

**ADAPTIVE REUSE VS URBAN RENEWAL APPROACH OF
ABANDONED INDUSTRIAL LOCATIONS -
A CASE STUDY OF SLAVIJA WAREHOUSE LOCATION IN
SKOPJE, REPUBLIC OF NORTH MACEDONIA**

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Abstract

Forced industrialization and urbanization during socialism led to massive and uncontrolled expansion of urban territory of the city of Skopje. In the absence of real estate market, industrialization resulted in irrational use of urban land, where large portions were allocated to industrial enterprises. The end of socialism and the transition to free market economy triggered various processes of spatial changes in the city, among which, the most evident was the process of deindustrialization. As a result numerous industrial locations, mainly situated within city's urban boundaries, became abandoned and underutilized, and remained as such. This paper discusses the importance and opportunities of these abandoned industrial locations as significant source of urban land that can be used for new productive and innovative industries, as well as for commercial programs compatible with production. It argues that through the process of adaptive reuse these facilities can accommodate new production programs thus ensuring rational use of urban land and sustainable development and growth of city's economy.

The aim of this paper is to tackle two different urban approaches for reuse of these locations. The first is the concept of urban renewal, achieved through demolishing of existing facilities and building a new one, and the second is the concept of adaptive reuse, achieved through renovation of the existing facilities. Through the case study of the abandoned location of Slavija warehouse in Skopje these two concepts have been challenged. The urban renewal concept, applied for this location in the official urban planning documents with incorporated residential program, vs the adaptive reuse concept, through the urban design for this location made by the research team with the program to accommodate new industries, such as creative industries, non-material production, and/or small artisanal manufacturing.

Key words: *Deindustrialisation, Adaptive reuse, Urban renewal, Creative industries, Urban production*

Introduction

After the independence of the Republic of North Macedonia in 1991 and transition to new economic and political system, significant transformations took place within the industry. Economic conditions in the country were extremely challenging, which led to a sharp drop in industrial production index and a decline in employment within the industry. According to official data from the State Statistical Office¹, the index of industrial production in the first decade of transition fell by 57% compared to the 1989 index, while the number of employees decreased from 213,525 in 1989 to 114,359 in the year 2000. The changes in production volume and the decrease in industry employment impact the urban space through the increase of abandoned industrial area and number of abandoned locations. As the country capital and major industrial center Skopje was the most affected by the decrease of production. After several years of transition, nearly half of Skopje's industrial area has become abandoned. However, industrial production does not cease completely, and new industrial locations appear on the outskirts of the city to new undeveloped locations. In the past decade, this trend of relocating industries outside the city to areas that were previously used for agriculture, has been more pronounced, with no signs of this trend slowing down in the near future. The question arises, is such a trend sustainable and in line with the proclaimed city's policies for rational use of urban land?

This text deals with the abandoned industrial locations in Skopje and the possibilities arising from their reuse. Specifically, the intention of the text is to present the advantages of adaptive reuse of industrial locations approach compared to the urban renewal approach. The text promotes the idea that abandoned industrial locations should be used for new production purposes that will improve urban production and diversify programs in the city. Despite the enthusiasm that adaptive reuse of abandoned industrial locations can strengthen urban production, the research focus of this text is that there is a lack of understanding and readiness for its implementation by local authorities.

The next section presents a brief history and the conditions for the development of industry in Skopje. Further sections present the results of the research on the transformation of industrial space in the post-socialist period, as well as the findings regarding the approach used in reusing abandoned locations, whether it's adaptive reuse or urban renewal. Additionally, a case study of the Slavija warehouse location is presented. The text concludes that more attention should be paid to highlighting the need for urban production in all parts of the city and that the benefits of adaptive reuse of abandoned industrial locations are significant and should be presented to local authorities.

Industry in Skopje form 1880 till 1991

The first industrial initiatives in Skopje began in the 1880s during the period of Ottoman rule on the territory of present-day North Macedonia. By the early 20th century in 1904, Skopje had five industrial enterprises, and this number had doubled by 1912 (Uzunov, 1970). These early industrial establishments were located within the city limits, showing a tendency to cluster near the Vardar River that provide necessary water power (Sidovski, 1980).

Following World War I, significant transformations occurred in Macedonia that would profoundly impact the future industrial development of Skopje. In 1918, the region of present-day North Macedonia became part of the Vardar Banovina under the parliamentary monarchy of the Kingdom of Yugoslavia. At the beginning of this era, Skopje was designated as the administrative center of Vardar Banovina, briefly emerging as a predominant urban and

¹ ASB of the Republic of North Macedonia for 2011, SSO, 2011

industrial center. This period witnessed the establishment of a capitalist socio-economic system, creating more conducive conditions for industrial growth. The changed political and social landscape facilitated capital accumulation, the presence of financial institutions, foreign investments, the formation of professional associations and chambers, as well as vocational schools to train the workforce for the industrial sector. Consequently, there was a surge in the number and at the onset of World War II there were 45 operational industrial enterprises (Sidovski, 1961). The industrial landscape during this era was characterized by the concentration of industries in the designated "industrial area" near the Skopje-Belgrade railway line, clustering of industries along the Skopje-Kosovska Mitrovica railway line, and the presence of enterprises dispersed within the city's boundaries.

After World War II, the Socialist Republic of Macedonia (present day Republic of North Macedonia) became an integral part of the newly established federal state, the Socialist Federal Republic of Yugoslavia (SFRY). As the capital of one of federal republics, Skopje underwent significant economic and industrial advancements during the socialist era. This progress was a direct outcome of socialist economic and urban policies aimed at fostering growth and development through industrialization, with the industry emerging as the primary economic driver, contributing significantly to overall production and employment. Industry, as the dominant economic activity, became concentrated in the urban area of the city, along the railway lines Skopje-Belgrade and Skopje-Thessaloniki and in three industrial zones (see Map 1). According to the distribution of industry in the city, it can be observed that during this period, the spatial organization of industry shifted from being dispersed to becoming monocentric. At the end of this period, industrial activity covered 967.8 hectares, representing nearly 14% of the urban territory. Due to the absence of a real estate market, most industries were situated in areas that would be deemed prime locations under typical market conditions.

Map 1: Socialist industry in Skopje 1991



Transformation of socialist industry in post-socialist period

Following the independence of the Republic of North Macedonia in 1991 and the introduction of a new economic and political system, significant transformations took place in the industrial sector, which were also evident in spatial terms. To assess the current spatial dynamics of industrial development from 1991 to 2023, an updated version of a previous study conducted by Mickovski in 2013 was conducted for this study (Mickovski, 2015). This update focused specifically on 163 individual industrial sites in Skopje that originated from the socialist period, using data collected in 2015 and mapping changes up to 2023. The research methodology employed for this update, included the following key steps: (1) Location analysis involved gathering information on urban characteristics such as the location area, percentage of built-up area, and utilization ratio; assessing the activity status of each site as abandoned, functionally transformed, reindustrialized, or renewed industry; (2) Data utilization from digital georeferenced maps to enhance accuracy and detail in spatial analysis; and (3) Conducting field research to supplement and verify the collected data.

The conducted research revealed that the industrial zones within the city are fragmented and are evolving into multifunctional areas. Areas that were previously solely designated for industrial purposes are undergoing changes due to processes of deindustrialization, functional transformations, industrial renewal and reindustrialization. The summarized outcomes of the transformation of the studied locations are presented in Table 1, showcasing the changes and trends observed over the studied period.

Table 1: Transformation of the Socialist Industry in Skopje from 1991 to 2023

Transformation of the socialist industry from 1991 to 2023	Abandoned Industrial Locations		Locations of Renewed Industry		Functionally Transformed Locations		Reindustrialized Locations		Total	
	Area (ha)	Location N°	Area (ha)	Location N°	Area (ha)	Location N°	Area (ha)	Location N°	Area (ha)	Location N°
	347,2	34	378,4	71	95,2	47	29,0	11	849.8	163
40.8 %	20,8 %	44.5 %	43,5 %	11.2 %	28,9 %	3,4%	6,8 %	100 %	100 %	

There is no universally accepted definition of abandoned industrial areas (brownfields) in Europe, not even for the member countries of the European Union. This research adopts the broadest range of the brownfield definition determined by CABERNET, where this term refers to "... areas damaged by former users or surrounding areas; which are abandoned or underutilized; located in whole or partially developed urban areas; requiring intervention to be reused; and which may have real or presumed pollution problems."² The status of industrial locations is determined through data obtained from the analysis of locations and questionnaires filled out during direct interviews with individuals who were or are employed in former industrial enterprises. This research method, due to its flexibility and immediacy in data collection, allows for the examination of significant details and information that are not easily accessible to the public. However, like any qualitative method, it contains a certain degree of subjectivity both from the interviewees and the researchers. This is particularly significant for locations with a borderline status/condition, where the assessment of location status likely contains a margin of error, and using this data for other purposes should be done with some limitations. Despite the aforementioned limitations in determining location status, mapping represents a unique source of data for further analysis of the research subject. The status of locations is determined only for former socialist industry, with locations of

² <http://www.cabernet.org.uk/?c=1316>, приступљено на 20 јули 2013.

abandoned industry created during the transitional period not being the subject of this research. Using this methodology, through the conducted research, mapping of the status of individual locations was performed. In this way, the total area of industrial urban land with the treatment of abandoned industry was calculated, and at the same time, the boundaries of abandoned industry were determined. According to the data from the Table 1, it can be concluded that the total area of abandoned industry is 347,2 ha and represents 40.47% of the total analyzed industrial area in the city (862,4 ha). If we analyze the number of abandoned locations, we can see that there are 34 locations marked as abandoned which represent 20,8% of all 163 analyzed locations. Areas of abandoned industry represent a significant element of urban structure. They stand out distinctly from the rest of the urban territory and often dominate the overall picture of a specific urban space. The distribution of abandoned industrial locations in Skopje, as determined by the research, is shown on Map 2: Transformation of the Socialist Industry in Skopje from 1991 till 2023.

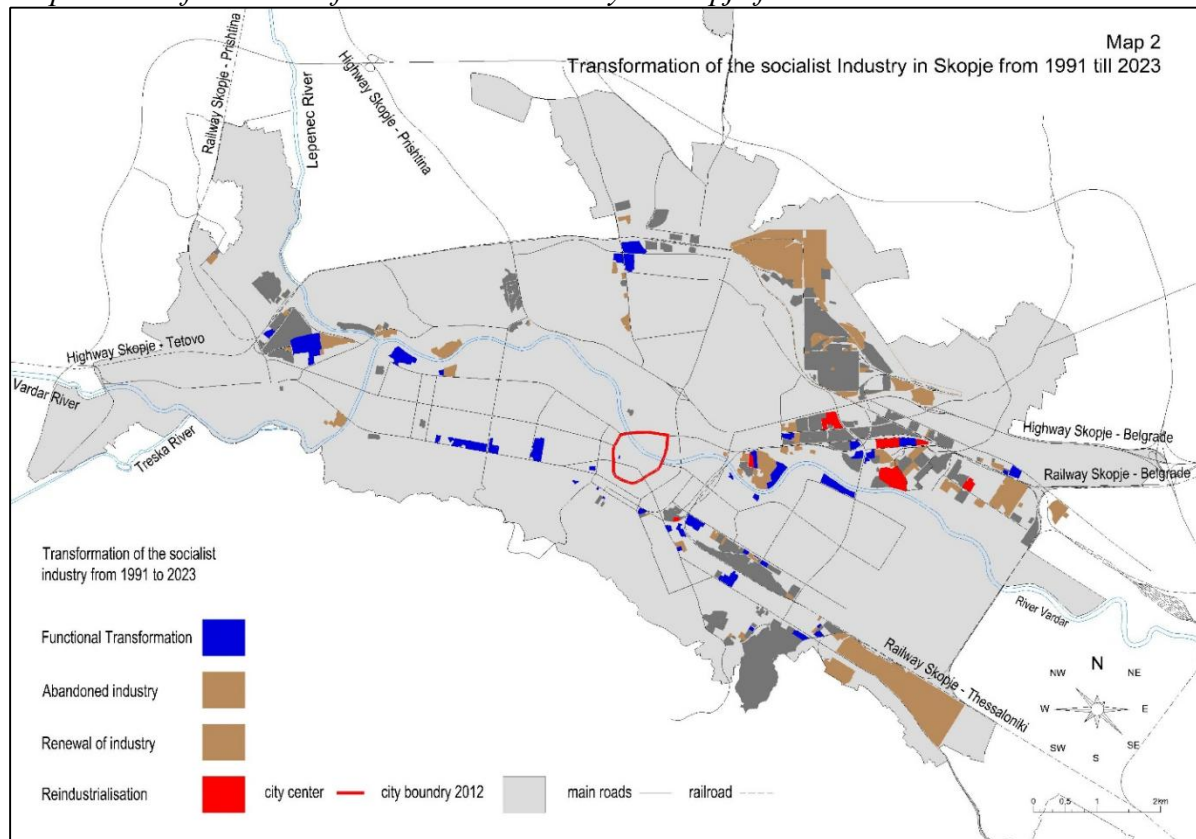
Functional transformation of locations for non-industrial purposes represents a change in the function of former industrial locations and facilities. These are areas where industrial activity has ceased and has been replaced by other economic activities, mostly commercial, service-oriented, residential, administrative functions, and other activities such as education, recreation, tourism, logistics, etc. During the post-socialist period in Skopje, there has been a highly uneven functional transformation of former industries, both concerning industrial spaces (whether they are dispersed or within industrial zones) and the adoption of new functions (with certain functions being favored over others). Through research, we analyzed the characteristics of specific locations to assess the overall area of transformed industry, the extent of functional changes in former industrial areas, and the new functions these locations have taken on. The new function of individual locations/objects was derived through dominant functions in space, which is particularly important in cases where the same entity performs various economic activities at the same location (for example: services, sales, administration, etc.). In these cases, the author's assessment of dominant functions in space is not considered subjective in the research, as the transformation into non-industrial function determines the change of function. In this study, functional transformation also includes changing the industrial purpose of a location from production to warehousing, as this permanently eliminates the production component once present at the location. The results of the mapping process of the status of functionally transformed locations are presented in Table 1. According to the data from the table, it can be concluded that the total area of functionally transformed industry locations is 95,2 ha and represents 11.2% of the total analyzed industrial area in the city (862,4 ha). The spatial distribution of functionally transformed industrial locations in Skopje, as determined by the research, is shown on Map 2: Transformation of the Socialist Industry in Skopje from 1991 till 2023.

During the post-socialist era, manufacturing in the city did not come to a complete halt despite the highly pronounced deindustrialization process. Many industrial enterprises persisted and operated. In such instances, industry renewal involved diverse transformations aimed at modernizing, reconstructing, and adapting existing industrial operations. Key to industrial renewal are changes that introduce new production technologies and innovations, embracing market changes, new distribution channels, and new methods of management and organization of enterprises. A particular emphasis of modernizing industrial facilities and improving the overall infrastructure at industrial locations is its pronounced environmental character. In general, socialist industrial enterprises began renewing their capacities in the same production activity, with an emphasis on incorporating more modern, efficient, and less polluting technologies. Within the category of industrial renewal, this work also addresses new economic entities that have acquired existing capacities and continued operations in the same industrial sector. The spatial effects of socialist industry renewal are not obvious and

easily observable because, , they occur "within the factory gates". (Kis, 1999). Data on the renewal of industry in Skopje were derived through field research on locations of socialist industry and are presented in Table 1. According to the data from the table, it can be concluded that the total area of functionally transformed industry locations is 378,4 ha and represents 44.5 % of the total analyzed industrial area in the city (862,4 ha). The spatial distribution of functionally transformed industrial locations in Skopje, as determined by the research, is shown on Map 2: Transformation of the Socialist Industry in Skopje from 1991 till 2023.

In this paper, the term reindustrialization refers to establishing new production activities at former socialist industrial locations. This can happen through the emergence of new industrial sectors or through changes in the industrial land use, shifting from activities serving industry functions (such as storage or services) to production activities. Former industrial locations offer several advantages for accommodating new industries. These include the existing character of the environment, a dominant industry with large capacities, connectivity to infrastructure and transportation links, proximity to residential areas and markets, and the area's tolerance to environmental pollution. Reindustrialization, whether due to the emergence of new industrial branches or changes in industrial land use, carries a positive connotation as it is linked to increased employment and production. Data on the reindustrialization of industry in Skopje were derived through field research on locations of socialist industry and are presented in Table 1. According to the data from the table, it can be concluded that the total area of reindustrialized industrial locations is 29,0 ha and represents 3.4 % of the total analyzed industrial area in the city (862,4 ha). The spatial distribution of reindustrialized industrial locations in Skopje, as determined by the research, is shown on Map 2: Transformation of the Socialist Industry in Skopje from 1991 till 2023.

Map 2: Transformation of the Socialist Industry in Skopje from 1991 till 2023



Adaptive Reuse vs Urban Renewal Approach of Abandoned Industrial Locations in Skopje

The previous section of the text presented the findings of the research on the transformation of the socialist industry and identifying abandoned industrial locations. In this section, the results of the same research that are related to the approach for redevelopment of abandoned locations are presented.

Identifying abandoned industrial locations within the city is essential to determine their potential for reuse and to assess their potential for redevelopment, as, they are "... 'golden reserves' for the city's future growth" (Kis, 2007). Eva Kiss (2002) identifies two ways of reusing former industrial locations, 'adaptive reuse' and 'urban renewal'. The first method is 'adaptive reuse' or 'building recycling,' introducing a new function or new production activities through renovation and revitalization, thereby creating necessary conditions for new activities. This method allows for the retention of the existing industrial buildings while making internal modifications to suit the new function, without altering the urban landscape significantly. The second method is 'urban renewal', involving the demolition and complete removal of all production structures and facilities, followed by the construction of new buildings that meet the requirements of the new function. This method takes a more drastic approach by demolishing existing structures and constructing entirely new facilities that meet the requirements of the new industrial function. This approach results in a complete transformation of the location and space, leading to a more radical change in the urban environment. Both adaptive reuse and urban renewal play crucial roles in transforming abandoned industrial locations into valuable assets for cities, albeit with different scopes and strategies.

The research on the transformation of industrial locations in Skopje showed that reuse took place within the processes of functional transformation and the process of reindustrialization. Total of 47 locations previously marked as abandoned where functionally transformed, which represent 28,9% of all 163 analyzed locations (see Table 1). Among the newly assumed functions by transformed industry, by number of locations commercial use dominates with 23 locations covering 33.8 hectares of land, followed by residential use with 17 locations covering 47.0 hectares. Additionally, other functions such as education are present in 3 locations totaling 2.50 hectares, and green spaces occupy 3 locations totaling 8.81 hectares (see Table 2). Total of 11 locations previously marked as abandoned locations where reindustrialized by establishing new production activities, which represent 6,8% of all 163 analyzed locations (see Table 1).

Table 2. Functionally Transformed Locations of the Socialist Industry in Skopje by new program

Functionally Transformed Locations of socialist industry in Skopje by new program	Residential		Public Open Spaces		Commercial		Education		Total	
	Area (ha)	Location N°	Area (ha)	Location N°	Area (ha)	Location N°	Area (ha)	Location N°	Area (ha)	Location N°
	47,0	17	13,1	4	33,8	23	1,4	3	95,2	47
	49,4%	37,2%	13,7%	7,8%	35,4%	49,1%	1,5%	5,9%	100%	100%

The research showed that there are cases of reused abandoned industrial locations either through adaptive reuse or urban renewal approach. Out of all 47 functionally transformed locations, 20 locations were reused through adaptive reuse, while 27 were reused through urban renewal. For this analysis, the connectivity of the new function (Residential, Public

Open Spaces, Commercial, or Education) of the location with the chosen renewal model is crucial. It is evident that the change to residential programming occurs exclusively through urban renewal, while adaptive reuse dominates in commercial transformations, although there are also examples of program changes through urban renewal (see Table 3). Out of all 11 reindustrialized locations, 10 were reused through adaptive reuse and 1 through urban renewal. It is obvious that in the examples of reindustrialization, the adaptive reuse approach dominates (Table 4).

Table 3. Functionally Transformed Locations of the Socialist Industry in Skopje by the chosen approach of utilization

Functionally Transformed Locations of Socialist Industry in Skopje by the chosen approach of utilization	Residential (Location N°)		Open Space (Location N°)		Commercial (Location N°)		Education (Location N°)		Total (Location N°)	
	Adaptive reuse	Urban Renewal	Adaptive reuse	Urban Renewal	Adaptive reuse	Urban Renewal	Adaptive reuse	Urban Renewal	Adaptive reuse	Urban Renewal
	0	17	0	4	18	5	2	1	20	27

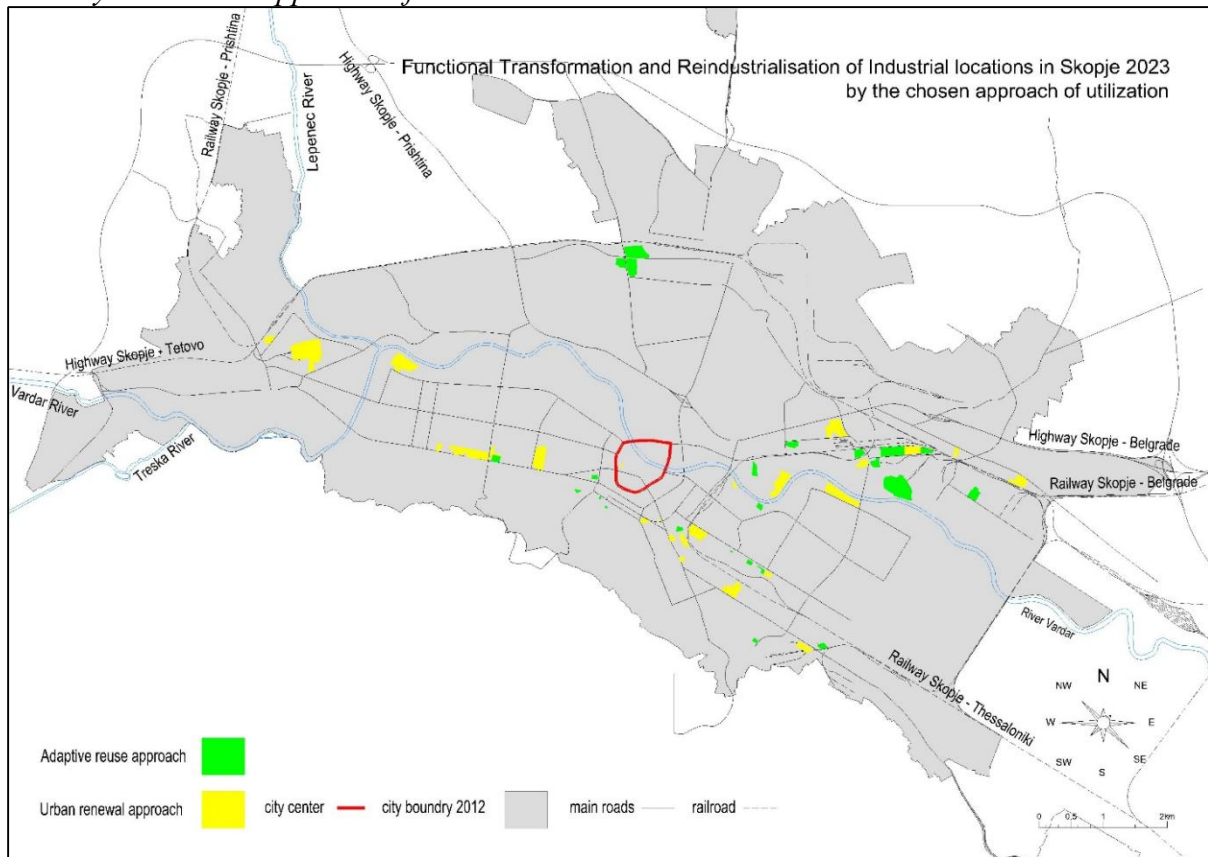
Table 4. Reindustrialized Locations of socialist industry in Skopje by the chosen method of utilization

Reindustrialized Locations of socialist industry in Skopje by the chosen method of utilization	Total (Location N°)	
	Adaptive reuse	Urban Renewal
	10	1

The research indicates that several factors play a significant role in choosing an approach for utilization (see Map 3). These factors include the location of the site within the city framework, whether the location is within an industrial zone or isolated and surrounded by other functions, the size of existing industrial structures, and the percentage of build area on the site. Locations within industrial zones, where there are large structures, are predominantly utilized through the adaptive reuse approach. Conversely, locations outside industrial zones, surrounded by other functions, are utilized through the urban renewal approach.

Additionally, the research indicates that the existing built industrial infrastructure largely meets the needs for production space of small and medium enterprises that dominate the post-socialist period. In fact, individual research on locations where utilization is implemented through adaptive reuse shows that they become hubs attracting small and medium enterprises. Concentrating these enterprises together at the same location and in shared facilities has brought several advantages, such as fostering collaboration among small enterprises to promote new products, enhancing joint capacity, optimizing the use of infrastructure at the locations, and facilitating the emergence of service and logistics activities at the sites.

Map 3: Functional Transformation and Reindustrialisation of Industrial locations in Skopje 2023 by the chosen approach of utilization



Slavija warehouse location

With a small percentage of reused locations and a large number of abandoned industrial sites still present in Skopje, there is significant potential for their utilization. One such abandoned industrial location is the Slavija warehouse in the Kisela Voda municipality (see Figure 1). The location was established after the First World War to meet the needs of the Kingdom of Yugoslavia's military, with the construction of the first four warehouses for accommodating military equipment. Following the Second World War, the site was utilized by the military of the SFRY, when two additional warehouses were added. Throughout this period, the location served as a storage and logistical center for the military. In the early 1960s, ownership of the site was transferred to the Slavija retail chain from Skopje. Slavija, like many enterprises during the socialist era, operated as a self-managed enterprise owned by its workers. The location remained active until the mid-1990s when, due to the unsuccessful transition from self-management to private ownership, the enterprise ceased its operations after declaring bankruptcy. Subsequently, both the facilities and the location were transferred to state ownership, which struggled to effectively manage the site thereafter. A small portion of the facilities is rented out as storage or production space to small businesses, with a trend of users vacating the premises due to poor management and inadequate maintenance of the facilities.



Figure 1: Slavija warehouse location, 2022

Towards the end of the socialist period in 1987, a proposal was made for an architectural and urban planning project to renovate the Slavija warehouses and the surrounding area, called the "Prvomajska – Local Center Kisela Voda" (see Figure 2).³ Following this, a conceptual design was developed, and two years later, a detailed project for the buildings and landscaping was completed with the intention of implementation. However, unstable investment conditions resulting from the political and economic crisis in the SFRY led to delays and ultimately the abandonment of the idea to carry out the renovation project for the location. The project aimed to preserve the Slavija location and its buildings while proposing to convert the buildings into retail centers for furniture, textiles, electrical appliances, and food, along with a hotel.

³ <https://marh.mk/magacinite-slavija-lokalen-centar-na-slucuvanja/>

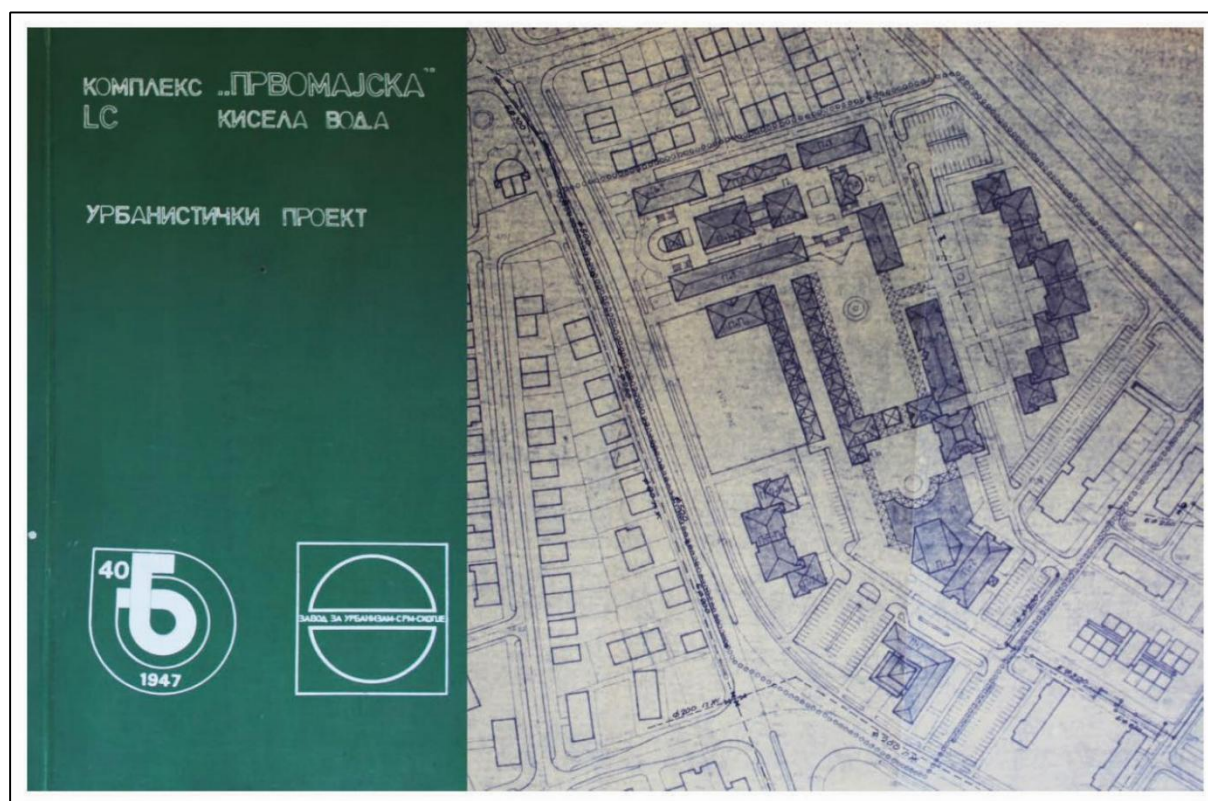


Figure 2: Urban Plan for Slavija warehouse location, 1987

Following the independence of the Republic of North Macedonia, the location became a part of the map of abandoned sites that gradually faded from the collective memory of Skopje's residents. Over the past two decades, a policy promoting investments in construction within the municipality's territory has resulted in the adoption of three detailed urban plans for the Slavija location. In 2006, the "Detailed Urban Plan – DUP, M.Z. Cvetan Dimov - Slavija"⁴ was adopted, which included plans for demolishing existing structures and constructing commercial and trade facilities with heights ranging from 10.2 to 19.2 meters. In 2012, the "Detailed Urban Plan – DUP, M.Z. Cvetan Dimov - Slavija (Blokovi 1-10)"⁵ was adopted, outlining the demolition of existing structures and the construction of commercial residential facilities with heights ranging from 18.5 to 25.2 meters. In 2013, the "Detailed Urban Plan – DUP, Zona J, Cetrvt J12"⁶ was adopted, envisioning the demolition of existing structures and the construction of residential buildings with a height of 27.0 meters (see Figure 3). It is evident that with the latest plans, the approach of adaptive reuse of existing structures and preservation of the specific characteristics of the location are being abandoned. Instead, the plans promote the demolition of existing structures and the construction of new ones. Additionally, the program shifts from commercial and trade in the 2006 plan to exclusively residential in the 2013 plan. If we analyze other plans adopted by the municipality in the last three decades, there is no practice of preserving existing structures and protecting potentially valuable urban assets in urban planning. The primary focus in urban planning is on the collective pursuit of profit by investors, the construction industry, and location owners. The influence of these interest groups shapes the approach to developing plans and determines the overall direction of the city's development. The example of the Slavija warehouse location is,

⁴ Detailed Urban Plan – DUP, M.Z. Cvetan Dimov – Slavija. Inpuma, Skopje, 2006

⁵ Detailed Urban Plan – DUP, M.Z. Cvetan Dimov - Slavija (Blokovi 1-10). Inpuma, Skopje, 2012

⁶ Detailed Urban Plan – DUP, Zona J, Cetrvt J12. Inpuma, Skopje, 2013

however, different because it is owned by the state. Therefore, it is surprising that demolition of existing structures and construction of residential buildings is planned for the location, considering the repeated claim that the local authorities represent the public interest and advocate for programs that are in the interest of all citizens. The question arises as to how the construction of residential buildings with apartments offered on the real estate market serves the interests of all citizens?

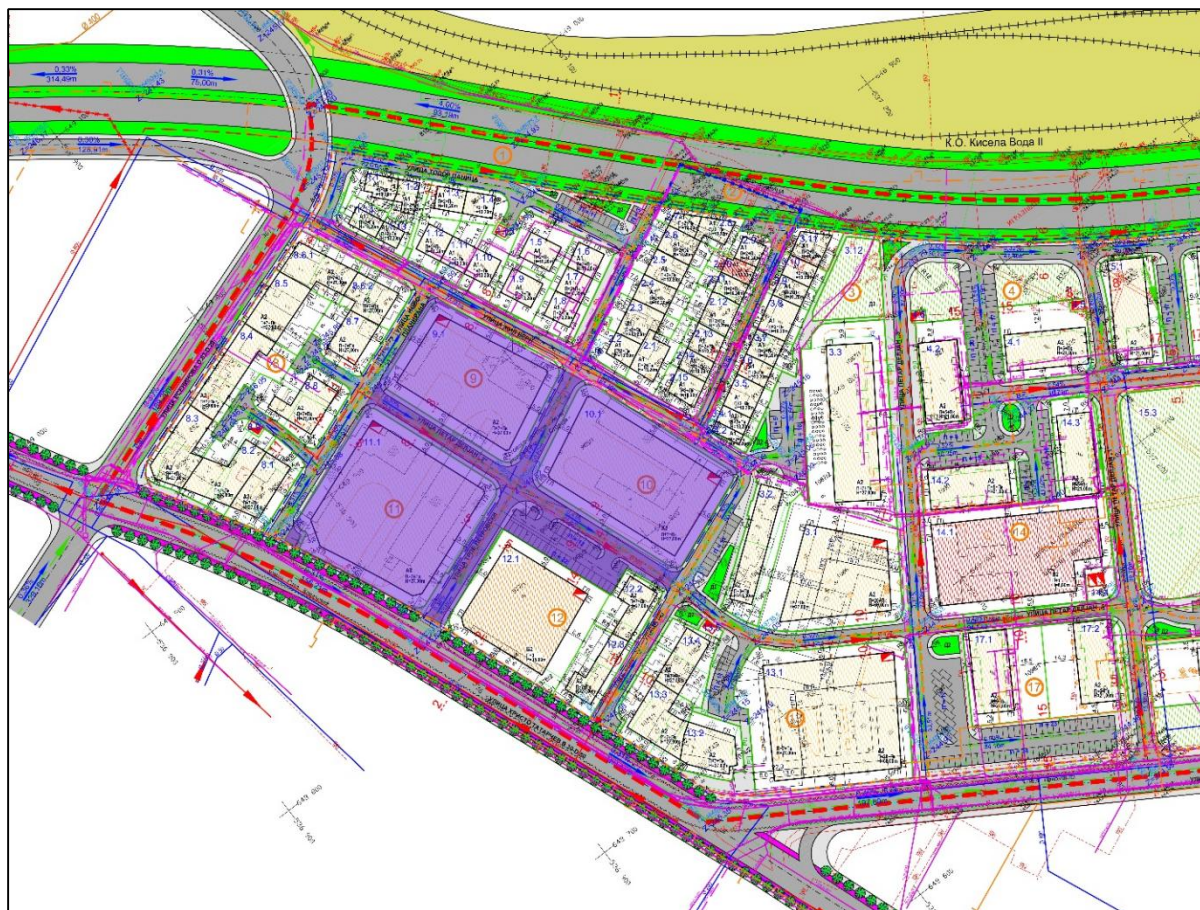


Figure 3: Detailed Urban Plan - DUP, Zona J, Cetrvt J12, 2013

The plan for the Slavija warehouse location from 2013 has yet to be implemented, providing an opportunity to reassess the planning decision and explore ways to enhance the utilization of the location and its facilities. In recent years, two independent research projects have almost simultaneously proposed ideas for the location. In 2022, the research project "Vertical Urban Factory," conducted within the framework of the teaching activities of the Faculty of Architecture at the University "St. Cyril and Methodius" in Skopje, explored the potential for adaptively reusing the facilities for new production purposes (see Figure 4).⁷ In 2023, the research project "The Slavija Warehouses - Local Center of Events," conducted by an independent research team, explored the possibility of reusing existing facilities for cultural programs (see Figure 5).⁸

⁷ <http://www.arh.ukim.edu.mk/index.php/mk/component/>

⁸ <https://marh.mk/magacinite-slavija-lokalen-centar-na-slucuvanja/>

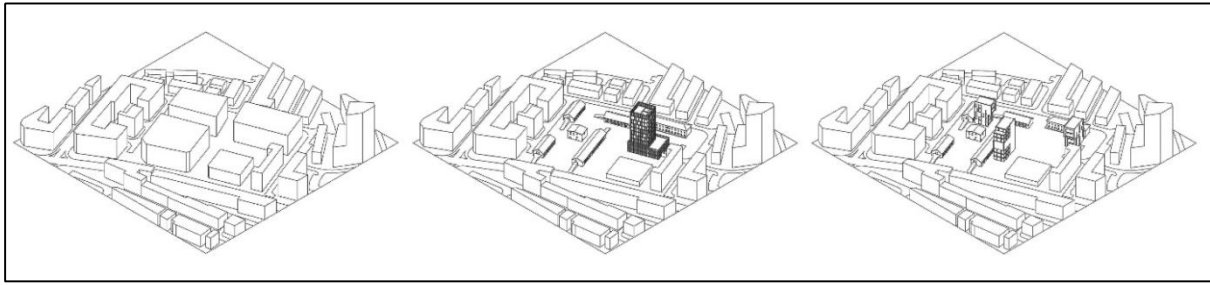


Figure 4: Research Project "Vertical Urban Factory", Axonometries (left to right): Detailed Urban Plan 2013, Creative Industries Center scenario, Crafts Center scenario, 2022



Figure 5: Research Project "The Slavija Warehouses - Local Center of Events", Plan (from left to right): Scenario 1, Scenario 2, Scenario 3, 2023

The Vertical Urban Factory project examined the possibility of adaptive reuse of the facilities for new production purposes through two scenarios. The first scenario proposes adaptive reuse of the existing buildings for a Crafts Center. The second scenario envisages adaptive reuse of the facilities for a Creative Industries Center. Both scenarios propose construction of a new production facility - the Vertical Urban Factory. Vertical Urban Factory is one of three forms of urban production recognize by Robert Lane (2020). Lane along Vertical Urban Factory recognizes so-called "Makerspaces" and "Innovation Districts". The project promotes the importance of and highlights the benefits of urban production. Supporting urban manufacturing in Skopje is particularly important following years of continuous decline in production volume and reduction in the number of employees in the industrial sector. Urban production aids in boosting the city's employment numbers and improving production efficiency. Additionally, supporting urban production enhances the utilization of urban land (Davis, 2020) . The research project "The Slavija Warehouses - Local Center of Events" aims to explore potential scenarios for amending the current spatial planning document for the area. This process takes into consideration current urban planning laws and mechanisms for adopting planning documents. The project's objective is to facilitate the adoption of a new planning document that retains existing structures and utilizes them for cultural programs. Three scenarios were examined in the project (Figure 5). The first scenario entails adopting a Detailed Urban Plan for the Slavija location, incorporating provisions for cultural programs, green spaces, and stationary traffic. This scenario focuses solely on the Slavija location without analyzing the surrounding space or the purpose of nearby structures. The second scenario proposes a solution that includes the Slavija location and extends the planning scope to adjacent parcels. The goal is to create a larger parcel with various purposes, such as culture, residential, commercial, and green spaces, through the adoption of a new Detailed Urban Plan. The third scenario involves planning cultural programs through a

General Urban Plan covering the entire Slavija location. This scenario suggests developing a Detailed Urban Plan in the second phase.

The two research projects presented above promote the rational utilization of urban space by repurposing abandoned industrial sites. By promoting the utilization of abandoned locations and facilities through the process of adaptive reuse, they positively impact the collective memory of Skopje's citizens and contribute to enriching urban functions and diversifying urban spaces.

Conclusions

Abandoned industrial sites and areas present a significant opportunity for the development of new, highly productive, and innovative industries. Repurposing these sites allows for the efficient use of urban land while simultaneously stimulating economic growth in the city of Skopje. However, experience from planning during the post-socialist period confirms a lack of willingness for the revitalization of abandoned industrial areas through adaptive reuse, even when the locations are state-owned. This situation highlights the need for increased engagement of architects and planners in explaining the benefits and opportunities arising from the adaptive reuse of abandoned locations.

This text aims to draw the attention of the wider public and decision-makers to the potential of abandoned industrial locations for the development of new industries. Considering the characteristics of the new industry its flexibility, ability to adapt to ongoing changes, production of limited quantities, and use of technologies and equipment that don't require extensive spaces or specific working conditions we anticipate that adaptive reuse of abandoned locations will gain momentum and become the dominant approach of reuse in the near future.

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