

Anthropological study on human settlements of hot arid 'environnements-The valley of M'Zab-

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Abstract

The human settlement can be considered as a specific historical creation; it has not always existed however appeared at a certain moment in the societies evolution, and can disappear, or be radically changed at another moment. The anthropology of space is interested in the representation, production and social use of human space, just like the cognitive sciences.

In this regard, we attempt over this study to analyze the anthropology of Saharan human settlement (The Valley of Mzab). The results reveal that social ties and human needs are determining factors in the morphology of Saharan human settlements.

Keywords : Saharan human settlement, Anthropology of space, Human space, The valley of Mzab .

ملخص

يمكن اعتبار الاستيطان البشري انجاز تاريخي محدد؛ لم يكن موجوداً دائماً ولكن ظهر في لحظة معينة في تطور المجتمعات، ويمكن أن يختفي أو يتغير جذرياً في لحظة أخرى. تهتم أنثروبولوجيا الفضاء بالتمثيل والإنتاج والاستخدام الاجتماعي للفضاء البشري، تماماً مثل العلوم المعرفية.

في هذا الصدد، نحاول في هذه الدراسة تحليل أنثروبولوجيا المستوطنات البشرية الصحراوية (وادي مزاب). تظهر النتائج أن الروابط الاجتماعية والاحتياجات البشرية هي العوامل المحددة في مورفولوجيا المستوطنات البشرية الصحراوية

الكلمات المفتاحية: المؤسسات البشرية الصحراوية ، أنثروبولوجيا الفضاء ، فضاء الإنسان ، وادي مزاب .

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1. INTRODUCTION

Human space is certainly a social construction. Studying the space in which people lived illustrates how it was laid out in line with their needs. The dialogue between human sciences, anthropology and architecture does not date from today, but rather is old and it engages specific tools that it is useful to recall. At a time when the city is unraveling and disappearing into vast boundless conurbations, the anthropological look is more required than ever to rediscover, without prejudice or a priori model, the origins and processes that recreate the shared space of the city (Choay.F, 2005). Anthropologist Michel Agier (2015) defends and describes a situational and dynamic approach extending the three traditions of urban investigation of the Chicago School, the Manchester School and contemporary French anthropology. The reflection is based on urban ethnographies implemented for several years in the peripheral districts, the “favelas” and the camps in black Africa, in Brazil, in Colombia, in the Near East and in Europe. Urban and reflexive ethnography makes it possible to rethink the city based on city dwellers and the social, political and cultural logics that give birth to and transform it. The question of making the city is thus at the center of the reflection. It leads to a current rereading, an implementation and an overcoming of the “right to the city” as myth and political speech. Cameropn M.Smith (2019) defined human space settlement as adaptive evolution. She also shows how evolutionary and anthropological sciences can aid in making the project of human space colonization more likely to succeed. Alexa Färber (2021),discussed comparison in urban anthropology from two viewpoints. Using the essential epistemological significance of comparison as a beginning idea for all ethnographic cultural researches. Firstly, she presented several comparative perspectives in urban

anthropology and their concepts. Afterward, she surveyed the comparison from the perception of the anthropology of knowledge as an everyday academic practice in order to understand its subjectification and spatial dimensions. Finally, she discovered the specific requirements of ethnographic comparison via the figure of the entrepreneurial-ethnographic self. Mozabite architectural science is unanimously recognized as an example of perfect adaptation to the scorching summer and freezing winter climate, to the point of being listed as a UNESCO World Heritage Site. Le Corbusier, after discovering the M'Zab, complained that: our progress was so ugly. This architecture without an architect inspired André Ravéreau to develop a philosophy of the city. In order to explain how the Ksour of M'Zab are urban? An anthropological study has been achieved over this investigation. In this regard, we have focused on the recommendations of our study internship carried out in the lower Sahara under the direction of professor marc cote and professor alkama djamel. Therefore, an oral history interviews with contemporary native elders and a review of historic documents provide insights.

The valley of Oued M'Zab

The valley of Oued M'Zab is located in the Democratic and People's Republic of Algeria, in the northern Sahara south of the Dayas region on a rocky plateau called Hamada, where only the gray and black rock sometimes crossed in depth appears by a dry wadi marked by its bed of sand. All of these Ksour are located at 32° 30' North latitude and 3° 04' 5" East longitude at an average altitude of 500 meters. The distance by road is approximately 600 km for Algiers, 300km for El Goléa, 200km for Ouargla and 1,200km for Tamanrasset. The Cretaceous plateau is formed by hard Turonian limestone. It is gullied in all directions by fluvial erosion from the beginning of the Quaternary and criss-crossed by a complex

network of wadis, the four main ones forming deep valleys. The Oued M'Zab crosses it from the North-West to the South-East. This fishnet configuration has earned the region the Arabic name Chebka which means: lace, net (See figure1).

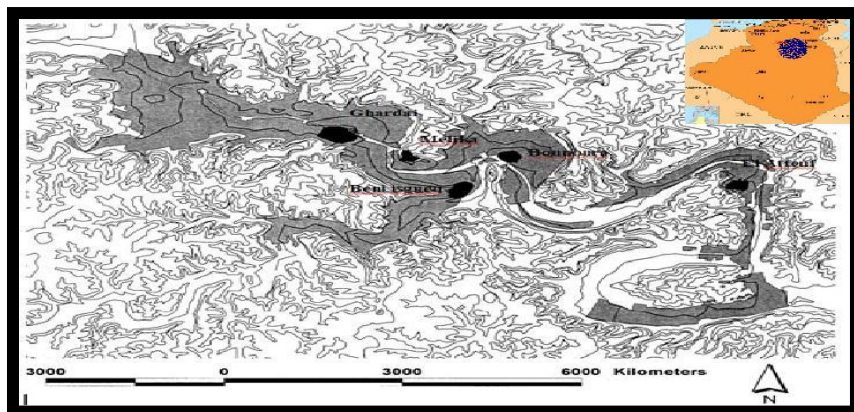


Figure1: The mzab valley <https://wikimemoires.net/2021/10/mzab-presentation-de-la-region-detude-les-acridiens/>

The Ibadis built in the 10th century five small cities of rare beauty. : El Atteuf (Tajninte) in 1012, Bounourra (Atébunar) in 1046, Ghardaia (Taghardait) in 1053, Mélika (At – Amlichet) in 1124, Beni-Isghen (Atizjan) in 1347. and two other towns located further from the valley: Guerrara (Iagrara) in 1630 and Berriane (Beriyane) in 1679. At the beginning they were all rural and now they tend much more towards the urban because the palm grove begins to disappear and gives way to increasingly dense constructions .The cities of the valley, although under a similar organization, cannot be reduced to a model.

The Ksour of M'Zab are considered urban by their social and political structures, their religious structures, their spatial organization, and their urban components.

1-Social and political structures:

1-1-The fractions: it is the basic administrative unit, are determined since the creation of the cities of the Chebka from the founding ancestors.

1-2- The çoffs: In the city, the fractions are divided into two çoffs: the çoff Chergui (from the east) and the çoff Gherbi (from the west). The çoffs have no institutional existence, and can be compared to political parties. Internal rivalries between the çoffs lead to the departure of certain groups of inhabitants, which was at the origin of the birth of the town of Guerrara, 85 km north-east of Ghardaïa and Berriane 40 km north.

1-3- The Executive Assembly of the Laity - (Djemaa): This assembly is made up of representatives of the different fractions of the city. It took care of the affairs of the whole city, it exercised temporal power, it of Ittifikat (regulations).

2- Religious structures:

2-1- The halgat of the azzabas: it is the guarantor of the Ibadhite doctrine and the stability of the community. It has twelve members, all sheikhs.

2-2- The assembly of the Timsiridine: This is the religious assembly of women, similar to that of the Azzab a, placed under its tutelage and the second in a way. The women who compose it are in charge of various tasks, in particular the washing of the dead.

2-3- The Medjles Ammisaid: It is an assembly that brings together all the sheikhs representing the different cities of the M'Zab.

3-Spatial organization and urban components: for each city, there will be dwellings, markets and shops, places of worship, defense works, hydraulic works and palm groves.

- The city developed in a concentric and tightened way inside the enclosure which is constituted either by a continuous rampart (Beni Isguen), or alternately by a wall and by rampart houses, high and without external

access (Melika). The ramparts certainly did not have the sole function of defending the city but also of ideological closure of the community.

- Cities are small. They never exceeded a certain number of inhabitants.
- The urban plan is dense, compact, the proportion of built spaces compared to unbuilt spaces is high.
- The mosque dominates the city. All the ancillary buildings: medersa, library, etc. are located directly around it. The whole constitutes the spiritual center of the city (See figures 1 and 2).

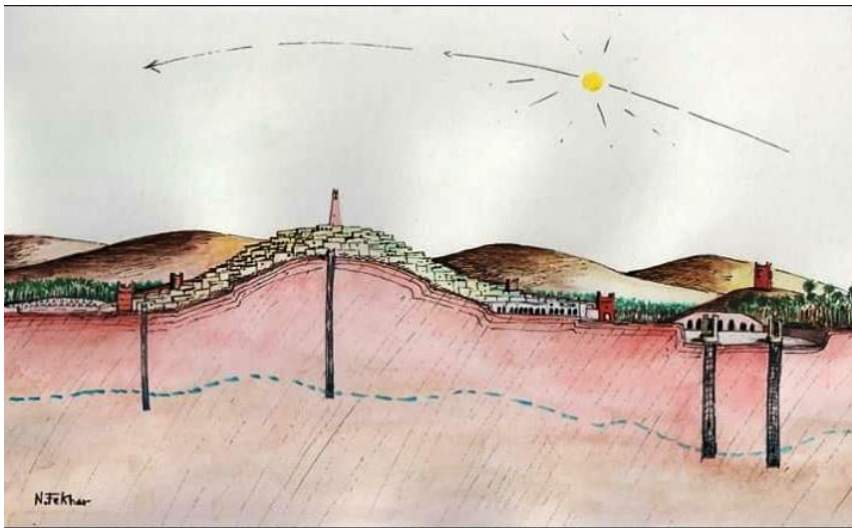


Figure 1: The organization of the establishment of a ksar in M'Zab. (Nora Gueliane (2016))

Figure 2: Ksar Beni Isguen

<http://myalgerianpost.canalblog.com/archives/2014/02/14/29211587.html>

- The market: This is the second pole of attraction. It is located near the gates of the enclosure, to ensure the defense of the city and that of the community vis-à-vis foreigners who should not cross the limits.

It occupies a rectangular shape in Ghardaia, entirely surrounded by a portico on which shops and storerooms open, the square is the center of other secondary markets such as: Souk el khadra, souk El ham. , it is also the end point of many alleys that fulfill an economic role in their part closest to the Souk (See figure3). There is a triangular square in Beni Isguen (See figure 4).



Figure3: Souk Ghardaia (Author, 2012)



Figure4: Souk Beni Isguen (<https://topdestinationsalgerie.com/connaissez-vous-lhistoire-de-la-place-lalla-achou/>)

Inside the ramparts, all the cities have wells which supply them with drinking water. Until recent years, they were the city's only water supply.

- traffic is carried out through winding and steep alleys, sometimes partially covered, accessible to pedestrians and donkeys. The ground of the alley is often the rock itself. Architecturally the alley is animated only by the form and the color of the walls on which the light plays the shadow.

- Some of these alleys are multifunctional: they serve as market passages and meeting places, thanks to the masonry benches which are arranged along the walls. Others are only used as passage and access to houses; others finally united functional are dead ends that lead into the alleys and only allow access to his house.

- We still notice the niches intended to accommodate the oil lamps which served as public lighting before the electricity equipment.
- The very construction of the houses was subject to real town planning rules, which concerned the orientation, and the height in particular, it should not be possible to see at the neighbor, and it was not allowed to cast shadow on him, the sun being, so to speak, inalienable. But it also had to follow other more general rules of religious origin: nothing in the exterior appearance of the houses should mark the differences in fortune, the rich should not crush the poor. The rich and the poor had similar houses from which any decoration was prohibited.
- Cemeteries and palm groves are outside the cities. They are the place of numerous and sometimes intense activities. Not only for burials, but also for religious festivals and on the occasion of sacrifices or distribution of food.
- The palm groves are located near towns and equipped with the elementary means of defense constituted by the watchtowers, which make it possible to warn the town. All have many hydraulic structures: absorption dams, underground galleries, then, artificial streams or channels (segua). Melika no longer really has a palm grove, the old palm grove being integrated almost entirely into the extension of Ghardaïa and covered with construction. Only a slight garden border is reserved at the bottom of the piton.
- The sudden influx of a new population and the economic development it entailed resulted in a parallel transformation of the urban fabric. Since the formation of new districts, which began around the 1950s, the continuous extension on both sides of Ghardaïa towards Beni Isghen and towards the palm grove, this new fabric will soon form a single agglomeration. In 1963 Mer Ravereau presented an urban plan for the municipality of Ghardaïa, which was seduced by the reasoned framework of the development to come,

the primary objective of which is the conservation of the traditional built environment of the Ksour.

- In 1972 Albert Speer is charged with the mission of studying the demographic and economic development of the valley over a period of fifteen from 1973 to 1988. the new Speer plan has two objectives: on the one hand it densifies and enlarges the areas existing, on the other, it creates a semblance of a satellite city. The latter seems to receive a concentric octagonal plan, a call may be from the Ksar with the mosque in the center.
- An urban modernization plan has been established according to the prefectural decree of September 25, 1977. It provides for urbanization, renovation and electrification projects in the various areas where the problem of water supply, drilling , road development, etc.
- In 2008 the floods brought a lot of damage to the Ksour of the pentapolis, in particular Ghardaïa in the extension part on the bed of the Oued.
- Currently there are concreting works of Oued M'Zab and other hydraulic works are placed further to protect the valley from the effects of flooding.
- The urbanization of the M'Zab valley is an irreversible and rapid phenomenon. To allow a harmonious balance between the safeguarding of a rich heritage and a new urbanization responding to new needs. It is obvious that a serious effort must be undertaken.

4. CONCLUSION

The ksour of the mzab constitute a balanced ecosystem, which represents the projection in space of a particular way of life, of a thought, of an ideology at a given moment in history - in a defined time -. On the human level, it is the organization in a delimited space of a homogeneous population in the form of clans and fractions. Based on this organization is born an institutional organization: 'achiras, notables, 'arsh, 'azzabas. These institutions (religious and secular) ensure the management of the ksar and guarantee its total autonomy in relation to the other ksour; they also manage the different aspects of life (political, economic, moral and social). They

have the power to wage war, make alliances, and establish laws (ittifaqat). This – institutional – aspect of the ksar has been relativized since independence (1962), due to the presence of state power. Morphologically and formally, the ksar forms a trilogy with its natural environment, the wadi, source of water for the city and its palm grove. The palm grove (tajemi) constitutes the attic of the ksar and its resort area and refuge during the great summer heat. Finally, the city which takes the name of aghrem, as an urban environment and main place of residence for the Mozabites. This trilogy (aghrem, wadi, tajemi) forms an entity called the ksar.

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