Professional paper

Electronic collection of papers of the Faculty of Civil Engineering

https://doi.org/10.47960/2232-9080.2023.25.13.15

ISSN 2232-9080

Renovation and Reconstruction of Vladimir Šterk's Mosinger Villa in Zagreb

Vedran Ivanković

University of Zagreb, Faculty of Architecture, prof. Ph.D, vivankovic@arhitekt.hr

Abstract: The Mosinger Villa in Zagreb (1930 - 1931, Pantovčak 112) was Vladimir Šterk's first villa built with undecorated facades. This confirms Šterk's commitment to modernism. Until the Second World War the villa was owned by Jewish families Mosinger and Mayer. After the founding of the Independent State of Croatia the villa was requisitioned and after the communist rule had been established it was divided into three apartments. A garage was added to the villa in 1966, and a second floor in 1982. The renovation and reconstruction project of the derelict villa, commissioned by its new owner, was commenced in 2019. The geotechnical and structural engineering surveys determined that the villa needed to be demolished. The conservation and restoration survey determined the original, first and oldest layer from 1930 - 1931 as the basis for reconstruction and presentation. The method of partial facsimile restoration was chosen, while the second floor will be designed in a contemporary manner. The external dimensions were retained in the existing condition in accordance with the set preservation measures for the Historical Ensemble of the City of Zagreb which the villa is part of.

Keywords: renovation; reconstruction; Mosinger Villa; Vladimir Šterk; modern architecture in Croatia in the 1930s

Obnova i rekonstrukcija vile Mosinger u Zagrebu arhitekta Vladimira Šterka

Sažetak: Vila Mosinger u Zagrebu (1930. - 1931.; Pantovčak 112) prva je vila arhitekta Vladimira Šterka izvedena s pročeljima bez dekoracija. To potvrđuje Šterkovo opredjeljenje modernizmu. Do Drugog svjetskog rata vila je bila u vlasništvu židovskih obitelji Mosinger i Mayer. Nakon uspostave NDH vila je rekvirirana, a nakon uspostave komunističke vlasti podijeljena je na tri stana. Godine 1966. vili je dograđena garaža, a 1982. drugi kat. Projekt obnove i rekonstrukcije zapuštene vile u ruševnom stanju započeo je 2019. na nalog novog vlasnika. Geotehnički istražni radovi i statički pregled utvrdili su da je vilu potrebno srušiti. Konzervatorsko - restauratorski istražni radovi utvrdili su originalni, prvi i najstariji sloj iz 1930. - 1931. za obnovu i prezentaciju. Odabrana je metoda djelomične faksimilne obnove, dok se drugi kat oblikuje suvremeno. Zadržani su vanjski gabariti prema postojećem stanju u skladu s utvrđenim mjerama zaštite Povijesne cjeline Grada Zagreba u kojoj se vila nalazi.

Ključne riječi: obnova; rekonstrukcija; vila Mosinger; Vladimir Šterk; moderna arhitektura u Hrvatskoj 1930-ih godina

1. INTRODUCTION

The Mosinger Villa (1930-1931; Zagreb, Pantovčak 112) was architect Vladimir Šterk's first villa designed and built with undecorated facades. It heralds his new design solutions, visible already in the design of the Radan Villa (1931-1932; Zagreb, Jabukovac 39). Šterk's approach to the design of the Mosinger Villa is the final confirmation of his acceptance of modernism principles. In Zagreb the Mosinger Villa is not the first expression of such professional and personal world view orientation, but it confirms that Zagreb architects accepted modernism and by then joined contemporary European movements with their contributions. Most historians of Croatian modernist architecture realized the historical importance of the Mosinger Villa, while those focused on Vladimir Šterk's work analyzed its characteristics in more detail [1].

Since its construction and until the Second World War, the Mosinger Villa remained in the possession of its Jewish owners. After the establishment of the Independent State of Croatia it was requisitioned like all the villas in the Jewish possession in northern, residential parts of Zagreb. After the communist rule had been established following the Second World War, the villa was divided into three apartments. In 1966 a garage was added to the villa and in 1983 another floor was added for the fourth apartment. Because of these additions, the villa entirely lost its identity of a modernist creation and an original authorial work. In 2019, when the new owner started his renovation project, the villa was derelict and dilapidated. The renovation project was preceded by the author's review of archival material, the literature on Vladimir Šterk and the historical context that formed him and in which he worked. The brief was determined by the intention of the new owner to turn the villa into a single unit, up to the contemporary living standard. The evaluation showed that Sterk's original parts (basement, around floor and the first floor) were the most valuable ones for renovation, while the added second floor lacked architectural value. Therefore, the second floor was designed in a contemporary architectural expression. The garage was moved to the north-east corner in order not to obstruct the view of the villa from the Pantovčak Street.

The renovation and reconstruction project of the Mosinger Villa was determined by today's housing standards, general guidelines on the reconstruction procedure and detailed instructions by the responsible conservation institution - the City Institute for Cultural and Natural Heritage Conservation.

The article presents the historical and cultural context in which Vladimir Šterk's artistic personality was formed, the archival data on the villa, investigation works, evaluation of the existing state of the villa and the project of its renovation and reconstruction.

2. THE HISTORICAL AND CULTURAL CONTEXT IN WHICH VLADIMIR ŠTERK'S ARTISTIC PERSONALITY WAS FORMED

Vladimir Šterk was born on Jan. 5th 1891 in Zagreb, in a Jewish family. His father's name was Vjekoslav/Alois and his mother's Lina, nee Jellinek. After the high school, in 1911 he enrolled in architecture studies at the Czech Technical College in Prague. He graduated in 1921 and returned to Zagreb. He was employed at the construction firm Špiller, Juzbašić, Šurina, and after that at Ignjat Fischer's Construction Office. Already in 1922 Šterk participated in the foundation of the People's Work, Association of Jewish Assimilants and Antizionists in Croatia, following the incentive of publisher, bibliographer and antiquarian Mirko Breyer, an advocate of the assimilation of Jewis into Croatian political and cultural life. Šterk was obviously Breyer's follower, and probably through him and Fischer he soon joined the Jewish cultural elite, which at that time had great importance in science, medicine, engineering, art, and especially architecture. Like the cultural environment of Prague at the time of his schooling, this local Zagreb environment could have influenced his formation

during the first years of his work. Since 1923 Šterk worked as independent architect-designer and remained in this capacity until his death in 1941 [2].

Apart from the large avant-garde centers like Moscow, Berlin, Paris and Prague, since 1930s other places also developed the principles of modern architecture and its movements. Ješa Denegri points out that then the "cultural map of Europe was polycentric" and that "contributions from different sides joined into a unified European art history" [3]. Zagreb also became one of such centers in a peripheral area. Modern architecture was accepted there only gradually, but continuously. Darja Radović-Mahečić observes that Croatian modern architecture reached its peak "at the beginning of the thirties, when it, examining different incentives of international rhetoric on concrete architectural tasks, started to form its own creative answers" [4].

Apart from the legendary Pfeffermann Villa (1928-1929, Zagreb, Jurjevska St. 27a) by architect Marko Vidaković, at the time when Šterk designed the Mosinger Villa (1930) a colony of villas commenced to take shape in Novakova St. with participation of almost all members of Zagreb's architectural avant-garde. Among the villas constructed in the beginning of 1930s, when Šterk opted for "pure" modernism (his villas Mosinger and Radan), reference should be made of the Spitzer Villa, Novakova 15 (Mladen Kauzlarić and Stjepan Gomboš, 1931-1932) and two somewhat later villas, the Botteri Villa, Tuškanac 54 a (Frane Cota and Zvonimir Požgaj, 1932-1933) and the Margetić Villa, Petrova 184 (Zlatko Neumann, 1934-1935). Villa as a "genre" was a special challenge for architects because it allowed them greater creative freedom than other designs, but also because their investors as a rule belonged to wealthy and highly educated citizens, a social stratum dominated by Jews in Zagreb of 1930s.

Examples of the new, modern direction in the Zagreb architecture of the 1930s are also municipal buildings designed by Šterk's university colleague Ivan Zemljak: public elementary schools at Jordanovac 108 and in Selska 45, (1930-1931); also, the high school building, Križanićeva 2-2a (Egon Steinmann, 1930-1932) and the Administrative Building of Municipal Services Company, Gundulićeva 32 (Juraj Denzler, 1932-1934). The panorama of structures with similar style characteristics is completed by a series of rental or residential and commerce buildings, for example the Wellisch Houses, Martićeva 13 and Vlaška 60 (Drago Ibler, 1930), the residential house in Gundulićeva 34 (Edo Schön, 1930-1932), the Shell Building, Gajeva 5 (Rudolf Lubynski, 1932), the Frisch House, Petrinjska 11 (Stjepan Gomboš and Mladen Kauzlarić, 1932-1933), as well as the Radovan House, Masarykova 22 (Slavko Löwy, 1933-1934) –Zagreb's first high-rise building. And finally, in 1932, the construction of the Endowment Block commenced, at Ilica-Gajeva-Bogovićeva-Petrićeva, for Tamara Bjažić-Klarin the "largest body of international style" in the center of Zagreb's Lower Town [5].

Public competitions that shaped new ideas also provided a special note to this vibrant architectural scene, along with publications and exhibitions. Three International competitions stood out: the Jewish Hospital (1930), the City of Zagreb Masterplan (1930-1931) and the Endowment and Clinical Hospital at Šalata (1930-1931). Along with Oswald Schindler, Vladimir Šterk probably also participated in the competition design from 1930 for the Hrvatski radiša Boarding School (today the Croatian Ministry of Defense, Trg Petra Krešimira IV 1, 1932-1935). With Jovan Korka Šterk designed the unbuilt Workers' Center and the Public Labor Exchange for the Brickyard (today High Schools' Playground) in a two-phase competition 1932. At the same time Šterk designed and constructed rental residential, business and commercial buildings similar in style to the Mosinger Villa: the Eisenstädter corner house (Prilaz Gjure Deželića 85), the Eisenstädter interpolation (Ilica 186) and the Rosinger-Jungwirth interpolated corner house (Draškovićeva 30/Đorđićeva 25). In their concept, the undecorated elevations and layout they indicate the change of direction Šterk explicitly demonstrated in the construction of the Mosinger Villa.

Ideas and innovations coming from two important associations doubtlessly contributed to the vibrant modern atmosphere of Zagreb between the two wars: the Zemlja Artists' Association founded in 1929 and the Zagreb Work Group (RGZ) founded in 1932. RGZ was CIAM's national group for Yugoslavia, founded at the initiative of Ernest Weissmann, Le Corbusier's long-term associate. Thanks to his social awareness and information on all important architectural ideas and actions collected through his international connections, he was the leading personality both in Zemlja and RGZ. He considerably contributed to the internationalization of Croatian modern architecture of the 1930s.

In the context of Zagreb modernism between the two wars Vladimir Šterk was not a "pioneer", but made a valuable contribution to it. Moreover, Šterk's possible change of his value system and the design direction is assumed precisely with the Mosinger Villa. This assumption is encouraged by lacking information regarding the investor of the villa, Štefanija Mosinger, encountered only in construction documents. Apart from her address, no other information about her could be obtained, not even the most important: did she belong to the respected Mosinger family that gave two artists, photographers, to Croatian culture: Rudolf (Varaždin, Feb. 27th, 1863 – Vienna, Oct. 9th, 1918) and his son Franjo (Zagreb, Jan. 26th, 1899 – Zagreb, Jan. 14th 1956)? No document can corroborate any answer to the question if Franjo Mosinger had anything to do with the villa at Pantovčak and Vladimir Šterk. However, they both belonged to the large and homogeneous Jewish cultural circle that maintained mutual connections.

3. ARCHIVAL DATA ON THE MOSINGER VILLA - THE ARCHITECT AND ITS OWNERS BETWEEN THE TWO WARS

The first and oldest information on the Mosinger Villa can be found in the building permit from 1930. It allows the construction of a two-story structure at Pantovčak 92c (later 112), issued to the name of Štefanija Mosinger from Zagreb, Ilica 55. Blueprints signed by architect Vladimir Šterk are attached to the building permit [6].



Figure 1. The layout of the ground floor and the first floor; the western, northern and eastern elevations; architect Vladimir Šterk,1930. (Source: HR DAZG, ZGD, sig. 1-3849)

The stakeout plan shows the position of the future villa: it is detached from the regulation line five meters and from the boundaries of the neighboring land lots 4 meters and 78 centimeters. The next building permit related to the Mosinger Villa dates from 1936 and it was issued to the new owners' name, Guido and Anny Mayer. It refers to the garage along the south-west corner of the villa, planned to be built by Spiller and Surina Construction Company. The building permit from 1939 is also for a garage, this time at the northern side of the villa. It is visible from the archival data that the garage was not built before the Second World War. The first garage, planned along the south-west corner, was not built because of the neighbors' complaint. The present situation shows that the garage at the northern side was not built either. After the Second World War, when the villa was rearranged into three separate apartments, interventions followed one another: in 1966 a garage with a storage room was built along the south-west corner and since 1972 the layout was changed with the aim of adding another floor that would accommodate the fourth apartment. Finally, in 1983, the second floor was built according to the design by Božidar Kolonić, the chief designer of the Osnova Design Office. While the garage obstructed the view of the southern facade, the second floor completely obliterated the original concept of Šterk's work and the identity of the villa [7]. Additional information can be found in the land registry. In the title deed from 1931 it is stated that a part of the land lot with the Mosinger Villa was sold to Jakob Deutsch, which means that the original parcel was divided into two new ones. In June of 1936 the villa was sold to Dr. Guido and Anny Mayer (Bosanska ulica 36, Zagreb) [8].

The existing gross floor area (of all stories) with the garage, according to building and operating permits, is 661.24 m². and according to the geodetical and architectural survey of the existing situation 661.02 m². The floor area of the villa according to the title deed from 2019 is 247 m². and of the garage with storage 40 m².

Šterk's original villa had a dining room, living room, kitchen, rooms for maids and a small laundry room on the ground floor. Four rooms, a wardrobe and a bathroom were on the first floor, while a larger laundry room, a boiler room and a wood cellar were in the basement. This layout was radically changed after the Second World War when new tenants moved into the villa. The historical registry says: "Flat No. 2" on the ground floor, "Flat No. 3" on the first floor and on the added second floor "Flat No. 4", while in the basement "Flat No. 1" was situated next to the "common pantry".

4. INVESTIGATION WORK AND THE EVALUATION OF THE PRESENT STATE OF THE MOSINGER VILLA

The main design for the renovation and reconstruction of the Mosinger Villa was preceded by following site investigations: geotechnical soil and foundations investigation (Geotehnički studio, d.o.o., Igor Sokolić, Ph.D., geotechnical engineer); structural survey of the villa (Ultra studio d.o.o. Zagreb, Andrej Marković, civil engineer) and preservation and restoration investigation (Teracotta, d.o.o., Goran Mišić, sculptor, preservationist and restorer). The conservation study was drawn up by Vedran Ivanković, Ph.D., architect, and Ivan Foretić, architect (MR 2 Architectural Office), while the detailed design for the removal of the villa was prepared by Andrej Marković, civil engineer (Ultra studio d.o.o.). The preliminary design for the reconstruction of the villa was developed by Vedran Ivanković, Ph.D., architectet, and the main reconstruction design was prepared by Vedran Ivanković, Ivan Foretić, architect, Taryn Babić, architect, Miroslav Rajić, architect, and Marin Račić, architect (MR 2 Architectural Office).

The geotechnical survey has determined a very bad condition of the strip footing because of the dampening and deterioration of the binding material, so that now the foundations do not guarantee safety and structural strength in case of the structure's renovation. Geotechnical investigation also pointed to the necessity of securing the potential

slide: a row of piles is planned transversally in the lower part of the land lot, before the steepest part of the natural slope.

The structural survey has determined a very bad condition of the construction, a questionable seismic resistance and the endangered mechanical resistance and stability of the villa. Damage from the earthquake 2020 has also been determined. In case of renovation the replacement of the existing load-bearing structure by a new one is recommended. Both surveys agree that the existing structure poses a threat to general security, other buildings and the stability of soil and that it does not meet the legal requirements for construction, which excludes any kind of renovation of the existing villa.

Conservation and restoration investigations (6 probes) determined the original color of the façade, woodwork and all metal parts of the Mosinger Villa. According to the results, the original façade color was white, the wooden entrance door and the wooden shutters dark brown, the wooden window jambs white, the metal shutter frames white, while the rest of the metalwork was black.

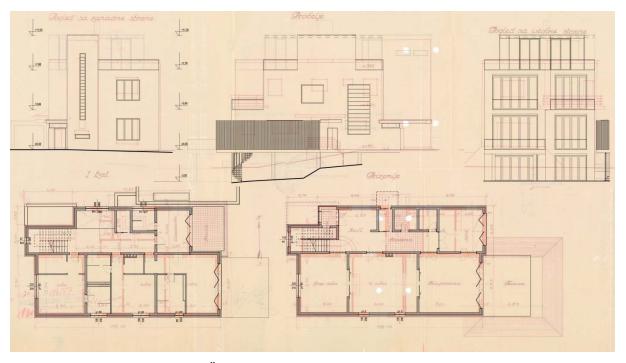


Figure 2. The rectification of Šterk's project for the Mosinger Villa (the layout of the ground floor and the first floor; the western, northern and eastern elevations, 1930) and the preliminary design of renovation and reconstruction of the Mosinger Villa (the Conservation Study; Vedran Ivanković, Ph.D, architect and Ivan Foretić, architect, MR 2 Architectural Office)

The investigation of archival sources and literature determined the construction sequence, individual phases were evaluated and by comparing Šterk's design from 1930 and the design of the added second floor from 1972-1983 with the present situation, all interventions and deviations from the initial 1930 project could be determined. The comparison of Šterk's design from 1930 and the design for the added second floor from 1972-1983 with the preliminary design and new construction details of the external parts of the villa, the deviations of the new villa from the planned one became obvious. And finally, a comparison of the survey of the present state with the preliminary design and the new construction details of the new villa from the villa showed the deviations of the new villa from the villa showed the deviations of the new villa

from the built one. These insights helped in the completion of detailed guidelines in the design of the new villa. All data of archival sources and literature, investigations and reviews and all comparisons between the existing (archival) and new design documentation, were integrated with the results of conservation and restoration investigations into a single document - the Conservation Study. The new (replacement) construction of the Mosinger Villa was defined in the Conservation Study as a "reconstruction with a facsimile interpretation of some parts of the Mosinger Villa". The use of modern materials instead of the original ones was specified (including the new reinforced concrete construction instead of the existing one) and the replacement of the added parts of the Mosinger Villa (the garage and the second floor) by new contrast-shaped bodies.

On the basis of the assessment of all expert surveys the plan for the removal of the villa was elaborated and the following documents submitted to the relevant authority - the City Institute for Cultural and Natural Heritage Conservation: the Request for the Removal of the Existing Mosinger Villa and the Conservation Study. With its Administrative Notice from Apr. 8th, 2022, the Institute granted the request for the removal of the existing villa and with the Administrative Notice from June 7th, 2022 it confirmed the Conservation Study. With the definition of the venture as a "partial facsimile renovation and reconstruction of the Mosinger Villa" and referring to the system of protection measures envisaged for the "Historical Urban Complex, the City of Zagreb" where the villa is located, the Institute has set firm program guidelines.

5. THE MOSINGER VILLA RECONSTRUCTION PROJECT

As it was not possible to renovate the existing Mosinger Villa, with the design of the new villa, i.e. the partial replica concept of Šterk's original Mosinger Villa and the reconstruction of the added second floor and garage, it was attempted to retain all the characteristics and elements that impart the monument importance to the villa. In its form, composition and volume (external dimensions), the partial replica is coherent with the original villa. The renovation of the western, street façade will be carried out according to Šterk's design from 1930 and of the southern one in accordance with the built situation from 1931. Both elevations will be painted in the tone of the oldest layer. A replica is planned for the steel mast and the steel fences on the French windows of the dining room adjoining the southern elevation (which were not anticipated by the 1930 design and were probably installed as part of the alterations in the course of construction).



Figure 3. The photograph of the existing Mosinger Villa, view from the south-west (the Pantovčak Street) 2020.

The second floor, added in 1983 (and planned 1971) will be removed and replaced by a new volume, shaped in contemporary architectural expression. This volume will be visually dematerialized through shaping in glass.

The structure of the new Mosinger Villa is completely executed in reinforced concrete. The second floor combines a load-bearing system with a reinforced concrete core and steel posts at the ends of the last, reinforced concrete roof slab.

The façade of the second floor is made of glass (everything apart from the core) and has no bearing function. Maximum dimensions of glass plates are planned without visible frames (the glass will be "laid over" its frame). The southern glass façade is fixed and will be executed in one piece (about 11x3 m) and it is planned to be lifted and installed with a crane. Inner screen shutters will provide the darkening of the room as necessary.

The garage from 1966 at the corner of the western (street) and southern elevation will be removed and a new one will be built to the north, behind the villa and towards the garden. The form of the new garage will correspond to the second floor and will receive its final paneling in aluminum sheets.

All wooden windows will be removed and replaced by newly designed ones with narrow steel sections, resembling original Šterk's jambs of the narrow and high stairway window and the overlight of the windshield above the entrance eaves.

The layout of rooms is new: on the ground floor the windshield and the entrance lobby, the dining room, kitchen and living room will be as Šterk conceived them, while a wardrobe with the connection to the garage, a toilet and a study will replace Šterk's maids' rooms; there are four bedrooms on the first floor (as Šterk had it), but each has its own bathroom; on the second floor, instead of the addition from 1983 there will be a secondary living room as a hobby room and another bedroom with a freestanding bathtub and washbasins. And finally, a swimming pool and a mini-gym, a bathroom with a toilet, a laundry room and a boiler room are planned in the basement. Although this layout is new and adjusted to modern requirements, to a certain level Šterk's original layout has been rehabilitated and the initial purpose of the villa restored.

Because of the arrangement and purpose of particular rooms, the dimensions and the position of the windows on the northern and eastern elevations have been altered; on the second floor of the southern elevation a smaller opening and the window of the third bedroom bathroom have been added. The fence of the second-floor terrace has been redesigned. It is in the place of the original fence of Šterk's impassable flat roof; in the added floor from 1983 this was a terrace fence.



Figure 4. A 3D model of the future Mosinger Villa, view from the south-west (from the Pantovčak Street), 2022.

The new fence will be transparent, from thin steel strip rods and unlike the old one it will enable a free view of the second floor, shaped in contrast to Šterk's "basis". All fences follow this design: around the ground floor terrace, the first-floor bedroom terrace, also the fences of the French windows on the eastern elevation. The color of the new window jambs will change: instead of the former white ones, the new ones are black steel (a reminiscence of the original Šterk's steel jambs, used only on smaller windows: the staircase and above the reinforced concrete eaves, only on the street, entrance and representative elevation of the villa). Instead of the old, dark brown wooden roller blinds, new, lighter and thinner screen-shutters will be installed. They protect from the sun and strong light equally well as the massive wooden blinds. Visually they make "lighter" the part of the villa that was built in the 1930s in accordance with that time's technical possibilities according to Šterk's design.

Defining this venture as a "reconstruction of a residential structure containing one apartment, group 2a, with a cellar, basement, ground floor plus two floors and a garage as auxiliary structure" the City Office for Reconstruction, Development, Physical Planning, Construction, Utility Services and Transport issued a Building Permit dated Dec. 13th, 2022.

6. CONCLUSION

In Zagreb there are very few examples of successful reconstructions of villas from the period of modernism between the two wars. The examples of devastation of villas from the 1930s in Zagreb are numerous. Blatant examples of devastation are the Spitzer Villa, Novakova 15 (Mladen Kauzlarić and Stiepan Gomboš, 1931-1932) and the Podvinec Villa, Jabukovac 29 (Ernest Weissmann, 1936-1937). The Nazor Villa, Grškovićeva 36 (Stjepan Planić, 1931) was torn down. For the renovation and reconstruction of the Mosinger Villa, built in 1931 according to Vladimir Šterk's design from 1930, annexed in mid-1966 (a garage at the southwest corner of the representative street elevation) and in the beginning of 1983 (second floor), because of its present condition (foundations and the structure) and the low-quality changes it was subjected to over time, the villa should be demolished first. The renovation will be carried out using the selected method of partial replica of the original Šterk's Mosinger Villa and the contemporary design of the added second floor and the garage. As part of this method, Šterk's design has been "purified" by abandoning the later modifications and additions and also by adapting it to the requirements of contemporary residential use which the villa was initially meant for. This has caused layout changes, although the spatial distribution and most valuable sections (for example the living room and the dining room on the ground floor, as well as the construction concept, originally with three longitudinal loadbearing walls) have been repeated to a large extent. Through the use of modern thin steel window jambs and a thin reinforced concrete structure, the impression of the original and replicated part of the villa has been visually "lightened". As such, it is closer to the spirit of European avant-garde of the second half of the 1920s than it was the case with Sterk's somewhat "too bulky" original. Unlike the partial replica of the original part, the second floor, added in 1983, is designed in modern manner. It is a glass cube, which represents a shaping contrast to the part from 1931, renovated using the partial replica method (basement, ground floor, first floor). The intention has been to present the author's approach to the reconstruction of a modernist villa through an innovative approach, the contrasting method: the new and the old is clearly separated. The old is in this case that which is inherited, renovated through the method of partial replica that strives to come as close to the original from 1931 and to the spirit of time in which the original was created as possible, although the Mosinger Villa did not express the ideas of the most progressive European avant-garde in all aspects of its construction. Therefore, this design tries to stress the spirit of modernism between the two wars, primarily characterized by striving for the new and the contemporary.

REFERENCES

1. Premerl, T. (1989.). Hrvatska moderna arhitektura između dva rata: nova tradicija. NZ Matice hrvatske, Zagreb; Kahle, D. (2003.). Stambene kuće Novoga građenja u sjevernim dijelovima Zagreba u razdoblju od 1928. do 1944. godine. Prostor, 26(2003.), 167-174; Radović Mahečić, D. (2007.). Moderna arhitektura u Hrvatskoj 1930-ih / Modern Architecture in Croatia 1930s. Školska knjiga, Zagreb

2. Esih, I. (1941.). Umro ing. arh. Vladimir Šterk, Jutarnji list, 30(1941.), 29; Kahle, D. (2008.). Potpisani projekti i realizacije Vladimira Šterka u Zagrebu od 1923. do 1941., Prostor, 36(2008.), 192-209; Židovski biografski leksikon, Vladimir Šterk (https://zbl.lzmk.hr)

3. Denegri, J. (1990.). Devetsil. Češka likovna avangarda dvadesetih godina, Galerija suvremene umjetnosti, Zagreb, rujan-listopad 1989., Život umjetnosti, 1(1990.), 70-72

4. Radović Mahečić, D. (2007.). Moderna arhitektura u Hrvatskoj 1930-ih / Modern Architecture in Croatia 1930s., Školska knjiga, Zagreb, 17-19

5. Bjažić-Klarin, T. (2010.). Zakladni blok u Zagrebu. Urbanističke i arhitektonske odlike, Prostor, 40(2010.), 323-335

6. HR-DAZG 13-14, ZGD, sign. 1-3849; Permit No. 114537-XVI-1930. The file contains the entire documentation of the villa.

7. The documentation regarding the interior of the villa has not been preserved. The cadastral sketch from Jan. 20th, 1966 shows the built garage (GU KG, Department for geodetical and cadastral databases, No. 423-60) – At the address: Secretariat for Municipal Affairs, Construction and Traffic, Department of City Planning Documentation and Regulations, Under No. UP/I-05/11-23845/2-1971. from Nov. 17th, 1971 we can find the urban development approval for adding the second floor, the building permit for it from June 26th, 1972 and the operating permit for the added second floor with an apartment (No. UP/I-05/1-5467/4-1983. from Oct. 2nd, 1983).

8. The entry in the Austrian Biographic Lexicon states that Guido Mayer (Vienna, Feb. 26th, 1891 – † 1945?) abandoned his apartment in Vienna (Krugerstrasse 1) in 1923 without leaving his forwarding address. He earned his PhD in engineering chemistry at the Technical College in Vienna, where he had a shaving products factory ("King-Rasierseife"). The later registration sheet states that he lived in Zagreb, at the address Bosanska St. 36 with his wife Anny, nee Matousch (Vienna, Feb. 25th, 1898) and his under-age son Guido (Zagreb, June 3rd, 1924), that he occasionally visited Vienna and founded a factory in Croatia. He disappeared in 1945. Österreichisches Biographisches Lexikon 1815-1950, Vol. 5 (Ifg. 25, 1972): 425-426, Vienna