The Aesthetic Component in Early 20th Century Urban Plans of Rijeka

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Introduction

The aesthetic component, together with the ethical as well as the technical-functional, is an integral part of the creative process of urban planning – that most complex form of architectural design. Throughout history, it has been more or less present, depending on various factors – the current architectural and artistic theories, natural, social and political context, the aesthetic attitude of the author – architect and planner. Aristotle's view that cities must be safe but also happy places for their inhabitants, and that urban forms are not only a matter of technology but also of art in the highest and most complete sense, was the basis of architectural ethics and aesthetics, which the creative genius followed and developed through plans, projects and final urban forms – buildings, streets, and squares.

Today, at the beginning of the 21st century, when the majority of the population lives in cities mired in globalist chaos, while at the same time we are experiencing the disappearance of the cities and lives we were used to, it may be more necessary than ever to plan "beautiful cities" – good and quality frameworks for life and work, learning from the most positive experiences of the past. The beginning of the 20th century, like all beginnings, had a great symbolic meaning of renewal and promise. The plans that emerged at that time were imbued with optimism and hope, a desire to create a better, aesthetically and artistically designed city, and they are perhaps the best guide for planning a humane city of the future.

The area of Central Europe that we can identify with the Austrian, later the Austro-Hungarian Empire, in the 19th century was affected by the process of urbanization created as a result of the first globalization caused by the Industrial Revolution. Regulatory plans as the basis of urban planning were based on Camillo Sitte's organic conception and Haussmann's ideas. The result was most often urbanism of a combined type – the organic growth of historic cores and the proper plan of new historicist neighborhoods (lower town) that overshadowed historical areas with their surface area, dimensions and meaning. At the beginning of the 20th century, the romantic urban conception of Otto Wagner was opposed to the romantic school of Camillo Sitte. The empire had contact with the Mediterranean in a narrow coastal area where two urban centers and ports developed – Trieste and Rijeka. Ports were becoming the new face of cities that were changing their Mediterranean character and developing under the direct influence of the continental aesthetics of Vienna and Budapest. The planners had a demanding task because the application of the concepts of continental cities was not possible due to natural conditions. Each city developed a complex and specific urban identity, which was significantly influenced by planning decisions from the early 20th century.

Paolo Grassi's plan from 1904 is probably the most famous urban plan of Rijeka, which is a somewhat unusual fact considering that only its textual part and not the graphic one is known of.[1] Perhaps this is why it intrigued and aroused the interest of experts and researchers who

1 Paolo Grassi, *Relazione intorno al progetto di regolazione ed ampliamento della città di Fiume* [*Report on the Regulation and Expansion Project for the City of Rijeka*] (Fiume [Rijeka], 1904).



Fig.1: Fragments of Paolo Grassi's plan shown on a 1936 plan. Parts of the 1904 plan are marked in red, partial plans from 1904 in purple, partial plans from 1905-1914 in yellow and the plan published as part of the 1934 Regulation Plan is in blue

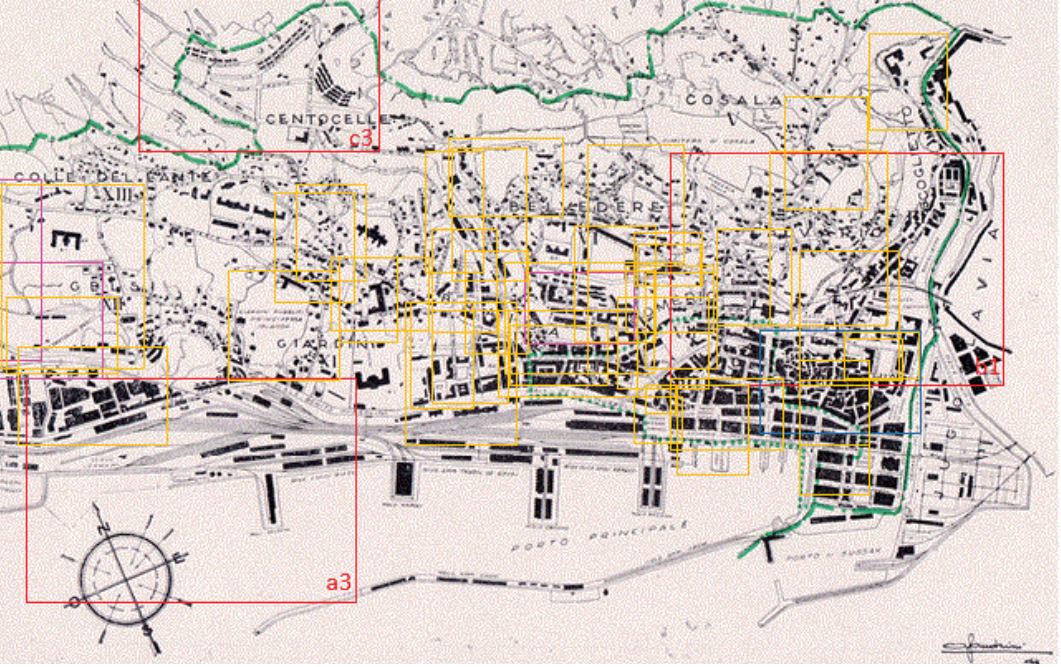
were trying to visualize from the textual part of the plan what these graphic attachments looked like.[2] Considering that several sheets of the plan have been preserved, and details of the plan can be recognized in later plans, it is unusual that none of this has been published so far, so here part of that documentation is published for the first time. The State Archives in Rijeka has 15 preserved sheets of the plan from 1904 in various degrees of completion, showing three city zones and three more partial plans from the same year, which are probably copies of the plan.[3] In the period between 1905 and 1914, several partial plans were made in which parts of Grassi's plan are present, of which about sixty have been preserved in various archival holdings. As part of the Old Town Rehabilitation Plan drawn up in 1934 by engineers Giovanni Carboni and Guido Lado, a plan has been preserved showing part of Grassi's plan for the area.[4] All these partial plans faithfully show the plan from 1904, which we can confirm by comparing the original and later plans that have been preserved and relate to the same area.[5] Partial plans cover a significant part of the city territory, and by superimposing them, most of the original plan can be reconstructed and a fairly true picture of the vision of the development of the "New Rijeka" in the 20th century can be gained. (Fig. 1)

2 See: Olga Magaš, "Urbani razvoj Rijeke i Sušaka na prijelomu stoljeća" ["Urban Development of Rijeka and Sušak at the Turn of the Century"], in *Arhitektura secesije u Rijeci* (Rijeka: Moderna galerija Rijeka, 1997-1998); Julija Lozzi Barković, "Paolo Grassi i regulacijski plan Rijeke iz 1904. godine - prilog istraživanju urbanističkog razvoja Rijeke s početka 20. Stoljeća" ["Paolo Grassi and the Regulation Plan of Rijeka from 1904 - a Contribution to the Research of the Urban Development of Rijeka from the Beginning of the 20th Century"], *Vjesnik Državnog arhiva u Rijeci* XL (1998), 157-183; Branko Metzger-Šober, "Regulacijski plan grada Rijeke Paola Grassija, 1904" ["Regulatory Plan of the City of Rijeka by Paolo Grassi, 1904"] *Prostor – znanstveni časopis za arhitekturu i urbanizam* 20 (2012), 1 (43), 146-157.

3 State Archives in Rijeka (HR-DARI), Technical Offices of the City of Rijeka (57), 3.4.1.1. map 1, no. 1/15/1904.-05. (HR-DARI 57, 3.4.1.1, 1/15/1904.-05.); There are three partial plans from the same year, which show larger private plots - Ciotta and Pessi fields in Podmurvice and Sussain field in Zeniković. 3.1.19.2. box 185, no. 119/1904, no. 120/1904, no. 126/1904.

4 The original plan is preserved in the Plan Collection of the Conservation Department of the Ministry of Culture in Rijeka.

5 For example, if we compare the plan shown in Fig. 2 and the partial plans from later periods, we see that there is no difference. State Archives in Rijeka (HR-DARI), Technical Offices of the City of Rijeka (57); 3.4.1.1. map 1, no. 1/15/1904.-05. (HR-DARI 57, 3.4.1.1, 1/15/1904.-05.); 3.1.19.2. box 185, no. 58/1908., no. 203/1909., no. 6 (76, 78)/1910., no. 34/1912., no. 9/1914.



Historical Framework

Rijeka is a city located in the northern part of the Adriatic, at the place where the Mediterranean Sea advances the furthest into the European mainland.[6] The abundance of constant watercourses has created living conditions since prehistoric times, and in Antiquity the municipality of Tarsatica was founded there, and on its foundations in the Middle Ages a new city developed – the Rijeka of St. Vitus. Up until the beginning of the 18th century, the city occupied a space of only 10 hectares within its walls. The proclamation of free navigation on the Adriatic and the imperial patents about a free port in 1717 and 1719 gave impetus to the economic and urban development, and the city expanded beyond the walls, to the south and west towards the newly built Lazaretto. The expansion to the east was slowed down by the Rječina River, on the west bank of which the town emerged. Throughout history, this natural barrier had long been the border between various administrative areas and even states, resulting in the uneven development of a divided city.

Rijeka experienced its strongest development in the 19th century, in the first and second industrial eras, especially after 1868, when it came under the direct rule of Budapest as part of the newly established Austro-Hungarian state. Up to that time, the relatively small city had been turning into a Mediterranean emporium. The privileged status of a free port ensured the influx of capital and people, leading to sudden urbanization. In the next 50 years, the infrastructure necessary for the industrial and transit center was laid, and numerous manufacturing, public and residential facilities were built. The historic part of the city was not the center of interest for city planners.

The previous development of the city outside the historic walls was determined by urban plans from 1778 (unknown author), 1785 (Anton Gnamb), 1843 (Josef Bainville) and 1870 (Hilarion Pascal, Antal Hajnal).[7] From 1872 to 1896, the city was headed by retired military

6 Trieste and Genoa in Italy have a similar position.

7 See: Olga Magaš, "Urbani razvoj Rijeke" ["Urban Development of Rijeka"], in *Arhitektura historicizma u Rijeci* (Rijeka: Moderna galerija Rijeka muzej moderne i suvremene umjetnosti, 2001), 60-97; Nana Palinić, "Prometne zgrade – željeznica i luka" ["Traffic Service Buildings - Railway and Port"], in *Arhitektura historicizma u Rijeci* (Rijeka: Moderna galerija Rijeka muzej moderne i suvremene umjetnosti, 2001), 374-419.

engineer Giovanni Ciotta, who surrounded himself with experts gathered in the city's newly established Technical Office. Only a few experienced engineers, followed the entire construction of the city, the most intensive in Rijeka's history.[8] Educated mainly at European polytechnics, they were in the multiple roles of urban planners, designers, consultants, inspectors and supervising engineers for public and private construction.

The 1873 Tender for the Regulation Plan – Beginning of the Plans of the 20th Century

The location of the railway in the city was defined by the plan of engineer Bainville and the port by the plan of French engineer Hilarion Pascal. Both these urban projects of strategic interest were financed by the state while adequate planning documentation was lacking for the accelerated urbanization of the city. Following the model of some other advanced cities, the city authorities decide to announce a public urban tender for the city's zoning plan. The tender, signed by Mayor Giovanni Ciotta, was announced in July 1873 and completed in February 1874.[9] The program included a coastal belt with an average width of 500 meters from the Rječina River in the east to the Technical Factory (*Stabilimento tecnico Fiumano*) in the west.

At the time of the tender, large state-initiated infrastructure works were already underway – between 1868 and 1873 due to the location of the railway and port, a large part of the coast in front of the city had already been levelled with an average width of 100 to 200 meters. Shortly before, the railway was completed and a branch line towards St. Peter (Pivka) and Vienna was opened, while a few months later the railway to Karlovac and Budapest was opened.[10] The eastern part of the port was also built, according to the project by Pascal and Hajnal from 1870. Changes in the field occurred daily, and the city administration concluded that it was necessary to obtain a regulation plan as soon as possible, so that changes in the area, which they did not like, would not get out of control. The main goals of the plan were to determine the network of main roads, to define the extension of construction to the west and north, to determine zones for industry and port facilities, to propose the arrangement of the Old Town and the location of public buildings.[11]

Unfortunately, the excessive haste with which the tender was prepared proved disastrous. The terrain was extremely unsuitable for planning, rocky and hilly, with few flat areas – narrow belts along the Rječina River and several other watercourses, plus a somewhat milder terrain in the area along the sea west of the historic center. Data (especially topographical information) was insufficient and competitors who did not know the city could not get a real idea of the configuration of the terrain.[12] Only a few works were submitted to the competition, and no work could be accepted.[13]

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8 The intensity of construction is illustrated by the data on the annual number of issued building permits. In the 44-year period between 1872 and 1914, the technical office of the city issued a total of 5,291 permits, an average of 120 per year. The highest, 226, was approved in 1910. To this should be added the large infrastructural and public constructions approved by state bodies. State Archives in Rijeka (HR-DARI), Technical Offices of the City of Rijeka (57), Inventory, Rijeka, 1979, 60-74. A building permit was usually obtained in just a few days.

9 *PROGRAMMA relativo al concorso per l'elaborazione di un piano generale di allargamento, regolazione e distribuzione della città di Fiume* [*PROGRAM relating to the competition for the elaboration of a general plan of enlargement, regulation and distribution of the city of Rijeka*] (Fiume [Rijeka], 16.07.1873).

10 The branch towards St. Peter was completed in June and according to Karlovac in October 1873 (Palinić, "Prometne," 374).

11 Zlatko Prikril and Zdenko Kolacio, "Urbanistički razvoj Rijeke" ["Urban Development of Rijeka"], in *Rijeka – zbornik* (Zagreb: Matica Hrvatska, 1953), 190.

12 In the Tender program, the competitors are instructed to get acquainted with the details of the terrain configuration through a model of the city made by Prof. Mayer, and exhibited by the Hungarian Maritime Government at the World's Fair in Vienna in 1873. The model was available until November 2, 1873. (*PROGRAMMA*, 3); Svjetska izložba Beč, 1873. [1873 Vienna World's Fair], https://hr.wikipedia.org/wiki/Svjetska_izlo%C5%BEba,_Be%C4%8D_1873.

13 One can conclude that the works were submitted exclusively by competitors who were not from Rijeka.

Some conclusions can be drawn from the call for tenders, as to how important aesthetic criteria were to the advertisers in this period. In the very introduction of the tender program it is stated that "in the preparation of a tender project, it must determine the possible harmonization of the aesthetics and well-being of the city with the needs of trade and communications."[14] In addition to tracing the main street communications, it was necessary to define squares, parks and the location of some public buildings in the project area: the new Governor's Palace, the City Palace, a theater, the City hospital, an almshouse, an orphanage, several covered markets, a slaughterhouse, two laundries, the Stock Exchange, the City Museum, the Catholic Church, the Capuchin Monastery, the Academy of Commerce and Nautics, several schools and a public city park.[15] Some of these public buildings were missing from the city and there was a real need for them, but some already existed in good, central locations. At the western end of the main city promenade *Corso*, there was the old Governor's Palace, at the eastern end the great City Theater, while the City Palace was located in the square of the historic center.[16] However, these buildings were not representative enough and did not meet the aesthetic criteria of the "New Rijeka" that was being created. The attitude towards several state-owned units and buildings located west of the historic core was similar – the State Tobacco Factory, the Military Command and the Naval Academy.[17] The program of the tender included the main city avenue with four rows of trees as the central thoroughfare of the linear city, which would end in a large circular square and a recreation zone to the west. It is suggested that if these objects, which were located on the imaginary route of this avenue, remained in their locations, there could be no perfect connection between the eastern and western parts of the city, which it should have connected. Although the program notes that demolition should be kept to a minimum, it can be concluded that an extremely good plan would justify even the demolition of these valuable and impressive buildings.

Demolitions in the historic center – the Old Town – were permitted. In the program, they are justified by hygienic reasons, although in this decision there was also probably an important aesthetic criterion, given that the historic core was dominated by older houses of more modest architectural values.[18]

Of the few entrants, only one competition entry by an unknown author has survived, submitted under the motto "Fiume prospera!" It had to be the best or among the best, because the weaker ones were probably returned to the contestants. It is a creative and ambitious plan, ideal for a plain area but impractical in the given space. The plan is dominated by a large avenue as the main link between the eastern and western parts of the city. It is mostly flat, partly winding, and in the eastern part, it splits into two parallel thoroughfares ending at the Old Town and the bridge at the Rječina. The block construction of orthogonal and radial geometry and various scales alternates with park areas and free plots on which solitary public buildings of striking dimensions are located. In addition to the above, the plan also offers a number of new city facilities such as markets in the western part of the city and a large public bathing site with pavilions, restaurants and swimming pools.[19]

Since there were no other plans, parts of this plan, although not rewarded or accepted, were nevertheless used to address some urban situations and determine some locations. The unrealistic plan was better than nothing in this situation. The eastern part of the imaginary avenue from the Mrtvi kanal (Dead Channel) of the Rječina to the Pomerio zone was adopted,

14 *PROGRAMMA,* 1.

15 Ibid., 2-3.

16 The old Governor's Palace was designed by Antun Gnamb in 1780; the City Theater by Andrija Ljudevit Adamić in 1798, and from 1833 the City Administration was housed in an adapted former Augustinian monastery.

17 The tobacco factory founded in 1850 moved into the Sugar Refinery complex built in 1750. The Military Command was located in the former Lazaretto of St. Charles Borromeo from 1725 and the Naval Academy was originally built for this purpose in 1854 according to the project of V. Poradowski v. Korab.

18 *PROGRAMMA,* 1.

19 State Archives in Rijeka (HR-DARI), Collection of projects (0509); See: Magaš, "Urbani," 76-78.

although in reduced dimensions, as were the locations of the theater and theater park, the market pavilion and the railway station.

The city was intensively built without a plan, following the Building Regulations of 1859 and the constant supervision of the Technical Office. In the last decades of the 19th century, most of the port was built, the railway was completed, and numerous industrial plants were built along the coast all the way to the western border with Istria. The entire area along the Rječina River and the coast was allotted to transport and industry, the latter on terrain that was mostly created by the users themselves by earthworks. Contact with the sea would be achievable only in the passenger port zone south of the historic core where two rows of blocks would be formed along the coast, and in the Lido zone between the passenger port and the Mrtvi kanal (Dead Channel) of the Rječina where 12 blocks would be formed in three rows. Construction in the hinterland would be sporadic, with very few roads organically adapted to the configuration of the terrain.

A proper orthogonal construction plan would characterize the harbor, built according to the Mediterranean model, with comb-shaped quays placed perpendicular to the shore. Port warehouses would be arranged in blocks on the quays and long rows on the shoreline. Although the urbanism of the coastal area had been adapted to the function of transport and manufacturing, aesthetics was taken into account especially in the last decade of the century. The wooden port warehouses and the pavilion-type ones would be gradually replaced by permanent ones that would have the features of public architecture. The first elevation of the port city would consist of brick buildings with decorative facades, with pilasters, cornices, fine details in stone and plaster and attics that hid the aesthetically unacceptable sloping roofs.[20]

The program of the construction of a number of public buildings and spaces provided by the tender would be partially realized by the beginning of the 20th century. Between 1880 and 1881 two market pavilions (Isidor Vauchnig) were built; in 1885 the Municipal Theater (Ferdinand Fellner and Herman Gottlieb Helmer); in 1887 two primary schools in Dolaz (Giacomo Zammatio) and in 1892 one at Mlaca (Sandor Baumgarten and Zsigmond Herczegh), in 1897 a state primary and high school for young ladies (Gyözö Czigler), in 1897 the new Governor's Palace north of the Old Town (Alajos Hauszmann); in 1900 the Trade Academy (Ignaz Alpár), and in 1903 the Maritime Academy (Samuel Pecz). In this period, two city parks were realized – in 1875 the Theater Park (unknown author), and in 1891 there was the Public Park at Mlaca (Filibert Bazarig). There would be several fountains, drinking fountains, laundry sites (Filibert Basarig) for the supply drinking water and maintaining hygiene, as well as to beautify public urban spaces. The city palace would not be built, however, by 1874 the existing building would be thoroughly reconstructed (Filibert Bazarig).[21]

The new Governor's Palace, the academies and part of the schools were state-built. However, the city invested even more funds to realize the buildings envisaged by the program that would significantly affect the representativeness and aesthetics of the city.

Paolo Grassi's Regulatory Plan of Rijeka

At the end of the 19th century, the situation in the area was completely changed and the construction activity, revived by the opening of the railway and the construction of the port, was so intense that the Technical Office could hardly monitor it and it was no longer possible to postpone the regulation plan. In 1888, a precise topographic survey of the central city space was

20 Palinić, "Prometne," 398.

21 *Arhitektura historicizma u Rijeci* [*Architecture of Historicism in Rijeka*] (Rijeka: Moderna galerija Rijeka muzej moderne i suvremene umjetnosti, 2001), Catalog, 544-645.



Fig. 2: The largest preserved part of the plan from 1904: the northern zone of the Old Town, *Pomerio* (Zagrad), *Calvaria* (Kalvarija), *Cosala* (Kozala), *Scoglietto* (Školjić) and *Via Aquedotto* (Vodovodna Street). On the right side is Sušak – at that time an administratively separate part of the city. Visible parceling and location of new public buildings: the Palace of Justice and the Hungarian primary school and grammar school in the Old Town, the Communal Slaughterhouse along the Rječina River and the new church at *Cosala*

made.[22] The previous bad experience influenced the city authorities not to announce a public tender for the new regulation plan, but to entrust the development of the plan to engineer Paolo Grassi and the Technical Office of the city, where Grassi was employed.[23] Since the 1888 survey covered only part of the project, additional measurements were made between 1898 and 1901, covering the entire area of the city and the city district.[24] The plan was completed in 1904, after six years of elaboration. It consisted of a text report and several graphic attachments. The basic plan was made as a general urban plan, with elements of a detailed plan, at a scale of 1:1000.[25] It was divided into several sections bearing letters and numbered marks, starting from the extreme southeastern part (a1) to the north (b, c) and west (2, 3, ...). There were also several graphic representations of details, mostly roads. Although previous researchers have analyzed and interpreted the textual part of the plan in great detail, a true idea of the extent of the changes that were foreseen in the field is obtained by looking at the graphic attachments that have been preserved and which undoubtedly define such interventions. The largest preserved fragment of the plan – (b1) is the one that includes the northeastern part of the area and also the zone along the Rječina – part of Fiumara, *Scoglietto* (Školjić) and *Via Aquedotto* (Vodovodna) to the Communal Slaughterhouse, the northern zone of the Old Town and the zones of *Pomerio* (Zagrad), *Calvaria* (Kalvarija) and *Cosala* (Kozala), being the most illustrative. (Fig. 2)

22 The 1888 survey covered only the terrain from the Rječina to the tobacco factory and north to Pomerio, which was only part of the 1873 project (Grassi, *Relazione*, 4).

23 Paolo Grassi was born in the vicinity of Koper in 1867 and completed his studies in construction at the Polytechnic Faculty in Graz. Before joining the Rijeka Technical Office in 1896, he worked in Trieste, in the Maritime Administration. In the interwar period he lived and worked in Trieste again as a planner (Julija Lozzi, *Secesija u arhitekturi Rijeke* [*Secession in the Architecture of Rijeka*] (Rijeka: Izdavački centar Rijeka, 2010), 13, 27).

24 Apart from the city center, the city district also included the sub-municipalities of Cosala in the north, Drenova in the northwest and Plasse in the west.

25 Magaš states that the plan was made at the level of the general urban plan, however, the plan was more elaborate. On the basis of the existing situation, most of the plan shows regulation and construction lines, not individual plots and houses. The exceptions were public buildings that are shown in defined dimensions, as well as some details such as porches (Magaš, "Urbani razvoj Rijeke," 118).

The second preserved plan (a3) includes the beginning of the western industrial zone – the junction of *Corsia Deák* and *Via Volosca* and the part of the port between the Petroleum Port and the last pier, and the third (c3) the workers' settlement *Centocelle* in *Scurigne* (Škurinje).[26] The plan is very clear, explicit and graphically attractive. It was made on the basis of the existing condition on which thin lighter contour lines show the existing buildings. Those that remain have reinforced contours and the more important (mostly public) are colored in gray, while the newly planned ones are colored in red and described. The regulation lines are marked in green and the construction lines of the plots in red, and the industrial zones are purple. Greenery as well as the sea and watercourses are shown in detail, in several shades of green and blue. Architectural elements of public space such as steps, fences and retaining walls have been drawn, and a tram line has been marked with a blue line. Street names, elevations (red) and street slopes (blue) have been inscribed.[27] The graphics of the third plan (c3) as well as the partial plans are similar, however the color is simpler on some plans.

Scope and Concept of the Plan

The plan covered an area about five times larger than the 1873 tender. In addition to the coastal and lower urban zone (*città bassa*), which was covered by the earlier plan and had an area of about 60 hectares, it included zones in the higher parts of the city (*l'altipiano*), from east to west: *Calvaria* (Kalvarija), *Cosala* (Kozala), *Belvedere* (Belveder), *Rastocine* (Rastočine), *Gelsi* (Podmurvice), *Toretta* (Turnić), *Scurigne* (*Škurinje*), San Nicolò and Drenova and the entire coverage area was about 300 hectares.[28]

In Grassi's plan, many of the elements set out in the 1873 program would be accepted, and the plan itself would become a logical and consistent continuation of the previous one, although it emerged 30 years later. In the introductory part of the plan, Grassi critically reviewed the preparation and results of the former tender.[29] He admitted that there were several projects that corresponded to the program and that there was no lack of good ideas and original proposals, but everything remained on paper and none of the indicated moves could be implemented. The program itself forced competitors to design "fantastic things," such as a 30-meter-wide main road with four rows of trees,[30] which would "instead of decorating, artificially and violently change the characteristic appearance of the city and surroundings." The road would "instead of opening up construction land, divide the lower and higher parts of the city into trenches and embankments, and the economic effect would be catastrophic."[31]

As there was no regulation plan, the city authorities were forced to randomly accept the building lines and parceling proposed by the owners and speculators, and the houses were erected in any direction and level. Since a large part of the city was built in the meantime, it was difficult to trace the transport network if the concept of the plan was not based on the regulation of a wider area that has not yet been urbanized. The main task of the new plan was to connect the old quarters, which were "built without any order" and the newest ones built along the new routes that remained unfinished, and link different parts of the city into an organic whole with appropriate road connections.

The studied land was primarily intended for housing, and public urban spaces and buildings. It was necessary to determine locations for public facilities, some of which were to be in the center and some on the outskirts, and the typology of the construction of new residential

26 State Archives in Rijeka (HR-DARI), Technical Offices of the City of Rijeka (57), 3.4.1.1. map 1, no. 1/15/1904.-05. (HR-DARI 57, 3.4.1.1, 1/15/1904.-05.).

27 The graphics of the plan are also described in the textual part of the plan. Grassi, *Relazione*, 11, 38-39.

28 Ibid., 6.

29 It is this review that is the main source of data about the 1873 tender.

30 Although this is exactly the kind of road specified by the propositions of the tender.

31 Grassi, *Relazione*, 4.

zones, in higher areas as well as possible improvements to existing ones. Although the plan excluded the zones of industry and transport, Grassi inevitably had to see the city as a whole inseparable from these vital facilities, which also occupied large areas and were present and active. Modernization was planned within the existing zones and apart from them, down *Via Serpentina* on *Toretta* (Zvonimirova), the plan did not take into account the further extensions of the already oversized work zone within the city territory. He believed that new industries, which did not have real space, like their predecessors, would "have to conquer the sea," although it was clear that further conquest of the sea and earthworks would further isolate and distance the remaining urban space from the coast.[32]

Morphology

As mentioned, apart from the relatively narrow belt of the city along the shoreline and watercourses, which at the beginning of the century took second place, behind the port and industry, the rest of the city's territory was rocky and hilly and difficult for planning. An additional difficulty for the project were the cliffs in the hill that abruptly interrupted the continuity of the land, and there were several in the area, including those created artificially, due to the opening of quarries required during the construction of the port.[33]

Part of the main roads established by the plan, whose role was to connect the old and new parts of the city, was on the route of the existing ones, while a part was new. Given the linear development of the city, two logical main longitudinal roads were planned to be laid in an east-west direction.

The first road touches the Old Town on the south side and the port and the railway zone on the north and passes along the route *Corso* (Korzo) – *Corso Deák* – *Via del Pino* (Krešimirova) and bifurcates into two streets – the southern *Via Volosca* (Milutina Barača), which passes the main industrial zone in the west all the way to the border with Istria, and the northern *Via S. Peter* – *Via Serpentina* (Zvonimirova), which meanders above the railway, also to the border. The second is the so-called "city bypass" that touches the Old Town on the north side along the route *Via Castello* (Žrtava fašizma) – *Piazza Giuseppe* (Trg R. Zanella) – *Via del Pomerio* (Pomerio) – *Via Germania* (F. La Guardia) – *Via Trieste* (Vukovarska) and follows the route of the old road to the northwest, Slovenia and Austria.[34]

The new streets that did not exist before and that should have connected the main longitudinal roads and the areas in the lower and higher parts of the city were *Via dei Gelsi* – the transversal between *Via S. Peter* and *Via Germania* (unrealized), then a new road that splits from the city bypass at *Via Germania* and leads along the route *Via Risorta* (Prvog maja) – *Via Valscurigne* (Osječka) to the *Škurinje* valley and further to Drenova, and a new road to the north that separates from the City bypass at *Piazza Giuseppe* (Zanella) and leads along the route *Via della Salute* – *Via Michelangelo Buonarotti* (Laginjina) – *Via Belvedere* (Tizianova), where it bifurcates into two branches – east for *Cosala* and west that connects with the road to *Scurigne* and Drenova.[35]

In order to activate as much city land as possible for construction within this basic infrastructure, an entire network of secondary and tertiary streets was interpolated which connected the new city districts with the center and with each other and that network was especially dense in the area between Pomerio and Belvedere. (Fig. 3)

32 Ibid., 6.

33 Great slopes are located near the cemetery on Cosala, between Potok and Belvedere, in the central part of *Gelsi* (Podmurvice), along the Zvir spring, which is "cut" from *Calvaria* and *Cosala*, and in the west between the railway and *Via Volosca*, which are separated from the hinterland.

34 These roads previously existed, but they were arranged according to the plan - expanded and corrected levels. The final execution was partial, and the demolition of the existing buildings along the streets was not carried out to the extent envisaged by the plan.

35 This part of the plan was consistently implemented, thanks to the fact that the space was sparsely built.

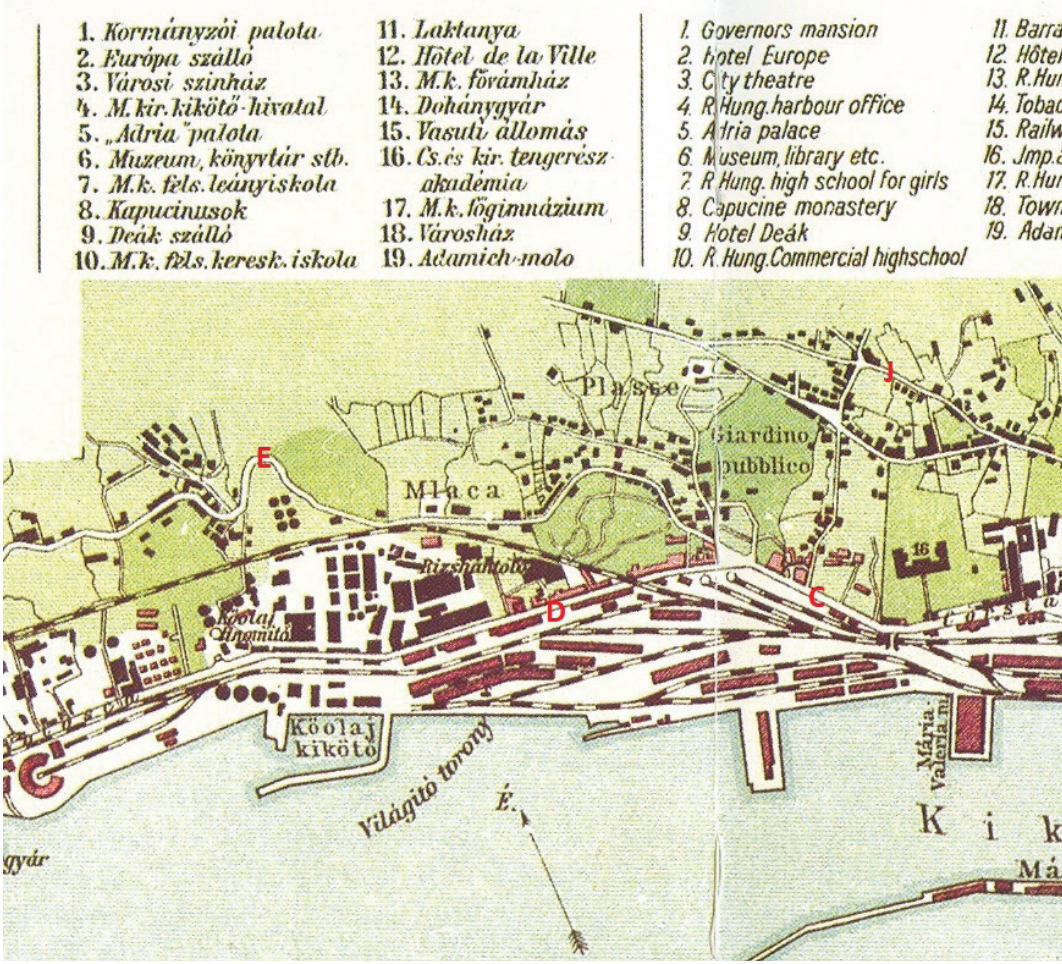
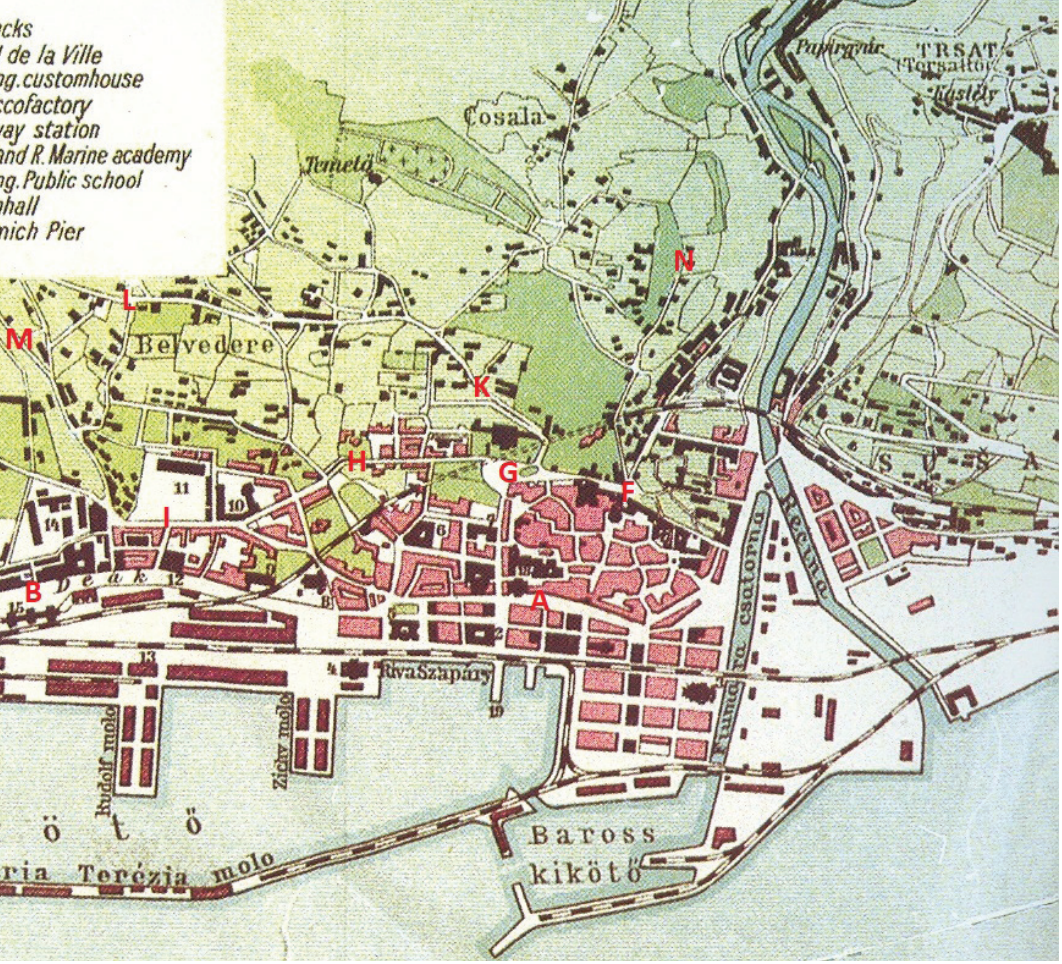


Fig. 3: Plan of Rijeka and the port from 1914, with marked main streets and public buildings.
A. *Corso* (Korzo), B. Corsia Deak, C. *Via del Pino* (Krešimirova), D. *Via Volosca* (Milutina Barača), E. *Via S. Peter – Via Serpentina* (Zvonimirova), F. *Via Castello* (*Žrtava* fašizma), G. *Piazza Giuseppe* (R. Zanella), H. *Via Pomerio* (Pomerio), I. *Via Germania* (F. La Guardia), J. *Via Trieste (Vukovarska),* K. *Via della Salute* (Laginjina), L. *Via M. Bounarotti – Via Belvedere* (Tizianova), M. *Via Risorta* (Prvog maja), N. *Via Calvaria* (Kalvarija)

Streets and Flights of Steps as Public Spaces

Grassi gave up on the wide streets that the difficult terrain configuration did not allow. He believed that such streets are justified in the Nordic countries with little sun, but they are not needed in the Mediterranean climate, and it is known that the streets themselves are not the best source of fresh air. Instead of using up space on the streets, it was better to use it to increase the plots and backyards and gardens that were more airier.[36] He, therefore, opted for three types of streets – the main streets with a total width of 15m (with 4 lanes of 2.5m and 2 sidewalks of 2.5m), secondary of 12m (with 3 lanes of 2.5m and 2 sidewalks of 2.25m) and tertiary, of which there were the most, of 10, 8.5 and 7m, with one sidewalk each.[37] All these widths are mostly planned in the newer neighborhoods that had yet to be urbanized, while in the central part of the city the plan was adjusted to much smaller widths as necessary, but not less than 6m. The maximum slope of the main streets was planned at 7%, due to the pleasant movement of vehicles, cars and people and the possible establishment of tram traffic. However, in the case of the secondary and tertiary (Belvedere, Cosala, Drenova) there were also those whose slope

36 Grassi, *Relazione*, 8-9.
37 Ibid., 10-11.



reached 16%.[38] Grassi correctly observed that for aesthetic reasons the interrupted parts of the road, especially if they are convex, should be leveled.[39]

The space between the regulation and construction lines, which varied depending on the available depth of the plots, was left for the gardens and the visual expansion of the public space and for possible street widenings in the future. Depending on the grade and width of the streets, the number of stories and the height of buildings were planned, which could amount to a maximum of 1.5 street widths, while in block construction it was recommended to further reduce or increase the width of the street. He believed, however, that excessive expansion of secondary streets was not desirable because guesswork could be used to build houses of the maximum height, which would result in monotonous street fronts, whereby the harmony and aesthetics of the public space would be disrupted. Since most of the streets were built on a slope, with the increase of their width, the difficulties of connections and intersections would also increase, which would all affect the appearance and continuity of the line of the street.[40] Although the plan envisaged 7-story buildings along the widest streets, 4-story buildings along the 13.5-meter streets, 3-story buildings on the 11-meter streets and 2-story buildings on the 7-meter streets were most often built.[41]

On very steep terrains, particularly on Calvaria and Belvedere, where the routing of roads required very high retaining walls, normal profiles were reduced and tree-lined sidewalks were often placed

38 Ibid., 12-13.

39 Ibid., 12.

40 Ibid., 9.

41 Ibid.; Lozzi, *Secesija*, 17.



Fig. 4: Partial plan of the regulation of the Belvedere zone with the construction of individual houses and villas on separate plots (1910). The primary street Belvedere and concentric secondary streets that follow a very steep terrain configuration, while transversal connections are made by public flights of steps

on one side only, along the edge of the retaining wall forming "panoramic streets" with very beautiful views. Among the most attractive panoramic streets, the one circling the hill of Calvaria was planned and built, about which Grassi wrote: "This road will give new life to numerous building plots which, due to their comfortable location, are especially suitable for building isolated houses and villas. It will be a picturesque panoramic road in the full sense. The spacious view from here which includes the historic hill of Trsat with Sušak at the foot, the estuary of the Rječina River and the city with its beautiful bay, will impress as one of the most beautiful memories for foreigners, and citizens will have the opportunity to appreciate and admire the picturesque location of the city and its surroundings."[42] Due to large height differences, the transverse connection of slopes and lowland space was most often overcome by public flights of steps and stepped ramps, whose minimum dimension was 3 to 4 meters, while the minimum distance of side buildings was 11 meters. The junctions and crossings of the steps were carefully shaped, often in the form of circular or semicircular extensions – viewpoints or small squares. (Fig. 2, 4).

Habitation

At the beginning of the century the city had 32,000 inhabitants and Grassi predicted that if the current growth dynamics of 30% continued every 10 years, the city would reach 41,600 inhabitants in 1914, 54,000 in 1924, 70,000 in 1934 and 82,500 in 1940. As a basis for planning, in addition to this data, he took into account a projected 30% reduction in population density, which at that time was particularly pronounced in the historic core, and he planned a reduction from 400 inhabitants per hectare to 275. He analyzed in detail how necessary it would be to provide construction lines for residential purposes with these parameters, and concluded that the planned space was quite sufficient for the needs of the city for the following 40 years.[43]

The plan envisaged several types of housing. The simplest and most compact type that provided the highest housing density was a block between 27.6 and 35.2 meters wide (depending on the width of the street) with two parallel rows of houses enclosing the yard. Such regular blocks

42 Grassi, *Relazione*, 16.

43 Ibid., 7-8.



Fig. 5: Partial plan of regulation of the Dolaz (Dolac) and Pomerio zones (1913) with the mixed construction of blocks, rows and individual houses on separate plots

were possible only in the lower undeveloped zones, which, to Grassi's regret, were few in Rijeka. Given that this was the typology he preferred, in the part of the wider center where, in his estimation, there were no buildings of greater architectural value, regular blocks were also overlooked, along with the partial or complete demolition of the existing construction, and the same concept was also applied in the historic core – the Old Town. (Fig. 5)

In the next zone, on terrains with a slight slope to which the roads lead, which were made in a bend due to the adaptation of the terrain, the plots were irregular and rows of residential multi-story buildings were planned. Ultimately, final irregular plots were left vacant, which would be regulated by the new building regulations.[44]

On even steeper terrains, such as those in *Via Belvedere* (Ticijanova), *Via Risorta* (Prvog Maja) and *Via del Calvaria* (Kalvarija), individual houses and villas of different dimensions and stories were planned on separate plots. Construction in such places was often planned on one side only, and on the most extreme slopes it was completely omitted. The grounds of the buildings themselves were planned accordingly and supported by high retaining walls on both sides of

44 The new ordinance was approved, along with the plan, in 1910 (Lozzi, *Secesija*, 15).

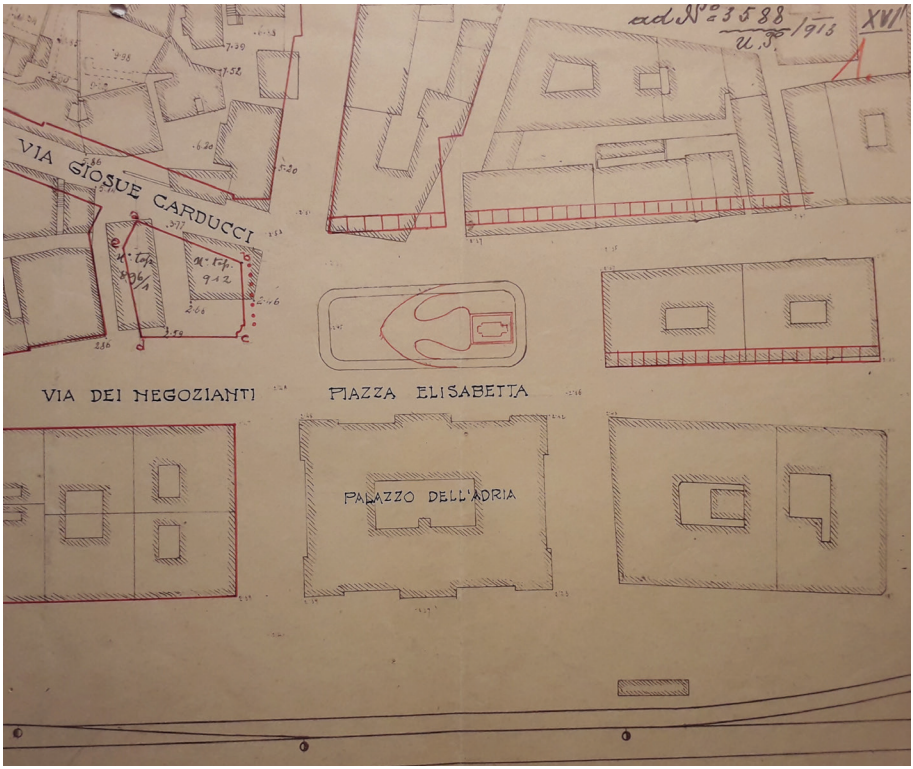


Fig. 6: Partial plan of the regulation of the zone around Piazza Elisabetta (Jadran Square), with visible porches along the southern facades of buildings (1913)

the street, which created special ambiences. The buildings on the north side were located high above the street, with access through portals in the retaining wall, and those on the south slope were well below street level and accessed via a bridge on one of the upper floors. A similar typology was applied to row buildings, which were on gentler slopes, such as *Via della Salute* (Laginjina) and *Via della Caserma* (Moše Albaharija). Retaining walls and access bridges became recognizable urban elements that gave a special stamp to certain streets and neighborhoods. Their appearance had to be harmonized with the architecture of the building on the plot because they were made as part of the same project, while the building ordinance prescribed elements that ensured the harmonization of the entire street.[45]

Housing types were consistently being applied in accordance with the zones and elevation characteristics of the terrain, thus eliminating the natural shortcomings of the building space. In places where it was most difficult to build, such as Calvaria and Belvedere, the most beautiful buildings and the most beautiful ambiences were formed, and an arranged and cultivated urban landscape was created.

Squares and parks

Squares as places of convergence and retention as well as landmarks of space were carefully planned. Grassi distinguished three types of squares. The first were city (architectural) squares, which represented the most obvious expression of civic culture and urbanity, and their purpose

45 See: Daina Glavočić, "Stambena arhitektura" ["Residential Architecture"], in *Arhitektura secesije u Rijeci* (Rijeka: Moderna galerija Rijeka, 1997-1998), 82.

was primarily aesthetic. They were planned almost obligatorily next to all public buildings, in existing and new locations. The second were utilitarian squares that serve trade, i.e., to accommodate the market, and the third squares whose purpose was recreational, i.e., to accommodate children's playgrounds and they were planned in large numbers. Grassi noted that the number of all squares in the plan was small, and their dimensions were insufficient because of the nature of the terrain, it was difficult to find large plots. Therefore, it was necessary for the city administration to pay close attention to their artistic design and harmonization with the buildings that dominated them, in order to increase the aesthetic value of the environment.[46] An example of such a triangular square was the one in front of the newly built synagogue in Pomerio, for the realization of which it was proposed to demolish a house in the place of which a fountain or a monument would be placed.[47]

The largest reconstruction of an existing square was planned at Adamić, the main town square, located between Corso and the coast. Since it was the place where foreigners who arrived by sea made their first contact with the city, this square was considered the most important for the representativeness of Rijeka. Since the project envisaged the demolition of the entire block of coastal buildings of unquestionable architectural value, the realization was left for the future. In a number of other squares, the landscaping was less demanding and therefore achievable. Two squares along the Rječina – *Scoglietto* (Školjić) and the square in front of the Slaughterhouse were landscaped. The planting of trees would enrich the space and beautify the view, which was spoiled by the unaesthetic background of the railway embankment.

Probably the most successful urban project of this kind was the design of *Piazza Giuseppe* in front of the new Governor's Palace, at the highest point of *Via Castello* and in the axis of Adamić Square. Due to the steep slope of the terrain, the square was divided into two levels, the lower which was part of *Via Castello* and the city bypass and the upper in the form of a spacious terrace that served as access to the palace and *Joseph (Archduke) Park*. The terrace is supported by a stone wall and crowned with a balustrade, and the whole ensemble, although not large, leaves a monumental impression.[48]

With more moderate interventions, two squares at the ends of Corso were also arranged – the square near the Sokol tower and Jadran Square, with a parterre design.[49] (Fig. 6)

A new urban element that could be seen in these squares, as well as in Adamić Square, the buildings on Corso and in several places in the Old Town and the wider center were arcade porches, an element that town architecture was almost not familiar with. Although this element had a functional justification – protection from the sun and rain, very common in this climate, the reason for their introduction was primarily aesthetic in nature, where the author found a model for the "New Rijeka" in the typical ambience of Italian cities. In addition to this, the modest canopies and awnings that spoiled the look of the city's main promenade and that were necessary in the summer would thus be eliminated. The way in which the porches are presented in the plan leads to the conclusion that their realization would be done in three ways – in some buildings they would be made as an extension, in some as reconstruction, however, most of the buildings were intended for demolition and would be replaced by new modern buildings which would have this element as mandatory.

At the beginning of the century, Rijeka lacked greenery, and due to limited space and the rocky nature of the ground, this element of the plan, like other public spaces, could not be solved optimally, which the author of the plan was aware of. He did not perceive city parks and gardens exclusively as an ecological category but as a part of the city's architecture, which has its own artistic value. He believed that the core of future parks was the existing ones. In addition

46 Grassi, *Relazione*, 21.

47 Ibid., 26-27.

48 Ibid., 26.

49 State Archives in Rijeka (HR-DARI), Technical Offices of the City of Rijeka (57), 3.1.19.2. box 185, no. 28/1913. (HR-DARI 57, 3.1.19.2., 185, 28/1913).; City Council Rijeka (22), sign. 1309.U.E., 26.06.1909.

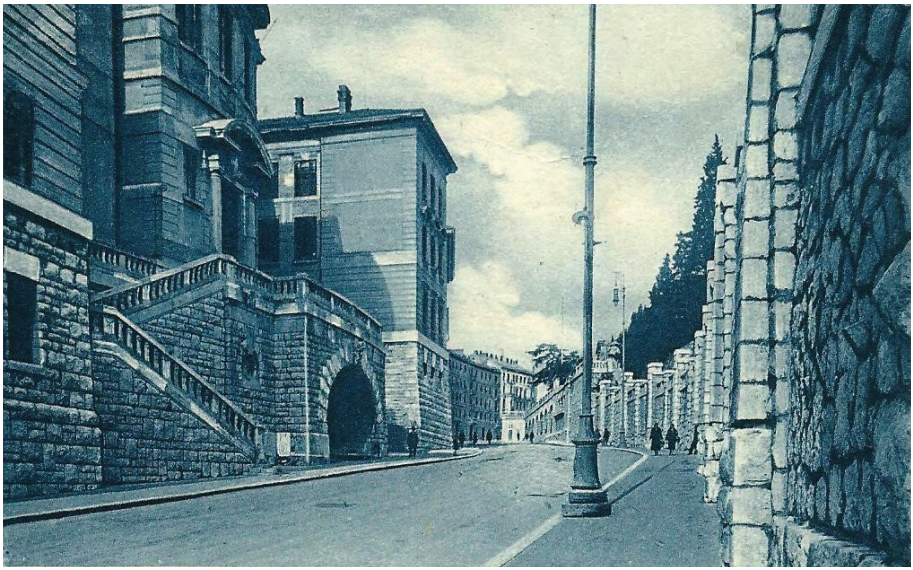


Fig. 7: The realization of Grassi's plan - Via del Castello as the starting point of the city bypass - the Palace of Justice and the stone retaining wall of Joseph's Park and Square, 1904-1907

to the Theater Park, Scoglietto Promenade and the Mlaca Public Park, there were landscaped gardens and parks next to public buildings, such as the one next to the Governor's Palace and the Naval Academy, as well as the private oases rich in vegetation created by passionate enthusiasts for many years. One such park was next to the residence of Archduke Joseph (today the Nikola Host and Vladimir Nazor parks) which was located in the center of the city. Grassi wrote about it: "Another area, no less suitable for the position and richness of plants, is the current Archduke's Park. As long as this park remains untouched by the will of the owner, the whole neighborhood, albeit indirectly, will benefit greatly." He also believed that if the opportunity arises in the future, the city should definitely include this park in its possession for the benefit of its citizens.[50] The importance of this feature was confirmed in the following years, when a retaining stone wall, designed by Giovanni Rubinich, was built in the extension of Joseph's Square, opposite the Palace of Justice. Despite the fact that the Palace of Justice did not have adequate access space on the north side, together with this wall, it makes one of the most monumental urban ambiences of the city. (Fig. 7)

A similar private oasis was the park on the former estate of the mayor of Ciotta on *Toretto* (Turnić), which was turned into a public park according to the plan because otherwise it would probably be parceled out for the construction of houses.[51]

The plan also envisaged a series of lines of trees in all the places where the width of the streets allowed it – double along the wide main streets, single along the secondary and panoramic. The plan to interpolate as much greenery as possible into the city space also included industrial zones, so a single line of trees was planned along the entire south side of *Via Volosca*, as well as near the Communal Slaughterhouse.[52] Where there was no possibility of planting lines of trees, the "borrowed landscape" of private gardens and backyards was relied upon, which should have been made possible by the new Building Ordinance, that would prohibit the erection of high stone walls, except where it was necessary for static reasons.

50 Grassi, *Relazione*, 33.

51 Ibid.

52 State Archives in Rijeka (HR-DARI), Technical Offices of the City of Rijeka (57), 3.4.1.1. map 1, no. 1/15/1904.-05. (HR-DARI 57, 3.4.1.1, 1/15/1904.-05.).

Public Buildings

The plan assigned a special role to public buildings — the role of establishing the new architecture models according to which the "New Rijeka" would be shaped, a reflection of an orderly and civilized society. In the textual part of the plan, speaking of public buildings, Grassi wrote:

> "These are public buildings that need to be erected as soon as possible. Everything corresponds to a real need, which arises not only from the increase in the population, but from the general development of culture and the propagation of sound ideas of social economy. It should be noted that every public building, in addition to serving the most justifiable purpose, always leaves an artistic impression; so city monuments have had historically an immeasurable educational impact on the broadest sections of the population, with a special reflection on private construction. A dominant building is recognized for its architectural value, and the most subtle contribution is its impact on the appearance of the smaller buildings that surround it."[53]

Office buildings, health and social care facilities, buildings for culture and entertainment, schools, hotels, army barracks and sacral buildings would generally have the characteristics of Secession, the dominant style of the beginning of the 20th century. The plan envisioned a series of public buildings, some of which were already at some stage of design or realization, such as the Palace of Justice (Gyözö Czigler, 1905), the Slaughterhouse (Carlo Pergoli, 1907), the Almshouse (Giulio Salvador, Carlo Pergoli, 1907) and the Emigrants Hotel (Szilard Zielinski, 1906). It also determined locations for numerous new buildings, most of which were erected by 1914, and a few in the interwar period. New army barracks were located in Plasse (Emil Eisner, Adolf Ehrlich, 1912), the new Benedictine Monastery (Theodor Träxler, Eugen Celligoi, 1914), the Italian primary school at Mlaca (Luigi Luppis, 1907), a primary school and kindergarten on Cosala (Luigi Luppis, 1911),[54] a parish church at Cosala (Bruno Angheben, 1934). Instead of the state primary and grammar school, the primary school in the Old Town was built (Pietro Bacci, Bruno Angheben, 1934).[55]

Instead of building a new city hospital, which was planned in 1873, Grassi opted to adapt the existing one as a less ambitious but more realistic solution that should meet the needs of the next 40 or 50 years and envisaged the possibility of locating the future, main, infectious hospital in the Scurigne valley, where there was ample terrain for such a complex facility.[56]

Some of the buildings were never realized, such as the Stock Exchange that was supposed to be located in the eastern part of the *Piazza Elisabetta* (Jadran Square) and the Summer Theater located in the northern part of the Potok zone. (Fig. 8) The most significant building that was never built was the City Palace, which was to be located at Adamić the main town square, as the first monumental building to be seen upon arrival in the city by sea. The City Palace was the main reason for the radical reconstruction of the square, which Grassi considered to be wholly justified.

Along buildings that were built on the outskirts, those that due to the nature of their purpose were necessarily central, were mostly interpolated into the existing urban fabric, along with the inherent sacrifice of extant architecture. The only building erected without demolitions despite its central location was the city bathing site. Given that five kilometers of coastline were occupied by the port and industry, the only possibility to locate the city beach and bathing facility was in a unique and unusual place, between the two basins of the port, on the outside of the large breakwater (Luigi Bescoca, Luigi Luppis, Vjenceslav Celligoi, 1913).[57]

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53 Grassi, *Relazione*, 37-38.

54 ***, *Arhitektura secesije u Rijeci* [*Secessional Architecture in Rijeka*] (Rijeka: Moderna galerija Rijeka, 1997-1998), Catalog, 400-517.

55 Grassi, *Relazione*, 36.; ***, *Moderna arhitektura Rijeke* [*Modern Architecture of Rijeka*] (Rijeka: Moderna galerija Rijeka, 1996), 151, 179.

56 Grassi, *Relazione*, 35-36.

57 Ibid., 37.



Fig. 8: Partial plan of the regulation of the Potok zone (1908). A block construction with a summer theater in the northern part of the zone

Attitude Towards Architectural Heritage

There is one aspect of the plan that deviates significantly from today's aesthetic criteria and accepted theories, and it is characteristic of this period in general; and that is the attitude towards the historical and the inherited. It can be seen in the whole plan and is especially pronounced in the historic center – the Old Town. The crowded and tall houses, narrow irregular streets were not considered hygienically and aesthetically acceptable and there was no mercy towards them. Although earlier plans, such as the one from 1859,[58] foresaw a major rationalization of the housing fund of the Old Town, and the same was envisaged by the program of a call for tender from 1873, the attitude towards demolition was relaxed and approached freely and without hesitation. Apart from the town tower and several buildings along Corso, only significant sacral buildings were preserved in the entire Old Town, such as the Cathedral of St. Vitus, the Congregational Church and the Leaning Tower, the Church of St. Jerome and the small Church of St. Sebastian, probably because of its status as a favorite sanctuary. Wide streets, as much as ten meters, block construction and a large reconstruction of the square in front of the City Palace were planned, with the obligatory interpolation of porches, which did not spare the cathedral. The historic core was thought of as a modern business center, *the City*, without analyzing what replacing the picturesque Mediterranean ambience with the sterile atmosphere of modern metropolises could do it to the identity of a city that was built over the centuries. The plan foresaw the demolition of large and significant buildings such as the Jesuit College and Seminary, as well as a whole range of historic buildings of solid architectural and construction value. Such a decision was certainly contributed to by the decision to build the Court Palace on the site of the historic castle (Kaštel), which was realized in 1904-1905, just at the time of the completion of the regulatory plan.[59]

58 State Archives in Rijeka (HR-DARI), Cartographic collection (277).

59 The fact that the proposal for the demolition of the historic castle came from the city's Technical Office and not the state authorities illustrates well the attitude of city engineers and planners towards architectural

And in the entire lower town, only newer, more representative historicist buildings built in recent decades were left, while all older structures were scheduled for demolition. Grassi was a doubly disadvantaged in this issue: in addition to being educated in the modernist spirit, he was a foreigner and had no emotional relationship with the city, its history and heritage. The plan had far-reaching consequences for the architectural heritage because it was the legal basis for the demolition that was carried out in the interwar and post-war period.

Conclusion

Paolo Grassi's regulatory plan emerges in a period of long peace and continuity, so necessary for the affirmation of knowledge and work, and is a prime example of a plan that illustrates the spirit of the early 20th century when future seemed secure and prosperous. Grassi was a modern urbanist who approached the development of the regulatory plan with responsibility, professionalism and great enthusiasm, imagining the "New Rijeka," an advanced and modern city built to the standards of the citizens. Although he sometimes resembled Renaissance and even utopian urbanists, his role models were contemporary – above all Wagner's regulations of Vienna with which he was probably familiar. He took from Camillo Sitte only what suited him to justify some interventions. Wherever possible he used archetypal forms to create the proper landscaped space he preferred. He expertly turned the shortcomings of locations where the dense road network had to overcome significant height differences of the terrain into advantages, creating conditions for quality architecture and new specific ambiences. The end result of the plan was a harmonized image of the city – viewed from the most important, the view from the sea. Among the blocks, rows and individual houses intended for housing, which, together with the port and industrial façades, formed the basis of the urban landscape, public buildings were arranged as accents in space: the new Palace of Justice on the hill of the Old Town, the church at Cosala on the hill above Joseph's Park, the Almshouse on the hill above the Lazaretto, the army barracks above the City Park, the Church and Benedictine Monastery at Plasse.

The natural limitations as well as the carefully studied planning that monitored the nature of the terrain, resulted in a quality relationship between the city and its surroundings, primarily the sea – new residential areas are provided with a panoramic view and the harmonious silhouette of the "New Rijeka" from the sea was assured. The successful plan, in addition to economic and hygienic aspects, had to meet aesthetic criteria, while the realization of a landscaped and artistically designed space was necessary for the mental health of the citizens and the prosperity of the city as a whole.

Today, with a time span of a century, we can conclude that Grassi's plan for the urban identity of Rijeka, which represents a unique blend of Mediterranean and Central European features, was crucial. Rijeka is presently a deindustrialized city of an undefined future that does not differ from other transition cities caught in the network of trade and consumer globalization. Therefore, this very plan, which essentially determined the plans that followed later, should be the basis for considering the development of the city in the future.

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heritage. The medieval castle did not fit the vision of a new, modern Rijeka and the few opponents who were against this decision, such as the historian Riccardo Gigante, were ignored.

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ILLUSTRATION CREDITS

Fig. 1: State Archives in Rijeka (HR-DARI), Technical Offices of the City of Rijeka (57), 3.1.18.21. box 106, no. 34/1939. (HR-DARI 57, 3.1.18.21., 106, 34/1936); graphic processing by the author.

Fig. 2: State Archives in Rijeka (HR-DARI), Technical Offices of the City of Rijeka (57), 3.4.1.1. map 1, no. 1/15/1904.-05. (HR-DARI 57, 3.4.1.1, 1/15/1904.-05.).

Fig. 3: State Archives in Rijeka (HR-DARI), Cartographic collection (277); graphic processing by the author.

Fig. 4: State Archives in Rijeka (HR-DARI), Technical Offices of the City of Rijeka (57), 3.1.19.2. box 185, no. 11 (83)/1910. (HR-DARI 57, 3.1.19.2., 185, 11(83)/1910).

Fig. 5: State Archives in Rijeka (HR-DARI), Technical Offices of the City of Rijeka (57), 3.1.19.2. box 185, no. 20/1913. (HR-DARI 57, 3.1.19.2., 185, 20/1913).

Fig. 6: State Archives in Rijeka (HR-DARI), Technical Offices of the City of Rijeka (57), 3.1.19.2. box 185, no. 28/1913. (HR-DARI 57, 3.1.19.2., 185, 28/1913).

Fig. 7: State Archives in Rijeka (HR-DARI), Postcard collection (279).

Fig. 8: State Archives in Rijeka (HR-DARI), Technical Offices of the City of Rijeka (57), 3.1.19.2. box 185, no. 61/1908. (HR-DARI 57, 3.1.19.2., 185, 61/1908).