Built Environment Principles for Achieving Intimacy in Traditional Cities of Algeria

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Abstract

Algeria has experienced rapid growth in urban development since 1962, when it gained independence from French colonization. This urban growth is not based on the traditional urban planning principles that have been followed in Algeria for many centuries. On the contrary, various imported urban forms have been implemented in the country. These forms have no relation to the traditional built environment and culture, nor to the local climate of the cities. As a result, problems have arisen. In Algeria, as well as in many Arab settlements and Muslim countries, privacy is a central socio-cultural value. It is a major criterion for both indoor and outdoor socio-spatial design. Currently housing design focuses on balance between aesthetic and functional values and ignores socio-cultural ones.

The aim of this article is to highlight the foundations of Arab-Muslim society, particularly Algerian society, and to clarify some of the criteria and elements of Islamic architecture that are related to residential privacy.

Key words: Arab-Muslim cities, intimacy, traditional house, Algeria,   traditional urban planning.

INTRODUCTION

Architecture has a considerable impact on humans because the places where they live act on their thoughts, feelings, and behaviors. So these masses that stand up and build our environment have a significant effect on our well-being or our malaise. In addition to the function of shelter and security it provides, the habitat has always been a reflection of a specific lifestyle and culture, where the inhabitants have built their spaces to keep these spaces relevant to their living practices in the way they want (Rapoport A, 1969).

The building is a reflection of human needs in a particular environment, an environment carrying special cultural, social, and ecological characteristics, representing the outcome of social values, religious, intellectual, and philosophical convictions.Algeria is experiencing a multidimensional crisis because of an incoherent urbanization policy with ill-defined objectives and a galloping demography since independence.

Various imported urban forms and planning regulations have been implemented in the country. These relate neither to the traditional built environment and culture nor to the local climate of the cities (Oussadou A, 1998). As a result, major cultural and climatic problems have occurred. The national identity of Algeria is based on a combination of Berber and Arab cultures. The strong influence of Islam in all aspects of Algerian life creates a sense of identity that extends beyond national boundaries to include other Arab nations.

Arabic semantics reveals the profound dimension of the term "sakana" (to dwell), which denotes peace, quietude, moral and physical comfort, and, above all, harmony with the laws of the universe in a profound relationship with the sacred.

According to Pierre von Meiss (1990) in order to be at peace with the universe, society, and himself, man must affirm his identity as a human being who distinguishes himself from other creatures, as a member of a group with which he interacts, and as an individual who maintains a margin of freedom and personal responsibility by distinguishing himself from the group and from all others.

The architect must discover the main elements that ensure this communication of identity either by observing or researching the architectural elements that are crucial to their identities.

METHODOLOGY

The research depends on a descriptive approach through the study of terminology and the definition of intimacy. This concept is essential for inhabitants.

The degree of achievement of privacy in residential architecture in Arab countries, in particular Algeria, is described. The method follows the path of logic and begins from the most general, i.e. the city, to the most specific, i.e. the traditional house, in order to deduce the most important criteria that should be taken into consideration to achieve privacy in residential architecture and the factors affecting it.

The Concept of Privacy

Privacy or Intimacy means singularity, the opposite of generalization. It implies the ownership of a private; secure residential sanctuary; quiet communication; and respecting the privacy of others (Bokhari,A.S et al.,2020).

The concept of privacy differs in various cultures depending on many factors such as: *"characters, ideologies, do's and don'ts, and values of the individuals and societies."* (Manesh,F.and Latifian, S, 2015). Today, there exist many different points of view and interpretations with regards to the concept of human privacy, but all have one thing in common: they explicitly acknowledge that, at the most basic level, privacy is about the ability of an individual or a group to control their visual, auditory, and olfactory interactions with others (Tomah, A.N, 2011).

It is an instinctive human feeling that provides safety and comfort for an individual and their family (Mustafa A.F et al., 1986). Intimacy is an important element in the design of one's home. Whether it is a social issue in terms of the link with others, or a psychological issue in terms of the need to exteriorize what

is most internal, intimacy takes shape from the moment when private space is dissociated and escapes from "public" space, when the walls and objects that surround us allow us to abandon ourselves to what is most secret in "ourselves". The home is organized according to a number of oppositions: private/public; outside/inside; masculine/feminine; parents/children; shown/hidden... etc (Pallasmaa.1992, Segaud M. 2007).

Privacy is one of the most important features of the building of the Arab residence. It gives it a distinctive character and identity. it provides the idea of *horma* (Inviolability), the fundamental concept in the life of the arab-muslim family. *Horma* means sanctuary, which refers to holiness and honor and the second meaning is the forbidden or prohibited. The concept of *horma* is usually associated with home, women, intimacy, dignity, and integrity; it's related to family honor (بومدين. 2007).

The Islamic religion has many principles that protect and preserve an individual's private life. For example: the prohibition against looking into others' homes. Intimacy in Islamic society means balancing the privacy of individuals and groups, but it should not prevent social communication and does not mean total isolation and separation from society. Intimacy should be a means to facilitate communication within a framework of religious controls and community behavior (Ali A.1993).

In Arab-Muslim traditional home, privacy is the main factor that shapes how home dwellers "plan, build, perceive, and use their interior home spaces" according to the precepts of Islam. (Omer. 2010, Othman et al., 2014)). These vary considerably from those normally associated with Western society (Belk and Sobh, 2011).

According to these teachings, a home must meet three essential needs (Belk.and Sobh, 2011):

a – intimacy: a secure and private sanctuary for family;

b – Modesty: spaces to perform religious and spiritual activities through frugality and design humility;

c – Hospitality: a place to strengthen relationships with neighbors and society.

A.S Bahammam (1987) suggests that intimacy in traditional Arab-Muslim homes is explicitly followed according to these teachings and involves four distinct layers of privacy. These include: privacy between strangers or neighbors; privacy between men and women; privacy within a home between family members and relatives; and individual privacy (Figure 1) . These layers of privacy are achieved through the visual, acoustical, and olfactory privacies (Sobh and Belk, 2011, Zalloom B, 2019).
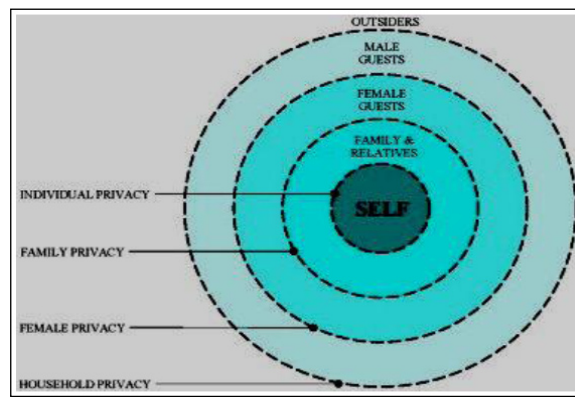
Figure 1. Hierarchy of home intimacy domains (Bahammam, 1987).

Privacy an the Urban Level

The medina, the historical centre of many Algerian cities and Arab-Muslim countries, is the reflection and production of a socio-cultural system set up by an Arab-Muslim society based on the search for the preservation of family intimacy (Boukail and Zeghich, 2009). Both at the city level and at the level of specific urban components, the medina is defined by his isolation from the outside world. The city was shielded from the outside world by fortifications for security reasons, and public gathering places were located on the edges of the city. Foreigners (barrania) were kept out of the city's life. The limits of the medina were materialized by gateway (bab) that closed at night (Naciri M, 1982).

The foreigner *(barrani)* approaching the city for commercial or other reasons was directed via specified routes that permitted him public access from these gates, which served as the city's threshold (Mosque, Fondouk (hotel), Hammam (steam bath), (Hadjri.k,1993). These paths all led to the large mosque, a dominant urban building, which can be seen from the various main gates of the city (Figure 2).
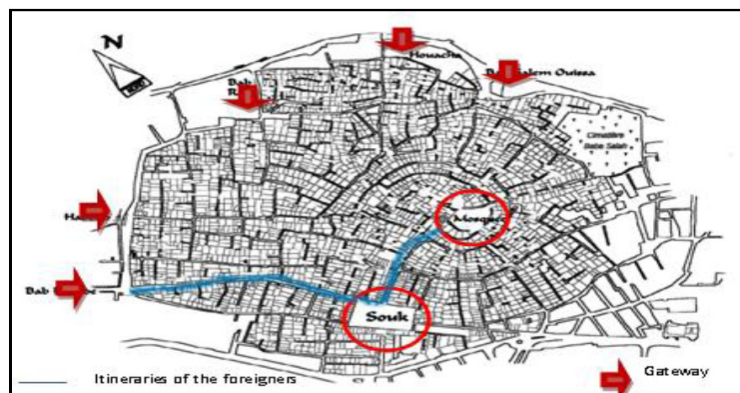

Figure 2. The foreigners Itineraries in Arab- Muslim city (Adad M.C, 2013 edited by author)

In those Medina's, the concept of public/private zones is used for both the interior designs of the houses and the socially constructed public/private domains. The spatial organization of the medina is based on a very great differentiation between the central parts, where economic activity is concentrated, and the areas devoted to the residences, which must ensure calm and tranquility. The opposition between these two parties is reinforced by a differentiation in the configuration of the road network: The relatively wide streets with a regular layout are devoted to economic activities, while in the areas intended for residences; there are a variety of narrow roads with a winding layout, with a multitude of dead-end lanes leading to each house. Islamic urban culture is much more related to social aspects of private life than to geometric questions of regularity. But beyond its labyrinth appearance (Figure 3), the medina is structured according to the logic of introversion (Cote M, 2007).

So, the concept of privacy in residential environments is closely linked to the gradual hierarchy of urban spaces. They range from public spaces into semi-public spaces. Then semi-private spaces and ending with private spaces. A very fine differentiation of the residential frame allows a progression from the most public spaces to the most private spaces by a series of transitions (Figure 4, 5) :

Place (rahba) public; street (trik) public; alley (zkak) semi-public; dead end lan (derb) semi -pivate that served a number of houses, threshold (skifa) private; patio (wast eddar) private. The skifa serves a family, the dead end serves a block, and the street a neighborhood (the hawma). The dead-end lan (the derb) ensures the intimacy of a neighborhood grouping.

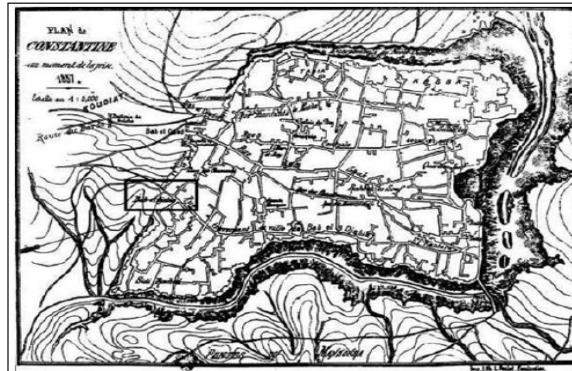Thus, each domain is provided with its own accessibility.

Figure 3. Plan of Constantine city (1857) Algeria. http:// www.Constantine –hier- aujourd'hui.fr
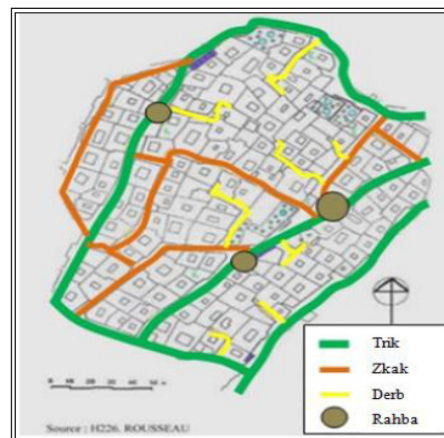

Figure 4. Hierarchy of pedestrian transition in old Constantine, Algeria (Bouznada, 2014)

Figure 5. Urban public spaces in traditional city of Constantine –Algeria (http:// Ekladata.com)

The passage of strangers' visitors through this series of progressive areas in privacy makes them feel that they are going to a very special place. The transitional areas of semi-public and semi-private spaces operate as filters through which strangers can be observed (Adad M.C., Aiche M,2013). The passage from the public to the private obliges the user to use discretion and reserve in order to preserve the intimate character of the private zones on the one hand but also to show a mark of respect towards the private spaces where quietude is required The derb display its autonomy by limiting access only to residents, parents, and acquaintances (Bouznada O.T, Zerouala M.S, 2014).

As to the neighborhood, it is more open to traffic, with routes of penetration and avoidance. It provides the continuity of the urban space and the relations of its components. It was equipped with basic equipment: a Koranic school, bakery, hammam, and grocery store (Boukail-Nezzal.S, Zeghich.A, 2009, Grandet .D, 1986). The hawma has established an urban belonging by defining a group of acquaintances based on neighborhood relations rather than family ties, which distinguishs them from foreigners, "the barrânîa",i.e. those from outside (Grangaud I,2006).

Intimacy an the House Level

At this level we change of scale and pass from outside to inside and there, another level Hierarchization occurs. The different internal spaces are organized from the most public to the most private (Figure 6). The traditional house is composed of collective spaces materialized by the patio (wast eddar) and the terrace (stah) and of private spaces constituted by a set of multifunctional rooms (bit).
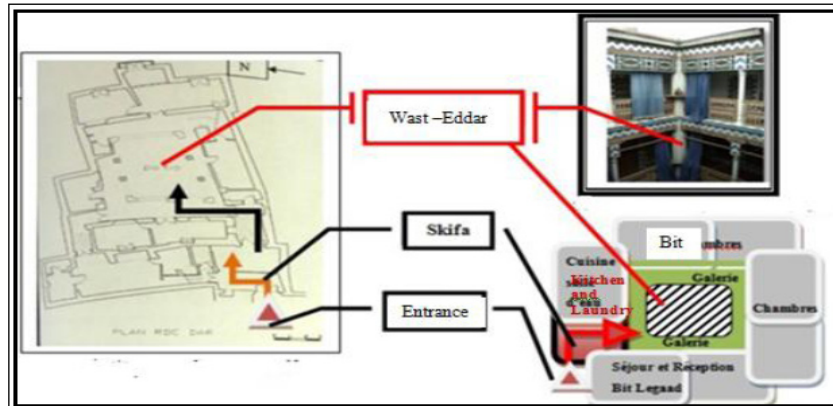

Figure 6. Organization scheme of the traditional house (Bouznada O.T, 2014 edited by author)

To preserve intimacy within traditional Algerian houses Several devices are preconized : such as the location and design of entrance doors, the placement and sizes of windows, the control of building heights and balconies, and the incorporation of internal courtyards (Mortada, 2011; Bahammam, 1987; Hakim, 1986).

Transition from outside to inside has a special importance.

• Entrance door: The separation between the public and private domains begins .with the entrance door (Bekleyen and Dalkilic, 2011; Mortada, 2011; Bahammam, 1987). It is positioned away from the main street and not directly facing the opposing neighbors (Figure 7). It is the unique opening that looks like a whole rectangular of about 1.10/1.20 below the average of a man's height. The visitor, therefore, is obliged to lower his head to the ground to enter and his gaze does not focus directly on the interior of the house. To prevent exposure of the internal spaces when the entrance is opened, the entrance is designed to open into a blank wall to obstruct views to the inside from the outside in order to preserve the privacy of the family even if the entrance door remains open all day (Figure 8).

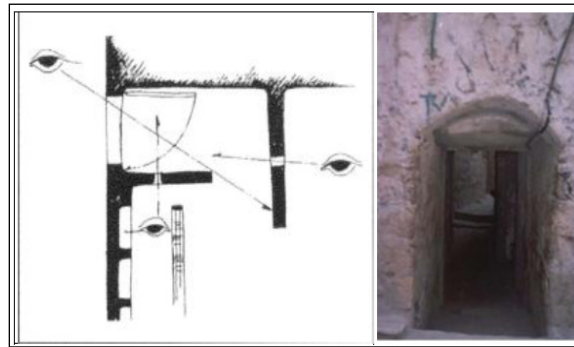**Figure 7**. Entrance door position in old Constantine, Algeria.

Figure 8. Strategy to obstruct views to the inside (Drawing after Ravéreau, 1981)

- **Door hammer**

A metal hammer, the simple shape of which consists of a fixed metal part of the door that connects to a metal ring by a joint to facilitate its movement. The visitor knocks on the door to ask permission before entering the house entering the house (Figure 9). Islam prevails in Arab societies. It maintains the inviolability of the dwellings. It also alerts the inhabitants of the dwelling to the presence of a visitor. There are two kinds of hammers, a big one for male visitors, the man opens and a small one for female visitors and so a woman opens the door.
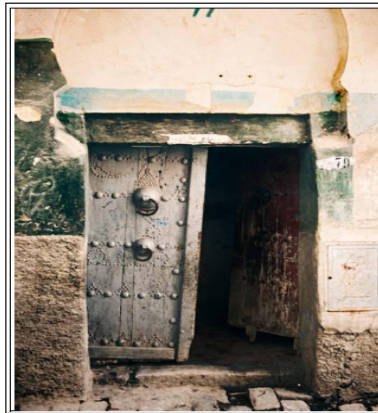

Figure 9. Door hammers. (http:// Ekladata.com).

The entrance to the house is marked by a threshold.

- Threshold (atba): usually high of the house level about 20 cm (Figure 7). As it represents the honor of the family, so it cannot be exceeded without permission (Layachi A., 2018).

- The *Skifa:* a space which located directly after the entrance door it serves an important transition between public and private realms. It also transition zone where mainly men guests await permission to enter the inside of house. The skifa is a well-decorated room which may also be used by men receiving their guests (Figure10). There are small openings in the two walls of Skifa (Figure8), and it's a way for woman to see who is inside without showing themselves. This provides visual privacy, and lead people of the house to feel well and comfortable (Mortada, 2011). Stairs leading to first floor are most of the time located in the *skifa.*

Figure 10. *The skifa (https://bibamous.skyrock.com).*

The courtyard is called *wast eddar* (the heart of the house), the internal open space within the house. House enclosed itself to the street and the external world by its blank, planar facades with minimal openings. The courtyard is surrounded by the building elements from two, three, or four sides but opens to the sky (Figure 11). In addition, the courtyard functions as an important space to provide cool cross-air ventilation during summer, light to its surrounding spaces, and opportunities for landscaped interventions, such as the incorporation of running water of fountains and shade trees (Al-Birawi and Adawi, 2019). It 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 (Figure 11). .

The courtyard interconnect the surrounding interior spaces, since it is the space where all the members of the extended family gather, where guests are received and where internal passageways converge. *Wast eddar* is represents the solution to socio-cultural requirements inside the dwelling. It allows the women to move freely about the house and carry out their daily domestic work. For this reason the kitchen and laundry room open onto the courtyard but placed well inside the house so that no one can easily see them (Figure 6). This is also the space where children play, women receive their friends and where social and religious events are held. Men equally share the pleasure of socializing, eating, and even sleeping (in the hot season).

The Room *(bit):* The last space is usually rectangular, with windows and door which opens onto a gallery. Each *bit* 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 (Hadjri K, 1993).

Figure 11. The courtyard (https://i0.wp.com/harba-dz.com, edited by author)

The Roof Terrace (*stah***):** Provides also a visual connection to the exterior is largely used by women to dry clothes and meet with their neighbors. The terrace is designed as a female-only space. Men can't see them (Figure 12).
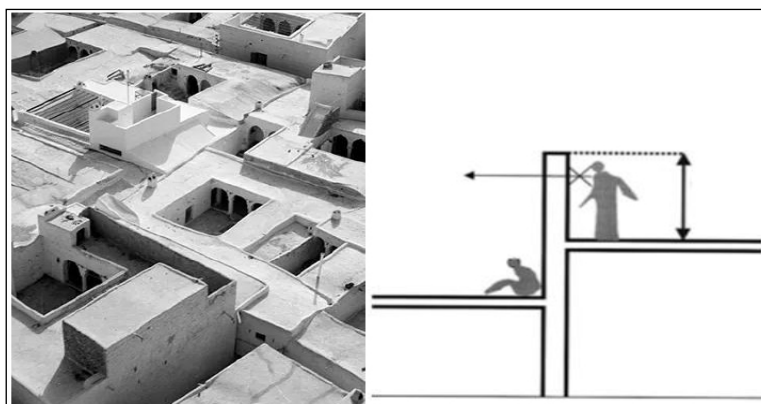

Figure 12. Use of similar building heights and adequate height of terrace walls (Ravéreau , 1951 edited by author)

The Windows Such That

The Windows in a traditional house has a special design. Its height and width conforms to the human body. They are located in the wall where a woman can sit in the wall's thickness and see the outside easily. At the same time she cannot be seen from the outside even if she is standing (Figure 13).

The usage of wooden lattice screens, or *Mashrabiya*, reduces visibility to the outside (Daneshpour, 2011; Mortada, 2011), mitigates the light inside and provides air circulation. In addition, it has an aesthetic shape as we note in the Figure14.
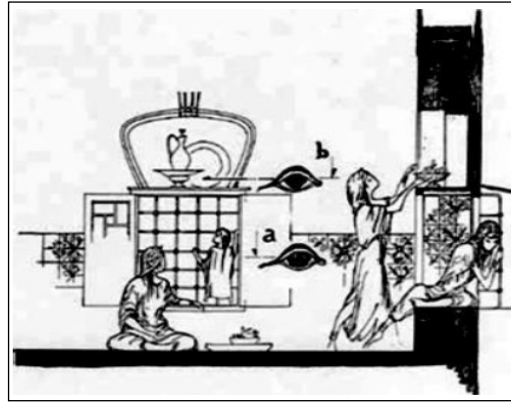

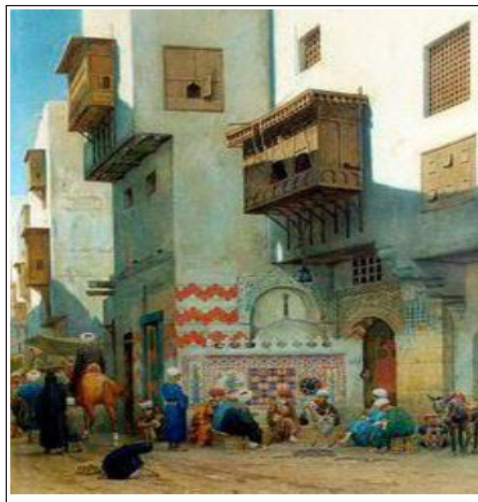**Figure 13***. Windows of casbah house, old Algiers, Algeria (Ravereau, 2003)*

Figure 14*. The Mashrabiya.(https://i.pinimg.com)*

Controlling building heights throughout the community is another design strategy utilized to preserve visual seclusion. The utilization of identical building heights and precise window placement so that the windows do not face residents living opposite the home nor penetrated by the view from the street (Figure 15).
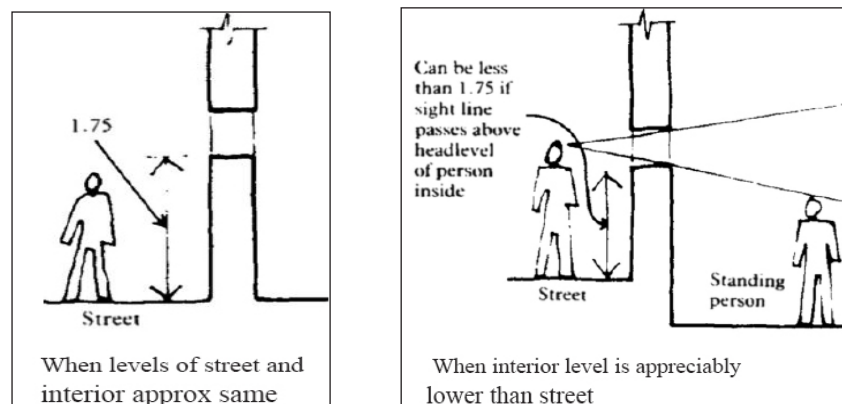

Figure 15. Window height and position guidelines in Arabic cities (Hakim, 1986).
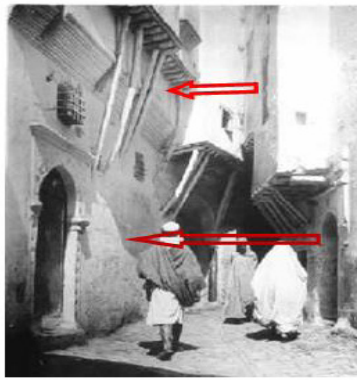
Figure 16. Careful locations of doors windows edited by author. (https://i.pinimg.com)

CONCLUSION

Algerians of Arab-Muslim culture settled in the urban districts abandoned by the French after independence. This phenomenon, along with the rapid expansion of urban centers as a result of a massive rural exodus and a demographic boom, was accompanied by the importation of a variety of design concepts that were ill-adapted and poorly integrated into the culture. This melting pot of cultures has resulted in a loosening of inherited cultural norms in planning and construction. It has also resulted in the loss of the embedded concepts of privacy control that are observed in the traditional built environment. As a result, the concept of privacy has become increasingly important, particularly among residents and social scientists.The demands of privacy are generally met in Arab-Muslim culture by a precise conception separating private life from public relations. This can be seen in the way traditional cities are organized, where we find a mode of transition that actually confirms a spatial hierarchy going from public to private space in a flexible, non-brutal, and harmonious way. This mode of transition from public to private can be found in the construction of Arab-Muslim city space at various scales ranging from the macro to the micro. The passage reflects these various transitions in the ancient city: from the public to the private, from the square to the street from the street to the alley from the alley to the dead end and finally from the dead end to the house. All are sided by many blind facades, symbols of intimacy and privacy.

The house is a feminine universe. It is protected by different thresholds going from the public space to the most private space. The patio or wast-eddar is the common space for women who practice both household tasks as well as handicraft activities; meetings were also organized for discussions and relaxation. Men's life was essentially outside the house in the city; the street with its shops, cafe, market and public squares are spaces for men's interactions. The habitat as a support of private and intimate identity is thus an urgent question to be treated to mitigate this conflict. The rules of urbanism must be reviewed for the well-being of the inhabitants to whom architects and urban planners must offer a living environment in harmony with their beliefs and culture.

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