Typologies of Traditional Buildings in Syria

Introduction

There is a rich diversity in building types in Syria; they can vary according to the region and people’s lifestyles. However, two main lifestyles generate a major difference of construction and dwelling: nomadic and sedentary.

The first lifestyle is called nomadic and depends on pastures as a daily economic activity; it requires constant migration from one place to another in search of pastures and water. These populations are called “Bedouins” and usually live under a tent. They can change geographic locations with their families and groups (usually tribes) according to the available pastures or water necessary to work and live.

The second lifestyle is the sedentary lifestyle, usually linked to cities and the countryside. The types of houses in a city or the countryside also differ according to the geographic location (seaside, mountain, valley, etc.). But there are still some clear differences between the traditional city house and the traditional country house: for example, the traditional city house is characterized by stone constructions with different types and colors and a great variety of building typologies. It essentially consists in a main inner courtyard surrounded by rooms for daily or sometimes evening activities. The country house’s courtyard tends to be used more as the garden of the house, surrounded on one side or more by rooms, while the rest is bordered by a wall. The internal partition splits the house into two areas: one for the inhabitants and another for the animals. Seasonal vegetables are usually grown in this garden.

Countryside houses are generally small, ranging from a two unit house with Mastaba in the front, commonly found in the coastal region of “Mashkita”, near Lattakia, to the house with courtyard where rooms border the courtyard, giving the house more space. In this case, more than one family can live in the house, such as it is in “Sfireh”, a village located on the outskirts of Aleppo.

Generally, the number of inner courtyards in the traditional Arabic house differs; the more luxurious the house, the greater the number of families living in it: some very big houses have 2 or 3 courtyards. As for houses with a single courtyard, they differ according to their occupant’s economical status; some houses have large courtyards with a fountain in the center, surrounded by trees, while others, smaller in size have a plain simple courtyard

Morphological classification

Seven main types have been distinguished; particular dwellings linked to the two main lifestyles mentioned above, in urban and rural areas:

- The Tent
  Tents are nomad shelters used by Bedouins as dwelling; they are easy to put up and take down for transfer. A nomad’s life is linked to sheep farming, which means
constantly moving from place to place, looking for pastures and a suitable environment for the community and its livestock. They generally move about in the desert, in plains, in the eastern areas of Syria, near the banks of the Euphrates and close to the Turkish border.

Tents are used for multiple purposes; they can be of different sizes, according to assigned function or use:

Firstly, there is the large tent made to suit the nomadic lifestyle, split into two parts: one for women and another for men. There is also a section for guests separated from the other sectors with a felt or cloth curtain, sometimes with supply bags and fine reeds. Saddles are usually hung on the left side of the tent and some belongings are also stored there.

Secondly there are small tents, usually used for household activities, including the kitchen and cooking area, or to stock fodder and store equipment.

The actual tent is rectangular or square and is made of woven wool, taut by ropes from the outside and fixed into the ground with stakes. The woolen fabric used is characterized by its relative good insulation properties and its ability to protect from the summer heat and the winter cold. The families that live in these tents usually consist of three generations. In some areas, we can find groups of tents in which a number of families live together, sharing water and pasture.

The tents are equipped with all the necessities for a nomad’s life, which has almost remained unchanged: they still sit and eat on the ground, and their tents are furnished in the same traditional way, with mattresses, pillows and reed mats.

- The Basic House

This type is composed of two aligned living units; they are open on the exterior, either in front of the house called “Mastaba”, generally used as a leisure part of the house, or on the back of the house, called “Zribeh”, and used as a stable for animals. These two rooms communicate through a door; their use is mixed between day and night activities. The first is mainly used as a bedroom and the second as a kitchen and food storage area.

This kind of spontaneous construction belongs to the rural world; the house is mainly composed of one floor and is associated to a farm called “Bustan”. It is found scattered in the mountains near the city of Lattakia.

- The House with a Riwaq

This type of house is composed of several aligned rooms forming a residential unit; they are connected to each others via a covered gallery called “Riwaq”, which makes up the whole front elevation.

This type of houses is common in the villages of the southern region of Syria, to the north of Damascus; it is used mainly as residence.

- The House with a Liwan

This type of houses can be found in the region located north of Damascus. It is a tripartite structure composed of three aligned units: two are used for living and the central unit, open on the exterior, is called liwan. The connection between the two living sections takes place through the liwan, which is used as a distribution space. This house is a typical multipurpose rural house, used for living, as a “local workshop”, as a warehouse, and finally as shelter for domestic animals in the central space (liwan).

- The Rural House with Courtyard

The difference between city and country life has an impact on building the typologies and shapes of houses: building materials therefore also differ in the outskirts of Syrian cities.

Life in the countryside depends on agriculture and livestock farming, this lifestyle calls for a courtyard attached to the house. It is used as a private space and is not necessarily surrounded by rooms. It can also have specific areas for animals e.g. horses, poultry, and seasonal vegetables.

Examples have been found in the surroundings of Aleppo, in the city of Sfireh, where mud structures and the use of mud cupolas in roofing are dominant. This typology is based on the use of one main unit, 4x4m, covered with a cupola and repeated around the inner courtyard. The larger the house, the richer the owner; the more units there are, the larger the courtyard.

Although these houses never rise higher than the ground floor, it was found that they are generally divided into a number of sections: the day sections, with rooms for men and rooms for women, the kitchen and service rooms, including the “tanour” (traditional oven), the bedroom section and a special area for animals, with a stable and animal stalls.

Mud cupolas are also used in Tiara, on the outskirts of Aleppo, but in this case the whole building takes on the shape of a cupola, not just the roof as is the case in Sireh.

With time, buildings changed and roofs became flat, covered with wood, plants and earth. After the emergence of reinforced concrete, cement, and CMU (concrete masonry units), they became flat concrete roofs; walls were either kept as a traditional structure or made with stone or CMU, because of their greater durability and due to the fact they don’t need any periodical repair. Another reason for the decrease in the use of mud is the lack of craftsmen capable of making and repairing mud structures. The new solution hasn’t fulfilled the needs of the people on the level of thermal insulation: traditional buildings surpass modern structures in this field; they provide better acoustic and thermal insulation and are more environmentally adapted.

Traditional walls are thick and can reach 70cm wide; mud itself is an insulator that keeps the temperature in the house stable in hot and cold seasons.

The most specific characteristic of this building typology is the limited number of openings, as can be observed in most cases, limited to the front door and small vertical long windows. It was noticed that locals make a hole in the cupola of the storage room to fill it with grain, then seal this hole. Earth rendering is used to cover the outer walls; the inner walls are usually covered with limewash.

Mud has been used as a main building material in many other rural areas and with different building typologies and shapes. Mud houses and rough stone houses can be found in the areas surrounding Damascus and Ghouta: buildings are made with wooden frameworks and are often two storeys high. In other cases, city building typologies are preferred, including the private courtyard that is most often completely surrounded by rooms. Sometimes city architectural elements are also applied to rural housing,
such as the Liwan (large alcove opening onto the courtyard) but in a much simpler version, using cheaper materials such as wooden roofs covered with plants or mud and brick walls...

- The Urban House with Courtyard

One of the most common building typologies in Syria is the traditional courtyard house. It can be found in all Syrian cities, just as it can be found in all Mediterranean countries.

This building typology is characterized by a small number of relatively small openings in the external façade, and a large number of openings that open onto the inner courtyard. Traditional houses vary in size and luxury level, and inner spaces vary in number and size from house to house, although they all have one common feature: the open courtyard gives the occupant a feeling of privacy and privileges the relations between the individuals of the family, who develop a strong attachment for the house. The inner courtyard is a garden and the center of household activities: all the rooms are set around it and open onto this gathering place. In large and medium sized houses, a fountain is placed in the center of the courtyard and freshens the air; trees are also grown in many traditional courtyards, adding shade and life to this exclusive area.

The height of the traditional house is limited, usually no more that 10m for two storeys. Generally, the living rooms and service rooms are on the ground floor whilst bedrooms are on the upper floor. In large houses with over one courtyard, spaces are separated into an area for the owners of the house, another one for guests and a third for servants. But not all large houses are luxurious or rich in architectural features, though they can have more than one courtyard.

In the traditional building the courtyard is accessed by a corridor starting at the house’s front door, a design which ensures privacy and security. Moreover, most of the doors and windows open onto the inner courtyard. The openings on the external façade are limited to a few long windows and high windows.

Traditional Arabic houses are known to be welcoming environments, and are friendly in both their design and structure. For example, courtyards are equipped with many elements that help humidify the air (trees and fountains); they also use the iwán as an open summer sitting room facing north. The thick walls and roofs are good insulators and help stabilize room temperature, while the variable roof heights and protruding elements in the facade provide shade.

Some elements appeared in the traditional urban house to help increase the amount of shaded areas, such as:
1. The use of protrusions and cornices on the outer facades or on the inner court, facades that look over the courtyard.
2. The use of the “Kishks” (protruding wooden kiosk) to cover the openings in the external wall, rarely used on inner facades.
3. Some traditional houses use the roof garden as a way to lessen heat in the house.
4. Covered streets protect external walls from direct sunlight.

Traditional houses in urban areas also contain many architectural elements made to ensure a natural airflow through all the spaces; wind catchers as well as openings opposite each other are used. A great variety of ceiling heights are used and the main spaces of the house are conceived so as to be ventilated by soothing winds.

- The Lebanese House

Throughout the eastern Mediterranean, we find a characteristic and common typology which bears the name of the country where its presence is the strongest: Lebanon. The Lebanese house appeared in the second half of the XIXth century and is linked to both Ottoman modernity and the development of a middle-class in the area. This typology represents a great change in the organization of space in the traditional house: it is the result of the incorporation of new industrial materials as well as of the new urban regulations and development programmes in that period.

The central hall is the main characteristic element of the Lebanese house. Around this hall, or large central room, we find several rooms for dwelling. The façade rooms open onto the outside through an ornate triple arch window. There is also often a balcony which prolongs the room towards the garden or the street.

The Lebanese house generally found in Syria is very modest compared to the houses in Beirut, but it really is the most modern middle-class traditional house in Syria. These houses are found throughout the Mediterranean area of Syria.

Evolution and Transformation

In this chapter, we will discuss the changes that have overrun traditional building styles and techniques over the years, as well as the developments that could have affected the building shape and function. Obviously, this process has been rather slow and has given each era a chance to express itself and establish its own building techniques, materialized in buildings that still stand today.

Traditional architecture usually depended on handcrafts, and building materials made from natural components were widely available locally.

These materials differed from area to area, thus conferring particular characteristics to the architecture of every area in Syria: this is noticeable in the style, color and dimensions of buildings, all adapted to local lifestyles and needs. Some of these characteristics have withstood time, others have changed or have been altered to adapt to modern times.

Building types have undergone changes in both the city and the countryside but to varying degrees. In some cities, the difference was blatant: building types, both in use and shape, moved away from the traditional forms. On the other hand, the development in country architecture varied: it was sometimes limited to small changes, confined to building materials or techniques, and other times calling for significant changes, affecting the whole building type.

The reasons for transformation are many; one is insufficiency of the number of buildings to face an increase in population. Sometimes, as with the traditional houses of the Old City of Aleppo, cities expanded horizontally to the point that the downtown population, in need of central housing, transformed 2 storey traditional houses into multi-storey buildings.
One of the main reasons that caused the near disappearance of several construction traditional crafts and the disappearing of some other crafts, is the declining number of skilled craftsmen: they alone knew the building arts and processes; how to prepare materials, determine spans, and dedicate the necessary time for every phase. The other reason is the shortage of traditional building materials together with the emergence of substitute materials that are faster to implement and are more durable.

The fact that some areas that use the traditional types of building have become tourist areas has changed the use of these buildings and the character of the area, introducing alterations in the materials used, and limiting building permits.

- **Formal Transformations**

- **Those that modify volume**

  These changes can be implemented by increasing the volume of the building, its height or width, or by adding alterations that affect the original shape of the building or its overall appearance.

  The reason for this expansion can be the emergence of new needs or a new use of a building itself; or this expansion can be caused by a growth in population, in turn increasing the need for real estate, which naturally expands the city towards new areas.

  Many problems arise from expansion, such as new needs, standards and additional services. Expansion results in the introduction of more cars into the area: this traffic increase, a result of the natural growth of the population, adds new technical infrastructural problems to the old fabric. This is the situation in the old cities of Damascus and Aleppo. In these two cases, the pressure on the old centre of the city is such, it has affected the urban tissue, the technical and social infrastructures. It has also brought about changes in living standards and expectations, leading some inhabitants to abandoning the old city, others to changing their houses, by adding on new floors or rooms. Changes also bring about alterations to openings, new house layouts and distribution, and the addition of modern, non compatible, materials and other changes.

- **On the level of wall partitioning**

  These types of changes are mostly related to daily life constraints or the inability of these houses to develop and host a greater number of occupants. Therefore, occupants decide to divide up rooms with wall partitions or to arrange the inner spaces differently to increase inner volume.

- **On a three dimensional level**

  These types of changes can affect the typology in general; in some cases, they can cause a lot of alterations to the plan of the building in terms of space distribution. In certain cases, this can go to the point of constructing a wall inside the Liwan (the main hall), dividing a vault or splitting a room covered with a cupola.

  In the case of a façade: a part or a whole window can be sealed up with blocks, or new openings with different shapes and styles can be implemented. Some cases were reported concerning ruined wooden "kishk", replaced with blocks and reinforced concrete: this massive wall was either blind or had a few openings, but nothing comparable to a wooden "kishk", neither in appearance nor in terms of performance.
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The tent

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