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# Urban Form in Oriental Cities: Key Elements and Residential Environments

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#### Abstract

This paper briefly describes the development of the Islamic/Oriental city and the elements that form a traditional Oriental city. It aims to outline their unique urban characteristics and the differences and similarities between the most Oriental to the least Oriental cities. To achieve this, three cities - Tunis, Sarajevo, and Skopje - are described and compared based on relevant literature, serving as examples ranging from the most Oriental to the least Oriental. The selection of these cities was based on varying percentages of the Islamic community and the conditions of Islamic establishment. In the conclusion, it is discussed that their primary physical characteristics are evident in all three cases, while their distinctions lie in their residential compositions. Their uniqueness is found in their non-physical characteristics, which are discussed as potential guidelines for the future development of the cities.

*Keywords:* Islamic/Oriental city, Urban characteristics, Organic town planning, residential environments

## Introduction

The urban organizational pattern of the Islamic cities is formed based on the Mesopotamian model that takes place approximately 3000 years before Islam, claimed by the author Besim Selim Hakim. He relies on a recent study that tends to replace the attribute "Islamic" and change it into "Oriental" because this model of urban organizational form detects in the most traditional Islamic cities, that date before Islam (Hakim, 2010, p. 137).

It is important to note that the Islamic faith had a significant impact later on, affecting urbanity by relying on building principles and guidelines that are the product of the Fiqh. The Fiqh is "the mechanism interpreting and applying the value system of the Shari'a (Islamic divine law) within the processes of building and urban development" (Hakim, 2010, p. 137).

This mechanism was very distinctive from Western zoning and other methods that rely on numerical standards because it was based only on one religious source that impacted all urban development. Other methods were designed to be applicative only on a local level, but the Fiqh mechanism tended to provide solutions even at the micro-level. It became very effective for specific conditions on a neighborhood scale by guiding all the decisions related to a building (Hakim, 2010, p. 138). They divided the decision-making process into two groups: rulers and citizens. Rulers were concerned about urban macro-scale decisions such as new public buildings, new roads, etc. Whereas citizens were concerned about urban micro-scale decisions that had a more notable impact on the city and its inhabitants (Hakim, 2010, p. 18, 19). This way of managing city development has been neglected through the years by most urban historians, which is especially evident in Modernism, which had an impact all over the world, even including Islamic countries (Hakim, 2010, p. 18, 19).

Correia and Taher (2015) analyzed two cities with different geographical locations and different historical and cultural backgrounds that are now Muslim but previously have not been. The first one is the city of Nablus in Palestine, which previously had been one of the largest Roman cities in the region before the occupation of Arab-Muslim countries. The second one is the city of Azzemmour in Morocco, which has a background layer of Portuguese occupation. They argued that in both of these cities, the orthogonal urban matrix of the Western urban concept is evident and still exists, embraced, and adopted by the traditional Islamic urban form that later took place. Correia and Taher (2015) analyzed the current urban morphology and the culture of the inhabitants of Nablus and Azzemmour and concluded that these cities represent proof that the Islamic culture impacted and guided the urban development, even if there was another historical background before in that city because this religious culture shaped the way of life which resulted in behavioral patterns that formed and followed unprescribed rules about city formations.

The influence of the Oriental urban form is visible in all areas once occupied by Islamic countries. Although there is substantial research on the Oriental urban form and architecture, it mostly focuses on cities with predominantly Islamic populations, such as those in Turkey, Iran, Central Asia, and parts of Africa (Budiman, 2018; Ganiyev, 2023). However, a comparative analysis of cities that are less Oriental in terms of key urban elements and residential environments is lacking. Such comparisons would reveal the distinctions and similarities between more Oriental and less Oriental cities. In places where Islamic occupation lasted only a single historical period, its influence is less evident. Cities like Sarajevo in Bosnia and Herzegovina or Skopje in North Macedonia adopted only some elements of the Oriental urban matrix, which today characterize the old part of these cities.

# **Research Questions**

This paper tries to explore and describe the development of the Islamic/Oriental city; by answering the following questions: What are the main urban elements of the Islamic/Oriental city, even in the ones that are less Oriental? Which factors make the difference between the most Oriental and the least Oriental cities? What makes these cities unique?

# Methodology

Seeking an answer, this paper describes and compares three capital cities: Tunis in Tunisia (selected as the most Oriental city), Sarajevo in Bosnia and Herzegovina (as a medium Oriental city), and Skopje in North Macedonia (as a less Oriental city) (Figure 1).

Because of the close relationship between the formation of Oriental cities and the Islamic religion, the selection criteria for choosing and categorizing these three cities were based on varying percentages of the current Islamic community, as well as the different conditions and durations of the Islamic establishment.

Islamic religion in Tunisia nowadays represents the absolute majority of its population with 99%, dating since 7<sup>th</sup> century CE when Muslims occupied this country with its city of Tunis and brought Islam and Arab culture to the local inhabitants (Britannica, 2024a; World Population Review, 2024). During the long history of its establishment, we can categorize this Arab city located in North Africa as one of the most Oriental cities.

The Islamic community in Bosnia and Herzegovina and its capital city, Sarajevo, is dominant with 51%. However, there is a composition of faiths in the other half of the percentage (WorldAtlas, 2017). Islamic religion in Sarajevo dates since its foundation in the 1450s by the Ottoman Empire which ruled for over 500 years until Austro-Hungarian Empire conquered the city and brought European influence (Britannica, 2024b). By the mentioned criteria, we can categorize the city of Sarajevo as a medium Oriental city.

In North Macedonia and the capital city, Skopje, there are also different religious beliefs, and the dominant religion is the Orthodox Church, with 61.6%, while Islam represents only 36.6% of the population (European Union, 2021). Roman, Bulgarian, and Serbian Empire ruled in this territory of Skopje before the Ottoman Empire occupied it in 1392 for over 500 years, which brought the influence of the Islamic religion in this city during this occupation period (Britannica, 2024c). Because of these conditions, Skopje is categorized as a less Oriental city.



Figure 1 - The most Oriental and the less Oriental cities – illustration scale

# **Results**

#### **ORIENTAL TOWN PLANNING**

Oriental city pattern is specific for its form by being irregular and opposite from the orthogonal urban matrix. Also, the arrangement of the main urban elements in Oriental cities differs from the Western zoning model; they do not follow a formal development scheme.

#### Arab Cities: Tunis

The urban elements that consist this Oriental city are: *Medina* – which represent the urban settlement or the central part of the town, *Kasbah* – is the citadel that serves as a shelter for the governor in emergent cases;, *Rabad* – represents the peripheral settlement; *Sur* – which is the defensive wall that surrounds the town and the central part of it, *Bab* – is the gate or the door within the defensive wall, *Burj* – fortified towers of the defensive wall, *Shar' or Tarik Nafid* – represent the streets and the throughways, *Bat'ha* – the public square, *Musalla* – a prayer place which may be public or private, *Maqbara* – the public cemetery, *Khazzan* – water storage, *Khandaq* – sewer lines, *Mahalia* – housing districts with the same ethnicity group (Hakim, 2010, pp. 56-63).

#### Bosnian Cities: Sarajevo

The influence of the Oriental organic concept is evident in this city because the beginning of its formation started with some unwritten rules for building that represented the following: "The road is the spine of the town and the valley its shape, the Charshiya (business center) its heart, the vegetation its lungs, and the river its soul" (Grabrijan, 1984, p.22). The urban elements that consist this city are: *The Charshiya* – positioned in the valley, formed by: "mosques (prayer houses), hans (hotels), hammams (baths), bezistans (covered markets) and other magnificent buildings" (Grabrijan, 1984, p.22), and *The Mahala* – positioned on the slopes, represents the residential area. The development started from the core center and then spread organically to the peripheral part through the main streets. The Mahala was formed when a house was built in the peripheral area, and a path for its access was provided, attracting other locals to start building homes by that path. As soon as the number of houses was raised, the local mahala mosque, a school, an aqueduct, a fountain, and small shops occurred in this area (Grabrijan, 1984, p.54).

#### Macedonian Cities: Skopje

Dušan Grabrijan, in his book (The Macedonian House), argued that for the Orient, it was essential to have good placement of the residential area (1986, p.171). The main mosque and the Charshiya are usually positioned on the valley, whereas; the residential areas (Mahalas) take place on the slopes, ensuring a beautiful view directed toward the Charshiya and forming organic architectural plasticity that takes into consideration the neighborhood aspect. When the town started to develop and expand, a group of Mahalas was formed, which consisted of a smaller mosque and small shops at the crucial street crossroads (Figure 2). This concept can be evident in bigger cities such as Skopje in North Macedonia, where "the organization of the whole town (macro-cosmos) is repeating in the mahala (microcosmos)" (Grabrijan, 1986, p. 174). Balkan cities with Oriental influence have the same urban elements - the Charshiya and the Mahala. If the topography of the place does not have slopes, then the views of the houses in Mahalas are directed into inner gardens, which is the case in Skopje.

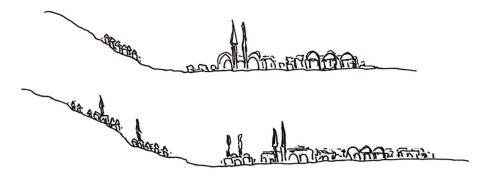


Figure 2 - Oriental small town vs. Oriental big town - "macro-cosmos in microcosmos"

#### **ORGANIC STREET PATTERN**

The primary role of streets in oriental cities was to provide access to the house. That's why there are a lot of cul-de-sacs that enable housing access. Cul-de-sacs connect with the main street arteries that direct the path through the central part of the town. In past **Arab cities**, the streets were dimensioned by the transportation way of the Middle East (dating around the fourth and sixth centuries AD) that was the camel, taking into consideration the dimension of two camels that are

fully loaded to pass by freely (Hakim, 2010, p. 61, 139). The drainage system of the water also connects with the street pattern; it follows the same logic. These water channels start from the house entrance, through the cul-de-sac, into the main streets, and then connect with main sewer lines that direct the water into lakes (Hakim, 2010, p. 63).

The same irregular street pattern is in **Balkan Oriental cities** but with different terminology; for example, in Sarajevo; the main road is "kitchma," the streets are "sokaks," and cul-de-sacs are "chikmas" that direct to the houses (Grabrijan, 1984, p.54). Also, these streets were dimensioned by the transportation method in the Balkan area (during the Ottoman occupation) that was a horse or a goat loaded with packs on both sides plus a single man. The dimensions depend on the street hierarchy, so they got narrower in cul-de-sacs or "chikmas" and wide on the main roads (Grabrijan, 1984, p.56). Analyzing this organic street pattern in Skopje, Grabrijan (1986, p. 177) makes an analogy with the tree where the stem represents the main road, the branches are the gathering streets, the veins are cul-de-sacs, and the leaves represent the houses.

# **ISLAMIC / ORIENTAL HOUSE**

The Islamic religion has also impacted the way houses were formed and organized. Female family members were not exposed, and their job was only to take care of the children and the house. Meanwhile, male members provided financially everything concerning the family's needs. Following those ethical requirements - resulted in a spatial transformation that is very internal oriented for securing the needed privacy and big houses as much as the financial status can afford. This aspect varies within the Oriental cities, depending on how much influence had the Muslim religion and how long the occupation time took. The following paragraphs describe the three country cases that the paper argues by analyzing their typical house.

### Arab Cities: The Courtyard House

In Arab cities, the typical house refers to the characteristic element of its formation, which is the courtyard. It is the most significant part because it enables the building to be opened and oriented toward it, whereas the surrounding walls of the house have minimum openings. This form provides a high level of privacy and independence from the surrounding neighbors while still enabling contact with nature and the outside space through the yard. Another aspect that is crucial in this house type is the "Batin vs. Zahir" which means "the inner and the external aspect of a self or a thing," by valuing more the inner over the outer (Hakim, 2010, pp. 95-96). That's why the courtyards are decorated as much as the financial budget is, even though they serve only the family members and their relatives, while the external walls are plain (Hakim, 2010, pp. 95-96). Seen from an aerial view, these clusters of courtyard houses in Medina central area in Tunis represent a composite urban dwelling, overtaking a massive part of the public spaces, with a percentage of 69.8 private domain and 30.2% public spaces (Hakim, 2010, p. 116). Also, because of the hot climate, the rooftops of the houses are flat, and they represent additional functional space for the family.

#### Bosnian Cities: Oriental Bosnian House

As mentioned before in this paper, Mahala in Bosnia and Herzegovina was formed by multiple houses that mainly took place on the slopes and ensured great views. This aspect of securing an undisturbed view from all the houses is tightly related to the Islamic divine law that signifies respect and love for the neighbor. This neighborliness attribute resulted in a harmonious amphitheatric town. Even though it's very dense, these houses do not disturb any other buildings around (Grabrijan, 1984, pp. 62-63). They even made special gates within the court walls that connect one neighbor with the other, not needing to go outside in the street (Grabrijan, 1984, pp. 62-63). The aspect of privacy can also be evident in Bosnian houses, affecting their shape. Just like the Arabian houses, they also orient toward the courtyard, but in this case, the terrain is mainly slope. The first floor of the house has overall closed facade walls, but the second one opens with windows and verandas, providing a maximal view meant specially for the females that stay at home all the time to have the needed contact with nature (Grabrijan, 1984, p.61, 63). This husband-wife relationship later on affected the internal housing organization, dividing the house into two parts, selamluk (for men - for business activities) and harem (for women - occupied by the family) (Grabrijan, 1984, p.79). Another aspect that affected the internal housing organization is the continental climate, which resulted in separate winter living quarters on the ground floor and summer living quarters on the upper floor (Grabrijan, 1984, p.70). Grabrijan (1984, p. 117) claims that the primary European elements of the Bosnian house were evident in the conversion of the summer and winter floors into two apartments, one above the other, due to the lowered living standard.

#### Macedonian Cities: Macedonian House

Macedonian house represents a transition between Oriental and European house even though it is more like a European house, its roots are of oriental influence (Grabrijan, 1986, pp. 224-229). Grabrijan (1986, p. 224) argues that the difference between the Bosnian and the Macedonian house is in their lifestyle, claiming that the Macedonian house doesn't emphasize the privacy aspect because it is open toward the street and the surroundings. In some cases, multiple houses share the same courtyard, which differs from the situation in Sarajevo or other Arab cities. Macedonian houses are also more closed on the ground floor, but the upper floor is open toward the street (Grabrijan, 1986, p.225). The upper rooms are organized around a characteristic element called "čardak," which means an open terrace that sometimes can be glassed-in (Grabrijan, 1986, pp. 224-225). "Čardak" had a multifunctional feature, transforming into a room that the family needed at that specific period, for example, a living room, a reception room for the guests, a summer bedroom, and even a wedding room (Grabrijan, 1986, p. 225). This "socialization" in this part of the house occurred when Christian people needed to socialize when the Turkish occupation did not allow gatherings in public spaces; so, it became the internal public space (Grabrijan, 1986, p. 225). The Oriental house serves for leisure and enjoyment, whereas the Macedonian house serves for work (Grabrijan, 1986, p. 225). The continental climate caused the Macedonian house to divide into winter living quarters on the ground floor and summer living quarters on the upper floor, just like the Bosnian house (Grabrijan, 1986, pp. 224-225). In this case, the European Modern elements are more visible by having parallelism in the ground floor plan and elevation, in the independence of the rooms from the supportive wall, independent structural plasticity of the house, built-in furniture, outer rooms, views, and the harmony with nature (Grabrijan, 1986, p. 229).

Arab	MAIN URBAN ZONES -Medina	STREET PATTERN Organic		WATER DRAINAGE AND SEW- ER LINES Follows	TYPOMOR- PHOLOGY OF THE SETTLE- MENT Valley	LEVEL OF PRIVACY/ ORIENTA- TION OF HOUSE High	HOUSE PURPOSE Leisure	ROOFS	SPECIAL ROOM SEPARA- TIONS
cities: Example: Tunis	(Central area)	-Main streets -Cul-de- sacs	Caller	the street pattern	Valley	-Closed and oriented toward the courtyard	Leisure	roof top that is usable	
Bosnian cities: Example: Sarajevo	-Charshy- ia (central area) -Mahala (residen- tial area)	0	Horse or a goat	Follows the street pattern	Slope	High -Closed and oriented toward the courtyard and pano- ramic view	Leisure	Gabled roof	Yes -Sum- mer and winter dwelling -Man and women dwelling
Mace- donian cities: Example: Skopje	-Charshy- ia (central area) -Mahala (residen- tial area)		Horse or a goat	Follows the street pattern	Valley in Skopje/ Slope in other cities	Medium -Open and oriented toward the street and the yard	Work	Gabled roof	Yes -Sum- mer and winter dwelling

**Table 1** - Differences among three Oriental cities, from the most Oriental to the leastOriental

# Discussion

By analyzing the architecture and urban aspects (based on literature) of three Oriental cities - Tunis, Sarajevo and Skopje (Table 1) - and categorizing them from the most Oriental to the least Oriental, we can summarize the **primary physical urban char**-**acteristics** that define an Oriental city, even the ones with less Oriental influence are:

- A central area that represents the main urban zone, composed of public buildings such as a mosque, bazaar, hammams, etc., and at least one residential area located more peripherally, composed of individual houses.
- An organic street pattern made up of main streets and branches of cul-de-sacs, where water drainage and sewer lines follow this pattern, and the streets are dimensioned according to the transportation system of the time.

The oriental elements that were reshaped or reduced from the most Oriental to the least Oriental city reappear in the composition of the residential area (mahala) and the house itself. The differences (Table 1) are due to these factors:

- Duration of occupation
- Geographical location (the different topography of the settlement)
- Culture of living (differences in the level of privacy, orientation, and purpose of houses)
- Climate factors (different typologies of roofs and room separations)

The unique features of the Islamic/Oriental cities prevail in their **non-physical characteristics**, such as:

- <u>The aspect of neighborliness</u> the respect for the neighbors enables free views from every house and impacts the whole organization of the residential area (Mahala), creating a harmonious urban composition (Grabrijan, 1984, pp. 62-63).
- <u>The anthropomorphic scale</u> dimensioning the houses and the streets based on a human scale, which makes the entire urban structure people-oriented (Grabrijan, 1984, p.140; Grabrijan, 1986, p.226).
- <u>The sense of place</u> considering the height of the buildings, where religious and public buildings dominate, while residential buildings flow with the topography, ensuring that every house has access to and connection with the central area of the town (Grabrijan, 1984, p.136),
- <u>The unwritten laws</u> even though they rely on religious sources, they take into account social aspects that yield better results than written laws (Grabrijan, 1984, pp. 63-64).

Nowadays, these non-physical characteristics can serve as guidelines for architects and urban planners when it comes to new interventions or reconstructions in the old Oriental parts of the cities. Additionally, they can provide a foundation for forming policies that will lead to more human-oriented solutions, even for the modern parts of the cities. This approach can be especially useful for cities like Sarajevo and Skopje, allowing for smoother transitions between different layers of urban morphology.

This paper opens a discussion about future architecture and urban design decisions, what can be extracted from past successful characteristics lost over time due to political and commercial reasons, and the possibility of implementing and modifying them according to the contemporary way of living.

#### References

- Alsayyad N. (1996). The study of Islamic Urbanism: An Histographic Essay, *Built Environment, 22* (2), 91-97. https://www.academia.edu/3751982/The\_Study\_of\_Islamic\_Urbanism\_An\_Historiographic\_Essay
- Budiman, H. (2018). Istanbul: The development of Islamic city thinking. MATEC Web of Conferences, 280, Article 02005. https://doi.org/10.1051/matecconf/201928002005
- Britannica (2024a). Tunis. https://www.britannica.com/place/Tunisia
- Britannica (2024b). Sarajevo. https://www.britannica.com/place/Sarajevo
- Britannica (2024c). Skopje. https://www.britannica.com/place/Skopje
- Correia, J., & Lopes, A. (2014). Azzemmour, Morocco: Early sixteenth-century Portuguese defences. https://repositorium.sdum.uminho.pt/bitstream/1822/32613/1/Paper%20Azemmour\_JCorreia\_ ALopes.pdf
- Correia, J., & Taher, M. (2015). Traditional Islamic cities unveiled: The quest for urban design regularity. Editorial Restauro Compás y Canto S.A. de C.V. https://editorialrestauro.com. mx/traditional-islamic-cities-unveiled-the-quest-for-urban-design-regularity/
- European Union. (2021). Population: Demographic situation, languages and religions | Eurydice. https://eacea.ec.europa.eu/national-policies/eurydice/republic-north-macedonia/population-demographic-situation-languages-and-religions\_en
- Ganiyev, A. (2023). The role of architecture in Islamic civilization. *ResearchGate*. https://www.researchgate.net/publication/375339852
- Grabrijan, D. (1984). The Bosnian Oriental architecture in Sarajevo with special reference to the contemporary one. Ljubljana: DDU Univerzum.
- Grabrijan, D. (1986). The Macedonian House or its Transition from Old Oriental to Modern European House. Skopje: Misla.
- Hakim, B. S. (2010). Arabic-Islamic Cities: Building and Planning Principles. London and New York: Routledge.
- WorldAtlas. (2017). Religious Demographics of Bosnia and Herzegovina. https://www.worldatlas.com/articles/religious-demographics-of-bosnia-and-herzegovina.html
- World Population Review. (2024). Tunisia. https://worldpopulationreview.com/countries/tunisia