

THE MACEDONIAN TOWERS OF THE 20TH CENTURY AS A LEGACY OF AN OUTDATED FUTURE - A CASE STUDY OF KOCANI

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ABSTRACT

The residential towers from the second half of the 20th century in today's Macedonian cities resemble remnants of former spatial patterns - a legacy of an outdated future. Social marginalization contrasts the basic idea of setting up a completely new and innovative model of urban settlement. This contradiction between residential towers' former and contemporary reality will form the main motive behind this research.

The residential towers on the capital's territory, Skopje, have mainly been explored, but they appear anonymously in other Macedonian cities. Therefore, this research is oriented towards the landscape of unexplored Macedonian cities, using Kocani as an example. To what extent and in what way has the vertical spatial space, social and constructive, been reflected in its urban texture over the years?

The main goal of this research is to provide an overview of the assessments of the city of Kocani, from the transformation of its Ottoman character into a modern city from the turn of the 20th century according to the measure of Modernity, to today's challenges for providing spatial capacities in it.

The paper investigates the modest verticals of the city of Kocani through a documentary, analytical, and comparative procedure. The research subject is the historical feudal and residential towers from the turn of the 20th century in the city shopping centre of Kocani Verticals.

This research intends to promote the mass production of residential towers throughout Macedonian cities as a significant architectural and constructive step in an intense period of Macedonian architectural history. Despite their modesty, the urban verticals of Macedonian cities possess spatial exclusivity as a specific urban planning typology. These towers are not only historical facts but also factors of their environment and the future development of cities.

KEYWORDS _ *Urban verticals, towers, Macedonian cities, transformation, Kocani*

TOWERS IN MACEDONIAN CITIES – AN INTERNATIONAL MODEL WITH A LOCAL IDENTITY

The post-war climate of the mid-twentieth century created an unprecedented opportunity to reimagine the urban order (Chipman, 1982), with verticality assuming a new and prominent role in the rapidly expanding European cities (Corbusier, 2007). The pragmatic approach of intensifying land use through vertical construction (Koolhaas R., 1994) did not elude Macedonian towns (Rankovic, 1975). Consequently, the second half of the twentieth century witnessed a swift and profound transformation of their urban landscapes. Vertical towers emerged as key protagonists in urban modernization and renewal (Lynch, 1960).

While residential towers within the territory of Skopje have been the subject of substantial scholarly investigation (Ivanovski, Ivanovska-Deskova, and Deskov, 2018), this phenomenon has remained largely overlooked in the broader Macedonian context. Skopje undeniably presents a rich and varied tapestry of vertical structures, reflecting distinct phases and expressions of modernization (Bakalcev, 2004). Yet, critical questions arise: what occurred beyond the capital? To what extent and through which mechanisms did this spatial, social, and constructive phenomenon manifest within Macedonia's more modest urban centres?

The historical and residential towers from the second half of the twentieth century across Macedonian cities exhibit a spatial distinctiveness as a specific urban typology despite their restrained forms and considerably lower heights compared to regional and global counterparts (CTBUH). The appearance of these urban verticals within the landscapes of Macedonian cities represents an underexplored spatial phenomenon. The principal aim of this study is to trace the historical evolution of the Macedonian city in correlation with its vertical structures, thereby establishing the Macedonian tower as a distinct spatial and social phenomenon within the broader discourse of urban development.

METHODOLOGY – MAPPING THE VERTICAL ARCHITECTURE OF MACEDONIAN CITIES

This research builds upon the previously initiated effort to map the existing stock of residential towers beyond Skopje, extending the focus to other Macedonian cities (Petrova, 2023). Through direct observation and documentary-archival investigation, the phenomenon of vertical architecture in Macedonian cities has been systematically recorded. The production of residential towers during the second half of the twentieth century indicates a widespread proliferation of such structures across Macedonian urban centres, representing a significant architectural and structural endeavour during a particularly intense period in the country's architectural history. As illustrated in the diagram (Fig. 1), the intensity of tower construction varies among cities, revealing several distinct categories: towns with a single residential tower – typically those with smaller populations; cities with a limited number of residential towers (2 to 4 towers); cities with a moderate number of residential towers (5 to 9 towers) – often undergoing continuous construction activity; and cities with a high concentration of residential towers (10 or more) – generally regional centres characterized by developed industries. However, the critical question arises: does this production of towers deviate from the universal model of urban verticals by responding to specific urban contexts? If so, can it be argued that the international residential tower model in Macedonian cities has acquired a local identity, similar to how Dušan Grabrijan interpreted the traditional Macedonian house (Grabrijan, 1955)?

To adequately address this question, it is necessary to delve into the fabric of individual Macedonian cities and to perceive their towers not merely as spatial artefacts but as active agents in shaping their environment and historical development.

In this context, the city of Kocani will serve as a case study, analyzed through a documentary and comparative investigation of the phases of its development from the seventeenth to the twenty-first century, focusing on the emergence of towers. To this end, information regarding the urban evolution of Kocani will be drawn from the available urban plans (Ajtovski, Arsov, Andonov, 1970) (Dimitrov,

Gerasimov, Ajtovska, Ananieva, Atanasova, Efremovski, Naumnov, Petrov Fafa, 2012):

- The General Plan of 1928 – which picturesquely organizes the urban core within modest boundaries;
- The Urban Plan of 1948, prepared by Luděk Kubeš – which expands the city following Modernist principles through the introduction of new residential settlements;
- The General Plan of 2016 reflects contemporary trends in the urban development of Kocani.

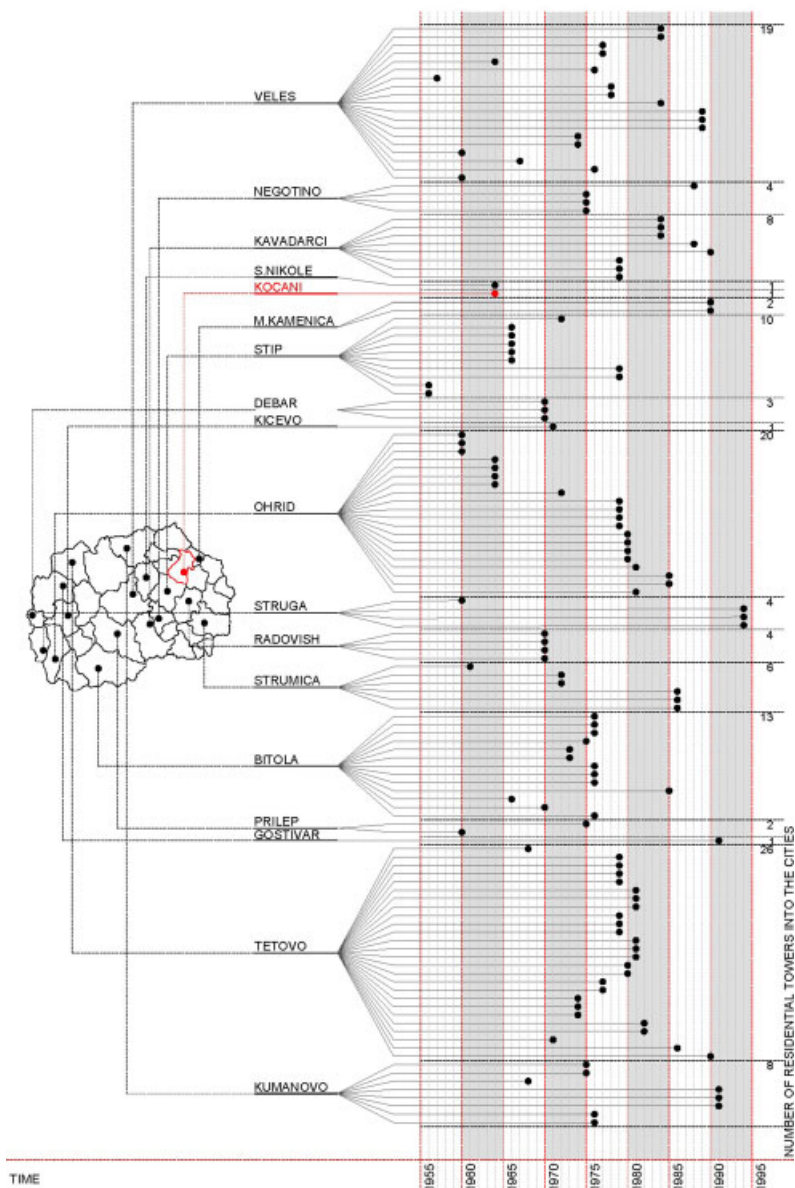


Figure 1: Chronology and Intensity of Residential Tower Construction in Macedonian Cities

CASE STUDY: KOCANI

Towers from the 17th/18th Century – The Framework of the Historic City

Kocani, located in the Eastern region of Macedonia, is spread across a distinctly hilly terrain descending from the Osogovo foothills along the Kocani River, forming an evocative urban silhouette. In this context, the phenomenon of vertical architectural expressions emerging from the urban fabric is not an innovation introduced by Modernism (Rudofski, 1964) (Fig. 2). On the contrary, the remnants of spatial patterns from the historic city still reveal traces of the former vertical monuments – the feudal towers (Fig. 3).



Figure 2: Panorama of Kocani, Early 20th Century; **Figure 3:** Kocani Tower, 17th–18th Century

In the 17th and 18th centuries, amidst difficult living conditions under the Ottoman Empire, four towers were built in Kocani: three for residential and defensive use and one as a clock tower. The proportions of these towers harmonize with the urban fabric, and their locations “were selected with great skill and undoubtedly with an understanding of the role and significance of the vertical landmark in shaping the city’s skyline and the artistic appearance of the city and its bazaar.” (Cholovic, 2008). Two towers were strategically placed at alternating intervals along both banks of the Kocani River, within a 300-meter radius on the highest hills marking the historic city’s boundaries. (Fig. 4). Today, in the absence of fortified urban demarcation, only two medieval towers remain, whose role within the urban structure has assumed a different character.

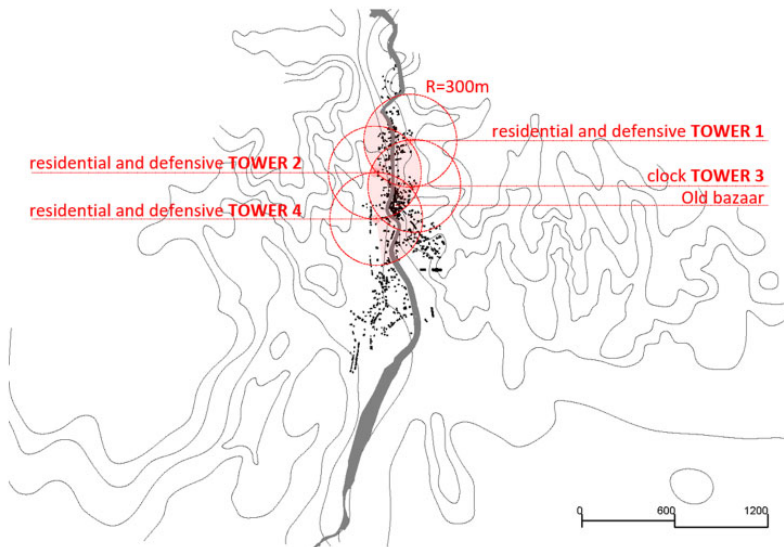


Figure 4: Kocani at the beginning of the 20th century

Towers of the 20th Century – The Beginning of the Modern City

The first half of the twentieth century did not bring significant changes to the urban image of Kocani, mainly due to the ongoing wars. However, the post-war period of the second half of the twentieth century marked the beginning of rapid urban development in Kocani. The small town, with approximately 6,000 inhabitants, would triple in size by the 1970s. The new urban order proposed the expansion of the city using modernist principles. As a result, the traditional bazaar, situated in the narrow upper course of the river, ceased to serve as the primary urban centre. On the flat terrain, a new city centre emerged to the south (Fig. 5), and the construction of a representative residential tower marked both the spatial and temporal beginning of the Modern City (Fig. 5).

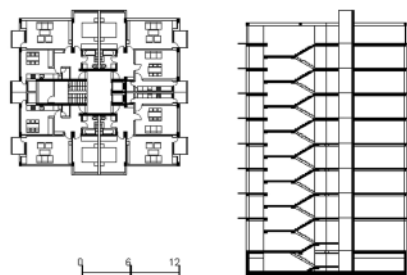


Figure 5: Panorama of Kocani, Late 20th Century; **Figure 6:** Modernist Kocani Tower, 1965

This process of Westernization of Kocani utilized the residential tower typology as a catalyst for urban aggregation. Specifically, within the fine-grained texture of low-rise family houses, the construction of a single residential tower in 1965 (Fig. 6) initiated the formation of a new composition of urban relations among high-rise buildings. In this way, starting from the first residential tower constructed in the early 1970s, the new urban centre evolved into a residential business complex of high-rises by the end of the 1980s (Fig. 7). Towers in Macedonian cities during the second half of the twentieth century legitimized socio-cultural, spatial, and technological modernization – often symbolizing an apparent rupture with previous urban dependencies.

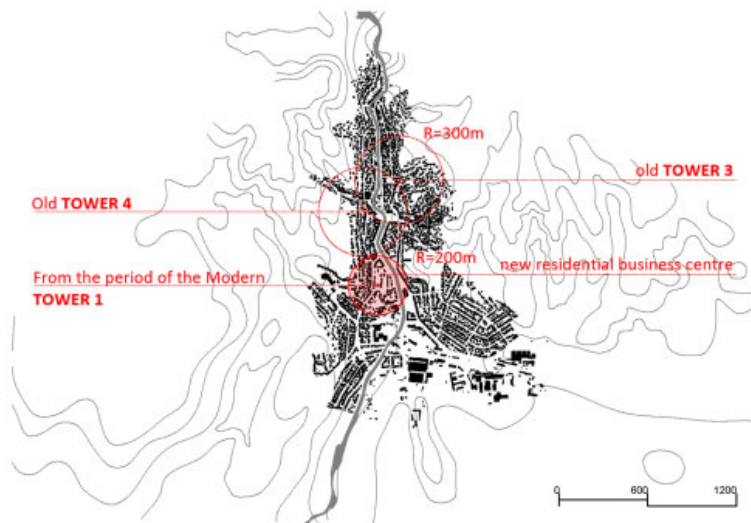


Figure 7: Kocani in the mid-20th century

Towers of the 21st Century – Tools for Urban Design

Unlike most Macedonian cities, the contemporary expansion of Kocani is oriented toward the hilly terrain, a response to the city's limited spatial possibilities. This picturesque setting along the slopes preserves the opportunity to shape an evocative urban skyline further. As a result, the monumental image of the city has been complemented by public buildings situated on two hills overlooking the City Commercial Center. Notable examples include the skillfully positioned "Monument to Freedom" (Fig. 9) and the "ASNOM Memorial Home" (Fig. 8), both constructed during the 1980s.



Figure 8: „ASNOM “Kocani; Figure 9: “Monument to Freedom “Kocani

However, the contemporary development of Kocani, from the late twentieth to the early twenty-first century, has not continued the use of the tower typology — nor that of residential towers — as a strategy for providing new spatial capacities or further strengthening the city's skyline identity. Although vertical growth is acknowledged within the new urban plans, it appears disconnected from a contextual reading of the characteristic landscape. This disjunction has led to a gradual dissolution of Kocani's once-recognizable silhouette, resulting in a fragmented skyline that lacks the deliberate spatial articulation necessary to accommodate a contemporary urban verticality.

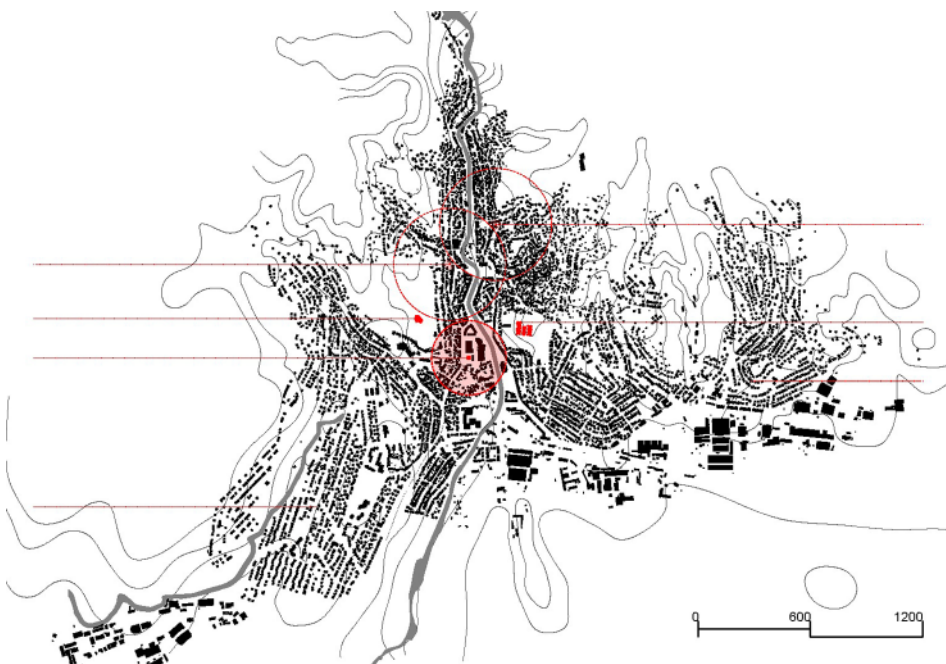
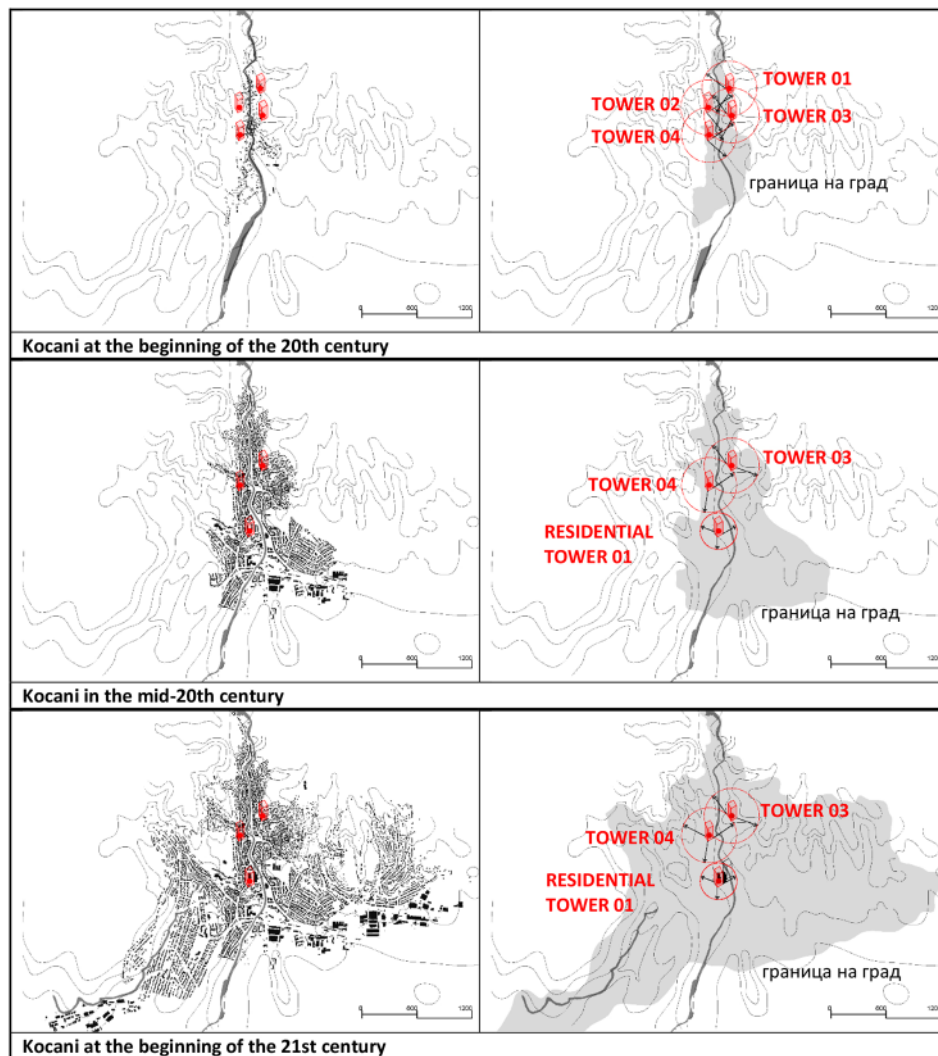


Figure 4: Kocani at the beginning of the 21st century

Comparative Analysis of the Historical Development of Kocani Concerning Towers

The diagrams presented in Table 1 provide a historical and spatial analysis of the development of the city of Kocani across different periods, with particular emphasis on the role of vertical architecture – the towers.

Table 1: Comparative Analysis



The comparative analysis opens the possibility for a broader discussion regarding whether the towers in Macedonian cities represent a unique phenomenon beyond the universal model of urban verticality. The production of towers in Kocani across different periods suggests that vertical structures were not merely implemented as a generic and neutral typology but rather emerged from specific urban contexts and the city's particular needs.

The historic towers of the 17th and 18th centuries were carefully embedded within the natural and historical context, following the logic of defensive and representative functions while maintaining a strong sensitivity to the landscape and the existing urban structure (CHOLOVIC, 2008). Tracing the

urban form of Kocani until the early twentieth century reveals that the historic towers were positioned along the city's periphery at elevated locations, reinforcing their role as limitation elements intended to strengthen the spatial framework of the city.

In the contemporary urban fabric, two historic towers have been erased, mainly due to their obsolescence within the modern city and the southward shift of the urban centre. Consequently, the remaining two towers today exhibit a paradoxical character relative to their original purpose — they now stand as vertical points within densely built environments. Nevertheless, their contemporary role has not deprived them of the monumentality inherent to their architectural typology. In this sense, they are not merely spatial artefacts but active spatial agents that have helped shape the identity and visual narrative of the city.

In contrast to the historic towers, the modern residential tower of the twentieth century does not directly continue the historical urban continuity. Instead, it represents a conscious and deliberate rupture with the traditional urban fabric. Nonetheless, its location and significance remain deeply connected to the urban logic and the city's social development, shaping a new centre and urban identity. Although this represents an imported Modernist concept, its application in Kocani was carefully adapted to the specific local conditions, again indicating a typological modification of the universal model to fit the local context.

The Kocani tower of 1965, when analyzed about the city's boundaries, clearly demonstrates a different urban strategy — the positioning of a vertical urban landmark oriented outward, without the enclosing character typical of fortification towers. In this way, the tower expanded the historic town by opening new spatial capacities within the heart of the urban fabric. However, in the twenty-first century, the absence of new towers suggests that contemporary urban planning either does not recognize or consciously avoids the local tradition of contextual reading. Thus, it becomes necessary to approach towers in Macedonian cities as an international architectural phenomenon endowed with a regional identity — much like the “Macedonian house,” which Dušan Grabrijan defined as a unique spatial, functional, and cultural artefact (Grabrijan, 1955).

From this perspective, the question naturally arises regarding the potential future development of towers in Macedonian cities. Can the historical examples—both the traditional tower model and the Modernist reinterpretation—generate new visions and strategies for the vertical growth of Kocani?

STRATEGIES FOR THE VERTICAL DEVELOPMENT OF KOCANI CITY

The comparative analysis of Kocani's urban development reveals several potential tactics for implementing future vertical structures — towers — within the city (Bakalchev, Bakalcheva, Tasić, 2015) (Petrova, Mihajlovska, 2022). These strategies draw upon lessons from historical precedents while simultaneously addressing contemporary spatial, social, and cultural demands:

- **Vision 01: Towers as Contextual Urban Markers**

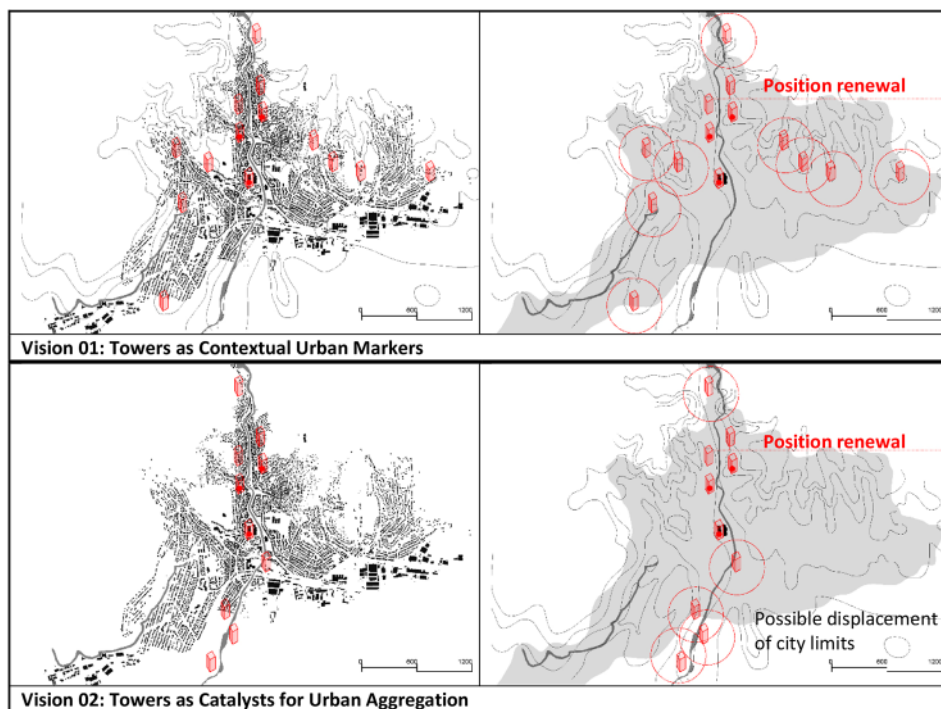
In the future development of Kocani, vertical structures can be strategically employed as markers at key urban locations, following the conceptual logic of the 17th–18th centuries, when towers served as visual and functional points of orientation. Contemporary towers could be placed on selected elevated sites and strategic positions that would clearly define the city's identity while simultaneously serving as navigational points for the expansion of the urban fabric. As illustrated in the vision presented in Table 2, the proposed vertical markers are positioned at higher elevations relative to the boundaries of the existing urban fabric. This way, the towers would be integrated into the city's structure while framing its immediate periphery.

- **Vision 02: Towers as Catalysts for Urban Aggregation**

Following the example of the modern residential tower from the twentieth century, future towers could

function as catalysts for developing new residential and public areas (Mumford, 1961) (Koolhaas R. &, 1995). Towers would be positioned in locations that could foster the emergence of new urban centres or redefine existing central zones. In doing so, they would stimulate the concentration of urban content, promote the rational use of space, and create socially active environments. The vision presented in Table 2 outlines a possible development trajectory for the city along the river corridor through the implementation of new urban centres. In this strategy, the extension of the city's boundaries does not depend solely on the positioning of towers; rather, towers, acting as urban aggregators, could densify the urban fabric in proportion to the natural constraints imposed by the riverbed.

Table 2: Visions and Strategies



CONCLUSION

The study of historical and contemporary vertical structures in the city of Kocani reveals that the construction of residential towers in Macedonian cities is characterized by unique qualities that distinguish it from the universal model of urban verticality. Although the residential towers in Kocani stem from Modernist principles typical of the second half of the twentieth century, their placement and development carefully reflect the city's historical and urban context. This approach indicates a clear potential for defining an international architectural model endowed with a local identity as a recognizable spatial typology analogous to the traditional "Macedonian house," which Dušan Grabrijan identified based on local cultural, functional, and architectural characteristics. In this way, the tower within Macedonian cities could be defined by contextual sensitivity, multifunctional character, and specific spatial symbolism, with the potential to serve as a clear reference point in the city's future development. The proposed tactics for placing new towers in Kocani further confirm the validity of this concept, opening possibilities for a sustainable and authentic spatial, visual, and social evolution of the urban structure and its identity.

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