Field Report

VERNACULAR HOUSING FORMS IN NORTH ALGERIA

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The paper examines vernacular housing forms in north Algeria to identify common characteristics which may be used in the design of new housing. For more than two decades the Algerian government has been using foreign designs in the construction of large-scale housing developments. In addition, self-builders have been utilizing French house-design components in their projects. This new housing is not fulfilling residents' social and cultural requirements, such as their need for privacy. New house designs are needed based on the main traditional requirements of daily life, as adapted to modern conditions. This examination of vernacular housing in north Algeria shows that there are three customary components in house designs: the sqifa entrance, the west-ed-da1 (courtyard), and the multifunctional room or biit.

Over the course of the twentieth century the Algerian population has experienced dramatic changes to its way of life and its built environment. The population, once predominantly rural, had become largely urbanized by the end of the French colonial period in 1962. This dramatic change obliterated the balance between rural and urban ways of life. The shift from rural to urban was in part brought on by the Algerian War (1954–1962), during which about 8,000 villages were destroyed, forcing most rural people — some three million in all — to seek refuge in bidonvilles (shanty towns) near large towns and cities. This experience has considerably influenced a new Algerian generation’s perception of the traditional way of life and suitable housing forms.

This paper deals with the search for aspects of vernacular housing in north Algeria that may provide new common patterns for contemporary house design. It briefly summarizes prominent political, social and cultural impacts on the continuity of vernacular forms. It then examines the historical development of
housed in north Algeria to identify possible vernacular housing components. The suitability of such components was investigated through a survey by questionnaire in Oran.

**CHANGES IN VERNACULAR HOUSING FORMS**

At the end of the colonial era in Algeria the French administration attempted to improve the housing conditions of Algerians by building new social housing as part of the Constantine Plan (1959–63). This housing took two forms, either permanent or temporary. The former was intended for Algerians living in poor housing conditions in cities, and the latter was intended for people from bidonvilles awaiting better-quality social housing.

A major part of the French effort were regroupement camps, designed and built by the French army in deliberate ignorance of traditional ways of life and housing requirements. The army placed Algerians in these settlements without consulting future residents about house type or community life. The army believed that by dominating and restricting housing space, it could control Algerians, who would be forced to migrate to the new settlements and leave their land behind. This tactic had an overwhelming impact on the traditional way of life in the country.

Regroupement not only destroyed the villagers’ social life, it severed their natural link to a familiar built environment. For example, regroupement-camp dwellings did not have courtyards. They were standardized to provide minimum space to cook and sleep. And open spaces were shared by everybody, including women, who were obliged to collect water from a public fountain in the middle of the central square.  

At the same time that Algerian rural life was under assault, the thousands of Algerians who were sharing towns and cities with Europeans were living in unhealthy and unsafe conditions, i.e., in bidonvilles. The response by the French administration was to build new housing called cités de recasement. Most of this housing was designed by famous architects, e.g., Simounet, Candilis, etc. Usually, a dwelling in a cité de recasement had one room and a balcony. This has caused some critics to claim that dwellings in bidonvilles actually offered more space and were more appropriate. Nevertheless, most of the recasement housing, which was originally intended to be temporary, is still occupied, sometimes by its original occupants. This illustrates the current housing situation among the urban poor of the country.

Another type of housing built by the French for Algerians was called million, and it was equally inappropriate. It consisted mainly of high-rise social housing of a lower standard than the French minimum, both in terms of number of rooms, floor area, and services. Nevertheless, a great deal of this type of housing was built.

After independence many people living in cités de regroupement and million, and a large number from regroupement camps and rural areas, moved to the country’s large towns and cities. Here the demands of modern life were added to the list of social, economic and cultural constraints and difficulties they experienced. A new generation of children born in regroupement camps never became familiar with their parents’ built environments. Growing up in camp dwellings, they were pleased by the French urban heritage. They saw it as an improvement on their housing conditions, although European housing forms conflicted with their inherited social and cultural traditions.

People from regroupement camps were obviously not the only migrants to cities. Other migrant populations came from farms and the mountains. Moreover, more than 300,000 refugees returned from Morocco and other neighboring countries after independence. A small number of Algerians were also living in designated areas on the peripheries of cities and towns. All of these people moved into the centers of Algerian cities after the French left in 1962. The effect of the sudden movement was dramatic.

For these people, the new housing, formerly occupied by the French, was totally alien in form to their way of life and sociocultural requirements. Since, this housing has undergone considerable change both inside and out, as attempts have been made to suit the new occupants’ requirements. When a French apartment did not provide full family privacy, or created discomfort (i.e., when the housing was too hot or lacked adequate space), the new occupants did not hesitate to permanently close balconies, divide large rooms, make new openings, and so on. But even these changes did not always fulfill their needs.

There has been a second impact engendered by the shift of the Algerian population to European-designed housing. This is that the modern way of life has led to social segregation. Today people living in good-quality European housing in city centers are seen as belonging to an upper social class. As a result, self-built housing has copied fashionable aspects of older European designs, creating a new typology best known as “balcony houses.” Such trends in building persist despite the fact that the modification of European designs was first reported by Gottmann in 1957, well before Algerian independence. At that time Gottmann wrote that Algerians were having to brick up openings in European houses not only to avoid light but to protect family privacy.
After Algerian independence the adoption of the French way of life and the embracing of French housing became a symbol of modernity and progress. Unfortunately, only a few authors have mentioned this impact of colonization. Amos Rapoport briefly points out that European housing, although inappropriate to the indigenous way of life, was nevertheless popular among certain classes in North Africa because it reflected modern life and a raised sense of social status.

VERNACULAR HOUSING IN NORTH ALGERIA

In 1982 Benmatti wrote of the need for a new effort to provide suitable low-cost housing in Algeria, based on an examination of what remained of the country's traditional housing. He identified three types according to their location. The first was the medina type, mainly found in the large urban areas of north Algeria; the second was comparatively less uniform, found in the semirural and rural areas of the north (e.g., the Kabylie region); and the third category was a very heterogeneous type found in southern desert areas (FIG. 1).

For the purpose of this paper only north Algerian vernacular housing will be examined, that is, the housing of the Kasbah of Algiers, the medina of Tlemcen, and Berber housing in the Aures and Kabylie regions. Another type, called gourbi, was widespread before and during the colonial period. It was a stone hut of poor quality used as temporary accommodation by nomads and migrating populations. Gourbi dwellings were usually built next to tents, and had one or two rooms. The front room was for receiving guests, cooking and eating; the back room was for sleeping and storing food. Other types that were not quite as widespread, but which are nevertheless worth mentioning, were cave and subterranean dwellings.

KASBAH- AND MEDINA-TYPE HOUSING: ALGIERS AND TLEMCEIN

The word kasbah (also spelled casbah or kasaba) means "fortress" or "citadel"; it is a term typical of North Africa and Andalusia in Spain. The Kasbah of Algiers is the oldest part of the city. Apparently, before the coming of the Turks to Algiers in 1516 the area was an Arab-Islamic medina, unprotected against military attacks. Later it was subject to many invasions, which reshaped it. However, it still presents features of the traditional urban design and architecture of north Algeria. The Kasbah is characterized primarily by the absence of squares and large streets. Only a number of major narrow streets connect to blind alleys leading to houses, public baths, mosques, and water wells or fountains (FIG. 2).
Housing design in the Kasbah is based on several key concerns, among which are climate, privacy inside the house, and protection against intrusion and housebreaking. In addition, wealth is sometimes expressed in the size and decoration of houses, although the architecture (and the facades in particular) of Arabo-Islamic housing are traditionally very modest. Houses are also built to accommodate several households (the extended family). This is why houses may have three stories and be composed of many rooms organized around a central courtyard. In such houses, there is only one entrance, through a *sqifa* (meaning a closed and covered space or entrance lobby, where there is a bench). This space is normally accessible either from an outside corridor called a *driba*, or directly from a blind alley or a narrow street (FIG. 3).

The courtyard, the *west-ed-dar*, meaning “the center of the house,” is a typical feature of medina-type housing. It is usually surrounded by a covered gallery with arcades giving access to rooms. The gallery provides women with a place for domestic activities in bad weather. Rooms in such a house type rarely have openings to the outside; instead, the courtyard provides both sunlight and ventilation.

Rooms in medina-type housing have different names according to their location and their main use. Three rooms usually occupy the first floor and are called *ghoraf* (plural of *ghorfa*, meaning “room”). They are connected to a large corridor (*es-hime*) which overlooks the *west-ed-dar*. On the second floor there are other rooms called *m’neazib* (plural of *menazib*, which means “distant room”). These are arranged in a similar way to the *ghoraf*, but because they receive considerable sunlight and dominate the house, they are in the best position. Finally, the house includes a roof terrace, largely used by women to dry clothes, look at the sea and the townscape, and meet their neighbors. Additionally, some houses have wells in the courtyard, and others have *djeb*, a tank which collects rainwater for washing clothes, cleaning floors, etc. (FIG. 4).

Physical characteristics of the site of the Kasbah of Algiers have considerably influenced its built form. Its steep slope forced its builders to rely on stairs and narrow, winding streets. Only pedestrians are able to enter (except that when the streets are flat, animals may be used for transport). Commercial activi-

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**FIGURE 3.** Accessibility to typical houses in the Kasbah of Algiers. (Drawing after Delac. L’Urbanisme et l’architecture d’Alger, p. 73.)

**FIGURE 4.** An example of a traditional house in the Kasbah of Algiers. (Source: Atelier de la Kasbah, 1980, p. 83.)
inhabitants out of some parts of the Kasbah. These parts will be considered a protected cultural heritage and will be renovated as a tourist attraction.

Some exceptional examples of medina- or kasbah-type housing can still be found in the cities of Tlemcen, Algiers and Constantine. The Kasbahs of Algiers and Constantine resulted from a combination of Arab-Islamic urban design and Ottoman architecture. Tlemcen's medina, on the other hand, preserved its original Arab-Islamic character. B.S. Hakim writes that "Tlemcen is unique in Algeria as one of the few towns to have preserved certain features of its celebrated pre-colonial past." These features are mainly historic monuments, mosques, and palaces which date to medieval times. To a lesser degree these include houses within a medina.

Tlemcen's history dates to the seventh century. It expanded very quickly and flourished during the medieval period. Tlemcen was a prominent town especially in terms of cultural, religious, commercial and political activities. For these reasons, it was protected against invaders by fortified walls and was accessible only through three protected doors.

The coming of the Ottomans to Algeria had disastrous effects on the development of Tlemcen. To begin with, it lost much of its importance to coastal towns like Algiers and Oran, which were favored and expanded under Ottoman rule. It was further damaged after the coming of the French, who obliterated its existing built environment and erected the customary buildings of their occupation, which later came to dominate its townscape. Little research has been done on vernacular architecture in north Algeria, especially its medina-type architecture. But a quick glance at Tlemcen's plan helps one understand the medina and its housing as a general concept (FIG. 5).

As one can see in the example of Tlemcen, the medina is a network of narrow winding streets that lead to narrower alleys which connect to private houses. Public spaces and buildings (educational, religious and political) are well defined, and located in specific areas. The need for family privacy and protection against intruders or strangers — mainly to protect the women — further led to the adoption of a strict hierarchy of space from public to private: this extended from public space (the market), to main streets, alleyways, the front door, the sqifa, the west-ed-dar, and the individual rooms of the house.

The sqifa plays an important role in this hierarchy. It is a well-decorated transition space one passes through before entering the remainder of the house (FIG. 6). Decoration, furniture, light, and view into the courtyard all provide a homey feeling here. Sometimes the sqifa has, besides a front door (the main feature of a house’s exterior elevation and a frontier between the public and private environments), a second door opening onto the courtyard. The sqifa is also used as a room where male guests are received.

By contrast, the west-ed-dar is regarded as the center of the house. It is where most domestic, social and cultural activities take place. This is an enclosed space, totally private and traditionally reserved for women. However, nowadays men equally share the pleasure of socializing, eating, and even sleeping (in the hot season) in this courtyard. In hot climates the west-ed-dar improves thermal comfort inside the house, and it is a source of daylight, water, and fresh air. It also symbolizes family unity and modulates daily activities; it is in west-ed-dar that most family activities and wet domestic activities take place. During the day all rooms are opened onto it. During the summer the rooms may also be left open to the courtyard to gather the breeze.

Rooms in the medina-type house are commonly called bout (plural of bit). They are multifunctional, especially in winter when domestic and social activities, normally undertaken in west-ed-dar, may be disturbed by the weather (some domestic activities may still take place in the galleries around the courtyard). Generally, the rooms are the place for receiving visitors, working, relaxing and sleeping.

There may be several types of relation between the medina-type house and the city, characterized by various levels of remoteness. The house may be connected to the outside simply by a sqifa, it may be connected by a drilha before entering the sqifa, or it may be further removed from the street by a blind alley (REFER TO FIG. 3). Other arrangements may exist as a result of a combination of these types, but generally these are the most common. It can be noted that the blind alley and drilha are the expression of the need for strict space hierarchy and enclosure in Arab-Islamic urbanism.

THE BERBER HOUSE: SHAWIA AND KABYLE

A second type of indigenous housing in north Algeria is found in the region of Kabylie in the center of the northern part of the country. It may also be found to the south of Algiers and in the mountain massif of the Aures in the northeast. In this region it is very cold in winter and quite hot in summer. Beside the sociocultural requirements of housing form, the climate and the peculiar topography of the area — rocky mountains and steep slopes — have played a major role in determining house form.
According to Rapoport, sociocultural factors are the principal forces influencing housing forms, whereas climatic and physical concerns may generally be related more to change and design improvement. However, in some instances, environmental conditions may be as influential as sociocultural principles. This has been the case for Berber housing. A crucial factor dictating the location of Berber towns has been a lack of water and fertile land. This has forced local populations to build their villages on top of hills and cliffs to save land for agriculture and prevent inundation of their settlements by flooded rivers during winter. Another aspect worth mentioning is that these people have been encouraged to build towns in easily defended locations on account of intertribal wars — as in the case of Ghardaia in the south. 

There are two types of Berber housing: the Shawia type (that of Berbers of the Aures region), and the Kabyle type (that of Berbers of the Kabylie region). The Shawia house has a flat roof and is built using mud bricks; only the foundations are of stones. It is common to find this type of house with two doors — one for people, the other for animals. However, when there is only one door, people and animals are segregated on the ground floor in the sqifa. On the first floor there is a central room, the heart of the house, where there is a fireplace, weaving place (a stone bench), storage room, and water contained in goatskins. This area is also used to receive friends and family members and to sleep. The Shawia house may also contain a guest room, a storeroom for food and agricultural produce, and a roof terrace mainly used by women (FIG. 7). 

Each Shawia house is surrounded on two or three sides by other houses or by rocks. Most of the time the rock is used as a back wall to save on building materials. The house is normally large enough to accommodate all family members. Some houses have two or three stories, allowing for separate dwellings for each household, for guests, and sheds for animals.
Locally available materials such as stone, wood, earth, and so on are used to build houses in the Aures. However, the extent of their use depends on their particular local availability. Stone is quite abundant and, despite its weight and the need for skilled labor, appears to have been quite popular for foundations, walls, lintels, and even roofs. Wood is used for beams, posts, roofs, and floors. Finally, earth is an important component in this vernacular building. It is locally available, easily manageable, and does not require skilled labor. It could be used in most parts of the building, as walls, fences, and roofs. Straw, gravel, and other materials are added to the earth to prevent it from cracking and to improve its thermal properties.

In this part of Algeria, the building of a house is an important social event; all members of the family, men and women, as well as the community at large, are involved in the building process. This process is accompanied by religious ceremonies and celebrations. Recently, however, modern building standards have appeared in this area. Many new self-built houses have been erected using concrete, steel, and bricks. The old traditional houses, built using locally available materials, are decaying and not cared for.

In contrast to the Shawia house, the Kabyle dwelling is composed of several small units which are built as the family expands. The same design principles are normally used in building the units, the principal one of which is that the main facade, containing the front door, faces east. This door is a source of light in the early morning and the reason the west wall is called “the wall of light.” The east wall is “the wall of darkness,” because it appears dark against the light of the east door.

In terms of its other features, the Kabyle house has a ground floor that is basically rectangular and divided into two parts. The lower part is located at the dark end of the house and is used to shelter animals and store domestic and animal food. This part of the house is dark, humid, and “dirty,” and is mainly used by the women for domestic purposes. Above this part there is an attic-like room where kitchen tools and hay are stored, and where children and women sleep in winter. The other, higher, end of the house, the illuminated end, is for receiving guests, cooking, and weaving. It is predominantly a male area, but can also be used by women when the men are out. At the back of the house there is a garden accessible through a small door. The garden is primarily for women.

Houses are built using stones with or without mortar joints, or, for the poor, in pisé (using earth and clay blocks made on site). Unlike the Shawia house, the Kabyle house has a pitched roof covered with clay tiles, which is supported by wooden beams lying on load-bearing walls and a main post.
The Kabyle rural town is basically laid out inside a circular street that connects to many alleys which lead to the center of each grouping of houses. The ring road protects the privacy of women and the community in the village from strangers. However, local men use the ring road when returning home from fields and places where they socialize.

As is the case with housing in the Kasbah, and with the Shawia house, the requirements of modern life have significantly affected the way Kabyle housing is built and used. For instance, the cooking corner has been transformed into a kitchen; more partitions, toilets, and window openings have been added; the floor has been covered with tiles; and basic ways of preparing food and cooking have been replaced by more efficient, modern means. In terms of building technology, stones and mud have now been replaced by concrete blocks, bricks, and dense concrete.

**A SYNTHESIS OF VERNACULAR HOUSING IN NORTH ALGERIA**

From this study of surviving vernacular housing types in Algeria, three components appear to be most common. These are the **sqifa** entrance, the courtyard or **west-ed-dar**, and the multi-functional room or **bit**. It is worth reviewing the main features of these spaces, which might be seen as the basis for the development of new contemporary housing forms in north Algeria.

The **sqifa** serves as an important transition between public and private realms. It is into this space that the front door (the limit between public space and private domain) opens. Traditionally, the **sqifa** is a well-decorated room which may also be used by men receiving their guests. It is also a transition zone where guests await permission to enter the inside of the house. Stairs leading to first floor are most of the time located in the **sqifa** (FIG. 9).

The second space, the **west-ed-dar**, can either be square or rectangular, and is normally surrounded by a gallery with arcades. The floor of this area is covered with tiles or marble, and its environment is kept fresh with trees and running water from fountains. The **west-ed-dar** is normally the main space for women to carry out their daily domestic work. For this reason the kitchen and laundry room open onto the courtyard. This is also the place where children play, women receive their friends, and where social and religious events are held. The **west-ed-dar** represents a solution to sociocultural requirements inside the dwelling, and it contributes to the thermal comfort of residents of the dwelling during the summer. The last space, the **bit**, is usually rectangular, measuring about three meters wide and up to twelve meters long. Its middle is more decorated than its ends, where benches may be located and used as beds at night. There are at least two windows and a door in each **bit**, which opens onto a gallery, and each may have a small opening to the outside, mainly for ventilation. A **bit** may be used for reception of guests during the day and for family members and guests to sleep during the night. Curtains or furniture (such as a wardrobe) may be used to divide the room into several separate spaces (e.g., for married sons to sleep in). This organization is also common in traditional housing in Morocco. The **bit** is clearly a multifunctional room which is used throughout the day by all members of the household and their guests.
CONCLUDING NOTE

The impact of colonial power on Algeria has led to a discontinuity in the development of traditional forms and the imposition of foreign typologies and urban forms. This is particularly true in the northern city of Oran. Here, Algerian traditional forms, based on Arab-Islamic principles of privacy, intimacy and hierarchy of spaces, were not allowed to develop. In fact, housing typology in Oran is the product of Spanish and French influence.

The impact of colonization and modernization on house form in Oran has led to the utilization of new designs by self-builders based on foreign styles. These are then combined with north-Algerian traditional patterns. The use of some Algerian traditional models in Oran may have been caused by internal migrations. The models still carry cultural values familiar to most natives of North Africa.

Of the three components of traditional housing designs studied here, at least two can be found in self-built housing and (to a lesser degree) in squatter settlements: the west-ed-dar, and the multifunctional bit. The sqifā has largely been replaced by the French entrance hall, which, in other modern Algerian housing at least, occupies the central location of the west-ed-dar.

It can further be said that in locations where traditional housing has been preserved at least three common urban elements remain that help achieve an important hierarchy of space and privacy within the neighborhood. These are the sqifā, the drikha, and the blind alley, all typical principles of Arab-Islamic urbanism.

Despite the apparent modernism of the Algerian urban population, Algerian society at large is still very traditional. This explains the need for new housing designs which are adapted to contemporary needs, but which still express the principal traditional requirements of daily life. Self-built housing, primarily the architectural expression of middle-income groups, has to date failed to address these two needs adequately. Such housing is neither unique nor appropriate to Algeria. More forms are likely to be developed in the near future, as Algerians look for a new typology that will better balance their competing requirements.
This paper is a summarized version of Chapter Two of the Ph.D. dissertation "The Viability of No-Fines for the Production of Appropriate Housing in Algeria," carried out by the author at the Joint Centre for Urban Design, Oxford Polytechnic, Oxford, 1992.

13. Blake and Lawless, "Tlemcen."
15. Rapoport, House Form and Culture.
17. Ibid., p. 32.
18. Ibid., p. 34.
19. Ibid., p. 36, and Rapoport, House Form and Culture, p. 46.
20. Ibid., p. 37.
23. Ibid., p. 181.