The Ighrem and the Tighremt of the Ait Bouguemez valley: a lost Centrality in the daily life of the mountain inhabitants of the High Moroccan Atlas

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Abstract

The question of the intimate relationship that exists between the inhabitant and his inhabitants in the valley of Ait Bouguemez, located in the Moroccan high Atlas, is central in the survival of the inhabitants of this mountainous region.

Our team, composed of heritage architects, conducted an immersive workshop in the valley for the identification, survey, knowledge and production of restoration project and safeguard granaries, a unique heritage in Morocco. Our article is a synthesis of moments of reflection, observations, conclusions and results that we have conducted in the field.

The climatic and geographical conditions being very difficult, the availability of cultivable land being scarce, the inhabitant of Aits Bouguemaz developed a spatial intelligence, which in order to adapt with the places whose topography is very uneven, produced a habitat with singular architecture. Thus two zones stand out: Traditional areas of irrigated farming with a community organization and zones of dry culture marked by a dispersion or even an isolation.

This physical reality of the valley has generated an original architecture, which is declined in three architectural sets of inhabited: Ighrem ¹, Tighremt² and Tigmi³, appellations of Berber origin and that we will discuss in our article.

In recent decades, the arrival of roads and electricity or migration to cities has had a direct impact on the social changes of the valley's inhabitants. The results we observed in the field are the changes in the spatial organization of the housing projects. From community or family home has become isolated and single family. Consequently, these large dwellings with their singular architecture have been emptied of their inhabitants, often abandoned, or sometimes, for some, have known a destiny of their different function.

In our intention and to illustrate this mutation in the practice of the space built by the inhabitants we chose two sites: the Tighrem of Ait Louakhoumi, which became a space of partial storage and thus in course of total abandonment. And, the attic of Sidi Moussa, which has managed its transformation from a communal collective attic into a sanctuary of the valley, and a must for tourists in the region.

Keywords: Ighrem, Tighremt, Ait Bouguemez, vernacular architecture, centrality, decentralization

1. The valley of Ait Bouguemez, or the people of the middle: a way of living the valley

The valley of Ait Bouguemez, located in the central High Atlas of Morocco, at an altitude of 2200m, is dominated by the Massif du M'goun culminating at 4068 m. Ait Bouguemmez is derived from the name Aït Bouammass - its inhabitants - which means in local Amzigh language, those of the middle or the people of the middle. This valley is also known as the Happy Valley or the Valley of Happy People. It is very rich in fertile land, the agricultural sector occupies an important place in the local economy.

The statement we make in this article develops around granaries or Igrems that hold an important place in the society of this valley.

Indeed, the physical and geographical reality of the site has generated a scholarly architecture that has held different features over time. These features have been maintained for some, such as storage and / or housing, or completely changed for others. The example of Sidi Moussa's ighrem, which has totally lost its original use, is edifying in this sense. It is located on top of a hill overlooking the valley and currently houses a small ethnographic museum, becoming a popular tourist destination in the valley.

The reality of the site has been that the mode of distribution of the population and habitat has been determined primarily by physical conditions and the availability of good land.

Two types of zones can thus be distinguished:

- Traditional irrigated areas in the Dir (piedmont) or high valleys, requiring community organization and settlement of the habitat near cultivated lands;
- Dry growing areas where the scarcity of good soils and their scattering call for dispersal and isolation of the habitat.

Other factors related to ethnic origin or security have led to this mode of distribution.

¹ Ighrem : citadel used as loft or dwelling (3 to 6 levels)

Tighremt: compact dwelling with 2 or 3 levels, most often in the form of a slender parallelepiped

Tigmi: dwelling of lesser importance, consisting of the addition or proliferation of adjoining rooms generally comprising levels or half-levels (1 to 3).

In this sense, the dispersed group is located in areas of recent sedentarization, as we observed at the entrance to the valley. It results either from the arrival of new populations in search of good land, or from the effect of increased safety and demographic pressure on arable land, or finally from the decline of pastoral activity and the sedentarisation of former pastoralists. transhumance. This habitat mode is set up according to the availability of arable land. The dwellings are scattered in space and generally located on the edge of the property, on the land least able to be cultivated. Often this grouping consists of the former douar exploded for social, land or convenience reasons (along a track for example).

The housing unit consists of one or more buildings grouped around a courtyard, the family of generally small size, because of the weakness of the resources that this type of exploitation provides.

As for the composite grouping, in our valley it is materialized by the village of Tabbant, but it contains nuclei of urban type and traditional type. It is located near the valley, in the center of a cluster of scattered douars and a weekly souk. The development of the latter as well as the implementation of public amenities of a commercial, socio-educational or administrative nature favors the development of a housing zone intended initially for State officials, then for traders and artisans, and finally to farmers who are attracted by the amenities of these facilities.

The shape of this agglomeration follows a linear pattern, along the access path to the center, the scattering of houses is well pronounced, and there are large gaps between habitat areas and in the fabric itself. -even.

The heart of our work, is located in this last grouping that we called compact. Unlike the previous type, this mode of grouping characterizes the regions of old peasantries. It essentially results from the existence of a community of interests between its inhabitants, based in particular on the collective use of cultivated or grazing lands, on the rights of water, on the control of a craft trade on the territory. tribal place, or on the common defense of the time when there was still insecurity (period called siba).

Located at the bottom of the valley, our site, adopts a linear structure, marrying the mountain and opening on the fields. The houses define a horizontal order, parallel to the contour lines, punctuated from time to time by a family Tighremt erected in height, sometimes limiting a horizontal span of houses.

This spatial configuration has generated constructions that we often find throughout the Atlas basin of Morocco and which comes in three constant forms including Ighrem, Tighremt and Tigmi.

2. Ighrem and Tighremt: a singular typology of habitat

The habitat of the high atlas and particularly the valley of Ait Bouguemez, has remained in its original form, thanks to its difficult access situation, which protected for a long time, somewhere, the contributions of the new modes of construction.

This situation has been maintained until the last decades, which explains the perpetuation of its habitats in the valley.

However, today the situation begins to change and therefore a transformation of this inhabitant and their uses is observable on the ground.

However, an architectural and spatial description of these forms of habitat is necessary to understand the mode of living of this population. Thus we have developed a chapter in this sense, setting up the spatial order as it has been and as it has become.





Figure 1. Shots of the valley, Souk Tabant, left in 1939, right in October 2018

3. Fortified habitat type Ighrem:

The Ighrem has the function and character of a fortress. It is used to shelter the crops in the case of the Ighrem collective use attic or men and animals in that of the Ighrem for residential use. The choice of the site responds to strategic concerns, the mountain side, in its steep part, or the top of a hill or steep slope, which offer the advantage of a position easy to defend, constitute the sites The most common.

The IGHREM, dwelling, which acts as a citadel and refuge for the whole douar, which it defends, is often located on the front line of the douar; while the attic IGHEREM is generally found in the upper part and behind the douar; in the entrenched position, it thus constitutes a last refuge for the inhabitants, in case of overflowing, during an aggression.

This type of construction generally consists of a single building block, with a square or rectangular plan, with a variable height of up to 16 m, and with several levels, sometimes up to six, the wall, with planes slightly fruity, and flanked by turrets in varying numbers: 4 for IGHREMS attics and sometimes more for others. Most often built of rammed earth or stone, but sometimes combining the two materials, reserving the stone to the basement and the last level, the most susceptible to rainwater attacks.



Figure 2. Photo of the hill sheltering the Ighrem of Sidi Moussa October 2018

The facades are pierced with openings in the form of loopholes or openings of small dimensions in the upper part of the Ighrem dwellings. Arrangements of claustras sometimes come to decorate the Coronation of the Ighrem. In the case of granaries, besides the loopholes, we sometimes find in crowns and on the vulnerable phases, breccias, sort of cubicles arranged to defend the feet of the wall of the building.

The Ighrem has only one entry, which imprints man and animals; the functions are distributed vertically in an orderly way:

- The animals on the ground floor;
- Food reserves, straw and wood on the 1st floor;
- The kitchen "AGNIR" and some "" AHANOU "living rooms on the 2nd floor;
- The rest of the levels are reserved for rest rooms;
- The top floor has an open terrace serving as a courtyard and serving for rest and meals in the summer.

Apart from the first levels devoted to beasts or annexes, each floor has one or more central spaces, sort of versatile covered patios, around which the rooms are organized.

Ighrem is the typical dwelling of the extended agnate family and of well-off social class; in the case of a burst of this one, it can know a partitioning which Saves to him its vertical and hierarchical organization of the spaces. Today, the trend towards the breakup of the family unit is manifested by the gradual abandonment of this type of habitat for the benefit of the home for a smaller family if not single household.

In the case of the Ighrem collective use attic, the organization of different levels is strictly identical, sometimes only the last level differs in that it is not compartmentalized and has an open terrace. With the renewal of security, this type of granary also tends to disappear, it has often been regrettable to note that they were poorly maintained and sometimes being disintegrated.

The Ighrem of Sidi Moussa: A special case of granary sanctuary

The attic of Sidi Moussa is a very particular case on several levels, first of all by its strategic situation overlooking the valley, its unique shape in all the zone and also by its function of museum and sanctuary at the same time.



Figure 3. Photo of the granary sanctuary of Sidi Moussa_October 2018

The Sidi Moussa ighgrem is located at the top of a hill at an altitude of 2008m, this situation gives it a prime importance in the Bouguemez valley.

The original function of the attic was used for the storage of food and valuables of the villagers, documents of the family, from where the choice of its situation at the top of the hill for a better protection of the attic.

Today, it is a sanctuary visited by women wishing to marry or have children.

Access to the attic is through footpaths on the north side of the hill. Before entering the Ighrem, there are terraces built around the building lined with retaining walls marrying the topography of the site.

At the level of the South facade, a cistern is also arranged below the building on an altitude of 1887m.

The building is in an irregular shape that fits into an ovoid shape, with the presence of four towers, one of which allows access to the terrace. It covers an area of 347 m2 on the ground and includes 29 granaries and a tomb. 14 bunk granaries are accessible from the main entrance through a corridor to the right which serves 7 attics at a low level and 7 others at a higher level.

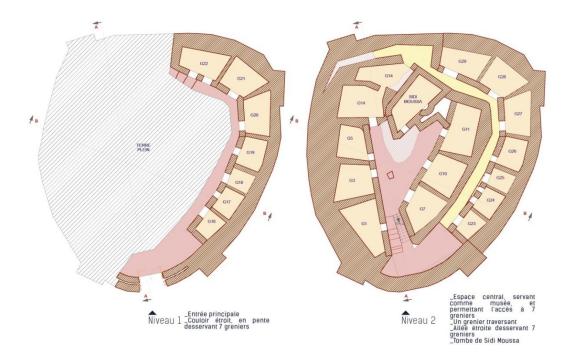


Figure 4: Plans of Sidi Moussa, Level 1 and Level 2

From the main entrance, too, but this time following a kind of staircase following the topography, we reach the central space of the building serving 15 granaries superimposed, including 7

in low level, and 7 in high level, and an attic of a greater height, and a tomb.

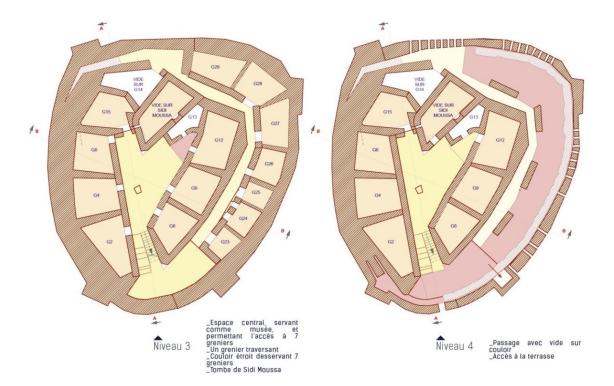


Figure 5. Plans of Sidi Moussa, Level 3 and Level 4

Access to the attics is through wooden doors of small sizes, variable dimensions, about 65cm wide and 80cm high, topped with wooden lintel and lined with wooden frame in the form of small circular poles or square.



Figure 6. Sketch of an access door to an attic

The eastern part of the building is built on three levels while the one on the west, north and south is on two levels, this configuration emanates from the topography which is more rugged to the east.

The only existing openings in the building concern the main gate and a small opening on the south facade, and some loopholes at the south and north facades, while the west facade is blind.

The exterior walls of the building are built in double and sometimes even triple walls. Indeed, the West facade is built in three successive walls, and the East is erected in two walls, the inner one stops at the ground floor, to form a low wall supporting the wooden posts supporting the joists.

The central space has a zenithal opening, from the terrace, allowing the attic to have a very satisfactory lighting, and a very pleasant atmosphere.

The approach of the building and the study of its characteristics, lead to the taking into account of the ingenious aspect of its construction, and this, through several aspects. Indeed, small details are the mystery making the building a remarkable work, the slope at the terrace, the slight difference in the height of the walls, the walls doubled or tripled, are all aspects that gave life to this work , whose proportions are consistent, the soft lighting and the indoor atmosphere very pleasant.

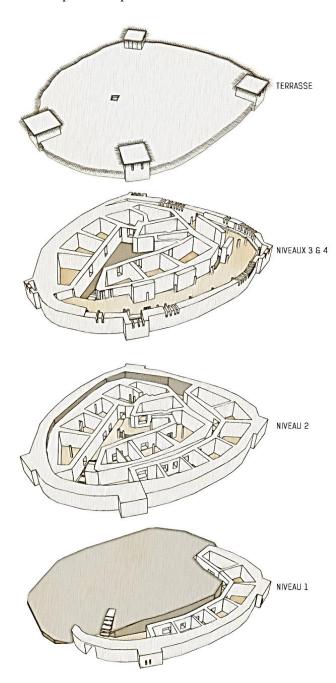


Figure 7. three-dimensional assembly of the spatial composition of the Sidi Moussa granary made during the workshop

4. Compact housing type Tighremt:

This type of housing is the most common model in the area; the construction is in the form of a closed block with square shapes with a massive, heavy appearance and including one or more terraces accessible either by internal stairs or by simple ladder.

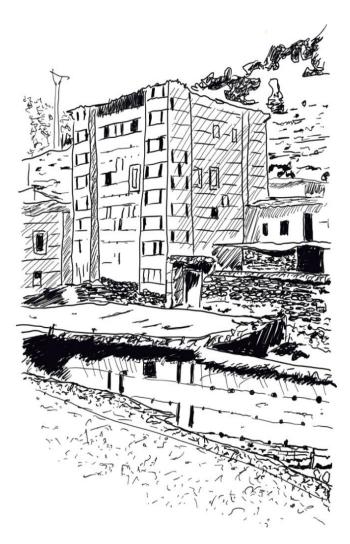


Figure 8. Sketch of TIGHREMT, illustrating the walls, openings and terraces

The choice of the site takes into account the strategic considerations but also the proximity of the water (source or seguia). the most common site is the slope facing south or east of a valley, mid-slope, sometimes with a forest massif upstream, the bottom of the valley being reserved for crops.

From a square or rectangular plan, it often has 2 to 3 levels and adopts as materials of implementation indifferently the rammed earth (most current), or the stone according to the potentialities of the site and the resources of the owner. The combination of both materials is even common in adobe buildings where stone is used for the basement walls, and as a protective lining of the gable wall facing prevailing winds and weather.

The roofs are treated in flat accessible terraces with a slight overhang of about thirty centimeters on the facades. In the case of stone constructions, the crowning of the building consists of flat stones that only overflow from 5 to 10 cm On the walls of the facades thus forming a peripheral cornice around the building.

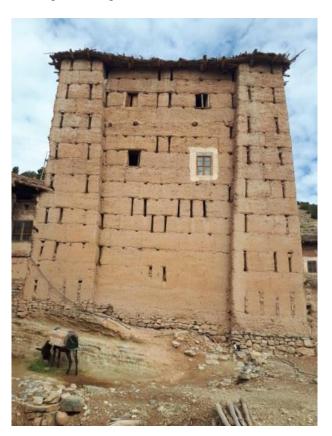


Figure 9. Picture of Tighremt Ait Louakhomi

The facade walls, with the exception of the ground floor and the north or west facing side, are pierced by a few openings provided with protections (shutters or grilles), giving preference to the valley and looking for the day to day. East or South; These windows are commonly surrounded by a white frame (lime or plaster plaster) or colored (introduction of industrialized paint), making them stand out clearly compared to the facades of dark color (earth).

Tighremt Ait LOUAKHOUMI: Living and not living

The Tighremt belonging to the family of Ait Louakhoumi, is part of the common use constructions, very useful formerly in the process of conditioning reserves, is currently deserted by its owners.

This Tighremt consists of four levels: a ground floor, housing stables for animals, a first floor whose three rooms are reserved for storing livestock feed, a second floor housing rooms and finally a third floor consisting of four bedrooms, one of which used to be a kitchen, seeing the traces of smoke on one of its walls.

The building is built of earth, with a stone base visible from the left exterior facade.

The volume of the Tighremt is simple, it is a truncated trapezium at the top.

On the left side facade we can see the 16 Tighremt and the joists of the last floor. Vertical loopholes punctuate the

facades, their number decreases while climbing the floors, they are supposed to ensure the ventilation of the premises.

These loopholes, designed at the base for this building, were narrower than they are high, they are easily distinguished at the level of the floors (the ground floor has no windows), they all have almost the same shape and dimensions, their heights correspond to those of the banches. However, we notice the addition of some glazed windows, sometimes decorated with wrought iron, with an exterior plaster in natural lime, not respecting the same arrangements at the level of the facades.



Figure 10. Windows added and modified / photo taken in October 2018

The ceilings of the floors are either simple or double, some of them are decorated with paintings with different colors and patterns (they are found in some rooms on the second floor). Other false ceilings are also in a state of repair, quite advanced degradation.



Figure 11. Ceiling of a room at Tighremt Ait Louakhoumi / photo taken in October 2018

The roof is accessible via an edicule built of stone and wood, it is the object of maintenance often before the Winter, in order to avoid its deterioration as it is built in ground carried

by wooden beams and joists, it is covered by fine gravel. It overflows the entire building to protect the facades from possible water infiltration.



Figure 12: Edicule allowing access to the terrace, Tghremt Ait Louakhoumi

This tighremt, is currently the property of three families, all descendants of the same ancestor. Each family has a floor and maintains it, except for the last two floors, where we notice a neglect of space, indeed, we notice the degradation of some walls, the subsidence of some ceilings, degradation or even the disappearance of the carpentry of some doors and windows.

This can be explained by the fact that these floors have been abandoned by their owners, who have migrated to settle elsewhere, or unable to get along with each other they abandon the building, thus causing its degradation.

These particular buildings, formerly a dual role of housing and storage, are a legacy of a time when the local inhabitants of the mountain deployed, know-how developed in terms of architectural and structural arrangement, build buildings double role with vernacular materials and local means resistant until today, denotes the developed technicality of their builders.

CONCLUSION

The valley of Ait Bouguemaz, housed houses that were welded to each other and form a continuous fabric, interrupted by narrow winding streets, sometimes tunnel (parts in saba). In these clustered douars, the first nuclei are tighremts, the erosion of the ancestral family order, the security and the demographic growth, pushed to the bursting of these tighremts and to the extension of dwellings while around. The rate of joint ownership is quite high giving the group, although not fortified, a form of "ksar" without external enclosure.

At present, agglomerations tend to burst, scattering their buildings on the periphery; the new dwellings abandon the old perched sites and gradually move closer to the valley floor or the places of communication; in this movement, the houses tend to become more and more spaced, to fall in height and size.

That said, the vernacular architecture that has been able to resist over time is beginning to lose all these original features in recent years.

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