PHYSICAL, CHEMICAL SCIENCE
AND ENGINEERING:
DEVELOPMENT OF HOUSING
ARCHITECTURE IDENTITY IN
DAMASCUS

Mohammad Ali,
Ph.D. Candidate of Architecture,
Tarbiat Modares University,
Tehran, Iran.

Afsane Zarkesh,
Corresponding Author, Assistant Professor of
Architecture, Tarbiat Modares University, Tehran, Iran.
Email: Zarkesh @modares.ac.ir

Mansour Yeganeh,
Assistant Professor of architecture, Tarbiat Modares
University, Tehran, Iran. Email:Yeganeh@modares.ac.ir

http://dx.doi.org/10.26739/2521-3253-2018-1-4-3

Abstract: The aim of this study is investigating development
process of hosing architecture identity in Syria and Damascus.
Damascus is the most ancient standing city of the world.
Damascus house with valuable qualitative characteristics was
a place for comfort and calmness. Despite of such a unique
potential, history, identity and originality, unfortunately housing
and residence in Damascus in the recent times have ignored
the traditional values of the past and moved toward awkward
and incorrect copying and imitation of other regions’
architecture. This study attempts to show changing and transforming architectural identity in Damascus for future inspirations. Research method is explanatory and descriptive. Samples were selected from Syrian tradition and modern house. The dominant social and economic conditions and globalization effects have led the Syrian citizens to imitation. The reasons are weakness in architecture culture and planning for architecture culture and identity enhancement. Syrian architecture has been located far from its history and urban development. It has changed into with no cultural meaning and with no relation to Syrian citizens’ needs and requirements. The point has been confirmed by many architects and academics. They believe that this alienation and lack of identity in Syria architecture are rooted in cultural weakness of the Syria society and architecture.

Key words: Syrian Architecture, Historical eras, Tradition and modern, habitation patterns.

Introduction
Syria Arabic Republic’s capital, Damascus, is the most ancient standing city of the world. According to the historical documents, the city has been dwelled since the second millennium BC, although the history of Damascus dates back to fifth millennium BC. Since the city has experienced a variety of civilizations, its architectural system has been influenced by various cultures and arts, including those of Assyrian, Persian, Greek, Raman, Islamic and Ottoman. Following these civilizations, Damascus and her architecture possessed a unique identity with a kind of unity and harmony in form, style and space.

Damascus house with valuable qualitative characteristics was a place for comfort and calmness. Space hierarchy played a key role in Damascus house. The concept of neighborhood was perfectly related to the concept of house, so that it possessed peripheral and internal environments separated by the fences and hedges, just as houses. There was an unbeatable harmony in application of architectural elements in the houses, in order to achieve security and comfort feelings.

Despite of such a unique potential, history, identity and originality, unfortunately housing and residence in Damascus in the recent times have ignored the traditional values of the
past and moved toward awkward and incorrect copying and imitation of other regions' architecture. Presence of ethnical diversity in Syria and various architectural styles including Greek and Roman styles in other cities of the country have influenced Damascus buildings. Spear'd of apartments, loss of privacy, peace, security and social ties are among objective documents of Damascus architectural deviation from local and original principles and standards. While social and cultural changes in Damascus are not so great that they lead to generation and inter-generation disintegration at the anomalies level, construction style has been distanced from real need and aspirations of people, due to external reasons. Studies reveal that most of people in Damascus tend to live in Damascus houses, which are in conformity with their personality and mood. It worth to note that older houses are more valuable the modern Damascus houses.

Researches from all over the world have studied Damascus architecture and considered it as a unique, ancient and fascinating work of art. Many articles and books have been published in this regard and Syrian architectures have emphasized on this point and published many reports on their analysis and findings about the Damascus architecture. However, modern design and proportionate to the current needs and local approaches to the Syrian architecture have been considered just in the form of large project, and the subject has not yet been assessed at the residential houses scale level.

Applying decorations on the ceilings, walls and in the whole of the house is the most important characteristic of the Damascus houses. Moreover, using wide yards and dividing the houses into winter and summer parts are among other crucial features of these houses. They are the symbols of identity and originality of the Syrian architecture in history as well as an undeniable example of good architecture, which Syrian citizens like to possess. Such houses may satisfy human needs generally including one's physical, mental, spiritual and social requirements.

Regarding the characteristics and flexibility of the Syrian architecture, it may be appropriate for modern houses.

**Historical Development of Ancient Damascus**

Existence of human in Damascus dates back to pre-historic era. In the first millennium BC, and in Assyrian texts about campaign of Assyrian King Shamanser III to expand his
Influence in the Mediterranean region, Damascus name has been mentioned. The city has been known as an important center for Arami kingdom as well as temple for worshipping Haded god.

Figure (1) Damascus in Roman era (right), Arami era (middle) and Byzantine era (left) source: Amadvari 2010: 110.

In the Hellenistic era, Damascus engaged in conflicts among Alexander successors, Ptolemy and Seleucids, until the rise of Antiochus 9th who announced Damascus as the capital of Phoenician and Syria in 111 BC. In this period, the city possessed a new neighborhood in the east, where Aramis lived; somewhere between the present Bardi River and Alqaimaire Avenue. In this era, the ancient temple was reconstructed and called Zeus or Jupiter Temple, and substitute for Haded god. During Roman empire (64-391 AD) Damascus found a clearer shape and emperor Diokulaisan built a castle and weapon manufacturing workshops in the city. Emperor Theodosius in 391 AD announced Christianity as official religion in Romania and Temple of Jupiter changed into a church. Moreover, ancient wall of the city was extended and many parts of the wall were covered by new constructions. Damascus has a rectangular shape with the dimensions of 900/1500. A street connects the east and west of the city called Medahat Pasha; it is the main street of the city (Via Recta). There some remains of the city dating back to the Romman bunkers, such as Alfaradis and Eastern gates. Other gates with astronomical names were recognized based on the historical books since in the Islamic era; they were replaced by new gates of Algieniq and Tuma. In north; Bulls (Keisan) and Alsaghir in south and Aljabie in west. In Byzance era, Damascus preserved its Roman shape but some new buildings and castles were added to encounter Iranian violation. In addition many churches were constructed Damascus faced many events in early 17th century. The most crucial event was appearance of Islam in Arab peninsula. Here, we are not going to assess religious and political history of Syria, and we focus on the architectural aspects.
Historical development of Damascus architecture

Damascus has experienced a variety of governments and civilizations in different eras, which were mostly complementary. The city was established by the citizens’ attempts with distinct culture, literature and many different aspects. Concerning the history, Damascus citizens possessed a clear and distinct identity, which was related to all previous governments and civilizations including Greece, Rome and Islam. The role of citizens was highly obvious in formation of this identity. They were inseparable part of city texture and possessed protruding role in various aspects of social life. They are now influenced by globalization concept in cultural and personal aspects. This influence is perfectly reflected in all events and commitments. For instance, houses changed into western style. The same is true about people behavior, because they believe that otherwise they are considered as under-developed population.

However, the ancient Damascus houses are the most valuable product of the urban and architectural developments. They reflect historical social and cultural values.

The ancient houses provide a unique architectural style and special characteristics in terms of aesthetics and usage distribution.

These houses enrich the city aesthetically and consist of many efficient factors in social, economic and environmental aspects. The ancient houses in Damascus emphasize on diversity in decorations and geometrical and plant images as well as materials including soil, wood and stone used in walls and roofs. The main venues have masterpiece decorations with colored marble and wood. Even, lower parts of windows and doors have been decorated.
Islamic Architecture of Damascus

The Islamic architecture was spread in Damascus by the Arab Umayyad Muslims. Innovation and creativity were obvious in it. It was for the first time that ultra-fine structures appeared in the city using original characteristics of the Islamic architecture. After appearance of Islam and its development, the building became perfect and equipped with more innovations. Even imitation of the western architecture vanished and new designs such as dome, roof, door, crown column, decorative inscriptions and other factors were presented based on a perfect engineering plan. The new architectural nature and form followed and responded the needs of Islamic Arabic culture of the time. They revealed the distinctive character and originality of the Islamic art and architecture.

The general feature of the Islamic art in architecture is unity in diversity; i.e. solidarity and cohesion in the whole and in the part. In addition, this architecture is characterized by refraining from illustration of human and animal, specifically in religious buildings and using plant decorations and nature illustration instead.

In the following paragraphs, the new post-Islamic political movements would be discussed and their effects would be analyzed, concerning the changes in the dominant art face and formation of these changes, in a specific framework. These changes led to a variety of technical schools on the Islamic art area as native art, Umayyad art, Abbasid art, Seljuk art, Fatimid art, Ayyubid art, Mamluk art and Ottoman art.

1-3-2 Umayyad Architecture

Umayyad architecture was concurrent with transfer of caliphate center to Damascus. The Green palace is the most famous architectural work of Moavie era. According to the historical sources, the palace was built around the Byzantine governor's mansion, next to Umayyad mosque in the southern wall. The Umayyad Caliph, Alavid Ibn-AbolMalek, established a great mosque in a holey place and decided to build the Hadad Temple. Then, he built the Roman Zeus Temple in an area of 300 square meters (705 AD).
2-3-2 Abbasid Architecture

After the end of Umayyad government in Damascus, and power transfer of power centers to other cities in Abbasid era, Damascus architecture was less concentrated. Therefore, no important architectural works appeared in the city, in this period. In Abbasid II era, Damascus architecture was highly influenced by Persian and Turkish architecture; specifically in the period of Almotavakel Ala Allah in 846 AD, and appearance of Seljuk in Sham. In the mid fifth century, the most important feature of the architecture in this era is porches with wide stone nodes, in open yard from four or three sides, and a pond in the central courtyard. In addition, domes are installed on a corner or side of roofs on the anticlines. Moreover, half-cylindrical or crossing domes are used to cover rooms and halls. Anticlines have been used for the first time as a considerable decorative and architectural element. They were applied over the main gate or corner of the roofs. A good example of Seljuk architecture is Nuri Hospital in Damascus.
Rise of Ayyubid was the time for new Seljuk architecture in Damascus, but this architecture did not deviate from the overall Seljuk architectural framework. It continued to improve and added some derivatives. Frequent wars and conflicts are among Seljuk era features, which in turn led to large buildings with towers and strong walls. Architecture was simple and no decoration was used. Ayyubid were interested in city enhancement, specially its walls. They also attempted to strengthen inside the buildings including mosques, schools, temples, tombs, domes and houses. Density of new buildings with various applications with regard to the society requirements was among architectural innovations of the time. Making central courtyard with a rectangular pond surrounded by porches was spread in this era. Roofs were cross-shaped or in the form of curved domes. Height of roofs increased with generally smooth and tapered picks.

The number of Ayyubid buildings is very high and many are still standing, such as Alqeimari Hospital, Aljuze Bath, Aladekie School.
2-3-4- Mamluk Architecture

Density in architecture increased during Mamluk dynasty. This made them shrink the total area of buildings. In addition, some changes appeared in the general design of buildings, the very known element of architecture (Heavenly courtyard) removed from mosques and they were covered by dome or roof. For instance, Jaqmaqie School, Assoltan Bath, Attorbato Takritie.
2-3-5 Ottoman Architecture

In the early 16th century, Damascus became part of the Ottoman Empire; and for this reason, its architecture reflects the Ottoman architecture. This style was highly interested by Ottoman rulers, and provided the city with a new appearance. Damascus became an architecture pearl of the time. Rulers and high-ranking officials possessed large and appropriative houses. They attempted to transfer the dominant Istanbul architecture models to Damascus. But the event did not caused to hide the common features of the ancient and modern elements of architecture. The combination produced beautiful and harmonious buildings. Public bath and mosques were built larger with more facilities. Since they possessed many rooms and internal courtyards, but external walls had no decorations, Central dome is the main feature of the Ottoman architecture. Examples are: King Solomon’s Cours (1566).

Figure (7) King Solomon Cours

2-3-6 Late Ottoman Architecture

In the late 17th and 18th centuries, urban development was determined by Ottoman rulers for states and city managers. These managers were among the rich and the elite. Great buildings such as houses, baths and schools were established by the rulers in the framework of Ottoman architecture, but in some cases the framework was deviated. Some rulers did not any mosque
for example Nezam family. They focused on palaces. Alazm Palace in Damascus was one of their works.

According to Damascus history and her architecture development documents, the problems of dwelling and architecture are more considerable in Ottoman era.

**Damascus Style House**

Damascus house is divided into two main parts: parts for welcoming men and women. Both parts contained internal courtyard surrounded by rooms and hall. Men's part considered of entrance with no visibility to the main courtyard and the main courtyard as a distinct element in the buildings, called Arzoddiar. The courtyard is perfectly symmetric. The guest was welcomed during winters in two halls in both side of the main porch. The woman part consisted of courtyard, fountain, and trees and connected to the kitchen.

Rooms and halls had two sections. The upper and halls had two sections. The upper section was 50 cm higher than the floor level and covers of the room space. The lower section called Alatable. The hall walls were built using precious and colorful woods whose beauty was enhanced under the light. The room in Damascus house possesses a closet (Al Katibe) in the walls or shelves (Al Kharastane) for keeping books. The shelves were made from wood or glass. (Concerning the stone decoration, the main feature is large and symmetric geometrical elements). In addition, there are small decorative plants, which reveal the highest level of art originally in Damascus architecture. There are marble frames in the main hall with some delicate decorative plants. They are used to achieve conformity and harmony with the Islamic architecture.

**Table (1) Damascus House Style (Source: the author)**

<table>
<thead>
<tr>
<th>House</th>
<th>House Style</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alazm Place</td>
<td>Houses with two or more courtyards</td>
</tr>
<tr>
<td>Khaled Alazm</td>
<td>Houses with two or more courtyards</td>
</tr>
<tr>
<td>Nezam House</td>
<td>Mansion</td>
</tr>
<tr>
<td>Jabri House</td>
<td>Houses with on courtyard</td>
</tr>
</tbody>
</table>

This group of models in Damascus houses has been selected from Ottoman era for the following reasons:

1- Having various models with small, medium and large houses.
2- Having clear and distinct architecture elements in large houses.
3- Access to all requires documents for samples analyses, including plans, view and sections.

**2-4-3 Houses with two or more courtyards**
This model contains 5 percent of Damascus houses. The internal and external spaces are perfectly distinct. Spaces for family members, guests and house cleaners are around two or three independent courtyards.

**House with one courtyard**
This model contains about 90 to 95 percent of Damascus houses. The model is distinguished by integrated internal and external or public and private spaces, with observation of privacy and rank.

The external space is in floor surrounded by various spaces around the central courtyard. The internal space is in the second floor contains private spaces such as bedroom, etc. Stairs next to the entrance separate these sections in two sides. This model of one-yard houses is divided into two styles: Baroque and Neoclassical styles.

**3-2-1 Baroque Style (Since 19 century)**
The example of this style is Anbar School/Office. The same style has been used in Damascus Forum (1982).

![Figure (8) Anbar Office](image-url)
This model dominated over Europe, architecture of 17th and 18th centuries and classic architecture (Roman and Greek) and extended more than Renaissance style in painting, architecture, sculpture and ornaments.

### 2-2-3 Neoclassic Style
The example of this style is Alsarai building. The first building of neoclassic style in Damascus was established by the Nazem Pasha, which was an imitation of Paris Neoclassic style. The builder was Decency using the imported plans and designs.

![Figure (9) Alsarai Building](image)

### 3-2-3 Mediterranean Style
This model was dominated over many buildings in Damascus including Faiha School and buildings along the Assalehie road.

### 3-2-4 Alkulniali Style
This style has been prevalent in capitals Algazira, Damascus and Qahiro, since Ottoman era in Istanbul. An example of this model is Aleppo. Moreover, there are Italian hospital and school as samples of this style. It is believed that these buildings have been pre-fabricated.

### 3-2-5 New Style
Alabid building is a sample of this style, constructed in 1910. The plan of the building was imported by the building was imported by the German architect, Meinzer, and implemented by the Spanish architect, Fernando de Aranda. Alabid is the most perfect and glorious building of this style.
3-2-6 Local style (updating)

Hejaz railroad station is the first building constructed using combination of modern and traditional architecture. It is not imported. The Spanish architect, De Aranda designed and supervised the construction of this building.

De Aranda designed many buildings in Damascus during a fifty-year period, including Albasam building in which colorful concrete mosaic frames have been used for doors and windows. De Aranda had also designed a number of glorious buildings, such as Ata Ayyubi and Jamil Mardom Beik houses in the Nuri Pasha neighborhood.
3-2-7 Modern Local style

This style possesses traditional architectural form and elements. The sample is Aladl Palace, Justice Ministry Complex and Alfige Institute building. The two last samples are among designs of Abd al-Razaq Molas.

![Figure (11) Parliament Building](image)

Characteristics of this model include using traditional architecture elements such as arches, columns and stone facades. The other building of this style is the Treasury Department building which was constructed for Omar Al-Malik.

3-9-8 Modern European Style

The sample of this style are very numerous, the most important of which is Alsharq Hotel built by Lebanese architect, Antoine Sabet, in 1932. The model follows the 20th century's modern architecture in Europe, characterized by innovation and prioritizing the building application, based on the terms of the time.

The Lebanese architect has another design called Bena Al Qodsi, Which is locate in front of the Post Office. Of course, it is not as important as the Assarq Hotel. Other samples are Fandoq Umayya Al-Kabir and Omar Al-Khayam designed by Farid Tarrad, the Lebanese architect.
3-2-9 Modernity

National Library Asad, Opera House and Higher Institute of Music buildings are samples of the Modernity architecture. They are built under supervision of Emad Bashur. The library was seriously criticized since it was a collection of all modern deviations. The Parliament building is another example, which was designed by the Japanese architect, Kenzo Tange.

3-10 Conclusions

Syria is one of the developing countries concerning the urban development. Therefore, it has not been possible to revive the country's culture, traditions and civilization in the ancient
capital, Damascus. The dominant social and economic conditions and globalization effects have led the Syrian citizens to imitation. The reasons are weakness in architecture culture and planning for architecture culture and identity enhancement. Moreover, development of trade architecture forms have led to the modern Syrian citizens to lose their architecture and replaced their last identity, commitment and pride with the present ones. Some citizens selected the commercial houses instead of cultural and artistic Damascus houses, because of ignorance about their values, although they are much more expensive than the commercial houses.

Syrian architecture has been located far from its history and urban development. It has changed into with no cultural meaning and with no relation to Syrian citizens’ needs and requirements. The point has been confirmed by many architects and academics. They believe that this alienation and lack of identity in Syria architecture are rooted in cultural weakness of the Syria society and architecture, because of:

- Lack of interest in architecture culture in curriculum of primary and secondary school as well as ignorance to ancient heritage and modern culture of architecture.
- Lack of interest in architecture culture in Syrian modern media (print, audio, video and internet), local newspaper or Arabic journals, where one finds no article about architecture. Architecture articles discuss hardly about historical works. Even Arabic Language T.Vs rarely broadcast Arabic and international programs about architecture. In addition, in their rare cases, they provide the audience with a general description of the architecture with a general description of the architecture background.
- Lack of NGOs on architecture and attempt to discover technical and architectural talents of Syrian citizens as well as lack of encouragement to localization and identification of the Syrian architecture, both in cities and towns.

Regarding the current reality of the Syrian architecture, Specifically in Damascus, one find out that it is totally imitation of the modern western architecture. The clues are domination of this architecture style in Damascus and public buildings. Usually, architectural style and form of a city's famous buildings are reflected in the private houses of individuals and citizens.
REFERENCES

4. Wulzinger K& Watzinger C., 1924, Damascus Die islamische Stadt