

West Node Kombinat

A Metaphor for Connectivity

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Abstract - Albania's capital and largest city, Tirana, has registered 2,761,785 inhabitants, according to the latest census published by INSTAT in January 2023. About 33.5% of these inhabitants live in Tirana. Due to the rapid increase in population and urbanized areas in the last decade, Tirana is experiencing a congestion that is mainly reflected in the mobility of people and vehicles. The traffic jams in Tirana have become more and more repetitive causing a negative impact on the city's environment and on the quality of everyday life. Furthermore, it has also increased the number of accidents and delays, frequently causing extreme congestion in the urban area. Moreover, the lack of a multimodal public transport system of any kind increases the gravity of the problem to an even larger extent.

Tirana today requires a comprehensive reflection on its territorial and regional context. The city should be approached as a metropolitan hub that interacts with neighboring cities through various networks and transportation systems. This perspective provides a clearer understanding of its urban form and whether it can or should be reconfigured. By reconceptualizing new urban nodes around Tirana's center, the city can move toward decentralization. This shift would alleviate pressure on the city center, distributing urban flows more evenly and reducing congestion.

The Kombinati area holds significant potential to evolve into a vibrant urban center. Historically, this area is anchored by the former textile factory, a landmark project constructed during the communist regime. As the first major urban development of its kind in the region, the factory was designed as the centerpiece of a satellite town located west of Tirana. This planned community embodied the regime's vision for industrialization and urban expansion, setting a precedent for the design and organization of similar industrial towns during the 1950s and 1960s. The Kombinati area's historical significance and strategic location make it a prime candidate for urban redevelopment and transformation.

Keywords - Polycentric city, mobility networks, urban nodes and functions, sustainable infrastructure, settlements connectivity

Introduction

In the case of Kombinat, former Stalin Textile Factory in Tirana, the urban center was designed recalling the shapes of a medieval city, featuring gates, towers, and arched loggias. This historicized approach to urban design was intended to create immediate cohesion between the emerging working class and the urban environment. It served as a stylistic code to evoke the "city effect," animating material forms while unifying the built environment. Here, the challenge was not in seeking originality or architectural innovation, as is often the case in modern architecture, but rather in blending historical elements and addressing the compatibility—or

inconsistencies—between architectural forms and their intended programs. The combination was envisioned as a cradle of communist tradition and a symbol of the "new man", making it an experimental model for testing urban policies and social dynamics that could later be implemented on a broader scale.

Research Objectives

As part of the research objectives outlined in this study, the redistribution of the traffic intensity joints in Tirana's central city will be used in order to reduce traffic congestion. In order to accomplish this, the urban form needs to be reconfigured, but

the strategy for doing this is to determine how the urban form can be interpreted from a variety of perspectives. A formal conceptualization of a city would refer to the process of defining, analyzing, and articulating the structure, functions, and characteristics of an urban area in a systematic and theoretical manner. This approach aims to establish a coherent framework for understanding the city as a complex, dynamic system influenced by historical, social, economic, and environmental factors.



Fig 1. The key components of formal conceptualization of a city. Source/ authors (2025)

Literature review

The mitigation of traffic and its principles have been the subject of discussion by many authors. There are some very interesting ideas in Christopher Alexander's book *A City is not a Tree*, Kevin Lynch's book *The Image of the City*, and Le Corbusier's book *The City of Tomorrow and its Planning*, in which each author analyzes the structure of a city, the spatial organization, and human behavior. Alexander critiques the hierarchical, "tree-like" urban structures that isolate different parts of the city, arguing instead for "semi-lattice" structures that allow overlapping and dynamic relationships. This kind of urban structures were identified in fact in the neighbourhoods of Kombinat, and villages like Prush or Peze-Helmes. In fact, all these settlements are linked through the main road Tiranë-Durrës, that resembles a tree-like, passing from Kombinat and where is created a lot of traffic recently. So,

by promoting decentralization and fostering permeability as Lynch strongly advise, pedestrians, cyclists and vehicles would navigate more flexibly. This is considered into our proposal by finding some hillfoot paths alongside the main road that connects the clusters identified. Our attention was drawn to Le Corbusier's principle of having wide avenues and hierarchical street systems with designated arterial roads for fast travel, which led us to look at the Kombinat city and enliven existing functions by improving the main boulevard and adding parallel routes. This kind of proposed system would better connect the natural areas surrounding Kombinat, the agricultural areas, but also the residential zones, and the old industrial zones that can be reactivated. All this, accompanied with Lynch concept on humans perceiving urban environments with clarity and ease of navigation.

Vision

The vision of this report and workshop is to enhance the urban context of the Kombinat as an ingrowing settlement next to Tirana, with a lot of existing functions such as economic, administrative and local governance, social and cultural, educational and research, transportation and infrastructure, residential and mixed-use, recreational and leisure, social and cultural etc. Despite the currently existing functions, mostly represented by residential buildings and abandoned productive facilities, through the revitalization of the historical manufacturing activities and the addition of a plethora of new functions, Kombinat can achieve the role of a "city in a city".

A sample of the functions needing consideration could be the following:

- Reactivation of the old and abandoned industry of textile and glass production, intended on a more artisanal scale rather than the former heavy industrial development;

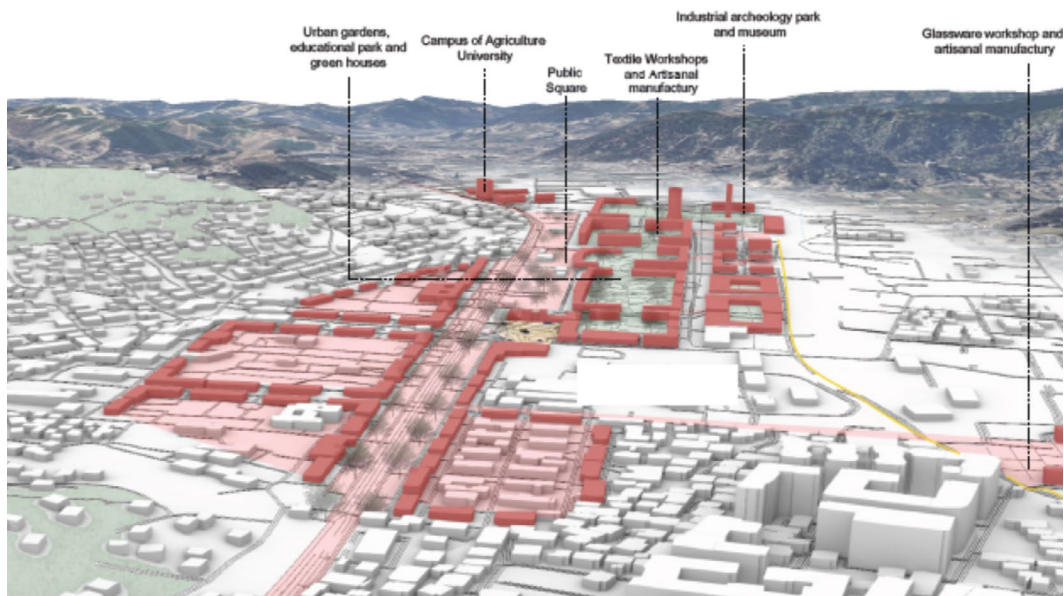


Fig 2. Proposed perspective on existing and new functions.
Source/ authors (2025)

- Creation of a business hub alongside the main boulevard of Kombinat, in order to attract the business industry into the area;

- Expansion and improving of the existing road network, mainly through micromobility infrastructure such as cycle lanes, pedestrian paths and public transit;

- Increasing the green areas between the buildings, also creating a natural park for the zone by activating paths and pedestrian routes alongside Sharra lake and connecting it with the main boulevard;

- Increasing the connectivity of the functions in the city, by creating a multifunctional hub where the different businesses, industries and the local community can create virtuous cooperation processes;

- Realisation of new connections with the other rural settlements towards Durrës, like Vaqarr, Pezë and Ndroq, through the reactivation of hillfoot paths, by directing and extending the people's flow towards them.

The general vision of this report is considering Kombinat as the main western node of the city of Tirana, with the aim of mitigating the traffic flow into the ring road coming Northwest from the Tirana-Durrës highway and South from the Tirana-Elbasan highway. Being in the middle of the two said flows, Kombinat with its existing and planned functions would increase its attractiveness as a "city in the city" itself. Apart to Kombinat, the other settlements like Peza with its monuments, history and cultural, Ndroq with its agriculture and viticulture tradition, complement Kombinat. Also, nowadays these villages are quite frequented during the weekends for leisure.

Methodology / process of understanding

The starting point for the research was to investigate the system of the urban clusters found

along the road from Tirana to Kavajë, from the junction between the ring and Kombinat up to the first major historical center in the valley in Ndroq.

The urbanized environment, predominant in the areas closer to the city and gradually decreasing when moving far from the center, is mostly structured around the axis of the main road running at the center of the valley. It is on this path that spontaneous settlements - both old and new - such as Pezë-Helmes, Pezë e Madhe and Ndroq are developed, with a structure of secondary streets developing directly from the main valley path. In the same way, the planned city of Kombinat revolves around the main boulevard with squares and productive buildings facing right on this axis.

On the other hand, some of the settlements develop on the foothill in an intermediate position on the slope of the surrounding reliefs, usually with a much more linear layout organized along one main street following the contour lines. Examples of this are the towns of Vaqarr, Lalm, Prush, Fortuzaj.

Based on the extension of the urbanized areas in contrast to the agricultural and forest land, the clusters have been identified and classified according to their urban morphology. In particular, the research investigated the shape of the urban fabric, consisting in the layout of streets and buildings related to the topography, land use, agricultural and water systems, highlighting a series of patterns that can be found multiple times in different settlements. The synthesis of this classification generated an abacus of urban morphologies that characterizes the entire linear system of the valley from Kombinat to Ndroq, highlighting a diverse and morphologically differentiated territory, that already accommodates in essence the multicentric potential of a new centrality in the southwestern suburbs of Tirana.

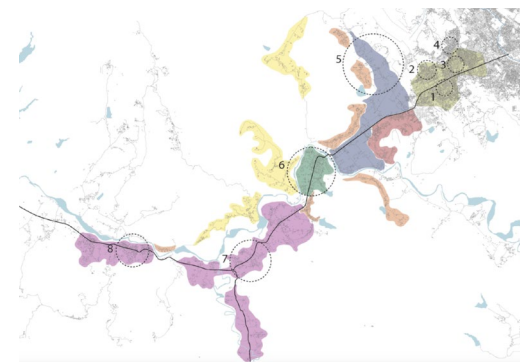


Fig 3. Identified clusters
Source/ authors (2025)

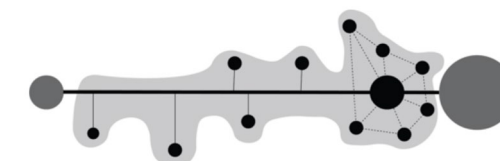


Fig 4. The urban neuron of Kombinat
Source/ authors (2025)

Results

The strategy, in order to highlight and empower the differences of the different urban areas, is centered on building new connections between the said centers, refunctionalizing them and adding infrastructure in order to create new relations.

The concept, mainly focused in the case study of the Kombinat district, proposes a reuse and reinterpretation of the typical open, wide courtyards located on both sides of the main boulevard. Their rigid geometrical structure, that defines the urban space with its rhythmicity, often encloses a more organic and spontaneous fabric of informal or semi-formal settlements, acting as a container for new urban structures.

The current abandoned productive site and the other nodes in the Kombinat district could be restructured with the reproduction of the open courtyard layout that encases the organic, spontaneous morphologies found in the countryside directly along the valley running to Ndroq.

This double layer of morphologies can welcome a variety of functions, recovering both the former industrial and productive soul of the district and at the same time giving space to new uses such as urban gardens, greenhouses and activities related to the nearby countryside, well represented and hosted by the informal structures enclosed inside the new courtyards. These structures will be linked to each other with the existing roads and with new infrastructure, developing both inside the urbanized area (e.g. along the dismissed railway tracks), and in the countryside by reactivating the already existing foothill paths running through the landscape and the rural settlements, thus giving an alternative infrastructure to the already congested valley roads.

This relationship between the peripheral valley urban structures and the "brain" of the system in Kombinat, achieved by connecting the settlements between them, conceptually results in a neuron-like

shape, with its "soma" concentrated in Kombinat and its "axon" spread along the valley with the villages of Vaqarr, Prush, Pezë and Ndroq.

Conclusions and recommendations

It is believed that the enhancement of the already existing different centralities and the introduction of new functions inside the Kombinat area and its valley, symbolized and characterized by the respective urban morphologies, can help to turn the southwestern districts of Tirana into a polycentric and attractive system itself, thus relieving the traffic towards and from the current city centre. The shape of the urban fabric in this case study is used to accommodate the new mix of functions. A further development of this experiment could involve the rural settlements in the valley of the river Erzeni, by individuating potential development nodes with the relative urban morphology, introducing functions related to the protection of the natural environment and its valorization.

The strengthening of the whole urban-rural system can also start a new era of better integration between city and countryside, where the relationship between the two can be of mutual benefit instead of subordination, laying the foundation for a potential return of the population to the countryside settlements..

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