# **Architectural Features of Ancient Damascus**

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**Abstract:** The study gives a brief overview of the main periods in the development of architecture in Syria. Architecture of the private houses in Damascus 19th and 20th centuries. Notes the influence of European architecture motifs on the total composition of a traditional house in the period of XVIII early XIX centuries. A brief description of the dwelling unit, it is functional zoning for the period under review. Structured classification for the traditional elements in Damascene houses, the development of the elements in Damascene houses, in three periods of Damascus history, XIX century, French Mandate period and modern buildings, included: the entrance form, the various forms of courtyard, how the rooms located in the house, service area "Kitchen, Toilet, bathroom" and the openings" doors and windows". In order to document the history of an important historical country like Syria.

Key words: Architecture of Damascus, planning elements of the home, chamber, zoning, doors and windows

# INTRODUCTION

Rapidly and steadily the movement of history. Before our eyes, changes dramatically the political geography of the world. Problems typological similarity in the development of national cultures in many parts of the Middle East, the study of a complex set of issues related to the conceptualization and a generalization of the laws of the formation of different kinds of national creativity, acquire now deeply relevant.

The connection between the history and the modernity. To accommodate all the centuries and today's tasks, historically an objective assessment of the past and create a new culture in tune with progressive ideas of our time all this defines the living content of a complex process that is experiencing the art and architecture of Syria (Afif, 1981).

Syria a country in Western Asia, adjacent to the West coast of the Mediterranean Sea. From the East Iraq, from the North Turkey and from the South Jordan was the cradle of ancient civilizations. The first traces of human here date to the early Paleolithic. In IV-III BC, up a significant portion of the population in Syria goes to a sedentary lifestyle. In III-II millennium BC, came the first small early state, type of state, Marie, with centers in the market towns, helped by a favorable geographic position. However, this made them the target of constant Foreign takeovers. Already in the XVI-XV centuries. BC Syria was conquered by the Egyptian pharaohs. In the XVI century BC, the Northern part of it was conquered by the Hittites. By the beginning of the X century BC, in Syria formed a strong state with its capital in Damascus. In the VIII BC, which was conquered by the Assyrians. Since, the end of VII century BC, Syria became a province of the New Babylonian Empire and in the VI BC, came under the rule of the ancient Persian Achaemenid dynasty. In 333 BC Syria was conquered by Alexander the Great. After the collapse of his empire acquires the status of the province of Syria as part of a vast Hellenistic Seleucid monarchy state or the Syrian Kingdom, created by Seleucus I Nicator. The Seleucids built new cities (Basili, 1962).

# MATERIALS AND METHODS

The capital of Syria Damascus (from the Arabic word Dimashqi) located at an altitude of 690 m above sea level and 100 km from the Mediterranean coast. Development of settlement on the site of the city began in the II millennium BC Damascus, located on the banks of the River Barada (which in Arabic means cold), one of the oldest capitals in the world. The River Barada 40 km, near Damascus, carrying the coolness from the mountains of Lebanon, it creates a second paradise on earth whose name Guta (still the area of Damascus green and cool). Prior to the Aramaic period were the original inhabitants of Damascus Amorites. One of the first buildings in Damascus was a pagan temple and castle with walls. In the X-VIII centuries BC, Damascus the capital of the Aramaic State, Aramaeans, it achieved great prosperity. Academicians wrote that "Assyrian kings could respond to attacks by nomadic tribes and thus saved the ancient agricultural culture of Assyria and Syria from them".

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Fig. 1: Plans of Damascus houses

English scientist D. Diringer wrote that "as a result of almost annual campaigns which can be traced for more than a century of Aramaic states were one after another defeated the Assyrian power. Do not give up within a few decades, Damascus fell in 732 BC was subject to Assyria and then never could attain political independence. "Scientists believe that at this time Aramaic merged with the Assyrian and became in this kind of language of the masses of Assyria, the language of commerce from Egypt to India. Christ language was the language of the Western Dialect of Aramaic Assyrian, part of the Bible was written on it. It is believed that this language was written by the original gospel. In 64 BC, Romans conquered Syria. Syria became a province of the Roman Empire. In 635 Damascus was conquered by the Arabs and became the capital of the Umayyad Caliphate (661-750). In 705 divided largest church of John the Baptist in two parts: one opened the mosque and the other left Christians but later occupied the second, turning it into the now famous Umayyad Mosque. Damascus continued to play a significant role as a commercial and cultural center. However, the change of the Umayyad Dynasty to the Arab Abbasid caliphs in (750-1258), they tried to take away this privilege from the city Language of the Qur'an penetrated deeper, pushing the Syrian, descended from the language Armeev and by the end of the XIII century virtually all Syria passed into Arabic (Voronina, 1969).

Traditional housing or the inner courtyard of the housing in the XIX century. Houses of the Ottoman period in Syria, particularly in Damascus, represent one or several buildings connected together, usually 2 storey (Fig. 1). Particular attention is given to the arrangement and decoration of the courtyard, paved with marble and framed by elegant arcaded porticoes. Window facades decorated with openwork lattices, courtyard flower



Fig. 2: Decorative pool of Azem Palace

gardens and swimming pools (Fig. 2), fountains and small cascades gently murmuring water, fruit-bearing shrubs and trees, ornamental foliage (Azem Palace, Maktab Anbar, Baroudi House, House Mudzhalyad, Kuatli House, House Gills, House Shamiya and many others). Arabic architecture offers optimal protection for the person from heat and cold, depending on climatic conditions, in particular the architecture of Damascus, there is a division of premises by function . characterized by a high level of civilization of the Middle East.

The first floor has a large hall and in the upper-lounges. Water and green courtyard gave coolness and create specific microclimate (Fig. 3). To escape the heat, high ceilings and make use of new building materials, ceiling consists of wooden beams, sometimes covered with a mixture of clay and straw from ordinary citizens, while the wealthy part of the population used painted ceilings-azhami and subsequently, tightening ceilings painted materials. The walls are built not only from mud brick but stone and marble are used.

In the Ottoman period in connection with the need to increase the height of the security walls of buildings (Fig. 4). The man in this era wanted more privacy, hide and hide the contents of his home. During the period of Ottoman rule, citizen tried to turn his home into a fortress. The front door was small but when the visitor enters, the fairly large space could hide him from the strong sun. Then the visitor enters the courtyard of the house, which could be several. In the middle is a fountain courtyards (Fig. 5). In the Arabic buildings proper and efficient water was distributed which was due to national traditions (water economy, as in all Arab countries). The windows are also interesting architectural element. On the first floor they were tall, visually increase the height of the building, often with stained glass inserts and openwork lattice windows of the second floor were much smaller. The



Fig. 3: Patio in the house of Mardam Bey

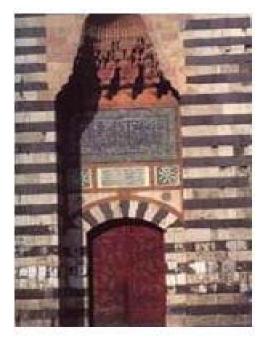


Fig. 4: The entrance of mosque

yard was full of greenery, plants were needed and were intended to create a specific microclimate. Plants as well have inspired architects and artists when creating different patterns and paintings premises (Voronina, 1972).

The alternation of light and shadow in the Arab dwelling has created an entirely new aesthetic



Fig. 5: Fountain courtyard of Sbai's house

atmosphere. As written on. Nadia Host in his introduction to the book Marwan Musselmani "Scenes Damascus houses": "all this and water and flowers and light and shadow to create true art. To understand this art does not need to specifically attend the exhibition, it is present everywhere, from the moment you open your eyes in the morning. Art manifested in the interplay of glass, stained glass designs, through which the light passes, creating a variety of shapes and colors. Art emerged in marble with vanishing water on it and through it. Art appeared in ceilings, chest wall paint decoration, greeting light breeze and illuminated with light, flowing from the long windows and openings above them. The art was all around you in the vaults, arches and walls colored masonry. Arts welcomes you in painted wood halls and gates which ends the door or window frames or roofs. Art was a small carpet under your feet. Refined splendor of small pieces of marble before us a harmonious mixture of patterns and ornaments. Everywhere you look, you can be surrounded by ornaments, decorations made of wood, stone, clay, tinplate (tin). Art was spread throughout a person's life, in his clothes, everything, what he looked "(Herman, 1990). Furniture was strewn with pearl mosaic. Floor and cushions were decorated with ornamental tapestry and beaded designs. Food was offered on a tray decorated with various patterns in the plates of brass. Things were kept inside the decorated wooden chests strewn with natural pearl mosaics and wood inlay. Clothing was made from fabric woven on looms. "Products made by hand from a marble wood, plaster and stone, show us a virtuoso to perform them. They see the amazing design reliefs, their internal weaves, looking at which one might think that the master worked with a soft cloth or clay but not solid materials (Marwan, 1997). All this in detail wrote a famous Syrian Scholar Marouane Musselmani that based on their collectible household items Damascene house kept diaries, creating a unique and important documents are witnessing high development grandeur of Middle Eastern civilization. Marouane Musselmani



Fig. 6: a) Ceramic tiles; b) Fragment door of the house of Nassau, inlaid with mother of pearl; c) details of the facade of the Palace Azem

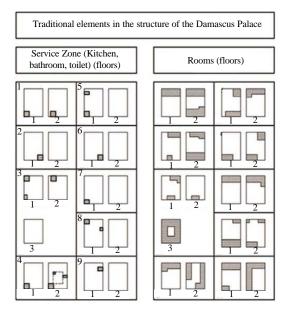


Fig. 7: Traditional elements of service zone in the structure of the Damascus Palace

colleted them with great difficulty and urgency in the first quarter of the 20th century. These documents have a historical value, since much of what they represented, no longer exist anywhere but in the photo, published in his book. Described by the researcher decorations Damascus houses stood in time, nevertheless it is inconceivable that they were victims of ignorance and negligence of their subsequent owners. The architecture of ancient cities must be preserved and adapted to the modern tasks related to the daily lives of people, the conservation of these monuments to mankind. In the era of the Ottoman Empire architecture, monumental and decorative arts and crafts in Syria has undergone significant changes under the influence of the Turkish metropolis perpetuated taste. Almost all kinds of art has spread a large ottoman flower pattern formed by the schemes vegetable ornaments Iran and Azerbaijan era (XVI-XVII centuries). But on a larger scale: blooming carnation, lotus flowers, tulips, fruiting vine (Fig. 6) (William, 1966).

Become an integral part of the inscription of Arabic calligraphy is located on the friezes, borders, panels and cartouches. We often meet there bright porcelain panels. Widely used skillful carving and painting on marble and wood. Unusually high skill reached the art of inlay wooden objects camel bone, colored precious wood, mother of pearl (Fig. 7), silver inlaid surface of tables, boxes, rifle butts look like a kaleidoscope of geometric shapes.

# **RESULTS AND DISCUSSION**

One of the most interesting periods of Damascus architecture can be considered as the relevant time by the end of XIX early XX centuries. Buildings belonging to this period, very bright, catchy, representing a unique historical value not only in the history of architecture of Syria but also in the world. These buildings in Damascus belonged to a wealthy stratum of society (Lujen, 2000).

Do not just define the style data structures. Damascus architecture has many faces, absorbed and let through art and culture of different historical periods. During this period, a marked influence of European architecture and in particular, the Baroque which was distributed in Europe in the XVII century and that includes the most subtle details, located in a certain rhythm swirling ornament, together with the manner of Rococo, determines the sophistication of fine plant parts. The general appearance of the decoration is also influenced by the Arab Middle East, echoes of the

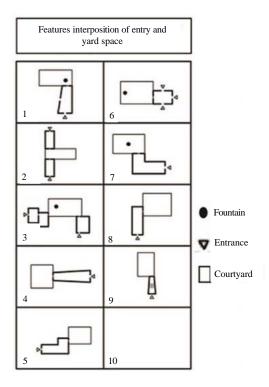


Fig. 8: Features interposition of entry and yard space

Ottoman Empire, Indian and Chinese influences. All this taken together is the image of Damascus apartment house (Juan, 2000). How Baroque style was in Damascus? The palace architecture of Syria in the Ottoman Empire (1516-1918) Acquired features of Turkish architecture. The most critical buildings were built by Ottoman architects projects (e.g., architect Senan who built a cult and charity such Suleymaniye complex in Damascus). Building facades are faced with rows of contrasting black and white (or yellow) stone. The interiors of palaces and rich residential buildings are becoming more ornate. Azem Palace, Maktab Anbar Sba? facades of these buildings are lined with rows of contrasting black and white (or yellow and red) stone. In Ottoman times was finally formed a network of covered markets, without which it is impossible to imagine now the old Syrian City. It blocks covered with vaults streets, passages, on the sides which extend retail shops with workshops and warehouses. During this period, a new layer formed society, the rich merchants and businessmen who having good material base, build their own buildings in the old city and beyond, in the newly created blocks (Fig. 8 and 9). They traveled a lot, they hade a close relationship in Europe, in connection with the changed appearance of many streets of the city. In place of solid walls appeared facades of two-storey houses with windows in the shutters and hanging over the narrow sidewalk balcony, closed top to

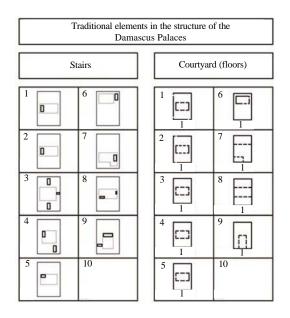


Fig. 9: Traditional elements of stairs and courtyard in the structure of the Damascus Palaces



Fig. 10: Details of the ceiling painting house Shamiya

bottom patterned wooden bars-Mashrabia. Examples of such structures are: Home Kuatli, Lisbuna, Muzhalled, Nizam, gills, Nedo, Shamiya, Istanbul, Uruktanzhi, Kasser, Muslim, Baroudi, Kozbari and many others (Juan, 2000). The period of the French mandate in the twenties of the 20th century. In the later period of the Ottoman Empire at the turn of XIX-XX centuries. In the urban development of Syria, there had been changes that had led to the emergence and development of European forms of architecture. Radical change in the architecture of Syria occurred after the fall of the Ottoman Empire when Syria was under French administration mandated 1920-1946.

During this period, intricately combines European technology and techniques in architectural details and monumental (fresco) painting (Fig. 10). Often architects



Fig. 11: Details of the facade of Damascus houses



Fig. 12: Modern houses in Damascus

were newcomers brought up in the spirit of European academic art of the XIX century. In the 20th of XX century, began the reconstruction of Syrian cities by the French Architect. In buildings, we see as a wonderful combination of distinct elements with Western elements inherited from the late Arab and Turkish miniatures and traditional ornament: decorative sophistication and jewelry drawing. A peculiar feature becomes symmetry, which is the beginning of a fundamental architectural organization of living space. Facades are also symmetrical. Zoning into female and male half passes vertically: the men's room and rooms for guests at the First floor and women's and dining room on the second floor (as seen in the House Baroudi) (Juan, 2000). Later built new European quarters with buildings in the style of French constructivism, built next to the traditional buildings, which has led to the characteristic of the colonial East division of the city in the old and new. In an effort to give local flavor buildings, architects readily introduced into their outdoor design elements of the Arab-Muslim architecture and decor while fully preserving the European structure and concept: the front side of the building facing the courtyard is not as the outside.

Facades cut big wide windows, bay windows or simulated outdoor balconies. Clearly expressed storey buildings (Fig. 11) (Dorotea, 1971).

Establishment of an independent Syrian State (1946) stimulated the growth of construction in the 50s but the focus on Western models in architecture was preserved, as Syrian young architects were educated in Europe. The situation began to change when in 1960 at the Faculty of Engineering at Damascus University opened branch architecture. In the 70s of XX century, modern architecture of Damascus met all the requirements of modern society (Fig. 12). In the city, there are new comfortable quarters, built-up villas and apartment buildings. There are parks, university campuses, hospital complexes, hotels and stadiums. Government and public institutions are being built on the projects for which tenders are announced. Modern architecture of the XXI century Damascus diverse and interesting. Maintained a tradition of cooperation between Syrian and Foreign architects. To build new high-rise hotels and new large shopping centers, modern educational institutions, libraries, opera and drama theaters, entertainment centers

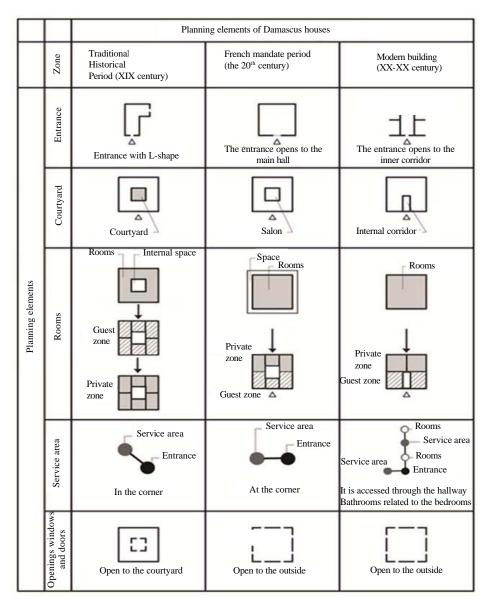


Fig. 13: Planning elements of Damascus houses

(Fig. 12). The boundaries of the city to expand, develop new territories, developing its infrastructure (Dorotea, 1971).

Thus, during the reporting period established several forms of social housing in Damascus. Residential buildings can be divided into three basic types: traditional house with patio. They are designed and built in accordance with the basic needs and social role of tenants. Typically, these houses are built from the available materials in the area. The roads in residential areas very narrow far from the main street (Fig. 13).

The buildings which were built after the establishment of the French mandate. From 1920-1946, the

country was subordinated to France. The first by a French architect, proposed a plan to complete reconstruction of Damascus in 1936, Michelle was Ikoshar. The plan incorporates the principles and features of architectural, France XIX century. Buildings of this period a mixture of traditional Arabian architecture style and modernism. House designed steel at a greater distance from each other, steel windows located on the external facades of buildings surrounded by a courtyard. Closed inner space of these homes are called "sofa". Bed and always will be located closer to the entrance of the house, giving complete freedom of tenants (Fig. 13).

Residential and multi-storey apartment buildings. These were built in a wait period after the return of Syria's independence in 1946. This period is peculiar to many changes, such as in the construction first began to use concrete. This contributed to the development of the whole area of the relevant laws and regulations. This type of housing was the most suitable for small families. Less multifamily home in the absence of personal space. This leads to problems between neighbors which leads to the desire of residents to some architectural changes such as the glazing of balconies and transfer windows.

#### CONCLUSION

Only by carefully studying, the history of this amazing country, we can understand the artistic culture of Syria and to understand the peculiarities of urban Damascus. In the whole world, there is probably no city of the mix of different cultures of East and West. There developed a kind of branch of the Hellenistic, Roman, early Byzantine, medieval, Ottoman cultures. Architecture of Syria and Damascus was developed as part of the cultural and historical complex, formed on the territory of modern Lebanon, Jordan, Palestine, Syria and proper Southern Turkey. Geographic position at the crossroads of major trade routes of East and West is caused by penetration of the Syrian art of different artistic influences and their close connection with local traditions all this is manifested in the architecture and art of Damascus.

### REFERENCES

- Afif, B., 1981. Syria's history and civilization. Damascus, pp: 54-86.
- Basili, K.M., 1962. Syria and Palestine under the Ottoman rule in historical and political relations. Publishing. east. Litas. pp: 27-122.
- Dorotea, D., 1971. Interior Design of Syrian Houses from 16-18th. Beirut, pp: 3-10.
- Herman W., 1990. History of civilization. Germany, pp: 56-89.
- Juan, L.C., 2000. Damascus in 1860-1946, pp: 16-70.
- Lujen, K.S., 2000. The Arab home of 17-19 century in Syria. Diploma, pp: 1-35.
- Marwan, M., 1997. Damascene homes in 18-19th. Damascus, pp: 73-351.
- Voronina, V.L., 1969. The architecture of the Arab countries. General history of architecture, Moscow, 8: 15-51.
- Voronina, V.L., 1972. Dwelling Folk of Arab countries. Syria, pp: 23-32.
- William, M., 1966. The Ottoman Empire and its Successors 1801-1927, Germany, pp: 3-69.