

Environmental and Ecological Considerations and Their Role in the Emergence and Development of Cities in the Central Maghreb during the Medieval Period (Tihert, Béjaïa, and Tlemcen as Case Studies)

الاعتبارات البيئية والحيوية ودورها في نشأة وتطور مدن المغرب الأوسط خلال العصر الوسيط
(تيهت - بجاية - تلمسان أمودجا)

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Abstract:

This research aims to identify some of the urban planning constants established by scholars and experienced practitioners in the founding of cities, and to examine their connection to the establishment of major urban centers of the Central Maghreb—such as Tihert, M’sila, Achir, Al-Qal’a, Béjaïa, Constantine, and Tlemcen. This is achieved through an investigation of the environmental and ecological considerations observed in selecting city locations and planning. Accordingly, careful attention was given to place characteristics and suitability in relation to criteria present in many chosen sites. Consequently, these factors had a significant impact on the history of these cities, their future trajectories, transformations, and relations with their surrounding environment, which constitutes a vital space for both cities and inhabitants. On this basis, these cities were able to develop, endure, and withstand time.

Keywords: urban emergence; Central Maghreb; environmental factor; natural defensibility.

Introduction

In the primary sources on the history of the Islamic Maghreb, as well as in medieval travel and geographical literature, we often find references to cities that once flourished but later disappeared, leaving only faint traces, or whose importance declined after serving as vibrant centers. In contrast, other cities—contemporary with them or even older—have endured the passage of time. This invites an examination of the reasons behind such divergence. Cities that persisted were likely established in diverse and dynamic environments, rich in natural, human, and economic resources, and capable of adapting to environmental or economic changes. By contrast, cities founded or expanded for purely material or temporary purposes, without regard to environmental and geographical factors, often lost their significance and eventually disappeared once their function ceased.

Natural and geographical conditions have consistently shaped urban planning in Islamic cities, particularly in the Islamic Maghreb, including Central Maghreb cities like M'sila, Tihert, Béjaïa, Constantine, and Tlemcen. These conditions also influenced their development, transformations, and interactions with their surrounding environment, a vital space for both the cities and their inhabitants.

From this perspective, this scholarly contribution seeks to identify some of the Islamic urban constants—especially environmental and ecological ones—associated with the establishment of the cities and urban centers of the Central Maghreb. On this basis, these cities were able to develop, persist, and withstand the fluctuations of time. This is addressed through the following research question: **To what extent were environmental and ecological considerations important in selecting the locations of cities in the Central Maghreb?**

1. The Selection of City Sites in Islamic Thought:

The texts of Islamic heritage concerned with urbanism contain important guiding ideas and principles regarding the foundations or constants that those in authority should observe and necessarily take into account when undertaking the establishment of a city¹. Particularly regarding the selection of its site and location, considering it as an important center of attraction, so as to make it capable of sustaining its civilizational role and prevent its premature destruction or disappearance². Although these texts

differ in their geographical and historical contexts, they are similar in their general framework and main meanings.

For example, Ibn Abi al-Rabi' (d. 272 AH / 885 CE) outlined the conditions for establishing cities in six main aspects, including: "the abundance of fresh water, the derived provisions, the moderation of the location and quality of the air, proximity to pastures and firewood, and the fortification of its houses against enemies and raids..."³. These are essential civilizational criteria. Here, Ibn Abi al-Rabi' addresses the various aspects of societal life in its three axes: economic, health, and security.

Similarly, Abd al-Rahman Ibn Khaldun emphasized the necessary conditions that must be met and taken into account when founding cities, summarizing them into two main principles: "repelling harms" by protection from threats and "bringing benefits". He explains that repelling harm from a city is achieved by choosing a location: "in an inaccessible place, either on a rugged hill of a mountain, or along a bend of a sea or river, so that it can be reached only by crossing a bridge or causeway, making it difficult for the enemy to access and enhancing its fortification"⁴. From this, we understand that security and protection became essential conditions in city-building and urban development. This emphasis is repeated in many texts on urban thought, including those of al-Qazwini⁵, likely due to the political and military circumstances following the Islamic conquests, during which military camps gradually developed into cities influenced by the natural, political, military, and organizational conditions of those camps.

Islamic urban thought also stressed the importance of environmental factors in selecting city locations, as these help repel harm. This was achieved by choosing sites with clean air to prevent disease, avoiding pest-infested or unsanitary areas.

Furthermore, "bringing benefits", according to Ibn Khaldun, was another factor given special attention in Islamic urban thought, guiding city founders' priorities. Chief among these was access to water, whether through rivers or springs, as water facilitates daily life⁶. For this reason, Arabs built cities in the lands they conquered in inland locations near rivers to secure ample drinking water. This approach differed from the Romans, whose cities were often near the coast. According to one researcher, this was due to the

humid climate of coastal regions, which was unsuitable for Arabs accustomed to dry desert conditions, and also to remain safe from the Roman fleet⁷.

Similarly, Islamic urban thought emphasized the necessity of building cities near fertile lands suitable for agriculture and pastures, in order to provide food for the population and sustain their livestock. If the farmlands were located close to the city, they were easier to access and cultivate. In addition, proximity to forests allowed for the supply of wood for construction and firewood for cooking and heating (Ibn Khaldun 2016, 274). The question then arises: Did the cities of the Central Maghreb meet these conditions?

2. Environmental and Vital Considerations in the Establishment of Cities in the Central Maghreb (Tihert–Béjaïa–Tlemcen as a Case Study):

2.1 Natural Determinants and the Emergence of Cities in the Central Maghreb: What Is the Connection?

The Central Maghreb experienced, during the period extending between the 2nd–8th centuries AH / 8th–14th centuries AD, a genuine movement of Islamic urban development, during which numerous cities were founded or newly established across different regions and periods. Among these was Tihert, founded as the capital of the Rustamid state in 160 AH / 776 AD⁸, M'sila, founded in 313 AH / 925 AD; and Achir, founded in 324 AH / 935 AD⁹.

These were accompanied by other cities such as Miliana, Algiers, and Médéa, where the emergence of the Fatimid state, followed by the Zirid dynasty, had a clear impact on the establishment and renewal of many urban centers during this period. Likewise, the cities of Al-Qal'a, founded in 398 AH / 1007 AD, and Bejaia, founded in 460 AH / 1067 AD, served as the capitals of the Hammadid state¹⁰.

As for Tlemcen, a city of ancient origin, it began to develop significantly after coming under Idrisid rule in 172 AH / 788 AD, until it rose to the rank of capital of the Zayyanid state in 633 AH / 1233 AD.

The emergence of each city in the Central Maghreb was linked to specific circumstances. Some began as small settlements that gradually developed into urban centers, taking advantage of the natural resources around them. Others were founded according to human design, particularly through political decisions.

When considering both the principles outlined by scholars and planners and the geographical settings of these cities, it is clear that their locations largely conformed to recognized criteria for urban planning. There is general agreement on the importance of major medieval urban centers such as Tihert, Béjaïa, and Tlemcen, given their strategic sites, spatial organization, rich surrounding environments (or supplying hinterlands), and connections with both interior and exterior regions.

Geographical and historical sources emphasize the advantages of these cities' locations, including access to water, a favorable climate, proximity to agricultural lands, and nearby grazing areas. These features are summarized in the following table:

City	Geographical Characteristics of Selected Cities in the Central Maghreb				Sources
	Water Description	Air / Climate Description	Agricultural Quality	Geographical Setting	
Tihert	Rivers and springs, some originating from the desert and others from the southern Jazoul Mountain ; a western river called	Severe cold, strong winds, frequent rain, fog, and limited sunshine.	Gardens, orchards, and dense tree cover nourished by surrounding rivers.	Inland city surrounded by rivers and fertile lands.	Al-Ya'qubi, pp. 109, 149; Al-Bakri, Al-Masalik wa al-Mamalik, pp. 66–67; Anonymous, Al-Istibsar, p. 66; Al-Idrisi, Nuzhat al-Mushtaq, p. 87; Al-

	Minna and another formed from gathered springs.				Qazwini, Athar al-Bilad, p. 169.
Bejaia	Large river to the east; city intersected by river and sea; important ancient harbor.	—	Abundance of fruits, crops, and various goods; gardens along riverbanks.	Coastal city overlooking the Mediterranean Sea.	Anonymus, Al-Istibsar, p. 129; Al-Idrisi, Nuzhat al-Mushtaq, p. 160; Al-Bakri, Al-Masalik wa al-Mamalik, p. 82; Al-Himyari, Al-Rawd al-Mi'tar, p. 80; Ibn Sa'id al-Maghribi, p. 142.
Tlemcen	Flowing rivers; water supplied from a distance of six miles;	Mild, healthy air and sweet water.	Irrigated agriculture, abundant yields, fertile plains, prosperity	Inland city connected to river systems and agricultural plains.	Ibn Hawqal, Surat al-Ard, pp. 88–89; Yahya Ibn Khaldun, Bughyat

	navigable river near the coast.		.		al-Ruwwad, vol. 1, pp. 85–86; Al-Himyari, Al-Rawd al-Mi‘tar, p. 135; Ibn al-Khatib, Mi‘yar al-Ikhtiyar, p. 184.
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2.1.1 Availability of Freshwater Resources

Based on geographical location—considered the foremost condition to be taken into account when selecting urban sites—and in which water was given priority as the fundamental axis upon which all life depends, in accordance with the Qur’anic verse: “**And We made from water every living thing**” (Qur’an, Al-Anbiya’, 30), the data presented in the above table clearly indicate that most cities of the Central Maghreb chosen to serve as political capitals during the medieval period were closely associated with this natural determinant and distinguished by it.

These cities were typically located either along river courses, near springs, or along maritime coastlines. For instance, Tihert was situated on the Mina River and the Natch River¹¹. Bejaia was located near the sea and possessed a large river¹². As for Tlemcen, it contained various water bodies, including valleys and springs descending from the surrounding mountains—particularly the southern mountain range, which constituted a natural reservoir of water resources¹³.

2.1.2. Moderation of Location and Quality of Air

This condition is considered one of the fundamental criteria in selecting a suitable site for the establishment of a new city, due to its direct impact on human health. When examining the extent to which this condition corresponds to the locations of the cities of the Central Maghreb, it becomes evident that they were situated within the fourth and central climatic zone of

the seven regions identified by medieval scholars. For this reason, it was described as:

“The most prosperous due to its moderation; according to their view, it is a noble land, fertile soil, productive plains, abundant in sweet springs and rivers, scarce in venomous creatures, and moderate in air throughout the four seasons with a nearly equal degree of temperance. Its benefits and fruits are continuous throughout the year.”¹⁴.

This description is clearly supported by what geographical and travel literature recorded regarding the climatic characteristics of the cities of the Central Maghreb, as illustrated in the table above. For example, the selection of Tihert’s location was also influenced by the gentleness and purity of its air. Its climate was characterized by cold temperatures and dense fog during winter, and a moderate climate in summer¹⁵. Its position between the Tell region and the Sahara granted it the mildness of the Tell and the healthy, pure air of the desert¹⁶.

The same applies to Bejaia, which was distinguished by a very moderate climate in summer and abundant rainfall during winter, reaching approximately 1,000 mm annually. Moreover, the Mediterranean Sea consistently moderated its climate, granting it all the characteristics and features of coastal cities¹⁷.

Tlemcen also benefited from its location at the foothills of the mountains, which endowed it with a climate that enhanced its beauty and greenery. Its climate was cold in winter and hot in summer. ‘Abd Allah Ibn al-Sabbah described it in his travel account as follows:

“Tlemcen possesses wholesome water and air, and welcomes every stranger with generosity.”¹⁸.

It is therefore evident that awareness of the importance of clean air for the health of the social environment was well established and widely recognized among the inhabitants of the Islamic Maghreb in general, and the Central Maghreb in particular—especially among scholars and knowledgeable individuals. They regarded the corruption of a region, or its proximity to fetid salt marshes that polluted the air and generated swarms of mosquitoes and other harmful insects, as a serious deficiency¹⁹. This concern is clearly reflected in Ibn Khaldun’s advice on protection against epidemics, wherein he emphasized the necessity of:

“Good air for protection from diseases, for if it is stagnant and foul, or adjacent to corrupt waters, putrid marshes, or noxious meadows, decay rapidly spreads from their proximity, and disease inevitably hastens upon the animals inhabiting such places. This is something that is clearly observed.”²⁰

3.1.2. Availability of Sustained Provisioning and Proximity to Pastures and Fuel Resources

Since one of the criteria for the establishment of cities was the availability of sustained provisioning (*mīra*) and proximity to pastures and fuel resources, as a fundamental condition for the prosperity and well-being of urban populations, the geographical and historical sources concerning the cities of the Central Maghreb indicate that this criterion was indeed taken into consideration when selecting their locations. These cities were characterized by fertile agricultural land and proximity to grazing areas.

Tihert, for instance, was distinguished by its red soil at the foot of the mountain, along with white calcareous and sandy stones, which facilitated the retention of groundwater and provided fertile, resource-rich lands suitable for agriculture and pastoralism due to water availability. As a result, various types of grains and flowers were cultivated in its lands²¹. Its inhabitants actively exploited the surrounding hinterlands, leading to agricultural prosperity; trees encircled the city and it became immersed in orchards. It was a city unparalleled in the extent of its open lands, crops, and water resources. Among its cultivated products were quince, flax, sesame, and various grains. Its inhabitants also devoted considerable attention to livestock breeding, to the extent that it became one of the major centers for horses, cattle, sheep, and mules, in addition to abundant production of honey, clarified butter, and diverse agricultural yields²².

Tlemcen possessed a mixed plain–mountain landscape, with plains renowned for the quality and fertility of their soils, such as Al-Hartun to the south and Al-Minya to the north²³. In addition, the plains and hills along both banks of Wadi al-Safisif to the east, as well as the plains of Imama and Mansoura to the west, were no less fertile. This favorable environment was reflected in both the quantity and quality of agricultural production, resulting in a wide variety of crops, including grains, vegetables, and fruits, cultivated in fertile lands adjacent to rivers and springs in the form of farms, orchards,

and gardens. Its surrounding areas also provided natural pastures, water, and fodder. This is what Lisan al-Din Ibn al-Khatib alluded to when he stated:

“Tlemcen is a granary of crops, a pasture of livestock, and a land of fruits of many kinds”²⁴. Likewise, Al-Maghribi described it by saying:

“The entire surrounding countryside is planted with vineyards and various types of fruit”²⁵.

Bejaia likewise possessed vast agricultural lands extending over a wide area, with fertile and diverse soils suitable for numerous agricultural products. Along with the regularity of its seasons and the moderation of its temperatures, these conditions greatly stimulated agricultural activity. This is evident in the diversity of crops produced, foremost among them grains and various kinds of fruits²⁶. Al-Idrissi stated:

“Bejaia possesses fields of wheat and barley and all kinds of fruits, sufficient for many regions”²⁷.

Consequently, it becomes clear that the selection of urban sites in the Central Maghreb was based on both immediate and long-term considerations, aiming to secure the most essential element for life, stability, and continuity—namely water—alongside the preservation of public health and the provision of food and other necessities for their inhabitants.

3. Military and Strategic Considerations and Their Impact on the Emergence and Development of the Cities of the Central Maghreb

3.1. Cities of the Central Maghreb and Natural Fortifications

Since the Islamic city exercised at least a minimum degree of military defensive function, given that security and protection were essential conditions of urban life, the selection of city sites took into account locations that enjoyed natural fortification. In this regard, Ibn Khaldun states:

“Whenever a city is difficult of access for those who seek to attack it—by being founded upon rugged mountain plateaus and lofty ridges—it thereby acquires protection against the enemy, who despair of approaching it due to the hardship of its terrain and the expected response to its calls for defense.”²⁸

In light of the political circumstances under which Central Maghreb cities emerged—especially those that became political capitals—it is evident that naturally fortified locations were decisive in their foundation. The site of Tihert, for example, was strategic for the Ibadis, as it was an inland area of

relative isolation. Although it lay at the head of the route connecting the Tell region to the lower Chelif Valley, and despite being enclosed within the high Tell of Mendès, it was on the southern slope of Mount Jazoul, facing the interior and turning its back to the sea.

Moreover, its position among the Atlas mountain ranges enabled it to dominate the Maghreb from all four directions. This strategic configuration prompted 'Abd al-Rahman ibn Rustam to settle there, as it was distant from Kairouan, separated from it by the Zab region and the Aures Mountains, and was also secure from attacks by the Byzantine fleet due to its remoteness from the coast²⁹.

Based on what historical sources report regarding the circumstances of al-Nasir ibn 'Alnas's transfer to Bejaia, motivated by the desire to escape the encirclement imposed by the Hilalian tribes around al-Qal'a³⁰, Ibn Khaldun explicitly links the foundation of Bejaia to this sweeping tribal advance. This is evident in his statement:

"They continued in this manner until al-Nasir abandoned residence in al-Qal'a and founded [a city] on the coast—Bejaia."³¹

Accordingly, it may be understood that al-Nasir's choice of Bejaia, in addition to its proximity to Ifriqiya³², was primarily due to its natural defensive strength. In this respect, al-'Abdari describes it as follows:

"The city of Bejaia is situated at the foot of a rugged mountain, cut off by river and sea, overlooking both like a vanguard, fortified by them, impregnable—leaving no hope for an assailant, nor room for a thrust or blow."³³

Bejaia thus became a safe refuge and defensive stronghold against the expansion of the Hilalian Arabs. Its position lay outside their customary zones of movement due to the presence of significant mountain barriers³⁴. According to al-Idrisi, they halted at the mountain range traversed by Wadi al-Milh, south-west of the city of Setif, where this valley formed, in his words, "a narrow and fearsome passage"³⁵. Moreover, Bejaia's site responded strategically to traditional principles familiar to the Hammadids: just as al-Qal'a had been established on the slopes of Mount 'Ajissa for protection, Bejaia was similarly constructed on the slopes of Mount Amsiyun³⁶.

Perhaps what deserves particular attention in this context is the emergence of coastal cities as political capitals among Muslim rulers, after

having long avoided making the coast their seat of power—only doing so once they had gained sufficient experience in maritime affairs. Following the defeat of Sabiba in 457 AH / 1065 AD³⁷, the social structures of Ifriqiya and the Central Maghreb underwent significant transformation. It was no longer possible for al-Qal'a to remain at the center of a nomadic society incapable of assimilating state authority, nor was the Hammadid government itself able to effectively control its dependent regions³⁸.

As a result, the balance between urban settlement and nomadism, and between the interior and the coast, was disrupted. This led the Hammadids to contemplate the establishment of a new coastal capital, ultimately choosing Bejaia, then a small maritime village. Consequently, coastal regions began to attract urban development—particularly capital cities—transforming them into strategic shields through the construction of fortresses and ribats, and eventually into major centers of civilization³⁹.

With regard to the city of Tlemcen, shedding light on the true nature of the defensive strength of its location requires revisiting the meanings of some of the names by which it was known—most notably Agadir, which in the local vernacular denotes a solid rock, a rugged elevation, or a fortress. This designation reflects the city's elevated position, particularly from the northern side. In addition, mountains surround Tlemcen from the west and the south⁴⁰⁴¹, thereby enhancing its defensive capacity, as these natural features functioned as powerful natural fortifications protecting it from invaders.

Accordingly, there can be no doubt that the naturally fortified location of Tlemcen played a decisive role in shaping its history during the medieval period. Musa ibn Nusayr designated it as the administrative center of the province of the Central Maghreb, and Tariq ibn Ziyad adopted it as a secondary base. Subsequently, it became the capital of an emirate independent of the Umayyad state, under the leadership of Abu Qurra al-Maghili al-Tilimsani al-Ifrani, in 148 AH / 765 AD, and later independent from the Abbasid state in Baghdad, under Muhammad ibn Khazar al-Maghrāwi al-Zanāti, in 170 AH / 786 AD⁴².

The Idrisids succeeded in bringing Tlemcen under their influence beginning in 174 AH / 789 AD. The city was again selected for prominence during the Almoravid period in 473 AH / 1079 AD, and later during the

Almohad period in 588 AH / 1144 AD, when it received significant attention. Both dynasties reinforced its defenses extensively and constructed monumental buildings and palaces within it⁴³.

Tlemcen reached even greater prominence during the Zayyanid period (633–962 AH / 1233–1554 AD). Its rulers undertook the construction of multiple defensive walls surrounding the city, often built in successive layers at some distance from the outer limits. Whenever weaknesses were perceived in its defenses, an additional wall was added to reinforce the city's protection⁴⁴.

3.2. The Impact of Trade Routes on the Emergence and Development of the Cities of the Central Maghreb

It is clear that the selection of the sites of these cities was largely connected to their vital economic sphere and the opportunities it provided, particularly in relation to major trade routes, which enabled the city to meet its needs and export its products. Indeed, a city could not survive solely on its local functions; it had to establish connections with other cities⁴⁵. Such connectivity not only promoted urban development and expansion, but also stimulated commercial activity in its markets. In this regard, Abd al-Fattah Wahiba emphasizes:

“Where roads and routes converge, a city often emerges, concentrating transportation and communication activity; the importance of the city is directly linked to the intensity of this movement.”⁴⁶

The location of Tihert on the caravan trade routes connecting the East and Sudan was a significant factor in its selection by the Rustamids. The city lay between the Tell and the desert on one side, and the surrounding tribes on the other, which made it a market frequented by tribes and a meeting point for caravans linking desert oases with coastal ports⁴⁷. Tihert thus served as a link between desert trade and overseas commerce, along the route stretching from the East to the Far Maghreb and al-Andalus⁴⁸.

Similarly, Bejaia attained significant economic and commercial importance due to its strategic position both by land and sea. By land, it was a junction for trade caravans heading toward the Maghreb and the desert. By sea, its port connected with several harbors along the Maghrebian coastline, exchanging goods with ships from Syria, Europe, Alexandria, India, and China. Al-Nasir ibn 'Alnas recognized this importance, as Ibn al-Aṭir reports:

“When al-Nasir and the messenger arrived in Bejaia, he saw its harbor location... and immediately ordered construction and development.”⁴⁹

Thus, the construction of Bejaia responded to the specific conditions prevailing in the Central Maghreb following the Hilalian incursions, especially around the Beni Hammad fortress, making it necessary to rely on maritime trade to secure the state’s economic resources (Khalafat 2009, 181).

The importance of Tlemcen similarly derives from its strategic location at the intersection of two major trade routes in the Maghreb. The first route linked the East and West, passing through the Chelif Valley to Tlemcen and then to Fes. The second route connected North and South, passing through the desert to Sudan. This positioning made Tlemcen one of the most important cities of Islamic Maghreb and the largest commercial center during the medieval period, allowing it to control overland trade between the interior and the outside world. Al-Idrisi notes:

“The city of Tlemcen is the key to the Maghreb, a hub connecting the interior and exterior.”⁵⁰

In other words, Tlemcen functioned as a link between different parts of Islamic Maghreb and beyond, connecting Ifriqiya with the Maghreb and its western extensions, thereby enhancing its significance.

Moreover, Tlemcen benefited from vital routes connecting it to the coast, where its ports were in proximity to those of al-Andalus, such as the port of Henin opposite Almería. As Abu al-Fida describes:

“The river winds to its south and east, accommodating ships as it flows into the sea... It has many forts and watchtowers, the most famous being Henin, opposite Almería in al-Andalus.”⁵¹

This enabled Tlemcen to open its doors to European trade on one side and commerce with the Maghreb and the East on the other, thereby revitalizing trade and boosting its economy.

Conclusion

From the foregoing discussion, it can be concluded that most of the cities of the Central Maghreb responded to the criteria for selecting urban sites as outlined in the Islamic urban heritage. The environmental factor played a clear role in the emergence of important cities in the region and in the consolidation of political authority through urban centers such as Tihert, Ashir, M’sila, the Qala’a, Bejaia, and Tlemcen. The founders of these cities

benefited from favorable living conditions, with abundant water from rivers and springs, fertile land suitable for agriculture, which contributed to high agricultural production and diversity, the proliferation of orchards, and the raising of livestock.

The importance of naturally fortified locations also emerged in the cities of the Central Maghreb. They benefited from natural defenses provided by rivers and mountains in their vicinity, which served as protective barriers against enemies.

Moreover, the strategic placement along major trade routes highlighted the importance of location. These cities occupied expansive transit spaces along main pathways in the highlands, which stimulated internal trade, population growth, urban development, and economic prosperity. Their locations also made them meeting points for caravans coming from various regions, whether from Ifriqiya, the Far Maghreb, or the desert. This enabled them to control and monitor Saharan trade, generating substantial profits for their merchants. Consequently, these cities developed markets that facilitated the supply of essential goods, which in turn led to the expansion of the urban fabric and the establishment of new urban units. This reality is reflected in geographical and travel accounts that describe these cities.

References:

¹ Shihab al-Din Ahmad bin Muhammad Ibn al-Rabi', *Suluk al-Malik fi Tadbir al-Mamalik*, ed. Naji al-Tikriti (Beirut: Oueidat Publications, n.d.), pp. 136–137; Zakariya bin Muhammad al-Qazwini, *Athar al-Bilad wa-Akhbar al-Ibad* (Beirut: Dar Sader, n.d.), pp. 6–7; Abd al-Rahman Ibn Khaldun, *Kitab al-Ibar wa-Diwan al-Mubtada' wa-l-Khabar*, ed. Adil bin Saad, vols. 1, 6, 7 (Beirut: Dar al-Kotob al-Ilmiyah, 2016).

² Hamid Haddad, *Islamic Urban Constants between Ibn al-Rabi' and Ibn Khaldun*, *Kan Historical Journal* (2015), p. 135.

³ Shihab al-Din Ahmad bin Muhammad Ibn al-Rabi', *Suluk al-Malik fi Tadbir al-Mamalik*, ed. Naji al-Tikriti (Beirut: Oueidat Publications, n.d.), pp. 136–137

⁴ Abd al-Rahman Ibn Khaldun, *Kitab al-Ibar wa-Diwan al-Mubtada' wa-l-Khabar*, ed. Adil bin Saad, vols. 1, 6, 7 (Beirut: Dar al-Kotob al-Ilmiyah, 2016), p. 273.

- ⁵ Zakariya bin Muhammad al-Qazwini, *Athar al-Bilad wa-Akhbar al-Ibad* (Beirut: Dar Sader, n.d.), p. 7.
- ⁶ Abd al-Rahman Ibn Khaldun, *Kitab al-Ibar wa-Diwan al-Mubtada' wa-l-Khabar*, ed. Adil bin Saad, vols. 1, 6, 7 (Beirut: Dar al-Kotob al-Ilmiyah, 2016), p. 274.
- ⁷ Mohamed Stitou, *Authority, Jurists, and Society in the History of Morocco: Consensus and Conflict*, ed. Abdelaziz Ainouz, Abdelaziz Bel El Faïda, and Mohamed El Gharayeb (Rabat: Rabat Net Press, 2013).
- ⁸ Abd al-Karim Jawdat, *The Foreign Relations of the Rustamid State* (National Book Institution, 1984), p. 31; Fatima Mottehari, *The Rustamid City of Tihert: A Historical and Civilizational Study (2nd-3rd AH / 8th-9th AD)*, Master's thesis in the History of the Islamic Maghreb, Department of History and Archaeology, Faculty of Social Sciences, University of Tlemcen, (Tlemcen: University of Tlemcen, 2010), p. 64.
- ⁹ Issa Ben Dib et al., *Urban Centers and Cultural Hubs in Algeria during the Medieval Period* (Algiers: National Center for Studies and Research on the National Movement and the November 1st, 1954 Revolution, 2007), pp. 74-113.
- ¹⁰ Rachid Bourouiba, *The Hammadid State: Its History and Civilization* (Algiers: University Publications Office, 1977), p. 36; Saleh Baazig, *Bejaia in the Hafsid Era: An Economic and Social Study* (Tunis: Publications of the Faculty of Humanities and Social Sciences, 2006), p. 55.
- ¹¹ Abu Ubayd Allah bin Abd al-Aziz Al-Bakri, *Al-Masalik wa al-Mamalik, the Section on the Maghreb*, ed. Zainab al-Hakkari (Rabat: RABAT NET, 2012), p. 160.
- ¹² *Ibid.*, p. 82; Abu Abd Allah Muhammad bin Muhammad al-Balansi Al-Abdari, *Al-Rihla al-Maghribiyya - The Moroccan Journey* (Bouna: Bouna Publications for Research and Studies, 2007), p. 23.
- ¹³ Muhammad Abd al-Mun'im Al-Hamiri, *Al-Rawd al-Mi'tar fi Khabar al-Aqtar*, 1st & 2nd ed., ed. Ihsan Abbas (Beirut: Library of Lebanon, 1984).
- ¹⁴ Abd al-Rahman Ibn Khaldun, *Tarikh Ibn Khaldun: Kitab al-Ibar wa-Diwan al-Mubtada' wa-l-Khabar*, ed. Adil bin Saad, vols. 1, 6, 7 (Beirut: Dar al-Kotob al-Ilmiyah, 2016), p. 52; al-Sharif Abu Abd al-Muhammad ibn Muhammad Al-Idrissi, *Nuzhat al-Mushtaq fi Ikhtiraq al-Afaq*, vol. 1 (Cairo: Maktabat al-Thaqafa al-Diniyya, 2002), p. 534; Abu al-Hassan Ali Al-Jazna'i, *Jana Zahrat al-As fi Bina' Madinat Fas*, ed. Abdelouahab Benmansour (Rabat: The Royal Press, 1991), p. 6.
- ¹⁵ Abu al-Abbas Ahmad bin Wadih Al-Ya'qubi, *The Countries*, ed. Muhammad Amin Dannawi (Beirut: Dar al-Kotob al-Ilmiyah, 2002), p. 109.
- ¹⁶ Fatima Mottehari, *The Rustamid City of Tihert: A Historical and Civilizational Study (2nd-3rd AH / 8th-9th AD)*, Master's thesis in the History of the Islamic Maghreb, Department of History and Archaeology, Faculty of Social Sciences, University of Tlemcen (Tlemcen: University of Tlemcen, 2010), p. 193.
- ¹⁷ Abd al-Halim Owais, *The Banu Hammad State: A Remarkable Page in Algerian History*, 2 (Cairo: Dar Al-Sahwa for Publishing and Distribution, 1991), p. 103; Muhammad al-Sharif Sidi Moussa, *Intellectual Life in Béjaïa from the 7th to the Beginning of the 10th Hijri Century (13th-16th CE)*, Master's thesis in Islamic History (Algiers: Department of History, University of Algiers, 2001), p. 33.
- ¹⁸ al-Haj Abd Allah Ibn al-Sabah, *Ansab al-Akhbar wa Tazkirat al-Akhyar*, ed. Muhammad bin Sharifa (n.p.: ar Abi Raqraq for Printing and Publishing, 2008), p. 95.

- ¹⁹ Mohamed Stitou, *Authority, Jurists, and Society in the History of Morocco: Consensus and Conflict*, ed. Abdelaziz Ainouz, Abdelaziz Bel El Faïda, and Mohamed El Gharayeb (Rabat: Rabat Net Press, 2013), p. 607.
- ²⁰ Abd al-Rahman Ibn Khaldun, *Tarikh Ibn Khaldun: Kitab al-Ibar wa-Diwan al-Mubtada' wa-l-Khabar*, ed. Adil bin Saad, vols. 1, 6, 7 (Beirut: Dar al-Kotob al-Ilmiyah, 2016), p. 274.
- ²¹ Fatima Mottehari, *The Rustamid City of Tihert: A Historical and Civilizational Study (2nd–3rd AH / 8th–9th AD)*, Master's thesis in the History of the Islamic Maghreb, Department of History and Archaeology, Faculty of Social Sciences, University of Tlemcen (Tlemcen: University of Tlemcen, 2010), p. 194.
- ²² Mokhtar Hassani, *The Medieval History of Algeria*, vol. 1 (Ain Mlila: Dar Al-Huda, 2012), p. 26.
- ²³ al-Hassan bin Muhammad al-Fasi [Leo Africanus], *Description of Africa*, ed. Mohamed Hajji and Mohamed Lakhdar, vol. 2 (Beirut: Dar al-Gharb al-Islami, 1983), p. 83.
- ²⁴ Abu al-Abbas Ahmad Al-Moukri, *Nafh al-Tib min Ghushn al-Andalus al-Ratib*, ed. Ihsan Abbas, vol. 9 (Beirut: Dar Sader, 1968), p. 341.
- ²⁵ Ibn Sa'id Abu al-Hassan Ali bin Musa al-Maghribi, *The Book of Geography*, ed. Ismail al-Arabi (Algiers: Office des Publications Universitaires - OPU, 1982), p. 49.
- ²⁶ Muhammad al-Sharif Sidi Moussa, *Intellectual Life in Béjaïa from the 7th to the Beginning of the 10th Hijri Century (13th–16th CE)*, Master's thesis in Islamic History (Algiers: Department of History, University of Algiers, 2001), p. 33.
- ²⁷ al-Sharif Abu Abd al-Muhammad ibn Muhammad Al-Idrissi, *Nuzhat al-Mushtaq fi Ikhtiraq al-Afaq*, vol. 1 (Cairo: Maktabat al-Thaqafa al-Diniyya, 2002), p. 61.
- ²⁸ Abd al-Rahman Ibn Khaldun, *Tarikh Ibn Khaldun: Kitab al-Ibar wa-Diwan al-Mubtada' wa-l-Khabar*, ed. Adil bin Saad, vols. 1, 6, 7 (Beirut: Dar al-Kotob al-Ilmiyah, 2016), p. 275.
- ²⁹ Abd al-Karim Jawdat, *The Foreign Relations of the Rustamid State* (National Book Institution, 1984), p. 31.
- ³⁰ al-Sharif Abu Abd al-Muhammad ibn Muhammad Al-Idrissi, *Nuzhat al-Mushtaq fi Ikhtiraq al-Afaq*, vol. 1 (Cairo: Maktabat al-Thaqafa al-Diniyya, 2002), p. 265; Abd al-Rahman Ibn Khaldun, *Tarikh Ibn Khaldun: Kitab al-Ibar wa-Diwan al-Mubtada' wa-l-Khabar*, ed. Adil bin Saad, vols. 1, 6, 7 (Beirut: Dar al-Kotob al-Ilmiyah, 2016), pp. 21–187.
- ³¹ *Ibid.*, p. 21
- ³² 'Izz al-Din Abu al-Hassan Ibn al-Aṭir, *The Complete History*, vol. 10 (Beirut: Dar Beirut for Printing and Publishing, 1982), pp. 46–47; Abd al-Rahman Ibn Khaldun, *Tarikh Ibn Khaldun: Kitab al-Ibar wa-Diwan al-Mubtada' wa-l-Khabar*, ed. Adil bin Saad, vols. 1, 6, 7 (Beirut: Dar al-Kotob al-Ilmiyah, 2016), p. 205; Saleh Baazig, *Bejaïa in the Hafsid Era: An Economic and Social Study* (Tunis: Publications of the Faculty of Humanities and Social Sciences, 2006), p. 55.
- ³³ Abu Abd Allah Muhammad bin Muhammad al-Balansi Al-Abdari, *Al-Rihla al-Maghribiyya - The Moroccan Journey* (Bouna: Bouna Publications for Research and Studies, 2007), p. 49.
- ³⁴ Saleh Baazig, *Bejaïa in the Hafsid Era: An Economic and Social Study* (Tunis: Publications of the Faculty of Humanities and Social Sciences, 2006), p. 55; Miftah Khalafat, "Béjaïa as a Model of the Developed City," *Journal of the Faculty of Islamic Sciences – Al-Sirat*, no. 18 (2009), p. 180.
- ³⁵ al-Sharif Abu Abd al-Muhammad ibn Muhammad Al-Idrissi, *Nuzhat al-Mushtaq fi Ikhtiraq al-Afaq*, vol. 1 (Cairo: Maktabat al-Thaqafa al-Diniyya, 2002), p. 265; Saleh Baazig, *Bejaïa in the Hafsid Era: An Economic and Social Study* (Tunis: Publications of the Faculty of Humanities and Social Sciences, 2006), p. 55.

- ³⁶ Miftah Khalafat, "Béjaïa as a Model of the Developed City," *Journal of the Faculty of Islamic Sciences – Al-Sirat*, no. 18 (2009), p. 180.
- ³⁷ al-Sharif Abu Abd al-Muhammad ibn Muhammad Al-Idrissi, *Nuzhat al-Mushtaq fi Ikhtiraq al-Afaq*, vol. 1 (Cairo: Maktabat al-Thaqafa al-Diniyya, 2002), p. 265; Rabah Bounar, *The Arab Maghreb: Its History and Culture*, 2 (Algiers: National Publishing and Distribution Company, 1981), p. 199.
- ³⁸ Saleh Baazig, *Bejaia in the Hafsid Era: An Economic and Social Study* (Tunis: Publications of the Faculty of Humanities and Social Sciences, 2006), pp. 49–50.
- ³⁹ *Ibid.*, p. 43.
- ⁴⁰ This mountain range takes on a crescent shape, extending eastward toward the Seven Sheikhs Mountains and westward toward the Trara Mountain Range. Among its peaks is Mount Felaoucen, which is considered one of its largest mountains, reaching an elevation of 1,230 meters.
- ⁴¹ Abdelaziz Filali, *Tlemcen in the Zayyanid Era*, vol. 1 (Algiers: Moufamek for Publishing and Distribution, 2002), p. 87.
- ⁴² Abd al-Rahman Ibn Khaldun, *Tarikh Ibn Khaldun: Kitab al-Ibar wa-Diwan al-Mubtada' wa-l-Khabar*, ed. Adil bin Saad, vols. 1, 6, 7 (Beirut: Dar al-Kotob al-Ilmiyyah, 2016), p. 14; Lakhdar Abdelli, *The Political History of the Kingdom of Tlemcen during the Zayyanid Dynasty* (Oran: University Publications Office, 2007), pp. 19–21; Khaled Belarbi, *Tlemcen from the Islamic Conquest to the Establishment of the Zayyanid State (55 AH–633 AH / 675–1235 CE)*, 1st ed. (Constantine: Dar al-Alma'iyah for Publishing and Distribution, 2011), pp. 64–65.
- ⁴³ Abd al-Rahman Ibn Khaldun, *Tarikh Ibn Khaldun: Kitab al-Ibar wa-Diwan al-Mubtada' wa-l-Khabar*, ed. Adil bin Saad, vols. 1, 6, 7 (Beirut: Dar al-Kotob al-Ilmiyyah, 2016), p. 65.
- ⁴⁴ Lakhdar Abdelli, *The Political History of the Kingdom of Tlemcen during the Zayyanid Dynasty* (Oran: University Publications Office, 2007), pp. 60.
- ⁴⁵ Abd al-Haq Al-Tahiri, "The Islamic City: Functions and Organizations," *Kan Historical Journal*, no. 28 (2015), p. 157.
- ⁴⁶ Abd al-Fattah Muhammad Wahiba, *In Urban Geography* (Beirut: Dar al-Nahda al-Arabiya, 1980), p. 79.
- ⁴⁷ Fatima Mottehari, *The Rustumid City of Tihert: A Historical and Civilizational Study (2nd–3rd AH / 8th–9th AD)*, Master's thesis in the History of the Islamic Maghreb, Department of History and Archaeology, Faculty of Social Sciences, University of Tlemcen (Tlemcen: University of Tlemcen, 2010), p. 194.
- ⁴⁸ Abd al-Karim Jawdat, *The Foreign Relations of the Rustamid State* (National Book Institution, 1984), p. 31.
- ⁴⁹ 'Izz al-Din Abu al-Hassan Ibn al-Aṭir, *The Complete History*, vol. 10 (Beirut: Dar Beirut for Printing and Publishing, 1982), pp. 47–48.
- ⁵⁰ al-Sharif Abu Abd al-Muhammad ibn Muhammad Al-Idrissi, *Nuzhat al-Mushtaq fi Ikhtiraq al-Afaq*, vol. 1 (Cairo: Maktabat al-Thaqafa al-Diniyya, 2002), p. 250.
- ⁵¹ Imad al-Din Ismail bin Muhammad Abu al-Fida, *Taqwim al-Buldan*, ed. Reinaud and MacGuckin Slane Baron (Paris: Imprimerie Royale, 1840), p. 136.