# URBAN MATRIX FORMATION MODELS IN THE MODERNE STYLE ARCHITECTURE IN NIŠ

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**Abstract**. This paper analyses contribution of architecture of structures to the quality urban matrix of a building or group of buildings in an environment. It can be considered a special town planning task, and the final results and successfulness of design is judged by the time and people. The time distance of almost one century since the first Moderne style buildings occurred in our parts, and some eighty years since the first such buildings were constructed in Nis, constitute a sufficiently long historical period for producing of an objective and good quality analysis of the contribution and impact of this style of architecture on the creation of urban matrix of Nis, that is, to express an opinion whether the Moderne style architecture in Nis succeeded in blending with the inherited structure of the city and create new urban values and referential city ambiance.

Key words: Moderne style in Niš, urban matrix, models.

#### 1. Introduction

The process of creation of contemporary urban matrix in the very city of Nis started immediately after the liberation of the city from the several centuries long Turkish occupation in 1878. According to the famous Winter's plan, a modern European city was being constructed, with squares, and for the standards of the time, wide streets. After the Balkan wars and WWI, a veritable construction boom occurred, all conforming to the already existing planning document, and new social-political and economic circumstances, where Nis became a part of one of the nine centers of Banovinas, administrative units of the newly formed state, intensified the construction activity.

"New public buildings of administration, culture, health service, education, boarding schools funded by the state, the city and Banovina administration were being intensively constructed. On the other hand the individual and multi-family housing building construction was intensified, and it followed and in some instances exceeded the construction of public buildings. As has already been said, due to the accelerated industrialization and the abrupt

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influx of population, there was a high demand for lodging space and the housing stock which had been devastated in the course of the mentioned wars, did not meet the demands of the new inhabitants either in terms of capacity or quality." [1]

"The public structures were, as a rule, built in the city core, whereas the smaller housing units, family houses and small multi-family building were initially built on the periphery of Niš. As the Moderne style becomes dominant by the beginning of the 30's of the 20<sup>th</sup> century in Niš, the multi-family housing construction was intensified, was now was also located in the central zone, with offices at the ground floor. By their importance, formative characteristics and voluminosity they become the significant landmarks in city vistas, with new centers, building blocks and streets being formed around them." [2]

The Moderne style structures in Niš can be viewed observing three characteristic models of creation of the city urbanity:

- The first model is creation of completely new city areas, with new public or housing buildings designed in the spirit of the Moderne, which became new landmarks and centerpieces for grouping of new buildings of various character.
- The second model of urbanity creation relied on the representative housing buildings designed in the Moderne spirit. Most often those were multi-family housing corner buildings, which became dominant structures from which the street fronts were evolved from.
- The third model of urbanity creation, that is, a contribution to construction and continuation of building of the city of Niš, were the buildings interpolated in the street front.

## 2. FORMATION OF NEW CITY CORE

The public structures were, as rule, always representative and occupied dominant and most attractive locations in the city, which enabled the designers to create new vistas in the cityscape. Around the important public buildings, new squares, blocks or plazas were created, which were fringed with public and housing buildings, and they were dominated by the Moderne architecture in this period (Fig. 1).

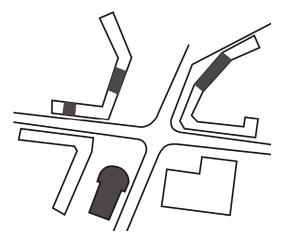


Fig. 1 Model of formation of new city core

One of the most important squares in Niš, the Sindjelic square (figure 38), obtained its basic characteristics and significance only after the National Theatre building was built (Fig. 2).

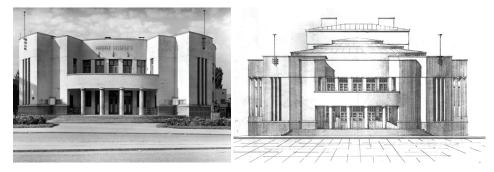


Fig. 2 The National Theatre in Niš

"Construction of the theatre in the very center of the square at that time initiates construction of other buildings around the square; those were high-rise housing buildings designed in the Moderne style, such as the "Banovina building" and the housing building of Dr Ljubomir and Desa Spasic. The housing building which was known as "Banovinska" was designed by the same designer of the Theatre building, architect Vsevolod Tatarinov, and the investor of both buildings was the same – The Moravska Banovina Administration." [3]

These facts suggest that a uniform architectonic expression was to be associated with this square, giving it a new character. The beginning of the WWII interrupted this intention, but after the end of the war, in 50's and 60's, the construction in the spirit of the late Moderne style was continued in this area, and particularly interesting case is the Army House, which, by its architecture and placement on the location represents an exquisite continuation, that is, finalization of formation of this significant square in Niš.

## 3. FORMATION OF A NEW STREET FRONT

"Formation of a new street front most often begins with the construction of some landmark building according to which the other structures are lined creating in this way the outline of a street or a block, which are very important components of the identity of certain city area. As a rule those are the corner building from which the street rows are formed and whose height and architectonic form determine the height and architectonic form of the structures adjacent to them. In the Moderne of Niš, the corner buildings, both public and housing, by their function, disposition and architectonic formation represented the most representative buildings, and as such, they were a perfect starting point for formation of the street fronts or entire blocks that were formed in the later period of time..." [4] (Fig. 3).

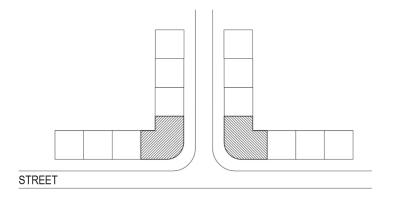


Fig. 3 New street fronts formation model

When talking about the public corner buildings, whose position in space changed not only the character of the location where they were created, but also the skyline of Niš, the present day City Assembly must be inevitably mentioned – as it was designed as an Apprentice Hall (Fig. 4) This exquisite architectonic creation by the architect Aleksandar Medvedev, was constructed on the eve of the WWII, and it was fully completed immediately after the war, forming the building rows in the Cara Dusana and Nade Tomic streets. The layout of this structure reveals a meeting of two wings, one following the Cara Dusana street in a shallow curve and meets at right angle the other wing which is formed along the Nade Tomic street and ends with a specific semi-circular volume at the ground level, emphasized with projecting semi-circular eaves.

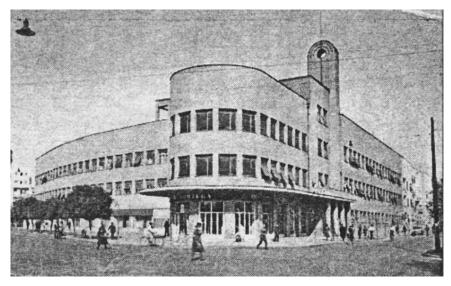


Fig. 4 Corner accentuation – new reference point in the city

#### 4. FITTING WITHIN EXISTING STREET FRONTS

Integration of a new structure into an existing urban structure of a street front is in many respects interesting and demanding designing challenge. At interpolations, designers always strived to abide to all the inherited parameters, alignment limits and to integrate within the existing structure in a best possible way. This holds both for the functional issues and for the aesthetic expression, where a designer made effort to make his structure prominent by some skillfully conceived detail or segment which will be recognizable and lend certain character to the entire structure. This statement in particular refers to the designers of the Art Moderne, who, designing the interpolated structures very frequently created masterpieces in this process in functional and architectonic-formative terms. The architects of the Moderne were true masters in terms of functionality - they managed to "pack" functions, especially in interpolations with very limited - narrow façade and demanding forms imposed by narrow and irregular form of construction land lots. Out of such approach to the issue of interpolation, some of the most significant structure of Modernism in Niš came to be constructed. They later to a significant degree determined the character of the street front of the street where they were constructed. It is notable that the most successful designs of interpolated structures were realized in buildings of gnd+2 to gnd+4 floors in the second half of the 40's of the previous century. Therefore it can be stated that the best designs of this kind of structures were realized in the mature phase of the Moderne of Niš, when the authors who designed in the Moderne spirit fully developed their mastery within this style (Fig. 5).

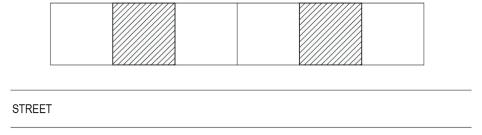


Fig. 5. Model of fitting within existing street front – interpolation

The interpolated structure in the Voždova street designed by architect Medvedev is interesting for several reasons, and primarily because the investor organized a sort of a competition between two architects, and entrusted the job to the mentioned famous Niš architect of the Moderne. Both designers provided the similar functional design, but the formative features of the structure achieved by the mentioned architect, ranks this structure at the top of the Moderne style in Niš. Observing the height limitation, the designer developed his formative expression in the pure tectonics, and relationship of full and the empty, emphasizing the floors with narrow terraces whose projecting decks are semi-circular at the ends. The high attic of the loft is characterized by three impressive oculi matching with the window apertures at lower floors. This structure, along with the already mentioned Kojic building in the immediate vicinity is one among the most significant examples of the Moderne in Niš, which determine the appearance of the Vozdova street (Fig. 5).

"At the housing building in the Rajićeva street, the designer solved the issue of narrow street front by an elongated form of the building making use of the depth of the construction land lot, which has already been recognized in this paper as a sort of a pattern for interpolations of this kind. The novelty is the task to fit the building between two structures which are very different in height. He managed to accomplish this by cascading two wings of his building, gradually connecting the two adjacent roofs. Such composition of the façade of the newly designed building produces a unitary street front with gradual change of building height, presenting an image of a harmonious whole" [3] (Fig. 6).





Fig. 6 Interpolation of a housing structure into an existing narrow street front

## 5. CONCLUSION

The process of creation of contemporary urban matrix in the very city of Nis started immediately after the liberation of the city from the several centuries long Turkish occupation in 1878. According to the famous Winter's plan, a modern European city was being constructed, with squares, and for the standards of the time, wide streets. After the WWI, a veritable construction boom occurred, all conforming to the already existing planning documents, and new social-political and economic circumstances, where Nis became a part of one of the nine centers of Banovinas, administrative units of the newly formed state, intensified the construction activity. Intensification of development by the beginning of 30's of the last century, which coincided with the increased presence of the buildings designed in the Moderne spirit, also intensified the construction of public structures and the multi-family housing, which were now located in the central zones, with office space at ground floors, which primarily holds for the structures constructed in the city core.

The Moderne style structures in Niš can be viewed observing three characteristic models of creation of the city urbanity.

The first model is creation of completely new city areas, with new public or housing buildings designed in the spirit of the Moderne, which became new landmarks and centerpieces for grouping of new buildings of various character.

The second model of urbanity creation relied on the representative buildings designed in the Moderne spirit. Most often those were multi-family housing corner buildings, which became dominant structures from which the street fronts were evolved from and even the small squares.

The third model of urbanity creation, that is, a contribution to construction and continuation of building of the city of Niš, were the buildings sometimes only interpolated in the street front, and sometimes forming a hub and setting a benchmark for a future street front.

Whichever of the mentioned models of urbanity is viewed, it can be observed that the architecture of Moderne in Nis gave a significant contribution in creation of a new urban image of the city, respecting the inherited structures, and transforming Nis from the small town into a modern Serbian and European city, so this period in Nis can be considered on the of the most important periods in the multi-millennium history of this city.

#### REFERENCES

- Keković A.; Stambena arhitektura Moderne Niša između dva svetska rata, Zadužbina Andrejević, Beograd, 2009.
- Keković A., Stambena arhitektura Niša u pokretu Moderna između dva svetska rata, Doktorska disertacija odbranjena 27.04.2009. na Građevinsko-arhitektonskom fakultetu u Nišu
- 3. Keković A., Čemerikić Z.; Moderna Niša 1920-1940., Društvo arhitekata Niša, 2006.
- Keković A. Petrović M.; Formative characteristics of Moderne style in Niš Facta Universitatis, Series: Architecture and Civil Engeniering Vol.6. N°1. 2008. pp 51-64 University of Nis.
- 5. Keković A. Čemerikić Z..; *Most significant buildings of the Moderne style multi-family housing in Niš* 1920 1941. Facta Universitatis, Series: Architecture and Civil Engeniering Vol.5. N°1. 2007. pp 01-15 University of Nis.
- Keković A., Čemerikić Z.; Moderna u Niškoj Banji, Arhitektura i urbanizam 8, str. 61-71, IUAUS, Beograd – Niš, 2001.
- 7. Istorijski arhiv–tehničko odeljenje Niške opštine Moravske banovine 1931-1941.

# MODELI FORMIRANJA URBANE MATRICE U ARHITEKTURI MODERNE NIŠA

### Aleksandar Keković, Marjan Petrović

U ovom radu se sagledava doprinos arhitekture objekata kvalitetnom stvaranju urbane matrice nekog objekta ili grupacije objekata u nekoj sredini; može se smatrati posebnim urbanističko-projektantskim zadatkom, a o konačnim rezultatima i uspešnosti datih rešenja sude vreme i ljudi. Vremenska distanca od gotovo jednog veka od pojave prvih objekata Moderne na našim prostorima i osamdesetak godina od izgradnje prvih objekata Modernističkog pokreta u Nišu, predstavljaju dovoljno dug istorijski period da se izvrši objektivna i kvalitetna analiza njihovog doprinosa i uticaja koji je ovaj pravac u arhitekturi izvršio na stvaranje urbane matrice Niša, odnosno da se da određeni sud da li je arhitektura Moderne u Nišu uspela da se svojim rešenjima uklopi u nasleđenu strukturu grada i stvori nove urbane vrednosti i reperne gradske ambijente.

Key words: moderni stil u Nišu, urbana matrica, modeli.