

HOW RADICAL EXACTLY?

Re-examining Neidhardt's 1937-41 Plans for Novi Sad

Aleksandar Bede, Dragana Konstantinović, Slobodan Jović

ABSTRACT: The international competition for the new regulation plan of Novi Sad was held in 1937, in which Juraj Neidhardt's design was awarded compensation instead of a prize. However, upon further consideration, the city administration decided to adopt a new version of Neidhardt's plan in the following years. In addition to this plan, he won the administration's trust to design a series of lower-level plans for the city in 1938-1941. Therefore, Neidhardt became the most prominent figure in the urban planning process triggered by the 1937 competition. However, his final regulation plan for the city from 1941 was rejected in the first post-war revision in 1945, failing to lead to any fruition. Nevertheless, the researchers later characterized the radical modernist approach of this plan as the inspiration for the subsequent general plans of Novi Sad, namely due to introducing the idea of cutting new axes through the urban tissue. There is room today, however, to re-evaluate these claims about the radicalness of Neidhardt's plan since its solutions were deemed insufficient in bringing radical quality to the urban space of Novi Sad. Furthermore, in the 1938-1941 period, he designed a series of perspective drawings for the new regulation of the streets in the oldest urban core of the city, which brought a decisively modernist approach to treating the urban heritage: keeping only a selection of the most iconic monuments while replacing the rest of it with new modernist structures. These designs can contribute to reinstate the knowledge about Neidhardt's approach to treating historical heritage, considering his later intricate studies of Bosnian and Macedonian architectural landscapes.

KEYWORDS: Novi Sad, Urban planning, Juraj Neidhardt, Modernism, Modernization.

INTRODUCTION: This paper aims to analyze Neidhardt's work on the regulation of Novi Sad and examine the extent to which the ideas behind his plans were radically innovative in local urban planning practice. The paper examines the historical background that led to Neidhardt's arrival in Novi Sad, the potential spatial conflicts his plans' implementation could have generated, and his legacy in the urban planning practices of the city. The research contributes to the modern urban history of Novi Sad, where Neidhardt's influence is fragmentarily comprehended, as well as to understanding the genesis, diversity, and novelty of Neidhardt's professional stands in the early stage of his career. The research methodology is based on desk research with a historical approach to primary and secondary sources, including content analysis of both. Also, a thorough urban and architectural analysis is conducted on available maps, sketches, drawings, and texts.

CONTEXT OF NOVI SAD AND ITS 1937 REGULATION PLAN COMPETITION

In the interwar period (1918-1941), the city of Novi Sad, today's second largest city in Serbia, had become the capital of Dunavska Banovina,¹ one of the newly created administrative regions of the then-existing Kingdom of Yugoslavia. Until then, the urban development of Novi Sad, a city with a relatively young history, had never been realized as an all-encompassing planned process. Apart from the initially unplanned and spontaneous growth, influenced by the natural morphology of the terrain and the trade routes that passed through the city, as well as by land policies and speculative capital, any planned development had only been partial or remarkably incomplete. The First World War interrupted the first grander planning initiatives at the very end of the Austro-Hungarian era, although they did provide the starting point for the following considerations and plans for reshaping the city,

if only in part. Such was the expansion of the city center towards the Danube and the newly constructed bridge to the Petrovaradin Fortress, with the new boulevard and the governmental Banovina Palace as the most dominant features of this development. Despite the draft for a new general city plan with defined land use in 1930 (Pušić, 1987, p. 122), the need for a more innovative planned regulation of the entire city became ever more apparent to the city administration in this decade. This was due to a significant increase in urban population, as well as an array of other municipal problems, such as a lack of housing and urban infrastructure. The local daily press wrote enthusiastically about the city's rapid development—built at “American speed”—but also warned that the new modern residential buildings were surrounded by muddy streets without sewage and pavement (Anon, 1937).

The decisive step towards solving these issues was undertaken in 1937 when an open urban planning competition for the new Regulation Plan of Novi Sad was announced. This competition was one of the most significant breakthroughs of modernist ideas in the Serbian urban planning of the interwar period (Blagojević, 2007, p. 30). Locally, the competition was significant, not least because it helped envision an expanded urban area of Novi Sad, which, for the first time in its planning history, included both banks of the Danube. The city now encompassed the previously separate historical settlements of

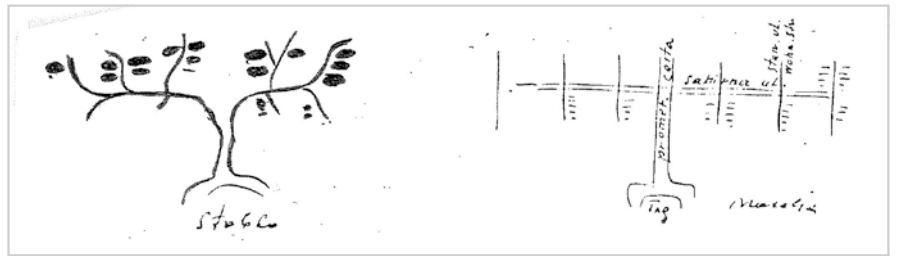
Novi Sad (on the left bank), Petrovaradin and Sremska Kamenica (on the right).

The competition attracted many urban planners who followed CIAM's ideology, including Le Corbusier students such as Milorad Pantović and Juraj Neidhardt. While, on the one hand, it is important to note that the announcement of the competition itself indicated the readiness of the administration to make a turnaround in urban planning, it is very indicative that in the end, the results of the competition showed the restraint of the local structures towards new and bold ideas and proposals (Blagojević, 2007, p. 31).

The first prize of the competition was not awarded, but the second prize went to the Belgrade-based architect Branko Maksimović. The shared third prize was awarded to Mihajlo Radovanović from Belgrade and a design by Nenad Pečić from Novi Sad and György Korompay from Budapest (Mitrović, 2021, p. 34). In this competition, Neidhardt was not awarded a prize but second-ranking financial compensation. In brief, the highest-ranking plan by Maksimović was unequivocally influenced by CIAM but somewhat more moderate in the physical transformation of the urban matrix of Novi Sad [FIGURE 01]. The CIAM influence consists primarily of the implementation of zoning principles (residential, industrial/commercial, leisure, and transport). However, this is primarily readable from Maksimović's accompanying manifesto of the plan



01 Central area of the highest-ranking (second prize) entry in the 1937 competition for the Regulation Plan of Novi Sad by Branko Maksimović. © Legat Branko Maksimovića, 2024. Maksimović, 1937, p. 10.



02 Neidhardt's concept of tree branches that grow out from the old part of the city into new microcosm developments. Sketches from his letter to Dušan Grabrijan in which he explains his 1937 competition entry for Novi Sad. © Tatjana Neidhardt, 2024. Karlič-Kapetanović, 1990, p. 89.

(Maksimović, 1937). Morphologically, the most notable proposals include new residential expansions of Novi Sad (north and north-west) and Petrovaradin (east and south), together with a new harbor and the new industrial zone north of the river and the canal.

NEIDHARDT'S 1937 COMPETITION ENTRY FOR NOVI SAD

When it comes to Neidhardt's 1937 competition entry, the clear expression of his modernist thought shows in his letter to Dušan Grabrijan, in which he elaborates on his design for the Novi Sad plan. Excerpts from that letter can be found in (Karlič-Kapetanović, 1990, p 89-90), and all of Neidhardt's ideas for his 1937 competition entry discussed below are paraphrased from that source.

Neidhardt's concept for Novi Sad operates with two strategies for the city and suburban areas. The city is anticipated as a *macrocosm*, as an operational whole, with efficient traffic solutions and space distribution on a macro-scale. On the other hand, the network of new dwelling neighborhoods –*microcosms* surrounding the city center—are organized organically, like tree branches originating from the city center [FIGURE 02]. The *satellites*, suburban areas, are small-scale towns, complete organisms that operate independently. Mitrović argues that, in its essence, this is a city plan of Le Corbusier's urban conception, in which the functional layout rests on the strict application of zoning (Mitrović, 2016, p. 28). Indeed, the most interesting innovation in Neidhardt's 1937 proposal for Novi Sad seems to be the series of new suburbs, the expansion of residential areas, and even a new industrial zone. Further on, he dwells upon the idea of a garden city and "city-village" applied to Novi Sad, but he calls these concepts "an illusion" since they don't actually provide enough free space. He thus calls for a new concept for garden city: "gardens" (probably meaning parks) instead of backyards, and terraced housing instead of "houses in blocks." This concept is clearly visible in his plan for Novi Sad, in which rows of residential streets are intertwined with belts of greenery [FIGURE 03].

Apart from these conceptual innovations, the biggest change in the urban space of Novi Sad that Neidhardt implied with his plan would come from his selection of narrow historic streets in the old center for new major

arteries. Thus, he placed those streets on top of the street network hierarchy, marked in the plan by thickening these street lines and widening them, including the old main square. This implies that all architectural and urban heritage would have to be replaced with new structures to broaden the streets for their function as arteries. Namely, one of the imperatives of the competition was to tackle the 'international' traffic in the city, by which they meant the road from Belgrade to Subotica and further to Hungary, on which the city of Novi Sad lies. This inter-urban connection passed directly through the old core and main square of Novi Sad and the historic 18th-century lower town of the Petrovaradin Fortress on the opposite bank of the Danube. Since the 1920s, a new bridge and a new boulevard leading to it have been constructed, but the definite route of the bulk of the traffic from this direction in relation to the old core of Novi Sad had not yet been defined: the direction of the boulevard implied that it could bypass the main square of Novi Sad.

Neidhardt, however, proposed to re-route the boulevard directly towards the historic main square, thus creating an urban artery and the 'international road' in the middle of the densest concentration of historical heritage in Novi Sad and Petrovaradin, bypassing them. Neidhardt stresses that Novi Sad's urban development already contains the nucleus of the "circular" (traffic)



03 Juraj Neidhardt's entry in the 1937 competition for the Regulation Plan of Novi Sad. © Tatjana Neidhardt, 2024. Blagojević, 2007, p. 33.



04 The 1941 Regulation Plan of Novi Sad by Juraj Neidhardt. © Tatjana Neidhardt, 2024.

system and that the traffic load of the city center needs to be de-loaded (Karlič-Kapetanović, 1990, p. 90). He does indeed introduce a modest ring street around the urban core, perhaps as an echo of earlier suggestions that predate World War One. One might wonder why Neidhardt had not used the ring road idea as the basis for his 'international road' routing. Neidhardt also envisions a second ring road, connecting to a new bridge over the Danube some 3 km upstream from the existing one. Therefore, Neidhardt's proposal would have introduced a radical change into the urban landscape of Novi Sad, but 'radical' in the sense of brutal rather than innovative when it comes to urban planning methodology. At that point in history, far more brutal-radical changes to street matrixes have been seen in urban makeovers in Europe and beyond, with Haussmann's Paris coming to mind first.

AFTERMATH OF THE COMPETITION AND NEIDHARDT'S PLANNING ELABORATIONS

The exact timeline after the 1937 competition is not entirely clear, as primary sources are scarce. Based on some sources, the city's administration was seemingly reluctant to immediately embrace the modernist future proposed by the competition entry; thus, even if they invited firstly Maksimović and then Neidhardt to further develop their plans, there was probably some covert obstruction by the city administration that caused some delay by not providing Maksimović nor Neidhardt with necessary input data for the drafting of the Regulation Plan in a timely manner

(Stančić, 2014, p. 119-120). According to others, at this stage, the city invited Neidhardt alongside the architects awarded in the competition for a second round; this was in 1938, and Neidhardt won (Mitrović, 2016, p. 27). In any case, Neidhardt finally emerged with the commission from the city to draw up the Regulation Plan of Novi Sad in 1939-1940. In addition, Neidhardt was entrusted to design several urban plans in Novi Sad, such as regulations of Šumadija Square and Fish Market Square in the city center, General Urban Plan, Levelling Plan, proposal for the civil airport, housing models, and regulation for some other urban fragments (Mitrović, 2016, p. 27).

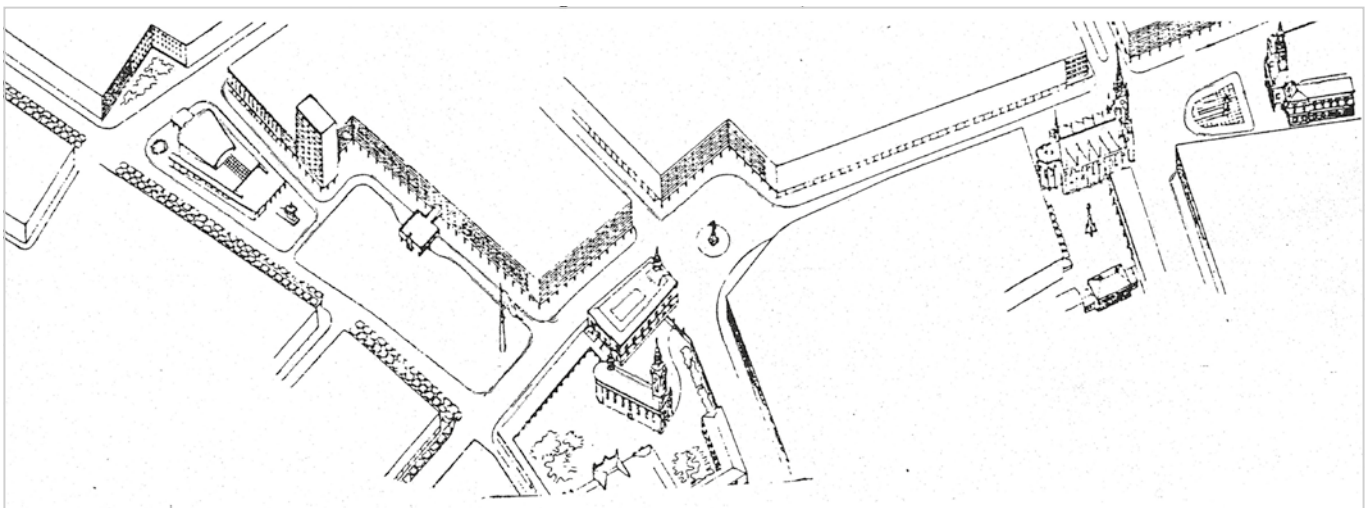
Neidhardt's work in Novi Sad synthesizes his previous planning concepts and ideas. Considering also the valuable planning approaches of other competitors, his Regulation Plan envisions an even more radical strategy for the overall modernization of the city [FIGURE 04]. He positions Novi Sad as a center of an expanded metropolitan area, with two airports, a port, and new housing towards the Danube. His planning aims to regulate urban and suburban connections, proposes efficient zoning, and directs the suburban sprawl, demonstrating a strong interest in large-scale planning and regional development. Neidhardt will develop these ideas further with Dušan Grabrijan in their urban study for the regulation of Sarajevo published in 1942 in the journal *Tehnički Vjesnik*, under the name "Sarajevo i njegovi trambanti" [Sarajevo and its satellites] (Alić, 2010, p. 96). Compared to his more organic approach presented in

the competition entry, the traffic network of the Regulation Plan follows strict geometric principles, positioning two axes—*cardo* and *decumanus*—as connecting lines with the metropolitan area. This network is superimposed on the existing urban fabric, showcasing the modern urban principles necessary to open the city and prepare it for future growth.

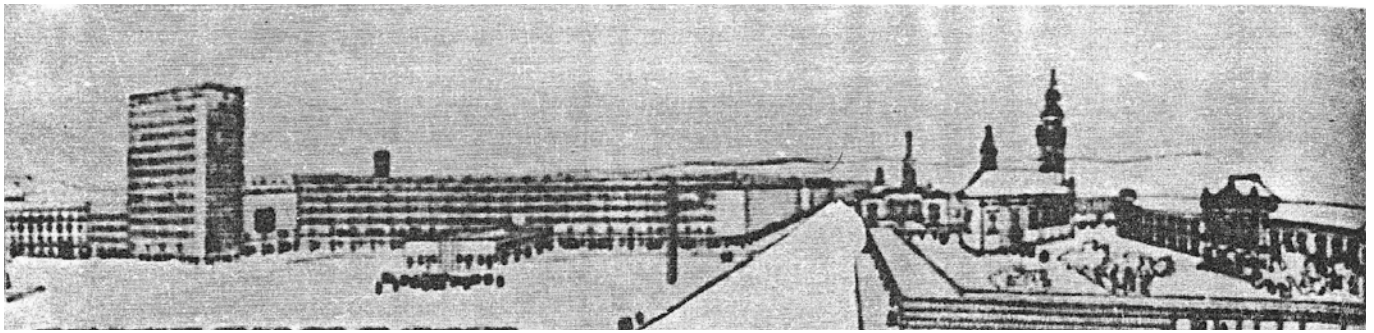
In a short-term exhibition held in the Commerce, Industry, and Trade Chamber in Novi Sad at the beginning of 1939 (Anon, 1939-2), Neidhardt presented his Novi Sad planning and design *oeuvre* and explained his approach to modernizing the city in a public lecture. The lecture focused on the *green city concept* he envisioned for Novi Sad, synthesizing his previous planning practice with experiences of working in Le Corbusier's office on the study for *La Ville Radieuse* (Karlič-Kapetanović, 1990, p. 91). Urban development of Novi Sad on these grounds would become possible if the new buildings, especially housing, were arranged in open urban blocks and with new height regulations. His green city concept seemed to be flexible enough to be applied with no urban sacrifices since it was based on building gradually and considering the existing environment (Mitrović, 2016, p. 27). As a distinctive feature of the plan, he introduced a housing model that would provide flexibility and adaptivity to the city for its growth. The housing model was envisioned with large front gardens owned by the city, offered to tenants for rent (Anon, 1939-1). These gardens offered a twofold solution—the rent was to be directed toward financing the works on communal infrastructure, and, on the other hand, they reserved the space for future urban expansion since the wide street profile provided space for new, unforeseen models of urban development. Architect Daka Popović discussed another potential for introducing this or a similar, modernized traditional housing model (Popović, 1940). Popović addressed two distinctive grounds in the urban

development of the city—the city center, built in line with Balkan settlement urbanization (winding narrow streets), and the periphery, built by Austro-Hungarian regulation principles with the orthogonal street matrix. According to him, the new regulation plan aimed to reconcile these two approaches, which meant introducing the wide, straight streets and boulevards into the city center and communal infrastructure to the periphery. However, to provide grounds for such a radical change, the social and cultural background needed to be set, including preparing the peasants, whom he calls urban gardeners, to become citizens. According to Popović, urban gardeners were crucial in mediating urban way of life among the villagers, thus enabling their eventual assimilation into the city. Their gardens were a new form of urban space, which also serves this socio-economic and cultural transformation of the new urban life (Popović, 1940).

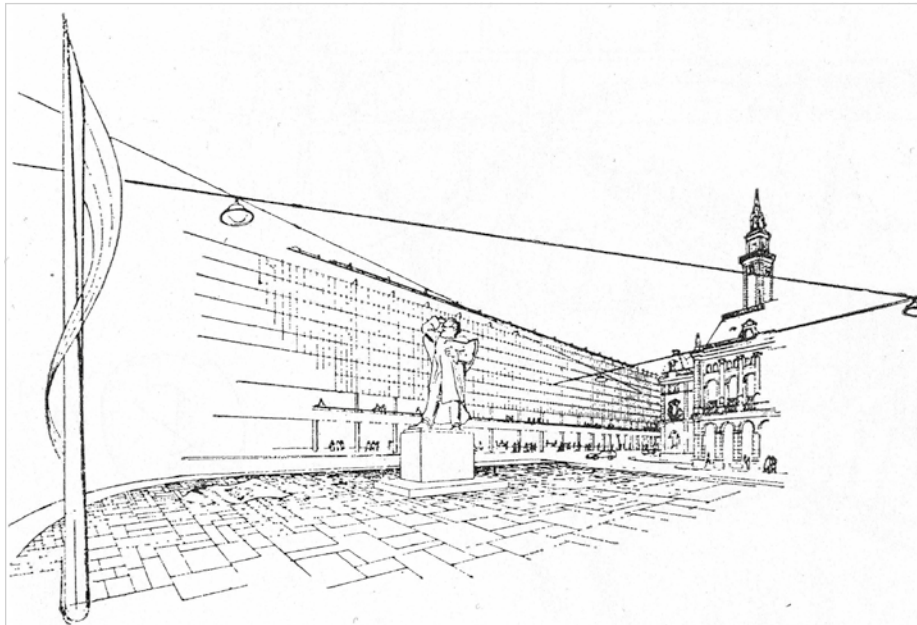
One of the most interesting legacies of Neidhardt's plans for Novi Sad is a series of perspective drawings of the central urban space and its fragments as shown in figures 05-08. The most obvious feature of these drawings is his determination to create an uncompromisingly modernist identity of the city center [FIGURE 05], with new buildings lined up along the old main street that connects the old main square and the new squares he proposed, like the Fish Market Square [FIGURE 06]. Only a selection of old structures, such as church complexes, city halls, and old high schools, were left standing in this vision, while he included none of the old vernacular residential and commercial buildings in these drawings. This approach aligns with the modernist stance on isolating a selection of the most significant historical structures and declaring them as 'monuments' while surrounding them with new structures, which is visible in Neidhardt's perspective drawing of the Main Square [FIGURE 07]. However, the approach Neidhardt demonstrated in dealing with the



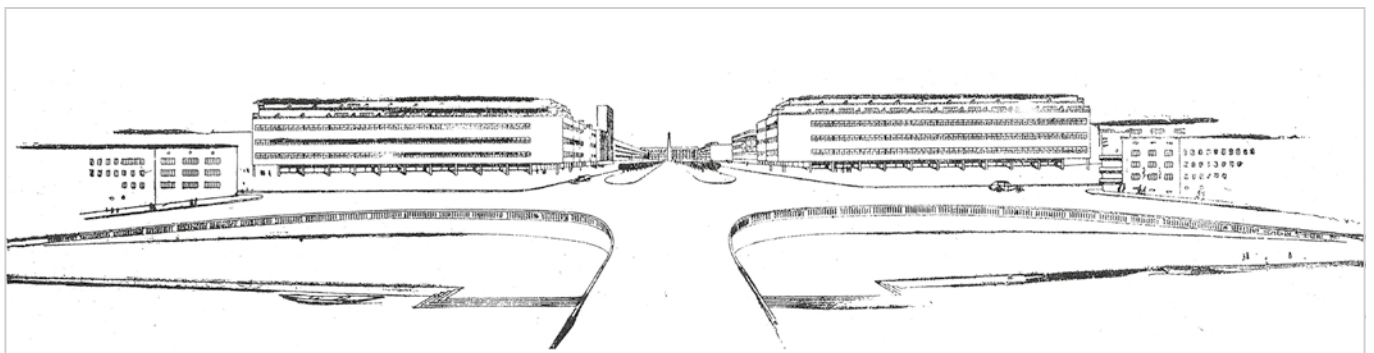
05 Neidhardt's proposal for central squares of Novi Sad, 1938. © Tatjana Neidhardt, 2024. Karlič-Kapetanović, 1990, p. 91.



06 Fish Market Square proposal by Neidhardt, 1939. © Tatjana Neidhardt, 2024. Karlič-Kapetanović, 1990, p. 92.



07 Neidhardt's proposal for the Central Square of Novi Sad, 1938. © Tatjana Neidhardt, 2024. *Arhitektura* journal no. 156-157, Zagreb, 1976, p. 16 (according to Vladimir Mitrović).



08 Perspective view on the city center of Novi Sad from the Petrovaradin bridge. © Tatjana Neidhardt, 2024. *Dan* newspaper, Novi Sad, 25.06.1940, p. 4 (according to Vladimir Mitrović).

historical heritage of Novi Sad in the late 1930s stands in contrast to his post-war reputation as a modernist architect specifically interested in vernacular heritage and the principles that can be extracted from it (as shown in his studies on Bosnian and Macedonian heritage). Perhaps this shows a professional development from initially crude internationalist modernism towards a more mature approach interested in the context. On the other hand, he repeated the approach of keeping only a selection of historical monuments in Sarajevo after World War 2. In any case, his attitude towards heritage and planning legacy was fiercely criticized by local researchers as “the fruit of urban planning delusions of that time” (Mitrović,

2016, p. 27). When it comes to Petrovaradin Fortress, the symbol of the city, Neidhardt does not offer similar graphic elaboration of his plans for it and its lower town, through which he envisioned the arterial ‘international road’. He only depicts the opposite view: the vista from the Petrovaradin bridge towards the new boulevard and the center of Novi Sad [FIGURE 08]. Finally, all of these drawings confirm his stance towards widening the city’s oldest streets and replacing its historical buildings, as implied in his initial competition entry from 1937 and the subsequent Regulation Plan.

Neidhardt completed the plan in 1940 or 1941, and it was unofficially adopted by the city in 1941. But

the outbreak of World War 2 halted its implementation (Mitrović, 2016, p. 28). After the war, immediately in 1945, new socialist state authorities considered but then rejected Neidhardt's pre-war Regulation Plan of Novi Sad. We do not know whether the reasons for this rejection came from the then-perceived radicalism or an inadequacy of the plan. In any case, attempts were made to adapt the plan to new objectives, which was done by Dimitrije Marinković from the Urban Planning Institute of Serbia in 1947. The city authorities of Novi Sad rejected this proposal, and the decision was made to start anew and draft a completely new plan. This plan was finalized by Marinković in 1950, and the city assembly adopted it as the first General Plan of Novi Sad (also known as GUP 1950).

CONCLUSIONS

The international competition for the Regulation Plan for Novi Sad in 1937 ensured the contemporary direction of urban planning and provided a new, modernist vision for Novi Sad. Neidhardt's work contributed significantly to directing Novi Sad's urban planning. His competition entry, the subsequent elaboration of the Regulation Plan, and his design solutions for various urban fragments announced a new paradigm of city planning and the direction of a modernist future for the city. In the early stage of his career, with fresh experience working in the office of Le Corbusier, Neidhardt's search for a professional approach matured in his work in Novi Sad. Strongly influenced by his teacher, Neidhardt was determined to modernize Yugoslav cities and provide their citizens with space, light, and air. In these efforts, the modernization process was rather radical in dealing with the existing urban environment, which was an obstacle to its fulfillment. Thus, his visions for the historical city center reduce the existing urban fabric to the level of a monument, "the pearl of the past," the concept he will apply even more radically in his reconstruction plans for Baščaršija in Sarajevo in years to come.

His approach to housing follows the same paradigm but introduces innovative solutions for the particularity of Novi Sad and the region—a personal interpretation of the modern paradigm and "localization" of the general. This will become more evident in his approach to Ottoman heritage and search for the fusion of modern and traditional in Bosnian architecture. In Novi Sad and Vojvodina, the region's vast space, low density, and character are interpreted in the housing model as a path toward a new green city model. In reviewing Neidhardt's planning contributions, Premerl stresses that this plan is one of the boldest and the most revolutionary complex comprehension and modeling of the cities, solved in general scale

and detail. Furthermore, in this particular plan, the urban thought of the interwar architects was synthesized as a thoughtful form of a time and one generation (Premerl, 1989, p. 108).

Novi Sad developed radically in the decades after WW2, modernizing every aspect of its urban condition. This process was founded on a pioneering vision of the architects and planners who saw the necessity for the radical and often uncompromising breakthrough toward new urbanity. This vision, which led to the development of tools and milestones in mastering the modern planning of Novi Sad, was perhaps ignited by what Neidhardt had introduced in the city a few decades prior.

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ENDNOTES

- 1 Translated into English as either Danube Banovina or Danube Banate.

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