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EXPLORING HABITAT APPROPRIATION IN THE TRADITIONAL FABRIC OF AIT ATTELI VILLAGE, KABYLIE (ALGERIA)

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ABSTRACT

This article examines the appropriation of housing forms within the village fabric of the Kabylian region in northern Algeria. The region has experienced significant architectural, spatial, and socio-cultural transformations, affecting both existing structures and newly produced forms. The study focuses primarily on spatial and architectural elements, utilizing observations, visits, and surveys of various cases. This is complemented by a socio-cultural analysis based on interviews and survey guides to identify existing housing typologies and the villagers' aspirations, as well as the broader social context. Several types of housing were identified, including villas, blocks of flats, and apartments. Residents appropriate these different types by integrating modern elements while retaining traditional aspects. This duality is evident in both architectural features and socio-cultural practices. The mechanisms of appropriation reveal an ambivalence in how villagers occupy their dwellings: while there is a strong desire for modernity to meet needs for comfort, security, and privacy, there remains a deep attachment to traditional structures and the values, practices, and traditions of Kabylian village society.

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1. Introduction.

The concept of space appropriation is pivotal in understanding how societies undergoing change adapt their environments, including rural settings, traditional structures, and urban private spaces such as homes (Rioux, Scrima, & Werner, 2017, p. 60). Space appropriation refers to the practices of adjustments, arrangements, fittings, and rearrangements that individuals apply to a given space to meet their needs for well-being, comfort, modernity, and safety (Ripoll & Veschambre, 2014). This concept often applies to existing spaces, such as old buildings and dwellings, which are converted to suit

contemporary needs and lifestyles. It also encompasses practices, behaviors, and spatial markings that reflect identity and culture, often linked to local or family traditions, and applied to new structures and spaces, thereby imbuing them with new meaning and representation (Segaud, 2008). Additionally, this process involves the transfer of activities and practices from traditional to new spaces, often accompanied by developments or adjustments to accommodate these practices (Merlin & Choay, 2010).

This phenomenon of space appropriation has been the subject of various research studies focused on regions, spaces, and sites experiencing rapid urbanization, modernization, development, and transformations in both built and non-built environments appropriated by their inhabitants. Notable studies have been conducted in regions such as Asia, Central Africa, and Europe (Eken & Kul, 2021; Coulibaly, Djah, Yapi, Gogb, & Atta, 2021). In a similar vein, the villages of Kabylia have undergone significant changes and transformations over time, affecting both their built and unbuilt environments as well as their social structures (Chegrani, 1988). These changes have resulted in a variety of habitat and spatial typologies within the villages, transitioning from structured traditional habitats to more modern typologies. This study aims to analyze these processes to understand how inhabitants appropriate their habitats.

Kabylia, a region in northern Algeria, is known for its villages perched on mountain heights. These villages are characterized by a specific traditional habitat that integrates the site's harsh climate, uneven topography, and socio-cultural values deeply ingrained in the inhabitants (Bennacer, 2019). Lacoste Dujardin (2005, p. 358) describes Kabylian villages as follows: "...Each of these high hills is crowned by dense, tightly-packed blocks, with the outer walls of the houses forming a continuous wall ideal for defense...". These villages are well-defined spatial and social units influenced by socio-cultural, economic, defensive, and environmental factors. The traditional houses in Kabylia are distinguished by their rural, self-built architecture. Each house, the smallest unit in the village, housed a family and was part of a contiguous complex centered around a courtyard, with its back to the outside and opening onto narrow pathways accessed through a single porch (Maunier, 1926, p. 15). This arrangement ensured a hierarchy in relation to the outside space, providing the houses with an intimate character (Bourdieu, 2015, p. 11).

A detailed description of a Kabyle house reveals a multitude of functions and profound symbolism beyond its formal simplicity. Typically small and rectangular, these houses were built using locally available materials such as stone and earth for foundations and walls, wood for the structure and openings, and tiles for the roof. The interior features a tripartite spatial configuration: a hall, the main living space, and an upper level for storage or animal sheltering (Maunier, 1926, p. 13). These houses were designed to meet the primary needs of the population, incorporating local building techniques and knowledge passed down through generations (Saada & Dekoumi, 2019). Over time, Kabylian villages have experienced significant changes due to socio-cultural and economic factors, such as development, accelerated urbanization, and modernization (Messaoudi, 2017, p. 3). These transformations have impacted traditional habitats, leading to a shift in lifestyle from large family models to nuclear families, and a move from introverted, hierarchical architecture to more open and modern designs.

The main objective of this study is to understand how traditional typologies are appropriated today, whether in their original state or through reconstruction and extensions. This involves analyzing spatial, architectural, and sociocultural transformations while noting how villagers integrate modern parameters while maintaining traditional architectural characteristics. The research reveals an ambivalence in how villagers in Kabylia appropriate and occupy their dwellings. While seeking modernity and alignment with international standards, they also maintain a strong attachment to traditional spatial, architectural, and socio-cultural structures. This study highlights the importance of understanding the continuous evolution of housing and village space in Kabylia, considering both historical and modern influences. The originality of this research lies in its focus on the appropriation of existing or newly produced dwellings within the unique context of Kabylia. This context is characterized by its heritage values in terms of space, architecture, and social values, alongside a stratification of traditional, colonial, and modern fabrics resulting from various transformations over the years. The study also emphasizes the dynamic social context that remains rooted in traditions and socio-cultural values, offering a comprehensive view of the evolving village landscape in Kabylia.

2. Materials and methods.

2.1. Study area.

To conduct our research, we selected the village of Ait Atteli, situated in the municipality of Larbaa N'At Irathen, in the elevated regions of the central Algerian massif in Greater Kabylia (figure 1). This area is characterized by a high density of vegetation. Ait Atteli is one of the largest villages in the region, with a history that spans several centuries. Historical maps confirm the existence of Ait Atteli well before French colonization, as it is referenced in staff maps and the Sénatus Consulte[1] of 1867 for the Kabylia region (figure 2 & 3).

Figure 1. Situation of Ait Atteli village, Source: Google Earth.

Figure 2. Sinatus consulte of Ait Atteli village.

Source: Archives of the village.

[1] The sénatus-consulte of 22 April 1863 was a law passed by the French colonists to organise land ownership in Algeria and demarcate the territories of the tribes and douars1. It was one of a series of ordinances and laws that overturned the land ownership situation in colonial Algeria.

Figure 3. Archival photo of the village square of Ait Atteli dating from the colonial era.

Source: Archive of the village.

This village was chosen to encompass a broad range of cases, given its diverse housing types, which include traditional, colonial, and modern buildings (figure 4). Additionally, its proximity to the main town of Larbaa N'ath Irathen and its central location among several villages made it an ideal selection for our study. We conducted a comprehensive analysis of the village of Ait Atteli, identifying its various neighborhoods and the distinctive characteristics of their structures. For the architectural study of different cases, we selected the Afir district, centrally located within the village. This district exhibits a blend of architectural styles, including traditional, colonial, post-colonial, and contemporary fabrics, providing us with access to diverse typologies (figure 5).

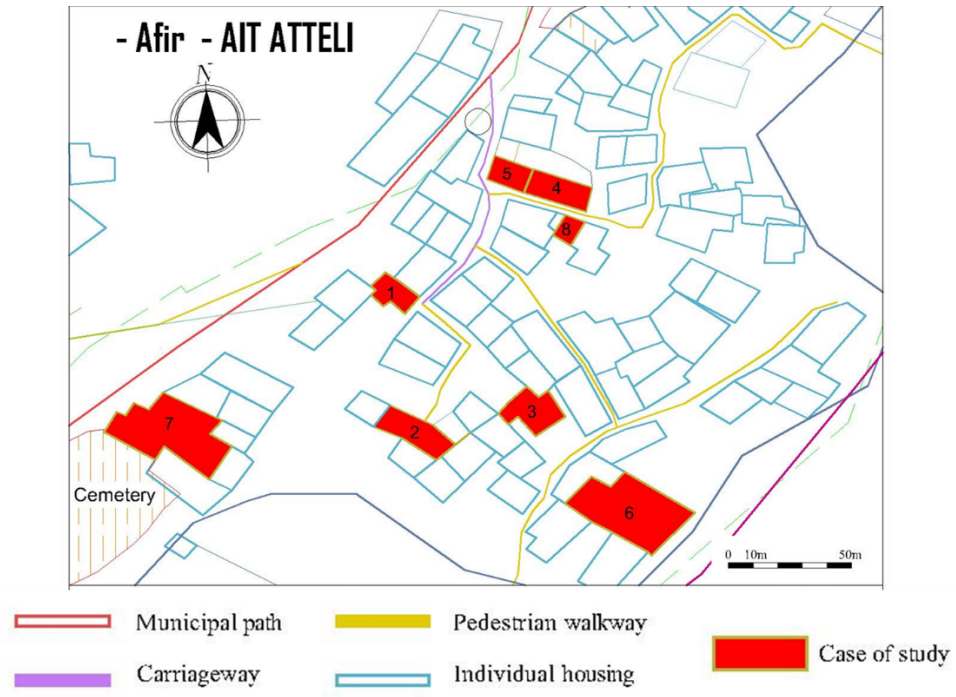


Figure 4. Identification and situation of case studies in the Afir district of the village of Ait Atteli (authors).

Figure 5. View of Afir neighborhood (authors).

2.2. Methodology.

In order to gain a deeper understanding of the traditional structure of Kabylian villages, we conducted a literature review focusing on their habitats and inhabitants. This review provided a foundation for understanding the changes and transformations in space and social structure, as well as the mechanisms of appropriation occurring within the village. Furthermore, to advance our research, we conducted two complementary studies: a socio-cultural study and a spatial and architectural study. The socio-cultural study involved survey guides and interviews with the residents of Ait Atteli village. The objective was to understand the various typologies within the village, the family structures in terms of size and living standards, and the residents' perceptions of their homes and desired housing types. This study consisted of two parts:

a) **Survey Guide**: We surveyed 80 family leaders in the village.

b) **Interviews**: We conducted interviews with the owners of the dwellings that were included in the spatial and architectural study. This allowed us to gather detailed information on how these homes are occupied and utilized.

The data from the survey guide were processed using SPSS 25 software to analyze and derive results. Whereas, the spatial and architectural study, in one district of Ait Atteli, we selected eight representative samples that reflected the spatial, architectural, and social diversity observed in the village. Although the sample size is small due to limited access—many inhabitants were reluctant to allow entry or participate in the study despite detailed explanations of our research aims—we succeeded in accessing the village's core, a notable achievement given the protective nature of the community. For each of the selected samples, we conducted architectural surveys using a laser rangefinder, tape measure, and double decameter. We then drafted these surveys using CAD software (AutoCAD). Photographs were also a crucial part of our documentation, taken with residents' permission. This comprehensive approach combining socio-cultural and spatial-architectural studies, supported by literature review, enabled us to develop a nuanced understanding of Ait Atteli's evolving landscape and social dynamics.

2.3. Data and statistics.

The data and statistics utilized in this study primarily stem from our surveys and interviews, as detailed in the previous section. These are summarized in the tables below.

Table 1. Demographic characteristics of the heads of families in At Atteli.

Age group				
From 18 to 28 years old	From 29 to 39 years old	From 40 to 50 years old	+ 51	Total
08	10	24	38	80
Gender				
Woman		Man		Total
44		36		80
Family situation				
Single	Married	Divorced	Widowed	Total
17	50	06	07	80
Profession				
Student	Employed	Unemployed	Retired	Total
06	23	35	16	80

Table 2. Frequencies of responses from 80 family leaders in the village At Atteli.

Q1: What type of accommodation do you live in?				
Traditional house	New construction*	Flat	Other **	Total
20	42	7	11	80
Q2: Would you move if you were offered accommodation elsewhere?				
YES	NO			Total
60	20			80
Q3: Do you prefer to live in?				
Traditional house	New construction*	Flat	Other***	Total
07	32	17	04	60****

* The category "New construction" includes villas, blocks of flats, dwellings in rural settlements, and all constructions constructed in the last decade.

** The category "Other" in the first question concerns buildings dating from the colonial and post-colonial period, which do not fit into the traditional category in terms of materials and construction typology.

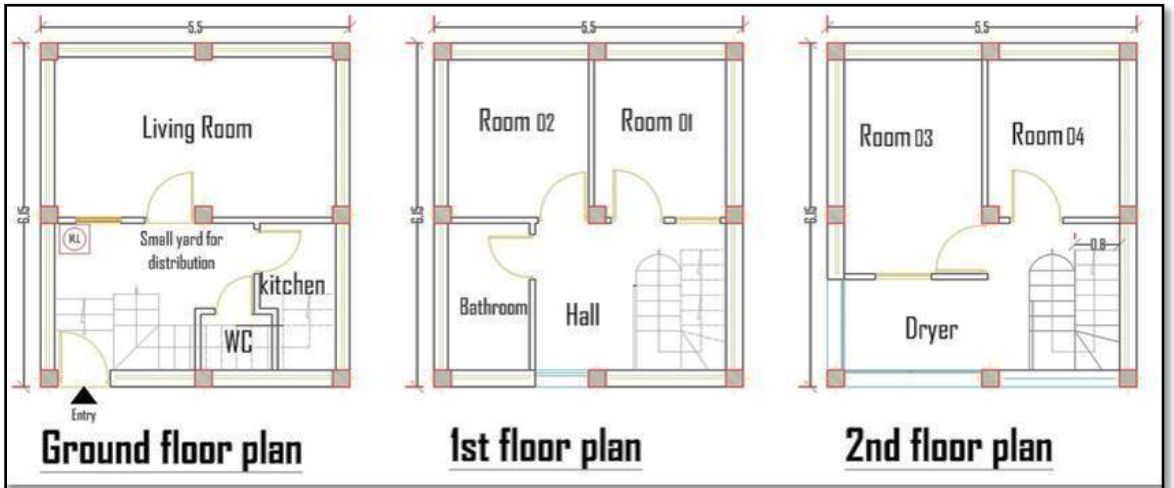
*** the category "Other" in the 3rd question, concerns ranches, cottages, beach houses and other dwellings different either in terms of architectural typology or according to their geographical location at the seaside, in the mountains or in urban centers.

**** The results of the 3rd question refer to the 60 applicants who answered "yes" to the 2nd question.

3. Results.

The findings from our extensive field investigations, social surveys, and bibliographic research are compelling, revealing numerous factors related to the transformation, occupation, and appropriation of space. Initially, we present an overview of the results for the village, derived from the questionnaires, to describe the various typologies present within the village. Subsequently, we detail the preferences and aspirations of the villagers concerning habitat typology. Mainly, eight typologies have been identified, highlighting many differences between theme based on spatial and architectural factors, or socio-cultural factors. These study specimens are situated in the heart of the dense traditional fabric, as illustrated in figure 4.

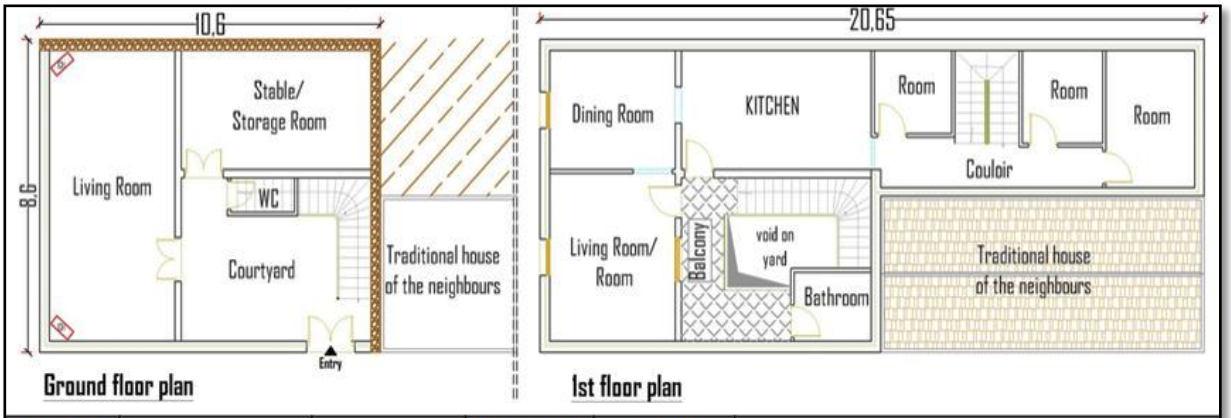
Case 1. Total reconstruction.



Number of families	Family Member	Type of house	Number of floors	Floor membership	Description +Observations +Remarks
01 family	(5): Parents +3 Sons Unmarried	New Building	R+2+ Accessible Terrace	to the Family	Reconstruction on a small plot of land after demolition of the traditional house, in the 90's, hence the smallness of the space and the need to go vertical

Figure 6. Study case N°01 (authors).

Case 2. Colonial house 1920.



Number of families	Family Member	Type of house	Number of floors	Floor membership	Description +Observations +Remarks
01 family	02 (Mother+ son) Father recently deceased, married daughter often comes	Colonial (Inherited from the settlers)	R+1+ Accessible Terrace	to the Family	One of the most prestigious houses in the area and in the village with a particular Spanish neo- moresque style built in 1920. -A lot of work has been done to keep it in good condition, but the basic structure is still intact. **PS:** The girls of the neighborhood leave this house on their wedding day, considered the most prestigious of the village.

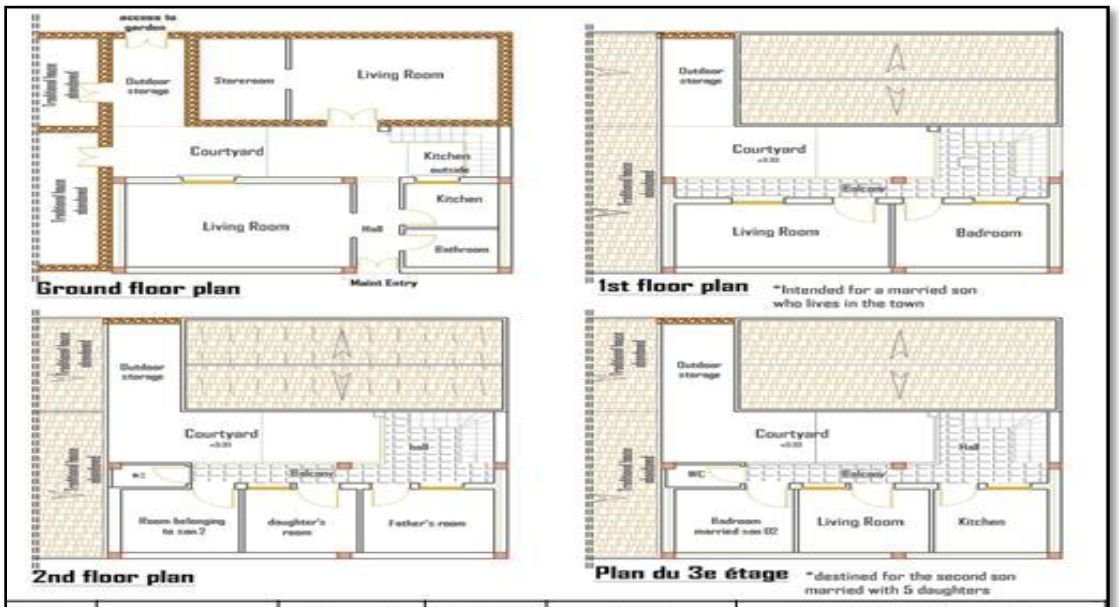
Figure 7. Study case N°02 (authors).

Case 3. Reconstruction of one part and conservation of the another one.

- The building has an imposing character in the neighborhood through its verticality on a small plot and its dominance over the traditional buildings in the neighborhood.

-The owners have demolished part of the building to construct the new building and have kept another part which is partially used.

Figure 8. A building showing case N°03 (authors).



Number families	Family Member	Type of house	Number of floors	Floor membership	Description +Observations +Remarks
03 familie s	*F1: 03 (Father + Mother-in-law + Daughter) *F2: 07 (Married son + Wife +05 daughters) *F3: Married son lives in Town	Traditional part	G-F	GF: father + courtyard, common, entry	_One part of the traditional houses has remained in abundance, another is used as a living room + storeroom with adequate interior fittings _The floor of the married son living in town is closed, is not used despite the smallness of the other floors _It is used when he comes to visit his family _An imposing verticality of the new building in the neighborhood
		Modern part reconstruction	R+3+ Accessible Terrace	1st Floor: Married son, lives in Town _2nd floor: father, & son married 2 _3rd Floor: Married son2	

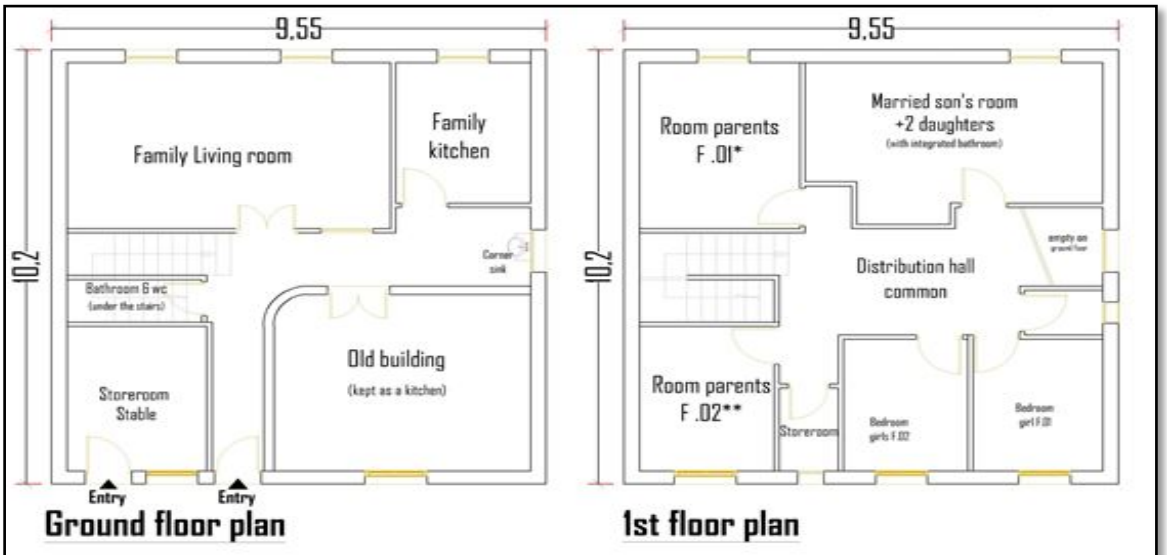
Figure 9. Study Case N°03 (authors).

Case 4. Horizontal extension of traditional house in undivided ownership.

- From the outside (figure 10), we can see two parts that are not visible on the inside, it is an extension built around the 90s, offering more space to house the two families.

- The extension is built horizontally in the same spirit as the first. Only the accesses and small openings are made on the facade limiting the contact with the outside, with no relationship with the neighbourhood.

-The entire roof is an accessible terrace (figure 10), housing the family's household activities, and also providing additional living space, given the small size of the house.

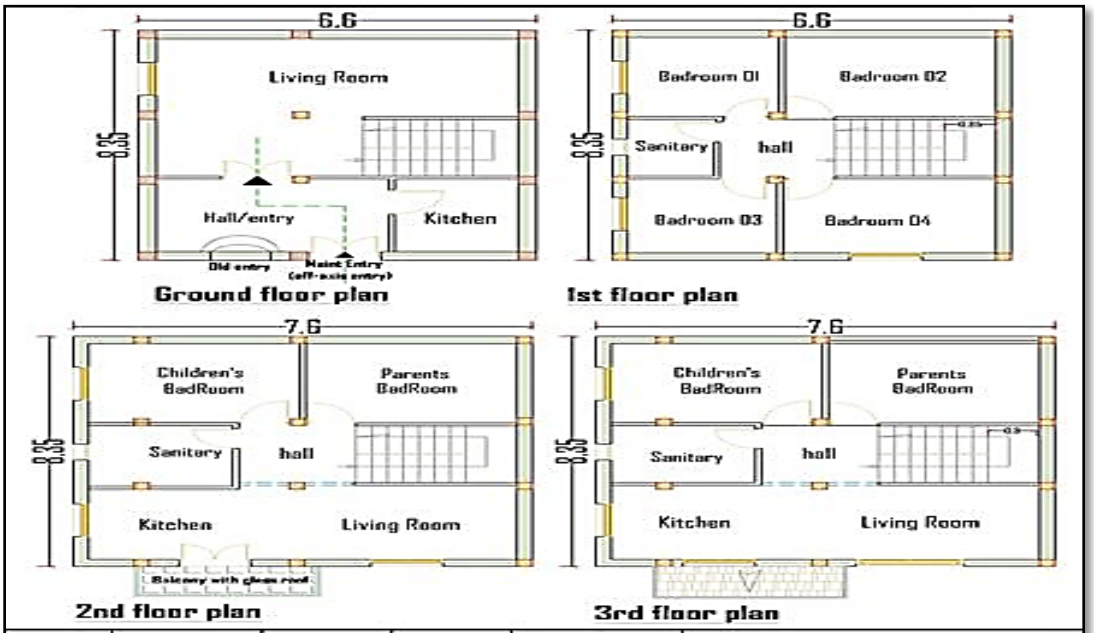


Number families	Family Member	Type of house	Number of floors	Floor membership	Description +Observations +Remarks
02 Families	*F1:Parents +daughter (married sons live elsewhere) *F2:Parents +2 daughters (unmarried) +married son with 2 small daughters Total = 11	Traditional part + a New Construction	GF+1+ Accessible Terrace	Belonging to both families, living spaces are shared	The spaces are very small for all the members of the family _The living spaces are common (kitchen + living room...) _The floor is reserved for the bedrooms, _The married son of the family02 occupies a large room with his daughters with integrated bathroom, the terrace accommodates the external activities (to spread out the linen...) of space of grouping the evenings of stifling summer

Figure 10. Study case N°04 (authors).

Figure 11. Façade of the house Case N°04 (authors).

Case 5. Vertical extension of colonial house.



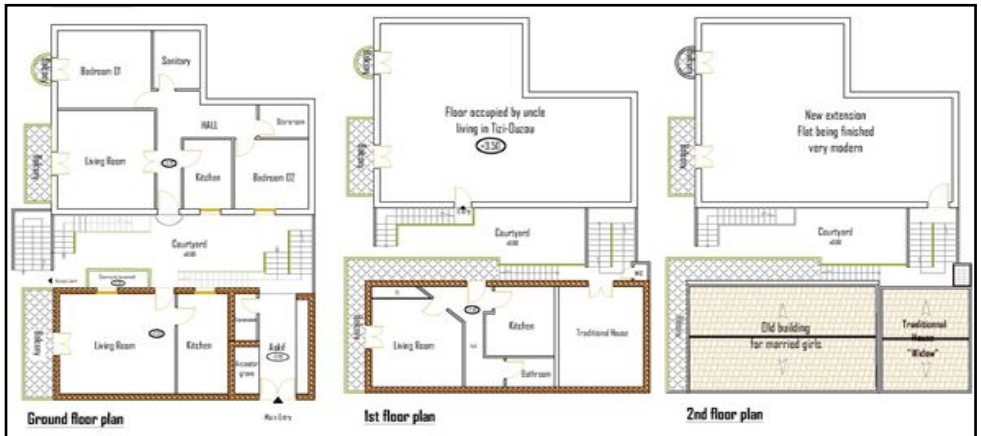
Number families	Family Member	Type of house	Number of floors	Floor membership	Description+Observations +Remarks
2 02 brothers = 02 families	*F1:Parents +3 children + Grand mother *F2:Ignore composition	Vertical Extension	GF+3 +Grenier and Terrace	_GF+1st floor in common (04 rooms) _F1: 2nd floor (closed, lives elsewhere) _F2:3rd floor with extension	The G-F and the 1st floor are common spaces, ground floor: living room + kitchen, floor: bedrooms The 2nd floor is for one of the brothers; closed as he doesn't live there, he only occupies it during parties and occasions, with a balcony and a glass roof _3rd floor: 2nd family, they occupy it even though it's cramped and tight _Overhangs are provided on the public passage from the 2nd floor.

Figure 12. Study case N°05 (authors).

Figure 10. Façade of a house Case N°04 (authors).

The house is located at the entrance to the neighborhood, with one façade facing the village square and the other facing the neighborhood alley. Both facades are treated with new materials, giving a modern aspect to the building, making it impossible to distinguish the old part from the extension, except for the small openings. For security reasons, the openings are to be barred. The various setbacks have made it possible to increase the surface area despite the small size of the plot, which is entirely occupied by the main building. In contrast to the 1st level, the openings are larger. As we notice the use of stone on the facade, for the crown, as well as inside for decoration.

Case 6. El Harra; group of traditional houses.



Number families	Family Member	Type of house	Number of floors	Floor membership	Description +Observations +Remarks
02 families and 03 small families and married girls	*F1:parents+ 04 daughters *F2+F3: ignore composition *F4: old widow *F5: married girls	El Harra, composed of several traditional and modern buildings	*El Harra*, consisting of several traditional and modern buildings	***Modern part** : -GF: Family1 -1st floor: Family2 -2nd floor: Family 3 ***Traditional part** -GF:Family4 -GF+ 1ST floor :Family 5	the whole belongs to a large family, a division is made. The modern part + a part of the old, destined to the 1st family composed of three sons occupying the modern part and married daughters occupying the old. The small remaining part (traditional) belongs to the 2nd family composed of an old widow (without sons), hence the difference in shares in the sharing, a second sharing will be made for the modern part of the 1st family (between the sons)

Figure 11. Study case N°06 (authors).

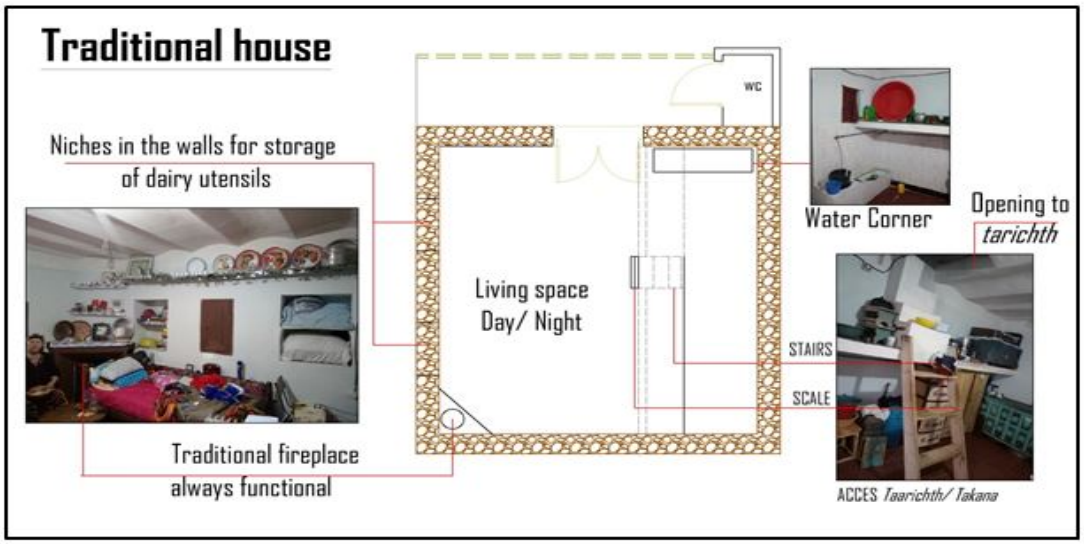
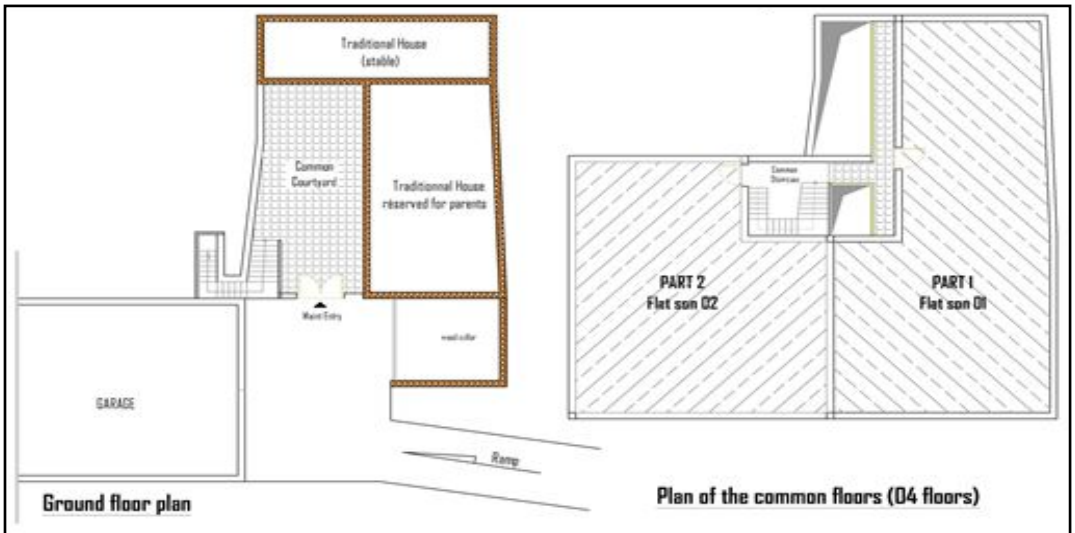


Figure 12. Case of the traditional house, part of the case N°06 (authors).

Case 7. Modern vertical reconstruction with extension of traditional part.



Number of families	Family Member	Type of house	Number of floors	Floor membership	Description +Observations +Remarks
01 compound family: parents + son married	parents + 04 married sons with children's	-Traditional house + vertical extension + new vertical construction in progress	-Traditional house on the GF -Block 1: GF+4+Accessible terrace - Block 2: GF+3 being extended	GF: entry, courtyard, stairs + parents -Each floor belongs to a married son	-the parents occupy the ground floor with the traditional part, then each floor is intended for a married son (flat type) the floors are served by narrow staircases, serving the two blocks, starting from the courtyard of the ground floor -the construction imposes a dominant verticality in the village (desired) the second block in the course of construction to offer more comfort to the children with their small families

Figure 13. Study case N°07 (authors).

Figure 14. The new building of Case N°07 (authors).

It is the most imposing building in the neighborhood and in the village, due to the topography of the site and the size of the construction; it is located at the upper limit of the neighborhood, also overlooking the main road of the village. The new building completely hides the existing traditional part occupied by the parents; one must access the interior to discover the courtyard and the traditional house preserved as a heritage from the ancestors; the new construction is only occupied by the married children. A multitude of openings are made on the facades, creating light, bright and airy spaces inside, with a close relationship to the outside, while remaining intimate.

Case 8. House in undivided ownership after partition.

Number of families	Family Member	Type of house	Number of floors	Floor membership	Description +Observations +Remarks
House owned by several heirs	One family lives there consisting of parent +02daughters +sons married living in town, come at weekends	Old construction	G-F+2 + Accessible Terrace	-G-F: family + 1 room heir 02 -1st floor: family + 1 room heir 02 1 room heir 03 -2nd floor: family + 1 room heir 03	The house belongs to several heirs, but only one family lives in it, this family has proceeded to buy back part of the shares of the other heirs, hence the importance of the share intended for them, the other rooms of the other heirs remain closed except in the event of a visit by the latter or an important event for the family

Figure 15. Study Case N°08 (authors).

Figure 16. Interior of the neck Case N°08 (authors).

-The ground floor of the two buildings on either side of the courtyard constitutes the traditional part; staircases were created at the back of the courtyard to allow access to the upper floors after the two buildings were raised.

-The courtyard was the central space, at the base open, and is now almost closed with the recesses made in the upper floors, covering it almost entirely.

-These recesses provide access to the spaces (see plans).

-The openings are oriented towards the interior of the courtyard.

4. Discussion.

The investigations and research conducted on village housing in general, and on the village of Ait Atteli in particular, have yielded significant findings. These highlight a coexistence between a deep attachment to vernacular structures, lifestyle, and ancestral traditions on one hand, and a desire to align with modern living standards on the other. Villagers navigate their daily lives within modern rhythms while maintaining ties to their built and unbuilt heritage. However, some families show a tendency to forsake traditional ways for modernity, while others remain committed to traditional systems. The attachment to heritage is evident physically through the preservation of traditional buildings and spaces like courtyards (El Harra, Askif, etc.), visible upon entering the village. Symbolically, this attachment is demonstrated through the practice of local traditions and celebrations such as Yenayer and Timecheret, adherence to the agrarian calendar, and respect for values like fraternity, sharing, and solidarity. These observations confirm the sociological role of traditional culture, as emphasized by Professor Medhar: "Traditional culture is the depository of the traditional social system: this is its sociological role... It consists of organizing, managing, and maintaining the traditional way of life by indicating preferential types of behavior and interactions. This is the proof of its hitherto unsuspected vivacity" (Medhar, 2014: 41-42).

Our results also indicate a shift towards modernity, both architecturally and socio-culturally. Architecturally, villagers are adopting new typologies aligned with international standards, featuring distinct spaces such as kitchens, sanitary facilities, living rooms, halls, and staircases. Socio-culturally, there is a new emphasis on comfort, privacy, and security, both within the large family unit and the broader neighborhood. Traditional homes with single communal living spaces are being replaced by layouts with separate private spaces for each family member.The observed architectural typologies in the village reflect this inclination towards modernity. Buildings are increasingly higher (ground floor plus five levels), with terraced roofs and flat typologies eliminating traditional courtyards. Larger openings and a direct relationship with the outside are also becoming more common. These spatial and architectural changes are closely linked to social and cultural factors that influence the occupation and appropriation of spaces, as elaborated below.

4.1. Transitioning from Introversion to Extraversion in Kabyle Village Dwellings.

One of the defining characteristics of Kabyle village dwellings is their historical introversion, characterized by opaque facades, small apertures, and spaces oriented towards internal courtyards. This inward focus fosters a sense of intimacy within the dwelling, as articulated by Navez-Bouchanine (2007), who notes a shift away from the traditional paradigm of "seeing without being seen" towards a contemporary ethos of "seeing and showing what we want and when we want" (p. 19). Architectural analysis reveals a nuanced revival of traditional values and spatial organization. Despite a growing trend towards more open facades and larger openings, certain traditional features persist, such as the hierarchical arrangement of rooms and clear delineation between public and private spaces. Navez-Bouchanine (1997) underscores this reciprocal exclusion, where areas for receiving guests are distinct from internal household activities (p. 21).

Moreover, rooms facing outside spaces or alleys typically serve as living areas, kitchens, or halls, while more private spaces like bedrooms are situated further inward. Staircases often function as thresholds, marking transitions between exterior and interior realms. In contemporary refurbishments, traditional structures are adapted to accommodate larger openings, prioritizing comfort and hygiene, as well as solar exposure, ventilation, and illumination. The transition towards extraversion in village architecture reflects not only a departure from historical norms but also a response to evolving lifestyle preferences and social aspirations. Residents increasingly seek to align their built environment with familial and communal dynamics while prioritizing modern comforts and hygienic standards. This shift underscores a dynamic interplay between tradition and modernity, shaping the evolving vernacular architecture of Kabyle villages.

4.2. Dynamics of Space Utilization in Kabyle Dwellings.

The versatility of spaces within Kabyle dwellings reflects a historical shift from single-room structures primarily occupied by women to contemporary multifunctional spaces accommodating diverse users. The evolving role of women, now actively managing households and participating in economic activities, has reshaped spatial dynamics. While traditional gender distinctions persist symbolically, contemporary realities blur these boundaries, with men increasingly involved in domestic tasks and space usage.The kitchen, traditionally associated with female domains, now serves as a communal space for cooking and dining, reflecting changing social norms. Outdoor kitchenettes, reminiscent of traditional practices, endure alongside modernized indoor kitchens, underscoring a balance between tradition and modernity. Limited space prompts multifunctionality, with living rooms doubling as bedrooms, study areas, or guest accommodations. Similarly, bathrooms often serve as laundry spaces, emphasizing the pragmatic adaptation of space to meet diverse needs. Interior fittings and furnishings reflect varying economic statuses, with modern amenities coexisting with traditional elements like wood and stone. This blend of old and new materials creates a sense of warmth and modernity sought by residents. Stone chimneys, evoking traditional hearths, add a rustic charm to contemporary homes, symbolizing continuity amidst evolving architectural trends. In summary, Kabyle dwellings demonstrate a dynamic interplay between tradition and modernity, as spatial arrangements adapt to changing social roles and economic realities while preserving cultural heritage.

4.3. Challenges in the Reappropriation of Traditional Kabyle Houses.

The reappropriation of traditional Kabyle houses presents significant challenges, particularly concerning ownership and occupancy status. Inherited properties often involve multiple heirs, complicating management and maintenance efforts. Despite attempts to find common ground, disputes over ownership and usage rights are common, leading to the abandonment or deterioration of properties. In cases where heirs cannot reach agreements, properties may be left vacant or rented out, exacerbating their decay. Occupants may face intrusions from other heirs, disrupting privacy and daily life. The burden of maintenance falls disproportionately on sole occupants, exacerbating tensions and instability within the household. Efforts to resolve these issues are hindered by familial ties and emotional attachments to the ancestral home. While some heirs may seek to buy out others' shares, such agreements are rare. Instead, symbolic attachments often prevent full relinquishment of ownership rights, perpetuating disputes and contributing to the decline of these historic properties. In summary, the reappropriation of traditional Kabyle houses is fraught with challenges stemming from complex familial

dynamics and legal ambiguities. Addressing these issues requires innovative approaches that balance heritage preservation with the practical needs of contemporary occupants.

4.4. Transitioning from Horizontal to Vertical Housing Production.

The trend in housing production and transformations within Kabyle villages is increasingly oriented towards verticality, departing from the traditional horizontal approach. This shift is exemplified by the "funnel theory," as described by a village resident, where single horizontal dwellings give way to multiple vertical blocks accommodating several households each. The move towards vertical living reflects a desire for enhanced privacy and discretion among family units, as well as a preference for compact and tranquil environments. Despite this shift, villagers maintain strong attachments to family values and kinship networks, often opting to reside close to relatives. Concerns about family heritage and intergenerational relationships further reinforce this preference for proximity and communal living. In summary, the transition from horizontality to verticality in housing production reflects a nuanced balance between modern aspirations for privacy and traditional values of familial closeness and cohesion. This shift underscores the evolving dynamics of Kabyle village life amidst changing social and spatial realities.

4.5. Re-appropriation by the inhabitants of the city.

Despite Re-appropriation by city dwellers of their village origins is a poignant phenomenon, showcasing the enduring ties between urban life and rural heritage. Despite embracing the city's dynamics, these individuals maintain a profound connection to their ancestral villages, echoing sentiments particularly prevalent among the older generation. Their attachment is vividly reflected in the multitude of houses, some meticulously maintained, others weathered by time, yet all symbolically closed, belonging to urbanites with rural roots. The notion of appropriation takes center stage as these city residents, while physically distant from their villages, emotionally invest in preserving their ties to their birthplaces. Their voices resonate, affirming, "I remain a villager at heart, rooted in the traditions of my birthplace," or expressing sentiments like, "Although I've adapted to city life, my heart still belongs to my village." Their children, too, inherit this cultural legacy, forming a bridge between urbanity and rurality, as they too express affinity towards their ancestral village.

Traditional customs serve not only as a link to the past but as a means of nurturing the future, instilling in younger generations the values and practices essential for resilience amidst urban challenges. The desire to maintain a residence in the village transcends mere nostalgia; it becomes a tangible refuge—a haven for familial gatherings, cultural celebrations, and moments of solace amidst the bustle of urban existence. Moreover, the allure of the village extends beyond sentimentality; it offers respite from the confines of city living, with its cramped spaces and lack of greenery. Especially during times of crisis, such as the recent health pandemic, villages became sanctuaries for urbanites seeking solace in nature and familial bonds. These rural abodes, though often modestly furnished, serve as repositories of surplus items from city flats, embodying a form of sustainable living through the repurposing of belongings. In essence, the re-appropriation of village heritage by city dwellers transcends mere nostalgia, encompassing a complex interplay of cultural identity, familial ties, and environmental refuge. It is a testament to the enduring resilience of rural roots amidst the ever-evolving landscape of urban life.

5. Conclusion.

The findings concerning the self-produced habitat of Ait Atteli village resonate with broader research on vernacular sites and rural environments, such as Leila Sriti's work on Biskra and Françoise Navez-Bouchanine's research on Moroccan habitat. Our investigations underscore a persistent paradox within Kabyle villages, notably Ait Atteli, marked by a simultaneous attachment to traditional spatial, social, and symbolic structures, alongside a pursuit of modernity aligned with international standards. This paradox reflects the ambivalence experienced by villagers, where some remain deeply rooted in ancestral values and traditions while others embrace modern lifestyles. Rural self-produced architecture reveals intricate dynamics of reappropriation, both physically and symbolically. Housing typologies in Ait Atteli demonstrate a trend towards modernity, evident in larger structures, innovative materials, and contemporary design elements. Despite these shifts, traditional influences persist, evidenced by the incorporation of traditional materials and motifs, reflecting a continued attachment to Kabyle traditions.

In conclusion, the future of Ait Atteli village raises questions about the preservation of its tangible and intangible heritage amidst evolving societal trends. Despite modernizing tendencies, remnants of traditional practices endure, suggesting a complex negotiation between past and present identities.

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