

Collision and contiguity in the transformation of Prishtina's urban form

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ABSTRACT

The work focuses in architectural dimension of urban form, by confronting the plans of three neighborhoods in Prishtina that represent potentially three main urban paradigms of the last decades in city's urban transformation. The study aims to unfold the main elements, confront them, and expose to possible transformation. The work progressively decomposes each case into basic components and deductively to their minimal unit.

The research, through interpretation and graphic illustrations, analyzes the three plans by layers: basic elements and their relational modalities, urban matrix, open space character and composing minimal units. The process will identify the main components, and their generic potentiality to be considered as future inputs in city's development.

KEYWORDS

urban form, urban matrix, elementary unit, spatial composition, openness, continuity

1. INTRODUCTION

The collision that occurs in the cities today due to rapid expansion shows the constant necessity for change, contamination, and hybridization as unavoidable processes for the contiguity and progressive transformation [1, 2].

Over the past two decades, Prishtina, as the capital city, has undergone a paradoxical percourse in its development. Recognizing the peak of its progression after 50s of last century and late 20th century (Fig. 1) [3], the urban and architectural evolution of Prishtina since the 2000s has been a topic of debate, marked by lingering discussions about inherited ideologies. The change in formal structure, as to the interest of this work - in the last twenty years, unfolds a coarse narrative dictated by the velocity of construction, ambiguous *genius loci* and reprehensively implied paradigms with unclear idea of the city itself [4].

Since 2000s, Prishtina has experienced a rapid and uncontrolled growth due to demographic shifts. The response to emergency phase was either through densification with punctual urban interventions or expansion through extensive urbanization of suburb areas [4]. In both cases the master-plans provided by international competitions or developed in local premises (mostly), stand in precarious ideological intend due to already fragile urban heritage and the different policies in implementing them [5].

The objective of this research focused on the compositional form of the city is developed to some extent through Rossi's views on the architecture of the city, its typological and formal constitution, the urban artifacts and the memory [6]. In the understanding of type as a principle of form and the building - artifact as a memory the selected cases overlook the inherent aspects of the formative areas beginning with Ulpiana [5] as a first case. Further, recalling on the Figure-Ground theory, the study investigates the physical geometry by understanding the relationship of mass and void. In this regard, the discussion on how the geometry would kindle between the existing and new, Collin Rowe's *Collage City* reopens

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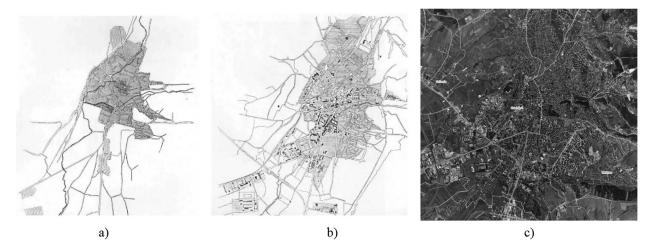


Fig. 1. a) Map of Prishtina 1953 (Source: Strategic Plan of Prishtina 2004–2020), b) Map of Prishtina 1964 (Source: Strategic Plan of Prishtina 2004–2020), c) Prishtina orthophoto (Source: geoportal.rks-gov.net)

the definition of urban texture and its continuity [7]. The aim of research is reconsidering 20th century theories while querying for open city form relying not only in geometry and urban texture but to open architecture defined through the important moments, as; ambiguous ends, incomplete and open architecture with *in between* spaces [8].

This work confronts three urban ideas, from three neighborhoods in the city of Prishtina, "Ulpiana", "Tophane" and "Kodrina". The first was completed decades ago while the other two are in implementation phase. The three approaches are distinctive and to some extent summarize and represent the main perspectives observable in the urban fabric of Prishtina. In operative terms, the nature of these interventions is either extension, or urban densification with punctual intervention in settlement scale. "Ulpiana" represents the most genuine demonstration, being the modern urban neighborhood built in Prishtina conceptualized in a prolific era for architecture and urbanism. It stands still as an active modern urban heritage [9].

The aim of this work is manifold. Each of the study case can be aligned to a particular model of the city representing an impactful response to the contextual conditions of the time. They exhibit identifiable overall structures characterized by their urban matrix, compositional principles, open space, and composing elements.

The study tends to understand if there is an affinity or continuity of an idea or paradigm. Current observations suggest that Prishtina is an ideal setting for proliferating experimental propositions, which also means that the probability for architectural and urban disorder is to higher degree.

The three areas represent the ideas with particular reflection to every contextual layer, where 'Tophane' is accurate contextual response in morphological terms, 'Ulpiana' stands as an unwavering modernist paradigm that attenuates and collaborates with the context while 'Kodrina' has a tendency of different influential tendencies either global or local.

2. METHODOLOGY

The city has a very active past and easily confluences with contemporary agendas. The work interrogates and confronts the approaches that stand in the urban and architectural terms as a formative example of legible paradigms of time.

The focus of the study is to unfold and reflect on three of those particular paradigms conceptualized in different time intervals of urban development of Prishtina. The interpretation of compositional form of selected areas is conducted through the process of geometrical abstraction where the components are addressed by layers such as: urban form, urban matrix, the character of open space, and composing minimal units.

Each case study is examined thoroughly, supported from short background explanations to deciphered minimal units where the relational modalities and combinations between elements are critically analyzed and graphically illustrated.

The process aims to reveal the influences, ideologies and contextual impact in the conceptualization of each neighborhood, as a tentative to redefine the representative model of each case, from enclosed to formally open city character [8]. The overall objective seeks to find elements, which could have a continuation or transformative character in future urban considerations.

This process claims a logical argumentation of historical data, theoretical stand, site observation, archive materials and is supported with graphical interpretations.

Cases are analyzed from various viewpoints, through the layers as: the matrix, the principles of settlement, the relationship of structure or components with the open space and the composing unit. The study illustrates graphically the decomposition of these layers per each case through the process of progressive abstraction. The objective lies in two antithetic directions: understand and hypothesis the general principle, the idea behind while reducing the scale to individuate the constitutional components and the essentiality of compositional principle [10].



The process shows the formal abstraction and decomposition till the composing elements and the relationship between them, while are deciphered the compositional operations, and identify the possible generic unit that supports the universal idea of the settlement [10].

3. THREE IDEAS, THREE 'PARADIGMS'

For further study, as it is stated, three cases are selected, which represent a particular moment of urban development of Prishtina, in terms of morphological and typological configuration with emphasis in the relationship of mass and urban space. The neighborhoods are conceptualized in relatively distant period from each other with approximately 40 and 20 years in between, and each of them represent a very clear and identifying formal idea based on compositional principle of urban design with precise definition of either *isolated urban block* typology or the *elementary unit* in one formally open city concept [8, 10]. The neighborhoods were chosen due to the clear intelligibility, vivid participation of the primary structures, and the potential to be reconsidered in new settings.

Thus, the neighborhoods have implemented different agendas and own their identifiable imprint in the city, embodying higher dimension rather than only contextual as applies to the first and the third case while the second case reflects the existing morphology or structural disposition as a guidance for the urban morphology of the new plan.

3.1. "Ulpiana" neighborhood as an open idea

The first case, "Ulpiana" neighborhood marks the beginning of modern urban development of Prishtina, conceptualized in 1960 by Bashkim Fehmiu [11] with precise ideological intend, that would influence the developing of other areas of the city. Positioned in the central part of the city, "Ulpiana" presents a strong topographical configuration from west to east. Notably, the plan is distinctive because of the disposition of masses following the natural terrain slope (Fig. 2).

In regard to this natural input, derives *the basic urban matrix* (Fig. 3) guiding the arrangement of units and shaping the overall concept of open urban space where buildings are streamed consciously according to a triple grid [12].

The urban matrix is generated firstly from a *radial* genesis point, which across the entire area marks a decentralized center representing the dynamic equilibrium and becomes the main principle. It is conceptualized in the east edge marking one of the main entrances in the neighborhood.

The radial system of organization indicates the first grid according to which are organized the first residential typologies, as the towers type, five of them, in the highest point of the terrain, the only plain disposition from where begins the slope distinguished with other residential typologies.

The second grid is *orthogonal*, which in combination with radial grid defines a mesh that stands in accordance with the terrain, which then dictates the stream of linear

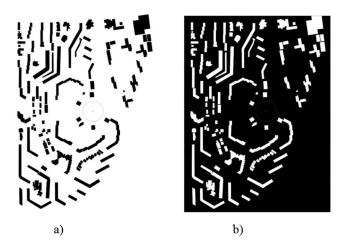


Fig. 2. ULPIANA ground plan. a) The form of the mass, b) the form of the void (Source: Drawings by Authors)

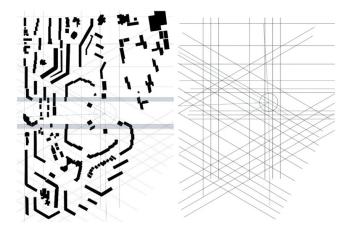


Fig. 3. ULPIANA, Urban matrix (Source: Drawings by Authors)

residential buildings. Linear architecture is mainly residential-multifamily and in the disposition is set either in elongated continuous or in the set of pavilions that follow the terrain.

The third grid alludes in *a hexagonal* configuration as a result of the convoluted first two grids, reconfirms the radial imposition, and appears as the most intelligible matrix in the urban form.

The *principle of settlement* is comprehended in hierarchical dispersion of the mass, from tower buildings of 14 stories to linear architecture-both typologies host a residential function-as a generic structure with clear typological structure and the possibility of continuous reproduction [13].

In addition, the non-residential buildings polarize the area by providing a variety of spaces. Those structures perform a strong formal response to the context composed mainly on modular system while defining a particular relationship with linear and bended structures in their perimetric boundaries. In formal terms, the neighborhood remains an open system with specific and clearly identifiable urban matrix, generic structures with hierarchical



disposition of mass and void, functional diversity and organic manipulation with terrain which defines the undulating scene characteristic of the neighborhood [8].

The urban block lacks an identifiable form. Structures are distributed according to a certain matrix rule rather than conforming to a formal structure with a defined typology. The disposition of mass is open and as regards to residential part is either linear or punctual and stands equally in relationship to each other conveying a homogeneous character of the void in terms of inclusion-private or public [8].

Individual towers stand according to radial disposition as a nucleus of the settlement, while linear structures are composed around this crux where in certain modules are bended according to prefixed urban matrix in the modality to retain the character of entirety of neighborhood while maintain the idea of formally open city.

Architecture is diversified with public buildings positioned in centralized areas defined with residential structures tilted to form their space and conceptualized in repeated modules which still preserve the generic unit in their whole composition.

The void is formally hierarchical (Fig. 2b), and spread homogenously rather than extended or formally contained. Space is fluid with turbine disposition hexagonally defined in the decentralized center [14]. As it expands in the sloppy terrain merges with parallel disposition of mass, creating a cohesive sense of belonging without physical closure. The spatial configuration of neighborhood demonstrates open spatial borders, which are atmospherically defined, thus can be considered as warm and cold open spaces [12].

The buildings typology is composed principally by one defined *unit* with core in the center and used repeatedly either to form linear straight or linear bended structures (Fig. 4). Dimensionally, this unit is transformed and

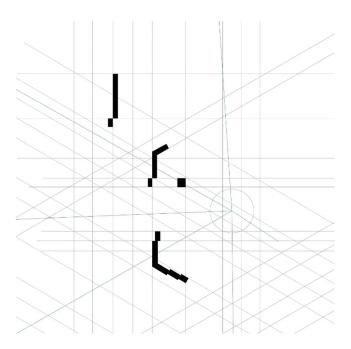


Fig. 4. ULPIANA, elementary unit (Source: Drawings by Authors)

detectable in other structures as the soliterat, individual tower buildings. The core and corridor tend to be centered with central communication.

The silhouette of neighborhood gradually raises from west to east with similar buildings heights ending in the east with the emphasized verticality of towers. As the configuration follows the terrain, the navigation through the area unfolds a different sequence as a meander like movement in different heights of streets and open spaces.

In the north-east part of Ulpiana is represented the area "Lagjja Studenti" also designed by B. Fehmiu [11], which was intentionally included here due to the extended ideological approach. As the character of space is expanded beyond the literal physical borders, is notable the scale of openness and homogeneity in terms of belonging, but what is witnessed is a shift in the typological response of temporary residential structures [8].

The minimal unit here is repeated in six buildings composed by two or three wings. The structure formed with three wings in turbine system is generated from the nod where this rotational sense begins and represents the core, thus the main communication. These units are arranged at specific intervals based on a repeatable principle following an orthogonal urban matrix.

3.2. "Tophane" neighborhood formally enclosed

Tophane is located on the north part of Prishtina, and is distinguished by its almost triangular shape. Its position was considered central for many decades as the city was developed around this area. The settlement records an organic expansion and change in built structure. The non-functional railway in the west limits its extension in this side and somehow sets a border with other neighborhoods on these sides.

Since 2005, Tophane was reconfigured according to a regulatory plan conceptualized by studio *Komunaproject Maribor* [15] (Fig. 5). It is the only study case here to be considered in already built context. The proposed masterplan preserved the organicity of the context by reinforcing the main features of existing structure as regards to circulation and the existing morphology of spontaneous constructions surrounded with ottoman scent of influence in their configurations. The proposal redefines the urban morphology according to the idea of closed urban block where streets maintain the classical character and space remain defined through enclosed courtyards [16].

The urban matrix is nothing about regularity or generic principle according to a precise geometrical unit. Urban blocks follow the predetermined formal disposition, with dimensional transformation.

Tophane lies on the conventional conception of city's urban morphology, maintaining the closure toward a public and its outside borders contents, while drawing a clear definition of private space.

The elementary unit here is an *urban block* transformed dimensionally but its formal typology recalls the enclosed urban blocks with inner courtyards. Conceptualized after



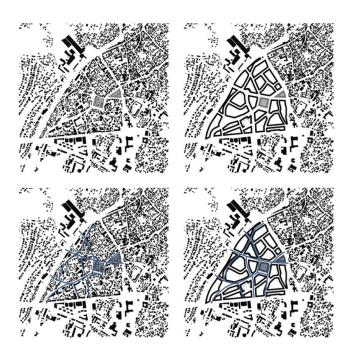


Fig. 5. TOPHANE, Urban matrix (Source: Drawings by Authors)

more than four decades from when "Ulpiana" was planned, this approach in an opposing attitude to what was predicated in previous study case where open and inclusive city would be formally supported [16].

The form of the void is delimited by perimetric mass. There is a sharp division of enclosed private space and the outer space dedicated to public. In formal conception these two types of space are precise, fixed, and static. The defined void of the blocks is contained, warm and its inner space is determined by the form of the block without any relation to other common spaces. Similar reasoning is valid for the space out of the blocks which belongs to public and is defined by streets [11].

In conclusion, Tophane is known as formally enclosed concept of city without a very identifiable geometrical form or comprehensible relation with surrounding and eventually no contribution to it. The block is enclosed entity which echoes the organic existing situation. Thus, the neighborhood is considered as a concluded entity conceptually, composed with enclosed units.

3.3. "Kodrina"

The third case 'Kodrina' neighborhood is conceptualized in a completely non urbanized area. It is located in north-east of Prishtina, planned by Daniel Libeskind [17] in 2017 through an international competition. Its form resumes a skewed rectangular shape set in a challenging slope of terrain. The competition was submitted to a particular regulatory plan executed by the municipality of Prishtina [18].

The neighborhood represents the most recent masterplan to be implemented in a completely bare area with the steep topographical configuration from south to north. The urban matrix proves a common starting point from where the grid is streamed in irregular radial system, shaping the tendency for open space through buildings disposition as a composing unit of settlement (Figs 6 and 7).

Unlike the two previous cases, the two predominant typologies of residential architecture are not strictly monozoned but rather hybridized and organized in anon-hierarchical manner. This is evident in the repetition of the typology of semi-closed urban block composed by vertical and horizontal residential architecture and which principally represents an elementary unit (Fig. 8).

4. RESULTS

The three cases unfold opposing strategies. The objectives of each case are evident from the overall composition to a

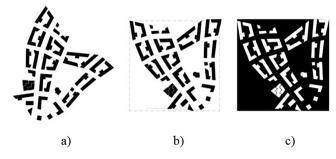


Fig. 6. KODRINA, a) masterplan disposition, b) the form of the mass, c) the form of the void (Source: Drawings by Authors)

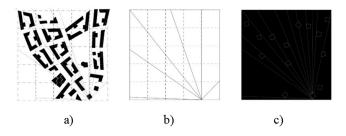


Fig. 7. KODRINA, a) the form of the block, b) urban matrix, c) the radial dispersion of vertical units (Source: Drawings by Authors)

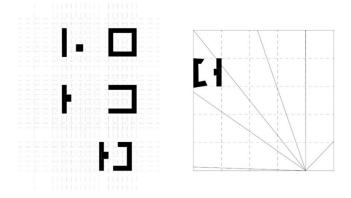


Fig. 8. KODRINA, The semi open block as an elementary unit (Source: Drawings by Authors)



minimal unit and reflect a particular moments of urban development of Prishtina. In the first case, the process reveals a *minimal unit*, which was considered through the principle of repetition to generate the horizontal architecture, which defined the linearity. Vertical architecture with central typology is concentrated around a common center and maintains the hierarchical correlation with linearity and terrain. The form of the open space reflects fluidity, permeability, connectedness, and openness [8].

In the second case is evident that the typology of enclosed *urban block* serves as a generative unit with its morphology aligning with the organic structure of the existing situation. The open space is contained within the blocks and is sharply illustrated in its borders within the blocks and between them reflecting what is strictly private and public [10].

The third case represents the hybridization of Ulpiana and Tophane, where the urban matrix challenges the purity of geometry while modulates the organic order. The elementary part simulates an open urban block is composed with linear and vertical elements. The morphology of open space is composed around one main communal area and spaces in between that private but yet public, which makes it open permeable, accessible and can be determined as a hot or warm space [12]. Even though, due to matrix and the morphological configuration, the settlement reflects closure, completeness and formal intelligibility [16].

5. CONCLUSIONS

The paper demonstrates an attempt to bring three main urban areas to the attention not as an active past, but as a potential paradigm to be considered critically for the future new settings through means of transformation. In the three cases, different approaches are identified. First neighborhood, 'Ulpiana' brings the interest in open city approach as in Richard Sennet terms for open cities, and presents the particular outcome in dialogue with the context, despite the generic tendency of the idea. The identifiable approach sets a potential minimal unit to be multiplied, in this way modulating the open space as well. The second case "Tophane" retains the concept of conventional enclosed block and consequently closed open space, non-inclusive, and sharply defined private and public spaces, restricting the possibility of repetition due to organic matrix. The third case demonstrates a hybrid result, with semi-open blocks that follow the matrix and the configuration of the terrain. The idea embodies an open approach through the concept of semi-open block which in different degrees becomes open as it progresses through different intervals of the urban matrix.

From the three ideas presented here, the most relevant instruments to be considered further can be extracted from the first and the third case. The compositional elements and principles which can be considered as generic, open and repeatable in the case of Ulpiana, would serve as an extended possibility for future settings for diverse formal configurations.

On the other hand, "Kodrina" aligns with local requirements for living units and maintains the global dimension in regard to how space in the neighborhood is conceptualized today as a common hub point socially sustainable and formally open and inclusive

The idea of inclusive cities seeks to respond to some various exigencies. This work intended to find elements which would serve as a sequel of city's development based on their generative qualities.

Thus, despite the ambiguous *genius loci*, the city owns a formative font to be transferred and transformed, as a generative instrument for future urban configurations.

The research welcomes future researchers to come across with new variables as a potential successive instrument for urban development.

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