

The Traditional Local Dwelling in AïnDefla: The Case of the ZeddineRegion

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Abstract:

The traditional houses in AïnDefla, especially in the Zeddine area, are more than just buildings, they are a reflection of the region's rich cultural and historical identity. These homes tell stories from different historical eras and showcase a range of architectural styles, all built using locally sourced materials. Unfortunately, like many heritage-rich regions in Algeria, AïnDefla hasn't received enough scholarly attention to fully explore and explain the depth of its architectural legacy. From this standpoint the traditional homes of Zeddine, which stand out for their unique and varied residential features. A closer look at these houses reveals that their layout is influenced by several key factors, such as the local climate and the natural topography. What's most striking about these homes is their simplicity and sense of balance. They are modest, functional, and completely free from excessive decoration or luxury, beautiful in their practicality and deeply connected to their surroundings.

Keywords: Traditional housing; Architectural heritage; Vernacular architecture; Zeddine region, AïnDefla

Introduction:

Traditional homes are more than just places to live, they are a reflection of local customs, traditions, and the surrounding environment. They carry the history and culture of a people, forming an essential part of national identity. Even with the rise of modern technology and urban development, these homes hold undeniable historical and cultural significance. They help preserve architectural heritage and pass down traditional craftsmanship and knowledge from one generation to the next. Beyond providing shelter, traditional dwellings represent a way of life that deeply connects people to their land and community. Their design varies across regions, adapting to different climates, landscapes, and social structures. These homes are a testament to human resilience and ingenuity, showing how people have skillfully shaped their living spaces to meet their needs while staying in harmony with their environment.

Traditional homes have evolved over time, adapting to changes in construction methods, design, and materials. In the past, people built their houses using whatever was available in their environment, clay, stone, wood, creating shelters that met their needs and suited their surroundings. In farming communities, homes were designed to support daily activities like agriculture and livestock care. As societies grew and cities expanded, traditional housing styles started to blend with different cultural influences. Each region developed its own unique architectural character, reflecting both its heritage and the changes brought by modernization.

The natural environment has always been a key factor in shaping traditional homes. Everything from the climate and terrain to the available building materials influenced how these homes were designed, ensuring they were well-suited to their surroundings and the needs of the people who lived in them.

While traditional homes vary greatly from one region to another, they share several common features. Many were designed with multiple rooms arranged to make the best use of space. Ventilation and natural lighting were essential aspects of traditional architecture, some homes had small windows to shield against strong winds, while others embraced a communal layout, with different sections housing extended families or entire clans. Each room served a specific purpose, whether for sleeping, cooking, or welcoming guests. This raises an important question:

What are the key architectural features and components of traditional local dwellings in the Zeddine area, AinDefla?

Definition of Dwelling:

The word "residence" (or "dwelling") is derived from the verb *sakan* (سكن), which means stillness or the absence of movement. *Sakana* (سكنه) means "to become still" when motion ceases. *Askana* (أسكنه) means "he caused it to become still," and *sakkana* (سكنه) means "another made it still." Everything that calms down is said to have become *sakin*, such as the wind, heat, cold, and similar phenomena (Ibn Manzur, 1993, p. 213). It usually consists of walls and a roof, yet it remains far removed from its true and comprehensive meaning (Havel, 1968, p. 22).

The concept of a house that individuals genuinely desire transcends mere shelter; it encompasses an environment influenced by societal support and services, facilitating comfort and stability for its inhabitants. It is a place where an individual can flourish, striving for an enhanced quality of life in all dimensions.

A house is acknowledged as a crucial component that links the individual to their family and social milieu. It cultivates a sense of humanity and belonging (Sabour, 1959, p. 5).

From another viewpoint, a home is regarded as a sanctuary that offers solace and fulfills fundamental purposes. It signifies a structured mode of existence within the individual's surrounding environment. A house is fundamentally a daily environment where diverse familial interactions are cultivated and maintained (Rida, 1985, p. 57).

The conventional rural home epitomizes the relationship between humans and their surroundings. A home is characterized as "a shelter where fundamental individual and familial functions are accomplished." It also represents a construction that embodies the culture and social identity of local communities. Erected with indigenous materials and methods appropriate to the geographic and climatic conditions, such a dwelling transcends mere habitation; it is an essential component that mirrors the lifestyle, beliefs, and daily practices of individuals within their communities.

The conventional rural home is defined by its interior arrangement, which mirrors social and familial duties. It was formerly a fundamental aspect of a family's or tribe's identity, embodying profound significance regarding interpersonal interactions, individual status, and the tasks designated to each member.

Types of Dwellings:

Individual Detached Home: This style of home is entirely autonomous from the adjacent properties. It is detached from residential areas and includes a private entrance. It may be intended for an individual, providing a significant level of privacy and liberty.

Individual Home within a Community: This home is autonomous from other residences and possesses a separate entrance road. It is often designed for a single household and is commonly situated on the periphery of the hamlet. Although it provides seclusion, it remains tenuously linked to the larger community.

Collective Home: A collective house integrates the characteristics of private residences within a communal framework. It comprises several housing units interconnected by shared walls or roofs. These apartments may also utilize shared access roads or a common primary entrance. This dwelling form is generally intended for a single extended family with the same surname and is frequently located in villages, rural areas, and desert regions (Dani, 2022, p. 33).

Types of Traditional Dwellings:

Traditional dwellings vary according to climate and environment, and can be further divided into the following types:

Traditional Desert Dwelling:

This style of habitation is utilized in arid regions, generally referred to as the desert city or desert castle (qasr). The design is tailored to withstand severe weather conditions, including elevated daytime heat and significant nocturnal cold. The desert habitation is distinguished by the utilization of indigenous resources like clay, stone, or wood, and is recognized for its superior thermal insulation.

Traditional Mountain Dwelling:

The mountain house is located in elevated and hilly areas, with its design tailored to accommodate rough terrains. It encompasses basic huts constructed from wood, stone, or clay, as well as more intricate residences including slanted roofs engineered to endure snow and rain, and small windows to conserve heat. Mountain residences are generally constructed to withstand intense winds and severe cold. This form of house is characterized by the utilization of natural resources like rocks and wood.

Traditional Rural Dwelling:

The rural residence is a fundamental component of conventional living in villages and agricultural regions. It is constructed utilizing locally sourced natural materials, like stone, clay, adobe bricks, or timber. These residences are frequently designed in a utilitarian manner, featuring expansive areas to fulfill agricultural requirements. Rural residences commonly exhibit inclined roofs and are encircled by gardens or agricultural land, illustrating the profound relationship between inhabitants and the agrarian landscape.

Traditional Coastal Dwelling:

Traditional coastal residences are located in coastal cities like Tenes in the Chlef province and Dellys in the Boumerdes province. These residences are engineered to optimize comfort and accommodate the unique climatic

conditions of coastal regions, including high humidity and heightened summer temperatures. Indigenous materials such as stone, clay, wood, and brick are employed in building, ensuring a balance of thermal insulation, material efficiency, and adequate ventilation. Due to the humid and warm coastal atmosphere, windows and doors are frequently situated on opposing sides of the home to facilitate natural ventilation. The roofs are generally inclined to facilitate the rapid drainage of rainwater, so safeguarding the homes from water accumulation. Furthermore, white or light-hued paint is frequently applied to exterior walls and roofs, as these shades reflect sunshine and diminish heat absorption, thereby reducing internal temperatures. These residences frequently feature an inside courtyard embellished with indigenous flora that flourishes in humid conditions, fostering a shady and pleasant ambiance within the dwelling.

Components of the Dwelling:

The conventional residence is distinguished by certain architectural features that fulfill both practical and aesthetic functions, enhancing the cohesion of the community's social and climatic context:

Doors and Windows:

Doors in traditional dwellings are often heavy and sturdy, providing protection against invasions or harsh weather conditions. They are typically made of wood. Windows are openings designed to allow good ventilation during the summer while preventing the infiltration of cold air.

Roof and Interior Layout:

The interior configuration differs among residences based on their dimensions and the characteristics of the community. In smaller communities, such as villages, residences generally include open spaces designated for communal activities. In more advanced communities, like as coastal cities, residences typically feature many rooms designated for various functions, bedrooms, kitchens, guest rooms, and a central open courtyard. Furthermore, there is typically a specific area for animals and a restroom facility.

Roof:

In hot regions, roofs are typically flat or low to make the dwelling more resistant to heat. In contrast, in cold regions, roofs are often sloped to help drain snow and water efficiently (Aqab, 1992).

Introduction to the Region: Geographical and Astronomical Location:

The city of AinDefla is located between latitudes 36°–37° North and longitudes -1°–2° West. It lies about 145 km southwest of the capital, Algiers, and serves as the capital of the province (wilaya). It was established as a provincial capital following the administrative division of 1984; prior to that, it was part of the Chlef province. AinDefla is bordered by Tipaza to the north, Tissemsilt to the south, Médéa to the southeast, Blida to the east, and Chlef to the west. It covers an area of 4,260 km², with a population of approximately 766,013 as of 2016.

Mountains comprise around seventy-five percent of its entire area, encompassing the extensions of Mount Zaccar and the Dahra Mountains to the north, as well as the Ouarsenis Mountains to the south. The region features abundant flora, especially in the southern section extending from the Djendel district to El Attaf in the west. Despite AinDefla's proximity to the sea on its northern flank, its climate is akin to that of a continental region owing to its configuration and geographical position. The city is located in a confined basin, with an entrance to the west, resulting in extremely cold winters and exceedingly scorching summers. The Chlef plain traverses the middle, with the Chlef River serving as the primary source of the province's fertile terrain (Directorate of Culture, 2008).

Historical Overview of AinDefla in Ancient Times:

The province of AinDefla reflects a profound and ancient past. Archaeological digs led by researcher Bloch revealed many flint stone implements in proximity to the springs of OuedBoutakton. The findings encompass artifacts from the Middle Stone Age linked to the Aterian industry, alongside those categorized within the Capsian industry of the Late Stone Age. The classes were determined by production methods and the materials employed. The architects of these prehistoric communities are thought to have resided in caves and tents, generally establishing themselves in valleys. This settlement pattern is due to the region's plentiful water supplies and lush flora, creating a conducive environment for human existence.

The Phoenicians were adept mariners who founded many trade centers, stations, agencies, and banks with economic roles. These subsequently evolved into settlements for Phoenician communities. A prominent instance is the city of Millyana, which began as a Phoenician settlement, illustrating the extensive Phoenician expansion along the Mediterranean coast, especially in regions such as Iol (modern-day Cherchell), which functioned as a crucial economic center and strategic stronghold for safeguarding Berber kingdoms. Numerous inscriptions have been uncovered in the area, including a memorial stele depicting a humanoid figure said to symbolize the goddess Tanit. Further inscriptions and monuments from the Phoenician period have been discovered in AïnDefla province, thereby affirming the region's historical significance during this epoch (Bloch, 1975-1976, p. 54).

During antiquity, namely in the Roman era, the province of AïnDefla housed numerous archaeological cities from that period. The city of Millyana is among the most significant Roman settlements founded on the upper Chlef plain. The initial center established by the Romans was founded by Emperor Octavius, known as Augustus, between 27 BCE and 25 BCE. The Roman author Pliny stated that the city was designated COLONIA AUGUSTE, indicating its status as a Roman colony. The name "Millyana" originates from Libyco-Berber and is thought to signify "Mountain of the god Abadir," pertaining to Mount Zaccar. Archaeological findings in the region underscore the city's importance during the Roman era. These comprise architectural remnants, sculpted figures, and sepulchral structures, all of which attest to the city's urban and cultural evolution during Roman dominion.

The city of HammamRigha, or AquaeCalidae, was a Roman colony founded in 44 BCE. It reached the peak of its development and prosperity during the reign of Emperor Tiberius, between the years 14 CE and 37 CE.

AbidumNovum, situated in the northeastern region of AïnDefla municipality, approximately 1.5 kilometers along the route to Arib, is a historically significant city of strategic importance. This significance secured its important position across many historical epochs. The city was founded in the early first century AD, specifically between 42 and 43 AD, by Emperor Claudius, who ruled from 41 to 54 AD. He established former Roman troops in that region to enhance the military infrastructure of the Chelif Plain while simultaneously cultivating the fertile plains of the Chelif Valley. The inhabitants of AbidumNovum were affiliated with the

Quirinatribe (Quirina). Later on, this Roman city was also used by Muslims and came to be known as al-Khadra or Aïn al-Khadra (Bloch, p. 122).

TIGAVA MUNICIPALUM (now El Abadia) signifies "municipality" and was founded in the 1st century AD. TigavaCastra, currently known as El Attaf, signifying "fortress," was linked to the township via a bridge. This fortification was constructed in 167 AD at the behest of Governor Sextus Pius Pedus to surveil the expansive plains and oversee the activities of both local population and insurrectionist tribes. There is contention on the precise date of the city's establishment, and insufficient emphasis has been placed on revealing the authentic history of this ancient site, which extends over 30 kilometers from the municipality of El Amra to its present locations in El Attaf and El Abadia.

Throughout the Islamic period, the region experienced multiple historical phases during the medieval era, particularly following the Fatimid migration to Egypt, which resulted in Zirid governance, then by the Almoravid and Almohad epochs, and ultimately the Ottoman period.

In the early 16th century, brothers Aruj and Khayr al-Din Barbarossa arrived in Algeria. Following the capture of Algiers, Aruj sought to expand his dominion westward. Between 1516 and 1517, he occupied Miliana and Tenes, despite opposition from the local ruler, Hamid al-'Abd. During the Ottoman era, Miliana was incorporated into the Beylik of the West, with its capital in Mazouna. Subsequently, the administrative framework of the Regency was restructured, placing Miliana directly under the jurisdiction of the Dar al-Sultan, overseen by the Pasha. In the 17th century, Miliana fell under the governance of Commander Othman al-Kurdi, the progenitor of Mohammed al-Kabir, Bey of Oran. His son, Ibrahim al-Kurdi, replaced him. With the decline of Ottoman authority in North Africa, Miliana came under the dominion of Ali bin Sulayman, a relative of the Sultan of Morocco, whose influence reached from Morocco to Miliana (National Agency for the Protection of Historical Monuments and Archaeological Sites, 2003).

The conventional rural residence in North Africa experienced a developmental trajectory that mirrored the region's civilizational advancement during antiquity. This evolution was significantly shaped by the encounters, interactions, and amalgamations of diverse civilizations that impacted the area over the centuries (Chentiti, 2001). Eventually, humans started engaging with nature to acclimatize to their surroundings. Consequently, it became imperative to design residences that could facilitate

the optimal release of heat, enabling the maintenance of social equilibrium and the attainment of a healthy lifestyle (Deffontaine, 1972).

Consequently, the architecture of ancient rural residences exhibited diverse designs and layouts across different regions and civilizations. This variation is ascribed to climatic circumstances, geographical considerations, and topographical elements, all of which significantly influence the type of placement for these houses. The architectural planning was meticulously tailored to address these environmental and contextual requirements. The conventional rural residence in the AinDefla province is situated in a strategically significant location, often constructed on higher terrain, either on a high plateau or at the peak of a mountain. This location serves mostly defensive functions, enabling residents to oversee their agricultural territories and offering protection against natural calamities like floods.

The building adhered to a defined planning philosophy, including several essential characteristics of local social life, including customs and traditions. The residences were frequently allocated in elevated regions according to familial associations and kinship connections, leading to a dispersed arrangement, one of the region's defining characteristics. Furthermore, the residences were generally oriented to the east, facilitating the ingress of sunlight into the interiors.

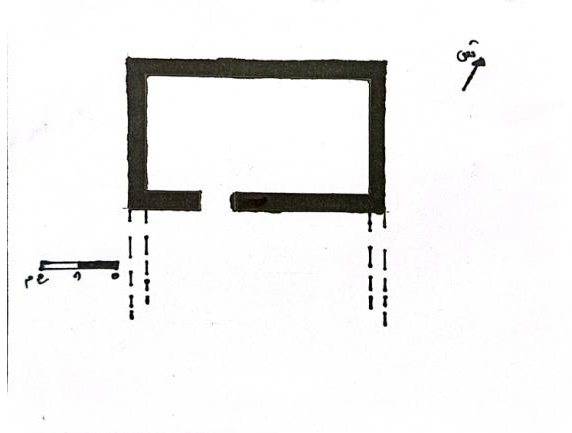
The conventional rural dwellings in the southeastern area of AinDefla generally possess an entrance that opens into a central courtyard referred to locally as al-Mrah. This space functions as a communal place where multiple family members can inhabit, with their rooms organized around the courtyard. Each residence comprises several rooms designated for distinct functions, with the quantity of rooms differing among dwellings based on the available construction area. The region is recognized for its scarce arable land, particularly in hilly places, compelling residents to confront the terrain and develop despite the challenges of acquiring building supplies. The rooms have wall apertures for ventilation. The house features a distinct cooking space referred to as al-Kanoun, typically situated in one corner of the dwelling and often directly opposite the room's entrance. The animals are housed in an area separate from the main living quarters, however they have direct access from the central courtyard via a designated door. A secondary door permits the animals to completely escape the residence. Ultimately, in the most remote section of the courtyard, there exists an area designated for the toilet.

Study of Models of Traditional Dwellings:

First Model:

This residence is positioned in the town of Zeddine, set on an elevated plateau and distinguished by its minimalist architecture. The primary façade is oriented towards the southeast. The primary entrance door, with a width of 0.9 meters and a height of 1.80 meters, leads into a rectangular space measuring 3.5 meters in width and 4.5 meters in length. The room's walls have several recesses for the storage of household things, as well as ventilation apertures. In one corner, there exists a chimney, locally referred to as al-Kanoun (traditional cooking place). This room is distinguished by its dual function as both a living space and a bedroom for an individual. This sort of dwelling is generally designed for an individual or a small family, often individuals who have been compelled to vacate the family home or have choose to relocate voluntarily. It is typically constructed on a minor elevation or plateau adjacent to the family dwelling or settlement. The residence features a courtyard, however its structure is not distinctly delineated.

Plan of the First Model (by the researcher)



Images Illustrating the General Form of the First Model (by the Researcher)



Second Model:

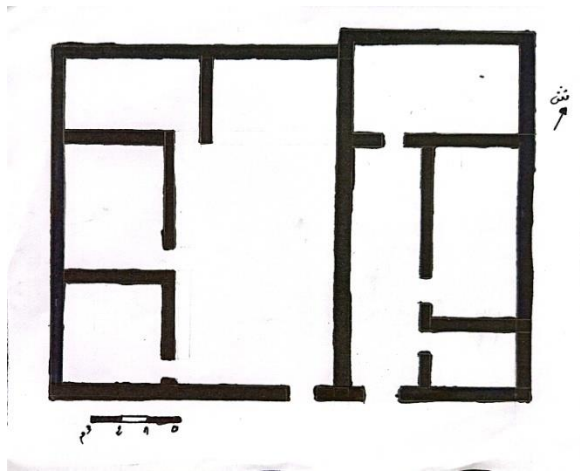
The second model of the conventional rural residence is entirely distinct from the first. The second model is an expansive residence intended for one or two families. It comprises two portions and is positioned around 1 kilometer from the initial model, sitting atop a plateau adjacent to the local road. This residence is rectangular, minimalist in style, and its primary façade orients southeast. The primary entryway to the residence is 0.9 meters in width and 1.80 meters in height. This culminates in a rectangular open courtyard, referred to locally as al-Mrah, measuring 11.4 meters in length and 5.4 meters in breadth, which functions as the nucleus of the residence. The adjacent residential apartments are arranged around this patio. Upon entering the house, three doors are placed in a row on the left side. The initial entry, with a width of 0.8 meters and a height of 1.6 meters, opens into a compact square chamber, evidently utilized for culinary purposes, referred to locally as al-Kanoun. The secondary door on the same side

accesses a rectangular room identified as the sleeping space. The third chamber is rectangular and designated for animal housing.

The second section features an entrance of 0.8 meters in width and 1.6 meters in height, providing direct access to the central courtyard or mrah. Adjacent to the entrance of the home, there exists a doorway that leads to a rectangular room measuring 3 meters in length and 2.5 meters in breadth. This compact space was allocated as a toilet, often known as the kaneef. The second doorway on the same side opens into a rectangular room measuring 4.5 meters by 2.5 meters, designated as a bedroom. The third entryway, directly opposite the main entrance, opens onto a rectangular room measuring 4.5 meters in length and 3 meters in breadth, presumably utilised as a guest room.

This style is characterised by its expansive form intended for a single family, featuring a generous area that overlooks private agricultural areas. A partition wall between the first and second parts was erected thereafter, quite recently. Furthermore, the primary distinction between the first and second models is in the construction material, which differs across regions and plateaus. In all types, the principal construction material is stone, obtained from adjacent riverbeds or quarries. Furthermore, clay, referred to as toub, is utilised. Regarding roofing, there are two categories: the first entails the use of tiles (qarmid), while the second involves roofing the structure with tree branches.

Plan of the Second Model (by the researcher)



Images illustrating the general layout of the second model (by the researcher)



Conclusion:

Following our trips to several dispersed settlements in the AinDefla region, particularly on the periphery of the Zeddine area, and upon scrutinising the remnants of the extant old dwellings, the subsequent observations were recorded:

- Before building a house, meticulous attention was devoted to the selection of the construction site, which needed to fulfil specific criteria, including safety, access to fresh air, and sunlight exposure. It was essential to honour the customary practices related to the construction of the local traditional dwelling.
- All the dwellings exhibit a uniform plan and utilise local building materials, including clay and stone supplied from the region. Furthermore, the architectural elements present in one residence are replicated in other residences.
- The houses are built in a simple, humble style that mirrors the modest lifestyle of the local people. Over time, the residents found clever ways to

adapt to their natural surroundings, especially in how they designed their roofs. One notable technique involved using three wooden beams for support, with the central one known as the "middle beam", a practical solution that blended tradition with ingenuity.

As for wall coating, it typically consists of a thick layer of clay, topped with a mixture of plaster, straw, and cow dung. Despite the arduous and tactically complex terrain of the Zeddine region, attributable to its topography and severe climate, the indigenous populace has successfully devised optimal strategies to adapt to these challenges. Moreover, employing their fundamental but profound expertise and meticulous construction methods, they constructed homes on mountain summits that satisfied both their requirements and those of their families.

The house is designed to face inward, creating a private space that allows residents to comfortably live their family life away from outside view. This approach respects and reflects the religious and social values of the local community, and the broader Islamic culture. therefore, With these distinctive features, the traditional rural home has managed to embody the community's values and spiritual identity. Its unified layout and elements reflect a shared cultural heritage and way of life. The house itself tells the story of its residents, it's thoughtfully divided into two parts: one that offers privacy and comfort for the family, and another that shelters animals, which play a central role in supporting the family's livelihood.

References

- Aqab. (1992). Introduction to the Arab dwelling in the city of Algiers. *10th Conference of Arab Archaeologists*.
- Bloch. (1975-1976). *Étude sur le nom de Miliana*. Algiers.
- Bloch. (s.d.). *digging campaign in the Cheliff Valley: The Tigava Castra*.
- Chentiti. (2001). The evolution of rural dwellings in North Africa. *Journal of the College of Human Sciences*, 13.
- Dani. (2022). *Ownership of common parts and their management methods in urban communities (PhD dissertation)*. Mostaganem: University of Mostaganem.

Deffontaine. (1972). *L'homme et sa maison*. Géographie humaine, Collimard.

Directorate of Culture. (2008). Aïn Defla.

Havel. (1968). *Habitat et logement*. Presses Universitaires de France.

Ibn Manzur. (1993). *Lisan al-Arab*. Foundation of Arab History.

National Agency for the Protection of Historical Monuments and Archaeological Sites. (2003). *Report of the National Agency for the Protection of Historical Monuments and Archaeological Sites*.

Rida. (1985). *Mu'jam matn al-lugha al-'Arabiyya*. Dar Maktabat al-Hayat.

Sabour. (1959). *Knowledge and power in Arab society*. Beirut Library.