God in the city: the religious buildings in the spatial configuration of organic Tetovo

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1 ABSTRACT
This paper is about the relations between spatial configuration and activities in the city. By using Space Syntax theory and methodology, it investigates the pattern of religious establishments and their spatial location and distribution in the organic configuration of Tetovo, which was developed from the XIV\textsuperscript{th} century until the World War II.

Tetovo, has always been a multiconfessional city, with the majority of Orthodox Christian and Muslim citizens. Both religious groups have had their distinct socio-cultural characteristics that shaped the city. But, whatever their differences, they all had one thing in common: the House of God. Muslims during the history of the city built their mosques and Christians their churches.

The research shows that regardless of the religion, Islamic or Christian, the religious establishments tend to occupy central locations and belong to the main arteries of the city. In these locations the number of people who move across the scales is at its peak. The religious authorities take advantage of the spatial configuration and occupy the most integrated spaces, in order to express their authority and influence the wider community.

2 INTRODUCTION
By investigating the patterns of religion in the spatial configuration, the final goal of this paper is to show the organic relationship of physical structures, activities and spatial configuration.

The core methods and techniques used in order to reveal the pattern of mosques, respectively churches are based on Space Syntax theory, widely used as an analytic tool for understanding and explaining urban phenomena. The Space Syntax community, especially its founder Bill Hillier, through numerous analysis have shown the effects of the urban layout on movement patterns and consequently on activities (Hillier, 1993).

It is very clear by now that the commercial activities (followed by catering facilities), occupy the central locations in the configuration of the cities in every scale, a trade centre in global (citywide) context, or a corner shop in a neighborhood (more local) context. Usually, public services (in the modern era), or crafts (in the preindustrial era), are right next to the commercial activities, while the residential segment is settled in the background (Hillier, 1999).

But, what about the religious establishments? They are of a symbolic nature, in contrast to commercial activities which are instrumental! Where do they fit in the urban layout? Having in mind Tetovo’s multiconfessional character, the location of religious buildings becomes more intriguing. Is there a difference between the set of spaces occupied by mosques and the set of spaces occupied by churches?

Hypothesis of the pattern of religious buildings and their central locations, will be tested through syntactical analysis of the spatial configuration of Tetovo which was developed from the XIV\textsuperscript{th} century until the World War II (WWII), and the pattern of religious establishments which used to operate in the layout of Tetovo before the WWII. This is the period when religious authorities have had strong position in the ruling system of the Ottoman Empire and deep impact into the public life of the population. Most of the mosques and churches were built during that period. After the WWII, religious authorities abruptly lost their power, and that was eventually reflected in spatial terms as well. That is the reason the research is focused on the period before the WWII. Otherwise, if the pattern of religious buildings is analysed in the existing urban layout, the results and the findings would not be accurate, since the properties of the network, and its parts, change and shift as a consequence of the transformation of the spatial configuration.

The next part of the paper, briefly explains the historical development of Tetovo, focusing on the socio-cultural conditions.
The paper will continue with the syntactical analysis of the spatial configuration of organic Tetovo, revealing the pattern of religious buildings.

As a summary, this paper will aim to clarify the relationship between the religious buildings built before the WWII and the urban layout; to explain the reason why the religious authorities decided to occupy certain set of spaces with similar properties; and to reveal the relationship between activities themselves.

3 BRIEF HISTORY OF TETOVO

Tetovo was built in the XIVth century under the Ottoman rule. The medieval settlement rose at the crossroad of once very important link Prizren-Tetovo-Skopje and Skopje-Tetovo-Debar (fig. 1). As a result of its strategic location, Tetovo soon became an important trading and administrative centre and capital of the region (in the XVth century).

![Map of Tetovo](image)

Fig. 1: Tetovo in the regional network at the end of the XIXth century1.

During the centuries, the number of population gradually grew. But, the real growth happened during the XIXth century. According to Ami Boue, in the 40-ties of the XIXth century the population number was somewhere between 4000 and 5000. At the end of the century the number of the population reached 19200 (table 1). It was the period when the Empire underwent reforms, which were supposed to bring equality to all citizens regardless of their confession.

<table>
<thead>
<tr>
<th>Century</th>
<th>XV</th>
<th>XVI</th>
<th>XIX</th>
<th>XX</th>
<th>XXI</th>
</tr>
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<tr>
<td>Population</td>
<td>1000-1200</td>
<td>1000-2500</td>
<td>4500-19200</td>
<td>15000-50000</td>
<td>55000</td>
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</tbody>
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Table 1: Approximative number of population in Tetovo during the centuries.

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1 The map is derived from Zija Shkodra’s book *The Albanian city during the National Renaissance.*
The religion, Islam in this case, was deeply rooted into the ruling system of the Empire. But, with some limitations, in principle, the Ottoman Empire was tolerant towards its Christian citizens and Christianity in general. That attitude allowed communities, other than Muslim, to develop their own cultural and social identity. Tetovo itself was divided into the Christian and the Muslim part. Each community used to live in smaller neighbourhood (and administrative) units called mahallah’s. The main social institutions of these neighbourhoods were the mosques and churches, respectively. They set and shaped the standards of social behaviour.

The religious authorities lost their power after the WWII, when new socialist ideology was proposed to the people. This new ideology, among other things, had no respect for the organic spatial configuration that was developed during the Ottoman period throughout the centuries. It was the time when zoning, regular street network and megalomaniac interventions as a reflection of the new modern planning and ideology, were changing the physical appearance of the cities in ex Yugoslavia (Ferati, 2011, 25). This stage of development had its repercussions on religion as well. According to the social-communist regime, religion is a restraint to the human development, thus, few mosques including the central mosque in Tetovo were demolished and no other religious building was planned to be built. That is the reason why this research is focused only on the organic spatial configuration of Tetovo which was developed until the WWII.

4 SYNTACTIC ANALYSIS OF THE ORGANIC SPATIAL CONFIGURATION OF TETOVO

The syntactical properties of the spatial configuration of Tetovo before the WWII, are analysed on a map dating from 1937 (fig.2). It reflects the fully developed organic network of the city, before the new interventions of the modernism took place.

Fig. 2: Spatial configuration of Tetovo dating from 1937.
The map is broken into axial lines (Hillier and Hanson, 1984, 97) - the fewest and longest lines of visual reach, which in this case coincide with those of the movement - and transformed into a segment map, which is analysed with *Depthmap*. *Depthmap* is a software platform developed at UCL for spatial network analysis. The default measure in depthmap is and *Choice*². It is a measure of centrality and reflects the relative position of the axial line or the segment in the network system. The measures can be calculated by taking into account the local network or the whole network of the city by defining a radius for the measure. Examples from different places have shown that their values correlate well with the movement frequency. Local scale movement is best reflected in a lower radius of measure (usually 400m or 800m) and larger scale movement is best reflected in a higher radius of measure (usually taking into account the whole network (RN)).

The syntactical analysis at global scale (radius N), reveals the main routes of movement in the city. Those routes (with higher values of choice) are represented in red colour in the processed map (fig. 3).

![Global accessibility of Tetovo, choice RN.](image)

The study of the location of the religious buildings in Tetovo, shows that the majority of mosques and churches used to belong to the main routes of movement in the city (fig. 4). The biggest mosque in the city, *Tupan* mosque, is at the intersection of the main integrators of the system (bul. *Iliria* and bul. *Ilindenska*) that connect Tetovo to Skopje and Gostivar. That is where the bazaar and the centre of Tetovo was. At the intersection of the streets that connect Tetovo to the surrounding villages on the East and South of Tetovo, and to the villages in the mountains, is the other – upper bazaar. *Kumluk* mosque is located at the entrance of this bazaar. Another mosque – *The Old* mosque – is located at the intersection of roads that lead to the villages on the North of Tetovo. The other two mosques, the *Painted* mosque and *Saat* mosque are at the intersection of the routes that connect the other mosques between themselves, meaning that they also belong to the main routes of movement in the city.

² Choice (also known as betweeness in mathematical vocabulary) measure the through-movement potential of each segment within a given radius.
After having all the strategic spots in the city occupied by the mosques, the churches, *St. Nicholas, St. Cyrilus and Methodius* and the church *St. Dimitrius* were placed along the main artery that runs along the christian neighborhoods and connects them, first to the bazaars, and then through the bazaars to the neighbouring settlements. At first sight, looks like *St. Bogorodica*, doesn’t belong to the pattern of churches. But, looking back at time, this church was built at the begining of the XIVth century at the very centre of the settlement, arround which gradually grew Tetovo as we know it today.

![Religious buildings in the map of global accessibility, Choice RN.](image)

A previous study has shown that these locations are very important urban nodes (Ferati, 2011)\(^3\), where trading (together with the crafts) and social activities reach their peak. It has been explained that the emergence of the urban nodes is a consequence of the spatial configuration and its effects on movement. As a result of the strategic central location in the network system, the probability of having maximum number of people is higher along these arteries, especially at their intersections. Trading and crafts take advantage of the benefits that the spatial configuration provides and occupy these central locations to be as close as possible to a larger mass of people, while at the same time creating urban nodes with a mixed use character. In order to express their authority and influence the wider community, religious buildings became a vital part of these urban nodes, completing their mixed use character.

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\(^3\) The urban node is defined as a relational phenomenon, with high concentration of people, activities and physical structures, that emerge as a result of the intensity of the relations between space-space, space-people and people-people.
The situation is different in the case of the rest of the mosques. Gamgam, Tabahane, Eski and Marchin mosque do not appear in the foreground network of Tetovo (fig. 4). The difference between these mosques in the Muslim mahallah’s and the churches in the Christian part of the city, is they are less integrated into the spatial configuration, because of the surrounding network which is broken up and more labyrinthian. According to Hillier (2001), the geometrical properties of the spatial configuration are a reflection of socio-cultural processes. In general, the Oriental cities, compared to the Western cities, are more labyrinthian and more complex in structure, because of the tendency to limit access to strangers into the local areas of the neighborhoods.

5 CONCLUSION

The research shows that in general, regardless of the religion, Islamic or Christian, the religious establishments tend to occupy central locations along the main arteries in the city or neighborhood. In these locations the number of people who move across the scales (from local to global), across the neighborhoods or across the settlements is at its peak. The sacral authorities take advantage of the spatial configuration and occupy the most central spaces, in order to express their authority and influence the wider community.

The most strategic spaces at the intersections of the main arteries which connect the city to the other settlements, are occupied by mosques, while the churches belong to the main arteries that run through neighborhoods. The reason was because mosques were built in the early stages of the empire, when islamic religion was deeply rooted into the ruling system of the strong Ottoman Empire, while the churches were built much later, during the XIXth century in a more democratic Empire. Since the most strategic spaces were already occupied by mosques, churches were settled at the most strategic spaces in the christian neighbours, very close to the city wide network. Because of the same reason and because of the low accessibility of the network, the set of spaces occupied by the mosques in the Muslim neighborhoods do not share the same properties as the set of spaces in the Christian mahallah’s.

Mosques in the glocal network of movement and churches, were significant part of the programme of the urban nodes, along with trading, crafts, cattering and social activities. Although different by nature, they all had one thing in common. The need for high concentration of people was the driving force for the concentration of all these activities and at set of spaces with simililar properties, creating at the same time rich mixed use centres.

REFERENCES

ФЕРАТИ, Армир: Декодирање на шемата на јазли во матрицата на јавни простори: Просторни и конфигурациски особености на јазлите во Тетово. Скопје, 2011.