

# Missed Opportunity for a Comparative Analysis. What Do the Budapest and Zagreb Maps of the 4th CIAM Congress Conceal?



Propuštena prilika  
za komparativnu analizu.  
Što skrivaju karte  
Budimpešte i Zagreba na  
4. Međunarodnom kongresu  
moderne arhitekture?

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## SAŽETAK

Četvrti Međunarodni kongres moderne arhitekture (CIAM) u Ateni 1933., na temu „Funkcionalni grad”, predstavio je analize 34 svjetska grada, uključujući Budimpeštu i Zagreb. Ove su analize, međutim, često zanemarivale specifičnosti pojedinih gradova, jer su ujednačeni aspekti i vizualni izgled karata prikriili uvjete u kojima su nastajale. Cilj je ovog istraživanja otkriti dublje značenje tih karata, istražiti probleme koji su bili istaknuti u analizama te razjasniti viziju budućnosti gradova prema suvremenim urbanističkim praksama. Također, istražene su razlike u ulogama arhitekata i urbanista u Hrvatskoj i Mađarskoj, koji su djelovali pod različitim političkim uvjetima nakon raspada Austro-Ugarske Monarhije. Analizirani su ekonomski i politički uvjeti koji su oblikovali urbanizam tih gradova, kao i stavovi gradskih vlasti prema urbanističkom planiranju.

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## ABSTRACT

The CIAM 4 Congress in Athens in 1933 presented analyses of 34 world cities, including Budapest and Zagreb. These two cities belonged to the same empire, where an intense knowledge exchange, mainly from the center to the periphery, could come about until the collapse of the Monarchy. The situation changed in the post-war period when Zagreb first took precedence in introducing the most progressive planning practices. The new regulation plan was based on an international competition in 1930/1931, which implemented the concepts of neighborhood units and linear cities of the Soviet type. Members of the Zagreb Work Group (the Yugoslav section of CIAM) played a decisive role in the design. It means that this group, gathered around Ernest Weissmann, a former collaborator of Le Corbusier, could enforce the methods of modern architecture and planning, unlike the Hungarian CIAM group led by Farkas Molnár, a student of Bauhaus, who were forced to operate on the margins of the conservative architectural scene. Both groups were connected by their committed work in proposing rational housing models to remedy the acute housing crisis and confronting the public with these problems by striking documentary exhibitions. Their social and even collectivist programs provoked a harsh reaction on behalf of the authorities and were disallowed by CIAM leaders, too. The Zagreb regulation plan, however, could remain the base of the post-war development of the city, while the more conservative development program of Budapest would have been redesigned several times.

## KEYWORDS

Budapest, Zagreb, CIAM national groups, CIAM-Ost, Farkas Molnár, Ernest Weissmann, housing documentary exhibitions, urban planning

NOVA ISTRAŽIVANJA | NEW RESEARCH

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Zagreb i Budimpešta pripadali su istom carstvu, Habsburškoj, a kasnije Austro-Ugarskoj Monarhiji, u kojoj se do njezina raspada mogao odvijati intenzivan prijenos znanja, uglavnom iz centra prema periferiji. Posljedično, prolazili su kroz iste urbanističke transformacije, uključujući spajanje općina i uspostavu infrastrukture, dok je stanovanje bilo dominantni urbanističko-arhitektonski i građevinski zadatak. Zagreb, bitno manje površine i broja stanovnika od Budimpešte, koja od početka 19. stoljeća planira izgradnju Pešte ortogonalnom mrežom ulica i blokova višestambenih zgrada, odnosno četiri modela izgradnje (blokovi, otvoreni način, stambeni nizovi, mješovita stambeno-industrijska zona), sa zakašnjenjem primjenjuje isti model izgradnje grada (1865.). U Zagrebu je kroz osnovu iz 1887. i nacrt grada iz 1923. dodatno razvijen sustav zoniranja — prema namjeni, ali i prema društvenom statusu. Urbanistička regulacija bila je neujednačena u oba grada, a regulatorne osnove usvojenim modelom i obuhvatom nisu pravodobno osigurale preduvjete za regulirani, planirani razvoj.

Situacija se promijenila u poslijeratnom razdoblju, kada je Zagreb, nakon što se promaknuo u drugi najveći grad Kraljevine Srba, Hrvata i Slovenaca, vodeće trgovačko, bankarsko i industrijsko središte, prvi preuzeo vodstvo u uvodjenju najnaprednijih urbanističkih praksi. Novi regulatorni plan implementirao je koncepte jedinice susjedstva, linearnog grada sovjetskog tipa i višestambenih lamela, odnosno osnovne postulate funkcionalnoga grada, uključujući velike zelene javne površine. Osnova plana bio je rad njemačkih planera nagrađen na međunarodnom natječaju za regulatornu osnovu 1930./1931. Članovi Radne grupe Zagreb (grupe CIAM-a za Jugoslaviju) odigrali su ključnu ulogu u njegovu oblikovanju. Ova je grupa, okupljena oko Ernesta Weissmanna, bivšeg suradnika Le Corbusiera, mogla provoditi metode moderne arhitekture i urbanizma, za razliku od mađarske CIAM-ove grupe, koju je predvodio Farkas Molnár, student Bauhausa, a koja je bila prisiljena djelovati na marginama konzervativne arhitektonske scene međuratne Budimpešte.

Obje su grupe bile povezane predanim radom na predlaganju racionalnih stambenih modela kako bi se ublažila akutna stambena kriza te su, neovisno jedna o drugoj, suočavale javnost s tim problemima putem upečatljivih dokumentarnih izložaba održanih u proljeće 1932. u Budimpešti, a ujesen iste godine u Zagrebu. Njihovi socijalni programi, prepoznavanje arhitekture i gradogradnje kao alata društvene mijene, izazvali su oštru reakciju lokalnih vlasti, a odbacili su ih i sami čelnici CIAM-a. Dok su zagrebački arhitekti uspjeli predstaviti napredne ideje na CIAM-ovu atenskom kongresu, mađarskim su kolegama oduzete putovnice. U rad kongresa uključili su se ponovno tek 1937. na Petom kongresu CIAM-a u Parizu i aktiviranjem istočne — regionalne grupe CIAM-Ost.

Iako su se oba grada suočila s problemima stanovanja, siromaštva i političkih prepreka, usporedna analiza urbanističkih praksi u Budimpešti i Zagrebu u drugoj polovici 19. i početkom 20. stoljeća pokazuje sličan napredak u implementaciji suvremenih urbanističkih ideja. U Zagrebu su gradske vlasti nastavile slijediti europske urbanističke trendove, dok je Budimpešta, zbog konzervativnih političkih vlasti, imala otežan pristup sličnim inicijativama. Na kongresima CIAM-a oba su grada predstavila svoje vizije urbanizma, pri čemu je Zagreb uspio ostvariti napredak u implementaciji svojih planova, dok je Budimpešta zbog političkih prepreka bila manje uspješna.

#### KLJUČNE RIJEČI

Budimpešta, Zagreb, nacionalne grupe CIAM-a, CIAM-Ost, Farkas Molnár, Ernest Weissmann, stambene dokumentarne izložbe, urbanizam

## INTRODUCTION

It is widely known that the subject of the famous Athens Congress of CIAM in 1933 was the Functional City, and national groups were invited to prepare the analysis of a selected city of their country. The participants of the Congress discussed the issues of modern urbanism based on 34 city maps that were first surveyed in the book *Atlas of the Functional City. CIAM 4 and Comparative Urban Analysis* published in 2014.<sup>1</sup> The essays of this book prove that not only focusing on the functions of a city was problematic but also the comparative method in itself. The prescribed aspects of the analysis and the unified visual appearance of the maps faded the specificity of the examined cities and, moreover, concealed the differences in and conditions for making this work. The Congress failed to compare the analyses, and although the book made such a comparison possible by lining up the case studies, this opportunity has not yet been exploited. Naturally, cities like Detroit, Bandung, Paris, Berlin, and Barcelona differ in their histories, topography, economic and industrial conditions. Still, it is not evident that cities of the same region, like Budapest and Zagreb, took such a different course in their urban development in the 1930s. So much more than the city analysis was prepared in Budapest and Zagreb similarly by the most progressive squad of modern architects, the Hungarian and Yugoslav national CIAM groups.

The aim of this study is thus to reveal what lies behind the carefully prepared analytical maps. What did these cities, diverse in size and position, have in common with the status report of the working groups? Where did they localize the gravest problems? What was their vision of the future of these cities, and to what extent were they able to realize it? And if their role was significantly different in this process, as had been the case, what was the reason for that? To understand this situation, we need to investigate the conditions in which the architects and planners had to work in Croatia (as a part of the new Kingdom of SCS/Yugoslavia) and Hungary after the dissolution of the Austro-Hungarian Monarchy. It is necessary to disclose how economic and political circumstances affected the development of cities and what kind of attitude municipal administration had towards the professions of architects and urban planners and planning models in general, as well as local CIAM groups in particular. Though the determining period for this story lasts from the late 1920s to the end of the 1930s, it is essential to consider both the prehistory of Budapest's and Zagreb's development as well as their post-war fate.

#### EARLIER URBAN DEVELOPMENT OF BUDAPEST AND ZAGREB

For a long time, these two cities belonged to the same empire, the Habsburg Empire and later Austro-Hungarian Monarchy, yet their size and role remarkably differed. Budapest was the capital of the Kingdom of Hungary, the largest part of the Empire. At the same time, Zagreb served as the administrative center of the significantly smaller Kingdom of

<sup>1</sup> Ferkai, Hungary. City Analysis; Bjažić Klarin, “Yugoslavia. Home and Life.”

Croatia-Slavonia. The population of Pest-Buda was nearly ten times larger in 1850 (143.289) than that of Zagreb (15.385). Both cities were established through amalgamating three towns or municipalities, with Zagreb undergoing this process in 1850<sup>2</sup> and Budapest in 1873.<sup>3</sup> Their growth began to accelerate after the absolutism of Minister of the Interior Bach, which — despite its overt despotic character — contributed to the development of a bourgeois society. The “Golden Age” of liberalism started with the Austro-Hungarian Compromise for Hungary in 1867 and with the Croatian-Hungarian Settlement for Croatia-Slavonia in 1868.<sup>4</sup> These deals helped the transition from feudalism to a new liberal civil society, and the ensuing recovery of trade and industry led to the rapid urbanization of the main cities. In the last three decades of the 19th century, the population of Zagreb increased by 182.8% and Budapest’s by 164.7%.<sup>5</sup> This growth was due partly to the ratio of the birth rate but mostly to the massive migration from the countryside provoked by the industry settled in the capital cities. The unification of the former towns, as well as the extension of the city core, necessitated the regulation of the area to establish a new structure of streets and city blocks with squares and parks, but also a system of essential infrastructure (railways, public transport, water supply, sewerage, gas, and later electricity). The prime issue was housing, namely the residential building types meant for various social strata. Finally, an important momentum for developing Zagreb and Budapest into spectacular capital cities of the dual monarchy was national pride. In the case of Budapest, the rivalry with Vienna or a side glance at Paris explains the ambitious plans of a nascent metropolis. For Zagreb, the reconstruction after the 1880 earthquake and resistance against the increasing potency of Hungarian governance in Croatia, that of the Ban of the Kingdom of Croatia, Slavonia, and Dalmatia from 1883 to 1903, the Hungarian Károly Khuen-Héderváry, made the construction of the capital city a question of national dignity. To picture how different the scale of these reconstruction works was, suffice it to say that Zagreb covered an area of 33.27 sq km and Budapest roughly 200 sq km (20.000 ha)<sup>6</sup> in 1896, with a population of 57.930<sup>7</sup> and 733.358<sup>8</sup> in 1900 respectively.

The regulation of city development by urban plans and building codes went unevenly in the two capital cities from the 1860s until the 1940s. fate.

## BUDAPEST

The first extension plan for Pest dates from 1805, when a grid system was introduced to the new Leopold Town north of the old city. The tragic flooding of the city by the Danube in 1838 enforced a new Building Code. The control of an Embellishment Committee resulted in a highly unified and harmonious cityscape in the center, whereas the outskirts developed haphazardly. No further step was taken until Prime Minister Andrassy raised in 1868 his favorite idea of establishing the united capital city of Budapest as a metropolis.

Andrassy began to promote this idea following the compromise of 1867. He submitted to the parliament the bills of expropriation law, credit, infrastructural works, etc., and proposed a new institution, Fővárosi Közmunkák Tanácsa (FKT, Municipal Council of Public Works). It was responsible for implementing the unification, planning, and regulating tasks together with financing the necessary public works. A dual system was the outcome, with the united municipal council and a superior body largely affected by the government. It necessarily provoked a conflict between the two levels. After completing its task, FKT should have been abolished and given the authority back to the city administration. This did not occur until 1948.

In 1871, FKT announced an international competition for the regulation and embellishment of the new capital city. The program prescribed the unification of the street network, the construction of new bridges, water, sewage and gas systems, railway connections, building up the river banks, and the disposition of main public buildings. It also demanded proposals for the metropolitan character and the cityscape. A grand avenue leading from the center to the City Park and a system of circular boulevards were previously decided upon. Ten entries arrived, and the jury awarded three of them. The first prize was given to Lajos Lechner, chief engineer of the Ministry of Public Works and Traffic, and the second to Frigyes Feszl, a gifted architect. Their work represents two extreme answers to the contradictory program: considering the given conditions and accepting the already-resolved elements or working out a new and perspective concept independently of the constraints. Lechner chose the first way, Feszl the second. No wonder that the winner would be later accused of being “prosaic and without any concept,” a work “made with bureaucratic care and avoiding any uncomfortable new ideas” and best to “fit into the available credit limit.”<sup>9</sup> Lechner believed, and it is shocking to read his opinion nowadays, that “broad streets are harmful,” and that “it would be a mistake to waste the territory of valuable building plots to wide streets and large squares.”<sup>10</sup>

The final regulation plan for the Pest side was prepared by Lechner in 1872, and that for the Buda side was ready by 1878. Lechner directed the construction of the Radial Avenue until 1873 and later some infrastructural investments of the capital city. FKT prepared a temporary building code in 1873, which was modified according to the remarks of the Municipality in 1886 and approved only in 1894. This delay certainly was not an accident since, during these two decades, liberal capitalism built metropolitan Budapest, and the massive construction of speculatively built rented apartment houses proved to be highly profitable.

The Building Code of 1894 divided the city’s territory into four zones (the first two developed in unbroken rows of buildings, the third zone with free-standing summer houses, and the fourth, as a mixed zone that was meant both for housing and industry). The height of buildings was set in proportion to the

<sup>2</sup>

Zagreb was born by the unification of the free royal city of Gradec with the municipalities of Kaptol, Nova Ves, Vlaška, and Horvati.

<sup>3</sup>

Buda-Pest, the new capital city of Hungary was formed by the unification of the coronation city Buda with the free royal cities of Óbuda, and Pest.

<sup>4</sup>

On the *Settlement* see more in: Šokčević, *Hrvati u očima Mađara; Ostajmer, Stoljeće iskušenja*, 64–66.

<sup>5</sup>

Beluszky, “Századforduló – sorsforduló?” 7–33.

<sup>6</sup>

At that time, Budapest was the second city after London in terms of the size of their area. Great Vienna, Paris, and Berlin were smaller, yet they all had far greater populations. Palóczi, “Budapest lakásügyéről III,” 168.

<sup>7</sup>

(anonym), “Zágráb népessége,” 6.

<sup>8</sup>

Thirring: *Budapest főváros demográfiai és társadalmi tagozódásának fejlődése az utolsó 50 évben*, 60.

<sup>9</sup>

Padányi Gulyás, “Budapest városrendezése,” 316–326.

<sup>10</sup>

Siklóssy, *Hogyan épült Budapest*, 121.

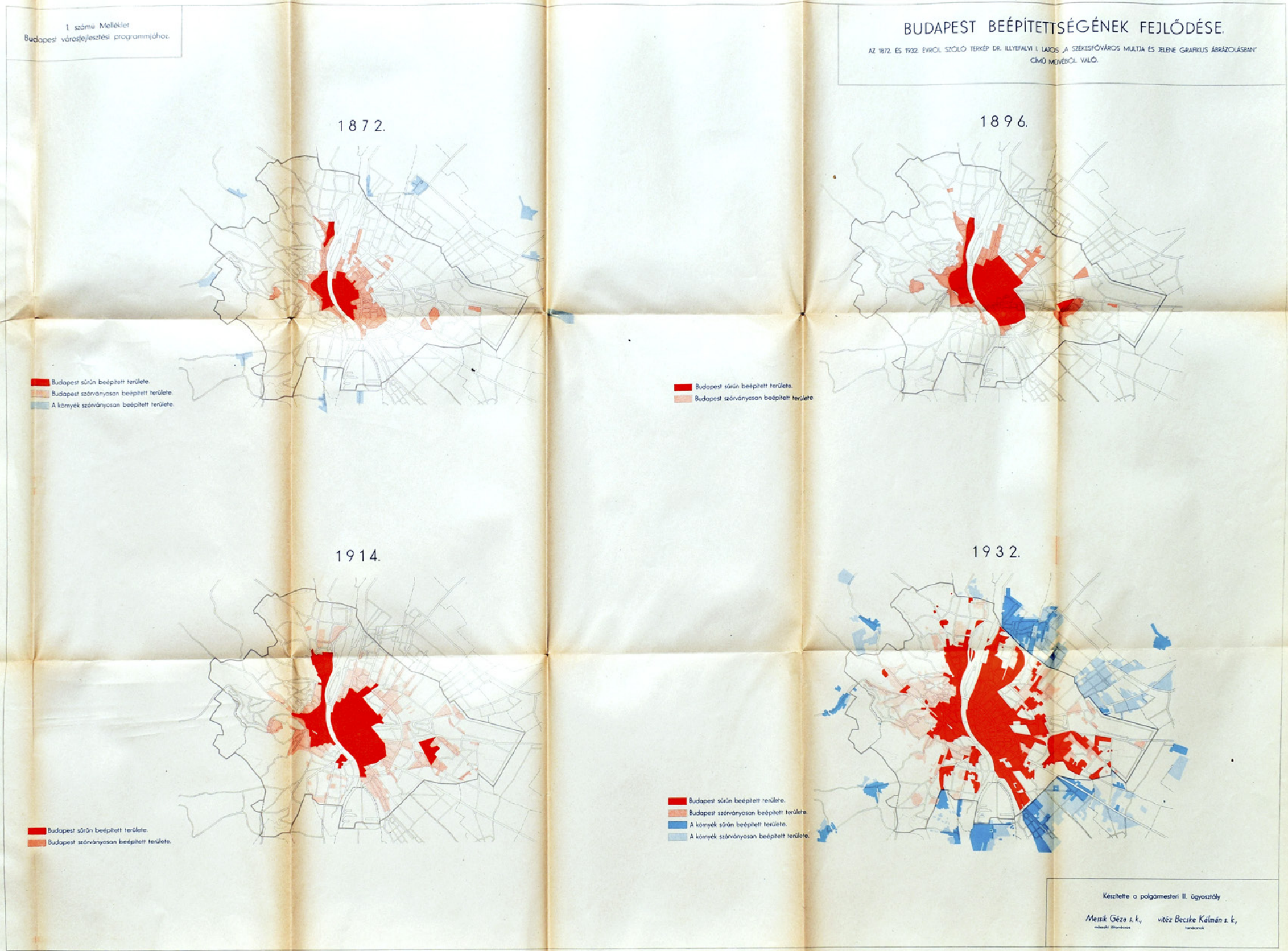


Fig. / Sl. 1 Development of the built-up density of Budapest between 1872 and 1932. *Urban Development Program of Budapest, 1940. Supplement No. 1. / Razvoj gustoće izgrađenosti Budimpešte između 1872. i 1932. Program urbanog razvoja Budimpešte, 1940. Dodatak br. 1.*

width of the street. The minimum size of parcels was rather large, and the maximum building coverage of the plot was very high (80–85%), allowing extreme exploitation of the site in every zone but the third one. The system of large apartment blocks, together with the meager provision of public spaces and green areas, made Budapest one of the unhealthiest cities in Europe. Some contemporaries reproached that most zones were unrelated to urban functions, and the fourth zone — a huge reserve area of the city — could be built up as intensively as the first two zones. It was ill-provided with infrastructure, yet sporadically built rented apartment blocks could push up land prices, and there had been massive pressure on authorities by landlords to supply the deficiency. This area thus became the hotbed of speculation (Fig. 1).

In Budapest, architects familiar with urban issues<sup>11</sup> demanded time and again a long-term development concept that would become the base of a new regulation plan. Against city planning according to artistic principles, they emphasized the aspects of hygiene, housing, and social care. These positions were taken seriously by the municipal authorities no sooner than 1906 when the liberal-democratic politician István Bárczy became mayor with a social-democratic program. He launched a large-scale school-building and social housing program and employed excellent experts such as lawyer Ferenc Harrer and social politician Imre Ferenczi. They believed that urban planning should not be subject to socio-economic forces; on the contrary, its task was to impact them through conscious planning. They were the first to address the problems of the capital city in the context of urban agglomeration. The most competent urban planner, László Wurga, worked in those days for the Town Planning Department. Among others, he prepared a detailed regulation plan for the Lágymányos district in 1913, which first prescribed using the perimeter city block system. The Building Code of 1914 slightly improved the 1894 one by multiplying the number of zones from four to eight, differentiating more sensitively their character, and diminishing the height of building from the center to the periphery. Unfortunately, the Great War and the following historic events overrode the effect of this document. The Building Code of 1926 was a re-edition of the previous one with minor modifications. In 1921 and then in 1926, temporary edicts tried to alleviate the too-strict building regulations to stimulate the stagnant building activity. Another general regulation plan commensurable to the entries of the 1871 competition or a master plan would not be prepared during the inter-war period.

## ZAGREB

Contrary to Pest, the new city of Zagreb began to expand in the southern direction from the slopes of the Zagreb Mountain (Medvednica) to the lowlands of the Sava River overlooked by the medieval twin cities, Gradec and Kaptol. The Lower Town on the Plain was given an orthogonal grid of streets and city blocks by the 1857 Building Code and visualized by the first 1865 regulation plan. The only change

between the two was the newly built railway line that blocked the south direction ideal for the city's extension.<sup>12</sup> However, the plan served as the foundation for the construction of the city's water supply system thanks to the 1876 Law on Expropriation of Real Estate in the City of Zagreb.<sup>13</sup>

As a supplement to the earlier Building Code, a new development plan was prepared in 1887, seven years after the massive earthquake in 1880, with the support of provincial government engineers and the Zagreb-based Society of Engineers and Architects founded in 1878 with the mission to contribute to the modernization of the homeland.<sup>14</sup> This plan managed to countervail the practical infrastructural and functional approach in planning with a view that regarded the city as a noble and high-quality urban and architectural space for everyday living. It divided the city area into three east-west zones. The upper part on the slopes of the Medvednica mountain served as a villa district for the elite. The central part was the Lower Town, with a minimum of two-floor-high blocks, defined as the business and trade center of the city as well as a residential zone for the middle classes. The lower part between the railway line and the Sava River, a floodplain periphery separated from the city, was designated a mixed zone for the working class and industry. That sort of functional organization created a distinct social topography of the city.

The Lower Town was embellished and made healthier by a sequence of city parks and squares labeled the "Green Horseshoe" according to its U-shape. It resulted from the common effort of engineers who worked for the city Building Department, Rupert Melkus and Milan Lenuci. The Green Horseshoe was inspired by the tenets of Josef Stübgen and obviously by the Ringstrasse in Vienna, which gathered the supreme public buildings of the capital city as did Zagreb, with the most notable scientific, educational, and cultural institutions along the Green Horseshoe such as the Croatian Academy of Sciences and Arts (HAZU), the Art Pavilion, and the National Theatre.

The 1887 Zagreb city plan already anticipated the need for zoning regulations prescribed by a new Building Code for cities in the Kingdom of Croatia-Slavonia in 1895. The most important innovation was the ordainment "to divide the urban area into several parts according to the different purposes and uses of the city," a measure that most Hungarian experts claimed for Budapest but was not taken by the authorities during the following three decades.<sup>15</sup> Furthermore, next year, the built-up part of the city block's plot was reduced to a maximum of 75%.<sup>16</sup> A committee of the Zagreb-based Society of Engineers and Architects discussed the issue of regulation and agreed to base it on modern hygiene and technological principles yet the acknowledged changes to the 1894 Building Code were minor.<sup>17</sup>

At the beginning of the 20th century, significant changes occurred in Zagreb. The annexation of neighbouring municipalities in 1900 increased its area from 33.27 sq km to 64.38

11

E.g. Béla Ney, Antal Palóczy.

12

The railway line connected Zagreb with Vienna via Zidani most in 1862.

13

Smrekar, "Zakon o izvlstbi nekretnina," 58o.

14

The plan established a framework for the introduction of the sewerage system. Both parties played a significant role in the planning of Zagreb, especially since the Zagreb Polytechnic School was opened in 1919.

(Knežević, "Urbanističke osnove," 21–39).

15

Smrekar, "Gradjevni red za gradove," 526.

16

Smrekar, "Gradjevni red za gradove," 551.

17

(anonym), "Njekoje pripomene k osnovi," 51–54; (anonym), "Izvještaj pododbora," 65.

sq km and its population from 38,742 in 1890 to 57,930 in 1900 and to 109,029 in 1910.<sup>18</sup> The provincial government encouraged Zagreb municipal authorities to introduce the regulation plan to facilitate city development towards the south direction, a natural extension of the city, blocked by the railway line. The Society's members who were familiar with the new discipline of town planning abroad voted for a long-term Zagreb regulation plan and an interdisciplinary approach. Still, municipal authorities preferred preparing partial plans for smaller city areas.<sup>19</sup> When the Lower Town's expansion reached the railway line, the Building Department decided to plan an extension in the east direction. The head of the Department, Milan Lenuci, prepared a sketch for a *Sajmište*—a small area between Drašković and Klaonička (today Bauer Street) in 1905, introducing diagonal street axes. In 1907, it was also Lenuci who offered a solution to the most serious deficiency of the city, the railway line. In the new regulation plan, Lenuci abandoned the strict orthogonal scheme of the former regulation in favour of a more organic street network with an east-west parade avenue that ran slightly curved from the center of the *Sajmište* to the major city park Maksimir. He suggested relocating the railway loop to the south of the Sava River and converting the Central and Western Stations into terminal stations by removing the railway link between them.<sup>20</sup> The Ministry of War did not allow these changes and postponed the problem. The 1923 plan thus envisaged the extension of the city in the east-west direction and left the south part untouched since this area lacked a water supply and sewerage system (Fig. 2).

AFTER  
WORLD WAR I

The dissolution of the Austro-Hungarian Empire brought fairly diverse conditions for Budapest and Zagreb. Hungary eventually gained its national independence but lost two-thirds of its former territory as a consequence of the Peace Treaty in Trianon. Overcoming the resulting economic, financial, and political difficulties was not easy. The liberal era was over, and after the 1918 revolution and the short-lived Council Republic in 1919, a highly conservative right-wing regime ruled the 1920s. Until the mid-1920s, the city government of Budapest was also led by nationalist Christian parties. This period was marked mostly by the construction of new churches and ecclesiastic institutions.

After secession from the Monarchy, Croatia could form a new state with her fellow South Slav nations, the Kingdom of Serbs, Croats, and Slovenes, in 1918. Since the kingdom was ruled by the Serb royal family, the constituent nations were far from being equal. However, Zagreb became the second-largest city of the kingdom after Belgrade, the new capital city. It was the most important industrial, commercial, and banking center of the country. Thanks to the architect and building contractor Vjekoslav Heinzl, who acted as the mayor of the city between 1920 and 1928, Zagreb could develop into a modern city with new, the most up-to-date municipal



Fig. / Sl. 2 Zagreb Lower Town and the new East City area in 1923. (NSK-000237071 · X-H-J-30). / Zagrebački Donji grad i novo područje Istočnog grada 1923. (NSK-000237071 · X-H-J-30).

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18  
CH, "Razvitak glavnoga zemaljskoga grada," 88.  
19  
(anonym), "Osnova za regulaciju istočnoga diela (...) Zagreba," 34–37.  
20  
Knežević, "Regulatorna osnova Milana Lenucija," 169–197.  
21  
Bierbauer, "Magánépítkezés és városfejlesztés Budapesten," 73–80.  
22  
Čapo, "Odnos zagrebačke gradske vlasti," 53–80.  
23  
Congrès Internationaux d'Architecture Moderne, founded in 1928 at their first meeting in La Sarraz, Switzerland.

THE CONTEXT  
OF THE ANALYTICAL MAPS  
IN 1932–1933

facilities, health care, and educational institutions. The housing shortage, however, was a common problem for both Budapest and Zagreb. During and after the Great War, a common symptom was the sudden growth of the population in the capital cities. Although the pace of growth in Budapest already declined before the war, it remained at 3.4% afterwards, and housing conditions were going from bad to worse because of the crowds that fled from the annexed territories. The scarce emergency housing financed by the state, and to a lesser extent by the Municipality, did not solve the problem. The shortage of affordable housing has driven low-income people from the unhealthy inner-city flats to the liberally regulated outskirts of Budapest or even further to the settlements of the agglomeration, where land prices were a good deal cheaper. From 1910 to 1927, 5891 small-family houses were built in the former fourth zone on a territory of 6.5 sq km chaotically as the realtors divided large estates into small parcels here and there.<sup>21</sup> Supplementing the missing streets and infrastructure was later a huge burden to the budget of the Municipality. This way of extensive development indicated the urgent need for new regulations (Fig. 3).

A similar tendency defined the development of Zagreb in the 1920s when a large-scale migration from the rural surroundings, northern and southern Croatia, and Istria annexed to Italy began to imperil the city. Most of the newly arrived found employment in the city or the industrial zone outside, yet their modest income did not allow them to rent or build in the middle-class milieu of the upper two zones. They built small family houses at the periphery on lots bought or mostly rented by them. The most popular area for these illegal settlements was the frequently flooded south area between the railways and the Sava River, especially in Trešnjevka and Trnje (Fig. 4). Nearly 5,000 buildings were erected there without construction permission and any infrastructure. The coexistence of the in-moving people and the old citizens was not trouble-free. The city government had no means and especially funds for solving this problem; therefore, they ignored that drear territory and carried out expulsions of newcomers.<sup>22</sup> Mayor Heinzl even considered two separate plans for the southern and northern parts of the city. The southern zone, however, remained without any regulation until the late 1920s, when the future extension of Zagreb was brought on the agenda.

The post-World War I tasks of the architects' profession were formulated most radically by the international organization of modern architects called CIAM.<sup>23</sup> The founding architects intended to draw attention to the necessity of a rational and economical way of designing and constructing buildings and cities to comply with the mass needs and scarce facilities of the age. Their second congress in 1929 focused on the housing of the minimum-income people, the third in 1930 on

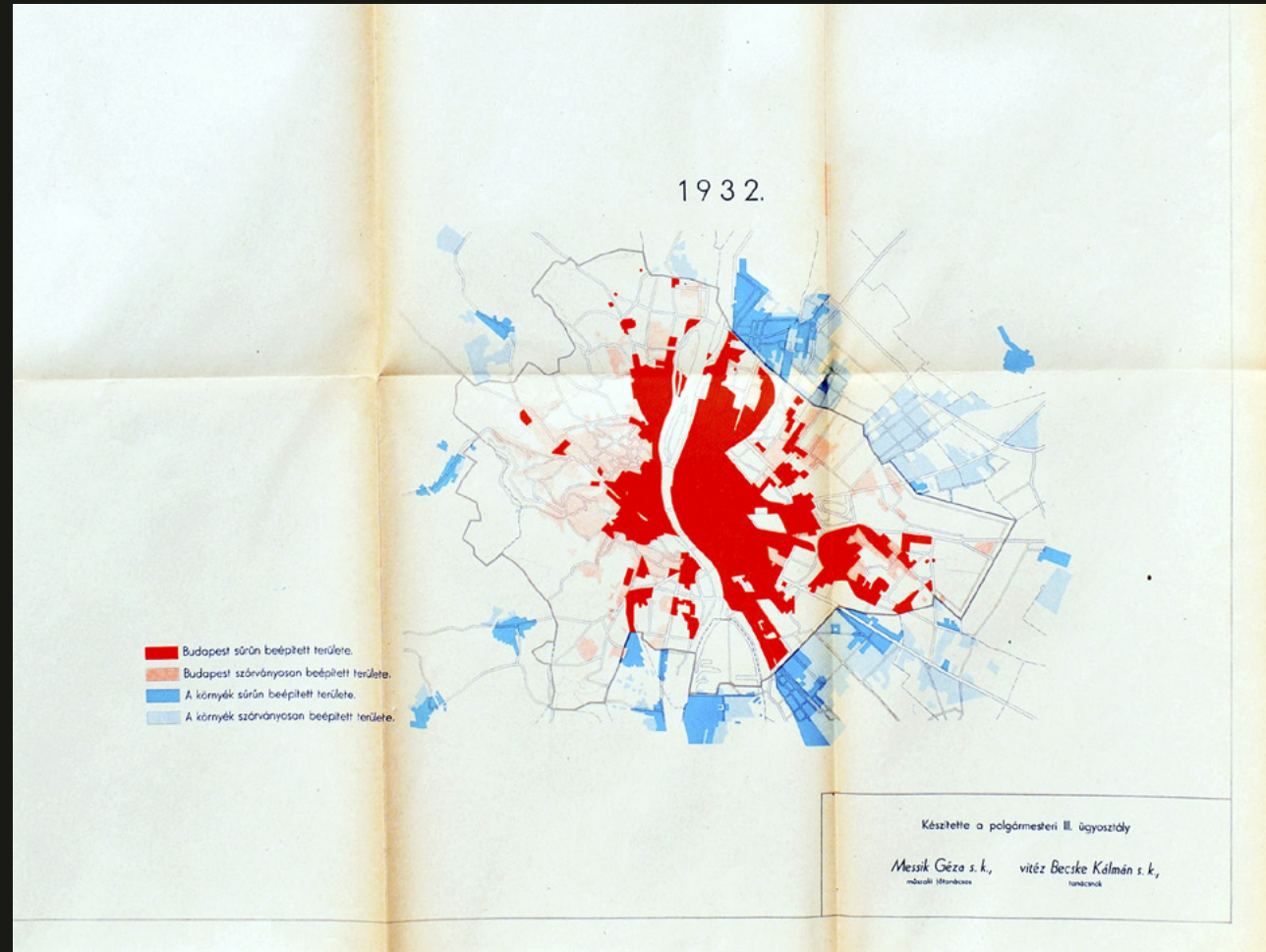


Fig. / Sl. 3 The built-up density of Budapest in 1932. *Urban Development Program of Budapest, 1940. Supplement No. 1. / Gustoća izgrađenosti Budimpešte 1932. Program urbanog razvoja Budimpešte, 1940. Dodatak br. 1.*

↑

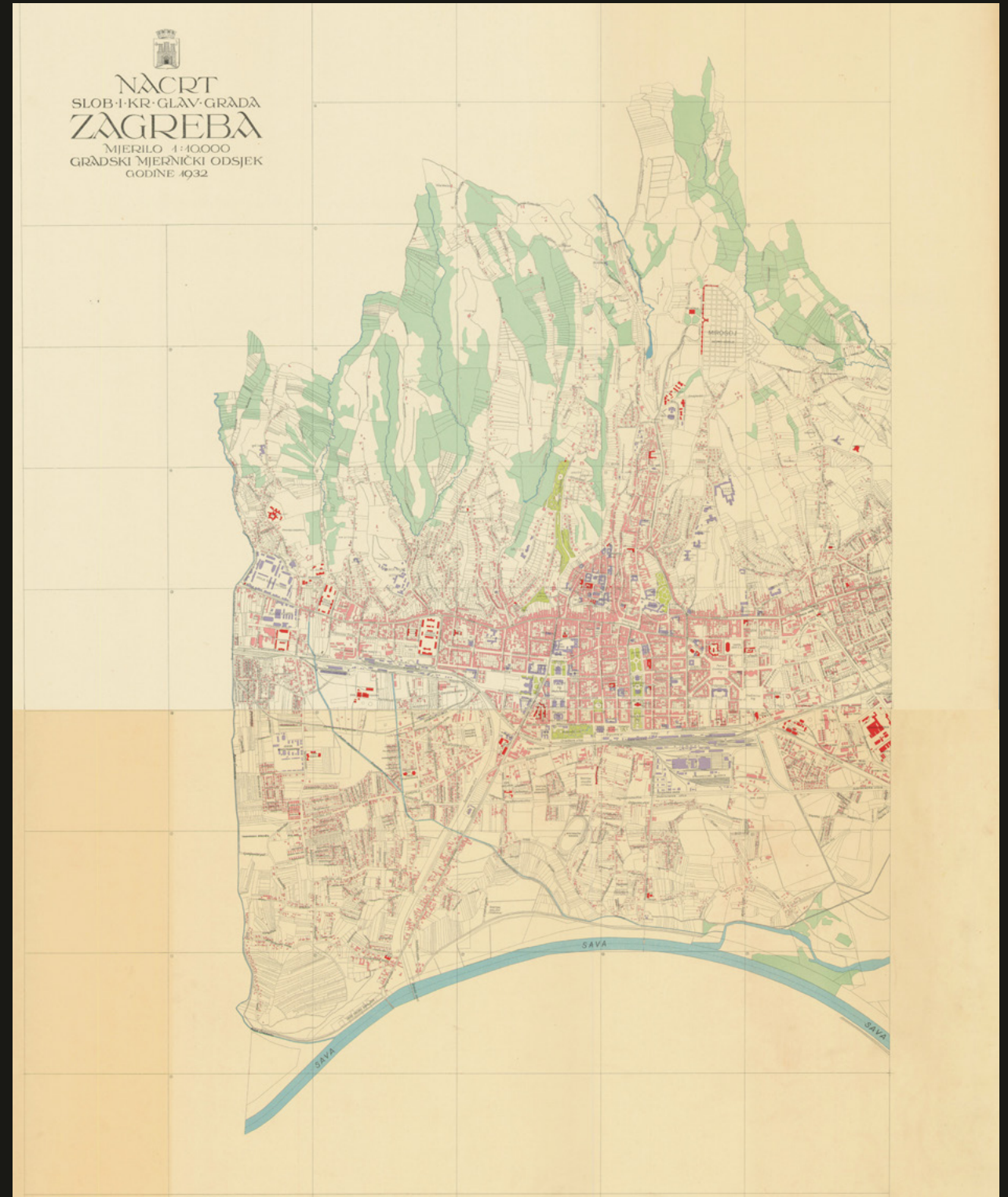


Fig. / Sl. 4 Zagreb Lower Town and the new East part in 1932 / Zagrebački Donji grad i novi istočni dio grada 1932.

↑

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rational land development, and the next in 1933 on the functional city. The second congress in Frankfurt was attended by some young architects from East-Central Europe, including the Zagreb-based architect Ernest Weissmann (1903–1985), who was officially appointed delegate of Yugoslavia the next year,<sup>24</sup> the Hungarian Farkas Molnár (1897–1945),<sup>25</sup> and György Masirevich (1905–1989),<sup>26</sup> who became the first and second delegate of the Hungarian working group in Frankfurt. The tandem took part in the Brussels congress on behalf of the Hungarian group.<sup>27</sup> In contrast, Weissmann only formed the Yugoslav national group of CIAM in 1932 after being invited to work in the getting up of the fourth congress in Athens.<sup>28</sup> The members recruited from the Zagreb Work Group (RGZ)<sup>29</sup> were devotees of modern architecture. Molnár was a student of the Weimar Bauhaus and a pupil of Walter Gropius, whereas Weissmann worked for Le Corbusier between 1927 and 1930. They thus represented the most contemporary ideas about new architecture when they returned home (Molnár in 1925 and Weissmann in 1930), and maintained their international network even when establishing a local practice. It was not easy for them to persuade the general public, the clients, and the conservative part of the profession of the validity of new ideas and forms. Molnár and his friends could not dream of larger projects than small family or apartment houses at the time. Their fellows in Croatia could at least parade their unconventional designs in open competitions for public buildings during the lively building policy of Mayor Stjepan Srkulj (1928–1932).

It took some time for Weissmann to distance himself from Le Corbusier's formal approach to modern architecture and embrace the values of the left-wing movement best represented by the Swiss ABC Group with Mart Stam, Hannes Meyer, and Hans Schmidt.<sup>30</sup> Molnár, as a pupil of Gropius, was hostile to Le Corbusier's attitude, and some among the first members of the Hungarian CIAM group maintained close contacts with the same circles. Tibor Weiner had a post-graduate course at the Dessau Bauhaus under Hannes Meyer, and Pál Forgó, who visited the Bauhaus at the same time, planned to issue a journal entitled 'New ABC' in 1928. Forgó and József Fischer, later the second delegate of the group, published regularly in the journal 'Munka' (Work) of Lajos Kassák, the socialist leader of the Hungarian artistic avant-garde, and also in the newspaper of the Social Democratic Party. When attending the second CIAM congress organized by the left wing, Molnár no doubt participated in the tour of *Neues Frankfurt* under the guidance of Ernst May, a decisive event for Weissmann too. In the summer of 1931, several Hungarians traveled to Berlin to see the *Deutsche Bauausstellung* and participate in the Extraordinary Congress of CIAM where they witnessed the controversy between the leftist German-Czech delegates and the apolitical leaders of the organization regarding the competence of the architect.<sup>31</sup> Another impetus was the lecture of Ernst May about his planning experiences gained in the Soviet Union likewise the counter-exhibition *Proletarische Bauausstellung* organized by the *Kollektiv für sozialistisches Bauen* under the guidance of Arthur Korn.<sup>32</sup> The Berlin *Proletarische*



Fig. / Sl. 5 Budapest, the city without parks. Poster of the demonstrative exhibition of the Hungarian CIAM group in March 1932. *Tér és Forma* 8, no 1. (1935): 6. / Budimpešta, grad bez parkova. Plakat demonstrativne izložbe Mađarske grupe u sklopu CIAM-a u ožujku 1932. *Tér és Forma* 8, br. 1. (1935): 6.



Fig. / Sl. 7 The garden suburb Rákoss: individual construction or row houses? Poster of the demonstrative exhibition of the Hungarian CIAM group in March 1932. *Tér és Forma* 8, no 1. (1935): 8. / Vrtno predgrađe Rákoss: individualna gradnja ili kuće u nizu? Plakat demonstrativne izložbe Mađarske grupe u sklopu CIAM-a u ožujku 1932. *Tér és Forma* 8, br. 1. (1935): 8.



Fig. / Sl. 8 Study "House and Life" at the Fourth Exhibition of the Association of Artists Zemlja in Zagreb in 1932. (Čepulić, *Naša nastojanja u borbi protiv tuberkuloze*, 68–69). / Studija „Kuća i život” na 4. izložbi Udruženja umjetnika Zemlja u Zagrebu 1932. (Čepulić, *Naša nastojanja u borbi protiv tuberkuloze*, 68–69).



Fig. / Sl. 6 Chaotic housing in the Rákoss area of Budapest. Poster prepared for the demonstrative exhibition of the Hungarian CIAM group in March 1932. (HUN REN Művészettörténeti Kutatóintézet Adattár. MDK-C-I-16/1219.1). / Kaotično stanovanje u četvrti Rákoss u Budimpešti. Plakat pripremljen za demonstrativnu izložbu Mađarske grupe u sklopu CIAM-a u ožujku 1932. (HUN REN Művészettörténeti Kutatóintézet Adattár. MDK-C-I-16/1219.1).

↑

24

Bjažić Klarin, *Ernest Weissmann*.

25

Molnár worked as an independent architect in Budapest from 1925 until he was killed in a bombing raid. (Ferkai, *Molnár Farkas*).

26

Masirevich earned his degree from the Technical University of Budapest in 1929. He worked for the Council of Public Works (1929–1931) and, alongside Péter Kaffka, contributed to Budapest's first experimental small-housing estate on Napraforgó Street. Before establishing his own practice in 1935, he worked as a consultant for construction firms. Active in urban planning, he emigrated in 1948 and settled in the USA the following year.

27

The group included at that time József Fischer, József Körner, Pál Ligeti, György Masirevich, Farkas Molnár, József Molnár, Gábor Preisich, György Rácz, Zoltán Révész.

28

Weissmann attempted to establish the group in 1929 but without success.

29

The RGZ had seven members, including Weissmann, Vladimir Antolić, Viktor Hečimović, Zvonimir Kavurić, Josip Pičman, Josip Seissel, and Bogdan Teodorović. The group also participated in architectural competitions.

30

Weissmann met Stam in Le Corbusier's Paris office on Stam's return journey from La Sarraz in 1928.

31

Weissmann received an invitation but was unable to attend Berlin events. He travelled to Barcelona, where he was introduced to the work of Jose Luis Sert's progressive group of left-wing architects, GATEPAC.

32

Korn lived in Zagreb from 1935 to 1937 and collaborated with Antolić.

33

On the Munka Circle of socio-photographers, see: Albertini, "The Munka Circle and Hungarian Social Photography," 284–303.

*Bauausstellung* influenced and radicalized the Hungarian group. In the years of the Great Depression when social tensions intensified, left-wing architects felt responsible for connecting housing and health issues to social criticism and showing alternative ways.

Both the Hungarian and Yugoslav sections of CIAM chose the instrument of propaganda exhibition to present the miserable housing conditions and other deficiencies of the urban structure. The team of the Hungarian working group produced its first demonstrative exhibition in the spring of 1932. While small in scale, it played a crucial role in the shaping of new methods of display. They visualized statistical data with charts and diagrams and used maps to demonstrate the unjust distribution of space within the city (Fig. 5). Photographs confronted visitors with the misery of the periphery (Fig. 6). For these visual effects, graphic designers and professionals of social documentary photography were invited from Kassák's Munka Circle.<sup>33</sup> The architects used the didactic technique of comparison (bad examples and good examples) to persuade visitors of the benefits of modern design. The anachronistic ground plan of a built social housing block was set against their functional design, which provided more rooms and greater comfort on the same floor space. Similarly, instead of the space-prodigal official regulation plan for the outskirts, they proposed an intensively built-up row-house system with local common services (Fig. 7). The enlarged exhibition was opened again in September 1932 at the Autumn Fair entitled *Build for your children*. It concentrated on the situation of infants, children, and mothers in the city, their state of health, living perspectives, place in the apartment, and institutions serving them as a nursery, kindergarten, school, and playground. Here, the contrast between rich and poor families was even greater, and statistical data were confronted with corresponding data from the Soviet Union. Before the opening of the exhibition, the police forbade these provocative posters. The harsh social criticism of both exhibitions in 1932 led directly to police measures after the proclamation of martial law and put an end to their political activity. The Hungarian CIAM section members were prosecuted for political agitation. Seven members of the group were sentenced to prison and, for the probation period of three years, their passports were confiscated. For that reason, Hungarian architects did not participate in the CIAM congresses and meetings until 1937.

Like their Hungarian colleagues, at the end of the same year, 1932, the RGZ presented research on the housing conditions of Zagreb at the Fourth Exhibition of the Association of Artists Zemlja at the Art Pavilion, an important exhibition venue of Zagreb, addressing the same issue and elaborating it in the same manner — with statistical data, documentary photographs of poor housing conditions by Vladimir Čepulić, a tuberculosis specialist, on one side and potential solutions on the other (Fig. 8). They pointed out the causal relationships between income and housing conditions/standards and the consequences of the absence of social housing policies on public health. Materialized by case studies — three

examples of Zagreb housing — exclusive family residences on the southern slopes of the Zagreb Mountain (Tuškanac), rental housing for white-collar workers in the new eastern part of the city (Sajmište), and the genesis of workers’ slums (Trešnjevka) on the floodplain of the Sava River cut off from the Lower Town by the railway track (Fig. 9). They particularly pointed out the imbalance between investment in housing construction and achievements. The exhibition was accompanied by a series of public lectures at the People’s University and expert-guided tours of the exhibition. It was also the culmination of the social and engaged action of Zagreb architects in the interwar period. They were under police surveillance due to fear of communist agitation during the exhibition, the Communist Party of Yugoslavia was outlawed in 1920, which was extended due to the high public interest.

#### DIFFERENT PATHS TO MODERN URBAN PLANNING

Despite their similar involvement in housing and planning issues and social criticism, the RGZ and the Hungarian CIAM group could make use of their proficiency in their cities to different extents. The main reason for this difference was on behalf of Zagreb, the unanimously supportive attitude to a new general regulation plan based on an international competition. In 1928, after a decade of denying the issue of the workers’ slums and a new regulation plan on the advice of a committee of experts, Mayor Heinzl accepted the idea of preparing the long-missed regulation plan for the whole city area. He entrusted architect Stjepan Hribar (1889–1965)<sup>34</sup> to collect the data and implement the measurements necessary for the competition program in the frame of the newly founded Department of City Regulation.

Unlike his predecessor, Mayor Stjepan Srkulj recognized town planning as a tool for solving Zagreb’s major problem, the workers’ slums. To do so, the heads of the City Building Office and Department for Municipal Public Buildings, civil engineer Mate Jurković (1885–1969)<sup>35</sup> and architect Ivan Zemljak (1893–1963)<sup>36</sup> were acquainted with contemporary worldwide planning ideas and practices. Together with Srkulj, Jurković went on a study trip in 1929, visiting Vienna, Brno, Prague, Dresden, Berlin, Frankfurt, and Cologne, while Zemljak participated in the International Congress for Housing and Urban Development in Rome and presented a detailed report to the mayor.<sup>37</sup> The peak of these efforts was the International Building Exhibition in 1931 in Berlin, along with the Hygiene Exhibition in Dresden the same year, both visited by Zagreb-based architects.<sup>38</sup>

After thorough preparations by the Department of City Regulation headed by Hribar, the international competition for Zagreb’s regulation plan was announced in 1930 and resumed the next year.<sup>39</sup> A total of 52 competition entries were submitted from Germany, Yugoslavia, Czechoslovakia, Hungary,<sup>40</sup> Austria, Spain, and Switzerland. The prize list was led by two Berlin teams, each awarded a second prize. Entry No.

15 (motto: Metropolis. Authors: Hans Lubke, Edi Reisner, Willy Shone) was appraised for its circulation network and green areas, whereas entry No. 44 (motto: Jelačić. Authors: Erich Kotzer, Ewald Liedecke, and Peter Koller) fully embodied the principles of a modern functional city. It had zoning according to urban functions, along with the concept of neighborhood units for around 8,000 inhabitants. The street system of these units organically adapted to the east-west railway line and the Sava River, and instead of apartment blocks, it proposed the construction of row housing. This entry became the base of the general regulation plan of Zagreb, which was prepared by employees of the Department, architects Hribar, Antun Ulrich, Josip Seissel, and Vladimir Antolić. The latter two were members of the Zagreb Work Group (RGZ) (Fig. 10).

The regulation plan separated the neighborhood units from the curved line of the river by leading the east-west streets in a straight line that, together with the north-south streets, surrounded rectangular city blocks. The riverbanks thus remained free for a recreational green area. Each neighborhood had its sub-center with services such as a school, sports playgrounds for children, promenades, and commercial centers along the main traffic routes. Markets, secondary schools, etc., were planned for multiple neighborhoods together. A significant percentage of greenery was made possible by increasing height, i.e., building density. A greater density was targeted for the new city center, the high-rise zone along the railway line (five or more floors), and the medium-rise zones (2–4 floors), both within the new southern residential area. In this area, blocks were planned with diminishing height and density towards the periphery and with a gradual transition to semi-detached and single houses.

The conceptual version of Zagreb’s progressive, socially sensitive regulation plan was confirmed at the end of 1932 when the economic crisis aggravated. The Construction Law of 1931 prescribed the multiple-stage procedure for regulation plans, which took, in this case, eight years, and the final regulation plan was approved by the Ministry of Construction as late as 1940.<sup>41</sup> A measure indispensable for active urban planning — the expropriation of private property — was included in the Law. It provoked a reaction on behalf of proprietors of real estate. The city government was ready to buy illegally built houses of the shantytowns in the southern part of Zagreb or to offer their owners land in the regulated parts of the city to liberate this area for future urban development.<sup>42</sup> The lack of funds and lots as well as deficient infrastructure hindered these efforts, and this problem could not be solved before the late 1940s. At the end of the 1930s, however, a sole example of the original vision was consistently realized by Antolić in the Cvjetno single-family housing estate close to the Sava riverside.<sup>43</sup> The six city blocks between two planned service zones were to be built up by several standardized family house types in the late 1930s (Fig. 11).

The conceptual regulation plan of Zagreb was presented at the fourth CIAM Congress in Athens, where the Zagreb Work Group actively participated. In the context of the discussions,

34  
Hribar graduated in Dresden in 1914. From 1919, he worked in public construction offices and the Pionir construction company. He ran an architectural studio from 1925 and specialized in urban planning. From 1928, he served as an employee or consultant for city authorities and the Ministry of Construction (1945–47). In 1965, he received a Lifetime Achievement Award from the Yugoslav Urban Planning Society (Bjažić Klarin, “Hribar, Stjepan”).

35  
Jurković graduated in Prague in 1909. From 1910, he worked as a city engineer focusing on civil works. He was the head of the City Construction Office, overseeing seven departments, an advisor and head of the City Department for Roads and Sewerage. In 1966, he was honored as an honorary member of the Association of Civil Engineers and Technicians of Croatia (Vukić, Fedá. “Jurković, Mate”).

36  
Zemljak graduated from the Technical University in Prague in 1920. From 1921, he worked at the City Building Office in Zagreb. He designed several primary schools and kindergartens according to the principles of modern architecture and pedagogy (Jordanovac, Selska, etc.). He was also involved in horticultural design and urban planning (“Zemljak, Ivan”).

37  
(anonym), “Zagreb ne zaostaje za inozemstvom,” 5.

38  
(anonym), “Kakav mora biti stan,” 8.

39  
Laslo, “Internacionalni natječaj;” Radović Mahečić and Štok, “Presedan zagrebačkog urbanizma;” Bjažić Klarin, “*Za novi, ljepši Zagreb!*”.

40  
There were two Hungarian entries, No. 29, motto: Nord-Sud (Lajos Deli and Ferenc Faragó) and No. 30, motto: Gediegen (József Szabó), and five from Yugoslavia. Bjažić Klarin, “*Za novi, ljepši Zagreb!*”.

41  
(anonym), “Uredba o izvođenju generalnog regulacionog plana;” HR-DAZG-10, box 87; (anonym). “Uredba o izvođenju Generalnog regulacionog plana grada Zagreba.”

42  
Čapo, “Odnos zagrebačke gradske vlasti.”

43  
Antolić, “Cvjetno naselje.”

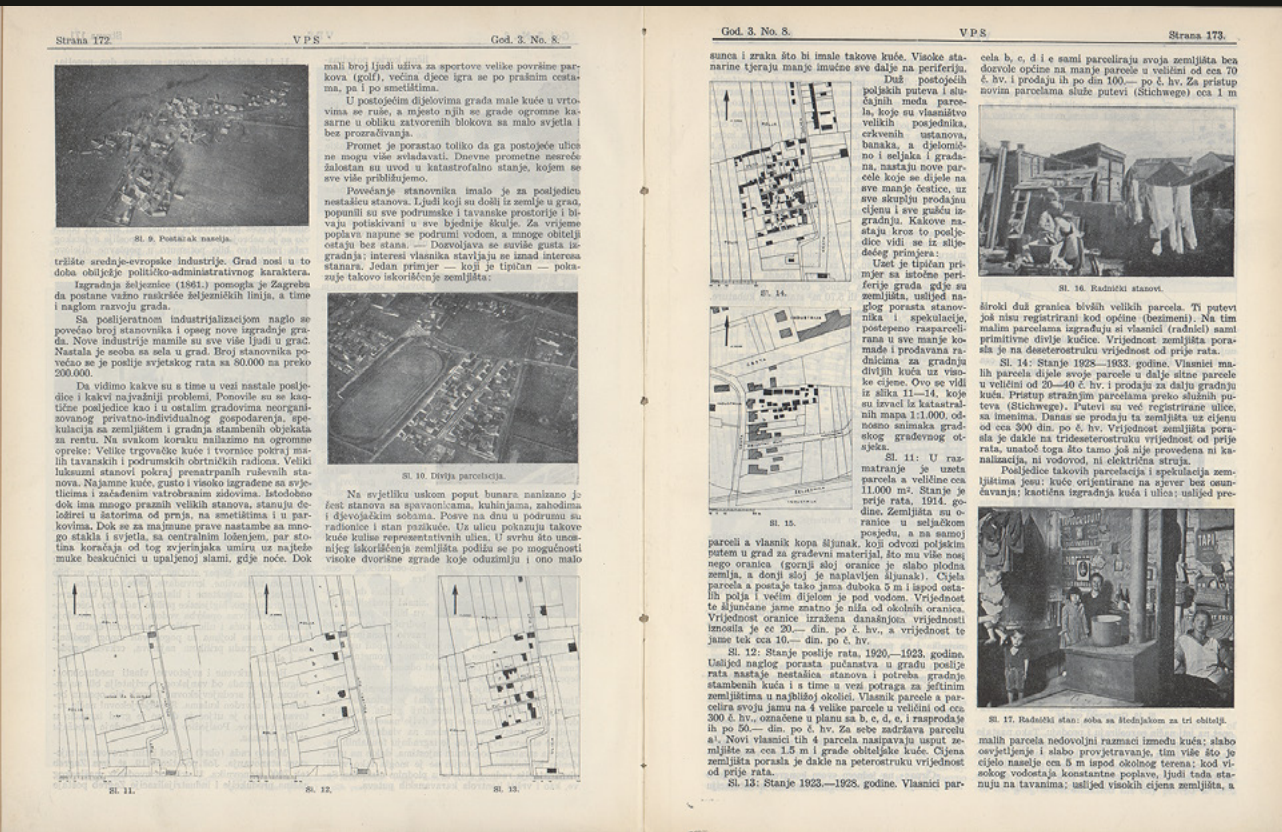


Fig. / Sl. 9 A Study on the Development of the Working-Class Slums at the Zagreb Periphery, Zagreb Work Group, 1933. (Antolić, "Razvoj naših gradova," 172-173). / Studija o razvoju slamova radničke klase na zagrebačkoj periferiji, Radna grupa Zagreb, 1933. (Antolić, „Razvoj naših gradova”, 172-173).

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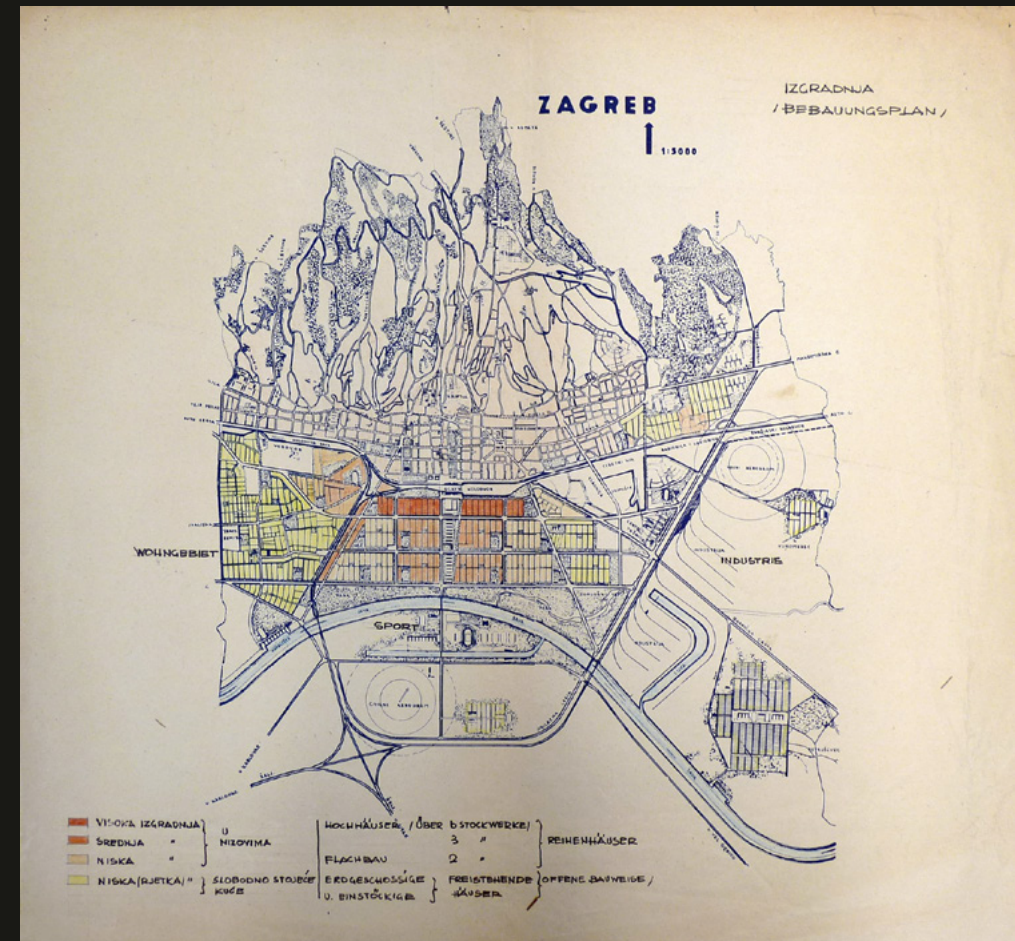


Fig. / Sl. 10 Zagreb Conceptual Regulation Plan, Department of the City Regulation, 1932. (Antolić, Seissel, "Regulatorna osnova za grad Zagreb," Tab.). / Idejni regulacijski plan grada Zagreba, Odsjek za regulaciju grada, 1932. (Antolić, Seissel, „Regulatorna osnova za grad Zagreb”, Tab.).

↑

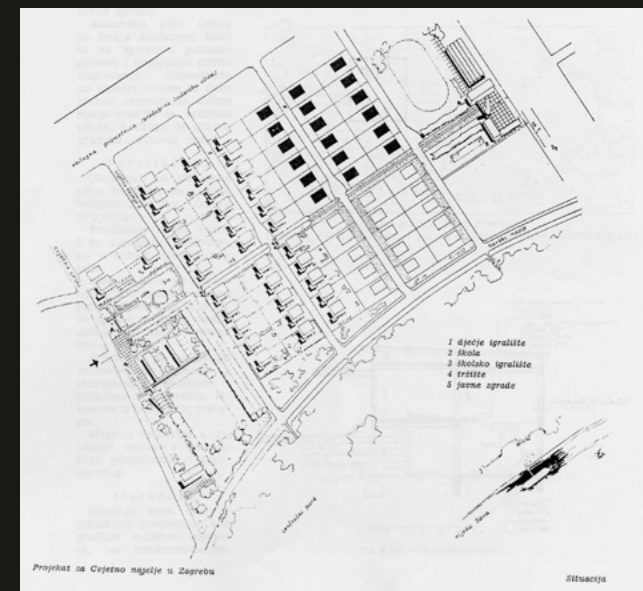


Fig. / Sl. 11 Cvjetno Housing Development Regulation Plan, Vladimir Antolić, 1938/39 (Antolić, Cvjetno naselje, 25). / Regulacijski plan Cvjetnog naselja, Vladimir Antolić, 1938/39. (Antolić, Cvjetno naselje, 25).

↑

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it became evident that the plan was much more than a simple adaptation of CIAM's principles that reflected both Le Corbusier's ideas and the German model of satellite towns. Not only does the British-Swedish neighborhood idea distinguish it from the 'functional city' model of CIAM, but the application of the Soviet Milyutin's version of the linear city. By analyzing given living and health conditions in Zagreb and preparing the regulation plan, Antolić, and his collaborators had to realize that the housing crisis could not be solved without the nationalization of land and means of production.

After the exhibition 'House and Life' in Zagreb,<sup>44</sup> the RGZ gave utterance to this conviction at the CIAM 4 congress where, supported by young leftist architects from France, Spain, the Netherlands, and Britain, they submitted an Alternative Version of the Athens Charter that frightened the apolitical leaders of CIAM. After that episode, only Weissman, who left Croatia, and Antolić remained active as delegates of the then formally existing Yugoslav CIAM group. Antolić participated in the CIRPAC meetings, the executive committee of CIAM in Amsterdam (1935) and Zürich (1939), as well as at the Fifth Congress in Paris in 1937 where, one more time, Weissmann and Antolić joined by Mart Stam, Arthur Korn and Marcel Breuer among others stood up for new city planning and housing models based on the citizens' needs. The foundation of CIAM-Ost in 1937 allowed Antolić to speak again about the relationship between urban planning and society at the first Budapest meeting using Zagreb as a case study.<sup>45</sup>

Meanwhile, the Zagreb Work Group was dissolved, and the Association of Artists Zemlja was prohibited in 1936 when the period during which the city promoted social policies terminated. Antolić was not positively recognized for his efforts, and their 1932 exhibition was reevaluated as communist propaganda. On the other hand, his professional activity was highly appreciated among others by Ivan Zemljak, then the head of the Department for Municipal Buildings, who employed him there after the Zagreb Regulation Plan was completed.

The Hungarian CIAM group acquired a similar reputation within CIAM circles. After having read the 1930 report of the Hungarian CIAM group, the Hungarian émigré architect Alfréd Forbát warned Siegfried Giedion, the first secretary-general of CIAM, that the too-sharp observations on behalf of Hungarians might discredit the congresses.<sup>46</sup> While the report was not too radical, Molnár had already tested Giedion about the limits the leadership of CIAM set for the national groups. He asked him if he was interested in house projects divergent from given social, economic, and familial models.<sup>47</sup> He implied here a collective house project of theirs, similar to the Soviet counterparts, that took shape soon and was ultimately presented at the Autumn Fair of Budapest in September 1931. When preparing for the Brussels congress, he wrote Giedion that their high-rise apartment house project they sent to the exhibition was easily convertible into a collective house.<sup>48</sup>



Fig. / Sl. 12 Regulation plan of Szent István Park and its surrounding Újlipótváros district, 1933 (Ferenc Harrer, *A Fővárosi Közmunkák Tanácsa 1930–1940, 1941., 137*) / Regulacijski plan Parka Szent István i okolne četvrti Újlipótváros, 1933. (Ferenc Harrer, *A Fővárosi Közmunkák Tanácsa 1930–1940, 1941., 137*)

↑



Fig. / Sl. 13 Riverfront of the Újlipótváros district, 1949. Fortepan 3654. Donation of Fortepan / Obala rijeke u okrugu Újlipótváros, 1949. Fortepan 3654. Donacija Fortepana.

↑

44

Soon after this exhibition, the Zagreb Work Group was already disbanding because of political differences.

45

Antolić, "Razvoj naših gradova;" Cirpac konferencija Budapesten.

46

gta/CIAM-42: Forbat, Fred. Letter to S. Giedion, January 11, 1932.

The report contains a detailed and objective account of the health and housing conditions of the rural and industrial population, the attitude of the authorities, legislators and money-lenders to the housing problem and the actual situation. 47

gta/CIAM-42: Molnár, Farkas. Letter to S. Giedion, March 20, 1930.

48

gta/CIAM-42: Molnár, Farkas. Letter to S. Giedion, July 16, 1931.

49

(anonym), "Felépülhet-e Budapesten az első modern kislakás-mintatétel?" 13.

50

Resolutio, MDK-C-I. 16/107.

51

Granasztói, "Vallomás az építészetéről," 217.

The delegates of the Hungarian group made propaganda for 'New Building' by publishing articles in the professional and daily press. They tried to persuade the state and local authorities of their views. When the case of a Budapest model housing estate ran aground in the summer of 1930, a year when an international competition for the Zagreb regulation plan was launched, the leaders of the group — Molnár, Masirevich, and Fischer — sent a memorandum to Mayor Sipótz and even visited him and the Town Planning Department to give information about the state of affairs in the international realm of social housing.<sup>49</sup> They offered their expertise to prepare the new Building Code and demanded an international competition for the new regulation plan of Budapest with foreign experts in the jury.<sup>50</sup> The reception at the Town Hall was polite, yet neither the idea of a competition nor the common work on the building code was accepted. After Masirevich quit the radicalizing group, Molnár and Fischer were never invited to the Municipality.

Unlike the enlightened and well-trained technical staff of the Zagreb Municipality, the Building Department and the Town Planning Department of the Budapest Town Hall were conservative and bureaucratic. They were interested more in protecting the traditional cityscape than revising the general regulation plan or solving social problems. During this period, urban planning issues were effaced, and the whole technical administration weakened in number and quality. Pál Granasztói-Rihmer, who became an employee of the Urban Planning Department in the mid-1930s, featured the atmosphere of his workplace as "fusty and conservative" where grand plans were seemingly supported but impeded in the everyday office work.<sup>51</sup> Although the urban planner of the former generation, László Wurga, could return to the department as an external expert, he could not change the old-fashioned and incompetent administration. Hence, the initiative moved to the FKT, especially when an outstanding politician, Iván Rakovszky became its president in 1928. During the following three years, FKT proved to be more progressive, with some architects from the younger generation (Péter Kaffka, György Masirevich) working for the engineering office. The duplicated system of the Municipality and FKT was far from being favourable. Their rivalry and continuous shuffling of dossiers back and forth complicated the office work. They initiated the development of Újlipótváros district with perimeter blocks, modern apartment houses and Szent István Park facing the Danube. (Fig. 12 and 13).

The building code issues, the new regulation plan, and social housing were never discussed in these offices. Some responsible and self-taught private architects had to raise them in the second half of the 1920s. The Association of Hungarian Engineers and Architects organized two conferences in 1930, one about housing and the other about the urban problems of Budapest. Surprisingly enough, key persons in these debates were not the young radicals of CIAM but slightly older and more pragmatic members of the same generation, such as Virgil Bierbauer, the editor of the journal *Tér és Forma*, the widely travelled Aladár Münnich and Jenő

Padányi Gulyás, who had been active in the youth movement of intellectuals. Based on their highly professional work, Bierbauer and Münnich were invited in 1932 to contribute to a ground-breaking enterprise, a long-term development program of Budapest. Bierbauer also participated in preparing the new Building Code for the FKT as well as a new Building Act. Compared to these proficient colleagues, Molnár, Fischer, and the members of the CIAM group were amateurs. They discerned the problems well, yet their proposals were utopian based on schematic models of Gropius and Le Corbusier. It is enough to have a look at the urban development plans of their young fellows (Róbert Földes and Pál Déman, 1935) and a competition entry by Molnár and Földes (1937) where high-rise slabs are floating in large green areas.

During the years of the Great Depression, problems multiplied to such an extent that managing them required a brand-new conceptual framework, just like after the foundation of Budapest in 1873. The initiator was politician Ferenc Harrer, who had returned to the Municipality in 1925 when the united opposition gained a majority at the local elections. He soon moved to the ruling party in the City Council, which facilitated his efficient functioning. As a former vice-mayor and recognized specialist in town planning, he was appointed in June 1930 as president of a specialist committee helping the Town Planning Department. When the regulation of a large exterior area of Budapest was put on the agenda in the spring of 1932, he convinced the city fathers that it was impossible to decide on a partial plan without a comprehensive urban program. The specialist committee was charged with the elaboration of a City Development Program (CDP) under the direction of Harrer. Thanks to his previous duties, he had the program outline almost complete in his mind. This made it possible for the committee to put the outline on the table of the City Council within four months and even to discuss it with the architects of the Association. At that meeting, Far- kas Molnár could comment on the program in the name of the CIAM section, which was about to prepare the analytical map of Budapest for the Athens Congress. The program — he warned — cannot be accomplished without accurate preparations (measured maps, state of the streets and infrastructure, and a wide range of various data). In his opinion, the disproportioned density of living quarters within Budapest could be improved by an intensive development in which the overcrowded inner zone would be eased with green strips where ten-story high slabs would stand and row houses in the suburbs (Fig. 14). He also attracted attention to the need for an expropriation law and betterment tax. The other speakers were less factual, but most of them supported the report.

The CDP systematically went through the aspects that could affect the development of the city, from the geographical, hydrological, climatic givens and topography through demographic, sanitary, and sociological conditions to the actual state of the building stock and the traffic network. This part of the work is reminiscent of the task CIAM 4 assigned to its national groups almost at the same time. However, the program did not stop at the analysis but proceeded to the

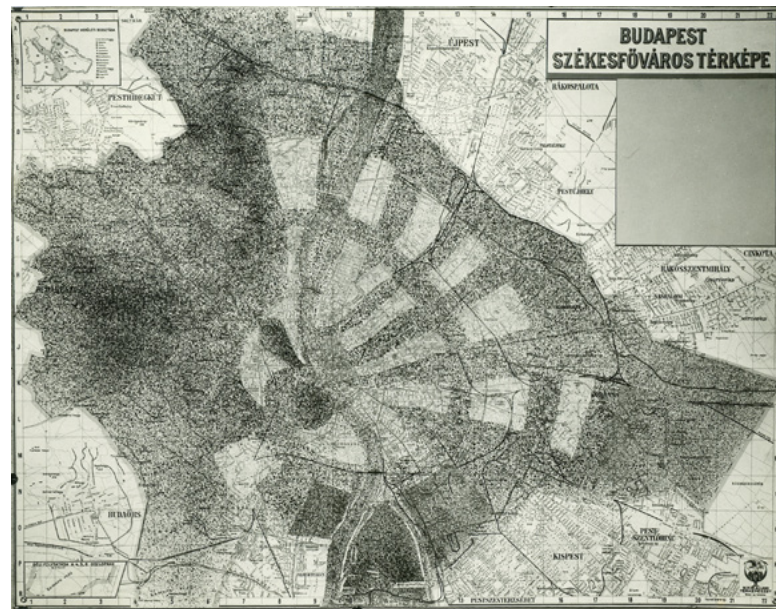


Fig. / Sl. 14 Proposal of the Hungarian CIAM group to diminish the density of inner districts of Budapest by green wedges, 1932. (HUN REN Művészettörténeti Kutatóintézet Adattár. MDK-C-I-16/1219.5). / Prijedlog Mađarske grupe u sklopu CIAM-a za smanjenje gustoće unutarnjih četvrti Budimpešte zelenim površinama, 1932. (HUN REN Művészettörténeti Kutatóintézet Adattár. MDK-C-I-16/1219.5).

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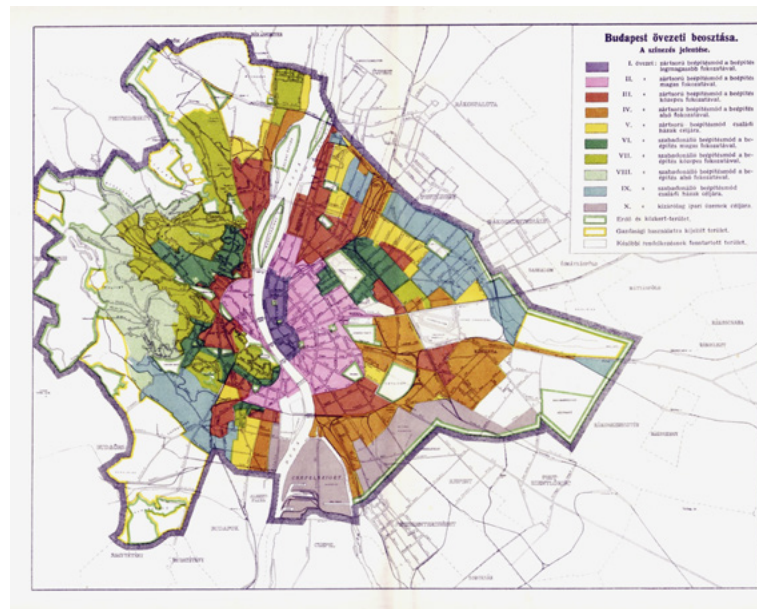


Fig. / Sl. 15 Map of Budapest with the areas meant to be built up by various housing types and buildings. (Urban Development Program of Budapest, 1940. Supplement No. 5a). / Karta Budimpešte s područjima predviđenima za izgradnju različitih tipologija za stanovanje i zgrada. (Program urbanog razvoja Budimpešte, 1940. Dodatak br. 5a).

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settlement policy, that is, fostering the rational distribution of urban functions (this notion was interpreted here with far greater subtlety than in the CIAM circles) by right plotting and selecting the pertinent way of building on. Beyond that, the program tried to diminish the density of the inner district and bring forth a gradual reduction of the building height from the center to the peripheries.

During the seven years of working out the whole program, the committee (with the contribution of external experts such as Bierbauer and Münnich) designated territories for housing (with a great variety of dwelling forms), trade and industry, business and banking center, historic center (the Castle Hill), for leisure, sport, and thermal baths, university campus, etc., and also set out those large areas where construction was forbidden (greenery and forests, and reserve areas). Harrer also investigated the financial, juridical, and administrative prerequisites of the program and brought up the old idea of Great Budapest as well. This program had a great part in the birth of a decree on construction and urban planning (1937) and the new Building Code for Budapest (1940), which, despite being far from the principles of the Athens Charter (1943), improved the problems of Budapest quite a lot (Fig. 15). It prohibited the closed courtyard, promoted the perimeter blocks, and allowed the free-standing slab system. The bulk of the tasks, however, remained for the post-war years.

## CONCLUSION

Despite significantly different political circumstances, scales, opportunities, and the prevailing notion that peripheries lag behind their centers, a comparative analysis of planning practices in the latter half of the 19th century and the beginning of the 20th century in Budapest and Zagreb reveals a similar level of quality in the implementation of contemporary urban and architectural practices. Following Vienna and Budapest's example, which, based on an international urban planning competition held in 1871, planned new urban boulevards, transforming the face of the city into a Central European metropolis on a grand scale, Zagreb did the same in 1887, creating the first contemporary city regulation plan. Although slightly delayed in its inception and until 1919 without a national Technical University, Zagreb acquired no less representative framework of Lower Town city parks and gardens, spaces for the manifestation of the emerging bourgeois class. The adopted zoning model, with three zones featuring different types of buildings and urban planning rules, was confirmed by the Building Order for the cities of the Kingdom of Croatia-Slavonia in 1895. Budapest had one more zone, a large mixed area outside the compact city, and a significantly higher building density of city blocks in the first two zones. Unlike Budapest, Zagreb hadn't yet faced the issue of large-scale workers' housing crisis until the end of the First World War. In both cities, the first decade of the 20th century was very progressive. While Zagreb attempted to address the issue of the railway line that still

divides the city into two parts today, Budapest implemented social programs involving the construction of schools and large-scale housing projects. However, the circumstances changed significantly after the war.

Although both Zagreb and Budapest in the 1920s had leading avant-garde architects, Farkas Molnár and Ernest Weissmann, advocates of European constructivism, such as the Swiss ABC group (including Hannes Meyer, Hannes Schmidt, Mart Stam) actively involved in the work of the International Congress of Modern Architecture (CIAM), they did not achieve the same results. This was due to significantly different political circumstances, although Hungary and Yugoslavia were alike, marked by autocratic regimes during the interwar period. Progressive city authorities contributed to Zagreb's advancement. After the Great War in the new Kingdom of Serbs, Croats, and Slovenes, Zagreb still followed the most modern European trends, including urban and architectural practices, which it sees as its identity. Sixty years after Budapest, Zagreb announced an international competition for its regulation plan, a luxury it could afford for the first time. In this largest modernization and social city project, the clearance of workers' slums, members of the national CIAM group for Yugoslavia, Zagreb Work Zagreb (RGZ), founded by Weissmann, Vladimir Antolić and Josip Seissel took part. The new Zagreb city plan completed in late 1932 was based on the awarded competition entry by German architects. It is a very early example of an officially adopted planning document that promotes the concept of the functional city, city zoning, neighborhood units, city blocks rich in greenery, with row houses and accompanying social amenities.<sup>52</sup> At the same time, the RGZ group prepared materials on Zagreb housing for the CIAM 4 Congress in Athens and used it to emphasize the need for urgent action through a documentary exhibition titled "House and Life" presented at the Fourth Exhibition of the Association of Artists Zemlja in Zagreb in December 1932. The misery of Zagreb's periphery was lively presented through documentary photographs of the anti-tuberculosis polyclinic in Zagreb. Contemporary social housing projects were proposed in response to these inhumane living conditions.

The Hungarian CIAM group did the same by organizing two exhibitions with social issues and the same approach and display in the Spring and early Autumn of 1932. Although RGZ architects were also under police surveillance as their work at the Zemlja exhibition was declared as a communist agitation,<sup>53</sup> the Hungarian architects were in a much more difficult situation. They were condemned and their passports confiscated, thus preventing their participation in CIAM's activities after their effective involvement from 1929 to 1932. As a disreputable group, they were handled suspiciously by the authorities and excluded from public works. Neither the conservative and bureaucratic departments of the Municipality nor the aristocratic FKT considered them partners. Solely the Hungarian Association of Engineers and Architects offered them occasionally a platform to discuss planning and building issues.

52  
Antolić, Seissel, "Regulatora osnova."

53  
The Communist Party activity was legally banned in 1920.

While Hungarian CIAM members were provisionally isolated, Zagreb members participated in the Fourth CIAM Congress, where they presented Zagreb's regulation plan and caused a significant rupture within the organization by demanding a political stance from an apolitical organization. The group named the tools for implementing urban and regional plans, including the nationalization of land and means of production. Although young leftist architects were hindered in their work by the leadership, including Sigfried Giedion, Le Corbusier, and Walter Gropius, they still persevered in promoting the social agenda. The final rupture occurred at the Fifth Congress in Paris in 1937. On the other hand, the Hungarian group returned over again at the same congress with innovative work, in which they adapted the analytical method of CIAM 4 to regional planning and even to the scale of the whole country. Parallel to the *ferme radieuse* idea of Le Corbusier, the Hungarians — in collaboration with Virgil Bierbauer — brought into prominence the problems of the rural population, namely housing issues of villages and the reorganization of entire agricultural regions.

Earlier this year, an unusual event thrilled the presidency of CIAM, the foundation of CIAM-Ost. The idea of regional cooperation among the Central-East European sections was raised in 1936 by Farkas Molnár and František Kalivoda, the delegate of the newly formed Czech group. They believed that their countries faced questions that differed from those of their West European counterparts and that their cooperation would be favorable in addressing them. The first meeting in Budapest, in February 1937, allowed Hungarians, Poles, Czechs, Austrians, and Yugoslavs represented by Vladimir Antolić to exchange their ideas. The presidency delegated Sigfried Giedion, secretary of CIAM, to attend the meeting, thus keeping it under control. The CIAM leadership closely monitored henceforth the activities of the new Eastern European fraction, which remained permanently overshadowed by their Western European partners, as was the case with Zagreb, which was consistently in the shadow of Vienna and Budapest, although it sometimes equaled or even surpassed them in certain periods. Unfortunately, the evolving Eastern European cooperation was broken on the eve of World War II and could not revive in the changed climate of the post-war years.

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