's case, the goal of the enterprise was still lodged in his prewar left-wing agenda to improve the quality of life for the greatest number. (It remains to be established, though, to what degree that goal was achieved considering its inevitable incorporation into the developmentalist agenda established in the capitalist West.) Such commitment is perhaps most obvious from the fact that he remained loyal to his homeland, socialist Yugoslavia, where he continued to contribute to various projects long after retirement, and citizen of which he remained until his death, even though he lived in the United States most of his life.

The exact methods and effects of Weissmann's intellectual entrepreneurship across the world remain to be thoroughly explored. There is little doubt, however, that such an exploration will cast light on an exceptional figure in the history of postwar planning, one whose moment in the spotlight has been long overdue.

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¹³ For this argument, see [4:290-291].

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MODERNISM IN THE PETRIFIED LANDSCAPE: ARCHITECTURE IN MONTENEGRO 1945-1980

ABSTRACT

The subject of this paper is architectural heritage of the former Socialist Republic of Montenegro (SR Montenegro) in the period between 1945 and 1980, with particular emphasis on the role of stone in modern architecture. Stone, as a primordial building and design material, is present in post-war modernist Yugoslav architecture, especially during the first decades, the 50s and 60s of the 20th century. It establishes the continuity of construction, which in Montenegro has two fundamental links: the first is the connection with the vernacular principles of construction in the dry, rugged Mediterranean landscape that extends all the way to the central part of Montenegro, and the second is the connection with the beginnings of the modernist architectural idiom in Montenegro in the interwar period when stone was used mainly in a classical, academic manner. While the paper sheds the light on a hidden part of a very fruitful but neglected architectural heritage, standing in sharp contrast with today's trends of neo-liberal design practices in the country, it also aims to discern an intrinsic influence of the Mediterranean ethos on the architectural and urban developments on the southern and central region of Montenegro. Although most of the addressed buildings are part of the urban context, the imprints of the Montenegrin landscape, with stone being its dominant characteristic and a certain kind of national demarcation present through its authentic use, create recognizable genius loci. Finally, while deconstructing this phenomenon, the paper will help to communicate the process of retreat with respect to the wider tendencies of European architectural currents of the 20th century.

Key words: Montenegro, stone, landscape, modernism, Mediterranean

1. INTRODUCTION

The subject of this paper is architectural heritage of the former Socialist Republic of Montenegro (SR Montenegro) in the period between 1945 and 1980. With the "new countries transformed intro free zones of corporate capitalism without political agency, prone to historical amnesia" [1:17] this heritage reminds us of perpetual crisis in all segments of our lives including the social stratification, exploitation of human and natural resources, all the way to the individual humiliation. Therefore, the analysis of the socialist building heritage within the Socialist Republic of Montenegro provides just a small piece of puzzle in the wider quest for rebuilding the forgotten patterns of development in this region.

Conversely, the study seeks to discern the overall influence of Mediterranean ethos on the architectural and urban developments in the southern and central region of Montenegro, with emphasis on the usage of stone as a dominant element in the surrounding landscape. This is particularly important considering the wider context of influence of Mediterranean culture on fundamental principles adopted and heralded as a 'retreat' from pernicious legacies of internationalism during second half of the 20th century.

Most importantly, while reassessing three pivotal decades of the socialist modernism in SR Montenegro, the paper also interrogates how beneficial the architectural and urban practice was in the search for self-identity within the smallest Yugoslav republic, re-born in the legacies of heroic fight against fascism during WWII.

The first part of the paper reflects on the historical pre-conditions rooted into the historical indebtedness of this area to the sea, emphasizing its extraordinary potential for further affirmation through the contemporary practice of the post-war generation of Montenegrin architects. In fact, it served as a chance to re-integrate with the contemporary architectural currents within the Mediterranean region. The second part provides systematic layout of the most important architects who contributed to the process of attuning the international influences coming from abroad to the local conditions, reflecting the need to follow the global tendencies while keeping in touch with the authentic dialectics mentioned above.

This will primarily be examined through 'textile tectonics', created by the use of stone in different scales and treatments, present in the works of many architects in Montenegro during post-war period: Vujadin Popović in Podgorica ("Crna Gora" hotel and Post Office, 1949-51); Đorđije Minjević in Nikšić (Grammar School, Elementary School "Žarko Radić" and others, 1957-62); Nikola Dobrović in Herceg Novi (Post Office and Children's Department of the Institute for Physical Therapy, 1962) and Milan Zloković in Ulcinj (hotel "Mediteran", 1965); application of the so-called 'sea pebble', stone from the banks of the Morača river, in the works of Vukota Tupa Vukotić ("Galeb" beach facility, 1961), Svetlana Kana Radević (Podgorica hotel, 1967; Bus station, 1968; Barutana monument, 1976-80) where stone is an inseparable part of the primary architectural design; Arsenije Martinović (residential building, 1961), Milan Popović and Božidar Milić (Clinical Centre, 1974; Technical Faculty of the University of Montenegro, 1977) in Podgorica and its surroundings; Milorad Vukotić in Cetinje (residential block of Stari aerodrom, 1967), Aleksandar Keković in Budva (Elementary school, 1976) and others. Bogdan Bogdanović writes an 'ode' to the Jablanica granite in the unique essay Record of the construction of monuments in Ivangrad (1980) [2], in which he describes the long process of choosing stone and the creation of the only monument of his on the territory of Montenegro - the Freedom Monument (1972-77) on Jasikovac Hill next to the city of Berane.

This paper will not only cast the light on neglected architecture of Montenegro, situating it within the larger context of Yugoslavia's *unfinished modernisation*, but it will also be used for decoding the shift from modern to post-modern practices, which spread across the world. Finally, this research will hopefully open new avenues for further understanding while contributing to the rich architectural heritage of the former Yugoslavia, Mediterranean region and, thus, European continent as a whole.

2. STONE AS THE FIL ROUGE OF THE TERRITORIAL CONTINUUM

If we recall what Fernard Braudel, in *The Mediterranean and the Mediterranean World in the Age of Philip II*, coined as "narrow seas" [3], with the Adriatic acting like a head to this coherent system constituting the Mediterranean, there is no doubt that this paradigm has strongly and most vividly reflected the historical importance of this part of the Old Continent. With numerous cities along the coastline, acting as economic engines and diffusers of what Braudel termed *civilisation*, we can understand the importance of synthetic analysis of mutual socio-political indebtedness between them. It is in this context that historians claim that "The hypothesis of a Mediterranean people united by centuries of history and multiple relationships has been accepted and explored by many scientists, and today it is consistent use to speak of "Mediterranean civilization" which exhibits the cultural and historical unity between the different peoples facing the Mare Nostrum." [4:264]. Consequently, it is exactly due to this historical discourse that architecture, with the stone in its foundations, represents a laborious testimony of the similar cultural roots (Figure 1). According to Antonio Monestiroli it lays new avenues in the overall process of decoding "...the homogenous territory anthropized in a unique way." (Figure 2) [4:199]



Figure 1. Walls of the Old city of Kotor under the Škudra canyon (left) and ruins of the Old city of Bar (middle and right) [11: 3, 77, 78]

In this context, Montenegro truly represents a unique substratum of indigenous practices interconnected by multicultural interests in forging the common idea of inextricable territorial continuum. This territorial continuum requires further studies on infrastructural, urban, typological and archaeological level that could lead us to the new understandings of stone as a unique DNA of the region. In that context, the emphasis on researching the term *built* landscapes in Montenegro vividly invokes the symbiotic relationship between the natural and artificial world where the new and the past coexist. One of the fundamental

traits of this unique territorial identification can be found in its materiality. Used as a domestic material, intrinsic to the dishevelled relief of the Adriatic coast and Dinaric Alps, whitened by the sea and river currents and carved by the wind streams, stone remained the basic unit of construction within the Montenegrin landscape. In fact, during the centuries-long process of anthropisation of the landscape, it reinforced the ideal of transversal civilization, which has preserved the symbiotic relationship between the men and the territory, and vice-versa. In this context, exploring the role of the stone as a primary building material in Montenegrin architecture, urbanism and morphology, within the overarching aim of retracing the *fil rouge* interwoven within this complex territorial system is of indispensable importance.

Anthropisation of the Montenegrin territory was predominantly characterized by its rough relief which pre-conditioned a wide range of vernacular architectural practices. These were divided in five different categories spread across the country, starting with the sea to the mountain oriented types of houses. In each case, however, the role of stone in the construction process was indispensable, contributing to the general notion of the symbiotic relationship between natural and artificial. In contrast to 'Durmitorska' and 'Plavska' house in the north, in case of 'Paštrovska', 'Bokeška' and 'Crmnička' houses, built in roughly processed or roughly fitted lime-stone present within the local landscape, it is important to note the general organization which complements not just natural environment but also entrenched social habits of Montenegrin 'bratstvo' (brotherhood) (Figure 4). This is particularly reflected through territorial organization in the south and central part of the country, represented by continual rows of tightly arranged plots of land of different brotherhoods on macro level and terraced houses within one brotherhood on a micro level.



Figure 2. Anthropisation of the landscape - Karst of Cetinjsko polje (left) [9:14] and Adriatic coast of Montenegro (middle and right) [5]

Such constellation was also conditioned by turbulent periods of enemies, whereby locals were always ready to defend themselves. This state of affairs is reflected in the architecture itself. The appearance of houses pressed against each other, each group being made up of a single family, speaks of the need to bring kinship closer together in times of misfortune and danger. Usually, each of these territorial units was divided by 'suvomeđa' as a stone arrangement not only intrinsic to the seaside and hinterland of Montenegro, but also of the Mediterranean in general. This skill of building in the dry involves processing and stacking stones on top of each other without the use of binding material. The stability of the structure is ensured by the careful selection and stacking of stone, and dry construction has shaped various cultural landscapes from prehistoric times to the present day. The skill was primarily passed down from generation to generation, depending on the terrain on which it was built.

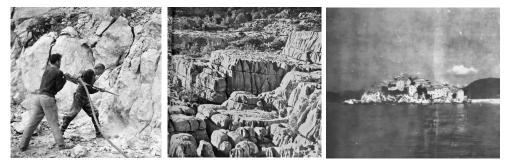


Figure 3. Excerpts from Montenegrin landscape from 1964 [11: 3, 19, 44]

The critical value of this inherited system, stone being in its foundations, can particularly be emphasized during post-WWII period when "...the tension between, on the one hand, the need for access to this progress and, on the other hand, the need to preserve our heritage, [in that] we suffer the pressure of the two different but equally compelling needs." [6] This was also one of the reasons why in 1957 the question of "crisis or continuity" [7] denoted critical discourse between pragmatic ideals of capitalist modernism and the possibility of domesticating the modernist ideals and attuning them to the inherited qualities of (in this case) the Mediterranean ethos (Figure 3). The values of this approach made it possible for architects across this region to identify the "truth that architecture could not give up on the social movements that justified it, the programmes that gave it meaning, or on memory, the engine of reconciliation with history, with the identity of place, with the value of the context, and finally with life." [8] Heralded in different socio-political circumstances that emerged on the continent, it was indeed this humane character which altered the principles of (post)modern architectural practice within the Mediterranean region resonating also on the global level. As this approach was simultaneously interrogated by architects in Portugal (Fernando Tavora), Spain (Joseph Antoni Coderch), France (Georges Candilis), Italy (Luigi Moretti), it also became the subject of architects in Montenegro, whose work addressed the complexity of vernacular as well as its translation into contemporary design context.



Figure 4. Bokeška house (left), Paštrovska house (middle), Crmnička house (right) [9: 11, 26, 40]

Moreover, specific to historical conditions of re-birth of the Montenegrin state in 1943, it was a post-war generation of architects that articulated fundamental values upon which new layers of authenticity were discovered and etched into diverse mosaic underpinning historical continuity of this minute Balkan state. In broad terms, these values can primarily be connected to those of the "socialist-humanist" approach in former Yugoslavia based on "antifascist, self-managed, non-aligned, anti-imperial and progressive political aesthetic" [1:18]. Such foundational character served as an ideal experimental laboratory for the generations of architects to research new categories between self-identification and future

development of the Montenegrin society. In deconstructing a DNA of this territorial complexity, different forms of stone integration within the construction process were pivotal in establishing the line of continuity between modern and vernacular. This wasn't just a mere imitation but a profound willingness to penetrate into the collective subconsciousness that influenced the way of living of the local people for centuries. It was an intrinsic need of the architects to synthesise the qualities of the ethnographic understanding of the materiality, which, we could say, strived to "animate rather than simply mimic, to rupture rather than merely account, to evoke rather than just report, and to reverberate instead of more modestly resonating." [10] Reawakening the sensoriality deeply entrenched into the ethos of the local people, Montenegrin modernists successfully balanced between contemporary programmatic expectations of new buildings and their capacity to establish connection with the pre-existing condition, adding additional value to it. With different interpretations of the stone, seamlessly fitting into the jagged landscapes across the country, they enriched Montenegrin architectural legacy to such an extent that it proved its quality far beyond the borders of ex-Yugoslavia. More importantly, the works of the post WWII generation of architects continue to remind us of our role in the process of discovering our own identity as a constitutive part of a broader civilisational context.

3. ECHOES OF THE MEDITERRANEAN LANDSCAPE

Retracing the continuity in materiality and forms, Milan Zloković and Branislav Kojić clearly understood, through their writings from 1964, the importance of medieval settlements of the Boka Bay in Montenegro, stating that "considered as a whole, the rural house of Boka Kotorska belongs to the general type of coastal house that one encounters from Ulcinj to Trieste, in the islands as well as on the entire Adriatic coast." [11:51] Kojić recognizes fundamental values of continuum in both historical and material context. He goes on and distinguishes two groups of settlements. The first one extends along the coast and the roads, in a long line of tightly packed houses, always facing the sea. Behind them, on the slopes rise the habitats of the second group, with scattered houses hidden in greenery. Kojić outlines that "the real village of Boka Kotorska is actually revealed in the second type of habitats which, located on hillsides, are more or less distant from the coast." [11:52] Kojić particularly emphasizes the authentic value of the stone as a primary construction material stating that "seen from the marine landscape, the house of the Boka can hardly be distinguished from the rocky ground which outcrops in places through the greenery. Built in stone, its grey colour blends with the grey of the rocky massifs." [11:53]. Here, Kojić outlines the quality of the vernacular in what he sees as creation of a stratified territory well represented by the same stone that homogeneously builds the nature and architecture of this strip of land.

Milan Zloković, on the other side, whose "childhood and adolescence must have been the great trinity of the Mediterranean life: the sea, the ship and the stone house" [12] directs his attention to bourgeois houses of Boka. Aligned, according to Ljiljana Blagojević with the aesthetics and logic of a ship, Zloković notices that "the simple numerical ratios, based on a common determined measure, represent one of the characteristics of the architecture here... [and] in addition to the traditional use of stone and the skill of its execution, architecture consisted in its quiet and discreet proportions." [11:56]. What is particularly important here to emphasize is that Zloković read the stone, not only as a material rooted into the tradition of the Mediterranean building practice but as a principal unit of a modular

system, which he later translated into his own architectural language. In case of palaces of Boka Kotorska he describes that "the stone elements were ordered before the start of the work, always according to the measurements taken previously, which led to the typing of certain elements. For module we have tacitly adopted the measure of 17.4 cm, that is to say half of the current Venetian foot." [11:57]. As the stone for palaces was often transported from the island of Korčula via Adriatic to Boka Bay, it represents yet another testimony to the integral idea of continuity in forms and materials traversing this unicuum of territories and people. It is also the reason why the heritage in the words of Zloković "represents an important chapter in the history and serves as a model in the realization of contemporary architectural problems." [11:58].

Specifically, during the 1950s and 1960s, the work of the most important protagonists of early modernism in interwar Yugoslavia, architects Nikola Dobrović (1897-1967) and Milan Zloković (1898-1965) on the coast of Montenegro, is of particular importance. In case of Zloković, the attitude towards the Mediterranean heritage comes from inheritance from Boka Kotorska (Bijela), whereas Dobrović's connection was established during his so-called 'Dubrovnik period' (1934-43).

The "Mediteran" Hotel complex in Ulcinj, on the slope of the Pinješ hill (first phase 1961-62; second phase 1963-64), which architect Milan Zloković realized with architects Đorđe Zloković and Milica Mojović [13], achieved a specific relationship between modernity and tradition, primarily through simple geometry of shapes and a sophisticated sense of measure and proportion, using the so-called modular coordination, constantly present in Zloković's work (Figure 5). The urban layout of the complex, based on cascaded pavilion buildings in the pre-existing greenery of terraced gardens and olive groves, represents a kind of interpretation of the Mediterranean vernacular heritage, while the combination of modern and traditional materials, primarily stone, brings the author in contact with the postulates of the "regional context" [14] and specific "Mediterranean modernism" [15]. This work establishes a clear continuity with his numerous realizations in Montenegro in the period between the two world wars (villa "Rivijera" in Herceg Novi (1934-35); People's House in Bijela (House of the Knight King Alexander I of the United Nations, 1935) [16]; Customs House building in Kotor (1935-38) and the National Health Centre with a hospital in Risan, the endowment of Vasa Ćuković (1938-41)), where a synthesis of modernist architectural principles and the Mediterranean building tradition [17] can be clearly observed (Figure 5). Specifically from that period, the buildings in Bijela and Kotor stand out as representatives of the Mediterranean tradition of stone integration within construction process.



Figure 5. National Health Centre, 1939-41 (left) and Hotel 'Mediteran' in Ulcinj, 1961-64 (middle and right) [17]

These are compact reduced volumes that represent a modern expression of traditional coastal building principles and materials, in precise classical proportions. A dominant multistorey volume of the hospital in Risan, done in reinforced concrete and a low, terraced tract with pergolas, terraces and sub-walls, placed longitudinally, parallel to the coast in the hinterland towards the hill, adapted to the views, topography of the terrain and specific climatic and environmental conditions, establishes a successful dialogue with natural landscape. [15:107-108]

In the period from 1950 to 1965, architect Nikola Dobrović was active in the area of Herceg Novi and Igalo, where he laid the foundations for the development of modern health tourism through a series of urban plans and architectural projects, most of which remained unrealized [18]. Dobrović's first work was, extremely modest in dimensions, the object of the reception and porter's office of the old spa treatment centre in Igalo (the old hotel "Igalo", 1958, demolished in 1972), of specific design with walls made of local stone [19:202]. Through a series of annexed functional-plastic masses and elements, using local, Mediterranean materials - stone and sea pebbles, Dobrović creates a living and authentic architecture, with an expressive character such as the Children's Department of the Institute for Physical Medicine and Rehabilitation "Dr. Simo Milošević" in Igalo (1959-62), which is actually an extensive addition and adaptation of a smaller cubical object of the former French cable telephone exchange building (Figure 6).

At the beginning of the 60s, Dobrović designed two more buildings in Herceg Novi: the Post Office building (1962), the position and plastic design of which derives from his previously defined urban design, and a new part of the Herceg Novi Municipality building (1962) (Figure 6). The expressive way in which Dobrović modifies the basic cubist plastics from which he starts, creating his own "conflict architecture" [19:203] (as in his most famous work - the General Staff building in Belgrade, 1954-63), is further enhanced by the influence of the specific morphological characteristics of the Mediterranean environment. The treatment of surfaces with different coverings - stone and sea pebbles of local origin - and their juxtapositional relationship, is an active principle in Dobrović's work since the 'Dubrovnik period'. The buildings in Herceg Novi and Igalo represent a significant part of the post-war architecture, Heidegger's attitude towards *genius loci* and the Mediterranean landscape, through the transformation of strict modernist principles characteristic of his pre-war period. [20]

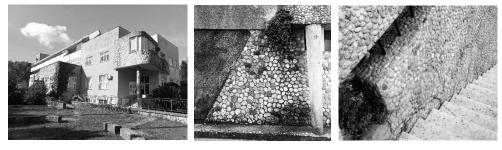


Figure 6. Children department in Igalo, 1959-62 (left and middle) and Post Office in Herceg Novi – detail, 1962 (right) (photos by Slavica S. Vučković)

In the 1970s, there was an almost complete change of the modernist paradigm and the emergence of architectural pluralism and "conceptual dualism" [21:19-21] in the whole of

Yugoslavia, including Montenegro. The modernist idiom is mostly transformed into a structuralist one, followed by the appearance of strong forms of individualized and sculptural volume, broken and curved lines. In addition to the dominant use of natural concrete in that period, some authors are still directed towards interpretations of the local construction context, which usually implies the establishment of continuity in the use of local stone, especially when it comes to the Mediterranean context.



Figure 7. Elementary School 'Stefan Mitrov Ljubiša' in Budva, 1975-77 (photos by Danilo Bulatović)

A good example is the spatial and form concept of the Elementary School "Stefan Mitrov Ljubiša" in Budva (1975-77) (Figure 7), designed by architect Aleksandar Keković (1939-2018) [22]. A fluid semi-open space in the basement part, strong modular stone wall masses and slanted single-pitched roofs, make this unique building, although compact and strong in form, fully integrated into the Mediterranean context [23]. It is precisely the use of semi-hewn stone on wall panels and surfaces that contributes to the reading of the specific 'vernacular archetype' of a terraced Paštović house, specific to the part of the hinterland of the Budva riviera.

4. STONE EMBROIDERIES

The simplified cubist volume of the flat roofs of the Post Office building (1947-49) and the hotel "Crna Gora" (1949-53), designed by the architect Vujadin Popović (1912-1999) [24], undoubtedly one of the first post-war Montenegrin architects who developed a clearly legible modernist language, marks the entrance to the central area of Podgorica ("Nova Varoš"). The Post Office building is characterized by plain geometry, clean facade surfaces with simple rectangular openings, grouped in horizontal strips on the first floor, without covered segments on the ground floor, with cladding made of white, cut stone slabs, placed in regular order without emphasizing the joint. The sculptural detail on the facade facing the boulevard - a dynamised female figure executed in a deep relief - represents a lyrical, classicist composition, which is also attributed to the specific artistic sensibility of the architect [25]. The skilfully juxtaposed cubic masses of the hotel "Crna Gora" (1949-53) [26], the orthogonal matrix of the facades and the formation of the open ground-floor portico on the columns show Popović's sophisticated perception in establishing functional and spatial relationships (Figure 8).

The use of roughly processed stone is dominant on the external surfaces of the ground floor, especially in the part of the covered portico - the central terrace of the hotel, where the pillars, covered with the same type of stone, come to the fore. Conspicuous use of stone on the ground floor contrasts with the clean facade surfaces on the higher floors and follows the Renaissance (classical) matrix of vertical facade treatment, with rustic cladding on the

ground floor. Similar design features can be seen in Popović's hotel "Onogošt" in Nikšić (1952-55), where there is also an emphasis on the use of local stone on the ground floor (Figure 8). The same material will also be present in the designs of the architect Đorđije Minjević (1924-2013) [24:120-122], who, after Popović's sudden emigration to Australia, participated in the design and completion of the construction of the "Onogošt" hotel.



Figure 8. Hotel "Crna Gora" in Podgorica, 1949-53 (left) [27] and Hotel "Onogošt" in Niksić, 1952-55 (right) [28]

In Nikšić, Minjević designed a series of buildings characterized by harmonious functionalcompositional units developed in orthogonal matrices and cubic volumetric masses, flat roofs and emphasized horizontality with the distinctive use of local stone on some facades: the Grammar School building (1955-57, later "Olga Golović" elementary school [29]), surgical and gynaecological hospital (1960) and elementary school "Žarko Radić" (1961). The Nikšić Municipality building (1962), and soon after that the residential tower on the roundabout (1963), became recognizable landmarks of the city from which a typical international style pattern can be read, while the first and the only Trade Union House in Montenegro (1962) [30], functionally divided and with dynamic volumetry, along with the impressive vertical concrete brisoleils on the southern facade, is a unique piece of work in Minjević's oeuvre from Nikšić [30: 129, 339]. The use of stone-clad wall tiles becomes a special element of architectural expression, which is architect's "preoccupation that originates from the tradition of the Montenegrin architecture" [31]. He uses different types of stone masonry that were favoured in the 50s and 60s (the so-called 'splitski vez' (Split embroidery) or 'češki vez' (Czech embroidery); 'na bunju', 'štokovano' etc.), emphasizing that for him the use of stone meant precisely the establishment of continuity "between traditional stone construction and modern architecture", but also the landscape ("and the landscape of this climate was dominantly characterized by stone") which "will not negate modernity, but will only ennoble it." [31:36].

The cubic volumetry of shallow floors and emphasized horizontality, with reinforcedconcrete walls covered with stone are also characteristic with respect to other buildings from the same period: elementary schools "Radojica Perović" in Podgorica (1963, today the School of Mechanical Engineering) (Figure 9) and "Vuko Jovović" in Danilovgrad by architect Yuri Gruzinov (1927-1973) (Figure 9) [24:61-62]; the building of the Faculty of Law and Economics in Podgorica (1962) by which Milan Popović (1934-1985) [24: 155-157] as one of the most productive Montenegrin architects, began his abundant and short 25-year career; as well as the impressive residential villa of the Executive Council of SR Montenegro (1967, today "CANU" building [32]) also in Podgorica, designed by architect Milorad Miša Vukotić (1932-1978) [24:49-52]. The last example is a completely authentic application of the modernist language on an unobtrusive volume, organically integrated into the slope of the Gorica hill, with emphasized horizontal lines, rhythmically placed brisoleils and penetrations of wall sycamores into the stone [33]. All the above-mentioned works are emblematic examples of 'regionalized modernism' in the 1960s.



Figure 9. Faculty of Law and Economics 1962 (left) and "Radojica Perović" school 1963 (right) in Podgorica (photos by Danilo Bulatović)

5. PEBBLE-MODERNISM IN TITOGRAD

During post WWII years of reconstruction, the capital city of Titograd (today Podgorica) acted as tabula rasa in terms of its capacity to adopt different kind of urban and architectural approaches in creating contemporary image of the socialist city. This modernity was predominantly reflected through new residential blocks, governmental and educational institutions, interconnected with wide network of transport infrastructure built on the west side of the Morača River. Most importantly, during this phase of the city's enlargement it is of indispensable importance to note how beneficial the architectural and urban practice of local architects was in the search for self-identity within the smallest Yugoslav republic. In broader terms, such development of the "unconquered men of the Black Mountain...whose inhabitants reacted to the unprecedented loss of independence [in 1918] by converting en masse to communism" [34], socialism brought, for the first time, a peaceful contribution to the historically war-torn process of a self-identification in Montenegro. Hence, in search for collective consciousness of the society and its translation into architectural language that defied the common principles of high-modernism during 1950s and 1960s, architects such as Svetlana Kana Radević, Vukota Tupa Vukotić, Arsenije Martinović, Dušan Laličić, among many others, left behind positive examples of this authentic design practice as a contribution to the "more local, the more universal" [35] paradigm.

Identification of co-existence between territorial materiality and architectonic-typological solutions within the petrified landscape of the Morača river canyon (which passes through Podgorica) was initially adopted and heralded in design by architect Vukota Tupa Vukotić (1932 – 2002). As the first author who used local pebblestone in the construction of "Labud plaža" (river-beach complex) in 1960, Vukotić followed the principles of *continuum* of knowledge related to stone building techniques, which testifies to the fundamental sensibility of the architect to the existing context (Figure 10). With the building devised "as

an organism with a multitude of balanced contents [that] follows the terrain without force, with the impression of complete adhesion and fusion", accompanied by "the horizontal strip [that] harmonizes the rhythmically arranged free spaces...with a lacy treatment of the wall (made of hollow blocks) to full partitions made of natural concrete and those with pebbles" [24:44] the architect manages to blur the line between the natural and artificial. Interestingly, a connecting line can be drawn between Vukotić (b.1932) and his Portuguese contemporary Álvaro Siza (b.1933), who, six year after Vukotić, designed the well-known Leça Swimming Pools complex (1966) on the beach of Matosinhos.



Figure 10. "Labud plaža" river-beach complex in Podgorica, 1960 (left) [36], (middle and right - photos by Danilo Bulatović)

In both cases the right balance was struck "between the functional, technological and material requirements of contemporary architecture", while keeping in touch with the "knowledge of local tools and techniques to resolve the specific problems of each context: climatic efficiency, economy of construction and conflict-free continuity in the landscape and in scale." [35:21]. Consequently, the two examples show how skilful both architects were in deriving new meanings and solutions for quite similar structures in quite complex relief, to the benefit of both the users and the local environment. Another trait that significantly contributes to the realization is that in such cases, instead of opposition, tradition and modernity did not clash. This approach allowed Tupa Vukotić to successfully materialize extremely contemporary architecture, without overlooking the legacies of modernism, nor the collective sensory sub-consciousness of the local people. Even today, when the pebble-stone of the river still emanates the essential qualities of the building's concept, it is an example "which inform approaches to urban planning and regeneration that are more attuned to the pleasures and effects of sensual diversity in the city" [37], which Podgorica desperately needs today.



Figure 11. Residential buildings in Podgorica, 1960 and 1964 (photos by Danilo Bulatović)

During the same period, architect Arsenije Martinović (1932-2018) also made his contribution to the process of dissemination of the pebblestone in the facade treatment in his architectural works in Titograd. It was residential typology in all three cases that Martinović made his recognizable footprint. These examples gravitate towards the river banks which clearly reflects architect's motivation and understanding of the city's inter-dependence on the natural elements as well as its role in creating the architectural identity of the city as a whole. In the first example (1960), on the west side of the river, on a linearly distributed three stories building, Martinović posited pebble-stone on the symmetrical corners of both blind-sides, with the white square windows in the upper corners underpinning the overall geometrical composition (Figure 11).

Furthermore, in two residential buildings (1964) on the east side of the river, near Stara varoš (Old city), the architect proposed a similar solution with minor changes in the treatment of the front elevation, with equally accentuated corners covered in pebble without openings (Figure 11). Hence, it is important to outline a clear intention of the architect to cultivate the austerity brought by the principles of high modernism, whereby shining white volumes on the top overlap with the carefully crafted connection to the ground. In this context, Martinović's sensibility shares foundational character similar to that of Vukota Tupa Vukotić, aiming at synthetic approach in resolving the questions of modern design practice.

Another important influence in the usage of a pebble-stone as the non-representational underlay of these *materialities* that we learn from, more than its representational overlay is Svetlana Kana Radević (1937 – 2000). In her elaborate writing about the pernicuous legacies of internationalization and her vision of the contemporary, Radević immensely contributed to the process of demesticating the architectural practice to the ambience of Titograd. Among many examples that show this kind of commitment, stand some of the most notable such as hotel "Podgorica" (1967) and bus terminal building (1968) (Figure 12). Those two represent architect's opposition to the wider currents in the architectural world that she described as "the movement [that] was eventually deprived in terms of creative force, repeated endlessly and as a consequence depleted while also being introduced in the ambiental surroundings neglecting their qualities" [38].



Figure 12. Hotel "Podgorica" 1967 (left) and central bus station 1968 (right) in Podgorica (photos by Lazar Pejović and Danilo Bulatović)

Built on the western banks of the Morača River, hotel "Podgorica", for which Radević was honoured with the prestigious *Borba* Award (1968), represents crucial moment in identification of the spatial and sensorial qualities which the site offers to the architect. In a linear arrangement of the volumes along the contours of the landscape, interrupted with concrete walls covered in pebble, she successfully balances between material and visual continuity with the surrounding space. In general terms, it subscribes to the "cats stretched out on the floor" [39] notion on account of its ability to blend into the ground. Similarly, in the bus station project, Radević emphasizes the role of pebble-stone in lower and upper zones of the building whereby the "plasticity and expressiveness of concrete" [40:13] reaches its pinnacle as a part of an authentic architectural language. In her saying that "I do not like tradition in the sense of something fixed, frozen, which is passed on. Rather I see tradition as a dynamic process where things are refined and we get a new expression that is essentially tradition.", [40:27] we can acknowledge a great contribution Svetlana Kana Radević had in the process of self-identification within Montenegrin architectural practice, etching her footprint into the collective memory of the city-scape.



Figure 13. Train station in Podgorica, 1976 (photos by Danilo Bulatović)

In addition to the public infrastructure projects such as Radević's bus terminal, another important example of the implementation of a pebble-stone is the central train station in Podgorica (1976) (Figure 13). Designed by Dušan Laličić (1933-2006) in repetitive system of the 'pebble stripes' with a continual colonnade covering the waiting platform, the architect emphasized the materiality as the initial meeting point between the city and the foreigners. It is yet another testament to the deep understanding of the anthropologic (and thus sensorial) character rooted into the rough landscape and its masterly translation into principles of contemporary design, that architects such as Laličić successfully incorporated as crucial value of Montenegrin architecture.

6. MONUMENT, STONE AND LANDSCAPE

In order to establish a new Yugoslav ideology [41], an array of specific architectural, sculptural, and landscape forms helped mark the major WWII events in the 1950s and 1960s. While the first notable evidence of memorial (monumental) architecture in Montenegro dates back to the 1950s, the culmination of their construction (in Montenegro and other areas of the SFRY) took place in the 1970s, which was the time that gave rise to very ambitious, republic and federal competitions symbolizing a general socio-economic development of the country. A leading role in the process of planning and building monuments and memorial complexes was given to architects since the fundamental aim was not the display of sculptural plastic, but the creation of specific public spaces – places where "ME" becomes "WE" [42], which, given an important socio-ideological role, have become new urban, ambient and landscape topoi.

The monument in the Savinska Dubrava in Herceg Novi [43] is one of the first monuments and prominent landmarks of the urban space constructed during the 1950s in Montenegro. Although it represents a modest form of spatial intervention – 'small-scale architecture', the analogy that can be drawn between the monument and other works of the architect Nikola Dobrović from the same period (in Herceg Novi and Igalo; the General Staff building and the Ministry of Defence building in Belgrade) indicates an essentially identical architectural approach characterized by Bergson's concept of dynamism of space and movement, the importance of the holes (pits) as a compositional element, and particularly the use of juxtaposed elements/materials-coverings, which altogether became the recurring elements of Dobrović's post-war works [43]. With his distinctive and subtle conception of design elements and the application and use of materials, primarily stone, Dobrović demonstrates a responsible attitude towards monuments. For him, monuments represent "the most subtle aspects of urbanity" and "means of harmonizing masses, finding proportional relationships, rhythmization and in-depth experience of space" [44]. Dobrović establishes a specific relationship with the Herzegovinian landscape by developing the dualistic spatial-form concept "vertically vs. horizontally", also present in his Monument to Viktor Dyk on Lopud (1936) from the time he worked in Dubrovnik (1934-43), when his emphasized relationship with the natural, Mediterranean environment paved the way for the landscape and the garden space to became inextricably interwoven, becoming thus an important design and shape tool. One side of the Savina monument (Figure 14) shows a "vertical marking" with a reduced cubic vertical covered with white marble in a square grid ("textile matrix" characteristic of Dobrović), on top of which there is an expressive work in bronze by the sculptor Luka Tomanović (the so-called "Bezmetković", phase I, 1954). The expanded memorial ossuary (phase II, 1960), located on the other side of the monument, represents the opposite principle of a "horizontal marking", which is based on the spatial immersion and the creation of a "rift/penetration" of a kind of "interspace" ("the plasticity of the void" [43]), as a specific spatial effect that Dobrović skilfully manipulates in much broader spatial compositions, such as the General Staff building complex in Belgrade (1954-63). While a square matrix of stone covering is applied on the vertical element of the Savina monument, the surfaces of the buried parts are covered with two characteristic, juxtaposed surfaces – sea pebbles and non-floodable red stone from the local mine in Morinj. It is precisely this use of local stone, noticeable in all of Dobrović's works in Herceg Novi, which aims to establish the continuity between the architecture and the characteristic Mediterranean landscape.



Figure 14. Savina monument in Herceg Novi, 1950s (photos by Slavica S. Vučković)

The Monument (Mausoleum) to the Partisan Fighter (1953-57) on Gorica Hill, one of the most impressive symbols of Podgorica, is the work of Vojislav Đokić (architect) and Drago Đurović (the academic sculptor) (Figure 15). Đurović created two memorial statues of 'partisan fighters' in front of the crypt area [45: 47-48]. Although similar to the monument on Savina in terms of its burial depth, the Mausoleum was designed in a classicist way, according to the principle of axial symmetry, with monumental access staircase leading to the central "canopy-house" in the upper zone of the complex. All surfaces are covered with the distinctive white-coloured local stone from the local stone quarry in the vicinity of Podgorica (Spuž), with the nuances in the varying treatment of both extremely rough and finely carved surfaces (including sculptures), which makes the whole complex monolithic and monumental. The dominance of the local stone corresponds directly to the local context of dry stone and sparse vegetation from the 1950s, while the orientation of the longer axis in the direction of Njegoševa Street at the foot of the hill, establishes the connection with the urban matrix of the central city zone.

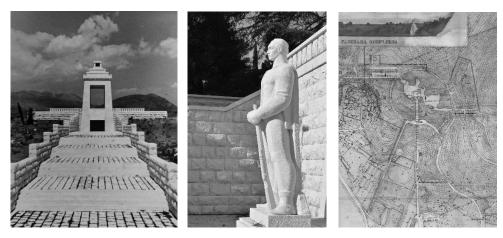


Figure 15. The Monument (Mausoleum) to the Partisan Fighter in Podgorica, 1957 (Slavica S. Vučković's private archive)

After designing Villa Gorica in Montenegro (Podgorica, 1957), the Croatian architect Branko Bon (1912-2001) also proposed the concept for the Monument in Žabljak (Figure 16) (Monument to Fallen Soldiers of the National Liberation War and Victims of the Fascist Terror in Durmitor, 1963) [45: 51-52]. Transforming vernacular architecture into a reduced modernist expression, the archetypal form of the Durmitor log cabin is materialized uniformly in a finely cut white stone from Brač, creating a close but subtle resemblance to the characteristic landscapes of Durmitor. It is exactly the fine stonework that inspired Đorđije Minjević to describe the monument in his memoirs as "a crystalline form...(with a Venetian mosaic in the interior)" [31: 37-38]. As an already experienced stone architect at the time, Branko Bon invited Minjević to supervise the construction of the monument.



Figure 16. Monument to Fallen Soldiers of the National Liberation War and Victims of the fascist terror in Durmitor, 1963 [45: 51-52]

The only architectural work of Bogdan Bogdanović in Montenegro is the Monument to Freedom on Jasikovac Hill, Berane (formerly Ivangrad), which was completed in 1977 [fig. 17]. In his essay on the construction of the monument in Ivangrad [2], Bogdanović once again expresses his search for 'paradigmatic material' in a lyrical attitude towards the landscape he selected as a location of the monument: he goes out and walks up the hill at night so that he can listen to the sounds and the wind, hoping to experience a prophetic vision of the 'invisible paradigm of the future building', waiting for the place itself to tell him what it wants to accommodate, in order to be perfectly complemented and yet remain naturally intact. He describes the process of creating the monument, which started in 1972 and took years to complete, emphasizing the 'wise search for the right stone' as a way of primordial, cosmological connecting with the 'Mother Earth' [45: 23-36]. His 'profane purchase' of the initially selected stone was unsuccessful due to the cracks that appeared in the stone. A long search ended when he made a selection and chose the well-known Jablanica granite, a hard, crystalline rock, which he used for the construction of 40 sarcophagi placed in the ambulatory around the central stone cone, or a 'pillar' 18 meters high (made of limestone rock on a metal substructure). The Monument to Freedom, like the other monuments designed by Bogdanović, is another cosmological category - 'idea-formformula' [46: 30-41] – that establishes a primordial bond with nature and landscape.



Figure 17. Monument to Freedom on Jasikovac Hill, Berane, 1977 (left - Slavica S. Vučković private archive; right – photos by Duško Miljanić)

Designed by architect Svetlana Kana Radević, Monument in Barutana (1980) is recognizable, first of all, by its expressive sculptural vertical in natur-beton ("torch of freedom" height ~12m), which represents the central part of the memorial complex, and dominates the surrounding landscape (Figure 18). Equally impressive and remarkable, and distinctly unusual and unique in the entire oeuvre of this architect, is the way the memorial complex ("Flowers") [45: 17-22] is shaped and structured, which enables Radević to express a special relationship to the so-called "non-programmatic architecture" that includes the monument theme. Prior to the Monument in Barutana, Radević created the memorial complex on the grounds of the Tobacco Factory (1972) as well as the Zlatica Park landscape design (1974) in Podgorica [46: 30-41]. It is precisely in these works that her architectural expression and design become softer, which is manifested in round and circular lines continuously connecting to each other. The culmination of the quest for forms that establish the continuity of nature is clearly represented in the subtle connection of the memorial space with specific landforms and the landscape of rocky hills, characteristic of the wider area of Lake Skadar.

The walking surfaces are paved with stone in a regular linear and radial pattern, and the entire memorial complex is subtly bordered by a low sloping wavy wall, which is covered with broken stone and accentuated joints that give the impression of a discrete stone network connected to the surrounding landscape. Interestingly enough, the monument design and the way in which the entire surface of the memorial is connected to the ground is very similar to the Partisan Memorial Cemetery in Mostar (1965), which was designed by Bogdanović. A clear similarity in the architectural language of both monuments is closely reflected in the wavy lines of the perimeter wall, as well as the combination of irregular pieces of stone with wide, accentuated joints and the linear stone cladding. Svetlana Kana Radević perceived the environment in the same way as Bogdanović ("... more than the space itself, the environment is also every sound, and event in space, and man in space, and time in space" [46: 30-41]), as something of "a great, complex value". [46: 30-41] Still, it was Svetlana Kana Radević who understood architecture, especially monumental architecture, as an important 'social medium', a public space, a space for meetings, events, and communication – a place where "ME" becomes "WE".[42]



Figure 18. Monument in Barutana, Municipality of Podgorica, 1980 (Slavica S. Vučković's private archive)

7. CONCLUSION

The overview of the post-war Montenegrin architectural scene given in this paper through the prism of the use of stone as an autochthonous material with the aim of building upon the characteristics of the Montenegrin landscape and establishing the continuity in the building process, enables the election of a specific group of architects whose contribution is immeasurable with respect to the size of the architectural scene in Montenegro.

The paper outlines a particular autonomy which can be seen in the practices of the architects such as Dobrović, Zloković, Bogdanović, Minjević, Vukotić, Radević, Keković and whose contribution to the development of modern architecture in Montenegro is of outstanding importance in defining a collective identity.

Precisely this group of the most influential (post)modernists, both Yugoslav (Dobrović, Zloković, Bogdanović) and originally Montenegrin (Minjević, Vukotić, Radević, Keković) show that among the best architectural achievements in Montenegro are precisely those who establish subtle relationship with the landscape or urban context, primarily through the use of authentic natural materials such as stone.

The paper has shown a transposition of the 'pebble', first applied by Nikola Dobrović (sea pebble) in his designs in Herceg Novi, which, afterwards, in the context of the Morača river (river pebble in a different scale) was adopted and became a crucial component of demarcation of the architectural works in Podgorica. Moreover, Đorđe Minjević, capable of manipulating and producing various forms of 'textile tectonics', achieved impressive work in the territory of Nikšić municipality. Alongside, his contemporary Bogdan Bogdanović judiciously chooses the pistoyan stone, re-contextualizing it from Jablanica to the landscape of Jasikovac.

All of the presented examples, show not only the fundamental role of stone as a building material intrinsic to the Mediterranean ethos and various possibilities of its application, but architecture as a thoughtful, synergistic act of art that complements the values of the preexisting. Inasmuch we are capable to grasp at the enduring, distinctive and inspiring legacies these works provide even today, to that extent will we be able to learn about ourselves in first place, and consequently about our future practice as architects.

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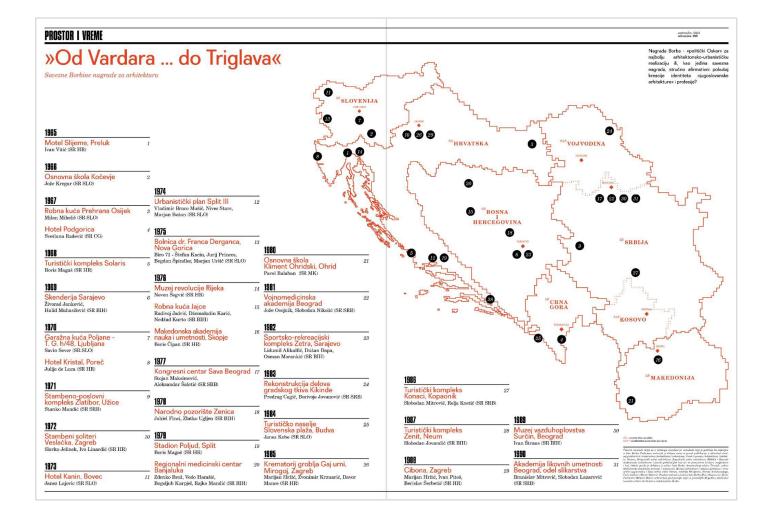
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МОДЕРНИЗАМ У ОКАМЕЊЕНОМ ПЕЈЗАЖУ: АРХИТЕКТУРА ЦРНЕ ГОРЕ 1945-1980

Предмет овог рада је архитектонско наслеђе бивше Социјалистичке Републике Црне Горе (СР Црна Гора) у периоду од 1945. до 1980. године, са посебним освртом на употребу камена у пројектантској пракси. Камен, као исконски грађевински и дизајнерски материјал, присутан је у послератној модернистичкој југословенској архитектури, посебно током првих деценија, 50-их и 60-их година 20. века. Примена камена успоставља континуитет градње који у Црној Гори има две темељне повезнице: прва је веза са вернакуларним принципима грађења у сувом, кршевитом медитеранском пејзажу који се простире све до централног дела Црне Горе, а друга је веза са зачецима модернистичког архитектонског идиома у Црној Гори у међуратном периоду када је камен коришћен углавном на класичан, академизиран начин. Сходно томе, овај рад има за циљ да осветли скривени део веома плодног, али занемареног архитектонског наслеђа, које је у оштром контрасту са данашњим трендовима неолибералне дизајнерске праксе у земљи. С друге стране, рад има за циљ да декодира суштински утицај медитеранског етоса на архитектонско-урбанистички развој јужног и централног региона Црне Горе. Иако је већина обрађених објеката дио урбаног контекста, отисци црногорског пејзажа, са каменом кас његовом доминантном карактеристиком и одређеном националном разграниченошћу која је присутна кроз његову аутентичну употребу, стварају препознатљиве гениус лоци. У деконструкцији овог феномена, рад ће помоћи да се процес 'retreat'-а у Црној Гори позиционира у односу на шире тенденције европских архитектонских токова 20. века.

Кључне ријечи: Црна Гора, камен, пејзаж, модернизам, Медитеран



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ARCHITECTURAL "YUGOCOSMOPOLITANISM"

ABSTRACT

The research "Borba za arhitekturu" not only tries to assemble, showcase and consequently analyze the wide variety of architectural production and its tendencies in socialist Yugoslavia but also, through conversations with architects who were active in this milieu, for the first time, it provides an authentic, direct insight into the affirmation and social role of the architectural profession in correlation with its current position in Western Balkans society. It demonstrates how architecture and urbanism cocreated the collective identity of Yugoslav society, and vice versa, by highlighting important milestones, such as social and professional events, media coverage, as well as industrialization and mass urbanization, subsequently followed by numerous public republican and federal open architectural and urban tenders which brought forth exceptional original space concepts and works. The exceptionality of socialist Yugoslavia's architectural production can also be well identified through the media popularisation of it, both within Yugoslavia and beyond its borders and especially revealed through the prism of the one and only federal Yugoslavi architectural Borba Award (1965-1991), established by the editorial board of the then-prominent Borba newspaper and the Association of Architects of Yugoslavia.

The Borba Award was not only the highest professional recognition but also a broad, popular public media award. It also represented one of the first postwar institutionalized awards for architectural achievements in Europe and the world. Since neither the Borba nor the Association, after the furious disintegration of the country, were ever able to collect the complete documentation of nominated and awarded works, this research gathers in one place an extensive range of reproductions of original photographs and plans, showcasing an extraordinary set of architectural creations from all over the former Yugoslavia between 1960 and 1991. Simultaneously, it delves into the social mission of Borba and provides an overview of professional juries and their interesting critiques. As an authentic insight into the practice and affirmation of the architectural profession, the research also introduces personal interviews with 19 renowned architects from all republics who were active during this period and, among other prizes for their creations, received the Borba Award and were a part of its jury. "Borba za arhitekturu" thus aims to raise new questions and provide a reason for further analysis of the "Yugoslav architecture" phenomenon, which still remains insufficiently known to both the domestic Western Balkans and the international public, and tries to encourage awareness of the rich shared heritage of the Balkans prompting questions about the current role of the architectural profession, social culture, and contemporary spatial development in comparison to the milieu of former socialist Yugoslavia.

Key words: (collective) identity, media popularization and affirmation of architecture, architectural heritage, social role of architecture, architecture and society

1. INTRODUCTION

Architecture is not just the art of creating space; it is the skill of shaping a society. The manmade spaces that surround us represent new worlds of material and perceptual values, which should primarily contribute to a better and, above all, genuinely humane life for people, fostering our activities and relaxation. Architecture not only plays a role in shaping our lives; it should fundamentally be a form of social and democratic creativity since it is undeniably indispensable for humanity, directly and indirectly influencing people, the development of culture, social perception and participation, and the formation of the collective identity of society. Consequently, architecture can be confidently labelled as one of the most authentic and tangible witnesses and recorders of mankind, representing not only aesthetic and functional but also socio-psychological, technological-technical, economic and ethical tendencies.

In comparison to the situation in the field of architectural creativity before the disintegration of socialist Yugoslavia, one could, through the opinions of interlocutors in the research, assume that architecture in SFRY used to play a vital and significant part in building up the image of the state and collective social identity. This influence was not only shaped through architecture and spatial planning in practice but also through endeavours of (professional) journalism, mass media, and various social and professional events of the time, popularizing domestic achievements, which reflected a growing understanding that architecture and its creators have a crucial role in society and its modernization [1].¹



Figure 1 and 2. Spreads of the publication "Borba za arhitekturu" (Archive of the author)

Since only detailed studies of different events and tendencies in architecture with the help of authentic journalism and visits to various archives all around former Yugoslavia did not seem competent enough to form a realistic impression and opinion in this research, or in general, to obtain the possibilities of architectural creativity in socialist Yugoslavia, the process also in 2021 included first-hand points of view through interviews with 19 renown architects from all the republics who were active since the 1960s until the country's dissolution in 1991, and further in their professional careers experienced the postdisintegration transition too. These architects received numerous professional awards for their creations, including the highly regarded federal or republic Borba Award. The targeted uniformed questionnaire, which strived to enable a comparison of their opinions and experiences from the practice, provides an authentic insight into the role of architecture

¹ From the interview with Trajko Dimitrov, Skopje, Mar. 24, 2021. "In Yugoslavia, architecture and the architect were considered a social public common good. As professionals, we worked hard to ensure greater public recognition, yet at times, we found ourselves in the background [1]."

and urbanism in shaping the Yugoslav society, discussing the architect's social role, engagement, their creative freedom, as well as the trends and tendencies in postwar architecture in the Western Balkans in correlation with the social, economic and industrial influences of specific regions within the former Yugoslavia, both then and today. The selected interlocutors were Lidumil Alikalfić (Sarajevo), Dragoljub Bakić (Beograd), Trajko Dimitrov (Skopje), Marijan Hržić (Zagreb), Janez Kobe (Ljubljana), Gregor Košak (Ljubljana), Stanko Kristl (Ljubljana), Dinko Kovačić (Split), Mirko Krstonošić (Novi Sad), Janez Lajovic (Ljubljana), Branislav Mitrović (Belgrade), Marko Mušič (Ljubljana), Pavle Popović (Podgorica), Branko Silađin (Zagreb), Aleksandar Stjepanović (Belgrade), Bogdan Špindler -Biro 71 (Ljubljana), Zlatko Ugljen (Sarajevo), Aleš Vodopivec (Ljubljana) and Panda Zografska (Skopje). The questionnaire also encouraged them to discuss their potential definitions of "Yugoslav architecture", the state and political attitude towards the profession at the time, domestic and foreign professional journalism, the media's popularization of architecture, the Borba Award, and, last but not least, the process and creation of their particular works.

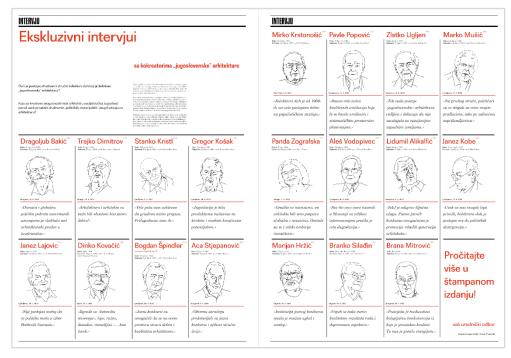


Figure 3. The research included interviews with 19 prominent architects of the milieu from all republics of the former Yugoslavia (Archive of the author)

Based on these dense yet extensive first-hand gathered and published pieces of information, the research entailed a review of architectural works publicly acknowledged by various awards and events within the milieu as examples of vital and socially significant architecture.

Therefore, the primary objective of this article is to provide a short introductory yet comprehensive context of how professional affirmation was pursued through the media's popularization of architecture, aiming to shape an image of modernization and collective identity of socialist Yugoslavia through spatial creativity. This contribution is thus only the first step towards a further detailed discussion of the tendencies and influence of the media

popularization of certain awarded and nominated architectural works gathered in the research, many of which undoubtedly set new guidelines and trends in the architecture of SFRY and its individual republics.

2. "YUGOSLAVARCHITECTURE"?

Lately, there has been an increasing discussion, re-examination, and re-evaluation of the architectural phenomena of the former socialist Yugoslavia. The architecture, often referred to as "Yugoslav" or "socialist", elicits a wide array of opinions, interpretable through collective and individual perspectives. This leads to the question: What might define the term "Yugoslav architecture" within the diverse tapestry of cultures and traditions that constituted the former federation? Namely, this rich ethnical, cultural, topographic and atmospheric diversity on which socialist Yugoslavia was based and built also ideologically as a state undoubtedly served as one of the most valuable foundations across all fields of creativity within this unique milieu.

The phenomenon of "Yugoslavianness" in the architecture of socialist Yugoslavia also stirred architects and art historians at the time, who frequently engaged in discussions on similar topics at various events. Furthermore, this prompts us to question whether a common social and professional collective spirit existed, defining the so-called "Yugoslav" postwar architecture, in other words, how "Brotherhood and Unity" might be identified through architectural creativity and its events. Exploring the creative possibilities of architects within the context of this milieu, amidst the complex and multifaceted influences of socio-political, economic, material, and other factors impacting architecture of socialist Yugoslavia. This aspect emphasizes the institution of public tenders for urbanism, architecture, and design. Despite different situations in individual republics within a common federal system, these tenders undoubtedly provided architects with total freedom in architectural creativity² [2], [3].

Architects of these generations were shaped during a period of significant socio-political upheavals and transformations, not only in the global context but also within Yugoslavia. This spanned from the challenging years immediately following World War II through the partial liberalization of politics in the mid-1950s and the further opening up of the country in the 1960s. During this time, Yugoslavia industrialized and, through its bold move in the creation of a non-aligned movement, also asserted its position in international politics, which opened up new possibilities for the activities of our architects abroad as well³ [4].

From the interview with Bogdan Spindler, Ljubljana, Apr. 14, 2021.

From the interview with Dragoljub Bakić, Beograd, Apr. 9, 2021. "Through the activities of our architectural practice abroad, we also transferred a kind of "Yugoslav" architectural and construction idea. The domestic, and indeed global, policy of the non-aligned movement greatly facilitated our penetration abroad [4]."

From the interview with Marko Mušič, Ljubljana, Jul. 15, 2021. "Politics receded into the background during calls for tenders and the evaluation of received projects, leaving full implementation and decision-making to the profession. This was particularly evident during my first realizations in Yugoslavia, where politics, although naturally present in the official management of projects and constructions, never interfered with the work and creativity of the architect [2]."

[&]quot;Since all our realizations at that time were accepted in competitions, all investors fully respected the decisions of the architectural profession and we had no problems with the realization. The clients were respectful to the authors, we only had to satisfy their demands regarding deadlines and quality [3]."

Furthermore, the 1960s witnessed the adoption of reforms aimed at revitalizing the domestic economy and transitioning towards a market-based economy. This era introduced a sort of Yugoslav social upheaval, featuring domestic consumerism, tourism, art, sports, film, music, and the emergence of domestic pop culture, which marked a turning point where an uprising of all that enhanced the daily lives of people contributed value to society and created a rapidly evolving Yugoslav identity that, in some aspects, still persists today⁴ [5], [6].

Consequently, there was a substantial demand for new, modern infrastructure with previously unexplored functions, ranging from housing to educational facilities, sports and recreational institutions, cultural venues, leisure-oriented tourist complexes, spaces of consumerism, and many more⁵ [7]. Through the tendencies in the architecture of this milieu, one can discern that the "revolutionary war-liberating initiatives" of the state gradually gave way, and Yugoslav society endeavoured to establish a form of a new modern and prosperous "social normality" by actively cultivating a contemporary "promising vision of the future", especially through architecture and urban planning⁶ [8].

Yugoslavia began to embrace the world and Europe, which also led to the formation of new professional connections, knowledge acquisition, and educational opportunities in different fields. Individual architects, including those who were still students at the time, started to pursue internships abroad in the West and as well stayed current with global architectural tendencies through foreign professional journalism and visits to Scandinavian countries, Italy, France, West Germany, England, the United States, and Canada which became more frequent during this period. The diverse environments within Yugoslavia shaped by the strong and distinct identities of domestic schools of architecture in Belgrade, Zagreb, Ljubljana, and the two established after World War II in Sarajevo and Skopje, along with their specific potent personalities⁷ [9], coupled with increasing pulses of foreign influences through international professional journalism, provided these emerging generations of architects and designers with a broad and creatively transdisciplinary range of creative opportunities. As declared by the Italian architect Ernesto Rogers in 1952 in the Athens Charter, this could be marked as a spectrum that extended "From the spoon to the city". Consequently, during that time, many creators were able to discover their niche or

⁴ From the interview with Mirko Krstonošić, Novi Sad, Mar. 6, 2021.

[&]quot;The collective spirit has generally taken on an increasingly populist meaning since the 1960s and has endeavored to develop further in the 1970s [5]."

From the interview with Lidumil Alikalfić, Sarajevo, Apr. 2, 2021.

[&]quot;In the period just after the World War II, the tasks of architects were primarily focused on the development of the economy, infrastructure, and social care for the population. Social attention in the construction of facilities for social, cultural, and sports programs became crucial later in the following decades. During this time, Yugoslavia increasingly opened up to the world, and the focus of interest expanded to new content in culture, sports, and entertainment [6]."

From the interview with Stanko Kristl, Ljubljana, Mar. 1, 2021.

[&]quot;When I think of the term "Yugoslav architecture", I think first of all about new programs and functions of buildings that we did not know before [7]."

⁶ From the interview with Zlatko Ugljen, Sarajevo, Mar. 10, 2021. "The former Yugoslavia represented a "golden age" for many architects of my generation. After the period of socialist realism immediately following World War II and the subsequent easing of pressures in architecture and culture, a time soon emerged when we architects could pursue our visions and work prosperously and creatively [8]."

⁷ "The architects who left their mark on the so-called "Yugoslav architecture" were primarily our professors who had studied in European centers of architecture. Many of them were students in places like Prague or colleagues of leading architects of the time, including figures like Le Corbusier. In turn, they selflessly transmitted the impulses and influences of new, modern tendencies to our generation. It was on these foundations that so called "Yugoslav architecture" emerged. Subsequent generations of students continued to shape this phenomenon, introducing the spirit of their own time and ambience [8]."

specialize in various fields. This specialization was not limited just to urbanism and architecture with their specific functions but also extended to industrial, graphic design, marketing, and other domains.

Despite the sudden dramatic turns evident in the increasing development of the industry and economy and subsequent intensive construction in the socialist Yugoslavia at that time, many architectural realizations bear witness to significant turning points aimed at improving the quality of life for society and co-creating a vision (for that time) of a more modern and humane standard of living for the entire population of socialist Yugoslavia⁸ [10]. This can also be obviously recognized through the set of architectural designs awarded with the Borba Award and the opinions of all interlocutors, which were, along with the important role of public tenders, also emphasizing a close and mutually beneficial relationship with domestic industry and the economy, intensively contributing to their development and vice-versa⁹ [11]. Together, they were prosperously establishing the aesthetic criteria of society and undoubtedly played a significant role in shaping the image of everyday habits and life.

2.1. PUBLIC INTEREST IN "YUGOSLAV ARCHITECTURE"?

In Yugoslavia, most separate events and prizes were established in individual republics during the 1950s and beyond. These awards primarily aimed to recognize achievements in science and art, occasionally extending their recognition to include high-quality architectural contributions. However, from the early 1960s, when the country effectively transformed into a vast construction site, they were no longer sufficient for the affirmation and popularization of architectural production and its creators in the social context of Yugoslavia. Architecture and its creators, despite the endeavours of domestic professional journalism and the efforts of the Federal Association of Architects of Yugoslavia, were not receiving adequate public attention during this period. This sentiment could be evident in one of the opening editorial lines of architect Oliver Minić in 1960, the first long-term editor-in-chief of the journal "Arhitektura i urbanizam", where he exposed that domestic Yugoslav architecture and its creators, despite their crucial role in the society, are unfortunately still remaining in the shadows of our public [12].

Architectural creativity in socialist Yugoslavia, amidst the increasing construction and urbanization, was apparently striving after an event or a public platform to capture the attention of a broader audience which would encourage the affirmation and participation of architectural creators from all the republics, fostering new professional connections and the promotion of high-quality architectural contributions from across socialist Yugoslavia.

Already even during a challenging decade marked by economic and socio-political reforms, particularly in the first half of the 1950s, when the Association of Architects of Yugoslavia gained official independence in 1952 namely, prior to that, architects were part of the Union

⁸ From the interview with Aleksandar Stjepanović, Beograd, Apr. 4, 2021.

[&]quot;There was a significant difference in the approaches and importance of the procedures adopted in our country compared to the Eastern Bloc countries at the time. In Yugoslavia, we endeavored to address spatial problems primarily through diverse solutions and the creation of a humane space, shaped by the physical and natural environment [10]."

⁹ From the interview with Stanko Kristl, Ljubljana, Mar. 1, 2021.

[&]quot;The emergence of industry was decisive, followed by the construction of residential buildings and other infrastructure. Industrialization likely occurred for political reasons as well. The government at the time was clearly aware that the country could only progress by establishing its own industry and needed to be competitive. Otherwise, it risked remaining in a subordinate position compared to other countries [11]."

of Engineers and Technicians Associations of the Federation, professional journalism began to emerge. Journals such as Zagreb's "Arhitektura", "Čovjek i prostor", and Ljubljana's "Arhitekt" made valiant efforts to report on domestic and international events in architecture, urbanism and design despite facing financial constraints at that time. It was not until 1960 that a significant institutional transformation took place within the Federal Chamber of Architects and the introduction of the new pan-Yugoslav professional journal, "Arhitektura i urbanizam". This period was marked by a productive phase of new endeavours aimed at creating events dedicated exclusively to architecture and, most importantly, recognizing and affirming the field and its creators publicly.

Thus, in 1960, the Federal Association also played a pivotal role in establishing the first Prize for the best contemporary architecture in the country. The inaugural awards of the Association of Architects of Yugoslavia recognized the achievements of Slovenian architects Stanko Kristl for the Block for Assistants of the University of Ljubljana and Danilo Fürst for the Elementary School Stražišče pri Kranju, which definitely set new guidelines in the design of residential and educational buildings. Despite the Prize (1960-1965), during the start of extensive urbanization and construction, architecture, being a form of creativity that the public interacts with daily, actually faced a big challenge. These and similar efforts in establishing some events in individual republics dedicated to architecture even later in the late 1960s and in the 1970s, such as the Zagreb Salon (1965), Plečnik awards in Ljubljana (1972) or the Belgrade Salon of Architecture (1974), could be interpreted as "the profession's earnest endeavours for the profession" in separate regions of federation, what can be evident in Ivan Štraus's statement during a 1981 discussion about architectural production in Yugoslavia in the 1970s, organized in Zagreb, where he exposed the public common disinterest in the field of architecture even among the domestic profession itself, describing that we are primarily interested only in achievements in the construction of local individual cities and regions, while other spatial efforts of the federation remain outside our perception [13].



Figure 4. Stanko Kristl and Danilo Fürst, winners of the 1st Prize of the Association of Architects of Yugoslavia and their awarded works - Block for assistants in Ljubljana and Primary school Stražišče ("Aktuelnosti," Arhitekt, no. 2, p. 9, 1960)

2.2. ARCHITECTURAL "YUGOSLAVIANNESS"?

A common topic of discussion among architects in Yugoslavia consequently also revolved around the inefficiency and the lack of systematic documentation and popularisation of quality domestic architectural production, which was, despite the professional journals, typically not published in an organized way and critically enough, even at the republican level, let alone at the federal level. Additionally, there were frequent debates and inquiries regarding the notion or definition of "Yugoslavian architecture".

The known art historian Ivo Maroević, who, in addition to Mihajlo Mitrović, Ivica Mlađenović, Ivan Štraus, and Stane Bernik most closely followed and published the architectural production in their individual republics in the 1970s and 1980s, at Zagreb's discussion in 1981 also instigated the potential definition of Yugoslavianness in the domestic architecture with an emphasis on not understanding the Yugoslavism as a state, social or territorial designation, but as a synthesized community which derives from different environments [14]. Most of the architects from all parts of Yugoslavia present there tried, though not very successfully, to define themselves based on this statement, as well as the interlocutors in the research, who were often explaining and linking their definition of "Yugoslav architecture" with the industrialization of the country, mentioning arrivals of new materials, construction technologies, and development of new functions or programmes of the buildings¹⁰ [15]. Similar was Mihajlo Mitrović's remark at the discussion on how our 'Yugoslavianness' in architecture can be recognized in practice, which also involved exposing specific materials such as brick, eternit tiles, and the import of Italian ceramic tiles, which unintentionally, through some authors and their creations on which they were used for the first time, triggered and influenced design trends and tendencies throughout Yugoslavia [16].

Questions among professionals also frequently arose regarding access to up-to-date information about contemporary architecture, urban planning, and spatial developments across all regions of Yugoslavia. The profession and the general public obviously had a much better awareness of architectural trends in Europe and around the world compared to their counterparts in other domestic regions of the former Yugoslavia [17]. Despite the highquality architectural production of many domestic Yugoslav architects, it was also a common sentiment among professionals even later in the 1970s and 1980s that their work and names were not adequately recognized and presented beyond the country's borders. Occasionally, some architectural works were featured in foreign professional journals, but these often appeared just as part of advertisements for prominent Yugoslav companies, with the actual authors often remaining in the background of these corporate ventures [18]. Despite the international successes and the strong reputation of certain Yugoslav design and construction bureaus, with Energoprojekt from Belgrade being particularly renowned, and the high recognition of specific architects with their projects in international competitions, such as, e.g. Ravnikar's Tronchetto, the high-quality Yugoslav architectural production unfortunately, was not receiving the recognition it deserved in foreign professional evaluations. Consequently, Yugoslav architects were not widely affirmed beyond the borders, and interpreted through Arch. Živko Popovski's words from 1981, we

¹⁰ From the interview with Janez Lajovic, Ljubljana, Jan. 18, 2021.

[&]quot;Trends in architecture throughout the entire Yugoslav area mainly followed domestically available technological capabilities. The Yugoslav industry was developing quite well during that time, and those in charge often allowed experts to travel abroad for tours and training. This facilitated the transmission of new technologies, construction methods, and materials to our environment [15]."

were missing a great opportunity to affirm Yugoslavian "big star architects" abroad [19]. Echoing this sentiment, the interlocutors in the research exposed that the architecture of Yugoslavia has actually only now, after several decades, begun to gain broader international attention, triggered very late with the exhibition Towards a Concrete Utopia in MoMA New York in 2018¹¹ [20].

2.3. "YUGOCOSMOPOLITANISM"

During the postwar transitional period to a gradual opening of the country to the world, architecture in Yugoslavia, both domestically and internationally, obviously did not receive the level of recognition, promotion, or public exposure that it deserved. It did not garner as much attention as other art forms, such as music or film, which were equally vital in shaping societal trends and co-creating the cultural identity and ambience of the Yugoslav society. Namely, in the late 1950s, the country embarked on an ambitious journey to construct a new and modern collective identity, which could be marked as "Yugocosmopolitanism". As an example, inspired by the Cannes Film Festival, the Yugoslav Film Festival was initiated in Pula in 1957. A year later, the first Yugoslav Music Festival in Opatija was also organized, seemingly influenced by the Italian music festival in San Remo. This period also witnessed the gradual establishment of numerous newspapers, journals and radio and television stations in the republican centres following the foundation of the Yugoslavian Radio Television (JRT) in 1957. Consequently, the media significantly contributed to the formation of identity and pop culture in socialist Yugoslavia, but amidst all these rising popular happenings and festivals, there was an evident absence of a public event and award dedicated to architectural creativity¹² [21].

Recognizing that the Award of the Association of Architects of Yugoslavia failed to attract the attention of the general public, a new concept finally emerged in 1965—a more popular and publicly visible award for architecture and its creators. This new award aimed to systematically encompass contemporary architectural realizations from the entire Yugoslav territory from each republic and later, after the constitutional changes of the SFRY in 1974, from the two socialist autonomous provinces as well.

3. BORBA: THE BIRTH OF ARCHITECTURAL "YUGOCOSMOPOLITANISM"

The Borba Award for Architecture was established through collaboration between the Federal Association of Architects of Yugoslavia and the editorial board of the esteemed Borba newspaper to raise awareness of this significant social, creative field with a specific focus on institutionalized encouragement of equal participation for creators across all republics while ensuring the broadest possible federal publicity and media attention. With the assistance of individual republican Associations of Architects, the best contemporary

¹¹ From the interview with Dragoljub Bakić, Beograd, Apr. 9, 2021.

[&]quot;Despite creating very good architecture at the time, perhaps due to our socialist social system, it remained under-recognized abroad. It was only when Rem Koolhaas happened to walk past some of Energoprojekt's buildings in Lagos, Nigeria, that it sparked worldwide interest in our architecture. A rather extensive exhibition in New York's MoMA has only now shown that in Yugoslavia, we worked with quality architecture deserving of international recognition [20]."

¹² From the interview with Mirko Krstonošić, Novi Sad, Jun. 3, 2021.

[&]quot;The Borba award was like a 'beautiful bride' for unscrupulous politicians and individuals insensitive to architecture. Until then, newspapers primarily featured articles offering opinions on good theater performances, art paintings, statues, and literature, leaving everything else, including architecture, somewhat in the background [21]."

achievements, as determined by their professional judgment, were nominated each year. Above all, the primary mission of the award was to bridge the gap between architecture and the general public, highlighting the significance of this creative field within Yugoslav society¹³ [22].

The main proponents of this award included Stane Stanič, who served as the editor of the science column in the Borba newspaper, and the representatives from the Federal Association of Architects Mika Janković, Stanko Mandić, and Mihajlo Mitrović. Moma Marković, the chief and responsible editor of the Borba newspaper between 1963 and 1969, expressed that this award and event significantly started to contribute to the improvement and affirmation of this important branch of social activity, which is creating a better standard and more compassionate relationships within our society [23].

The Borba Award was established with a specific purpose: providing architecture and its creators with media recognition and expert evaluation on a federal level. Through the award and its associated events, one could recognize a nurturing sense of "Yugocosmopolitanism" within the architectural creativity of Yugoslavia during that era. In fact, the Borba Award somehow dogmatically embodies the synthesized term "Yugoslav architecture," promptly showcasing and evidencing the rich yet common diversity of "Brotherhood and Unity" through one of the highest expressions of contemporary architectural production from all ambiences of the federation.

Although the axiomatic Yugoslav professional collective spirit was fostered through attempts to connect the professional circles of creators at that time through the federal Association, domestic journalism, especially with the pan-Yugoslav journal "Arhitektura i urbanizam" in the 1960s, and the Borba Award, the real unity in practice that truly personified this professional collective spirit of "Yugoslav architecture" was according to the interlocutors, simply the freedom of creativity which was embodied by public federal (and republican) architectural and urban planning competitions¹⁴ [24], where the juries were consistently composed of experts (from different republics). On the other hand, interlocutors also significantly highlighted the Borba Award, considering it one of the best providers of media recognition among citizens and the professional community, offering them opportunities for new connections. Therefore, one of the fundamental definitions of what, besides the social connotation, "Yugoslav architecture" was the freedom of creativity within the institution of many public tenders where architects interpreted their visions of establishing new human relations of modern society and its future.

¹³ From the interview with Aleš Vodopivec, Ljubljana, May 20, 2021. "If the award remains confined to the profession, it becomes irrelevant. Borba's award had a significant resonance, covered by almost all media outlets. This is incomparable to current award ceremonies, which receive modest media coverage, causing these events to pass by unnoticed. During that time, architecture was much more socially present due to such extensive media coverage [22]."

¹⁴ From the interview with Branislav Mitrović, Beograd, Jul. 30, 2021.

[&]quot;There was a shared atmosphere of collegial competition from which quality emanated, energizing all of us. I believe that competitions were the main professional connecting factors, where like-minded architects could meet [24]."

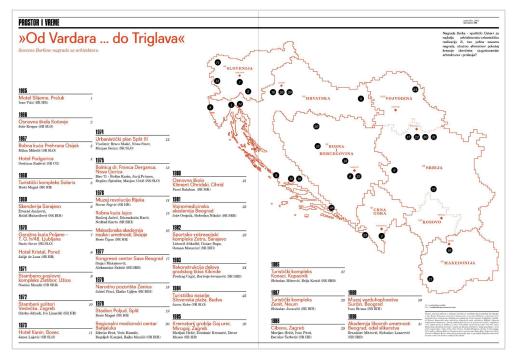


Figure 5. Map of all architectural works recognized with the federal Borba Award between 1965 and 1990 (Archive of the author)

3.1. POPULARIZATION OF "YUGOSLAV ARCHITECTURE"

Despite some shortcomings, the Borba Award for Architecture managed to survive until the collapse of the federation, offering, at the very least, a partially realistic portrayal of the commonalities and diversity¹⁵ [25]. It showcased not just architectural design tendencies but also economic and material trends within the common yet different environments from all corners of Yugoslavia, which could be observed in the variety of proposed buildings. The award and its associated events embodied an artificial yet revealing common Yugoslav identity within the architecture and ultimately satisfied, at least on a formal level, the need for a systematic, albeit somewhat superficial, review and expert assessment of domestic architectural achievements.

The first public announcement of the award was documented in a Borba newspaper article dated February 19, 1965, and according to the regulations, only those architectural works completed during the current year were eligible for the nomination for the Borba Award. This process allowed for proposals from Republican professional juries, individual citizens, labour organizations, and actually from any citizen or organization. The list of nominees was regularly published in the column "Arhitektura - juče, danas, sutra", which was featured in the weekly supplement of the Borba newspaper. The award was presented to authors living in a specific republic whose work could be located anywhere within Yugoslavia, and a good cash prize was even provided to the best (group of) author(s). The rulebook also established that the annual announcement, exhibition of the awarded contributions, and presentation

¹⁵ From the interview with Dinko Kovačić, Split, 15. 3. 2021.

[&]quot;I believe that Borba's award did not carry a political message or connotation; instead, it primarily embodied a standard—a way of life, social relations, and circumstances. All these factors determined the parameters in architecture, even though the buildings might differ, for example, in Ljubljana, Bitola, or Split [25]."

of diplomas and plaques would initially take place in Belgrade and subsequently, in the following years, alternate between the capitals of each republic. The grand event was scheduled for February 19, coinciding with the jubilee day of the Borba newspaper, and in the issue released on that day, all the awarded works were published, accompanied by photos and concise reports of the jury's evaluations [26]. However, until this research, there had been no comprehensive compilation of all nominees and the awarded works made available to the public. This absence may also be linked to the previously mentioned problems regarding the lack of systematic and up-to-date reviews of contemporary architecture at the federal Yugoslav level.



Figure 6. The presentation of the architectural awards and the opening of the exhibition was often the most prominently featured news on the cover of Borba newspaper - as seen in this 1971 edition, which showcases visitors at the exhibition and federal Borba awardees of 1970 - Savin Sever for the Garage in Poljane Ljubljana, and Julije de Luca for Hotel Kristal in Poreč - in a collegial handshake (Archive of Borba Beograd) The annual Borba Award for architectural achievements certainly made a substantial effort to increase the attention of both professionals and, more importantly, the general public to the numerous high-quality architectural creations and well demonstrated the important significance of this creative field for society¹⁶ [27]. Consequently, a specific identity of the so-called "common Yugoslav architecture" with this event, even though somewhat loosely defined, began to take shape and swiftly evolved into the most eminent and prestigious recognition for the architectural profession.



Figure 7. Borba award winners for 1969: Živorad Janković, Ognjeslav Malkin and Halid Muhasilović, authors of complex Skenderija in Sarajevo, at the opening of the exhibition in the Cultural Center Belgrade, February 19, 1970 (Archive of Borba Beograd)

Much like how pop culture was evolving at events in other creative fields, the Borba Award for Architecture fostered an atmosphere for the popular scene of "Yugoslav architecture" and its creators (who were presented to the citizens) with a human face, but most significantly, the award educated the public to become more aware of the culture of space and the social mission of architecture. In parallel, the Borba acted as a witness to the social and economic inclinations of individual republics and, later, the autonomous socialist provinces.

Furthermore, the award facilitated the creation of new connections among architects from various regions of the country. This engagement was evident each year during the endorsement of the nominees, followed by the opening of an exhibition, which was, on

¹⁶ From the interview with Branko Silađin, Zagreb, May 23, 2021.

[&]quot;When discussing architecture as a social need, encompassing its propaganda and the resulting education, Borba played the most crucial role compared to other awards. It held much more significance than any other award both then and even today [27]."

some occasions, relocated to the site of the awarded building so that the local communities could proudly identify themselves with their architectural achievement. Despite the initial intention in the Award Rules to have the event migrate to different centres in Yugoslavia's republics, it consistently took place only in Belgrade, where in the first years, the exhibitions were held at the Cultural Center of Belgrade, while later, the Borba press house even established its own gallery for this and other cultural purposes.

3.2. FELLOW JURY MEMBERS, DO WE HAVE A QUORUM?

Despite some paradoxes and irregularities within the award's institution, the Borba was, according to the opinion of all 19 architects who were part of the research, an essential, competent, and highly respected recognition. It significantly popularized architecture among the public and provided a fairly realistic portrayal of social standards, conditions, and tendencies in various regions of the country. Nevertheless, evaluating architectural creations for the Borba Award was indeed a challenging task for the members of the jury. They had to consider a diverse range of projects differing in size, function, and the socioeconomic conditions of their respective regions. Consequently, some juries might have leaned towards favouring bigger-scale projects when making their assessments, while sometimes, especially in the 80s when the tendencies towards the disintegration of Yugoslavia were increasing, even being biased toward works from specific republics¹⁷ [28] [29].



Figure 8. Federal jury of the Borba Award during their evaluations in 1969 (Archive of Borba Beograd)

¹⁷ From the interview with Branko Silađin, Zagreb, May 23, 2021.

[&]quot;Borba meant much more than any other award then and even today. Later, with the gradual transformations of the socio-political scene, the award slowly became an object of inter-republican competition and bragging. I was a member of the federal jury twice, already at the stage when the game between the republics began. In such a working atmosphere, it was not very pleasant and easy to work and fight for the real quality of the contribution of the architectural work [28]."

From the interview with Trajko Dimitrov, Skopje, Mar. 24, 2021.

[&]quot;Among the republics, bias in judging was primarily manifested in 'cheering' for each other. I believe that perhaps, at that time, we were not fully able to evaluate purely in a professional manner [29]."

The process every year began at the level of the republic's or province's Associations, where professional juries closely monitored local contemporary architectural production and decided among the nominations for the one officially proposing it for the federal award. While these republic-level juries often visited the proposed works in situ, the federal jury's task, which consisted of architects, who were sometimes accompanied by artists, writers and journalists from all republics, was primarily to review only presentation posters containing photos and plans of the proposed projects. This limited their ability to experience the architecture, leading to potential challenges in making comprehensive evaluations. It is important to acknowledge the complexities involved in comparing such a diverse array of architectural achievements. These challenges could sometimes lead to decisions based on criteria like the size of the building or voting for the one that they experienced in person, for example, deciding between Marko Mušič's House for the painter Janez Bernik in Brezovica and the National Theater in Zenica by Jahiel Finci and Zlatko Ugljen (1978), or among Boris Magaš's Poljud Stadium in Split and Hospital in Banja Luka by Zdenko Brož, Vedo Hamšić, Bogoljub Kurpjel and Rajko Mandić and the Post Office and the shop in Vremski Britof by the group of authors from studio Kras - Marko Dekleva, Matjaž Garzarolli, Vojteh Ravnikar and Egon Vatovec (1979)¹⁸ [30].

It is also interesting to note that the Borba Award nominations and winners rarely included "ideologically oriented" works such as monuments or memorial complexes. In fact, just two - The Partisan Memorial Cemetery in Mostar by Bogdan Bogdanović and Spomen Park Vrača in Sarajevo by Vladimir Dobrović were nominated in the 25-year history of the award, which could also go against the superficial idea that the award was (only) politically motivated¹⁹ [31].

¹⁸ From the interview with Marko Mušič, Ljubljana, Jul. 15, 2021.

[&]quot;The largest projects, in terms of scale, usually had the advantage as they represented the greatest sociopolitical pride. Examples include hospitals, sports centers, apartment blocks, and, (unfortunately, many also poorly designed) hotels. The professionally based conflict of the jury in Belgrade, which would have arisen when deciding between the otherwise excellent Theater in Zenica by Jahiel Finci and Zlatko Ugljen and an individual house in Breznica, was, of course, not possible and also not desirable [30]."

¹⁹ From the interview with Stanko Kristl, Ljubljana, Mar. 1, 2021.

[&]quot;I never had the feeling that politics was involved in Borba's award in any way. Colleagues from other republics were very honest and did not forcefully submit projects that did not deserve recognition. The award was undoubtedly of educational importance for the society and highly valued; it represented a great tribute to the one who received it [31]."



Figure 9. Visitors at the exhibition of Borba's awardees, Belgrade, 1976 (Archive of Borba Beograd)

Instead, the majority of the nominated and awarded projects actually reflected the collective burgeoning spirit of "Yugocosmopolitanism" and modernization, emphasizing the creation of structures that contributed to a broader higher social standard. These projects often included hotels, department stores, congress halls, sports and cultural facilities, as well as medical, scientific, educational and business buildings. However, there was a noticeable absence of nominations in the field of housing despite the significant mass construction of residential dwellings taking place throughout Yugoslavia at the time. In the first five tenders, only one appeared in the contest for the Borba - Šišenska soseska 6 in Ljubljana by Ilija Arnautović, Aleksander Peršin and Janez Vovk, which Slovenia nominated for 1968. This issue was publicly criticized by artist Edo Murtić and architect Delfin Vojteh, who were members of the federal jury in 1971 and who underscored the importance of recognizing a more diverse range of architectural achievements, including those related to housing, which played a vital role in the development and transformation of Yugoslavia during that period [32]. The absence of nominations for residential buildings and the subsequent criticism led to a more diversified selection in the following years. Although Murtic's and Vojteh's remark was on the spot and publicly mentioned in one of the articles published in the Borba newspaper, they never spoke about establishing a special Borba housing award again. In the following years, it looked like the institution of the award tried to redeem its reputation in this field by giving the award to the Zlatibor Residential and Business Complex in Užice by architect Stanko Mandić, one of the co-initiators of the award. May it all just be a big coincidence that a year later, the residential towers in Veslačka Street in Zagreb by Slavko Jelinek and Ivo Linardić deservedly got the award. In 1972, the Serbian Republican Jury even strongly encouraged Arch. Mandić to submit his project for selection for a national award [33]. These differences in the submission and nomination processes,

as well as the diverse presentation of proposed works, highlight some of the challenges in the administration of the Borba Award. While any citizen could make a nomination for the republican selection, it appears that many authors and their colleagues did not want to "egoistically expose" themselves and consequently did not suggest their own architectural creations for the nomination. Additionally, the organization and procedures of the republican associations of architects varied, leading to differences in how architectural works were proposed, presented and evaluated²⁰ [34]. The graphic representations of the nominees also differed among the republican candidates, indicating varying standards and approaches in the presentation of architectural projects, which was exposed by some of the interviewed architects as well, explaining that these differences have contributed to discrepancies in the federal jury evaluation and selection process, further emphasizing the need for a standardized and consistent approach to the award's administration.

Despite its media importance and educational contribution to Yugoslav society, the Borba Award was evidently not without controversies and criticisms. In some situations, the federal jury, through democratic voting, reasonably three times ended up awarding pairs of creations (for 1967, 1970, and 1979), while for the year 1976, for the first and only time, even three buildings received the federal award: the Department Store in Jajce, the Macedonian Academy of Sciences and Arts in Skopje, and the Museum of the Revolution in Rijeka.



Figures 10, 11, 12. Three federal awards for the best realization in 1976: Department Store in Jajce, Museum of the Revolution in Rijeka [35, 36] and Macedonian Academy of Sciences and Art in Skopje (Archive of the Macedonian Academy of Sciences and Art)

This choice raised many questions and led to heated discussions and criticisms within public and professional circles. The latter, despite its successful integration into the old picturesque town, accused the Department Store in Jajce of appearing too "romantically folkloristic", the Macedonian Academy of Sciences and Arts was criticized for exaggeration in the interior design, and the Museum of the Revolution in Rijeka was marked as an example of outdated international pure functionalism. There were also debates about the crisis of the identity of the domestic Yugoslav profession and award's rulebook, although on the other hand, those same critics, Arch. Aleksej Brkić, Uroš Martinović, Nikola Sajčić and Ranko Radović still rated it as the most important, prominent, and very successful event for architecture in the country [37].

²⁰ From the interview with Pavle Popović, Podgorica, Apr. 15, 2021.

[&]quot;Montenegro did not nominate its architectural works several times, mainly due to slightly weaker architectural production and the limited engagement of the Union of Architects of Montenegro at the time, even though some very good projects were completed in those years when our republic was absent from the selection. Our engagement was more apathetic compared to some other republics; mostly, we had to nominate for the award by ourselves, which seemed somewhat unprofessional [34]."

While all the criticisms and suggestions made during several discussions about the Borba Award were well-intentioned, they always remained unanswered. The Borba, till the disintegration of Yugoslavia, continued as an institutionalized annual practice with its rules and procedures largely unchanged from its inception in 1965. Some proposals, such as Murtić and Delfin's for special awards for achievements in housing construction and Ranko Radović's idea of an individual award for contributions to architectural theory and criticism [37], were not further discussed or integrated into the awarding rules. Notably, the only submission related to architectural theory and criticism for the Borba Award arrived in the year 1980 from Slovenia, which proposed the Architect's Bulletin journal for its active role in promoting critical public debates on architecture through various events and exhibitions.

Despite some of its shortcomings, the Borba Award evidently played a significant role in popularizing the achievements of architecture in socialist Yugoslavia. Together with this special event and its mass media coverage, it helped to create an official yet superficial collective identity of "Yugoslav architecture", allowing the public to be aware of the significance of architectural creativity through everyday life and, on the other hand, also serving as a handy socio-political flagship of construction achievements showing modernization of the state. Such an award, which was also initially fostering connections, exchange of opinions and experiences among architectural and urban achievements, would be, especially now, in the times when architecture is evidently losing its basic social mission, undoubtedly more than welcome in the Western Balkans again.

4. CONCLUSION

Based on conversations with architects who were active during this period, it is evident that the architectural profession in the milieu of socialist Yugoslavia held an important and respected role in shaping a better and more modern everyday life of individuals and society. Architects played a crucial part in realizing and materializing the vision of the idea of a "more prosperous future", contributing to the improvement of living standards and the creation of a better society, and such being an integral part of nation-building and the development of a collective identity.

The mission of architecture is constantly evolving over time and varies depending on the socio-political and economic context. In comparison to the socialist Yugoslavia milieu, contemporary tendencies in the Western Balkans and many other parts of the world can reflect an obviously different perspective. Today, spatial planning and architecture are facing challenges, especially related to market-driven forces, economic constraints, and a focus on profit generation. This mostly results in a perception of architecture just as an unnecessary expense or, at the other extreme, as a luxurious service for the interests of capital and space accumulation. In this context, urban landscapes and our cities are shaped more by market forces than by a collective vision for the betterment of society. As a consequence, spaces are becoming self-exclusive, less humane, and unresponsive to societal needs and changing ecological, climatic and socio-political trends which we are facing, while the architectural profession has a crucial and critical role to play in advocating for humane and inclusive urban environments, sustainable design, and the improvement of living conditions for all of our descendants and us.

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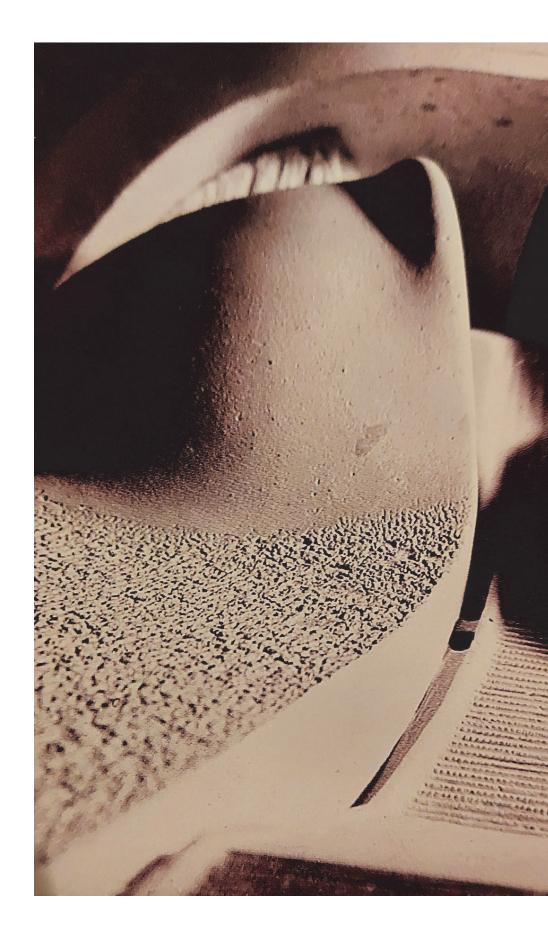
Timotej Jevšenak was born in 1995 in Celje. He graduated from the High school Celje - Center, art department. He has been living and creating since 2014 in Ljubljana, where he received his master's degree in 2021 at the Faculty of Architecture of the University of Ljubljana. He works in the field of architectural and urban planning, as well as journalism and specializes in researching the architecture of Yugoslavia. In 2022, he was enlisted as a Teaching assistant at the Faculty of Architecture in Ljubljana and was the author of several exhibitions projects and publications, including *Tendence, Architecture and Urbanism in Celje 1955-85* (Majolka Celje, Museum of Architecture and Design Ljubljana, Architektur Haus Kärnten, 2018-2021), *Vizije so 17 - Limits or opportunities?* (Kresija gallery Ljubljana, 2022). He is also a recipient of the national Plečnik medal (2019), the Brumen Award for Design (2019), and the award of the Belgrade Salon of Architecture (2022).

АРХИТЕКТОНСКИ "ЈУГОКОСМОПОЛИТИЗАМ"

Истраживање "Борба за архитектуру" не само да покушава да склопи, прикаже и анализира широку лепезу архитектонске продукције и њених тенденција у социјалистичкој Југославији, већ и кроз разговоре са архитектима који су били активни у овом миљеу, по први пут пружи аутентичан, непосредан увид у афирмацију и друштвену улогу архитектонске професије у корелацији са њеним тренутним положајем у друштву западног Балкана. Она показује како су архитектура и урбанизам кокреирали колективни идентитет југословенског друштва, и обрнуто, кроз наглашавање важних прекретница, као што су друштвени и професионални догађаји, медијско праћење, као и индустријализација и масовна урбанизација, након чега су услиједили бројни јавни републички и савезни отворени архитектонски и урбанизација, након чега су услиједили бројни јавни републички и савезни отворени архитектонски и урбанистички конкурси који су произвели изузетне оригиналне просторне концепте и радове. Изузетност архитектонске продукције социјалистичке Југославији може се добро идентификовати и кроз њену медијску популаризацију, како у Југославији тако и ван њених граница, а посебно разоткрити кроз призму једне и једине савезне југословенске архитектонске Борбине награде (1965-1991), коју је установила редакција тада угледног листа Борба и Савеза архитеката Југославије.

Борбина награда није била само највеће професионално признање, већ и широко, популарно медијско признање. Представљала је и једну од првих послијератних институционализованих награда за архитектонска достигнућа у Европи и свијету. Будући да ни Борба ни Савез, након жестоког распада земље, никада нису успели да прикупе комплетну документацију номинованих и награђених радова, истраживање "Борба за архитектуру" на једном мјесту окупља широк спектар репродукција оригиналних фотографија и планова, приказујући изванредан скуп архитектонско стваралаштва бивше Југославије између 1960. и 1991. године. Истовремено, задире у друштвену мисију Борбе и даје преглед стручних жирија и њихове занимљиве критике. Као аутентичан увид у праксу и афирмацију архитектонске струке, истраживање садржи интервјуе са 19 реномираних архитеката из свих република који су дјеловали у овом периоду и, поред осталих награда за своје стваралаштво, добили Борбину награду и били дио жирија. "Борба за архитектуру" тако има за циљ да покрене нова питања и пружи повод за даљу анализу феномена "југословенске архитектуре", кој*и* је још увијек недовољно познат како домаћој западнобалканској, тако и међународној јавности, *и* настоји да подстакне свијест о богатим заједничком насљеђу, те поставља питања о данашњој улоз*и* архитектонске струке, друштвене културе и савременог просторног развоја у поређењу са миљеом бивше социјалистичке Југославије.

Кључне ријечи: (колективни) идентитет, медијска популаризација и афирмација архитектуре, архитектонско насљеђе, друштвена улога архитектуре, архитектура и друштво



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THE VITALITY OF THE KORČANICA MEMORIAL LANDSCAPE

ABSTRACT

The Korčanica Memorial Zone is a Yugoslav architectural heritage, one of the many World War II memorials and one of the rare preserved memorial sites in Bosnia and Herzegovina. The Korčanica memorial of the former Partisan hospital is presented as historical landscape research. Through multi-layered, primarily cultural, social and economic aspects of the Bosnian Krajina territory development at a given time, the paper aims to its (re)integration in urban planning and landscape design, with public participation in local and regional development. Korčanica landscape historical contextualization, through available archival materials and periodicals research, information obtained by interviewing the sculptor and on-site analysis, provided a broad insight into heritage as a process within specific discourses, helping in current significance comprehension.

Universal landmark language in the current Korčanica landscape communicates intelligibly by timeless message design quality. The message sent in this place almost half a century ago, although now out of its political and socio-ideological context and currently unprotected, manages to reach the few casual or intentional visitors. Its vitality lies in the uniqueness of the response to, first of all, the historically significant place marking - for the birth of great social strength and unity, to the expected abstraction or symbolism beyond the national, as well as the response to the natural context of this hidden landmark, whereby in formulating such an answer in a sculpture scale, the author himself remains true to his expression. The landscape biography reading discovered many history lessons about the variable territory state, and many traces of social, economic, educational, cultural and technological layers of Grmeč Mountain history are (un)available in the current Korčanica landscape.

Keywords: landscape biography, memorial zone Korčanica, Partisan hospital, Ljubomir Denković, architectural heritage

1. INTRODUCTION: BIOGRAPHY OF KORČANICA LANDSCAPE

The memorial complex on Korčanica is one of the monuments that characterized the Socialist Yugoslavia memorial practice, marked to commemorate historical places and events significant for the period of the National Liberation War¹, on the site of the Partisan hospital on Grmeč Mountain in Bosnia and Herzegovina. Such landscapes are connected to people on an individual level, with their personal histories, but they are also part of a wider, collective world history. As a complex phenomenon – a monument designed on the scale of the landscape - it can be analysed both by objective scientific methods and by subjective observation and experience and therefore has a perceptual, aesthetic, artistic and existential meaning. Working with the same territory of the country, we can see different landscapes. The change in the social system and the relationship to history in the educational and national sense that such system has, resulted in the current state of the monument, which is not on the list of protected or endangered monuments of Bosnia and Herzegovina. The collective memories change existing views of the past according to what is considered right or appropriate. Although certain dominant narratives about the past are remarkably resistant to change, they often vary at any given moment as much as over time [1]. Completely bare, without recognizable symbols of the system or narrative reliefs and quotes, the monument today belongs to the forest and communicates only with its natural landscape surroundings (Figure 1).

Korčanica's landscape biography is presented in this paper with the purpose of analysing and researching the multi-layered landscape history, with a focus on several aspects of the landscape design change in a certain time. Landscape biography aims to better integrate historical landscape research with urban planning, landscape design and public participation in local and regional development [2]. Actually, there are two landscapes in landscape biography, one which we initially see and another landscape produced through local practice and which we recognize and understand through cultural-social, ethnographic description and interpretation. Think of landscape not as an object to be seen or a text to be read, but as a process by which identities are formed, where cultural contexts are inferred, and human action and activity are also changing over time [3].

Presenting the memorial landscape biography through available literature, archival materials², periodicals and interviews, and comparative analysis with other examples within certain groups helps to understand the many values of Korčanica. Although the paper is structured as a chronological sequence of the historical understanding of the first, physical, memorial landscape of Korčanica, it actually follows the intangible process development of Podgrmeč in parallel, until the very conclusion. The paper consists of six chapters. After the Introduction, the second chapter deals with the pre-war and war period on a territorial scale. Although the subject of the chapter includes specific historical data from archival documents and literature, both postwar and contemporary editions, the chapter examines the cultural and social landscape of the wider area. In the third chapter, the spatial setting of the memorial landscape interprets using the original competition document Grmeč Spatial Planning and Organization Program [4], the original Korčanica tourist guide [5] and

¹ The National Liberation War developed in Yugoslavia during World War II. Unlike the resistance movement for the return to the previous state, the national liberation forces, along with the resistance of the occupiers, organized and developed their government and created a new social system. In the national liberation war, a relatively large part of the population participated in various forms of combat.

² The original project documentation was not available from the Institute for Architecture, Urbanism and Spatial Planning in Sarajevo, due the permanent loss of projects from the period up to 1992.

an interview with the author, sculptor Ljubomir Denković [6], and by on-site analysis. The urbanistic-architectural values of marking the former hospital complex are a theme here. The fourth chapter deals with the design of the memorial message and how the message is thought through and architecturally and/or sculpturally shaped. Here, the primary source is the author Denković, for a response to the naturalness of the shaped memorial landscape. And in the fifth chapter, Denković is an important witness as a participant, but actually, the archival material reveals the most about the financing and the process of building the memorial zone itself. Periodicals provide the best information about the state and possibilities of technology at that time. In the end, instead of a conclusion, the landscape of Korčanica today is presented with all its (un)readable values.

The different types of landscape, although often interacting and overlapping, provide a valuable theoretical starting point for understanding the ways in which both past and future memories are produced and reproduced through spatial action [1]. The biography of the Korčanica memorial landscape could demonstrate the existence of cultural meaning in the landscape and help to understand the development process of the territory in a social and cultural sense as well.



2. HISTORY TO REMEMBER: MEDICAL CARE IN WAR AND EDUCATION ON THE TERRITORY OF BOSANSKA KRAJINA IN 1942

The area of Grmeč represents a historical-geographic zone of particular importance due to the events that took place here in the past, and specifically during the World War II. In the course of history, the mountain was a safe place for rebels and/or refugees from the surrounding territory [4]. The meaning of a place consists of its physical properties together with what has taken place there and the events that are celebrated and remembered by people. There are numerous places of significant events, places of torture and cemeteries, places of fugitives, the beginning of the rebellion, places of making historical decisions, birthplaces of prominent personalities, and especially significant for this paper are places of treatment for both the army and civilians in Partisan hospitals. Without memory in the broad sense, such places would lose much of their meaning. Attachment to a place always involves a portion of events, actors and emotions associated with the place, and memories in terms of knowledge concerning the anticipated history and nature of the place [3]. In the landscape itself, the lives and times of the predecessors who moved in it for generations played their part in its formation. To perceive a landscape is to perform an act of memory, where memory is not so much a matter of calling up an inner image, stored in the mind, but of perceptual engagement in an environment that is itself full of the past [2]. Thus, in this chapter, while getting acquainted with the history of the pre-war health system and Partisan hospitals on the territory of Podgrmeč during the war, we can also understand the social and cultural dimensions of the observed landscape both past and present.

Prevailing political, economic, social and cultural conditions influenced the poor condition of the inhabitants of Bosnia and Herzegovina even before the National Liberation War. In an economically underdeveloped, predominantly agrarian and culturally underdeveloped environment, the rural population made up 80% of the population, 85% of whom were illiterate, and the poor health culture of the inhabitants is clear from the data of only 15% hygienically correct houses [7]. The population suffered massively from various infectious diseases as a result of low hygiene and low living standards. Socio-economic and culturalhygiene backwardness led to extremely difficult health situation. If we consider accommodation conditions³, the above mentioned hygiene standards, food options, poor mountain settlements mostly, the medical service on the territory of Bosnia and Herzegovina had to perform its activities under far less favourable conditions than in other parts of Yugoslavia [7], [8]. There was a lot of diversity in the work of the medical service in some parts of Bosnia and Herzegovina, too. Complicated epidemiological relations, where socio-economic factors such as the level of living standards and the level of health culture, played a significant role in Bosanska Krajina. Infectious diseases appeared here from the very beginning of the war as a pressing problem, unlike in other countries, where infectious diseases appeared only during the war, as 'war diseases' [8], based on the economic and social damage that the war brings.

In Partisan guerrilla war conditions demand was decentralization of the wounded with the need to create a larger number of smaller hospitals, so each specific area of conducted combat operations could have its hospital. Thus, there were various types of Partisan hospitals, such as stationary (stationary or territorial), temporary or permanent, that is, public or secret, as well as mobile hospitals of individual Partisan battalions [7]. The medical

³ On the territory of Bosnia and Herzegovina before the war, there were only 18 hospitals with a total capacity of 3,700 beds and situation was poor with the medical staff too [7].

service relying on territorial hospitals had a noticeable disadvantage. The disadvantage for the Podgrmeč hospitals was a distance of about 25 - 35 km from the combat positions, meaning about 12 hours of delayed admission to the hospital [8]. Thus, for those situations where the wounded needed urgent surgical assistance, medical team checkpoints were set up along the evacuation route (Figure 2).

Podrgmeč hospitals had a joint administration, about 1400 wounded soldiers passed through in 1942, of which 150 died, and about 400 sick civilians too [8]. In the same year 136 new buildings, hospitals, workshops, warehouses, mills, and power plants were built in 21 places on Grmeč Mountain [4]. In August 1942, there were six hospitals located on the Grmeč [4]. The secret hospital, the New Central Hospital near the spring of Dobra Voda, and the Hospital near Lašva are the most frequently mentioned ones in literature that deal with healthcare during the National Liberation War [4], [7], [8]. However, for the residents of this region, the Korčanica hospital was the most equipped one and the largest one with 19 facilities built in one place [4], [5]. This hospital was built in the spring of 1942, in April -May, next to a spring of drinking water, similar to other mountain hospitals [4], [5], [8]. First known as the Battalion Hospital, later named the General Military Hospital, the hospital on Korčanica had a first manager Dr Moni Levy [4], [8]. Detailed descriptions of all hospital facilities contain information about the surgical department, and the electricity produced by a locomobile so all facilities had artificial lighting and could use medical equipment such as an X-ray machine [4]. Figure 3 shows the building plans of the hospital and the building for social and entertainment work, intended, among other things, for the classes held there for the purpose of training for medical personnel.

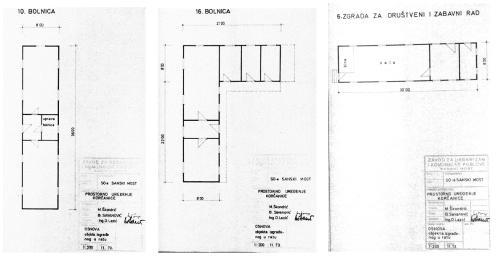


Figure 3. Plan of the hospital, the inpatient unit and plan of the social and entertainment work building, three of the 19 buildings that were located within the hospital complex in Korčanica [4]

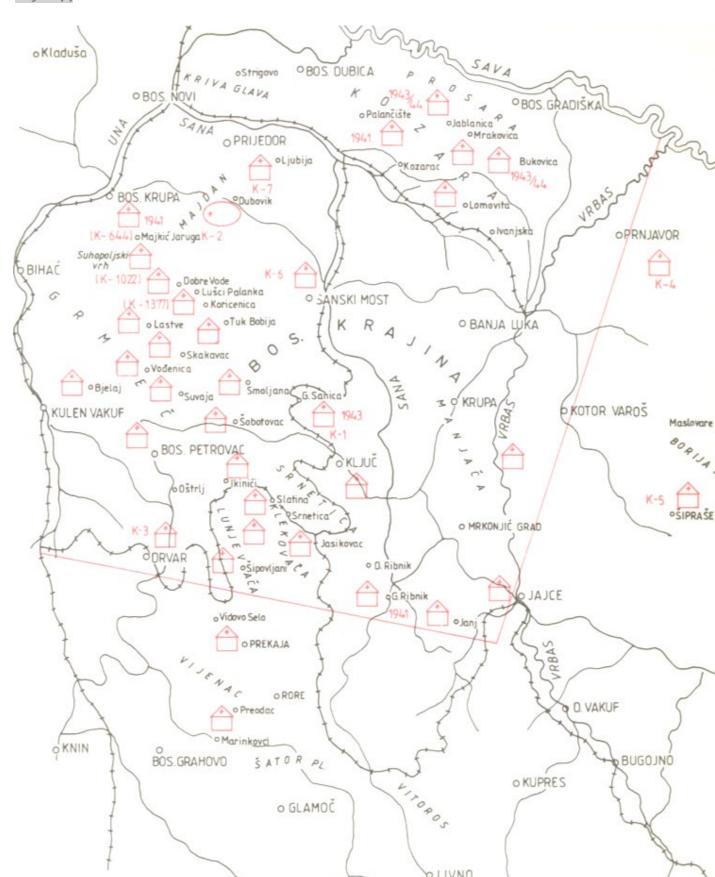


Figure 2. Hospitals in Bosanska Krajina, the territory of northwestern Bosnia between the rivers Una and Vrbas to the Drvar-Jajce direction. The highest density of hospital points is on Grmeč Mountain and in its surroundings -Podgrmeč [8] There are papers that deal with the topic of Partisan hospitals exclusively from the rare doctor and medical aspect, describing the difficult situation of performing even the simplest interventions. Although they describe hospitals built in Slovenia at the end of 1943 or 1944 as organized wartime surgical hospitals, staffed by surgeons, they convey information from the diaries of doctors who worked in those hospitals [9], [10], so it is possible to understand the gravity of the circumstances doctors worked in. Besides the extreme winter weather conditions, the hospital premises reflect the severity of war circumstances through poor hygiene, inadequate equipment, and procurement of medical supplies and accessories [9], [10]. The scope and types of surgical interventions in wartime Partisan hospitals are directly related to the surgeons' ability to perform complex general and wartime surgery operations, as well as logistical support in instrumentation and anaesthesia [9]. In addition, there was a constant problem of the lack of staff, and some hospitals did not have a single doctor, and the tasks were performed by medical students, rare nurses, i.e. trained medical staff [4], [8-10]. On the territory of Bosanska Krajina, many courses were held for the training of auxiliary hospital staff, on several occasions in 1942, lasting up to five weeks [8]. Courses participants were mostly women, with the aim of training them not only to provide first aid but to also care for the wounded and sick, both on the field and in the hospital (Figure 4, 5). The introduction of an adapted curriculum [11] and printed material in the form of periodical pocket editions [4], [11] facilitated the teaching and exchange of information and experiences. There is a record of a certain three-week course led by Dr Zdenko Kraus for 45 nurses and the education at the New Central Hospital for about 80 female nurses led by Dr Izidor Levi in 1942 [11]. Such courses included practical work in the morning and theoretical work in the afternoon in order to prepare the participants for providing assistance as good as possible. In the same year, the names of Dr Herbert Kraus, who led the intermediate hospital course, and Dr Drago Herlinger, the senior hospital course, are also mentioned [11].



Figure 4 (left). Young women carry the wounded in 1942 [8] and Figure 5 (right). Partisan hospital in Podgrmeč in 1942 [8]

During the Fourth Enemy Offensive, in the beginning of 1943, all patients from the hospital in Korčanica were evacuated in a timely manner, and the hospital was not discovered, which was not the case with other hospitals in this territory, but soon after in a new offensive on Grmeč, a nearly year after its construction, this hospital was discovered too and completely destroyed [4].

3. MARKING THE IMPORTANT PLACE: MEMORIAL LANDSCAPE PLANING

With the memory of past activities and stories associated with a location, along with prospective memories of its anticipated future, the meaning of a place becomes multiple and dynamic in a way that is not possible in an isolated present without memory [3]. Enabling visitors to read the message of history through the experience of the memorial area as a whole in all its specifics, to create the illusion of the past without imitating former physical structures, was the most important, but also the most difficult task of spatial planning [12]. Here it is very important to make a distinction between the marking of a significant place then and today when we could equally read the significance of the heritage marked then and the landmark itself as heritage. The motivation reflecting in nation brotherhood and building unity is very important in understanding the history and process of multidimensional territory development as described previously.

The basic spatial characteristic of memorial areas is the dispersion of memorial contents, which is a limiting factor in the use of memorial areas as open-air museums if one wants to preserve and present authenticity. On the other hand, museum, historical and conservation science is based on facts and has elaborate methods of presenting the past, and the application of these methods in a large area creates dilemmas, especially where there are no physical remains of objects. All buildings that were built and used during the World War II in Korčanica were wooden, of limited durability and completely destroyed. In such situations, it is more correct to present the objects in museum form of photographs, drawings and models. In addition, with no museum nor information about the marked place context and history, generations remain deprived of the knowledge about the historical significance of the territory development, so the feature becomes the only visible inheritance [13].

The reconstruction of the former hospital buildings was not even planned after the war, when there were concrete markers at the place of two graves, a fountain and a concrete obelisk [4], [6], [14]. The initiative for commemorating this significant location held a competition to solicit architectural designs for a museum that would showcase the history of the former hospital complex, feature a memorial sculpture, and highlight the position of the original buildings. One central sculpture with individual sculptures in the landscape (Figure 6) (Korčanica) is somewhere in between two existing types: Central sculpture and topography modelling in landscape design (Jasenovac memorial) and multiple sculptures in the landscape alluding to the places of former huts (Drežnica memorial). In addition, there were two tombs in Korčanica, with such a formal task where "the objects of the museum and the memorials are artistically uniform and form a unique architectural and sculptural expression" [4] (Figure 7). Monuments in memorial zones in former Yugoslavia were sculptural-architectural solutions, for the structural and performance possibilities of monumental sculptural responses to message shaping as well as responses to the architectural and urban requirements of the location itself. The competition sculptures were conceptual projects intended to be enlarged and erected as building structures in a landscape. The most exemplary works of art have managed to create spaces that are relational in nature, allowing objects, sculptures, and architecture to interact with the natural environment in a unique way. As a result, they are no longer seen as independent plastic objects that stand alone in the landscape. Instead, they become contextual operations that are strongly influenced by the memory of past events in the same location. These events help to determine the form, space, and relation of the objects, sculptures, and

architecture in that specific place. [15]. Monumental art "favours architecture as a superior to plastic and painting" [16], but unlike "fitting sculpture into architecture...", the best example of a such synthesis is when "an architectural work becomes a kind of inhabited sculpture" [17]. The spatial planning and memorials of the Korčanica Memorial Zone in Grmeč conceptual design were not stated as sculptural or architectural tasks in preparing the bid.

The competition was announced on July 19, 1975, in Sarajevo's *Oslobođenje* and a day later in Belgrade's *Politika*. The basic conditions of the competition (who has the right to participate, what is the deadline and what are the prizes) were published here, and more detailed conditions and documents could have been collected, for a fee, at the Institute for Urban Planning and Communal Affairs in Sanski Most. In addition to this information, the text contained [17-19]:

"Although the Grmeč Spatial Planning and Organization Program defines the functional purpose of the Korčanica memorial zone, the competition participants are given full freedom in choosing and offering solutions that, according to their imagination, can most adequately reflect or symbolize the wartime health care of our Army and other events that took place in and around the legendary Grmeč during the National Liberation War."



Figure 6. Marks on the authentic sites of the buildings of the Partisan hospital in the form of hewn stone with a text about the marked building in 1979 on the left [14] and in 2020 on the right (photo by author)



Figure 7. Memorial sculptures at the site of graves in the form of a cut tree with Ćopić's quotes in 1979 on left [14] and in 2020 on right (photo by author)

The document *Program for the Grmeč Arrangement and Spatial Organization*⁴ was prepared by the Institute for Urban Planning and Communal Affairs Sanski Most in March 1974 [4]. This program envisaged the creation of a conceptual sculptural-architectural solution for marking the Korčanica Memorial Zone. The competition participants, as stated in this document, were given full freedom to "decide at their own discretion for a suggestive or associative method of expression in the design of memorials" [4]. Although the Program only gave guidelines on how to mark the place, some design parts were defined in detail.⁵ On the Spatial Concept and Organization of the Korčanica Memorial Zone map (Figure 8), as the main competition material, the boundaries between the memorial zone and the utilitarian point have been set clearly. The place where the memorial sculpture has been planned (marked as "ORA1") had to be completely separated from the museum. The plan was to set up a large open space for events ("MP") within the tourist zone. The same map shows the position of the museum entrance ("M") marked clearly, left in relation to the site leading road.

⁴ The architect Dušan Marinković was the author of the spatial concept of the Korčanica Memorial Zone, together with civil and forestry engineers, an agricultural engineer, an educational and political worker, and a retired general [4]. Dušan Marinković is the author of the spatial plan of Kozara too [20].

⁵ The space of the museum was conceived in detail and described in the Program as a central circular hall, with the positions of the site model and exhibits, as well as light and audio effects recorded on stereophonic tape [4].

UTILITARNI PUNKT - KORČANICA

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BP	BENZINSKA PUMPHA STANICA
MP	PROSTOR ZA MANFESTACIJE
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ENEXCE .	SUMSKE

Figure 8. Korčanica General Plan - Central Memorial Zone, the author of the spatial concept is architect Dušan Marinković; Commissioning of the work: Assembly of the Municipality Sanski Most, holder of the program: Institute for Urban Planning and Communal Affairs Sanski Most [4]

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MAGAZIN ZA ŽITO HAUBIČKI DIVIZION 1. KORPUSA KAPTAŽA IZVORA 20 21 22

Two years after this (pro)position, a completely different spatial organization won the second-level competition⁶. The monument was a part of the memorial zone, not a utilitarian point as planned previously. The memorial sculpture was located at the very entrance to the former hospital site, with the leading road passing through the monument itself. With the monument opening in this very place, the sculpture took a double form of the memorial site gate (Figure 9).

With this planning design change, the monument solved the spatial setting of the central memorial zone. The sculpture with the crypt united the monumental sculpture and the museum, unplanned in the document from 1974. With these changes, the objects of the museum ("M"), the reception area ("R") and the sculpture ("ORA1", "Z1 ") were joined at the same place, in one building. The multi-functionality of such an object can be read in the architectural cross-section because the program division is placed through the floors.

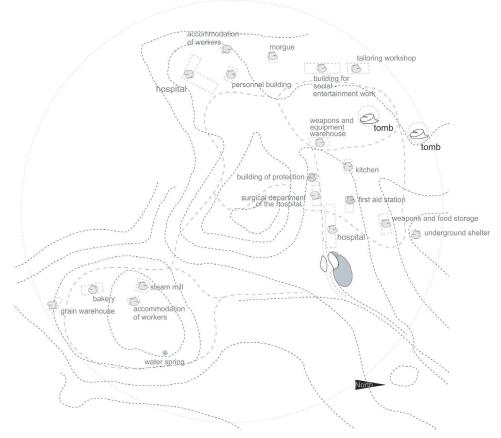


Figure 9. Sketch of the current state of the central memorial zone in Korčanica (sketch by author)

The 250 m long approach seems like a direct route, in fact, with forest surroundings and curved imperceptibly hiding the monument completely until halfway, when the semi-profile of the monument opens slightly and gradually over the water surface (Figure 10). Finally,

⁶ At the first competition, the first prize was not awarded, so the second prize, shared with the authors of the "narrative relief solution from Zagreb". At the second level competition, in the same year 1976, there were no significant changes in the competition proposal of the second team. Denković then decided to "completely change the solution" and by "opening the bud" he got the winning shape. [6]

reaching the water surface, the pathway is divided in the form of a delta into two elevating paths, reconnected within the object (Figure 11). The main rising path in turn to the right leads to the above-ground sculpture, becoming a part of the sculpture itself. In terms of urbanism, this place has the form of the site gate and is not just a passage, but a place of communication between the visitor and the monument itself. In the acoustic sense, the double form of concave forms creates an echoing space, an echoing "dome"⁷ [6], so the monument responds to every step and voice with an extended echo. In spaces of this shape and span, with hard and poor sound waves absorbing concrete surfaces, the reverberation time is significantly extended [21]. The special additional acoustics effect of the space designed in this way contributes to the concrete structure reviving, which encourages the active, physical and psychological participation of the users. In typology proposal, Sanja Horvatinčić defines a monument integrated into a given spatial context as a "constructive-innovative type of monument" and the examples she cites as a "constructive-innovative type of monument" and the examples on the authentic Partisan hospital locations, in uninhabited locations in general.

The second path branches off along the water surface, in a parallel turn to the right, gently descending to the underground museum. The terrain model with the former hospital buildings was exposed on a central circular platform in an exhibition glass pavilion, zenithally illuminated via a smaller dome. Along the outer exhibition wall around the central pavilion, a circular path starts and ends in the same place, at the bottom of the stairs, where two paths reconnect at the site gate. In addition to this spatial organization and setting, the urban scale of Denković's solution is confirmed by the presence of the designed water surface. One of the two parts of the sculpture emerges from the water and "models the found landscape, corrects it for becoming an integral part of the symbolic program and artistic conception of the memorial complex" [22]. Ultimately, the created landscape on Korčanica without water is unimaginable, as Korčanica is the name of the spring located within the hospital complex and one of the main reasons the hospital was built in this very place [4].



Figure 10. The long path in framing the change during the approach from a completely hidden monument to an open view of the monument raised slightly in semi-profile (photo by author)

⁷ In his lecture *Architectural theory, science or gnosis*? Bogdan Bogdanović also mentions the dome. Here he explains the anagram using the example of the idea of an inverted dome from "Zaludna mistrija".

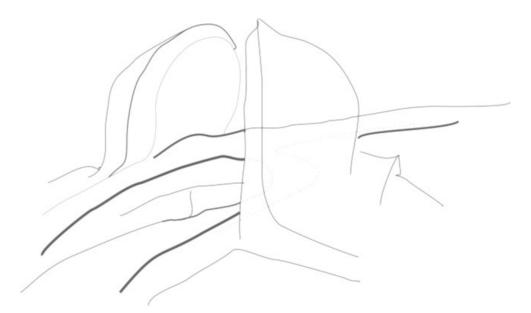


Figure 11. Separation and rejoining of paths in the interior of the sculpture (sketch by author)

4. PERMANENT SYMBOLS OF NATURE: MEMORIAL MESSAGE DESIGN

The need for memorial landscapes was revitalised after the World War II when the emphasis shifted from democratic and local commemorative practices to brotherhood and unity as the nation-building identity. This approach was used to demonstrate a past with its complex overlapping layers of social, economic and political history in a new form of a future ideology. What people remember, and how, changes with time, especially when historic events start to disappear from the living memory. The interview with the author of the monument, sculptor Ljubomir Denković, was of great importance for the understanding of the message design. Denković participated in Yugoslav competitions, winning prizes for monumental sculptures and conceptual solutions in the period between 1971 and 1979.⁸ The study of Ljubomir Denković's work and dynamic path development determines him as a distinctly contemporary sculptor and Arsić singles out the period of the eighth decade of the twentieth century, in which the "associative character" of Denković's "natural vitalism" is especially emphasized [24]. As there is a clear connection between the monumental sculptures in the cycle up to 1980, Denković explains the character of his work in parallel easily. In the description of two constructed memorials and other competition sculptures he designed at the time, Denković reveals the collaborative and competitive parts of the process, of designing and executing an architectural memorial sculpture. In the overall work, including the memorial example on Korčanica, everything is thought out and understandable through the power of nature and natural processes. Life arose naturally - is a message he conveys clearly as a basic design idea, whether in the "movement of the bud opening" in the high pine forest on Grmeč Mountain, or "the new life sprouting from the earth, bursting earth in front of the fruit seeking a way to the sun" on the hill above the Vardar river [6]. When describing his sculptures, he emphasizes the "movement" and "birth

⁸ He won the first prize in an architectural and sculptural competition in the territory of the former Yugoslavia twice, for the Korčanica Memorial in 1976 and the Memorial Ossuary in Veles in Macedonia in 1974. In addition, there are two first prize-winning memorial marble sculptures realized also, the monument to Đura Đaković in Sarajevo from 1971 and the Memorial Ossuary in Rome from 1975 [6], [24].

stopped in a moment", while sculpting soft plaster "searches for a moment and a position that will carry the message of the entire process" [6]. In sculpture, the illusion of life cannot be presented in any other way other than by movement defined as a transition from one position to another, because sculpture is a static object and cannot show movements except to suggest successive positions at the same time [16] Thus, the message about the life process is conveyed not only through symbols, but also through the sculpted form, which intuits preceding and following movement, achieving the vitalism of the sculpture. In Figure 12 of the models, on the very top of the sculptures, "lips" as Denković calls them, the soft outwards curving reveals the intention of opening. The accentuated sharper outer and softly rounded inner edges of the petals, as well as the rough outer and smooth inner surface treatment extends the birth to a life cycle in the interval from the inner young to the outer old. This is visible on the competition sculptures for Korčanica and Veles and it is most pronounced in the sculpture for the memorial of the Battle of Batin on the Danube near Bezdan (Figure 12). The sculptures for Korčanica and Veles, in addition to the opening and different textures, also allude to emerging from the ground with a slight transition from horizontal to vertical surfaces. It is very important to understand Denković's work as a specific type of sculpture that strives for vitalism and an allusion to the entire natural process.

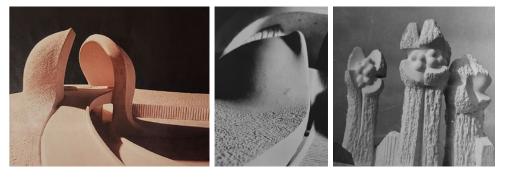


Figure 12. Competition sculpture for the memorial zone in Korčanica, 1976, 1st prize, (left); Competition sculpture for the Memorial Ossuary in Veles, 1974, 1st prize (middle); Competition conceptual design of the Batin Battle Memorial on the Danube near Bezdan, 1974, III award (right) [24]

Denković's message design for the Korčanica memorial becomes clearer and stronger if read together with the tombs site design, where symbolism is used as generally understandable and readable in the context of nature and place. Sprouting bud as a symbol of birth, nature and life, opens and grows in a dense mountain forest. With the remains of two felled trees in the place of terminated, severed lives, the overall message grows into one about the indestructibility of nature and its power of rebirth and renewal. Here, Denković has set a clear boundary between mortal man and immortal nature. The difference is in the consequences of such "cutting the tree" action on the one hand and nature incontinently budding on the other. The nature of the memorial does not allow the monument to come into concrete contact with the commemorated event or historical site but rather emphasises the essential qualities expressed through the abstract symbols [25]. The symbols of life and death were found here in the same place as a response to the memory culture in Yugoslavia, where important memorial projects should serve as symbols of "reconciliation and faith in the future" as well, and not only as "places of memory" or "collective mourning" [26]. The necessity was to fulfil the expectations of the survivors and highlight the historical meaning of defeat and victory in the same place simultaneously. The

symbol of the bud is inseparable from the symbol of the graves in the form of a felled tree, and together they can convey a complete message. The action of a man and the consequences of war in violent cutting exist only at the site of the graves and end there. The bud that opens despite the previous felling is a symbol of the victory of life, indestructible nature and a new beginning, sending a message of hope and faith in the future.

The Korčanica Memorial Zone, Museum in Jasenica and other memorials in the "Partisan Forest" were officially opened on July 27, 1979, on the date the Uprising Day in Bosnia and Herzegovina is celebrated [5]. The daily newspapers *Nedeljni glas* and *Oslobođenje* announced the opening in several issues before the date and reported on the events finally in the weekend edition after the opening. The monument was presented as a "severed bud" [14], [27], [28], and the tomb features in the form of "cut down trees of the Grmeč firs" and "cut down trees of gorostas" [27].

A cut bud emerges on Korčanica, representing the indestructibility of life, and, in a certain way, symbolizing the Grmeč bosom as the shelter and refuge of the Partisans. [14]

Was the message about the indestructibility of life carried by the competition sculpture from 1976 and the constructed building from 1979 equally? Could the "cut" bud be a sculpture by Denković? Denković offered a "lyrical monument of very successful plastic solutions" to the competition task⁹ of "an author's clear commitment to the symbol of a front breakthrough victory" [29]. To the very precise action presenting the task of a breakthrough as human action, he offered an "insufficiently associate the sharpness and dynamics of the front's breakthrough and victory" answer for the third prize, and "the pious character" proposition presented action of nature through "organic architecture growing out of the terrain" [29]. The vitality of Denković's proposal for Korčanica is confirmed here and the organic form, between sculpture and architecture, is what best describes the constructed building. Such organic form ensured the vitality of the concrete sculpture built in Korčanica, and a "severed" bud is not in the character of Denković's work and his message about natural processes. Memorial sculptures expressed with such clear symbols aiming "mass emotions" and in relation to society stand as no "representatives of the artist's personal consciousness or feelings", but primarily "as catalysts of collective consciousness" [16]. Denković conveyed the message by the means of a generally understandable symbol, thereby for a finished form he avoided the additional narrative relief, often necessary in the case of the central monumental sculpture abstract solutions [22], skilfully. All narrative was placed outside of the memorial plastic and displayed only in quotation form in the museum, alongside the site model and tomb sites [5]. Narrative through quotes was inevitable as easily and quickly understandable political message and emotional message of local community gathering. Tito's quote at the museum entrance and Ćopić's¹⁰ quotes at the tomb sites were presented in periodical reports as equally important messages as the message of the designed memorial [5], [28], [30].

⁹ Competition for the conceptual design of the monument to fallen fighters of the Liberation Army of Yugoslavia on the Srem front in 1944-1945 [29].

¹⁰ Branko Ćopić (1915 – 1984) was a Yugoslav writer who became famous for his stories often set during World War II in revolutionary Yugoslavia, i.e. Podgrmeč, written with characteristic Ćopić's humour in the form of ridicule, satire and irony. He is the most famous person from Bosanska Krajina.

5. PUBLIC PARTICIPATION AND LOCAL DEVELOPMENT CONSTRUCTION

The perception, interpretation and use by people in periods succeeding their construction should be regarded as parts of the monument's life history and constituents of the place meaning, rather than as a secondary phenomenon [3]. This is in fact one of the great advantages of biographical approach to landscape, which regards the place and the monument itself as the focus around which a range of activities was performed at different times. Current landscape studies are thus facing the challenge of reloading heritage practices with time depth and new notions of time and temporality. Biographical approaches to landscapes and places seem promising in this respect. They may be able to link social memories to the long term, connecting the micro-histories of places to large-scale developments and integrating experience and process [2]. Through memory, past landscapes have been reused and renegotiated, and old monuments have taken part in new social contexts in which remembrance and memory played an important role [3]. The most visited, public, accessible and best-preserved National Liberation War memorials in Bosnia and Herzegovina are certainly the monuments on Kozara and Tjentište, from the beginning of the seventies of the last century. The sites on Korčanica and Makljen were marked in the late 1970s and are now abandoned and unknown to younger generations. The Makljen and Neretva Battle Memorial Complex in Jablanica are important in this chapter, not because they belong to the group of endangered monuments in Bosnia and Herzegovina, but because the project and construction process took place at the same time and in the same way as for the Korčanica memorial.

Documents preserved in the Archives of Bosnia and Herzegovina indicate the funds collected for the marking of these two sites, at the same pace and with the same deadlines. In early 1976, the socio-political structures of Bosnia and Herzegovina created The Program for Marking Important Historical Places and Events from the National Liberation War and the Socialist Revolution, and by the end of 1978, the site commemorating The Battle for the Wounded at Neretva and Partizan Hospital on Grmeč had been marked [31]. The construction of all revolution and national liberation memorials policy was decentralised to the republics and committees [32], so Bosnia and Herzegovina had to finance two very important projects at the same time.¹¹ Special attention was paid to the organization of political and fundraising activities as expected. Newly formed Committee for Marking Significant Historical Places and Events in Grmeč proposed and eventually signed the Social Agreement¹² with the regional municipalities. By signing this agreement, the municipalities were obliged to the participate in the project financing, anticipating the participation of all municipalities of Bosnia and Herzegovina in the program implementation, regardless of the agreement signatories, which were not implemented as intended fully [31]. The memorial on Korčanica was built by "solidarity and joint means of working people, citizens and youth" from 27 municipalities of the wider area of Bosanska Krajina [28]. This financing model had political and social dimensions, and the fundraising campaign had political and "moral importance" for the local population [28].

Marking the formal Partisan hospital site on Grmeč nurtured more than the culture of memory for the local community. As the Committee members were representatives of the

¹¹ Funds were collected for the building of the monument on Makljen and the Korčanica memorial zone, as well as the tourist complex in Jablanica and the memorial point in Jasenica on Grmeč, at the same time.

¹² The Social Agreement defines the tasks, implementation agents, financing and method of implementing the action.

local community also, and the regional municipality was a signatory of the Social Agreement, the implementation of this project also meant regional development. The local population financed the project eventually and saw a unique opportunity to build a new local and rehabilitate a regional road as a good foundation for further development, economy and tourism above all, but other region potentials too [31].

The Committee's financial reports, submitted to the Union of Associations of Fighters of the National Liberation War initially, and to the signatories of the Social Agreement later, provide project documentation and an insight into the construction process. The competition was completed in February 1977. The Institute of Architecture and Urbanism at the Faculty of Architecture and Urbanism in Sarajevo was contracted for the project design and construction supervision, and deadline for project documentation was March 1977 [31]. The Committee formed the Commission for the revision of the project of facilities on Korčanica to "check the planned materials quality and the reality of the prices, in order to avoid an unjustified increase during construction" and in this process phase "a possible and suitable contractor is being considered". Before the holidays in May 1977, the Commission still has not taken over the elaboration from the Institute, and there is a record that the on-site construction started two months later: "The construction was entrusted to the local contractor "20. oktobar" from Sanski Most, as the most favourable bidder, and the building started on July 4, 1977" [31]. The conceptual design team led by Denković participated in the construction process (Figure 13) [6], [31].

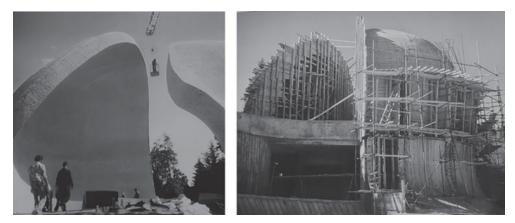


Figure 13. Denković supervises the construction [6]

During the project development and implementation, in the period from 1977 to 1979, the Sarajevo, that is, Bosnia and Herzegovina edition of the magazine in the field of architecture and urbanism was not published.¹³ Information about the state of affairs in Bosnia and Herzegovina is rare and available in the publications of the neighbouring republics. In "The Neretva Memorial in Jablanica" paper, published in *Čovjek i Prostor* journal, the Institute of Architecture and Urbanism at the Faculty of Architecture in Sarajevo is listed as the project designer and supervisor for this location as well. The authors of the conceptual design in the competition were domestic (local) architects, citing the parallel between the project

¹³ The Sarajevo edition of the leading professional magazine in the field of architecture had a break in this period from 1969 to 1991 (issues from 1963-1964, 1966, 1969, 1991), while the Belgrade edition of the magazine Architecture, urbanism: the magazine for architecture, urbanism, applied art and industrial design, did not publish editions in the period from 1977 to 1980 (issues from 1960-1973, 1977, 1980-1985, 1987).

design and construction process, since the opening of the memorial would be on November 12, 1978 [33]. Insight into such a parallel process is given in the following quote and additionally explains the previously described process in Korčanica.

.. the contractor was not up to the task and the too-short deadlines did not allow any manoeuvring. The battle is won, but the casualties are considerable. Many of the competition ideas (water at the building entrance, the museum glass cube, the use of local eruptive stone, etc.) were minimized or cancelled, so we can still be satisfied with the final result. [33]

In both cases of Korčanica and Jablanica, local bidders were the most favourable for the building construction, and the main project design and/or its revision proceeded in parallel with the on-site construction. It was difficult to fulfil all the conceptual design authors' requirements in the case of building the Memorial in Jablanica building, whether technologically unfeasible for the local contractor or impossible to implement within the planned budget. Denković had one particular request for the monument on Korčanica also. In the construction process of his concrete memorials (Korčanica and Veles), he insisted on the white colour of the concrete [6]. According to his memory, it would take too long to wait for the cement, which would ensure the appropriate concrete crushing strength in the desired white colour, imported from Greece [6]. Both monuments designed by Denković (Veles and Korčanica) were made in white concrete, and the same material was used for the Monument to the Battle for the Wounded (Makljen) construction. There was a practice of building monuments in white concrete, aiming at the figure abstraction increase and concrete structure tectonic effect reduce. In addition, the snow-white colour of the monument in a place covered by a thick winter blanket for most of the year represents a positive response to the natural environment and spatial context also.

When it comes to the concrete colour and texture, special requirements can be found at Bogdan Bogdanović's flower in Jasenovac too. On the other hand, he insisted on the uniform concrete structure and colour fineness.¹⁴ [34]. As an architect, Bogdanović knew how concrete as a material behaves in the construction process and reacted to avoid mistakes preventively. As an architect, he skilfully shaped a flower from a pure structure, by multiplying the most important plastic element of the buttress [35]. Denković, on the other hand, does not shape a flower, or even a bud, but as a sculptor of natural vitalism, alludes flowering and budding process. The sculpture was made of two fleshy petal forms and massive reinforced concrete canvases in the structural sense. The sculpture conceived in this way could be an example of the successful "individual structural elements within the monumental organism" unification [22], successfully as the flower from the buttress, cited by Horvatinčić as the "structure-innovative type" [22]. However, there is nothing innovative in terms of structure, in fact, it is extremely traditional with no idea of using concrete in the construction concept. The material is relatively innovative, but its use is not. It was used by a sculptor's uses (as a mass to be modelled), not as engineers and architects use it (as a spatial structure). As a result, the bud structure was separated and the imagined effect of the strength of the petals was reduced by the clumsily circular beam and square-section columns in the basement space centre.

¹⁴ The requirement was to provide sufficient quantities of concrete for the entire building in a timely manner, so that the texture and color of the building would not change during phased building process and interruptions [34].

If we go back to the natural vitality of Denković's sculpture, the constructed building differs in one more detail. In comparison to the sculpture in plaster (Figure 14 left) on one side and the sculpture in concrete (Figure 14 right) on the other, the difference is noticed in the "lips" detail, at the sculpture's very top. The opening softness and naturalness were lost in the concrete, and the petals lost their fullness and gained in slenderness. However, the natural vitality of Denković's sculpture has not been lost completely. The concrete sculpture alludes successful emerging from the earth equally. The texture difference in the rough outer and smooth inner surface processing is preserved, and the petal inner edge, although not rounded, follows the outer edge at the opening angle. Differences in design and construction are expected considering the physical and chemical characteristics of the material difference, scale and technology of sculpture and building making.



Figure 14. Plaster sculpture on the left [6] and the object constructed in concrete on the right (photo by author)

It is possible for a divergence to occur between these two processes during the architectural drawing phase. In this type of drawing project, the elaboration of the basic idea proceeds in the same course and in the same rhythm as in the usual architectural design, with the fact that the idea has been shaped and it is necessary to translate the proposed form into a drawing as faithfully as possible. According to Denković, the architects used a grid placed above the model to measure distances with a plumb line at certain points, in order to draw sections of the future building [6]. This draft geometry method is known as parallel planar dimensioned projection and there are several types of projection used to translate a threedimensional model into a two-dimensional drawing, where the selected method primarily depends on the object shape [36]. Obtaining precise orthogonal projections, bases, layouts, and sections is crucial for accurately presenting the shape of a complex object. Projection points can be used to achieve the accuracy and precise dimensioning of the shape. However, in the case of the Korčanica sculpture, it is unknown what the network density is, the number of points projected in the drawing, and the exact attachment.¹⁵ However, in the case of the Korčanica sculpture, the network density, the number of points projected in the drawing, and the exact attachment are unknown. The problem is further complicated in the construction case, in the other direction, where the task is to get the shape from the drawing. There, from the method of dimensioned planar parallel projection, one moves to

¹⁵ One-millimeter error in the dimensioned projection of the model sculpted on a scale of 1:100, leads to a change in the curve of up to 10 cm on a scale of 1:1.

the theory of shape from planar curves [38]. Modern technologies are still developing software that would correct projection errors in one direction (translating a threedimensional shape into a two-dimensional drawing) or another (shaping an object according to planar curves) [37].

In the end, we have a simplified version of the plaster form proposed in the competition with many possible reasons for losing the imagined message in translation. On the one hand, the bud was simplified to approach the needs of the construction site, which impoverished the realization, without losing the magic of the form, although there is a problem of material use and in this case, the brick would have been a suitable choice for better results in the bud detail. Furthermore, it is not clear why the structure of the central part was solved in this traditional way, whether there was a change during the design, revision and/or construction. However, it should be added that, despite the technologically unfeasible Denković's detail for the local contractor and/or impossible implementation within the planned budget, Denković's project - the conception of the sculpture - does not contemplate the problem of casting concrete process in such building form. In this sense, the responsibility could be on Denković and his engineering team also.

6. CONCLUSION: THE CURRENT STATE OF THE KORČANICA LANDSCAPE

The Korčanica Memorial Zone is a Yugoslav architectural heritage, one of the many memorials of the National Liberation War and one of the rare preserved memorial sites in Bosnia and Herzegovina. The biographical approach highlights a critical aspect of the importance of places, namely their different interpretation and association in different periods and contexts and hence the perception and use of sites in periods post-dating their original cultural context [23]. A historiographical approach to the study of conflict landscapes is crucial for a full understanding of their changing meanings. Although history is one and unchanging, memories of past events are never fixed but change continuously, influenced by individuals, groups, or nations. Of course, various groups (ethnic groups, individuals, nations) can have different views on the same landscape. Memories are both continued as well as transformed by successive generations, adapting and expanding their cultural memory and choosing a suitable past [23]. Personal connections with the memories presented are weakening as time passes by, identities are no longer based upon a shared experience of the past but derived from a common heritage rooted in the past. Therefore, the history of a landscape can only be fully understood through the history (of the events, of its inhabitants...), and by means, the author expresses a powerful message in the landscape representing.

The monument on Korčanica is recognized today as a monument on an authentic site of a Partisan hospital, a monument within the memorial park forest, an architectural-sculptural project and, according to its materialization, a monument made of reinforced concrete. The monument on Korčanica is an example of recognizable natural vitalism sculpture in permanent symbol message, yet unique for its urban-architectural solution in the spatial arrangement within the memorial area. The monument on Korčanica is a sculpture with a crypt, a building of more than just one purpose, combining the symbolic and aesthetic dimensions with the museum and educational utilitarian function. Such kind of architectural organization monument unite different purposes, but cannot be seen as an individual building. Its spatial setting in the memorial zone ambient context and the symbols used in the monument and memorial design make it an inseparable part of a cultural-historical whole. The compatible functions merging into one organic form of the memorial architecture make this one stand out from the other National Liberation War monuments in Bosnia and Herzegovina.

The meaning attributed to a monument at a given moment depends on the social context and interpretive horizons of the interpreter and reflects the meaning of the monument in history. The social context of a place changes over time, and the 'status' of a place can change completely based on seemingly minor events or changes in its life course. Because social contexts are dynamic and overlapping, a site will have multiple understandings and multiple biographies that overlap and change over time. Korčanica has no protected monument status, although, in addition to the historical values that could protect the monument, this monument has social and cultural values also. The Grmeč Mountain, known as a guerrilla habitat of wolves and hajduks, in extremely difficult war conditions had been a place of education for the illiterate actually. Later, the museum in the wild mountain nature was the mode of educational and cultural development of this underdeveloped and war-ravaged territory. In addition, the marking of important historical places and events in Grmeč project and site construction had wider economic and regional significance. This place at a certain time was significant for the participants as individuals and the community as well, so marking it meant continuity of cultural development also, reflected in the construction of the museum facility. Moreover, the sustainable domestication of the wild nature of the mountain through educational tourism can also be considered the cultivation of the territory.

Regardless, forgotten and abandoned, the monument and message sent here are unknown to the generations it addresses. The timeless message is performed as a witness of a past time, but the picture and the status of the current landscape reflects our time. Through memory, past landscapes could have been reused and renegotiated, so old monuments take part in new social contexts in which remembrance and memory play an important role. As societies changed over time, so did the attitude towards this heritage. All the values mentioned in Korčanica's biography are still authentic today. The natural potential of this place still exists today and could be used for integrated regional development, as originally planned. Such a plan either does not exist today or has not been realized yet. Ultimately, without memory, the meaning of place is restricted to its physical objective appearance and the activities performed in the immediate and experienced presence of perception (Figure 15).

Reading the biography of the Korčanica landscape discovered many lessons about the territory state changes throughout history, and all social, economic, educational, cultural and technological layers are (un)available in the current landscape of Korčanica. The monument is a concrete sculpture not visible from the main road and the features of the former hospital facilities are hidden deep in the mountain without prior knowledge, guidance and no path directions, and the location of the former hospital is undisclosed. While modern society creates new monuments and memorials, this one grows in the form of another quote from Ćopić, evoking mass emotions with ease:

...before they take me away, I hasten to tell a golden fairy tale about people. The seed was sown in my infant's heart and it's sprouting constantly, blooming and renewing itself. It was fried by the many horrors I went through, but the root remained, life-giving and indestructible, and under the sun, it put forth its weak green sprout once again... [38]



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ВИТАЛНОСТ МЕМОРИЈАЛНОГ ПЕЈЗАЖА КОРЧАНИЦЕ

Сажетак: Меморијална зона Корчаница је југословенско градитељско наслијеђе, једно од бројних спомен-обиљежја НОБ-а и једно од ријетких очуваних у Босни и Херцеговини. Корчаница је обиљежје на мјесту некадашње партизанске болнице и овдје је представљена кроз историјско истраживање пејзажа и вишеслојне (културне, друштвене и економске) аспекте развоја територије Босанске Крајине у одређеном времену, а са циљем њене (ре)интеграције кроз урбанистичко планирање и обликовање пејзажа са учешћем јавности у локалном и регионалном развоју. Историјска контекстуализација пејзажа, из доступне архивске грађе и периодике, информација добијених интервјуисањем аутора скулптуре, те анализом на лицу мјеста, омогућила је широк увид у баштину као процес у оквиру специфичних дискурса, како би се што боље разумио и представио значај који Корчаница има данас. Пејзаж Корчанице носи поруку обликовану изван свога времена која разумљиво комуницира универзалним језиком симбола. Порука послата на овом мјесту прије скоро пола вијека, иако сада ван свог политичког, друштвеног и идеолошког контекста, а тренутно незаштићена као насљеђе, успијева да допре до малобројних случајних или намјерних посјетилаца. Њена виталност је у јединствености одговора на, прије свега, природни контекст у коме се крије ово обиљежје, на апстракцију или симболику изван националног, па при обликовању обиљежја, једног историјски значајног мјеста за рађање велике друштвене снаге и јединства, и сам аутор остаје вијеран сопственом изразу. Читање биографије пејзажа открило је много историјских лекција о територији, а многи трагови друштвених, економских, образовних, културних и технолошких слојева историје планине Грмеч су (не)доступни у садашњем пејзажу Корчанице.

Кључне ријечи: биографија пејзажа, спомен зона Корчаница, партизанска болница



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VISIONS AND NARRATIVES OF LARGE-SCALE PROJECTS OF SOCIALIST VOJVODINA

ABSTRACT

In this paper, three case studies of various natures, scales and positions within the discipline are identified and analyzed as exemplary of Vojvodina in the discussion of large-scale projects of socialist Yugoslavia. The interpretive-historical method is used to describe and interpret the case studies, while primary sources are subjected to qualitative content analysis in order to extract the underlying narratives of these projects, as well as to establish their position more firmly in the field. The first one is the Grand Canal Danube-Tisa-Danube (*DTD* waterway), the biggest spatial project of Vojvodina, conceptualized by the engineer Nikola Mirkov in 1947 and completed by the early 1980s. The second is the case of two plans for road and railway networks in Vojvodina by the architect Dimitrije Marinković, from his 1950 General Plan of Novi Sad, which proved to be more visionary than plans made by spatial planning institutions since. The third case is a network of memorial graveyards *Rohalj Baze* (1973) and *Jabuka* (1974) on the Fruška Gora mountain by the architect Milorad Berbakov, as an example of a new landscape-based paradigm of Yugoslav memorial architecture in Vojvodina. The questions discussed in this paper are as follows: 1) the importance of narratives for the success of a project; 2) the expanded definition of projects to include networks; 3) arts as networks (with *Neoplanta Film* as a showcase); 4) the creative output of individual creators versus institutions.

Key words: Vojvodina, spatial planning, Great Canal Danube-Tisa-Danube, DTD waterways, canals, Nikola Mirkov, Dimitrije Marinković, Yugoslav monuments, Milorad Berbakov, Fruška Gora, Rohalj Baze, Jabuka, Neoplanta Film

1. INTRODUCTION

1.1. RESEARCH CONTEXT

Vojvodina is a historical region and an autonomous province in northern Serbia, with the city of Novi Sad as its administrative center. After WW2, Vojvodina was given this special political status with the foundation of socialist Yugoslavia. It lies in the Pannonian (or Great Hungarian) Plain and is a major European hydrological node where many rivers flow into the Danube. The landscape of Vojvodina has been subjected to intense cultivation and infrastructural modernization since the 18th century. These undertakings transformed the land from swampy and often flooded plains to a highly productive agricultural landscape crisscrossed by canals, railways, industries, and planned urban and rural networks. This process was conducted when the region was part of the Habsburg Austrian Empire (later renamed Austria-Hungary) and built upon in times of socialist Yugoslavia.

1.2. RESEARCH GOALS

The goal of this paper is to offer a new nomenclature of the most significant cases of largescale projects of Vojvodina, which could substantially contribute to the history of territorial modernization of socialist Yugoslavia. Moreover, this proposed nomenclature consists of a triptych of case studies that are very different in their nature and scale, with the goal to demonstrate that disparate instances and edge cases from this field can serve as better benchmarks in the discussion about local spatial modernization than the nominally biggest institutional plans and projects. For this purpose, an expanded definition of territorial infrastructure is introduced in one case study, which includes networks of memorial projects. The significance of the case studies is to be demonstrated through deep reading of original materials by the creators of the showcased projects. From a historical distance, the narratives extracted from these materials appear to be of crucial significance for the success and legacy of these projects. The additional goal, therefore, is to discuss the strength of these narratives and to measure individual creators' visions against the routine institutional planning practice since the circumstances analyzed in the case studies offer an opportunity to do so.

1.3. SELECTION OF CASE STUDIES

The three case studies analyzed in this paper and proposed as the benchmark projects of large-scale modernization of Vojvodina are: 1) The Great Canal Danube-Tisa-Danube by Nikola Mirkov – a built territorial infrastructure project, 2) Vojvodina plans by Dimitrije Mariković – a concept for a spatial plan, and 3) Milorad Berbakov's monuments for Fruška Gora – a network of memorial landscape architecture sites.

The choice of these case studies came from the realization that they have, perhaps, not yet been represented in the discussion about the history of planning and modernization of Yugoslavia and were, especially, not analyzed alongside each other. Moreover, the realization that these individual large-scale plans and projects came outside of the regular institutional urban and spatial planning procedures was additionally interesting from a researcher's perspective. In addition to the stated goals of the research, the very placement of such disparate case studies alongside each other is an experiment of its own, conducted in order to test how many common conclusions can be extracted from them and discussed. It is particularly interesting to test new combinations of case studies of large-scale projects in Vojvodina since this region owes its very existence to the centuries-old grand projects of territorial modernization and cultivation.

1.4. METHODOLOGY

The general methodological approach in this paper is interpretive-historical research, applied in the manner outlined by Linda Groat and David Wang in [1]. This means that the stages of the research consisted of data/evidence collection, identification/organization of data, evaluation, and narration, i.e. description of the reconstructed history, with interpretation of the data happening all along [1:137]. The materials collected can be grouped as follows: 1) primary sources by the designers of the case study projects, including their writings and designs; 2) institutional sources from the construction phase later representation of these projects, or both; and 3) secondary analyses and interpretations by researchers.

The differences in the three case studies and their related materials required somewhat different methodological approaches. The vast scale and historical complexity of the first case study (the canal network) required more attention, which resulted in more space dedicated to it in the paper, but this was expected in a paper that had the goal of measuring up smaller cases against larger ones.

In all case studies, primary sources and project documentation were thoroughly sought, not only to assemble the correct historical timeline but primarily to acquire a body of text and drawings authored by the original creators. The dominant method then applied to these materials was qualitative content analysis. Even though this method is normally applied to a text, the drawing materials that were collected were also analyzed in this way, as a sort of an "extended text" that researchers familiar with these disciplines are well equipped to "read". Content analysis was applied along the lines of Bernard Berelson's definition of this method as a "research technique for the objective, systematic and quantitative description of the manifest content of communication" [2:18]. Berelson had this method in mind primarily for the analysis of media communication, but others have expanded the method into humanities and beyond, like Holsti did in the case of history [3:173]. Nevertheless, the fact that the original writings analyzed in this paper were published by their authors as a sort of personal public-relations media or popular engineering texts aimed at decisionmakers and the broader public goes along with the originally intended purpose of this method.

Moreover, the choice of the three disparate case studies for this paper is further supported by the recommendation by Matthew Miles and Michael Huberman to use a three-tiered sampling approach if the goal of the analysis is to broaden the understanding of a field, which should consist of these: 1) a typical/representative example; 2) a negative/disconfirming example; and a 3) exceptional or discrepant example [4:3, as discussed in 5:10]. The three case studies correlate to some degree to this nomenclature: The Great Canal by Nikola Mirkov is a typical large-scale project, the Vojvodina plans by Dimitrije Marinković is (to a lesser degree) a disconfirming example due to its speculative nature and lack of fruition, and the network of memorial sites by Milorad Berbakov is an exceptional case that had not been included before in similar analyses. In that sense, this paper is an example of a qualitative analysis that "intentionally seeks to identify and understand the perimeters of a field, including 'outliers''' [5:10]. When it comes to secondary sources, i.e. later researchers' publications, their existence or lack thereof was used as evidence of general awareness about the significance of these projects, which helped underline the intended goals of the paper in the discussion.

2. CASE STUDIES

2.1. CASE STUDY: THE GREAT CANAL DANUBE-TISA-DANUBE BY NIKOLA MIRKOV

Vojvodina inherited an extensive canal system in its sub-regions of Bačka and Banat, built in the era of Austria-Hungary. The canal network, together with accompanying hydrotechnical structures like sluices, locks, and earthworks, was a critical infrastructural backbone of these lands. This system enabled the land to be drained from excess water and protected from seasonal floods, which massively increased its habitability and productivity but also resulted in the anthropogenic character of its landscape, dominated by endless croplands, as well as dense networks of settlements, railways, and industries.

However, one man was not nearly as satisfied with this condition and devoted his career to solving the problem of waters in Vojvodina. This was Nikola Mirkov, an engineer from Novi Sad who specialized in hydrotechnical work and spent the entire 1920s and 1930s studying the peculiarities of local water management. He became the foremost expert in this field and started to see the bigger picture of the territory as a unified and organic waterway system rather than a set of diverse local water management policies (as was then the practice). After WW2, Mirkov immediately started to publish his thoughts on the condition of waterways in Vojvodina in 1945 [6]. On top of his vast knowledge about local waters, he also kept his eyes on references and experience from around the world, from canal-building efforts in Japan to the Tennessee River projects in the USA [7:8]. He admired the examples from history that spoke about the central role of water management in a society, such as the apparent role of Chinese Emperors as chief water managers or the Dutch treatment of water management authorities as "water state" (Waterstaat) [7:18]. He then finally came forward with a radically ambitious new concept for the canal network in Vojvodina in 1947 (Figure 1), which would supplement and expand the existing waterways [7:8-11]. His new canal system was centered around one main waterway, Veliki kanal Dunav-Tisa-Dunav (The Grand Canal Danube-Tisa-Danube). Mirkov always insisted on calling the whole system 'grand canal' (veliki kanal) rather than 'network', perhaps in order to emphasize the importance of the central arterial canal of his proposed network [7:13]. Today, however, it is most commonly referred to as Hidrosistem DTD in the Serbian language, which is more true to its nature, or simply DTD.



Figure 1. Left: the existing waterways in Vojvodina in 1945, with proposals for new canals in 1945-1947 (bold) [6:25]. Right: Nikola Mirkov's concept for the DTD canal network in 1947 [7:9].

Mirkov conjured up an elaborate argumentation in favor of such a project, which he published in a couple of texts: [8], [9]. In short, his idea was that Vojvodina needed an integrated canal network system that could outperform the existing canals in gravitational drainage of land and flood protection. Such a network would lead to agricultural expansion, an increase in grain yields, shorter shipping routes, opportunities for hydro-power, and water supply for industries and inhabitants, together with a plethora of other advantages [10:231]. Remarkably, he succeeded in persuading the provincial and the republic authorities to embark on such a project, and they included it in the 5-year plan for the economic development of Serbia for 1947–1951 [7:9].

It is worth analyzing his 1947 writings about the canal (especially [9]), which are a poetic exhortation in their character as much as a technical rationale for the canal construction. Mirkov understood well the narrative potential of such a project for the societal selfperception and its identity-creation. He saw his canal project as an opportunity for total social reconstruction. This is an interesting case of identity-building based on conquering space and taming nature with grand engineering projects. Such an approach completely made sense for Vojvodina, whose raison d'être was not founded on ethnic principles, like in the case of other Yugoslav federal units. Mirkov starts off by saying that the canal construction will be among the biggest projects in the world; that we are not yet aware of the creative powers that can be unleashed from the people through it; that the new grain fields enabled by the canal will revive "our Mesopotamia"; that it will enable the flourishing of new life, new civilization and new culture in the backwaters of Balkans [9:183], and that the pinnacle of this concept would be the creation of a new human [9:202]. He claims that it is historically unheard of that a plan for a new water management regime went on together with planning a new province, new agriculture, new nature, new industries, new traffic network, new towns and villages [9:184]. He writes that "the canal would draw together all the healthy spiritual, moral, material and labor powers of the nation"; he especially emphasized the inseparable role of creative professions in this grand project, singling out writers, artists, poets, musicians, painters, sculptors, inventors, and cinematographers, alongside natural sciences, engineering and technical experts [9:184]. He saw the canal system and water management as a foundation not only of the material but also of the spiritual culture of Vojvodina [7:13]. This is just a small sample of highlights from his grandiose narrative for the canal, which is also illustrated by a candid map of Vojvodina with the new canal network (Figure 2).

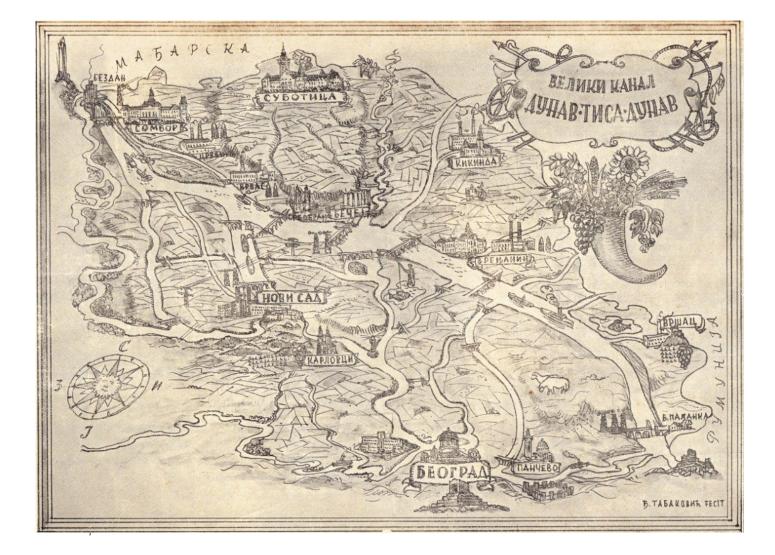


Figure 1. An illustration of Nikola Mirkov's 1947 concept of the DTD canal system by the famous pre-war architect from Novi Sad, Djordje Tabaković. It features the exaggerated Great Canal, in comparison to actually bigger rivers (Danube, Tisa, Sava) [9:185].

From there, things started to develop quickly. The team of engineers and technicians who were to design the project was assembled at the newly-founded *Direkcija za izgradnju kanala Dunav-Tisa-Dunav* (Directorate for the Construction of the Danube-Tisa-Danube Canal). The 'Basic Project' for the canal was already done by December 1947, and the 'General Project' a year later [11:20-30]. However, the project was interrupted by the harsh economic situation that arose in 1948 when the country experienced deteriorating relations with the Soviet Union and faced an economic blockade, making the construction of the canal within the 5-year-plan financially unfeasible [11:30]. This, however, proved advantageous for the designers of DTD as it provided them with more time for the blueprints. They continued surveying the landscape and designing the segments of the network until the mid-1950s. One such elaboration was the intricately designed Southern Bačka Hydrotechnical System, developed from 1951-1956 (Figure 3) [11:35].

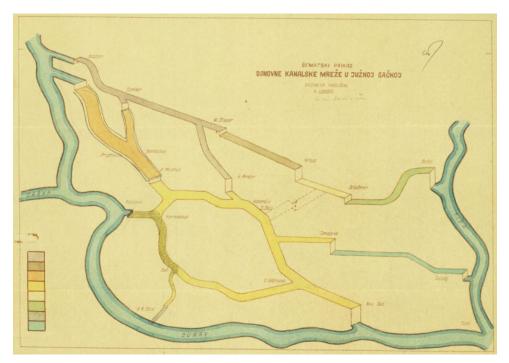


Figure 2. Scheme of the Southern Bačka Hydrotechnical System, by the engineers Žarko Šuput and Petar Vandrovski, 1954 [12].

However, the beginning of the construction was nowhere in sight, so Nikola Mirkov once again stepped in with his narrative-crafting skills in order to arouse the government to ensure the funds for the project. He drafted a new argumentation that was focused on economic opportunities that the canal would deliver, suggesting that the canal project was self-sustainable because it could pay for itself during construction due to the immediate benefits of irrigation that the completed sections of the canal would bring about [11:32]. He named this concept "self-construction" (*samoizgradnja*) and presented it in a series of texts and booklets – [13], [14], [15] – in which he intertwines the engineering with the economic rationale. However, even here, he could not help but wind up his hyperbolic storytelling. He extrapolated the importance of this local project to the continental level by pointing out the project's central position in the inner waterways axes of Europe. He was also pushing for a documentary movie about the canal to be filmed, not only for propaganda

reasons but also in order to "[...] suppress the dangerous misconception that the DTD Canal is a fruit of our megalo and grandomania. No, it's a life issue of our country" [7:17]. This resonates with his 1947 statement mentioned above that the canal construction should mobilize cultural and artistic forces, including cinema.

Finally, the federal government decided to carry on with the construction of the DTD system in October 1956 and allocated the funds for it after an extensive review of the project. A new preliminary design was completed in 1957, and the construction finally set off in the same year. Most of the canal network was completed by the mid-1970s, including the dam on the Tisa near Novi Bečej in 1977, which was the single biggest structure of the system. Upon completion in the early 1980s, the network encompassed 939 kilometers of canals, 664 of which were navigable (Figure 4, Figure 9). The canal network included 26 sluices, 16 locks, five safety sluices, and six pumping stations. It drained 1,060,000 hectares of land while simultaneously irrigating 510,000 ([11:91] and [16]). Eighty-four new bridges were built over the canals [11:98]. In total, 127 million cubic meters of earth were excavated when new canals were dug out, which lies in between the Suez Canal's 75,000,000 m³ and the Panama Canal's 205,000,000 m³.



Figure 3. The final shape of the DTD canal network (blue/bold), with sluices and locks [18].

However, Nikola Mirkov did not live to see any of that. The creator of DTD died of cancer in 1957, the very year in which the definite construction of the project finally took off. He lived long enough to design the canal system and to give it two critical pushes with his writing in 1947 and 1955. He was nevertheless remembered as the undisputed author of the entire project and was commemorated by his colleagues and water management institutions in later publications such as [20] in 1967 and [21] in 1976. The narrative about the canal and the argumentation he came up with were used by institutions and government long after, in their showcase publications about the canal network, like [22] and [23] (which also feature the first graphically interesting cover designs with the motifs of the canal, Figure 5).

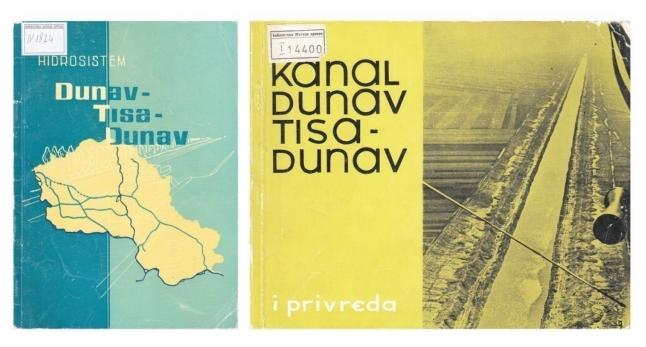


Figure 4. Covers of the 1960's showcase publications about the canal project [22] and [23].

As per his wish, Mirkov was never employed by the state as a public servant in the socialist period, even though he was the central person in one of the country's grandest construction projects. Instead, he acted as an advisor on all matters of the project and had a peculiar lifestyle arrangement: he was content to live in a studio office that the authorities had provided him with, located at 4 Miletićeva Street in Novi Sad [7:17]. Later, he was similarly granted full board lodging at the Hotel Park in Novi Sad, which was his last place of residence [19:195]. His aura of a secluded genius author was also amplified by his growing habit of avoiding attending any meetings or conferences; he would instead get reports from his colleagues and communicate with them on a person-to-person basis [7:17]. Also, the institutional ecosystem whose experts he advised (and in which he could have been employed) was vast: Direkcija za izgradnju kanala Dunav-Tisa-Dunav (founded in 1947), Direkcija kanala DTD (f. 1950), Uprava za izgradnju kanala DTD (f. 1953), Hidrozavod -Preduzeće za studije i projektovanje hidrosistema i objekata, Novi Sad (f. 1953), their later iterations, and various provincial, republic, and federal bodies, offices, councils, and revision commissions that were included in the project [11:100]. Mirkov thrived in his studio solitude instead, removed from all of that, and focused on his life's project and mission: the Grand Canal. The success of this mission granted him the label of "The Man Who Completed the Creation of Vojvodina" by later researchers [19].

The fact remains that DTD was the largest project constructed in socialist Vojvodina since other infrastructural networks were rather a palimpsest of smaller individual projects. It was a major driver of the modernization of the province. Not only did it support sectors like agriculture, industry, or transportation, but it could also be linked to the development of agricultural and technical sciences at the newly-founded University of Novi Sad, or the success of the Novi Sad International Agricultural Fair. One of the editions of the fair even featured a model of the DTD network as a flagship project of Yugoslav modernization (Figure 6).



Figure 5. A schematic model of Vojvodina with DTD waterways, exhibited at the Novi Sad International Agricultural Fair in 1964 and 1965 [24].

However, where were architecture and urbanism in the DTD project? It seems that the entire endeavor was conducted outside these professions and executed exclusively by other kinds of engineers. In between Mirkov's poetic narratives and the engineers' technical blueprints, a concern for the urban-scale quality of the spaces that were built along the canals seems to have been entirely absent. In fact, one can even find instances of interventions that were later deemed deeply anti-urban, such as in the case of the change of course of the Begej river in Zrenjanin in 1971, done within the DTD project in the name of the waterway efficiency for cargo traffic [25:324-325], which eventually led to the removal of large segments of the river from the city. To make matters worse, this undertaking took some architectural victims, such as the beloved historical steel bridge from 1904 (Veliki most) [26], which was illegally demolished by the city in 1969 [27:104]. These sacrifices look particularly unjustified today when there is no large cargo boat traffic on this section of the canal system. In the case of Novi Sad, the location of the confluence of the old, the 19th-century canal with the Danube was shifted away from the urban core, which was one of the major innovations of the 1950 General Urban Plan of the city [28:416] that also catered to the DTD project. The old canal course was then completely covered, depriving the city of an entire typology of the urban landscape that a historical canal bank could have offered in future urban renewals [29:28].

The first explicitly architectural and urban planning project we can find within the DTD brackets is a study of areas along the canal done by the Urban Planning Institute of Vojvodina (*Zavod za urbanizam Vojvodine*) in 1968 [30]. The study, or rather plan, tried to suggest new land uses and programs for towns and villages in whose vicinity the canals were cut through since DTD's grander spatial logic seemingly neglected these aspects. The plan proposed new locations and zones for recreation, water sports, auto-camps, protective tree belts, marinas, beaches and other leisure activities. It also offered typical models for vacation cabins along the waterways (Figure 7) and proposed new nature reserves, including the entire course of the Tamiš River that remained unchannelized by the DTD project. It is also interesting that this study drew a direct connection between the canal water quality and the "aesthetic and artistic experience" of the environment [31:612], making architects and urban planners among the first to raise the alarm about the issue of water pollution in DTD canals, which they deemed to be an existential urban problem [31:618]. In any case, the effects and implementations of this plan have yet to be attested and studied, if any.

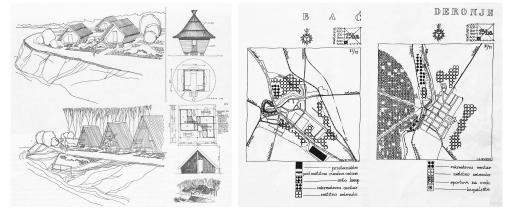


Figure 7. Designs for leisure cabins and plans for villages along the canal, from the 1968 study by the Urban Planning Institute of Vojvodina [30], [31:614-615].

Some structures that were built as a part of the DTD project, like locks, sluices, and pumping stations, have an undeniable architectural quality. Such is the 'command house' at the Sombor lock, which could even be more loosely tagged with such popular terms as 'space-age modernism' (Figure 8). These structures added a significant layer onto the existing hydrotechnical architectural heritage in Vojvodina from previous centuries, establishing continuity with it. Even more significant is the landscape architecture quality of lock and sluice compounds. They often looked like small parks with their abundant tree ensembles and were used by locals from nearby villages as leisure areas if access was not denied. Overall, the hydro-technical structures of DTD were designed by engineers from *Hidrozavod* [31:615] and not by architects, which may be the reason why they have so far been completely overlooked in studies and reviews about the history of architecture of socialist Yugoslavia.

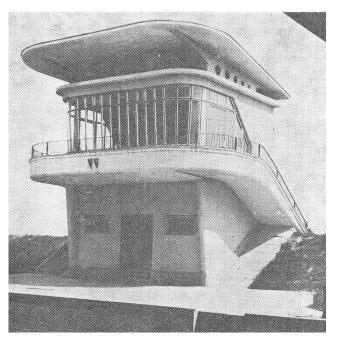


Figure 8. Command house at the Sombor lock, designed by Hidrozavod, Novi Sad [32:430-431].

Finally, the effects, success, and lessons of the DTD project have yet to be comprehensively re-evaluated from a critical standpoint. Different types of engineering disciplines that were directly involved in its construction already have their consensus about DTD, as they hold the project in the highest esteem. However, the disciplines of architecture-urbanismspatial planning have the potential to synthesize all those particular insights, spot their shortcomings, and propose more holistic strategies for the future development of DTD. In terms of criticism, various points could be brought up. Yes, the hydrotechnical network allowed for extensive irrigation of farmland, but how feasible is that if the canal water is polluted by the food industry located along the waterways? According to some, the canal section between Crvenka and Vrbas is one of the most polluted waterways in Europe [33]. To make the whole matter even more alarming, the products of this industry, like sugar and seed oils, have a detrimental impact on human health [34], which makes this whole business seem rather absurd. Also, the runoff of pesticides used on the irrigated croplands back into the canals further brings this entire endeavor into question. Moreover, while the canals have opened up vast swaths of Vojvodina territory to nautical tourism, very little has been built that would serve it, such as fully-equipped marinas, even though regattas are nowadays regularly held. Passenger traffic on the canals is still non-existent, and it is hard to think of any intermodal node that connects the canals to any other infrastructural networks.

One of the rare contemporary efforts to soberly analyze the legacy of the canal, with enough time distance and with the synthesizing wisdom of urbanism, is Vladimir Mattioni's 2010 essay on the urban networks of Vojvodina [35]. In it, Mattioni pointed out the necessity to separate the impressive aspect of the seemingly over-encompassing technicality and scientific methodology of spatial planning in Vojvodina, including the DTD project, from the actual effects and results of those plans. That would open up a possibility to examine the self-proclaimed scientific approach of the past planners' grand projects and establish whether the discipline was indeed efficient in their modeling and prescriptions or rather trapped in its self-sufficient logic; nevertheless, Mattioni describes DTD as a crucial element of Vojvodina's modernization [35:158].

Finally, the canal continues to inspire contemporary researchers and designers, from its oldest sections, to which Vojvodina owes its modern appearance [36], to future narrative speculations about re-imagining the identity of the canal network in a completely new key [37]. Maybe such shifts and turns in the canal re-imagination will again create conditions for fulfilling even the most ambitious ideas from Nikola Mirkov's narratives, like connecting Vojvodina's canal system the Aegean and Adriatic seas by new international canals (which he dwelled upon as early as 1924 in [38:338], and repeated in 1947 in [9:200]).



Figure 9. DTD branch in Novi Sad (photo by Wikipedia (Micki | CC BY-SA 3.0), cropped by A. Bede)

2.2. CASE STUDY: VOJVODINA PLANS BY DIMITRIJE MARINKOVIĆ

This short case study is entirely based on a text and a couple of sideline and slightly off-topic drawings, almost sketches, published in 1953 in a showcase book by the Urban Planning Institute of Serbia from Belgrade (Urbanistički zavod NR Srbije), in the chapter about the General Plan of Novi Sad from 1950 [39] written by Dimitrije Marinković. He was the planner from this institution who designed this plan. Marinković's career is little known today. As a newcomer to the planning scene of Novi Sad in the late 1940s, he introduced some radical changes in the cityscape with his 1950 General Plan. One of the aims of his plan was to liberate large swaths of urban territory from railway and industrial uses, which had indeed initiated a new era for the spatial layout of the city [40:142] but ended up creating new "urban conflicts" in the city's morphology as well [41:1936]. However, some of these changes might have been deduced from his consideration of a much broader scope. Namely, his Novi Sad plan had a methodological innovation: Marinković first analyzed the entire territory of Vojvodina and proposed new concepts for its development, perhaps since no spatial plans for the province existed at that moment [42:101]. Thus, an analysis of the province's spatial and economic situation, which includes two plans for its future road and railway networks, figures as an introduction in the general plan of Novi Sad (Figure 10), and in the book chapter that describes the plan and that is analyzed here. The reason this instance was chosen as a case study is the fact that these two modest drawings offer a strikingly more ambitious vision for Vojvodina than any spatial plan later produced by spatial planning institutions whose nominal mandate was to be the hub of such visions.

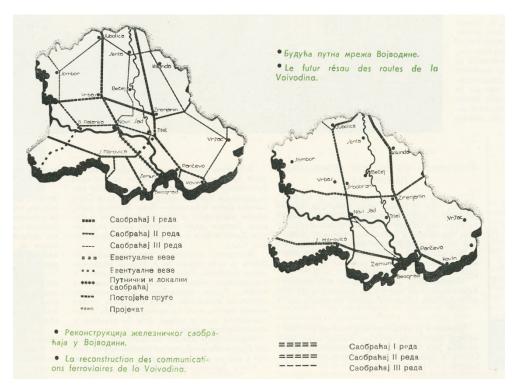


Figure 6. Railway (left) and road (right) network proposals for Vojvodina by Dimitrije Marinković [39:72].

Marinković's ambitious vision can primarily be observed in the international connections that he proposed. For instance, the two roads that cross Banat and intersect at Zrenjanin: one leading straight to the important gravitational center of western Romania – the city of Timisoara – and connects it over Vojvodina to Croatia and the rest of western Yugoslavia; the other one is the new north-south axis of Banat, a kind of a parallel alternative to the E-75 road that runs from Belgrade to Hungarian border via Novi Sad and Subotica. If built, these two corridors would have become the shortest links between entire European regions. The east-west route could have been the shortest connection between Romania and Italy, but today, the passenger traffic is mostly served by air due to bad road or rail alternatives on this corridor. The north-south corridor would have relieved the presently congested A1 highway in Serbia between Hungary and Greece/Bulgaria/Turkey. Marinković offered similarly far-seeing solutions in the railway plan, with drastic optimization of the network within Vojvodina that could have served the same international corridors (via, for example, a proposed connection between Banat and Syrmia [*Srem*] across the Danube).

However, such strong local, national, and international connections were almost nowhere to be seen in later spatial plans and are mostly still lacking today. The institution nominally in charge of producing spatial plans for Vojvodina, and supposed to be the generator of such ambitious visions was the Urban Planning Institute of Vojvodina (*Zavod za urbanizam Vojvodine*; for name changes, see [43]), founded in 1950. The analogous plan to Marinković's Vojvodina, commissioned in 1966 and enforced in 1978 (see more about the plan in [44], with details on methodology in [45] and [46:48]). Other major spatial plans that they produced in this period were the two for nature parks: Fruška Gora (1981) and

Deliblato Sands (1981). Among planners, such plans, as well as the entire planning, methodological, and scientific output of this institute in the socialist Yugoslav period, have been lauded ever since as the historical pinnacle of planning in Vojvodina, such as in [46] and [47]. However, this judgment deserves a more objective assessment that would compare their output to that of other institutions and even measure the success of the physical implementation of their plans. The numerous volumes of these plans, with hundreds of pages each, consist primarily of extensive mapping and analyses of the existing spatial conditions, which is of great historical value. However, those chapters always seem to overshadow the final drafts of those plans and any creative proposals they had. Moreover, none of those final drafts have ended up in publicly accessible libraries. This lack of tangible outputs that might be of interest to researchers today seems to be the result of institutionalization and bureaucratization of planning in Vojvodina, which was captured by a self-centered institutional ecosystem, unaware of the importance of communicating their work outside the house.

In contrast, Marinković's drafts for the road and rail networks of Vojvodina seem to have been incepted the other way around: from the creative and ambitious vision rather than from many years and hundreds of pages of analyses by numerous institutional employees. On top of that, he wrote about them and published them in a book chapter aimed at a wider audience, unlike later institutional planners. The result is that the two sideline sketches from a local urban plan from 1950 offered an international vision of the future of the entire province, while such a future does not exist in later nor today's spatial plans [48:32]. Marinković, on the other hand, was also an institutional employee, but he, nevertheless, seems to have been playing an individualist role as an outsider from Belgrade who came to Novi Sad to tackle the urban and spatial problems on his own without much interference from others. In any case, this situation opens up the question of institutional capacity for generating ambitious concepts and ideas for plans.

2.3. CASE STUDY: FRUŠKA GORA MEMORIALS BY MILORAD BERBAKOV

This case study features a series of 'memorial cemeteries' (spomen-groblje) of WW2 Yugoslav Partisan fighters on the insular Fruška Gora mountain in the Syrmia (Srem) subregion of Vojvodina. They were designed by Milorad Berbakov, an architect from Zrenjanin, according to his winning design from the 1972 competition [49:40]. These locations are dotted along a 12-km-long ridge road in the mountain forest and consist of two major memorial cemeteries – Rohalj Baze (completed in 1973, Figure 12) and Jabuka (1974, Figure 11) - along with three additional remote gravesites of individual fighters (Lepinjicin, Mošin, and Maksin grob). Original project documentation - designs and photographs - were available for this analysis, but no textual materials about this project penned by Berbakov (beyond technical description) seem to exist. In any case, Berbakov treated all these sites as one project, as a network of memorial nodes that feature variations of the same design principle he introduced into this landscape. That design is completely subordinated to the natural context, and all spatial interventions are adapted to the topography [50:97]. By clever use of natural surroundings, as well as local stone and oak logs, without big building interventions, he managed to create unique landscape memorials [51:269]. Indeed, the biggest elements of those memorial ensembles seem to be trees, such as an old apple tree that is central to the spatial ensemble of the Jabuka memorial.



Figure 7. Jabuka Memorial Cemetery after the 1974 completion [52:17].

It was Bogdan Bogdanović who had, in fact, previously introduced landscape architecture and even land art phase into memorial architecture tendencies in Syrmia, Vojvodina, and Yugoslavia, with his Partisan memorial cemetery in nearby Sremska Mitrovica, built in 1959. This architectural approach replaced the previous phase dominated by figurative sculpture and, in the context of Vojvodina, was, perhaps, crowned by the large memorial site *Sremski Front* by the architect Miroslav Krstonošić in 1984-87. Both of these structures encompass large-scale landscape ensembles, but what sets Berbakov's project apart is the fact that it is a *network* of different sites, making it more illustrative for the intentions of this paper (Figure 13). The network emerges once we imagine the routes that connect individual memorial sites within his Fruška Gora project. More examples like this can be found on the mountain, such as another memorial network that overlaps with Berbakov's and even compliments his *Jabuka* site: a series of simple stone blocks by the sculptor Pavle Radovanović, which are placed as markers of important sites on the mountain [53:23-24].



Figure 8. Rohalj Baze Memorial Cemetery in 2023 (photo by A. Bede).

If we expanded Berbakov's network in order to include all of his memorial projects in Vojvodina, of which there are plenty, perhaps the most prominent node in it would be his memorial museum near the village of Bezdan in Bačka sub-region, dedicated to the 1944 Battle of Batina, which opened in 1981. This project, again, relies heavily on land art and is located on a narrow cape between the Danube and the DTD canal. This is the very place where Nikola Mirkov's *grand oeuvre* connects to the river and both symbolically and hydrologically begins. It could, therefore, be denoted as a connecting node between two networks that critically marked both the physical reality of Vojvodina and the province's post-WW2 foundational narrative: the canals and the memorials/monuments.

Finally, a specific significance of Berbakov's work could be ascribed to his use of minimal and natural construction elements for memorial purposes and monumental ensembles. This approach might stem from a certain Banat or Vojvodina attunement to seemingly monotonous landscape, which, in fact, is sensible to the slightest changes in topography and nature and is content to work with them and to ascribe them meaning. Such lowlands sensibility stems from the context we described as profoundly anthropogenic and artificial but seems to create landscape architecture that is primarily natural and organic in form.



Figure 9. Left: the network of two sites in Berbakov's design – Jabuka (right) and Lepinjicin grob (far left); the two parking lots were not built. Source: [54]. Right: Lepinjicin grob – individual grave site of a Partisan fighter [49:84].

3. DISCUSSION

One of the most striking phenomena analyzed in this paper is the powerful role of Nikola Mirkov's narrative craftsmanship in ensuring the success of his DTD project. The impression is that his grand stories do not at all come off as some Soviet propaganda genre when read today. On the contrary, many other projects could have used some of that approach, like the road and railway networks proposed by Dimitrije Marinković. One wonders if his spatial ideas for Vojvodina would have had more chances for fruition if he had focused more on narrative crafting and text producing, as Mirkov did for his canals. Vojvodina's roads and railways could have easily been envisioned as a critical infrastructural node in Europe, on par with its hydrological centrality demonstrated by Mirkov. Instead, Marinković's proposals for Vojvodina's infrastructural networks were forgotten, while the problems they were tackling remain pressing issues nowadays.

Moreover, a strong narrative could help in the *post-festum* maintenance efforts during the lifetime of built structures. In his earliest 1945 water management manual for youth [55], Mirkov even advocated for nurturing "the cult of water" [7:8] with this aim in mind. Maintenance is especially important for anthropogenic landscapes like Vojvodina that depend on these structures, like canals and flood protection, being functional, so a "cult" like this makes sense. If the narratives of such structures were forgotten, the question is what would remain of the local community, which is defined by and physically dependent upon its built surroundings [56:38]. Finally, narratives help with remembering the relevance of past projects, which was so painfully apparent for Vojvodina at the occasion of the Museum of Modern Art's exhibition *Toward a Concrete Utopia: Architecture in Yugoslavia, 1948–1980* in New York in 2018. Not a single project from Vojvodina was showcased at this most important global review of Yugoslav architecture to date (other than a department store in Novi Sad by a Slovenian architect). This is, perhaps, the consequence of the lack of substantial local attention given to projects of Vojvodina in research and publishing.

When it comes to the issue of the definition of networks, one of the criteria for choosing the case studies for this paper was that they were individual single projects rather than networks that resulted from many different building projects. However, they still have a structure of networks: Mirkov's canals are literally an infrastructural network, as well as in Marinković's Vojvodina plans. Berbakov's monuments are a constellation of points. However, in future studies, expanding the definition of projects to include entire territorial infrastructural and other built networks could be a sensible tool for analyzing an anthropogenic region like Vojvodina, which is so saturated with various construction efforts of many generations that had the same aims. Mattioni used this approach when he proposed to map all the buildings of communal and social infrastructure in Vojvodina, as well as new housing estates, through which a new layer of urban topography would emerge [35:151].

The "network as a project" method becomes especially exciting when applied to structures of cultural use (like networks of cultural centers, museums, or WW2 memorials that we showcased in the previous chapter) and then overlapped, conjoined and viewed integrally with infrastructure such as canals. This method has already been taken further into the realm of cinematography: consider the development of a thesis that the cinematic output from Vojvodina could be viewed as its territorial infrastructure in [56], [57], and [58]. This thesis has now been unexpectedly supported by Nikola Mirkov's statement from 1947, as paraphrased above: "An important role in building the canal will be held by our [...] painters and sculptors, our musicians, [...] our cinematographers" [9:184]. Indeed, in the 1960s, there was a group of

amateur filmmakers from Novi Sad who learned their craft by filming documentaries about modernization and construction projects in Vojvodina, including the canals (the 1962 documentary *Nove reke* by Branko Milošević). Soon after, they switched to making short and feature art films under the label of the newly founded *Neoplanta Film* Company. These films became a crucial part of the neo-avantgarde movement known today as New Yugoslav Film, as they swept through European film festivals where they won the highest awards (like the *Grand Prix* at Berlin Film Festival 1969, which went to Želimir Žilnik's *Rani radovi*).

The main claim of this thesis is that the entire production of *Neoplanta Film* could be viewed as a part of the urban and spatial planning heritage of Novi Sad and Vojvodina. The artistic phase of this company emerged thanks to their initial experience in filming the construction sites of urban and territorial modernization projects. Analogous to that, Vojvodina's towns and villages owe their vitality and productive output to infrastructural networks on which they are dependent, like canals. Thus, the movies of *Neoplanta Film*, i.e. the locations that they feature, represent a spatial network of historical memory that is integral to the modernization project of a territory that owes its existence to the radical transformation from the natural state [58:209]. Moreover, these movies reveal the "narrative foundations" on which the structures, such as canals and earthworks, were built. By keeping these narratives alive over time, the movies have a significant role in the vital and permanent project of maintenance of these structures. Thus, we should consider them as part of the territorial infrastructure and network projects and mark their locations accordingly.

Finally, one of the main impressions that emerged from the case studies is that the individual creators over-performed entire institutions whose missions were nominally to come up with ambitious plans for the future. The analyzed case studies notably are products of the geniuses of their authors rather than institutional group effort and planning procedures. Nikola Mirkov's vision for the 'Grand Canal' kept an entire ecosystem of institutions busy for decades while he himself enjoyed a lifestyle of artistic seclusion away from those institutions. Moreover, they never produced anything that would overshadow him, and his most futuristic visions are yet to be dealt with by upcoming generations (canal links to the Aegean and Adriatic, or even a branch to Subotica). Mirkov was perhaps lucky to hold a lead with his project, which he launched before local planning institutions with the mandate to produce such projects were founded. Similarly, a couple of unseemly sketches by Dimitrije Marinković are more visionary than anything produced later by generations of employees in spatial planning institutions of Vojvodina, Serbia, and Yugoslavia. In the case of Milorad Bebrakov, his creative genius was crucial in contributing to a new nature-based paradigm in memorial architecture in Vojvodina, although least surprising since this was always a domain of the creativity of individual architects and sculptors and not of institutions.

One cannot help but notice that these insights resonate with a certain popular or philosophical adage that "academia" is not the place where good "art" is created. It is difficult to approach this issue scientifically, as the topic is somewhat captured by the contemporary political polarization between strong reliance on and strong suspicion of institutions and bureaucracy in general. Nikola Mirkov was himself quite wary of the institutional condition and its burdens, which is maybe why he completely rejected it. In his best manner, Mirkov saw his *grand oeuvre* as the solution to this predicament as well: "The Great Canal will root out any bureaucratizing, any untidiness, and any unsystematic and unprogrammatic work" [9:205].

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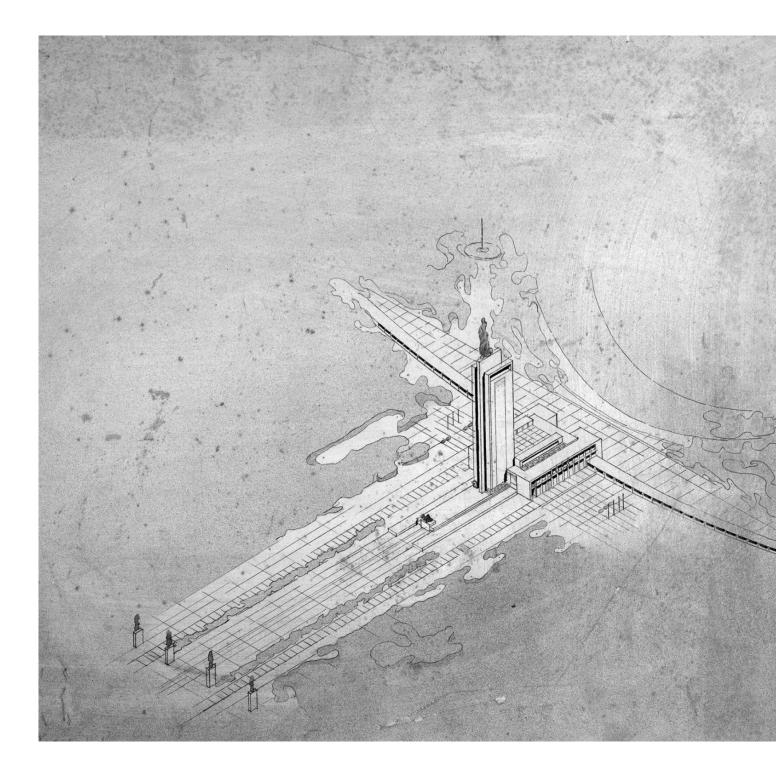
Aleksandar Bede

Aleksandar Bede (1986) earned his M. Arch. Degree at the Faculty of Technical Sciences, University of Novi Sad, Serbia (2011), and a Ph.D. Degree in urbanism at IUAV University of Venice, Italy (2017), with a doctoral dissertation titled "Prototyping a Provincial Capital: Socialist Modernization of Novi Sad". In 2023, he participated in the CSCA Summer School in Classical Architecture at the University of Cambridge (UK) and Engelsberg (Sweden). He is the author of the book *U paru za društvo: Arhitektura Sibina Đorđevića i Milene Stanković Đorđević* (Stuttgart, 2015) and co-author of the book *Spens: Mera grada* (Novi Sad, 2022). He has been editing and co-editing the Serbian architecture magazine *DaNS* since 2016. He works as an architect and researcher with the status of an independent artist in Serbia.

ВИЗИЈЕ И НАРАТИВИ ПРОЈЕКАТА ВЕЛИКЕ РАЗМЕРЕ ИЗ СОЦИЈАЛИСТИЧКЕ ВОЈВОДИНЕ

Сажетак: Овај рад идентификује и разматра три студије случаја различите природе, размере и позиције унутар дисциплине, као илустративне примере из Војводине у расправи о пројектима велике размере из доба социјалистичке Југославије. Интерпретативно-историјски метод је коришћен за опис и интерпретацију студија случајева, а примарни извори су подвргнути методи кавлитативне анализе садржаја како би се извукли изворни наративи тих пројеката, као и да би се учврстила њихова позиција унутар овог поља. Први је Велики канал Дунав-Тиса-Дунав, највећи просторни пројекат у Војводини, којег је од 1947. осмишљавао инжењер Никола Мирков и чија је изградња завршена до раних 1980-их. Други је случај две скице путне и железничке мреже Војводине архитекте Димитрија Маринковића, из његовог Генералног плана Новог Сада из 1950, које су се показале далековидијим од каснијих институционалних планова. Трећи је мрежа спомен-гробаља Рохаљ базе (1973) и Јабука (1974) на Фрушкој гори архитекте Милорада Бербакова, као примера нове парадигме југословенске меморијалне архитектуре у Војводини, засноване на пејзажној архитектури. Питања о којима се у закључку расправља су: 1) важност наратива за успех пројекта; 2) проширена дефиниција пројекта која укључује мреже; 3) уметност као мрежа (на примеру Неопланта филма); 4) одмеравање креативности појединачних аутора наспрам институција.

Кључне ријечи: Војводина, просторно планирање, Велики канал Дунав-Тиса-Дунав, хидросистем ДТД, канали, Никола Мирков, Димитрије Маринковић, југословенски споменици, Милорад Бербаков, Фрушка гора, Рохаљ базе, Јабука, Неопланта филм.



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CONTRIBUTION TO THE RESEARCH ON NEW BELGRADE: THE UNBUILT PROJECTS AND THE CONCEPTS OF NIKOLA DOBROVIĆ

ABSTRACT

Architect Nikola Dobrović is best known in Serbia for his only constructed building in Belgrade, the complex of the State Secretariat of National Defense (DSNO), better known as the General Staff, today an endangered cultural heritage and a crumbling building with an uncertain future. However, his short-term engagement as the head of the Urban Planning Institute of the Republic of Serbia from 1946-1947, and his later professorship at the Faculty of Architecture University of Belgrade, are equally significant for Belgrade and Serbia. Documents testifying to the post-war period of his work are scattered in several places: in the Urban Planning Institute of Belgrade, the Museum of Science and Technology, the Historical Archive of Belgrade, and the rare publications can only be found in a few libraries in Serbia. In the course of his short-term work on New Belgrade, Dobrović provided several conceptual projects and sketches for New Belgrade within the Urban Planning Institute: the perfomance square, road schemes and the urban planning solution of the zone between the Palace of the Federation and the Railway Station - today's Central Zone of New Belgrade. Finally, at different stages of his career, Dobrović also designed individual objects, such as the project for the Faculty of Electrical Engineering and the building of the Central Committee of the Communist Party of Yugoslavia, which remained in the domain of 'paper architecture', unbuilt, and which provides an insight into the way he thought about the process of urban and spatial planning, through the positioning of builidngs which would've generated the character of their immediate and distant surroundings.

Key words: Nikola Dobrović, New Belgrade, the Greater Belgrade, Central Committee, block 32, Faculty of Electrical Engineering

1. THE FIRST POST-WAR YEARS: GREAT ENTHUSIASM AND TREMENDOUS PROBLEMS

"No one can expect that his ideas would be accepted 100/100. 70-80 percent of chances for success are sufficient enough to give wings to one creator. He would flutter his wings if he is unable to fly due to the decrease in this percentage, regardless of the increase in all difficulties. If that percentage is reduced to only 15-20 percent compared to an even greater increase in difficulties, then it becomes clear to every person that there is no reason to fight for such percentage. The general circumstances in that case clearly show the fact that such a creator is not really necessary [1]."

Dobrović was appointed as the head of the Institute of Urban Planning in 1946, a position where he dealt with the urban planning of cities in Serbia and the so-called Greater Belgrade. In many ways, he started working on this assignment during the Second World War: in 1943, while he was travelling via Italy, he managed to join the Yugoslav Partisans on the island of Vis, where a group of experts was gathered to plan the reconstruction of the country after liberation. After the end of the war in 1944, he was appointed the head of the Department for Architecture within the Ministry of Construction of the Democratic Federal Yugoslavia, then the director of the Institute of Urban Planning of the People's Republic of Serbia in 1945 and finally the director of the Urban Planning Institute of the Executive Board of the People's Committee of the City of Belgrade in 1946. The immediate post-war years were a time of great poverty and planned distribution of personnel, so he visited cities and little towns in Serbia with the idea to organize urban planning services and develop plans, visited organizations in Belgrade and provided instructions for the design of buildings during reconstruction. A special and very big problem was that "the loss of the cadastral inventory", as Dobrović stated in his study Konture [2], and that there were no reliable plans of the city, which the Institute was developing along with all other tasks.¹ In addition to expert supervision of infrastructural repairs, the Institute worked on the reconstruction of Belgrade and Zemun and the planning of New Belgrade, planning of residential spaces, recreation, greenery, traffic - in general, the integration of parts of the city into one urban entity.

2. NEW BELGRADE WITHIN THE "GREATER BELGRADE"

"The proper growth of a well-grounded city is easy to control at every stage of development and adapt to the new factors of life. A solid skeleton provides a future scale, which can outgrow the intended framework [2]."

Dobrović's approach towards New Belgrade is largely deduced from the larger image of the city and it is possible to observe three main starting points that are the recurrent themes in his work. The first one is the issue of the Greater Belgrade, as he would often name it in his works and always observed in a wider context, wondering about the position of Belgrade in the region, the Republic, Federation and Europe [3]. The next one is the issue of natural

¹ In order to present the scope of (his) work more clearly, it is important to note that the Urban Planning Institute later divided into the Urban Planning Institute of the Republic of Serbia and the Urban Planning Institute of Belgrade.

resources and the landscape with two dominant rivers: the monumental position carrying the symbolism the city has for this part of Europe. Finally, there is the theme of his understanding of the symbolism of that age, which is reflected in the construction of New Belgrade, to which he remained faithful for several decades. His engagement with the Institute ended in 1947, when he obtained the position of tenured professor at the Faculty of Architecture of the University of Belgrade. Miloš Somborski assumed the position of the director of the Institute, and the New Belgrade project was taken over first by Stanko Mandić, and later on Branko Petričić. It is important to point out that soon after that, the complete administrative organization of the state changed from planned economy to selfmanagement, as the result of the 1948 Cominform Resolution. Hence, the need for the buildings of federal ministries, which Dobrović counted on in his concept of the New Belgrade, ceased to exist: the ministries were transformed into secretariats that were all located in the Place of the Federation, i.e. the Federal Executive Council. In one word, his conception had lost its real programmatic and societal foundation, which also was not elaborated enough due to the lack of consensus about the project program - which has been another problem in the urban planning of New Belgrade for decades now, and until today visible on the ground. However, he presented it in programme indications, often wandering through different scales and scopes - from urban planning of rigidly separated zones, towards architectural design of monumental buildings that should present and trace his demiurge vision of (New) Belgrade [4]. In this key, it is also possible to observe the project of the Central Committee building as a form of generator of New Belgrade's urban development around its administrative and managerial headquarters. An administrative tower with an annex of classic, even soc-realist contours, dominating the Ušće area, was supposed to bring a visual benchmark into this space-. Although none of the proposals from the 1946 competition was developed, the tower still remained as a desired architectural typology, which was kept in the subsequent planning iterations of the New Belgrade.²

² After a series of competitions, the building was built according to the design of Mihailo Janković and the architectural studio "Stadion", in 1960-64 in the spirit of International style.

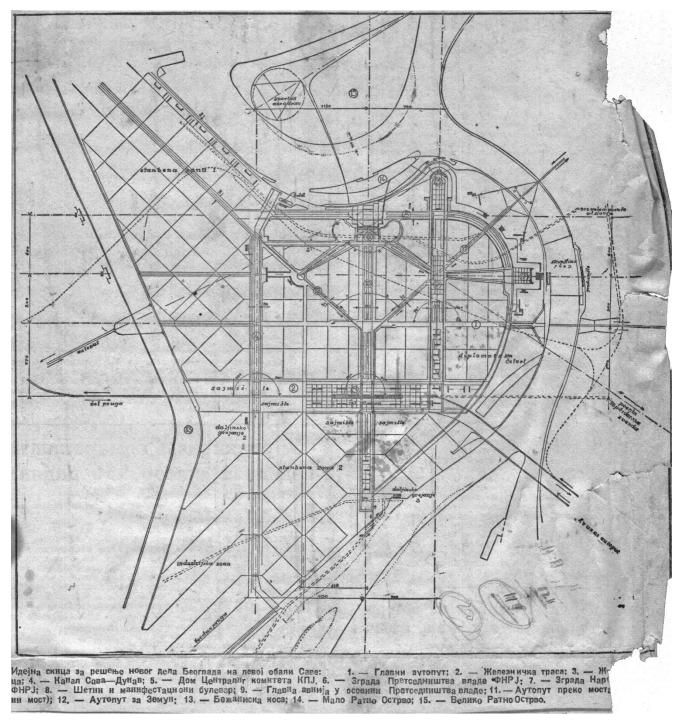


Figure 1. One of the conceptual sketches of the New Belgrade, Urban Planning Institute [5].

However, when his activities are observed in the context of the Greater Belgrade, as the profession at the time called the metropolitan area of Belgrade, which included Zemun, the old part of Belgrade, the future New Belgrade and the left bank of the Danube River, it is clear that the planning services were not able to pay too much attention to the site, which at the time was still unprepared, not ameliorated and unprotected from flooding. At that moment, there were more important, burning issues: they were planning the construction of new facilities for residential, administrative and recreational purposes, roads and services. Additionally, according to the First five-year plan, Belgrade would receive particular attention as the administrative, cultural, industrial and educational seat of the Yugoslav Federation and the Republic of Serbia. "The needs are so great that it would be necessary to demolish half of the (old part, author's comment) of the city to locate everything (...) but the area of Bežanijsko polje is unoccupied [2]". Dobrović lays out the 12 km long highway from Bežanijska kosa to Mali Mokri Lug, which is envisaged as the main traffic backbone of the city. In his vision of Belgrade, the development of Kalemegdan and the right bank of the Sava River is one of the priorities - of course, after meeting the requirements for moving the railway and the railway station from the Sava amphitheatre: it would be the location for the Opera, cultural facilities and buildings of ministries.³ It also envisages "the controlled area": Makiško polje as the Belgrade's source of drinking water supply; Železnik as a place of heavy industry with the residential area for workers; Čukarica and Rakovica, which would be remodelled as new rayons after the relocation of shipyards and industry; embankment of the right bank of the Danube up to Ada Huja; "the giant projects of the Greater Belgrade" - Film City, Traffic Institute, the recreational belt, State Hospital Complex , university city; the new housing estate Pioneers' City, which would also solve the issue of the displacement of the Jatagan mala informal settlement; public facilities around Tašmajdan and important streets; Topčider as a city park within the project of afforestation and greening of Belgrade with a continuous network of large and small parks. The definitive reconstruction of Old Belgrade was planned "after the construction of New Belgrade".

³ It is not specified, but it can be reliably claimed that he meant the republican ministries, because he had planned the federal ones on the left bank of the Sava river.

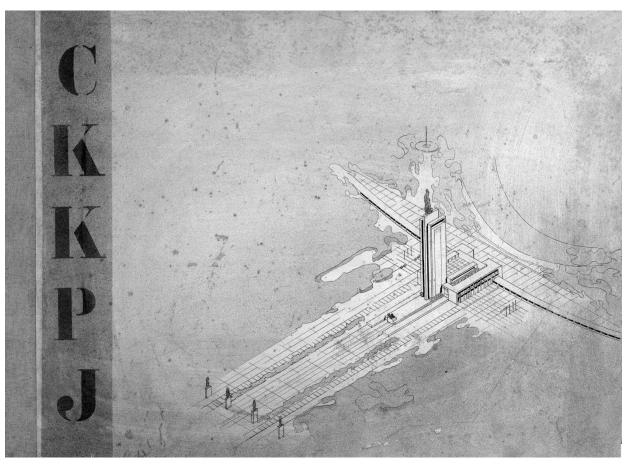


Figure 2. The CKKPJ project on Ušće, axonometry, Nikola Dobrović, 1947 [6]

3. NEW BELGRADE AND THE SYMBOLISM BEHIND ITS CONSTRUCTION: HOUSING IS (NOT) NECESSARY

According to the available sources, after leaving the Institute, Nikola Dobrović would appear in the context of the urban planning of New Belgrade with long breaks, with intervals of several years: in 1956 and 1957, he participated in the work of the Council of Urban Planning⁴, where he represented the views of the Society of Urban Planners of Serbia, the President of which he had been since 1955. He appeared at the Council meetings and expressed his views in a highly suggestive manner, even aggressively. It seemed that he had still hoped to reverse the planning process, which took a different course after he left the Institute. At that time, Stanko Mandić took over the urban planning of New Belgrade, who led the development of the General Plan for New Belgrade largely based on previous plans and studies, and after that, Branko Petričić, who further elaborated the plan [7] in accordance with the principles of the Athens Charter, and not "central monumentality [8]" as Dobrović had envisaged. After observing the elements of these plans, it is clear that there was continuity and that they represented a superstructure and a synthesis of individual plans and sketches that the Institute had worked on during Dobrović's mandate. For the

⁴ Council for Urban Planning on the occasion of discussing the New Belgrade General Urban Plan, which worked from November 1955 to the end of April 1957.

purpose of implementation, they had to go into detailed elaboration and obtain the form of a planning document, and to harmonize with the new administration and social needs, and finally, with the regulations and laws that have been adopted in the meantime. The sessions of the Council lasted throughout 1956 and the first half of 1957, and Dobrović constantly repeated his views and defended his outdated concept of the New Belgrade, in his desire to return the process to its previous state. He wrote the following text for the Council: "New Belgrade and the symbolism behind its construction", which was an integral part of the documentation discussed by the members of the Council, together with the text and drawings of the General Plan. In that text, he emphasized that with the construction of the New Belgrade, old Belgrade would finally be able to breathe and correct its major problems and crises, and that the role of the New Belgrade was to introduce "logical, legal and regulatory relations into the structure of the entire future greater Belgrade as an organic unit". However, in his opinion, there was still no need to build housing in that area, but only facilities for public purposes, which further indicated that Dobrović seriously ignored an objective problem of the ongoing housing crisis in Belgrade.

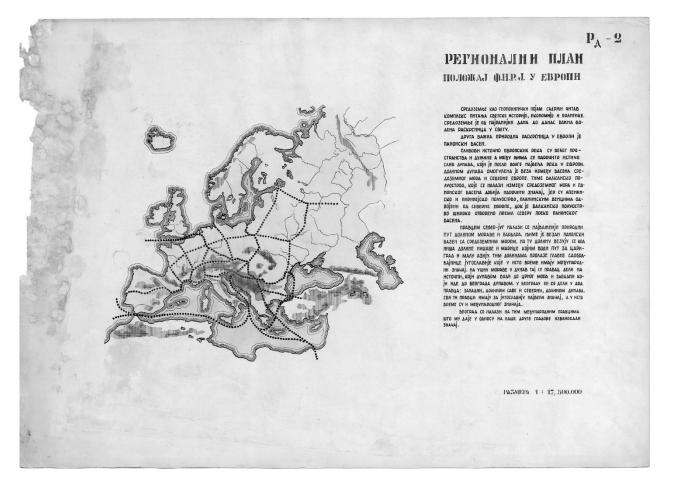


Figure 3. Regional plan of Belgrade, Urban Planning Institute 1947, Urban Planning Institute of the City of Belgrade [3]

On several occasions, the discussion would even become bitter when both Dobrović and Đorđević (director of the Urban Planning Institute of Belgrade) would single out their opinions into separate comments on various issues and details of the plan, and the session itself would take on the tone of a personal conflict, as the chairman Branko Pešić noted. Dobrović continued to insist on the importance of the area in the context of Europe: New Belgrade was a historical opportunity, because it was to be built only once, and it would represent the testimony of the "creative abilities of the Yugoslavs - a relatively small nation - to develop one of the key places in Europe and the world within one chapter of history. Yugoslavia should also justify the political fact that it is the owner of this precious part of the Earth." He considered the city a political symbol and affirmation of the Yugoslavs in the field of spatial creativity - in that context, some of the participants pointed out to him that it was not Europe that financed the city construction, but Yugoslavia, which had disposed of relatively modest funds and had to use them rationally. Also, he insisted on subordinating the built structures to the landscape formed by the Sava and the Danube, and abolishing the idea of an artificial lake on the Danube for the sake of a - highly undefined - formation of a hydro node on the Danube by drastically raising the water level from Derdap Hydro Power Plant, which turned out to be almost impossible, "an action against the nature" as hydrotechnical engineers⁵ would call it. He attacked Petričić's concept of neighbourhood units, which he believed could not be the bearers of the symbolism of the city's 'urban being', that housing was not the reason to move the city to the left bank of the Sava because there was still room in the city for those needs, and insisted on moving the residential zone for 250,000 inhabitants on the edge of the zone, in the area northeast of today's Omladinskih brigada street and south of the highway. He considered that what the urban planning service of the Belgrade Municipal Council accepted was rather an "average construction program", which could be found in any place and for any purpose, corresponding to the "provincial rococo taste" - similar qualifications could be heard a lot later, when new residential blocks were erected during the 1980s and 1990s. Dobrović expressed his opinion that there was no sufficiently developed project programme for this area, that the planning service must not be responsible for developing urban plans and that it was necessary to organize public calls for proposals in the whole of Yugoslavia in order to obtain the most adequate solutions for this part of the city.

⁵ The sketches were published in the journal *Urbanizam Beograda* [9].

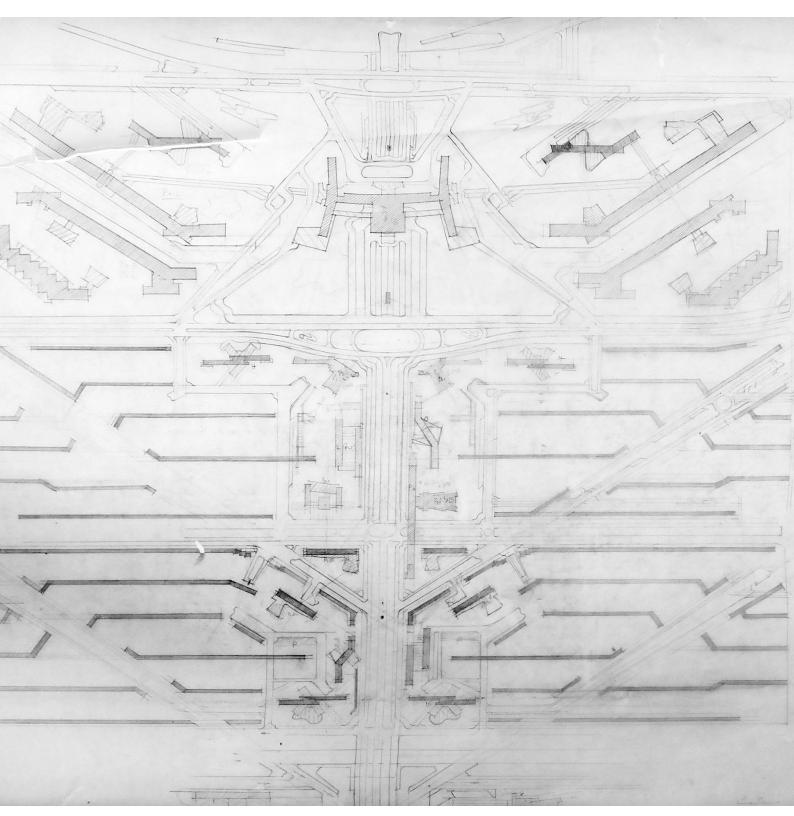


Figure 4. Drawings for the competition, New Belgrade, Nikola Dobrović [10]

4. FINAL REFLECTIONS: THE FINAL PROJECT FOR THE NEW CITY

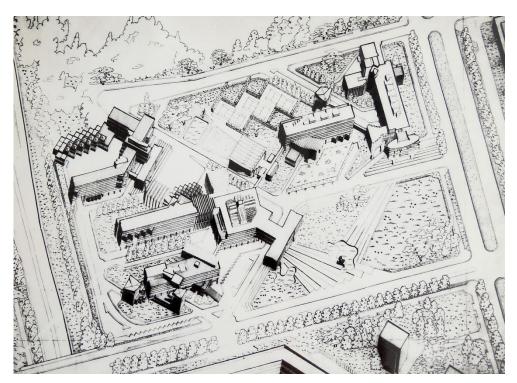
"For brave people, New Belgrade is not a taboo; it is a programme that this generation can complete within 2-3 decades. Mocking should stop. Is there currently a better idea, a better programme for the future decades, for the life of the current generations? You cannot go back, standing in one place in one historical era is equal to work in vain [11]."

Dobrović revisited the topic of New Belgrade once again when, in 1963, he developed the conceptual design of the ensemble of the Faculty of Electrical Engineering and the "Nikola Tesla" Institute, located in block 32, in cooperation with architect Ljiljana Babić. Ironically, Dobrović, who advocated for the shaping of New Belgrade through architectural competitions, now appeared in a - from a professional point of view - problematic and never fully explained role of the appointed designer of this complex. Namely, the competition for the building of the Faculty of Electrical Engineering was announced in 1961, and the first prize was awarded to the proposal created by Aleksandar Stjepanović, Božidar Janković and Mihail Naslas, but over time, the realization of this solution was abandoned, and Nikola Dobrović was directly appointed by the Rectorate of the University of Belgrade. The background behind this decision is not entirely clear, Ljiljana Babić said that the Institute of Architecture and Urban Planning of Serbia hired Dobrović, as a sign of confidence in his qualities and experience. Furthermore, it can be assumed that the investor, on the one hand, considered that they would get a better quality of the project and faster implementation if they hired a more experienced architect, whereas, on the other hand, younger colleagues withdrew and granted this chance to Dobrović, in order to give him another opportunity to work in Belgrade at the moment when the General Staff Building had not been constructed yet.

At that moment, the construction of blocks and buildings was in progress in accordance with the Regulatory Plan for the area of the New Belgrade municipality, which was adopted in 1962, and based on the results of the competition from 1959 for the Central Zone. From Dobrović's design of the block, it can be seen that the shape of the block itself in this plan iteration⁶ was rectangular, unlike today's square shape, which would probably be more appropriate to the urban form that Dobrović created by placing the buildings in the complex in the shape of the letter H at its base. As the project was developed alongside of mass housing construction in New Belgrade, the morphology of the block as proposed by Dobrović would introduce additional functional and form diversity into the urban fabric of this part of the city. The forms of classical modernity, typical for his work, would've be an additional contribution to the style, and an even more significant contribution to the typological diversity of New Belgrade's architecture, which, due to circumstances, never received its central functions in the scope which was planned and which such a large municipality would need. Unfortunately, the project was not implemented, partly due to the fact that one part of the teaching staff was against commuting to New Belgrade⁷, and

⁶ There were several transitional urban solutions until the final adoption of the urban matrix according to the Regulatory Plan for the area of the municipality of New Belgrade, which was adopted in 1962. The competition for the building of the Faculty of Electrical Engineering was announced in 1961 with the foundations that were current at that time.

⁷ About this broader phenomenon, "Why would I cross the Sava River if I am important" is written in Dimitrije Perišić's text, *Sećanje na arh. Milutina Glavičkog*, in the book *Milutin Glavički. Arhitekta - urbanista*, p. 16.



partly due to disagreements between the architect and the investor - Dobrović himself wrote about his disappointment in the book *Savremena arhitektura 4* [12].

Figure 5. Faculty of Electrical Engineering and the "Nikola Tesla" Institute, isometry, Nikola Dobrović, 1963 [14]

When one puts together the author's biography, consisting only of projects and competitions, Nikola Dobrović often appears - and this is how he is interpreted in the literature - as a tragic figure of our architectural scene, a misunderstood author and intellectual who wasted his talent and energy in tilting at windmills. After reviewing the documentation, which will undoubtedly continue to be discovered in some old libraries, and networking the newly-acquired knowledge, and with a better understanding of historical circumstances, it will be possible to offer a somewhat different interpretation of Dobrović's work and his legacy. In many ways, many of Dobrović's concepts were continued in the practice of city planning and construction during the 1960s and 1970s: both competition policy and traffic management. Moreover, in the context of "the Greater Belgrade" one can see the outlines of his ideas about the recreational belt⁸, the settlement of Železnik and many others.

In many ways, Dobrović did foresee many aspects of the future of (New) Belgrade, but behind his words was his experience and knowledge as a protagonist of the city planning; therefore, he also knew the weak points of these plans. However, the city developed following the matrix outlined in the planning documents, which were in continuity with many of Dobrović's ideas. Observing the wider historical context of his involvement in the

Belgrade: Urban Association of Serbia and City Secretariat for Urban Planning and Environmental Protection, 1990 [13].

³ A detailed analysis can be found in the text written by Vladana Putnik Prica "Добровићеви нереализовани пројекти политичко-спортског стадиона и фискултурног појаса [15]".

Ministry of Construction, i.e. the Urban Planning Institute, it is extremely significant that Dobrović was at the head of such important institutions in the crucial, formative years, as an uncompromising modernist but also an experienced architect with formidable knowledge of both historical and *contemporary* architecture.

Nonetheless, it must be stated that the dynamics of realization, which he had foreseen immediately after the war, was simply too ambitious and unfeasible at that moment. Dobrović imagined New Belgrade as a scene of democracy in experiencing everything that contemporary spatial art offered, a 'city of the sun' that would send out modern urban spirit and mood with all its being – today, the urbanism of New Belgrade is what the citizens appreciate the most as the quality of life is declining because the city is densified. Finally, New Belgrade, which was built "during the era of new architecture and urbanism", as such should become "a monument of this period for future generations". Therefore, Dobrović also anticipated its canonization as an exceptional heritage of modernist architecture and urbanism of global significance.

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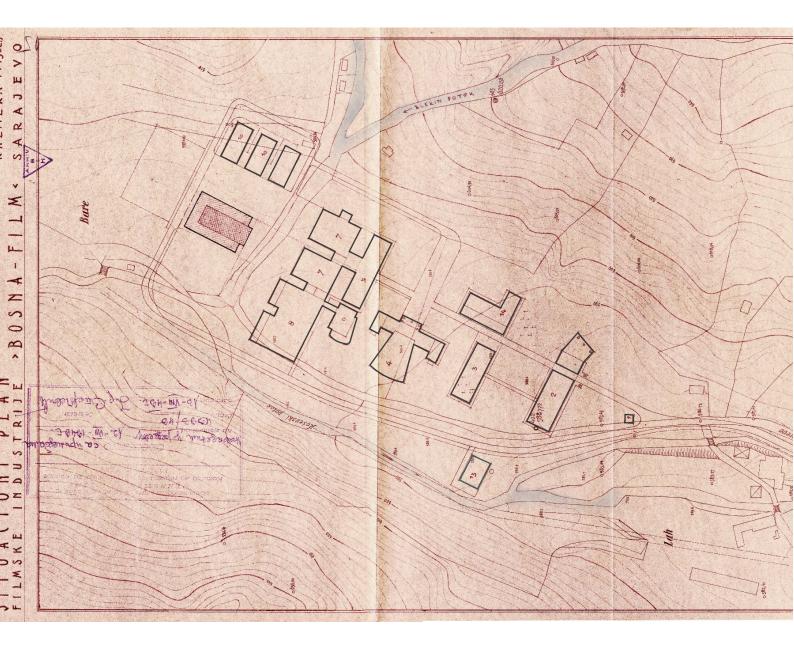
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ПРИЛОГ ПРОУЧАВАЊУ НОВОГ БЕОГРАДА: НЕРЕАЛИЗОВАНИ ПРОЈЕКТИ И КОНЦЕПТИ НИКОЛЕ ДОБРОВИЋА

Сажетак: Архитекта Никола Добровић је у Србији најпознатији по свом једином изведеном објекту у Београду, комплексу Државног сектератијата народне одбране (ДСНО), познатијег као Генералштаб, данас угрожене културне баштине и рушевног објекта неизвесне будућности. Међутим, за Београд и Србију је једнако значајан мање познат његов краткотрајни ангажман на челу Урбанистичког института НР Србије од 1946-1947, те каснија професура на Архитектонском факултету Универзитета у Београду. Документа, који сведоче о послератном периоду његовог рада су расута на више места: у Урбанистичком заводу Београда, Музеју науке и технике, Историјском архиву Београда, ретке публикације је могуће наћи само у пар библиотека у Србији. У току свог краткотрајног рада на Новом Београду Добровић у оквиру Урбанистичког института даје више идејних пројеката и концептуалних скица за Нови Београд; манифестациони трг, шеме саобраћајница и урбанистичко решење потеза између Палате Федерације и Железничке станице — данашње Централне зоне Новог Београда. Најзад, Добровић у различитим фазама каријере конципира и појединачне објекте, попут пројекта за Електротехнички факултет и зграду ЦККПЈ, који су остали у домену 'папирне архитектуре', односно неизведени, а који пружају увид у начин на који је он размишља о процесу урбанистичког и просторног планирања, кроз позиционирање објеката који генеришу функционални карактер свог ближег и даљег окружења.

Кључне ријечи: Никола Добровић, Нови Београд, Велики Београд, Централни комитет, блок 32<u>,</u> Електротехнички факултет



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BETWEEN VISION AND POSSIBILITY – INDUSTRIAL ARCHITECTURE FROM THE SOCIALIST PERIOD IN SARAJEVO

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BETWEEN VISION AND POSSIBILITY – INDUSTRIAL ARCHITECTURE FROM THE SOCIALIST PERIOD IN SARAJEVO

ABSTRACT

As a contribution to the research on the specificities of Yugoslav modernism, the development of industrial architecture in the City of Sarajevo after World War II is presented. When defining the architectural typology of industrial buildings during this period of development, examples of conceptual designs whose implementation was either fully or partially absent were analyzed. The paper elaborates on the specific socio-economic and cultural context that determines the architectural production of the post-war period. Financial difficulties led to significant rationalization of construction that resulted in devoid of aesthetic expression. Nonetheless, conceptual designs from the archive of the People's Republic of Bosnia and Herzegovina's Ministry of Construction (*Ministarstvo građevina NRBiH*) show careful consideration of the technological process in conjunction with contemporary constructive possibilities and aesthetics of the functionalist design of modernism. The detailed presentation of the ambitious design of the Bosna Film "film city" in Jagomir provides a vivid insight into the undisputed development of architectural thought in this area.

Key words: industrial architecture, socialist period, Bosna Film film studio, the City of Sarajevo, modernism

1. INTRODUCTION

While international heritage conservation organizations work to determine how cultural heritage preservation can encourage climatic actions and promote the role of heritage as a driver and enabler of sustainable development [1], heritage protection services in Bosnia and Herzegovina still fail to recognize their industrial heritage, as well as the twentieth-century architectural heritage. These "newer" cultural heritage categories are mostly neglected. Their values are still not recognized as an intrinsic component of Bosnia and Herzegovina's cultural legacy by the public, national policies, and heritage conservation organizations. The aforementioned is clearly indicated on the current list of national monuments in Bosnia and Herzegovina.

The demand for extensive systematic research concerning industrial architecture stems from the fact that understanding the value of any heritage asset depends on broad scientific knowledge about its fundamental and special qualities. This paper highlights some of the findings of the author's research into developing an original methodological strategy for protecting Sarajevo's industrial architectural heritage [2]. It is known that industrial architecture paved the way for new architectural forms through its functional aesthetics, development of construction principles and the introduction of new materials, which laid the foundation for modernist expressions [3]. Although industrial architecture arises from the functional requirements of production technology, its development will be marked by architects' creative aspirations to produce harmony of function and form through the refinement of constructive systems. These are the main bearers of industrial heritage's architectural and artistic identity.

This study tries to demonstrate the evolution of modern ideas displayed in industrial architecture, which is frequently disregarded and attributed to a lack of aesthetic expression. The structure of this study is based on historical research and heritage documentation methodology. A summary of Sarajevo's urban and industrial development since 1945 is provided to illustrate the social, cultural, and economic context of the examined spatial scope. Moreover, the architectural scene is described, and an overview of design activities in industrial construction is given through the documentary fund of the People's Republic of Bosnia and Herzegovina's Ministry of Construction (in continuation: Ministry of Construction), which is stored in the Archives of Bosnia and Herzegovina [4]. Ultimately, the presented case study of the film city design in Jagomir shows that the design solutions of post-war industrial architecture resulted from studious consideration, harmonization of the technological program with constructive possibilities, and the aesthetic expression of modern functionalist architecture.

The author's research [2] recognized and defined the architectural identity of the industrial building typology. With the adopted methodological procedure, i.e. the analysis of 27 industrial entities created in the city of Sarajevo, it was possible to classify the architectural-formal, micro-urban and environmental-landscape features that define this architectural typology. In this regard, the evolution of industrial architecture is examined across all significant chronological periods. This is also applicable to postwar industrial architecture, which was studied through archival and field research. From the documentary fund of the Ministry of Construction, the following designs were selected: the extension and interpolation of new structures on the site of the old Slaughterhouse in Novo Sarajevo (1949); the Konzum Dairy Factory design, planned but never realized, along the Sušica stream in the Velešići area (1948); parts of the Central Dairy Factory design (chimney, boiler

house and administrative building design) in Pofalići (1949); additions to the facilities of the Tobacco Factory at Marijin Dvor (1949); the conceptual design for the ŠIK Knitwear Factory at Alipašin Most (bridge) (1950); the conceptual design of the Žica Wire and Nail Factory at Alipašin Most, in several variants (1949) and the Bosna Film design in Jagomir, also in several variants of the conceptual design (1949).

The designs of the Konzum Dairy Factory, the ŠiK Knitwear Factory and the Žica Wire and Nail Factory stand out in particular, along with the proposal for the film city in Jagomir, which will be presented in detail in the continuation of the work. The modernist functional approach to design is easily readable in the aforementioned designs. These conceptual solutions result from systematic consideration of the technological production process, harmonized with the constructive possibilities at the time and efforts to humanize work by applying a pavilion spatial system surrounded by greenery.

Modest financial resources and the lack of basic building materials lead to the rationalization of construction, reducing the design to the essential building stock within industrial units and complexes. The conducted research discovered that realizations of the most significant industrial architecture designs were completely absent, as was the case with the Konzum Dairy Factory and the ambitious film city design. Some were replaced by standardized ones, as was the case with the Central Dairy Factory. The latter cases were carried out with significant changes, turning the imagined open pavilion plans in a "green environment" into mixed block building systems with significant savings in space and building materials, as in the case of the ŠIK Knitwear Factory.

2. URBAN PLANNING AND DEVELOPMENT OF SARAJEVO AFTER 1945

The period following World War II was marked by frequent territorial reorganizations and dynamic urban activities in Sarajevo. The war-torn city, which had faced problems of insufficient housing construction, inadequate and outdated communal infrastructure and urban traffic, and the unresolved issue of the neglected and dilapidated historical core - *čaršija*, became further burdened with a large influx of refugees in the post-war period. In 1945, the city was characterized by muddy, unpaved streets with horse-drawn carriages and housing poverty [5].

Few architects, builders, and technicians gathered around the newly-formed Ministry of Construction, within which a department for design and urban planning was organized under the leadership of the architect Jahijel Finci, attempted to solve the basic architectural and urban problems in the Republic at that time. Due to insufficient staff, the Czechoslovakia government was contacted in an effort to obtain expert assistance in the development of urban plans [6].

Preparations for the General Regulation Plan of Sarajevo began in 1947 with the arrival of expected technical assistance by architects from Czechoslovakia. The tasks for the Plan were specified, some of which were: "...to rehabilitate the old part of the city, preserving all its cultural and aesthetic values, and adding to this a New City that will meet all the needs of modern society, and at the same time be a logical continuation of the old part of the city"; "...to properly limit spaces for three basic needs of residents, namely for housing, work, and recreation". It was also noted that "...the possibilities for further development and expansion of the city exist in the western direction, and partially in the Koševski Potok valley, towards the north" [6: 390].

In December 1948, the proposal for the long-awaited General Regulation Plan of Sarajevo was completed. This plan was never adopted, but it was not rejected either. Certain documentary additions and comprehensive analyses were necessary. Until then, what was not controversial in the plan could be implemented. Furthermore, Đumurkčić presents the basic principles of the Plan in his article, thus expressing its significance from the perspective of the city's urban development history.

The spatial scope of the Plan was limited to the area up to Dolac Malta in the west, while the area of the "Sarajevo region" did not extend beyond the settlements of Ilidža, Blažuj, Hrasnica, and Vogošća. The industry was located in the Sarajevsko Polje (field) without a closer spatial organization and structure [6]. Today, this Plan is considered a conceptual design for spatial activities at the time [7]. The focal points - squares in front of the Republic administration buildings and the railway station, connected by boulevards and the upcoming urban planning activities, will represent the backbone of the new city center.

The 1950s were marked by partial urban solutions for parts of the city that were not expected to change their purpose significantly after the Plan's adoption. During this period, an industrial zone with a rail freight station and a wholesale market was formed in the settlement of Pofalići, and a significant part of the city's industrial zone was formed at the Alipašin Most - Stup route alongside the existing Sarajevo-Ilidža road [6][8].

One of the main shortcomings of the Plan was insufficient analysis of real economic, social, cultural, and other influential factors. As Đumurkčić points out, Sarajevo should have been seen not only as an administrative and cultural center but also as an industrial center, with particular attention given to the problems accompanying the city's economic development. For this purpose, a methodology for developing the program followed by the Plan was elaborated, which was continuously improved without losing its scientific and professional approach. Fifteen different commissions participated in the preparation of the economic documentation alone. According to Đumurkčić, 143 experts worked on the preparation of the entire documentation, expert analyses, and the final Program for the creation of the Plan (completed in 1960), which comprised 3,272 text pages [6].

Finally, the first General Urban Plan of Sarajevo (1965-1986) was adopted by the City Council with the Decision of May 28, 1965 [9] (Figure 1). The General Urban Plan (GUP) defined the territory for the city's development. It was determined that the city should expand adjacent to the existing city towards the west while utilizing the Miljacka River valley and the surrounding hills for residential construction. Sarajevsko Polje was designated for the placement of the main area for work, while Trebević and Ilidža were designated for recreational purposes. Two additional residential zones were added to the urban fabric to mitigate the negative aspects of this elongated shape. These areas were formed within natural amphitheaters, one at Slatina (Betanija) to the north and the other at Miljevića (Lukavica) to the south. This plan resulted in the city covering an area of 130 km² along with its extensions [9].

The entire urban territory was divided into two parts: Marijin Dvor and the Old Town, located in the eastern part, and the New Town, located in the western part. Furthermore, the city was divided into four regions, within which there were a total of 46 residential units. The central functions along the main axis of the city's development line were distributed in three urban centers (Baščaršija, Marijin Dvor, and Otoka) and two regional centers (Čengić Vila and Mojmilo). Residential areas were developed along the left bank of the Miljacka River, while business zones were situated on the right bank, adjacent to the railway [7].

The spatial layout of industry (GUP, 1965-86) [9] was predicted in the areas between the railway marshalling station in Rajlovac and the lower course of the Miljacka River to the Bosna River, the area between the lower course of the Miljacka River, Stup, and the airport's protective zone, the area in Buća Potok, the industrial area in the Vogošća settlement, the industrial area in Blažuj, the industrial area in Hrasnica, and the industrial area in the Lukavica Valley [9].

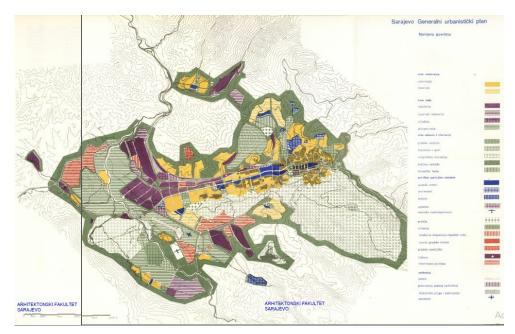


Figure 1. GUP 1965-86 [9]

The expected population growth to 336,000 inhabitants by 1985 was significantly lower than the actual dynamic of the city's development. The rapid increase in the number of inhabitants in new residential zones was not accompanied by adequate development of urban centers, which, according to Žuljić et al. [7], was caused by poor economic development and the city's economic structure. Almost all the higher-order centrality functions were located between Marijin Dvor and Baščaršija, resulting in daily migrations of the population from the "new" to the "old" part of the city. A new generation of long-term planning documentation was initiated to bridge the gap between assumed and real capacities and the spatial distribution of urban centers themselves. Therefore, the Urban Development Plan of Sarajevo for the period between 1986-2010/15 was adopted in 1990. The new plan directed further development towards the north-southern and western directions, encompassing spaces towards Marijin Dvor–Lukavica, Marijin Dvor–Betanija, Vogošća, and Ilijaš. On the east-west development axis, nuclei of urban centers were formed. Stup settlement was a newly formed center, intended to establish a balance with the existing urban core.

The latest generation of spatial planning regulation, namely the Spatial Plan of the Sarajevo Canton for the period 2003–2023, as stated by Žuljić et al. [7], envisages a spatial development concept that objectively creates the potential for the development of a regional and European metropolis.

In continuation, a brief overview of the city's industrialization will be given in order to provide a contextual framework for architectural activity while forming the industrial building typology of the considered time period.

3. RENOVATION AND FORCED INDUSTRIALIZATION OF THE CITY - THE FIRST SOCIALIST PERIOD OF DEVELOPMENT

During the interwar period (1918-1945), Sarajevo lost its central role in the wider region, leading to economic stagnation in the city. Poor transportation connectivity, underdeveloped rail and road networks, low purchasing power of the population, and neglect in economic policy contributed to weak industrial development in Bosnia and Herzegovina as a whole and, thus, Sarajevo as well [10]. Sarajevo's economic development, which relied on the administrative and military apparatus of the Austro-Hungarian period, without a developed industry capable of absorbing a significant workforce, did not offer economic prosperity to the city in the new, significantly altered political conditions.

War destruction and lack of raw materials affected the complete cessation or significant reduction of pre-war industrial production in Sarajevo. At the end of World War II, industrial facilities were destroyed, and the most significant companies in the city, such as the Tobacco Factory, the Main Railway Workshops, the Ključ Factory, the joint stock brewery's malt factory in Kovačići, and the City Gasworks, were ruined [11]. According to industrial geographers [12], a period of reconstruction and forced industrialization began immediately after the war (1945-1952), which is considered one of the most challenging periods in the economic development of the former state. This certainly had an impact on the industrial development of Bosnia and Herzegovina. The entire country's planned directions of development, as well as the development of the Republic of Bosnia and Herzegovina, significantly affected the city's economy. Sarajevo became the political and administrative center of the Republic once again, which significantly defined and conditioned its further economic development. The construction of transportation connections within the Republic, especially the "youth" railway line Šamac–Sarajevo, which had a broader Yugoslav significance, significantly impacted the city's economic development. Military industry relocation from the country's lowland regions to the Sarajevo area, which followed the Informbiro Resolution, profoundly impacted the future path of its development (such as the Zrak, Famos and Pretis factories). In accordance with the five-year plan, which primarily placed the future of economic development on the construction of basic industries (energy, mining, black metallurgy, and machinery), the first new hydroelectric power plant in Bosnia and Herzegovina (in the settlement of Bogatići, on the Željeznica River) was built in Sarajevo, and its entire metal processing industry was reorganized [11].

During this first period, industrial plants were nationalized, and their reorganization (merging and reorientation of production) and the creation of entirely new industrial enterprises took place. Industrial enterprises established in the Austro-Hungarian period represented a realistic basis for the city's future development and the reconstruction of the war-destroyed economy.

The historical industrial spatial units of Sarajevo emerged during the first capitalist development period and were further expanded by accelerated industrialization after World War II, forming recognizable industrial landscapes. These units include the valleys of

Koševski potok, Sušica, and Kovačići, the area of Skenderija (Terezija Street) and Marijin Dvor (the tobacco factory and electric power plant), Pofalići (Central Railway Workshops), the Paromlin and City Gasworks zone, and finally, the Alipašin Most industrial zone. Through the conducted research [2], three significant historical industrial zones were defined within the observed spatial coverage:

- 1. the northern industrial zone of the city consisting of three spatial units: the valley of the Sušica stream, the valley of the Koševski Potok, and the area along Miljacka riverbanks from Skenderija to Vrbanja Bridge;
- 2. Novo Sarajevo industrial zone composed of two spatial units: Pofalići and Paromlin;
- 3. Alipašin Most industrial zone, which stretches along the former Sarajevo–Ilidža road from Otoka to Stup.

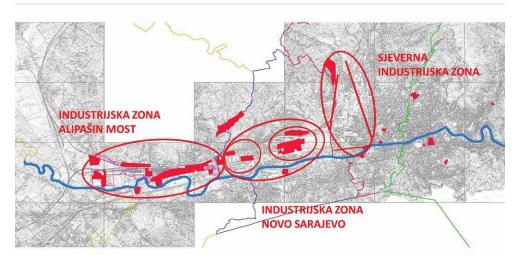


Figure 2. Industry distribution map (drawing by the author, 2021)

When considering the urban industry layout in the western part of the city, Muhamed Kadić observes that "[m]any industries were placed alongside the existing railway and road traffic routes, in order to save on investment costs for material and labor transport. In this way, a strip of tightly packed buildings emerged between the railway and the road... These tightly packed factories blocked each other's further development and expansion while also blocking the development of the city in that strip, both in spatial and aesthetic terms" [13:13].

Companies primarily founded during the first industrial period, whose location conditions were tied to the proximity of the workforce (such as the textile and graphic industries, as well as the Sarajevo Brewery), remained within the central urban core.

3.1. ARCHITECTURAL TYPOLOGY OF INDUSTRIAL HERITAGE AFTER 1945

As previously mentioned, after World War II, Bosnia and Herzegovina was a significantly destroyed and impoverished country with only a modest number of builders available for its reconstruction. This included a small number of local architects, from whom only a few had notable works from the pre-war period, as well as technicians and students from technical schools.

According to the notes about the fund of the Ministry of Construction, the Ministry was established on April 27 1945, by the Law of the People's Assembly of the People's Republic of Bosnia and Herzegovina, at the third session of ZAVNOBiH in Sarajevo, and was abolished as early as April 14 1951. At the time of liberation, the construction works department at ZAVNOBiH had only six engineers, three technicians, and one typist.

Although young architects returned to Sarajevo with degrees from universities in Zagreb and Belgrade in the post-war years, the real strengthening of the architectural practice resulted through a planned distribution of professionals from more developed state centers into Bosnia and Herzegovina. Early tasks mainly addressed the issue of rebuilding the most essential buildings, such as standardized facilities for cooperative houses, rural cultural centers, rural schools, infirmaries, agricultural facilities, sawmills and brickworks. New settlements were also built near new or existing factories and mines based on simple spatial sketches. Limited financial resources and operating capacity, along with improvised and outdated equipment and a permanent shortage of building materials, did not allow for detailed research, studies, and creative approaches in the development of urban and design solutions. Only the necessary low-standard housing was constructed, with simplified floor plans, whose implementation was often pressured by tight deadlines and haste [14].

According to Straus, the understanding of architecture at that time was imposed by the new social order based on socialist foundations in Bosnia and Herzegovina, and it carries all the contradictions of this short period. Strong links between leading architects and the building values of the interwar period, along with the obligations imposed by socialist realism principles, led to a wide range of achievements "from ambitious competitions for buildings of exaggerated content and artistic pretensions in the centers of the state to the implementation of cheap housing of poor quality devoid of elementary design features" [14:15].

According to the established periodization given by Kreševljaković [18] in his thesis, the post-war period is associated with a significant influence of the USSR through social and economic processes. In architecture and art, this influence was evident in the emergence of socialist realism. Noticeable influence of this style is observed in the design of the new railway station in Sarajevo (1947/53), built according to the architectural concept of architects from Czechia and Eastern Germany, which was subsequently supplemented and functionally completed by the architects B. Stojkov, J. Finci, E. Šamanek, and the engineer Eichberger. Another example following the same principles is the building of the Institute for Hygiene (1952) by Vaso Todorović. During this period, several significant architectural achievements were built that represented a continuity with the established principles of the international style initiated in the interwar period, such as the housing complex on Džidžikovac by the Kadić brothers and the ski lodge on Trebević by the architect Juraj Neidhardt, thus confirming the aforementioned statement by Ivan Štraus.

This period of development (defined between 1945 and 1975) was marked by rapid industrialization of the city, with the construction of new facilities in all previously established industrial areas and significant expansion of existing ones. Production facilities were designed based on the principles of functionalist design that followed the production technology process, with basic stylistic features of modern mass production after World War II. The building structures of production facilities were constructed using a combination of brick walls, framed structures and monolithic, as well as prefabricated, reinforced concrete constructions. Standardized halls in the metal, construction, pharmaceutical, and

even food (dairy) industries were constructed using prefabricated steel structures. New industrial complexes established during this period were located next to the industrial railway track (all except for the Zrak, Bosna Film, and Bosnalijek factories). The composition of these complexes was mostly formed in a mixed pavilion-block spatial system, often conditioned by the location and limited surface area of the land plot. The spatial block comprised administrative and main production facilities (usually connected by a single entrance, with workers' changing rooms providing access to production areas, as in the case of the dairy, tobacco, VMC, and Zrak factories). In addition to previously established production, energy, storage, workshop, and administrative functional units, the morphology of the complex also includes workers' social standard facilities, laboratories, and garage facilities. Workers' housing units remained within certain industrial complexes (the beer and dairy factories), as well as their immediate vicinity (the Tobacco Factory in Pofalići and the Zrak Factory). The semantic features that characterize this period of development are high factory chimneys and functionalist design, whose forms, such as shed roofs (Zrak and Žica factories), façade structures that display the structural elements of the building, and the arrangement and size of openings, clearly indicate the utilitarian nature of these spatial units [2].

The founding of the Faculty of Architecture in Sarajevo in 1949 and the involvement of Professor Muhamed Kadić in the course "Designing industrial and agricultural buildings" certainly contributed to the development of architectural thought when considering this architectural typology. This is supported by the fact that Professor Kadić and his assistant at the time, architect Živorad Janković, both of whom went on to become academics, received the Sixth of April Award for the realization of the Tobacco Factory industrial complex in 1963 [16]. In the following sections of the paper, the studied archival material related to the planned construction of a film complex on the city's western edge will be shown in detail. This design, envisaged by an ambitious capital construction plan for the purpose of affirming film art in the newly established state, is also signed by one of the academic architects of BiH, a pioneer of modern thought in these areas. By studiously considering the program and the technological process, the designer provides solutions in which the harmony of function and form with the constructive possibilities of the materials used at the time was achieved.

The prominent cultural worker Vefik Hadžismajlović described this complex at the end of the last century: "But! The development of Bosnian-Herzegovinian cinema confirms that life and real possibilities are stronger than dreams and fantasies. Conceived as a strong cinematographic center, located in Jagomir near Sarajevo, with a large studio and many accompanying facilities, as a 'film city', 'city of dreams', and a local version of Hollywood, Mos-film, and Barandov - today, only a modest technical base of 'Bosna Film' remains, with studios in which films are not made, with facilities that, through their abandonment and emptiness, seem like a sad moment of a distant era of a Don Quixote-like heroism and vision." [17: 544]

4. THE FILM CITY IN JAGOMIR - THE DESIGN OF "BOSNA FILM" (1949)

From the documentation fund which accompanies the conceptual design for the construction of the Bosna Film, small studio complex in Jagomir, it is discovered that the establishment of the film complex was planned as part of the capital construction plan for the year 1949. Experienced engineers specialized in industrial buildings, the architect Radanović and the engineer Bajraktarević from Belgrade were hired to design it. Initially,

the engineers produced a conceptual design without a previously developed program based on their experience in constructing facilities for the film industry, as stated in the attached technical description. However, the processed material also includes a "Construction Program for the Production of 6 to 8 Artistic and 10 Documentary Films per Year", probably created after the aforementioned conceptual design. The conceptual design of the complex created in accordance with the provided construction program can be seen based on the site plan (Figure 3).

The film city was located in the valley of the Koševski Potok within the undeveloped green oasis of the city. Inside the complex, accommodation was provided for film studios (three studios in order to allow for uninterrupted work on two films at the same time) with accompanying dressing rooms for actors and technical staff, a film laboratory, an editing facility, a dubbing facility, and an administrative building with accompanying workshops and warehouse spaces. Its own energy production and central garage facilities for passenger cars and trucks were planned. The morphology of the complex was conceived in the spatial composition of a mixed pavilion-block construction system.

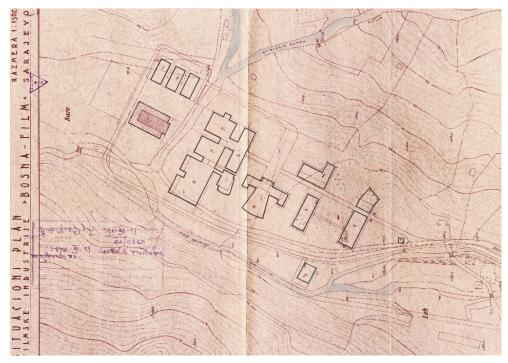


Figure 3. A variant of the "Bosnia Film" site plan from 1949. The site of the complex in Jagomir is located on the right side of the Koševski Potok along the existing road to Nahorevo (today Nahorevska Street). The entrance to the complex is planned from the south of the plot. The facilities inside this film city are: 1 - porter's office with a guard, 2 - administration, 3 - laboratory, 4 - synchronization, 5 - wardrobe, 6 - small studio, 7 - auxiliary studio, 8 - large studio, 9 - workshops, 10 - warehouses... 14 - painting room, 15 – garages (by courtesy of Archives of Bosnia and Herzeqovina).

Given that the revision commission for planning decided to save up to 50% of investments, the architects from Belgrade offered a compromise solution. They proposed a small atelier as a temporary solution for the main production. According to a letter intended for the Cinematography Commission, the planned building would be repurposed into a decoration warehouse upon completion of the construction. The architects proposed to place the

supporting facilities such as wardrobes, offices, buffets, kitchens, fireplaces, and warehouses around the central hall, and the conceptual design for a hall measuring 15 x 40 m, 7.0 m high and accompanying spaces that would be located in the side wings be approved in the first phase of construction.

Certain objections were made to the proposed design, and in August 1949, the middle nave, i.e. the main hall measuring 40 x 15 m, began to be built in accordance with the proposal but was limited to the basic form. From the technical description signed by engineer Svetislav Hrisafović on behalf of the Sarajevo City Design Company, who was encharged with a new concept design of auxiliary spaces arranged around the main hall, the original state of the dilapidated structures found on the site today can be read. It is evident that the comments of the revision commission were adopted, and sufficient space for the start of production was created with the new design.

The technical description reveals that the revision committee changed the position of this production facility in relation to the design of the engineer from Belgrade. In addition to the production hall, wardrobes and auxiliary rooms were added in the western wing, while warehouse space comprising two floors was added in the eastern wing. A central annex with finished mezzanines was designed from the rear of the hall. As stated in the technical description, the first-floor spaces of the west wing were not fully defined. Therefore, typical individual openings were installed, between which partition walls can subsequently be added. The construction and materialization of the facility respond to the set requirements for investment savings. A photograph of the film complex's model shows significant deviations from the originally conceived conceptual site solution that accompanied the presented program (Figure 4).

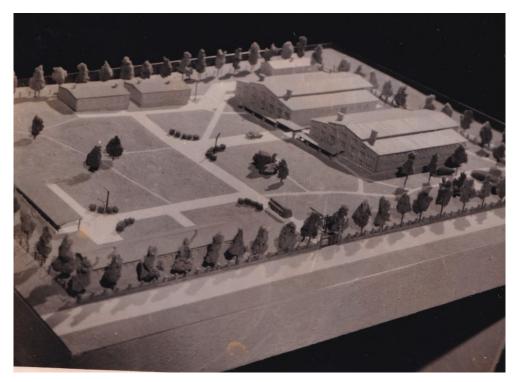
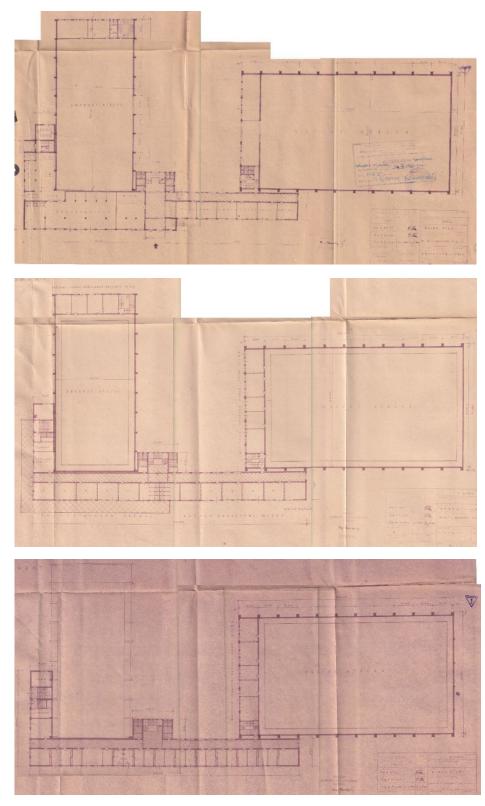


Figure 4. Photo of the model. The small studio conceived as a "temporary space" from the first phase of the development of the complex will remain the only production hall in the next 40 years of use (by courtesy of Archives of Bosnia and Herzegovina).

A conceptual design of an ambitious scale was discovered in the second box of the archival fund belonging to the Ministry of Construction. The design in question consisted of a large and medium-sized studio connected in a single block via a section for wardrobe storage and other accompanying spaces (Figures 5 and 6), as well as a conceptual design for a laboratory and assembly building (Figure 7), created by the City Design Company and signed by Jahiel Finci in April and May of 1950. Although these d were never realized, an insight into the technology of the film industry in the mid-20th century is provided, as well as the undeniable development of architectural thought in Bosnia and Herzegovina and the surrounding region. The monumentality of the primary production structures, the film studios, emerged from the designer's creative drive to demonstrate the viability of modernist design's harmony of function and form in industrial architecture via the proposed constructive system.

The large and medium-sized studio with wardrobes was conceived as a single industrial block. The production halls (studios) are connected via a common section (thermal connections) of the building for placing wardrobes and other accompanying spaces. In the central part of this building, consisting of three floors, there is a representative entrance through a wide staircase to the lobby area with the main staircase and restrooms. Furthermore, on one side of the ground floor, there is a restaurant, kitchen, storage rooms, and a living area for employees, and on the other, there is a makeup room, costume warehouses, and a tailoring room. The wardrobe building was planned to be built as a solid brick structure with concrete foundations and reinforced concrete slabs. The roof structure would be built as a classic wooden one, covered with corrugated asbestos-cement roof tiles. The flooring would be covered in parquet.



Figures 5. Jahiel Finci's 1950 conceptual design for the construction of a big and medium-sized atelier with dressing rooms consists of three drawings: 1- the ground-floor plan, 2-the first-floor plan, and 3- the second-floor plan (by courtesy of Archives of Bosnia and Herzegovina).

The large and medium-sized studios differ only in their dimensions. The large studio measures 30.0 m x 50.0 m with a height of 18.34 m, while the medium-sized studio measures 20.0 m x 29.80 m and has a total height of 13.80 m. Adjacent to the production halls are storage areas for light reflectors and other technical equipment, as well as staircases leading to the " directing and administrative offices " situated on the upper floors. Within the studio space, work galleries are formed as cantilevered balconies (two in the large studio, 90 and 100 cm wide, and one in the medium-sized studio) for the assembly of technical equipment required during film production. The structure of the building is conceived as a reinforced concrete framed structure with concrete walls and roofs in the form of reinforced concrete vaults (single-span arched reinforced concrete halls in combination with a reinforced with a 4.0 cm air gap between the wall and the facade cladding made of heraklith was planned.

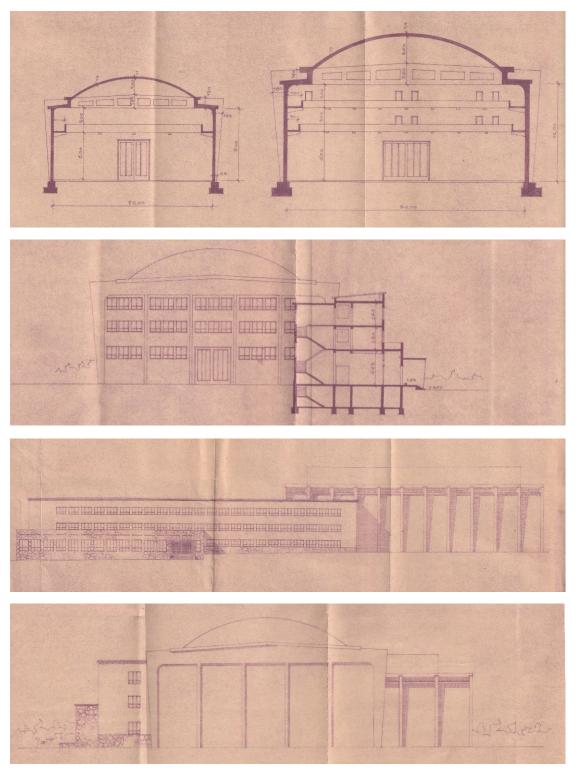


Figure 6. Designs of the characteristic sections and facades of the "large and medium studio with dressing rooms" building are presented, revealing the structural features and modernist design typical of post-war mass construction (by courtesy of Archives of Bosnia and Herzegovina).

The following conceptual design found in archival documents relates to the laboratory and assembly building. The building has a U-shaped floor plan with symmetrical rear wings inside which two separate technological processes were developed, assembly on the right and laboratory on the left side of the building (as viewed from the frontal facade). Separate entrances to these two technological units are also formed on the side of the building (emphasized entrances with accompanying porter and wardrobe spaces were created). The building is designed as a one-story building with a basement and an attic. Auxiliary rooms for the boiler room, air conditioning, and storage tanks for chemicals needed in production are located in the basement. According to the space usage legend, on the ground floor, the following areas were situated: offices (1, 2, 3), space for film storage (4), chemical storage (5), dispatch (8), "pickling" or negative film resting (9), laboratory for developing negatives (10), chemical melting (11), laboratory for developing positives (12), sound laboratory (13), assembly of negatives (14), auxiliary warehouse (15, 16), and smoking area (17). While the rooms on the upper floor were intended for projection halls (one in each side wing) (1), projection cabins (2), anterooms for halls (3), there are also: trick-laboratory (4), experimental laboratory (5), pickling (6), light reader (7), copier (8), assembly of positives (9), chamber (10), and technical control (11).

Based on the attached drawings, it can be concluded that it is a construction of massive brick walls with a reinforced concrete slab and a classic wooden roof structure. When contrasted to the preceding design, it is clear that the design approach is the same, albeit in a much more modest shape, and belongs to the modernist design characteristic of mass post-war construction.

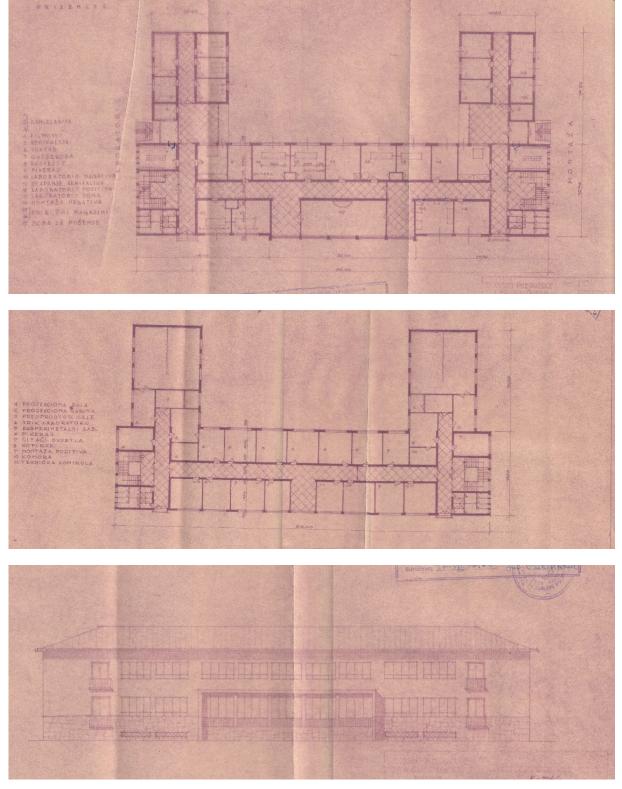


Figure. 7. Design for the Bosna Film laboratory and assembly building by Jahiel Finci (1950) (by courtesy of Archives of Bosnia and Herzegovina).

4.1. DISCUSSION

The conceptual design given by architect Jahiel Finci, which was never realized owing to rationalization and a lack of financial resources, provides insight into the creative process of young architects in Bosnia and Herzegovina at the time. The reconsideration of industrial architecture as a vital component of modernity has been demonstrated in the design of the key production facilities, film studios. The design emphasizes the structural assembly of a single-space arched reinforced concrete hall, with large smooth wall surfaces divided by an accentuated colonnade of reinforced concrete skeletal structure pillars, which, by their monumentality, indicate the role of the film industry in the newly established social system. A studious approach to the program, as a rethinking of the technological process, is also visible in the design of accompanying content. The gradation of masses, halls, studios and the entrance building, accentuated entrances, rhythmic openings, and the rustic finish of the ground floor facades, which stand in contrast with plastered smooth surfaces, all hint at the aesthetics of modern stylistic features.

Today, only the ruins of this film company can be found on the site of Jagomir. From the presented design documentation, the only building (intended as a temporary studio) from 1949 was built according to the design by the engineers from Belgrade and finalized according to the conceptual design made by S. Hrisafović in 1949. Conceived as a film town, a local version of Hollywood, it ended up with a modest technical base. It is known from historical sources that the Bosna Film company, i.e. Studio-film, had available 4.0 ha of land in the presented locality, so their legal successor, Sutjeska-film, and today the Sarajevo Film Center, occupied only 2.0 ha, or one half of the designated area. A comparative analysis of historical maps, site plans and current geodetic foundations shows that the former complex of the film industry extends only to the northern part of the plot shown in the preliminary design. The position of the "small studio" is clearly legible on all geodetic plans and corresponds to the site position presented in the conceptual design.

5. CONCLUSION

Although we often witness the industrial architecture of the early socialist period reduced to simplistic forms devoid of aesthetic expression, the previous presentation highlighted the design activity that thoughtfully considers the harmony between technological process and material and structural design possibilities that lead to the aesthetics of functionalist modern design.

The presented designs and defined architectural typology are the results of research conducted within the spatial scope of the city of Sarajevo, which is limited to only four municipalities. The unexplored material stored in the Ministry of Construction archive demands further research into this construction category. The archived designs of industrial buildings, workers' housing, social facilities, such as workers' clubs, industrial schools, and workers' health care facilities, located in the cities of Zenica, Lukavac, Jajce, Vareš, Banovići, Brčko, the Hrasnica and Blažuj areas, as well as the Jelšingrad foundry design, surely conceal the unexplored industrial heritage of Bosnia and Herzegovina.

Ultimately, this presentation aims to raise awareness of the significance and importance of 20th-century industrial heritage as expanded scientific knowledge forms the foundations for the objective valorization of this cultural category.

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AUTHOR'S BIOGRAPHIES

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Maja Pličanić was born in 1978 in Sarajevo. She obtained a doctoral degree in architecture from the Faculty of Architecture, University of Sarajevo, in 2021. As a researcher in the field of cultural heritage with a focus on industrial heritage, she mainly presents and publishes her work at international conferences and meetings. In March 2014, she was assigned the position of a Teaching Assistant, and in September 2021, the position of an Assistant Professor at the Faculty of Educational Sciences, University of Sarajevo, for the scientific field of Cultural Heritage of Bosnia and Herzegovina. She has been a permanent member of the ICOMOS National Committee in Bosnia and Herzegovina since 2010 and the TICCIH since 2022.

ИЗМЕЂУ ВИЗИЈЕ И МОГУЋНОСТИ – ИНДУСТРИЈСКА АРХИТЕКТУРА СОЦИЈАЛИСТИЧКОГ ПЕРИОДА У САРАЈЕВУ

Сажетак: У прилог истраживању специфичности југословенског модернизма, показује се развој индустријске градње на подручју града Сарајева послије Другог свјетског рата. Приликом дефинисања архитектонске типологије индустријских објеката овог периода, анализирани су примјери концептуалног дизајна чија је реализација била дјелимичма или је потпуно изостала. Рад је представио специфичан друштвено-економски и културни контекст који је одредио архитектонску продукцију у послијератном периоду. Иако су финансијска ограничења водила до велике рационализације која је углавном резултирала индустријским објектима лишеним естетског израза, концептуални пројекти пронађени у фонду Министарства грађевине Народне Републике Босне и Херцеговине показују студиозне рефлексије о технолошком процесу који је усклађен са конструктивним тежњама и естетиком функционалног модернизма. Детаљан и амбициозни пројекат "филмског града" у Јагомиру веома живописно пружа увид у неупитан развој архитектонске мисли у овој области.

Кључне ријечи: индустријска архитектура, социјализам, филски студио "Босна филм", Сарајево, модернизам.

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154-161 Visual essay

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THE LANDSCAPE OF THE KRAJINA MONUMENTS

The essay is based on the Architecture exhibition titled "Architecture. Sculpture. Remembrance. The Art of Monuments of Yugoslavia 1945–1991" and its installations, which was held from 29th November to 7th December 2023 in the new building of the Faculty of Architecture, Civil Engineering, and Geodesy at the University of Banja Luka. This exhibition was organized as a part of the 25th anniversary celebration of the school of architecture in the Republic of Srpska.

The exhibition is dedicated to showcasing the architecture and sculpture of the monument built in Yugoslavia to commemorate the national liberation struggle. It aims to highlight the significance of architectural and cultural heritage, with particular emphasis on Yugoslavia's modernist architecture and its influence on contemporary thought about space. The exhibition showcases around 60 mapped monuments that commemorate the national liberation struggle of the people of Yugoslavia, emphasizing their cultural and timeless importance and trying to raise awareness of their value. The goal is to encourage better maintenance and preservation of these monuments. The exhibition has already visited 11 cities across all the former Yugoslav republics, defining the landscape of memories from the entire Yugoslav area and beyond. This exhibition presents the qualities of the unique architecture of Yugoslav monuments, emphasizing their importance and influence on the education of fundamental values and principles of contemporary thought about space.





The way we remember historical events is not just about the facts but also about how they are perceived. Our understanding of the past is constantly changing and influenced by different individuals, groups, and even nations. As cultural memory adapts and expands, memories are transformed across generations, and we choose to remember certain aspects of the past. Personal connections to these memories weaken over time, and identities shift from being based on shared experiences of the past to a common heritage rooted in history.

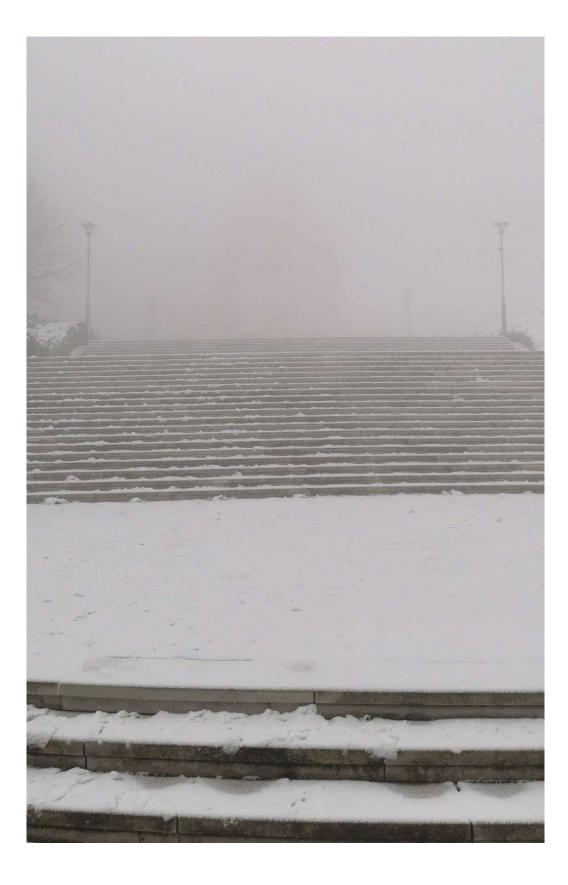
The act of remembering is significant because it gives meaning to places that are important in history. Without memory, these places would lose a significant portion of their significance. In the past, the significance of the marked heritage and the mark itself as a heritage can be equally understood. By interpreting the timeless message sent to us, we become aware of such heritage and its importance in understanding the history and development of a territory. By shaping the message through universal symbols of life and death, love and fear, mourning and acceptance, we can read it today in every memorial as a response to the culture of memory. Memorial projects of the past served as places of collective mourning and remembrance. They also served as a place of acceptance and faith in the future, and now that future is our present day. Cultural memory helps us better understand the past, as our (mis)understanding of the past shapes our future.







The former Bosnian Krajina area holds significant historical and geographic value due to the events that happened here in the past, particularly during World War II. Throughout its history, the Kozara and Grmeč mountains have been a sanctuary for fighters and refugees from the surrounding regions and now serve as the most prominent memorials of the NOB in Bosnian Krajina. The exhibition has 56 monuments, including the two most massive memorial features in the mountain landscape - the memorial complex on Mount Kozara, created by the sculptor Dušan Džamonja in 1972, and the memorial zone Korčanica on Mount Grmeč, designed by the sculptor Ljubomir Denković in 1979. Besides their historical and artistic significance, these monuments also have social and cultural values for the region. They toned the wild nature of the mountain through the cultivation of the territory, making them significant for the participants and the community at a certain period. Many other places in the area were also marked, such as places of torture and cemeteries, including the memorial area of Garavica, created in 1981 by the architect Bogdan Bogdanović, as well as places of significant events, such as the Monument to Fallen Fighters in Drvar, constructed in 1967 by Marijan Kocković, the beginning of the rebellion and making historical decisions or birthplaces of prominent personalities. Some of the monuments are related to the wider area and the creation of a new identity, such as another monument of Marijan Kocković, Mother Partisan in Novi Grad, built in 1964.









The curators of the original exhibition are Boštjan Bugarić, Kristina Dešman, Maja Ivanić, Špela Kuhar, Eva Mavsar, Špela Nardoni Kovač and Damjana Zaviršek Hudnik. The local curators of the exhibition in Banja Luka are Igor Kuvač, Sonja Rapajić and Una Okilj. The organizers are DESSA Gallery, ab - architect's newsletter, DAL, Architectuul, Space Research Center and Faculty of Architecture, Civil Engineering and Geodesy, University of Banja Luka.

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