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172-187 DARKO KAHLE

ARCHITECT ZLATKO NEUMANN Works after the Second World War (1945-1963)

ORIGINAL SCIENTIFIC PAPERS UDC 72.038.1(497.5 Z. NEUMANN)"1945/1963" Arhitekt Zlatko Neumann

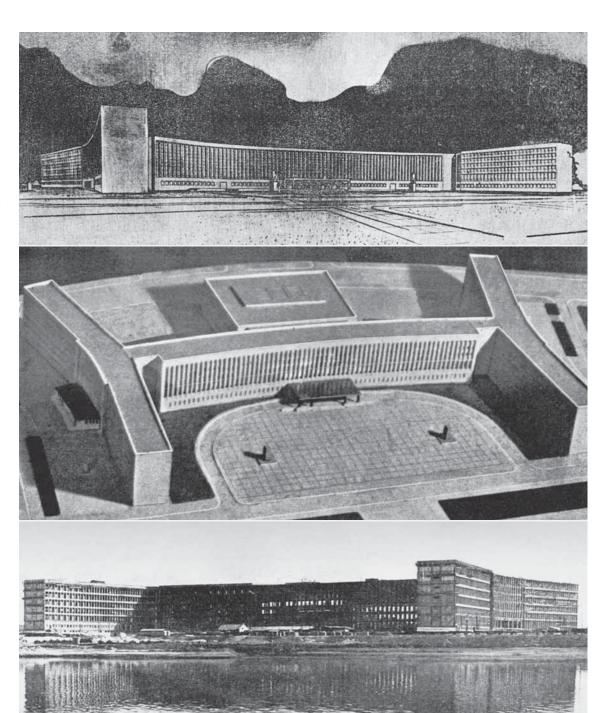
Djela nakon Drugoga svjetskog rata (1945.-1963.)

IZVORNI ZNANSTVENI ČLANAK UDK 72.038.1(497.5 Z. NEUMANN)"1945/1963"



FIG. 1A POTOCNJAK, VLADIMIR; NEUMANN, ZLATKO; ULRICH, ANTUN; PERAK, DRAGICA: THE NEW GOVERNMENT PRESIDIUM BUILDING, THE FUTURE NEW BELGRADE, YU, 1946-47, FIRST PRIZE COMPETITION ENTRY, PERSPECTIVE VIEW

SL. 1.A POTOĆNJAK, VLADIMIR; NEUMANN, ZLATKO; ULRICH, ANTUN; PERAK, DRAGICA: NOVA ZGRADA PREDSJEDNIŠTVA VLADE FNRJ, BUDUCI NOVI BEOGRAD, JUGOSLAVIJA, 1946.-1947., PRVONAGRAĐENI NATJEĆAJNI RAD, PERSPEKTIVNI POGLED



1B - MODEL VIEW ON THE DEFINITIVE BUILDING SITE, 1947

1.B POGLED NA MAKETU NA KONAČNOJ LOKACIJI ZGRADE, 1947.

Fig. 1c Potočnjak, Vladimir,

ARCHITECT-IN-CHARGE; NEUMANN, ZLATKO, SENIOR DESIGN ARCHITECT; ULRICH, ANTUN; PERAK, DRAGICA: THE REINFORCED CONCRETE SKELETON OF THE NEW GOVERNMENT PRESIDIUM BUILDING AFTER THE CONSTRUCTION HALTED IN 1949 SL. 1.c POTOČNJAK, VLADIMIR, ODGOVORNI ARHITEKT; NEUMANN, ZLATKO, STARIJI projektant; Ulrich, Antun; PERAK, DRAGICA: Armiranobetonski kostur NOVE ZGRADE PREDSJEDNIŠTVA VLADE FNRJ NAKON ZAUSTAVLJANJA RADOVA 1949.

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# ARCHITECT ZLATKO NEUMANN WORKS AFTER THE SECOND WORLD WAR (1945-1963)

ARHITEKT ZLATKO NEUMANN
DJELA NAKON DRUGOGA SVJETSKOG RATA (1945.-1963.)

International Style (Modern Architecture) Neumann, Zlatko Yugoslavia Zagreb Internacionalni stil (Moderna arhitektura) Neumann, Zlatko Jugoslavija Zagreb

The article enlightens the virtually unknown work of the Architect Zlatko Neumann after 1945. As one of the design architects of a seminal government building in the socialist Yugoslavia in 1947, he immensely contributed to the suspended beauty of a slender H-beam shape of the today "Palace of Serbia". In 1954, he effectually started an independent architecture practice as a Central Executive Officer [CEO] of the Architectural Design Office "Neuman" (sic!) and was active there until his retirement in 1963.

Članak prikazuje engleskom govornom području dosad nepoznato djelovanje arhitekta Zlatka Neumanna od 1945. gotovo sve do njegove smrti 1969. godine. Kao jedan od projektanata palače Saveznoga izvršnog vijeća [SIV] u Beogradu 1947., dao je enorman doprinos suspregnutoj ljepoti tlocrtnog oblika blago svinutoga H-profila današnje "Palate Srbije". Godine 1954. započeo je praktično neovisnu arhitektonsku praksu kao direktor Arhitektonskoga projektnog biroa "Neuman" (sic!) sve do umirovljenja 1963. godine.

### **INTRODUCTION**

UVOD

s the seguel to "Architect Zlatko Neumann: Buildings and Projects between the World Wars", this article reconsiders virtually nonexistent architect's position in the English speaking world after the Second World War [WWII], exemplifying his work after having been released from German prisoner of war [POW] camps in 1945 up to his retirement in 1963 and his premature death in 1969. The backbone of the article are projects and realizations in Zagreb brought to light through the archival documentation contained in the State Archives in Zagreb [DAZG], and additionally through competition entries for the Party and Government Headquarters [HQ] buildings in 1947 (Fig. 1a, 3), which incorporated the regulation plan for government buildings to be situated on yet unbuilt area of future New Belgrade (Fig. 4). The realization of the Federal Government Presidency Building was awarded the first prize (Fig. 1b, c). The Appendix comprises the hopefully comprehensive list of all his projects and realizations from the period.2,3

The Croatian Modern Movement, or as some authors named it, the *Neues Bauen* (hrv: *Novo građenje*), emerged in Zagreb in 1928 under the influences of various German Modern Movements in the 1920es (Gustav Bohutinsky, Antun Ulrich, Slavko Löwy), Le Corbusier (Ernest Weissmann, later Zlatko Neumann), Adolf Loos (Zlatko Neumann, Vladimir Potočnjak), of Czech Modern Architecture

(Marko Vidakovic, Vladimir Šterk), and finally under the auspices of the Architectural Department at the Academy of Fine Arts under Drago Ibler (Lavoslav Horvat, Stjepan Planic, Mladen Kauzlarić, Drago Galić, Aleksandar Freudenreich) and of the Architectural Department of the Technical Faculty of the University of Zagreb (Alfred Albini, Juraj Denzler, Milovan Kovačević, Edo Schön, Zvonimir Vrkljan). In this context, Architect Zlatko Neumann (Fig. 2.) figured as an important connection between the *Loosschule* and the contemporary architectural scene in Croatia.

- KAHLE, 2015: 28 ff.
- 2 The numeration of entries continues from the list featured in preguel article thus making the whole.
- 3 For all the remarkable people involved in shaping this article, I am especially thankful to two skillful professionals of DAZG: Mrs. Stefica Vrhovnik, for her competence in finding lost signatures, and Mrs. Ivana Ciko Vidovic, for her competence to organize occasionally chaotic circumstances for an effective work. Beyond these substantial, other important acknowledgments go to the reviewers and editorial staff for their simultaneous improvement of this article, further to the Chairwoman of DAZG Assistant Professor Dr. Živana Hedbeli.
- 4 Compare the full literature reviews in KAHLE, 2015: 30-32 and KAHLE, 2016, 50-52. For a short biography of Architect Zlatko Neumann, see KAHLE, 2015: 32
- 5 UCHYTIL, BARIŠIĆ MARENIĆ, KAHROVIĆ, 2009, 2011<sup>2</sup>
- **6** Philips, 1949: 46, explanation of a picture in the upper left corner: "New Presidium rises in Belgrade to house Tito's government. All the work is done by volunteer student and peasant brigades, as their contribution to Comrade Tito's Five Year Reconstruction Plan. The signs exhort: Greater Work for Greater National Honor."
- **7** The official name of the "New Presidium Building" after its completion in 1961 [MISIC, 2007: 137] up to 1992 (hrv: *Palaca Federacije /SIV*; srp: *Palata Federacije /SIV*).
- **8** See entry Neumann in the Register of Persons for further clarification.
- 9 Kulic, 2009: xix, label to Fig. 3.16 [ASCG (srp: Arhiv Srbije [i] Crne Gore), Fund (srp: Fond): [the] Projects of the FEC building (srp: Projekti zgrade SIV), Folder (srp: Fascikla): A6.]
- **10** Kulic, 2009: 274, footnotes 477-479 ([the] "Aleksandar Jankovic (son of late(?) Architect Mihailo-Mika lankovic) Collection")
- 11 He recently sumarized the emergence and further construction of New Belgrade as a paradigm of perpetual U-turns in Yugoslav foreign policy from the USSR via the USA up to the Non-Aligned Movement [NAM], an excerpt from still unpublished PhD dissertation "Land of the Inbetween: Modern Architecture and the State in socialist Yugoslavia, 1945-65". See KULIC, 2009
- **12** KULIĆ, 2009
- **13** Kulić, 2009: 274, footnote 478
- 14 LASLO, 1987: 458-459; LASLO, 1996: 628-629
- 15 I assume that the inheritance documentation of late Architect Zlatko Neumann was still intact in 2008, when his widow deceased. It is not possible to claim where or in which state this documentation currently is, although it is possible that the whole or at least some its parts will come to light in some form.
- **16** The first Constitution of Federal People's Republic of Yugoslavia from January 31<sup>st</sup>, 1946, was written in four languages: Serbian, Croatian, Slovenian and Macedonian.
- 17 Latin and Serb Cyrillic scripts.
- **18** It seems that the term "Man & Environment" better describes this journal in English than literally translated as "Man & Space".
- 19 KULIĆ, 2009: 195-196

After the WWII, this Movement was recognized as predominant in the whole Yugoslav area, launching prominent executives, taking lead at important federal competitions (Government buildings in future New Belgrade), and yielding professional journals ("Architecture") or organizing new schools of architecture in some federal parts (Antun Ulrich, Slavko Löwy and Valdemar Balley as assistant professors at the University of Skopje).

### LITERATURE REVIEW

### PREGLED LITERATURE

There is no literature in the English language considering the work of Zlatko Neumann after the WWII. Recently, a valuable monograph was published on a broader subject under the title "Lexicon of Architects - Atlas of 20th Century Croatian Architecture". 5 The famous article in "Life" respecting the influences of Tito's breakup with Stalin, failed to mention any architects or professionals involved in the construction of, as coinedt, the "New Presidium [Building]".6 In various internet sources he is often mentioned as one of the architects of the "Palace of the Federation [FEC]"7, vet with erroneous transcriptions of his surname as "Najman", "Naimann", "Nojman" or "Neuman".8

With insight into the archival documentation and the inheritance documentation of the Architect Mihailo Jankovic¹o, Vladimir Kulic¹¹ revealed construction drawings for the Federal Government Presidency Building [PFG] from 1948¹² and later the written refusal of the Architect Zlatko Neumann to serve as a consultant to the "Committee for the Revision of the Project of the Building of the [FEC]" without design prerogatives, dated January 10<sup>th</sup>, 1955.¹³ It is possible yet not probable that the architectural historian late Aleksander Laslo contacted the architect when still alive, there-

fore one has to conclude that Laslo composed articles in visual arts encyclopedias of 1987 and 1996<sup>14</sup> mostly based on his studying the architect's inheritance documentation and based on conversations with the architect's late widow.<sup>15</sup>

The professional literature in Croatian and Serbian<sup>16</sup> from the period started in January 1946 through the emergence of the journal "Technology" as a continuation of the pre-WWII technology journal "Technical journal" with articles from the whole field of technology in both scripts17, including some in Slovenian language as well. The specialized architectural journal "Architecture" emerged in August 1947 as a bulletin for architecture and visual arts for the whole territory of Yugoslavia up to 1953 with articles in both scripts and in the Slovenian language too. After that it became a professional journal of Association of Architects from Croatia, where the newly emerged "Man & Environment" was created in 1954 as a monthly issued newspaper. As Kulic pointed it out, in inclusion of foreign contemporary architectural news there is the shift from the Soviet architectural influence through meticulously planted articles upon the Yugoslav architectural heritage in the first years after Tito broke up with Stalin up to the news of the then recent realizations of leading architects of Modern Movement in the Western World.19 It seemed from the pages of journals and newspapers issued by Association of Architects from Croatia that in the 1950s Yugoslavia fully belonged to the West.

The majority of the projects and realizations of the Architect Zlatko Neumann was found in the signatures of DAZG, however in different collections. The relative incoherence of the documentation itself after 1945 is due to numerous changes of the construction legislations caused by U-turns in foreign policy and



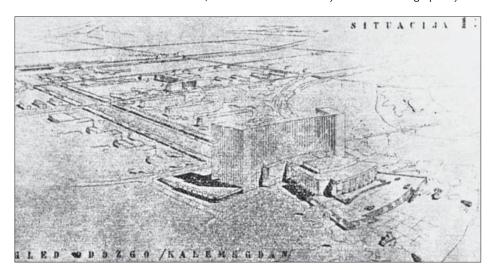
Fig. 2 A portrait of Architect Zlatko Neumann, oil on Canvas, cca 1953, author painter Anka Krizmanic Sl. 2. Portret arhitekta Zlatka Neumanna, ulje na platnu, oko 1953., autorica akademska slikarica Anka Krizmanic

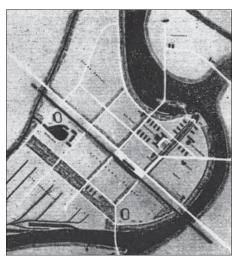
FIG. 3 POTOCNJAK, VLADIMIR; NEUMANN, ZLATKO; ULRICH, ANTUN; PERAK, DRAGICA; VASILJEVIC, BRANKO: THE COMMUNIST PARTY PRESIDIUM BUILDING, THE FUTURE NEW BELGRADE, YU, 1946-47, COMPETITION ENTRY SL. 3. POTOCNJAK, VLADIMIR; NEUMANN, ZLATKO; ULRICH, ANTUN; PERAK, DRAGICA; VASILJEVIC, BRANKO: NOVA ZGRADA PREDSJEDNIŠTVA CK KPJ, BUDUCI NOVI BEOGRAD, JUGOSLAVIJA, 1946-1947., NATJEĆAJNI PROJEKT

Ulrich, Antun; Perak, Dragica; Vasiljevic, Branko: Regulation plan for the "New Belgrade", the future New Belgrade, VI, 1946-47, competition entry Sl. 4. Potočnjak, Vladimir; Neumann, Zlatko; Ulrich, Antun; Perak, Dragica; Vasiljevic, Branko: Regulacioni plan za "Novi Beograd", Buduci Novi Beograd, Jugoslavija, 1946.-1947.,

FIG. 4 POTOČNJAK, VLADIMIR; NEUMANN, ZLATKO;

NATJEČAJNI PROJEKT





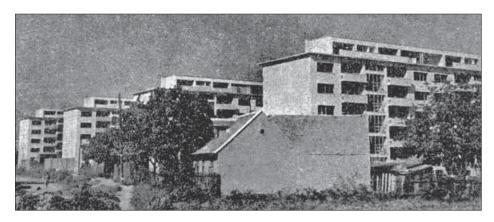


Fig. 5 Potočnjak, Vladimir; Neumann, Zlatko; Gomboš, Stjepan; Kauzlaric, Mladen: Four southernmost 6s CHBs, 5-8 Gaie Alage St, 5-8 Frana Bošnjakovića St, 5-8 Ivana Stožira St & 5-8 Fausta Vrančica St, ZG, YU, 1946-47, near completion

SL. 5. POTOĆNJAK, VLADIMIR; NEUMANN, ZLATKO; GOMBOŠ, STJEPAN; KAUZLARIĆ, MLADEN: ČETIRI JUŽNO SITUIRANE ŠESTOETAŽNE KOLEKTIVNE STAMBENE ZGRADE, ÜL. GAJE ALAGE 5-8, ÜL. FRANA BOŠNJAKOVIĆA 5-8, ÜL. IVANA STOŽIRA 5-8 I ÜL. FAUSTA VRANĆIĆA 5-8, ZAGREB, JUGOSLAVIJA, 1946.-1947., NEPOSREDNO PRIJE DOVRŠETKA GRADNJE

virtual adaptations of the proclaimed principle of self-government.<sup>20</sup> Finally, the late Professor Zvonimir Vrkljan gives us a valuable insight into the state of professional affairs after the WWII in his memoirs.<sup>21</sup>

### THE PERIOD FROM 1945 TO 1954

RAZDOBLJE IZMEĐU 1945. I 1954.

Architect Zlatko Neumann escaped from German POW camps in 1945 and subsequently worked for a few months as an architect for the Western Allies' occupation troops in Germany<sup>22</sup> before returning to Yugoslavia, where he joined a newly foounded state-owned architectural office after demobilization. The State Construction Project Institute [of Croatia] SCPI was decreed with the intention to collectivize the majority of architects practicing in the People's Republic of Croatia.<sup>23</sup> Vladimir Potočnjak & Zlatko Neumann together made a semiofficial architectural design team.

### A COLLECTIVE DWELLING ESTATE

### KOLEKTIVNO STAMBENO NASELJE

Their first significant task in cooperation with Gomboš&Kauzlarić was practically the first housing project in Zagreb after the WWII, a collective dwelling estate containing eight buildings situated on an unbuilt, former Wehrmacht estate in vicinity of Moscow St, today Vukovar Ave. The still valid pre-WWII regulation plan from 1940 was used and adapted to make equal distance between the buildings, placed in S-N cardinal axe. Dwelling layouts for each building were taken from usual pre-WWII yard apartment buildings, by coupling two opposite sides with blind walls back-toback, to have a layout with four dwellings per stairwell with unilateral orientation to E or W respectively, consequently a thorough natural ventilation was made possible only through small ventilation funnels. Contrary to similar Nordic schemes, windows were not

- 20 E.g. in one professional review of the current building legislation in 1956 author pointed to the Law of Buildings from Kingdom of Yugoslavia (1931) and the Building Code for Zagreb in 1940 as valid [Šilhard, 1954: 10]. However, the preserved documentation still gives roughly 80% of data to us, if properly read.
- 21 VRKLJAN, 1995
- 22 It is probable that in this period he became acquainted with state of the architecture in the Western World up to the 1945, the data he missed being detained in German POW camps.
- 23 CEO of this institution was Architect Branko Tuckoric, one of the pre-WWII left-wing Croatian architects. The deputy was architect Vladimir Potocnjak, another acquaintance of Zlatko Neumann. He was one of young graduates of the DoA at ZIT whom Neumann recommended to Loos. After practicing for Loos in Paris and Ernst May in Frankfurt am Main, he established his career as a Licensed Architect in Croatia, mostly in Zagreb and Susak area and wrote remarkable articles about Architecture in Croatia between 1878 and 1938. See POTOCNJAK, 1939: 49 ff. Being expelled by the Ustasha regime in 1943, Architect Vladimir Potocnjak was charged with huge commissions after 1945.
- 24 As stated in the text, the original drawing documentation mentions only Branko Tuckoric as the CEO (hrv: upraviteli) and Vladimir Potočnjak as the designer-in-charge (hrv: odgovorni projektant). In most contemporary publishings, these four buildings were pointed out without mentioning its designers. First written attempt dated from the professional journal "Architecture" probably in January 1952, in the article Architects speaking on their dwelling projects (hrv: Arhitekti govore o svojim projektima stanova) where in Latin alphabet order Architects Ivo Bartolic, Kazimir Ostrogovic and Vladimir Potočnjak presented their contemporary dwelling houses. When one analyses this article one can not make a connection between Ivo Bartolic and/or Kazimir Ostrogovic (even Vladimir Potocnjak himself!) and these eight buildings [BARTOLIC, OSTRO-GOVIC, POTOCNJAK, 1952: 20-23, pictures: 24, 25]. Furthermore, the secretary of the editorial board of the publisher was Architect Boro Pavlovic, who later in his eulogy on Architect Zlatko Neumann mentioned the first four buildings as "four blocks built 1946 in (contemporary in 1969) Proleterskih Brigada St (i.e. former Moscow St)" [PAV-LOVIC, 1969: 67; hrv: Vec 1946. izvode se 4 bloka u Ulici Proleterskih brigada u Zagrebu]. Therefore, it seems that the majority of further researchers were deceived with the title of the article and simply attributed these eight buildings to Bartolić, Ostrogović and Potočnjak as a group.
- In: UCHYTIL, BARIŠIĆ MARENIĆ, KAHROVIĆ, 2009 and 2011 the authorship is declared: Stjepan Gomboš, Viktor Dušan Hecimović, Vladimir Potočnjak / APZ.
- 25 He would later be known as the inventor of substandard, so-called Tuckoric-dwellings, containing rooms and spaces of minimal dimensions.
- 26 The next collective dwelling building, for which BP was issued in 1947 was "Elektrozapad" building at Ibler Sq., designed by Prof. Vrkljan. It continued with the usual pre-WWII layouts with a servant room per each dwelling, therefore made Vrkljan to opt for self-criticism, as driven by the Party. Compare Vrkljan, 1995: 74-75.
- 27 DOBROVIC, 1946: 177. Kulic is suspicious whether architects or politicians invented the term [Kulic, 2009: 130-131], however Dobrovic was the first who put it into circulation.
- 28 A monumental two 100 meters high skyscraper-like winged ensemble with huge domed auditory in the centre, in the place of Mestrovic's monument which stood there. [Dobrovic, 1946: 180-181]
- 29 \*\*\*, 1946: 353
- **30** KULIĆ, 2009: 145
- 31 Who as a team designed a tournament hall, published in very first issue of "Architecture", virtually with no resemblance or reference to Neumann's work. Compare: Ulrich et al., 1947: 25-26. Two years later Ulrich and Perak together went on to Skopje, to supervise architectural design there and to teach at a newly formed Skopje university.
- **32** For urban planning purposes they co-opted Architect Branko Vasiljevic, who was particularly named only for the Party Presidency building.

allowed even to dwellings at every corner side (Fig. 5)<sup>24</sup> of the building. Such sparse organization may be attributed to the Architect Branko Tučkorić who signed drawings as a CEO.<sup>25</sup> Original design scheme didn't contain even balconies, which were added probably on intervention of Gomboš&Kauzlarić, who were not signed on layouts, as was not Zlatko Neumann, who probably designed huge cornices, stairways' window strips and terrace allotments, in which the first-built four buildings (Fig. 5) slightly differed from the other four, placed similarly in close northern vicinity and built shortly after.<sup>26</sup>

# THE PRESIDENCY OF THE FEDERAL GOVERNMENT BUILDING AND BEYOND

ZGRADA PREDSJEDNIŠTVA VLADE FNRJ I OSTALO

Early in June 1946 Chairman of the IUPS, Architect Nikola Dobrovic started to reveal his vision of the renewal and reconstruction of Belgrade, publicly coining the terminus "New Belgrade".27 Among the buildings he proposed, the "New Yugoslav Assembly Building at the Kalimegdan (sic!)" was to occupy the most honorable position.<sup>28</sup> The nomenclature opted for the erection of three public buildings: The Party Presidency, the Federal Government Presidency Building and the Hotel for the Party and Government executives. In November "Technology" announced three open competitions, each for every building, accompanied with programs and preliminary design sketches for the urban planning of "New Belgrade"29, made by the IUPS and designed by Nikola Dobrovic himself.30 The sketch significantly encompasses the position of the Party and Government Presidency buildings and relates the position of the Party Presidency building with a dome shaped circle to the proposed Assembly building. Further on, at the proposed place of the Government Presidency Building one can find a symmetrical plan layout ensemble, placed exactly on the place and with the main axe oriented exactly in the orientation line of the executed building.

Vladimir Potočnjak and Zlatko Neumann took over the Architects Antun Ulrich & Dragica Perak, another architectural designer duo from the same firm. 31,32 The placement of their surnames as authors was a hierarchical one: Vladimir Potočnjak was the chief architect and the architect-in-charge for the possible execution, Zlatko Neumann was a senior architect with design authorities close to Potocnjak, whereas Antun Ulrich and Dragica Perak were junior architects.33,34 The team competed at least in two competitions, for the Party Presidency Building35 as a group of five and were awarded with the fourth placement and the third prize, whereas for the Government Presidency Building as a group of four they won the first prize.<sup>36,37</sup> Treating the problems accentuated by the competition announcements masterly<sup>38</sup>, the architects choose suspended constructivist symbols for the shapes of buildings, namely a slender H-beam layout for the Government Presidency and a C-beam scheme for the Party Presidency.<sup>39</sup> To implicit the prevalence of Party over the Government, they gave the main part of Party Presidency an overall height of 15 stories and placed the building to the natural focal point of New Belgrade, to the confluence of the river Sava into the Danube, again a suspended statement of the importance of these two rivers for Yugoslavia and importance of the unification of the two polarized parts of the new greater Belgrade Kalemegdan fortress<sup>40</sup> of the old heritage and the proposed Party HQ of the new ways (Fig. 3 and 4). The Government HQ were placed at the right angle to the W and surrounded by simple cubic design of office or residential buildings.

The Urban potential of the chosen I-beam layout for the Government Presidency building combined with the Dobrovic' planned position of it turned out to be ingenious, enabling practically two focal points: one from the newly planned square avenue from the SSW where the main entrance currently is (Fig. 1a), and the other one from the banks of the Sava river and the Great War Island from the northnortheast (NNE; Fig. 1c). The New (Government) Presidency (Building), as the author of the famous article about Tito issued in "Life" in 1949 coined the terminus, slowly started to

<sup>33</sup> This corresponds with the fact, that in 1955, in the absence of late Architect Vladimir Potocnjak, only Architect Zlatko Neumann was contacted in accordance with redesign and finalization of the FEC building. [KULIC, 2009: 274]

<sup>34</sup> With Arch. Branko Vasiljević as urban design consultant.

 $<sup>{\</sup>bf 35}$   $\,$   $\,$  Probably connected with a sketch of a master plan of the future New Belgrade.

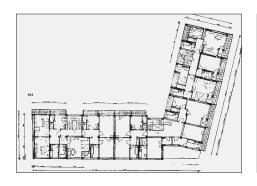
<sup>36</sup> It is not known whether they submitted an entry for the third competition: namely for a Hotel for the party and government executives from all along Yugoslavia, which was won by another team (Architects Mladen Kauzlaric, Lavoslav Horvat & Kazimir Ostrogovic) from the same design office. [SEISSEL, 1947: 22-23]

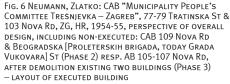
<sup>37</sup> It is worth of notice that the contemporary deputy of Yugoslav Federal Minister of Buildings was Branko Tučkorić.

**<sup>38</sup>** Arch. Milorad Macura (one of contestants itself, and also a coworker of Arch. Dobrovic) deemed the Arch. Haberle and coworkers' entry as truly functional, where it is obvious that this entry is only an articulated functional sketch, inevitably to converge to Potocinjak Neumann solution in execution. See Macura, 1947: 15-16. Other recent authors, e.g. Misic or Kulic show more sense for suspended monumentality of chosen design.

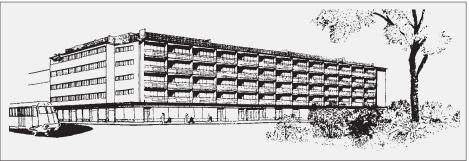
**<sup>39</sup>** As a possible constructivist influence of Ludwig Mies van der Rohe.

<sup>40</sup> i.e. the proposed Dobrovic' Assembly building.





SL. 6. NEUMANN, ZLATKO: UGLOVNA STAMBENA ZGRADA "NO OPCINE TRESNJEVKA – ZAGREB", UGAO TRATINSKE ULICE 77-79 I NOVE CESTE 103, ZG, HR, 1954-1955., PERSPEKTIVNI PRIKAZ CJELOVITOG PROJEKTA, UKLJUČIVO NEIZVEDENE: UGLOVNA STAMBENA ZGRADA UGAO NOVE CESTE 109 I BEOGRADSKE ULICE [PROLETERSKIH BRIGADA, DANAS GRADA VUKOVARA] (ETAPA II.) ODNOSNO STAMBENA INTERPOLACIJA NOVA CESTA 105-107, NAKON RUŠENJA POSTOJEĆIH DVIJU ZGRADA (ETAPA III.) – KARAKTERISTIĆAN TLOCRT IZVEDENOGA DIJELA ZGRADE



emerge from the Banks of Danube41, relying on Potočnjak's skills as the architect-incharge and on the work of numerous working brigades from all over Yugoslavia. When the works came finally to a standstill due to the definitive lack of funds mostly caused by the blockade after Tito's break up with Stalin, the structure was finished as a fully reinforced concrete skeleton shaped as an elongated H-beam section. Potočnjak obviously attempted to finish the building, and in the meantime he translated the "Bauordnungslehre", a famous Neufert' work from 1944 into Serbo-Croatian<sup>42</sup>, to transplant the efficiency of German planning methods in building construction into the Yugoslav building community. It is probable that Zlatko Neumann helped him with the translation, although he was not credited most probably because of his experience as a POW in Germany during the WWII.

After Vladimir Potočnjak's premature death in 1952, Zlatko Neumann took his place as the Head of Architecture at the State Construction Project Institute [of Croatia; SCPI], until starting his own independent architectural practices in 1954. It is significant that from the beginning in 1946 until sometime in 1953 the architectural group had its address in one of famous Zlatko Neumann's buildings, the former Rosinger apartment building in Zagreb, 69 Vlaska St. However, the death of his closest ally of the period and his exclusion from any further involvement in the completion or redesigning of the still unfinished New Government Presidency building<sup>43</sup> made the appearance of buildings he designed more complicated and filled with virtual nets of brise-soleils, occasionally framed into boxes. One of the first examples is the dormitory of the navy yard in Sibenik, recently an inspiration for a newly erected hotel building which won a recognized international prize.

# THE PERIOD FROM 1954 TO 1963 AND BEYOND

RAZDOBLJE IZMEĐU 1954. I 1963. ODNOSNO POSLIJE

The Architectural Design Institute was dissoluted on February 11<sup>th</sup>, 1954. Thirteen archi-

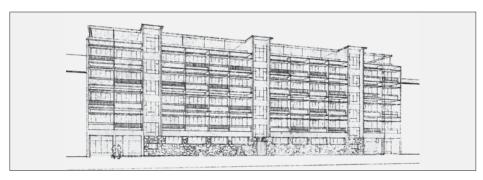
tectural groups became independent Architectural Design offices, among them Architectural Design Office [ADO] "Neuman" (sic!) on the same day.44 Architect Zlatko Neumann was appointed as a CEO of the ADO which bore, although slightly misspelled, his surname.45 Many other colleagues – architects, structural engineers and other professionals were appointed as CEOs of design offices under their surnames subsequently, or a couple of years before. 46 In fact, almost all of the survived pre-WWII professionals and engineers were co-opted in professional structures of socialist bureaucracy as reliable skilled masters, badly needed to put the building industry on its feet.<sup>47</sup> However, this tide was dwindled down at the beginning of 1960s, when a majority of the de facto independent architectural practices was drowned again in bigger collective entities. His ADO ceased to exist on February 14th, 1963 and was submerged into the "Engineering Design Office".48 He was probably retired on the same day49, although he stayed in contact with his former coworkers and authored at least one realization.

### RESIDENTIAL BUILDINGS

### STAMBENE ZGRADE

Zlatko Neumann realized two great residential commissions placed by the Executive Commit-

- 41 It is possible that the new building was to host both Party and Government HQs, at least for temporary. For the completion of the building as the Palace of FEC and its further fate, see KULIC, 2015: 135 ff.
- 42 NEUFERT, 1944; NEUFERT, 1952
- **43** KULIĆ: 2009: 274, see footnotes 11&13
- 44 \*\*\* 1954: inside front cover. Other ADOs were, according to the same announcement: ADO "Auer", ADO "Bartolic", ADO "Delenardo", ADO "Dumengjic", ADO "Gersic", ADO "Grakalic", ADO "Horvat-Bilinic", ADO "Novak", ADO "Pavesic", ADO "Plehati", ADO "Tuckoric", ADO "Ulrich.
- 45 Hrv: Arhitektonski projektni biro [APB] "Neuman" (sic!) It is paradoxical that in his sole advertisement in "Architecture" during the whole period of office' existence his name was correctly spelled as Neumann, whereas in the entire documentation submitted to the authorities and later legally enforced as parts of relating BPs and/or OPs the name was misspelled as Neuman.
- **46** E.g. former owner of a costruction company before the WWII Eng. Ferdo Keller, who became Neumann's frequent structural engineer as the head of the SDO "Keller".



tee of the Sabor50 at the corner of Marticeva and Derencinova St and by the Zagreb city authorities, at the corner of former Rade Končara, today Tratinska St and former Lenjingradska, today Nova St (Fig. 6). Beyond that he made a project of at least one residential building for the City of Zagreb People's Committee in Primorska St. with a network of brisesoleils and stairways extruded to the street façade, as an outcome of the layout disposition (Fig. 7) where all the daily spaces were oriented to the street balconies but all nightly spaces to the yard. The living room had a potential to be loosely divided with a curtain into two rooms in need of arranging space for emerging kid(s). This project failed at the revision, consecutively he proposed another yet much conventional solution, trying in vain to secure commission. Laslo stated that he designed a villa in Cumberland<sup>51</sup>, UK, for his old pre-WWII landlord Friedländer in 1954, yet to be researched, although its design would be very significant for the analysis of his architectural design practices.

### OTHER BUILDINGS

### **OSTALE ZGRADE**

Beyond residential buildings, Architect Zlatko Neumann designed in his architectural design office other kinds of edifices, per example kindergartens, primary schools, office buildings, industrial facilities, hospitals and museum pavilions. In spite of being connected with certain professionals, who as the old boys' network helped him remarkably after the death of his after-WWII accommodator Architect Vladimir Potočnjak, every commission was sui generis in the milieu of the second decade of socialist Yugoslavia, not to speak Zagreb alone. The system of making decisions was very rigid, exhausting and time-consuming, bound with lot of meetings when one was talking too much but deciding too little. E.g. at the first stages of designing Vrbaniceva school, which lasted at least for a couple of years, the main question was how to handle a few landlords of unlawfully built residences before the WWII at the chosen construction site. Consequently, the layout plan was changed four times in eighteen months, with respect to whether these residences will be left or torn down completely. Every single principal tried to enlarge design program, to secure maximum of capacities in the given, always tight budget. The layout of the tuberculosis [TBC] Pavillion at Vinogradska Hospital was changed two times during the design process (Fig. 8 and 9) from the saddle roof to the inverted roof of a regular attached apartment building of the pre-WWII as executed, to the final emergence of the whole flat roof with one additional story when being reconstructed in 1964-65.52 Therefore he organized his office in an efficient manner, made the drawings and documents, which they produced together, always clean, precise and comprehensible, filled with necessary details and connected with other professionals offices, e.g. for structural design, Heating, Ventilation and Air-Condition [HVAC], etc. etc., to be able to cope with such kind of demands. One can say the organization of his office was a forerunner of today's Building Information Modeling [BIM], however with typewriters, slide rulers and pens instead of tons of Gigahertzes and Terabytes of today's graphical workstations and servers, further tons of Skizzenpapier put into simple carton folders instead of solid state drives, finally the books like both Neuferts or Handbuch

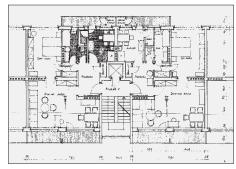


FIG. 7 NEUMANN, ZLATKO: AAB "DEPARTMENT FOR HOUSING OF CITY PEOPLE'S COMMITTEE ZAGREB", 3-5-7 PRIMORSKA ST, ZG, HR, 1955, FIRST DESIGN, REJECTED ON REVISION: PERSPECTIVE VIEW-LAYOUT

SL. 7. NEUMANN, ZLATKO: UGRAĐENA STAMBENA ZGRADA "STAMBENOG ODSJEKA GNO ZAGREB", PRIMORSKA ULICA 3-5-7, ZG, HR, 1955., PRVI IDEJNI PROJEKT, ODBIJEN NA REVIZIJI: PERSPEKTIVNI PRIKAZ – TLOCRT KARAKTERISTIĆNOGA KATA

<sup>47</sup> E.g. former building firm owner Eng. Mauricij Stapp after the WWII became a city administration official in Zagreb, further Eng. Stjepan Cernjak, and Eng. Josip Neumann (Najman), former owners of his beloved pre-WWII building firm, became city or state administration officials, at least a former pupil of Arch. Aladar Baranyai and practicing architect Arch. Ervin Hönigsfeld, after the WWII Henigsfeld, became an influential official in the Croatian state planning committee, a body de facto in charge for approving all non-residential building enterprises.

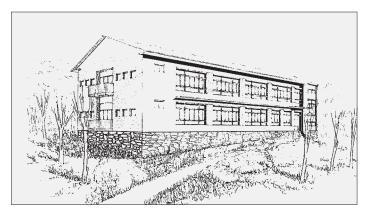
<sup>48 \*\*\* 1963:</sup> front advertising pages

**<sup>49</sup>** LASLO, 1987: 458

**<sup>50</sup>** I.e. Croatian State Government; every one of six states which constituted Yugoslavia had its own government, however with significantly less political power than contemporary Länder which constitute Federal Republic of Germany.

**<sup>51</sup>** LASLO, 1996: 629

<sup>52</sup> The reconstruction, i.e. putting the whole flat roof to the TBC pavilion was so far the very last architectural comission of Architect Zlatko Neumann, probably as a retiree with his former coworkers for their new design office.



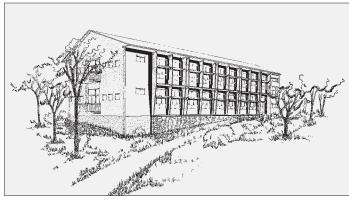


Fig. 8 Neumann, Zlatko: TBC pavilion, "Dr Mladen Stojanovic Hospital", today "Sestre Milosronice" Hospital, 29 Vinogradska St, ZG, HR, June 1954: Perspective of first variant-July 1954: perspective of second variant

SL. 8. NEUMANN, ZLATKO: TBC PAVILJON U BOLNICI "DR. MLADEN STOJANOVIC", DANAS BOLNICA SESTARA MILOSRDNICA, VINOGRADSKA ULICA 29, ZG, HR, LIPANJ 1954.: PERSPEKTIVNI PRIKAZ PRVE INAČICE – SRPANJ 1954.; PERSPEKTIVNI PRIKAZ DRUGE VARIJANTE



FIG. 9 NEUMANN, ZLATKO: TBC PAVILION, "DR MLADEN STOJANOVIC HOSPITAL", TODAY "SESTRE MILOSRDNICE" HOSPITAL, 29 VINOGRADSKA ST, ZG, HR, 1954, CONTEMPORARY PHOTOGRAPH

SL. 9. NEUMANN, ZLATKO: TBC PAVILJON U BOLNICI "DR. MLADEN STOJANOVIC", DANAS BOLNICA SESTARA MILOSRDNICA, VINOGRADSKA ULICA 29, ZG, HR, 1954., SUVREMENA FOTOGRAFIJA PRIJE ADAPTACIJE

# FIG. 10 NEUMANN, ZLATKO: PRIMARY SCHOOL "CVJETNO NASELJE", 17 CVJETNA RD, ZG, HR, 1957-62, CONTEMPORARY PHOTOGRAPHS

SL. 10. NEUMANN, ZLATKO: OSNOVNA ŠKOLA CVJETNO NASELJE, CVJETNA CESTA 17, ZG, HR, 1957.-1962., SUVREMENE FOTOGRAFIJE



der Architektur instead of today's prevailing internet.

### **CONCLUSION**

### ZAKLJUČAK

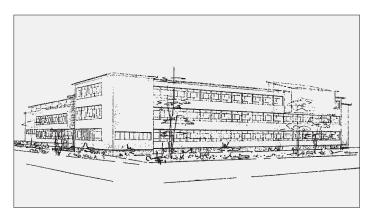
After his return from the confinement in Germany, after the end of WWII, Architect Zlatko Neumann (1900-1969) was demobilized and employed by the State Ministry of Building of People's Republic of Croatia. At the beginning of 1946, he was one of the founder members of the State Construction Project Institute of Croatia, later known as the Architectural Design Institute, together with the Architect Vladimir Potočnjak, serving as the Chief Architect and Architect Branko Tuckoric. serving as the CEO, at the address 69 Vlaska St, possibly in the pre-WWII architectural office of Zlatko Neumann. Together with the Architect Vladimir Potocnjak he constituted a mutual architectural team who, in cooperation with other architects, won the first prize for the most ambitious federal building enterprise (Fig. 1a-b-c), the Government Presidency Building in New Belgrade in 1947, today "the Palace of Serbia". The construction started soon with the Architect Vladimir Potočnjak as the Architect-in-charge and the Architect Branko Tuckoric as a supervisor in the position of the Deputy of Yugoslav Federal Minister of Buildings. Due to the shortage of funds, the construction was halted in 1951 when the reinforced concrete skeleton of a slender H-shaped building was finished. Until the death of Arch. Potocniak in 1952 they together designed a few industrial facili-

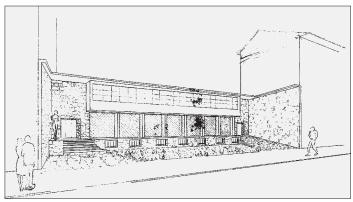


ties, most notable being the Fish factory on the island Prvić in the same year.

Regarding residential buildings designed by the Architect Zlatko Neumann after the WWII, they can be divided into two groups. The earlier class corresponds to the four southernmost collective housing blocks (Fig. 5) of eight buildings, designed by Architects Vladimir Potočnjak, Zlatko Neumann, Stjepan Gomboš & Mladen Kauzlarić as an improvement of plans probably composed as a compromise between the municipal and the state socialist bureaucracy in 1946. This supergroup of four "star-architects" from before-WWII improved sparse façade design with adding balconies to the already straight-tied layout and diversified other elements such as cornices and stairways fenestration. Highly esteemed within few years after erecting, these buildings may be interesting today only as an entry into monographs of their authors. Later class is more substantial for analyzing his design methods in the housing design. Between 1954 and 1963 he was awarded with three residential commissions, from both the city and state administration. The layouts are more spacious, with generously given standards for socialist countries, with fresh concepts of manipulation with layouts to achieve an unusual solution for a corner building, e.g. molding the layout and placing a central stairway into the wrist of both wings, while placing bathrooms and water closets onto the front facade just right in the middle of the corner (Fig. 6). Such experiments could naturally go on only to a certain limit, beyond that the layouts were rejected as not social or appropriate, as for the first layout solution for the not realized project in Primorska St (Fig. 7). It comprises both usual Raumplan solutions in Zagreb area, namely ventilation shaft for the water closet above the ceiling of pantry for each regular apartment and arranging the doorway with a small staircase because the level of the first story was designed slightly above the ground.

At the beginning of the 1950s, Yugoslav authorities surprisingly approved the founding of a few private architectural offices simply





called by their head architect. In February 1954, the Architect Zlatko Neumann effectually started an independent architectural practice as the CEO of the Architectural Design Office "Neuman" (sic!). Until his final retirement in 1963, he designed and supervised the execution of nineteen various edifices, among them six schoolhouses. The old boys' network of his pre-WWII colleagues, who at the times were highly positioned in diverse decisionmaking or advising bodies entrusted him with school design. Design drawings and supporting documentation were ahead of the time in Yugoslavia: complete construction, HVAC and detailing sheets were made either by the design office itself or by corresponding support offices. It can be said that all the involved parties functioned in a way which may be called Building Information Modelling [BIM], however provided by human resources on drawing desks with pens, slide rulers and typewriters. This was necessary due to the rigidly structured decision-making process exercised by the authorities. Common typological characteristics of six schools analyzed are flat roofs, rows of lengthwise windows flanked with vertical pillars making mesh-like surfaces, longitudinal main parts of a building with classrooms oriented to the South thereby ensuring a maximum of insolation to pupils, where, so to speak, he succeeded in making a classroom the living room for children.

The design approach of the Architect Zlatko Neumann started to change significantly before the WWII. Instead of smooth white surfaces extruded with horizontally oriented window stripes, he started to implement three-dimensional meshes of yet suspended either transversal plates or columns and horizontal plates as the arrangement of loggiashaped balconies in horizontal direction of a particular façade curtain he designed, which he seminally implemented for the street front of the unrealized "Stoeger" project in 1937 [KAHLE, 2015: Fig. 16]. His experience of being a POW in WWII certainly added particular conspicuous elements to his design skills, i. e. structural meshes appeared to both directions, three-dimensional boxes emerged on top stories (Fig. 11). In the process of design and execution, meshes started to grow organically (Fig. 8 and 9) or were implemented since the beginning (Fig. 6, 7 and 12). These structural patterns were withheld when schools were designed, as if he tried to spare the children from the real world (Fig. 10 and 11). His 15-story skyscraper-like double-circular tower at the new Zagreb Paper Mill facility is one of most cogent, conceivable and potent high-rise in Zagreb skyline. (Fig. 13).

The impact of the Architect Zlatko Neuman onto the architectural affairs in Croatia and beyond from 1927 up to 1966 is overwhelming. He managed himself to attend the Loosschule and to be an important collaborator of the Architect Adolf Loos, further he gave enormous efforts to implement his masters's way of designing to Croatian Modern Movement, having success at least at a subconscious level. Miraculously having survived the Holocaust, he attempted to create new patterns of conceiving Modern Architecture: by suppressing two or three-dimensional meshes on the building envelope, characterizing his emotions forced by fortunes of his life.

[Proofread by Gordana Čalić, prof.]

FIG. 11 NEUMANN, ZLATKO: PRIMARY SCHOOL "SILVIJE STRAHIMIR KRANJCEVIC" VRBANICEVA ST, ZG, HR, 1955, PRELIMINARY DESIGN DATED AUGUST 8™, 1955: PERSPECTIVE

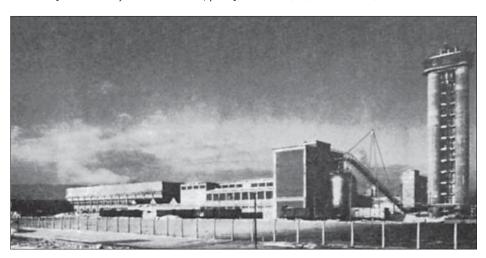
SL. 11. NEUMANN, ZLATKO: OSNOVNA ŠKOLA SILVIJA STRAHIMIRA KRANJĆEVICA, VRBANICEVA ULICA, ZG, HR, 1955., PRVI PRETPROJEKT S NADNEVKOM 8. KOLOVOZA 1955.: PERSPEKTIVNI PRIKAZ

FIG. 12 NEUMANN, ZLATKO: PAVILION IN THE YARD OF ARCHAEOLOGICAL MUSEUM, 19 ZRINSKI SQ., ZG, HR, 1954, PROJECT, PERSPECTIVE

SL. 12. Neumann, Zlatko: Paviljon u dvorištu Arheološkog muzeja, Zrinjski trg 19, ZG, HR, 1954., Projekt: Perspektivni prikaz

FIG. 13 NEUMANN, ZLATKO (GENERAL DESIGN ARCHITECT & AIC): ZAGREB PAPER MILL, NEW FACTORY FACILITY ŽITNJAK, 173 RADNIČKA RD, ZG, HR, 1958-62, CONTEMPORARY PHOTOGRAPH

SL. 13. Neumann, Zlatko (odgovorni projektant i glavni nadzorni inženjer): novi tvornički pogon Zagrebačke tvorniče papira na Žitnjaku, Radnička cesta 173. ZG. HR. 1958.-1962... suvremena fotografija



**APPENDIX:** A COMPREHENSIVE LIST OF REALIZATIONS AND PROJECTS OF ARCHITECT ZLATKO NEUMANN (1900-1969) AFTER THE SECOND WORLD WAR (1945-1966) [41]<sup>1</sup>

**DODATAK:** ISCRPAN POPIS REALIZACIJA I PROJEKATA ARHITEKTA ZLATKA NEUMANNA (1900.-1969.) NAKON DRUGOGA SVJETSKOG RATA (1945.-1966.) [41]

- E. WORK IN VARIOUS ARCHITECTURAL POSITIONS FOR VARIOUS STATE-OWNED COLLECTIVE ARCHITEC-TURAL DESIGN OFFICES (1945-1954) [20]
- E. RAD NA RAZNIM ARHITEKTONSKIM ODGOVORNO-STIMA U RAZNIM DRŽAVNIM KOLEKTIVNIM ARHI-TEKTONSKIM UREDIMA (1945.-1954.) [20]
- E.1. The House of Culture, Novi Marof, HR, 1945; AL1996
- E.2. Technical office building, [Old] Oil Refinery, Mlaka, Rijeka, HR, 1946; AL1987; AL1996
- E.3. Social standard building, [Old] Oil Refinery, Mlaka, Rijeka, HR, 1946; AL1987; AL1996
- E.4. Four 6s CHBs between Varażdinska St and future "Motorway Zagreb-Belgrade", err. Vrbik, today 5-8 Gaje Alage St, 5-8 Frana Bośnjakovica St, 5-8 Ivana Stożira St & 5-8 Fausta Vrancica St, ZG, HR, 1946-47 (Chief designer: Arch. Potoćnjak, Design team: Potoćnjak; Neumann, Z.; Gomboś; Kauzlaric, M.); BP1969; AL1987; AL1996
- E.5. The Communist Party Presidency Building, BG, RS, 1946-47 (Chief designer: Arch. Potočnjak, Design team: Potočnjak; Neumann, Z.; Ulrich; Perak; Vasiljević), project
- E.6. Regulation plan for the "New Belgrade", BG, RS, 1946-47 (Chief designer: Arch. Potočnjak, Design team: Potočnjak; Neumann, Z.; Ulrich; Perak; Vasiljević), project
- E.7. The Presidency of the Federal Government Building, 1946-51 (Chief designer: Arch. Potocnjak, Design team: Potocnjak; Neumann, Z.; Ulrich, Perak, AlC: Potocnjak), after completion (Arch.&AlC Jankovic) the "Palace of the Federation/FEC", today "Palace of Serbia" (srp: Palata Srbija), BG, RS, 1955-61; BP1969; AL1996
- E.8. Pavilion, Steel Factory, Sisak, HR, 1951; AL1987; AL1996
- E.9. The House of Culture, Titova Korenica, today Korenica, HR, 1951; BP1969; AL1996
- E.10. The House of Culture, Vojnić, HR, 1951; BP1969; AL1996

- E.11. The House of Culture, Dvor na Uni, HR, 1952; AL1996
- E.12. Fish factory, Prvić Luka, island Prvić, HR, 1952 (Chief designer: Arch. Potočnjak, Design team: Potočnjak; Neumann, Z.); BP1969; AL1987; AL1996
- E.13. Adaptation of front of theater building "Stage", former cinema building "Apollo", today theater building "Kerempuh", 31 ITY Ilica St, ZG, HR, 1952
- E.14. Workers' wardrobes, textile factory "Victory" (hrv: *Pobjeda*), 18 Zavrtnica St, ZG, HR, 1952-53; AL1987
- E.15. Zagreb Paper Mill, new factory facility, "Autoput", today Slavonska Ave, ZG, HR, 1953, project
- E.16. Hostel & Theater, Šibenik, HR, 1953; BP1969; AL1987; AL1996
- E.17. Post Office, Remete, 3 Kameniti Stol St, ZG, HR, 1953-54; AL1996
- E.18. Doorman's booth, Zagreb Paper Mill, 17 Zavrtnica St, ZG, HR, 1953-54; AL1987
- E.19. Electrical power plant, Perušić, HR, NKY; BP1969
- E.20. Aluminum factory building, Šibenik, HR, NKY; BP1969
- F. THE ADO "NEUMANN", ERR. "NEUMAN" (1954-1963) [20]
- F. APB "NEUMANN", ERATIĆNO "NEUMAN" (1954.-1963.) [20]
- F.1. Villa Friedländer, Cumberland, UK, 1954; AL1996
- F.2. Chemical laboratory building of Cement factory, Dugi Rat, HR, 1954; AL1987; AL1996
- F.3. CAB "City People's Committee Zagreb", later "Executive Council of the Sabor" [Parliament of the People's Republic of Croatia], 46 Marticeva St, ZG, HR, 1954-57; BP1969; AL1987; AL1996
- F.4. CAB "Municipality People's Committee Tresnjevka – Zagreb", 77-79 Tratinska St & 103 Nova St, ZG, HR, 1954-55 (Phase 1); BP1969; AL1987; AL1996
- F.5. TBC pavilion, "Dr Mladen Stojanović Hospital", today "Sestre Milosrdnice" Hospital, 29 Vinogradska St, ZG, HR, 1954; BP1969; AL1987; AL1996

- F.6. Old paper warehouse, Zagreb Paper Mill, 17 Zavrtnica St, ZG, HR, 1954; AL1987
- F.7. Pavilion in the yard of Archaeological Museum, 19 Zrinski Sq., ZG, HR, 1954, project
- F.8. CAB "Municipality People's Committee Tresnjevka – Zagreb", 109 Nova Rd & Beogradska [Proleterskih brigada, today Grada Vukovara] St, ZG, HR, 1955-56 (Phase 2), project; BP1969
- F.9. Primary school "Silvije Strahimir Kranjčevic" Vrbanićeva St, today 13 Bogišićeva St, ZG, HR, 1955-59; BP1969; AL1987; AL1996
- F.10. AAB "Department for Housing of City People's Committee Zagreb", 3-5-7 Primorska St, ZG, HR, 1955-57, project; BP1969
- F.11. Primary school "Cvjetno naselje", 17 Cvjetna Rd, ZG, HR, 1957-62; BP1969; AL1987; AL1996
- F.12. Garage for the Post office Remete, 3 Kameniti Stol St, ZG, HR, 1957
- F.13. Zagreb Paper Mill, new factory facility Žitnjak, 173 Radnička Rd, ZG, HR, 1958-62; BP1969; AL1987; AL1996
- F.14. Primary school "Ferencica", today "August Cesarec", 9A II<sup>nd</sup> Ferencica St, ZG, HR, 1959-62; BP1969; AL1987; AL1996
- F.15. Primary school "Folnegovićeva ul.", today "Lovro pl. Mataćic", 1 Joze Laurencića St, ZG, HR, 1961-64; BP1969; AL1987; AL1996
- F.16. Primary school "Laginjina ulica", today "Matko Laginja", 13 Laginjina St, ZG, HR, 1961-64; BP1969; AL1987; AL1996
- F.17. Kindergarten "Ferencica", ZG, HR, 1961-62, NKY; AL1996
- F.18. Kindergarten "Volovčica", ZG, HR, 1961-63, NKY; AL1996
- F.19. Communal Bank, Slavonski Brod, HR, 1961-63; BP1969; AL1987; AL1996
- F.20. Primary school "Borongaj-sjever", today "Dobriša Cesaric", 29 Ksavera Šandora Gjal-skog St, ZG, HR, 1962-64; BP1969; AL1987; AL1996
- G. WORK IN RETIREMENT (1963-1966) [1]
- G. RAD U MIROVINI (1963.-1966.) [1]
- G.1. Reconstruction of TBC pavilion, "Dr Mladen Stojanovic Hospital", today "Sestre Milosrdnice" Hospital, 29 Vinogradska St, ZG, HR, 1964-65

<sup>1</sup> The meaning of acronyms: BP1969 – occurs on the list in PAVLOVIC, 1969: 61 ff.; AL1987 – occurs on the list in LASLO, 1987: 458-459; AL1996 – occurs on the list in LASLO, 1996: 628-629. All entries from all lists are present in this Appendix, except an entry from Pavlovic' list because it has not been found in DAZG (Primary school in Kuslanova St).

### REGISTER OF PERSONS

### REGISTAR OSOBA

Cernjak, Eng. Stjepan, LSE (1892-?), former partner of CC "Cernjak & Neumann", after WWII city official

Crnic, Eng. Mate, LSE, former owner of CC "Mate Crnic", after WWII city or state official

Gombos, Prof. Eng. Arch. Stjepan, LA (1895-1975), graduated at DoA, BIT in 1921, former partner of "Gombos & Kauzlaric Architects", after WWII architect employed at SCPI, 1950-54 Professor of Industry Facilities Design at the DoA, SoT, UoZ

Hönigsfeld, after 1945 Henigsfeld, Eng. Arch. Ervin, LA, former pupil of Arch. Aladar Vladimir Baranyai, licensed architect in Zagreb, after WWII an influential official in the Stately Planning Committee of People's Republic of Croatia

Janković, Arch. Mihailo [-Mika], LA (1911-?), architect from BG who supervised finishing the FEC building. For further information, see: Kulić, 2009: 274 ff

Kauzlaric, Acad. Prof. Arch. Mladen, (1896-1971), former partner of "Gombos & Kauzlaric Architects", after WWII architect employed at SCPI, from 1948 Professor of Architectural and Enterior Design at the DoA, SoT, UoZ

Keller, Eng. Ferdinand (Ferdo), owner and CEO of CC "Ferdo Keller", after WWII an influential structural engineer, later CEO of SDO "Keller"

Neuberger, Eng. Leo, LSE (1896-1941/1945?), owner and CEO of CC "Leo Neuberger" from 1927 to 1941. Killed in yet unknown concentration camp.

Neumann (err. Najman, Neuman, Nojman), Eng. Arch. Zlatko, LA (1900-1969), neither to be confused with: Neumann (err. Najman), Eng. Josip (1891-1967), LSE, former partner of CC "Cernjak & Neumann", after WWII senior advisor in State Ministry of Building of People's Republic of Croatia; nor with: Najman, Arch. Josif, LA (1894-1951) (srp: Najman, Josif), licensed architect from Belgrade

Neumann or Rajšek Neumann, Olga [Rajsek, Olga] (1915-2008), fiancée, wife and widow of Architect Zlatko Neumann. After captivation and confinement of her betrothed in WWII, she stayed in their apartment (25 Mesnicka St) and saved Jewish people in Croatia from Holocaust (https://jfr.org/rescuer-stories/rajsek-olga/). It is possible that she guarded his architectural studio (69 Vlaska St) too, thus made possible to Tučkorić, Potočnjak and Neumann to organize SCPI in 1946. They married after his return from confinement.

Perak, Eng. Arch. Dragica, neć Gjurjgjević (?) (1917-?), graduated at the DoA, SoT, UoZ in 1941. After WWII joined with Arch. Ulrich, they together went to Skopje in 1949-53 to practice and teach architecture.

Potoćnjak, Eng. Arch. Vladimir, LA (1904-1952), graduated at DoA, ZIT in 1926. Zlatko Neumann recommended him to Adolf Loos. Junior architect by Loos in Paris, Stadtbaurat Ernst May in Frankfurt am Main and Prof. Hugo Ehrlich in ZG. LA in HR, after WWII in-charge for architectural affairs in newly formed SCPI

Stapp, Eng. Mauricij, former partner of CC "Jurisić, Batusić & Stapp", after WWII city or state official

Tuckorić, Eng. Arch. Branko (1910-1971), graduated at the DoA, SoT, UoZ in 1937. CEO of the newly founded SCPI, deputy of Yugoslav Federal Minister of Buildings, from 1953(?) CEO of ADO "Tuckoric"

Ulrich (err. Ulrih, Urlich), Arch. Antun (1902-1998), graduated at the Kunstgewerbeschule, today the University of Applied Arts in Vienna in 1927. Between the WW a city official in ZG. After WWII employed at the State Urban Planning Institute in Zagreb, from 1949 to 1953 Prof. at DoA, SoT, UoS, from 1953 CEO of ADO "Ulrich".

Vasiljević, Eng. Arch. Branko, graduated at the DoA, SoT, UoZ in 1946. Probably an associate of the team Ulrich-Perak.

Vilicic, Eng. Arch. Vjekoslav (1907-1995), Branko Tuckoric' brother-in-law and Melita Tuckoric' husband, graduated at the DoA, SoT, UoZ in 1935. Employed at the Construction company Leo Neuberger, probable AIC by most of its construction sites before the WWII.

Vilicic (-Tuckoric), Prof. Dr. Eng. Arch. Melita (1913-2005), Branko Tuckoric' sister, graduated (Eng. Arch.) at the DoA, SoT, UoZ in 1941. Habilitated at the SoASEGE, UoZ in 1964. Promoted (PhD) at the SoA, UoZ in 1976. Her primary professional and scientific interest was history of built heritage.

### **GLOSSARY OF TERMS**

### RJEČNIK POJMOVA

Architectural Design Office "Surname" — (hrv: Arhitektonski projektni biro "Prezime", local acronym APB), an organizational form of a smaller architectural design studio, usually from 15 to 30 persons, where the principal design architect is a CEO and the studio is individualized upon his surname

"Architecture" – the professional journal "Arhitektura" (hrv, srp, slv), issued by various incorporations of the Association of Yugoslav Architects from 1947 to 1953, further issued by the Society of Architects of [the People's Republic of] Croatia (hrv: Drustvo arhitekata Hrvatske), not related with professional journal "Arhitektura" (slv, hrv, hbs), issued by a consortium headed by Arch. Eng. Dragotin (sic!) Fatur from 1931 to 1934, LJ, YU

"Builder" — the professional journal "Gradevinar" (hrv, srp, hbs), issued as a bulletin of State Ministry of Building of People's Republic of Croatia from 1949 to 1952, further issued by the Society of Croatian Builders and Structural Engineers

City People's Committee — the form of a local government in Yugoslavia after the WWII, roughly equal to the City Council

Collective housing block (hrv: *kolektivna stambena zgrada*) – the type of residential building erected in socialist countries usually containing large numbers of not spacious flats (studio apartments, one room apartments, rarely two room apartments), western counterpart would be social housing

Federation, federal – Yugoslav state institutions from 1945 to 1992

Federal Executive Council (hrv: Savezno izvršno vijeće, local acronym SIV; slv: Zvezni izvršni svet; srp: Savezno izvršno veće) – the name of the Yugoslav Federal Government between 1953 and 1992

House of Culture – in socialist countries (hrv: *Dom kulture*, *Kotarski zadrużni dom*, *Zadrużni dom*, etc.) the building of a particular county, city or village for socialization of people on common interest, e.g. singing, performing, etc., similar to the club house, but not equal

Institute of Urban Planning of the People's Republic of Serbia — (srp: *Urbanisticki institut Srbije*), a collectivized design office regarding matters of urban planning of Serbia

"Man & Environment" – the professional usually monthly newspapers "Čovjek i prostor" (hrv, srp, hbs), issued by the Society of Architects of [the People's Republic of] Croatia (hrv: Drustvo arhitekata Hrvatske)

New Presidium / Presidency [Building] (hrv: [Zgrada] novog Predsjednistva [vlade FNRJ]) — a term coined in article about then Yugoslav PM Marshal Tito in journal "Life" in 1949 = The Palace of the Federal Executive Council (hrv: Palaca SIV, srp: Palata SIV), today The Palace of Serbia (srp: Palata Srbija)

"Our Buildmanship / Construction Industry" (?) — the professional journal "Nase gradevinarstvo" (hrv, srp, hbs), issued as a bulletin of Yugoslav Federal Ministry of Building from 1947 to 1952, the Editor-in-chief was Eng. Arch. Branko Tučkorić, further incorporated to "Technology"

State, stately, People's Republic of (1945-1963), Socialist Republic of (1963) – referred to each of six constituent parts of Yugoslavia, however with less political influence than the *Länder* in contemporary Federal Republic of Germany

State Construction Project Institute [of Croatia], later known as the Architectural Design Institute – (hrv: *Zemaljski gradevno projektni zavod Hrvatske*, local acronym ZGPZ[H], later known as: *Arhitektonski projektni zavod*, local acronym APZ), a seminal organizational form of the collectivized Architectural Design Office in the period 1946-53, before atomizing into a cluster of many individualized ADOs or SDOs

State Urban Planning Institute – (hrv: *Urbanisticki institut Hrvatske*), a collectivized design office regarding matters of urban planning on a state level (e.g. Croatia, for Serbia see IUPS)

Structural Design Office "Surname" – (hrv: Staticki projektni biro "Prezime", local acronym SPB), an organizational form of a smaller structural design studio, usually from 15 to 30 persons, where the principal structural engineer is a CEO and the studio is individualized upon his surname

"Technology" – the professional journal "Tehnika" (hrv, srp, slv), issued by the Association of Yugoslav Architectural, Structural, Machine and Electrical Engineers from 1946 to 1952, further by the Society of Serbian (?) Architectural, Structural, Machine and Electrical Engineers

### ABBREVIATIONS AND SYMBOLS

KRATICE I SIMBOLL

Acad. – Academician, the title of a member of the Croatian Academy of Sciences and Arts (former Yugoslav Academy of Sciences and Arts)

Arch. - Architect

Ave - Avenue

 b. – blue, occasionally black or green number, signed in the below right corner of a signature folder

cca. - circa, about

cf. - compare

deu, de – German language (ISO 639, individual language)

eng, en – English language (ISO 639, individual language)

Eng. — Engineer (architectural, structural, electrical, mechanical)

err. - erroneously

ff. – far forte, m. and continuing (when referencing a whole book or article)

hbs (deprecated: sh) — Croatian-Bosnian-Serbian language, commonly known as Serbo-Croatian language (ISO 639, macrolanguage)

hrv, hr — Croatian language (ISO 639, individual language)

hun, hu — Hungarian language (ISO 639, individual language)

Ill. - Illinois

m. - meaning

ns, usually 2s to 9s — number of stories given counted as in the US, i.e. first story is the ground story

pl. - nobleman (hrv: plemeniti)

Prof. – Professor (high school, college, university)

r. — red number, signed in the above right corner of a signature folder

Rd - road (hrv: cesta)

sign. - signature

slv, sl – Slovenian language (ISO 639, individual language)

Sq. - square (hrv: trg)

srp, sr – Serbian language (ISO 639, individual language)

St – street (hrv: ulica)

AAB - attached apartment building

ADI – Architectural Design Institute (hrv: *Arhitektonski projektni zavod*, local acronym *APZ*)

ADO – Architectural Design Office (hrv: *Arhitektonski projektni biro*, local acronym *APB*)

AIC - architect-in-charge

AJ – The Archives of Yugoslavia (srp: *Arhiv Jugoslavije*)

AL1987 — entry on appendix list first recorded by (Aleksander) Laslo, 1987

AL1996 — entry on appendix list first recorded by (Aleksander) Laslo, 1996

ASCG — The Archive of Serbia [&] Montenegro (srp: *Arhiv Srbije* [i] *Crne Gore*), today The Archives of Yugoslavia (A))

 ${\rm BG-Belgrade}$  (srp: Beograd ), former capital of YU, today capital of RS

BIT – the Budapest Institute of Technology (hun: Királyi József Műegyetem), today BUTE: Budapest University of Technology and Economics (hun: Budapesti Műszaki és Gazdaságtudományi Egyetem)

BL - bilingual

BP – the building permit

BP1969 — entry on appendix list first recorded by (Boro) Pavlović, 1969

CAB - corner apartment building

 $\mathsf{CC}-\mathsf{Construction}$  Company, referred to private enterprises in YU between the WW

CEO – the Chief Executive Officer (hrv: *direktor*, *upravitelj*, *generalni direktor*)

CHB – the Collective Housing Block

 ${\sf CMOS}-{\sf the}$  Chicago Manual of style, recent (16th) edition

DAZG — The State Archives in Zagreb (hrv: *Državni arhiv u Zagrebu*)

DE - Germany

DoA – the Department of Architecture

FEC – the Federal Executive Council

HQ - headquarters

HR, HRV - Croatia, Republic of (ISO 3166)

HVAC – Heating, Ventilation and Air Conditioning

IL - Illinios, State of the USA

 $\label{eq:second-condition} ISO-the\ International\ Organization\ for\ Standardization$ 

IT – the Institute of Technology

IUPS – The Institute [of] Urban Planning [of the People's Republic of] Serbia

JSAH — The Journal of the Society of Architectural Historians

JLZ – the local acronym (hrv: *Jugoslavenski leksikografski zavod*) for publishing house in ZG who published mostly encyclopedic works in former YU, later JLZ "Miroslav Krleża", today LZ "Miroslav Krleża" LA - licensed architect

LJ - Ljubljana, former YU, today capital of SLO

LSE - licensed structural engineer

ML - monolingual

NAM - the Non-Aligned Movement

NKY - not known yet

OP - the occupancy permit

PFG – the Presidency of the Federal Government [Building]

PM – the Prime Minister, in Yugoslavia the President of the Government of FNRY, later the Chairman of the Federal Executive Council

PRM - People' Republic of Macedonia

POW - the prisoner of war

RS, SRB – Serbia, Republic of (ISO 3166)

SCPI – State Construction Project Institute [of Croatia], see Glossary

SDA - Senior Design Architect

SDO – structural design office (hrv: SPB)

SI, SVN – Slovenia, Republic of (ISO 3169)

SIV – the Federal Executive Council (hrv: *Savezno izvršno vijeće*)

SoA - the School of Architecture

SoASEGE – the School of Architecture, Structural Engineering and Geodetic Engineering

SoT - the School of Technology

 $\mathsf{UK}-\mathsf{the}\ \mathsf{United}\ \mathsf{Kingdom}\ \mathsf{of}\ \mathsf{Great}\ \mathsf{Britain}\ \mathsf{and}\ \mathsf{Northern}\ \mathsf{Ireland}$ 

UoS - the University of Skopje, PRM, YU

UoZ – the University of Zagreb

USA – the United States of America

USSR – the Union of Soviet Socialist Republic

WW, WWII - World Wars, the Second World War

YU – Yugoslavia, former Federal People's Republic of Yugoslavia (hrv: *Federativna Narodna Republika Jugoslavija*, local acronym *FNRJ*, 1945-1963), later former Socialist Federal Republic of Yugoslavia (hrv: *Socijalisticka Federativna Republika Jugoslavija*, local acronym *SFRJ*, 1963-1992)

ZG - Zagreb, former YU, today capital of HR

ZGD – archival collection of documentation made in process of issuing legal building and occupancy approvals (hrv: *Zbirka građevinske dokumentacije*)

ZIT — The Zagreb Institute of Technology (hrv: *Visoka tehnicka śkola u Zagrebu*, local acronym *VTŚ*, 1918-1926), later incorporated in the University of Zagreb as the School of Technology (hrv: *Tehnicki fakultet Sveucilista u Zagrebu*) with a high degree of autonomy

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F.13. HR-DAZG-1122-ZGD sign. b.3394 Zavrtnica 17 Tvornica papira, 1957.-1959., HR-DAZG-1122-ZGD sign. b.3640/2 Žitnjak Tvornica papira Gr. dozvola 8158/60 Ogrda, Bunar, crpna stanica[,] Skladiste sirovina[,] Bunker za ugljen[,] Garderoba, Separacija[,] T.S., HR-DAZG-1122-ZGD sign. b.3642 Žitnjak Tvornica papira Rastvarac (sic!) [,] sjekaonica, sortir-

nica[,] garderoba,silos[,] dizalo u tornjevima 1960., HR-DAZG-1122-ZGD sign. b.3640/1 Žitnjak Tvornica papira Gr. dozvola br.6943/59 Rem. Radionica[,] Toranj za kiselinu[,] Spremište, garaža, dorada[,] T.S

F.14. HR-DAZG-1122-ZGD sign. b.639 r.973 Ferencica Osmogodišnja škola Br. 19815/59 Revizija glavnog projekta, HR-DAZG-1122-ZGD sign. b.639/1 r.972 Ferencica Osmogidišnja(sic!) škola Revizija instalacija br. 25967/59. Plinske instalacije br. 5079/60.

F.15. HR-DAZG-1122-ZGD sign. b.659 r.1008 Folnegovicevo naselje škola — Građevna dozvola 9752/63.; Revizija idejnog projekta 26280/62.; Revizija glavnog projekta 16732/63., HR-DAZG-1122-ZGD sign. b.660/2 r.1009 Folnegovićevo naselje škola Revizija glavnog projekta 16732/1963., HR-DAZG-1122-ZGD sign. b.659 r.1010 Folnegovićevo naselje škola Revizija glavnog projekta 16732/1963., HR-DAZG-1122-ZGD sign. b.660/3 r.1011 Folnegovićevo naselje škola Revizija gl. projekta 16732/1963. Statički račun 13889/1964.

F.16. HR-DAZG-1122-ZGD sign. b.1537 r.2207 Laginjina 13 Osnovna škola — idejni projekt 1962 — projekti  $B_1$ - $B_3$  br. 1529/1963, HR-DAZG-1122-ZGD sign. b.1537/1 r.2209 Laginjina 13 Osnovna škola Teh. dokument  $B_4$ - $B_7$  br. 1529/1963, HR-DAZG-1122-ZGD sign. b.1538 r.2208 Laginjina 13 Osnovna škola  $B_8$ -  $B_1$  br. 1529/1963, — vodovod — Hotel za samce, HR-DAZG-1122-ZGD sign. b.1536/1 r.2213 Laginjina 16 zajednička kotlovnica DNZ. I osnovne škole  $B_1$ - $B_4$ 

F.20. HR-DAZG-1122-ZGD sign. b.183/1 r.360 Borongajska cesta Osnovna škola Br. 25602/1962. – idejni projekt i investicioni program; statički račun za Fis. dvoranu; Rješenje za tehnički pregled

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Fig. 1A POTOČNJAK et al., 1947: frontispiece

Fig. 1B POTOČNJAK et al., 1948: 11

FIG. 1C \*\*\* 1951: 123

Fig. 2 Krizmanić, 1953: 43

Fig. 3 \*\*\* 1950: 33

FIG. 4 SEISSEL, 1947: 20

Fig. 5 \*\*\* 1947b: 251

Fig. 6 NEUMANN, 1954: 28

- Fig. 7 HR-DAZG-1122-ZGD, sign. b.2330, Primorska 3-5-7, Četverokatna stamb. zgrada 1955 1957 (K.Č. 3590, 3593, 3594)
- Fig. 8 HR-DAZG-1122-ZGD, sign. b.3211, Vinograd-ska 29, Bolnica, TBC Paviljon, 1954.
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- Fig. 12 HR-DAZG-1122-ZGD, sign. b.3425/1, Zrinjski trg 19
- Fig. 13 Pavlović, 1969: 67

### SUMMARY

SAŽETAK

### ARHITEKT ZLATKO NEUMANN

Djela nakon Drugoga svjetskog rata (1945.-1963.)

Poslije povratka iz zarobljeništva u Njemačkoj neposredno nakon svršetka Drugoga svjetskog rata, arhitekt Zlatko Neumann (1900.-1969.) bio je demobiliziran i zaposlen u Ministarstvu građevina Narodne Republike Hrvatske. Početkom sljedeće godine bio je jedan od osnivaca Zemaljskoga građevnoga projektnog zavoda Hrvatske, poslije poznatog pod nazivom Arhitektonski projektni zavod, zajedno s arh. Vladimirom Potočnjakom koji je bio glavni arhitekt, odnosno arh. Brankom Tučkorićem kao upraviteljem Zavoda, u stambenoj zgradi ex-Rosinger, Vlaska ulica 69, vjerojatno u bivsem predratnomu vlastitom uredu ovlaštenog arhitekta. Zajedno s Potočnjakom činio je zajednički projektantski duo koji je, popunjen drugim arhitektima (duo Ulrich-Perak), sastavljao grupu koja je osvojila prvu nagradu na općejugoslavenskom natječaju za zgradu predsjedništva Vlade FNRJ (Sl. 1.a-b-c) na zemljištu budućega Novog Beograda 1947., poslije dovršetka 1961. poznatu pod nazivom "Palača Federacije / SÍV", a danas pod nazivom "Palata Srbija". Građenje je počelo iste godine pod rukovodstvom arh. Vladimira Potočnjaka, a nadzor je vjerojatno provodio arh. Branko Tučkorić u svojstvu pomoćnika jugoslavenskoga saveznog ministra građevina. Zbog nedostatka sredstava gradnja je prekinuta 1949., kad je dovršen armiranobetonski kostur glavnoga tijela zgrade u obliku blago zakrivljenog H-profila. Do smrti arh. Potočnjaka 1952. njih su dvojica zajedno projektirali nekoliko industrijskih postrojenja, među kojima se istice Tvornica sardina na otoku Prviću iste godine, a danas "Odmaraliste Pozega".

Stambene zgrade koje je Zlatko Neumann projektirao nakon završetka Drugoga svjetskog rata mogu biti svrstane u dvije grupe. Ranija klasa sadrži četiri kolektivne stambene zgrade koje su projektirali arhitekti Potoćnjak, Neumann, Gomboš i Kauzlaric (Sl. 5.), od ukupno 8, kao popravak projekata nastalih 1946. kompromisom između gradske i Hrvatske zemaljske birokracije. Ova arhitektonska supergrupa, sastavljena od četvorice 'zvijezda arhitekture' prije Drugoga svjetskog rata, popravila je štedljiv projekt pročelja dodavanjem balkona stisnutom tlocrtu, odnosno diverzifikacijom glavnoga vijenca pročelja i fenestracije stujetsa. Visokouvažavane prvih nekoliko godina nakon nastanka, ove zgrade danas mogu biti zanim-

ljive samo kao sastavnice monografija svakoga od svojih autora. Klasa zgrada između 1954. i 1963., kad je dobio tri stambene narudžbe za gradsku i Hrvatsku zemaljsku administraciju, supstancijalna je za analizu njegovih metoda projektiranja u stanovanju. Karakteristični tlocrti sada posjeduju više prostora, s velikodušno tumačenim stambenim standardima za socijalističke države, i svježim obrascima manipulacije tlocrtnim obrisima kako bi se dobilo neobično rješenje uglovnice, naprimjer omekšavanjem obrisa i smještanjem središnjega stubišta u zglob obaju krila te smještajem kupaonica i zahoda po sredini ugla uličnoga pročelja (Sl. 6.). Ovakvi eksperimenti mogli su, naravno, ići do određene granice, iznad koje su tlocrti bili odbijani kao premalo socijalni odnosno neprimjereni, kao u slučaju prvoga tlocrtnog rješenja nerealiziranog projekta u Primorskoj ulici (Sl. 7.). Prvi idejni projekt, uostalom, sadrži dva predloosovska obrasca 'Raumplana' siroko primjenjivana na zagrebačkom području, poimence zračni kanal smješten iznad stropa izbe u svakome standardnom stanu namijenjen prozracivanju zahoda, odnosno aranzman ulaznoga prostora u svako stubiste gdje se s nekoliko stuba svladava visinska razlika između tla i povišenoga poda prizemlja.

Početkom pedesetih godina dvadesetoga stoljeća jugoslavenske su vlasti iznenađujuće dopustile osnivanje manjeg broja privatnih arhitektonskih ureda, jednostavno nazvanih po prezimenu glavnog arhitekta. Tako je u veljaci 1954. arhitekt Zlatko Neumann započeo nezavisnu arhitektonsku praksu kao direktor APB "Neuman" (sic!). Do umirov-ljenja 1963. projektirao je devetnaest razlicitih objekata, odnosno nadzirao izvedbu većine njih, od toga šest osmogodišnjih škola. Mreža njegovih kolega otprije Drugoga svjetskog rata, koji su sada bili strateški raspoređeni po različitim bilo izvršnim bilo savjetodavnim tijelima, omogućila mu je projektiranje nekoliko školskih zgrada. Građevni nacrti i pripadajuća dokumentacija bili su ispred vremena u tadašnjoj Jugoslaviji: cjeloviti statički, instalaterski i detaljni nacrti bili su izrađeni u njegovu ili u odgovarajućemu stručnom birou. Može se tvrditi da su svi sudionici procesa funkcionirali na nacin koji danas zovemo Building information modeling [BIM], iako podržani ljudskim resursima na crtacim daskama oboružani rapidografima, logaritamskim računalima odnosno pisacim strojevima, što je bilo uvjetovano hijerarhijski konfliktnim načinom donošenja odluka u vladajućoj administraciji. Tipološka obilježja ovih škola jesu uzdužni traktovi zgrada s učionicama okrenutim jugu, čime je arhitekt uspio od učionice napraviti dnevni boravak za učenike.

Postupci oblikovanja arhitekta Zlatka Neumanna počeli su se značajno mijenjati već prije početka Drugoga svjetskog rata. Umjesto glatkih bijelih ploha izbušenih vodoravno orijentiranim prozorskim vrpcama, počeo je primjenjivati prigušene trodimenzionalne mreze poprečnih zidnih ploha ili stupova, odnosno horizontalnih stropnih ploča, kao uređenje balkona u obliku lođe u vodoravnom smjeru pojedinačne fasade koju bi projektirao. Tako je to izvorno primijenio na uličnom pročelju neizvedenog projekta "Stoeger" iz 1937. [KAHLE, 2005: Sl. 16]. Njegovo iskustvo kao ratnog zarobljenika u Drugome svjetskom ratu sigurno je dodalo suspektne elemente njegovoj projektantskoj vještini, naprimjer - pojavu strukturalnih mreža u objema dimenzijama proceljnoga platna, izbačene trodimenzionalne kutije na posljednjim etazama (Sl. 11.) itd. Tijekom procesa projektiranja mreže su rasle organicki (Sl. 8. i 9.) ili su bile implementirane od prve ideje (Sl. 6., 7. i 12.). Ove su strukturalne mreže ipak potisnute u projektima školskih zgrada, kao da je pokušao poštedjeti dječje umove od realnosti svijeta koji ih okružuje (Sl. 10. i 11.). Njegov petnaestoetažní neboderoliki, dvostruko cjevasti toranj nove Zagrebačke tvornice papira na Žitnjaku jedna je od najuvjerljivijih visokih zgrada zagrebačkog horizonta (Śl. 13.).

Utjecaj arhitekta Zlatka Neumanna na arhitektonska zbivanja u Hrvatskoj i sire između 1927. i 1966. godine bio je enorman. On se uspio upisati u Loosovu privatnu školu, zatim postati jednim od najvaznijih suradnika arhitekta Adolfa Loosa, da bi uložio nadljudske napore u implementaciju projektantskog metiera svoga ućitelja na hrvatsku modernu arhitekturu, u ćemu je uspio makar na podsvjesnoj razini. Čudesno preživjevši holokaust, pokušao je stvoriti nove obrasce shvaćanja moderne arhitekture — potisnute dvo- ili trodimenzionalne mreže na oplošju zgrade, karakterizirajuci svoje osjecaje koji su nastali sudbinom vlastitoga života.

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### BIOGRAPHY

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Dr.sc. DARKO KAHLE, arhitekt [ARB, Ujedinjeno Kraljevstvo], arhitekt [BYAK, Slobodna Država Bavarska], ovlašteni arhitekt [HKA, Hrvatska], viši znanstveni suradnik [MZOS, Hrvatska]; 1989. diplomirani inženjer arhitekture, 2002. magistar tehničkih znanosti, 2007. doktor tehničkih znanosti [Sveučilište u Zagrebu, Arhitektonski fakultet, Mediteranski centar za graditeljsko naslijeđe Split]. Od 2002. godine objavio je 11 znanstvenih radova, 4 izvedena projekta obnove i 2 natječajna projekta.

