

Studying Iranian Religious Minority Architecture: Differences and Commonalities in Religious and National Architecture after Safavid

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Abstract—Architecture is rooted in the experiences of the residents in a place. Its foundations are based on needs and circumstances of each territory in terms of climate, available materials, economics and governmental policies, and cultural ideals and ideas of the people that live there. The architectural history of Iran echoes these architectural origins and has revealed certain trends reflecting this territory and culture. However, in recent years, new architectural patterns are developing that diverge from what has previously been considered classic forms of Iranian architecture. This article investigates architectural elements that make up the architecture created by religious minorities after the Safavid dynasty (one of the most significant ruling dynasties of Iran (from 1501 to 1736) in Iranian cities: Isfahan, Tabriz, Kerman, and Uremia. Similarities and differences are revealed between the architecture that composes neighborhoods of religious minorities in Iran and common national architectural trends in each era after this dynasty. This dynasty is specific as a point of reference in this article because Islam was identified as the state religion of Iran during this era. This decision changed the course of architecture in the country to incorporate religious motifs and meanings. The study associated with this article was conducted as a survey that sought to find links between architecture of religious minorities with Iranian national architecture. Interestingly, a merging of architectural forms and trends occur as immigrants interact with Iranian Islamic meanings. These observations are significant within the context of modern architecture around the world and within Western discourse because what are considered religious minorities in Iran are the dominant religions in Western nations. This makes Iran's architecture particularly unique as it creates a kind of inverse relationship, than that of Western nations, to the ways in which religion influences architectural history.

Keywords—Architecture, ethnic architecture, national architecture, religion architecture.

I. INTRODUCTION

A. Analysis Thread

IRAN has the great privilege of hosting more than 50 languages and local dialects. It also has a powerful

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intermediate language, “Farsi” or “Persian”, which is historically significant regionally and internationally. Iran is also home to many ethnic groups. The primary ethnic groups in Iran are Persians, Azerbaijani Turks, Kurds, Lures, Arabs, Balochis, Turkmens, Turkish tribal groups such as the Qashqai, and non-Persian, non-Turkic groups such as Armenians, Assyrians, and Georgians. Different religious groups also have their own specific traditional and rituals in Iran. Major religions practiced in Iran include Zoroastrian, Christian, Muslim, and Jewish [1].

It has been helpful to examine architectural trends within the context of these various religious minorities and ethnic groups. In order to distinguish between the architecture of the dominant culture and architecture created by these mentioned minority groups, this article refers to the former as national architecture and the latter as ethnic architecture.

This article merges and diverges concepts between national identities, minority identities, and architecture of the country. The state religion of Iran is Islam, which means that other religions are considered by the country as minority units. Christians, Jews, and Zoroastrians have their own, separate societies, and the architecture within these societies and neighborhoods reflect this separation, merging their own values with the country they occupy. The buildings examined in this paper, are in the cities considered as major centers of these minority units, including Isfahan, Tabriz, Kerman and Uremia.

B. Materials and Methods

The framework of this discussion is both theoretical and practical and includes a two-step investigation and review process. For the investigation process, research supported the pilot study and informed the methods used to create the questionnaire. Collecting the data involved presenting the questionnaire, speaking with locals, taking photos, and drafting maps and sketches of architectural observations. The review process included the compilation and reflection of this gathered data.

C-Samples

Selected cities are major centers of religious minorities in Iran with many religious buildings. Geographically, Kerman and Isfahan are located on the Eastern and Central parts of Iran, while Uremia and Tabriz are in the Western half. These two regions are distinguished because they have such different climates which impacted architectural forms and building

methods. In Tabriz and Urumieh because of cold climate, architectures mostly use materials with high heat capacity. Buildings are usually built with one side of yard to use south

sunlight. In a hot climate like Isfahan and Kerman, low heat capacity materials are used, and buildings are constructed with four sides of yard (courtyard).

TABLE I
SAMPLE QUATIONARY USED FOR EACH CASE STUDY ANALYSING*

1	Building Name	Jewish Synagogue/ Uremia	Armenian quarter of Isfahan	Christian neighborhood of Tabriz	Kerman Zoroastrian Community (Fire Temple neighborhood) Urban Texture
2	Building use	Not used today's	Urban Texture	Urban Texture	Urban Texture
3	The main Space of Building/ Area	Men Area, Women Area, Bimah, Torah, Tva, Hakhal, A Separated Area, Yard, Guard House	Houses, Churches, Stores, Alleys, Urban Walls	Houses, Churches, Armenian School, Stores, Alleys, Urban Walls	Houses, Fire Temples, Alleys, Urban Walls, School
4	Material of building/ Area	Brick, Wood	Tatch, Brick, Stone, Wood	Brick, Stone, Wood	Thatch, Brick, Stone, Wood
5	Decoration of building/ Area	Different type of Arches, Colored Plaster, Sentences of Torah, Menorah	Different types of Arches, Holy Sentences, Inscriptions, Plaster, Painting	Different type of Arches, Holy Sentences, Inscriptions, Psimting	Different type of Arches, Holy Sentences, Brichk works
6	The spaces which are built according to Minority relation	Men Area, Women Area, Bimah, Torah, Tva, Hakhal, A Separated Area between Main Area and Yard	Basilica Plans of Churches	Churches Plans, Armenian School	Detail of Fire Temples plan, Zoroastrian School, Special Spaces in House Plans, and direction
7	The materials which are used according to Minority relation	Stone	Stone in pavement, Plaster	Stone on the facade	—
8	The decorations and elements which are done according to Minority relation	No invitation, Sentences of Torah, Menorah	Cross shape, European style in paintings, Human and animal motifs, Holy Sentences, Use decoration in inner side	Cross Shape in Elevation, Semicircular arches, Holy Sentences, Use decoration in inner side	Ahura picture, White Plaster Elevation, Cypress motifs, Holy Sentences, Use decoration in inner side
9	The spaces which are built according to local architecture	Kolahfaranghi, Yard	Houses plan, Courtyard	Houses plan, School Form, Courtyard	House Plans, Pirnshyn, School Form, Courtyrad
10	The materials which are used according to local architecture	Brick, Wood	Tatch, Brick	Brick domes, Wooden Structure	Thatch wall, Brick
11	The decorations and elements which are done according to local architecture	Brick Arch, Stone Inscription	Brick Arch, Stone Inscription, Lack of human form in Outside decoration	Tyzehdar arches, Lack of human form in Outside decoration	Tyzehdar arches, Doors with two kobes, Brick work

*All the Items are studied in detail for paper.

The period of examination of this article occurs after the Safavid dynasty or era. This dynasty is specific as a point of reference in this article because Islam was identified as the state religion of Iran during this era. This decision changed the course of architecture in the country to incorporate religious motifs and meanings.

II. LIBRARY STUDIES

A. Conceptualizing Identity

In the Dehkhoda dictionary identity is expressed as, "The true attributes of an object or person, including his essence, fact of object or person to include his substantive characteristics, character, essence, attributed existence to Hu, birth certificate, what his father, one." [2] Other definitions describe identity as, "a sense of belonging to a set of material and spiritual elements." [3] In the anthropological sense, identity is the individual or collective consciousness or set of cultural and social features that leads to differentiation of a person or persons from another person or persons.

Identity was popularized as a word by European scholars in the fourteenth century. However, its meaning is continually theorized, changing within different spatial and temporal contexts. Some of its shifting dimensions include personal

identity, and social and urban identity [4]. Thus, it can be stated that the concept of identity is shown in a variety of forms on the different categories. In these groups what are related to our article purpose could be some meanings like nationality identity, architectural and urban areas identities.

B. Ethnic and National Identity

Ethnic and national identities are distinguished because of the persistence of spiritual signs and signifiers of a nation throughout history that come to define that nation from others. The national and regional identity accumulates unique characteristics that manifest how that nation is remembered.

Ethnic architecture is enclosed in the border region and ethnicity politics have a decisive role in this enclosure. Politics influence the maintenance of beliefs and ancestral heritage and so people with similar beliefs that compose an area in turn create a type of border region. Social life of religion has been one of the factors affecting ethnic architecture. There has been a symbiotic relationship between Iran's ethnic architecture within this context of religion as it has contributed to the values of religion while also growing as a specific art form at the same time. This is more clearly visible with Imami Shi'ism, also known as Iranian Islam, the state religion, which has played a decisive role at the national level in terms of art

and architecture. [1]

Religious places and spaces constitute a significant part of the material culture in Iran and are a manifestation of ethnic art. These places include mosques and shrines like Saqakhaneh in the Shia Imami context, and churches, synagogues, Kneset, and temples in the context of Iran's religious minorities [1]

Cities can embody an identity of individuals that compose a community. A city is a series of lively and dynamic elements accumulating in time. One example of how cities take on the identity of its people is the Bazar. Historically in Iranian cities, Bazars had a principle role in trade and society life. Most major cities in Iran formed around these architectural elements. These markets affected the formation of cities. Additionally, neighborhood positions next to other neighborhoods impact what kinds of people group together and influence one another. Elements within these areas, like buildings, transportation, and fields, are the result of the creative energy of a neighborhoods resident and the interactions of different neighborhoods communicating. The accumulation of these interactions provides that the identity of a city is created by common memories and associations of citizens provided their belonging and affiliation to a city.

Although the identity of the city is the result of the culture of its residents, the identity of a city can in turn affect citizens in terms of creating its own implicit criteria of participation by residents and visitors. Identity is a criterion for the city. In other words, when a city or community grows, part of the identity attributes will change during growth and have the new organization. In this structure, the city's identity must be introduced as a benchmark for development and a factor to improve environmental quality. Therefore, components of a city, like economy or government must consider the city's collective identity. The physical manifestation of the city is, therefore, determined by its identity. [5]

Perhaps more deeply, architecture is one of the main signs and cultural characteristics of peoples and also each unit in time, or a historical period. Architecture indicates the defined and known principles and criteria, and also has a firm and unbroken link with the culture, values, and behavioral patterns of society. That is why the architectural style of a period is reflecting a culture and art of the period. As architectural changes are proportional with changes takes place in other areas of life, this change requires a dynamic and vibrant architecture to meet the new needs of a group of people. [6]

C.Minority Architecture

Minority architecture depends on the life of the architect; a minority arises before the architecture. Also, the experiences of a person will impact how they creatively express their ideas. [7] Tracing the scope and path of architecture produced by minority architects can provide a better understanding of contemporary architecture and its future trajectory. The architecture produced by these architects break conventional architectural patterns and histories of a specific area, while bringing in influences of their specific communities and experiences and even merging them with traditional

architectural forms of the area. While this may disrupt the architectural consistency of an area, it provides a richer texture and provides inventive creative dialogues between various types of architecture [8].

D.National Architecture

Within the field of architecture, artists create spaces by integrating their ever-changing identities and experiences into a formal language of motifs and symbols. This description of the process of translating a creative idea into a tangible object or space allows for the integration of religious beliefs into the creative process of making. In this description, the boundaries between religious art making and creating architecture with religious influences are cleverly disintegrated [9].

Iran contains many different cultures that speak many different languages, including, Turkish, Kurdish, Arabic, Baluchi, Turkmen, and Persian. The concept of the nation-state is a modern concept, formed as a result of the printing press and the media. The nation-state also upheld ethnic-tribal interests. Traditional structures of urban communities were changed with the advent of industrialization and the appearance of a modern economy and were replaced with urbanization. The national consciousness has changed with history and so what it means to be an Iranian can be discussed as a modern concept [10].

Cultural traditions and religious beliefs are core in shaping the architecture of a country. Armenians in Julfa have specific developments in housing that comply with Iranian cultural beliefs while also maintaining their Armenian beliefs and traditions of their ancestors. The result is a merger between Islamic and Christian cultures [11].

The influence of culture and religion on architectural patterns within a country is, in fact, what binds these minority groups together, in general. For example, national unity and ethnic solidarity was not due to military-political union. If this were true, the unity of the people would be destroyed after government collapse. The political and social history of Iran, until the beginning of the twentieth century, shows that ethnic groups in all periods of collapse and political chaos stood in solidarity with one another, whether against Iran or another government [12]. This sense of community is apparent in Christian neighborhoods of cities whose architects are inspired from their own identities along with Iran-Islamic Urban trends. Combining Muslim and Christian religious influences into a new form of architecture has been a revolutionary opening to what has previously been defined as Iranian architecture. These merging influences are found in residential neighborhoods, religious buildings, as well as in the daily lives of individuals. There seems to be a merging of religious beliefs that impact the level of reverence and respect that people have for one another within their communities. Although this reflects Christian ideals, it also is found from principles of Islam that value equality, fraternity, and respect for sacred texts from God [13].

Iranian architecture is usually introduced with courtyard of houses in Yazd and blue inverted domes of mosques in Isfahan, because this architecture is devoted to specific areas

of Iran. Since the architecture must be both a home and a cultural sign simultaneously, it must answer to a set of requirements that cultural identity is one. These two cases are considered in definitions of Iranian architecture and its own principles. In definitions of Iranian architecture, references are made to geometry and to materials and forms and rhythms that call attention to light, transparency, and garden and nature. Some scholars [10] have highlighted religious values as a factor in identifying Iranian architecture. Others have highlighted the role of climate. For example, Pirnia and Gholam Hossein Yousefi are noted to typical formal typology and morphology of Iranian architecture. Stylistic qualities based on Khorasani, mystery, Azeri, Esfahani styles reference geographical-cultural differences [14].

III. PAPER SAMPLE STUDIES

As mentioned in the theoretical part of this paper, Iran is a collection of ethnicities and they make up Iranian nationals. Besides the Shi'ite community that composes most of the nation, the influence of religion in architecture can be seen from other religions of the country. As they try to manifest their opinions on lifestyle and housing, some Iranian cities have neighborhoods with different faces. For example, Barnava, in Tabriz, is composed of Armenian minorities and Kerman houses many Zoroastrians. By entering this neighborhood, different beliefs into spaces can be felt from the surrounding neighborhoods quietly. Cities of Uremia, Tabriz, and Kerman are investigated in the following examples of minority architecture.

A. Jewish Synagogue in Uremia

The Synagogue is in heart of old Bazar of Uremia. However, it is abandoned because there is not a large Jewish population in the city. But because of the liveliness of architecture, it is a morphology of a Jewish shrine. All elements of these types of buildings exist here, including architectural spaces, and decoration and staffs. Religious propaganda is forbidden to call to religion because in religion only one who is born of a Jewish mother is a Jewish, so it is difficult to identify their buildings. It also makes a more interesting study of Uremia building architecture because it includes sacred places. According to the inscriptions of the historic Jewish synagogue building in Uremia, it was built about 260 years ago (Fig. 1).

The architecture of the building is formed around two elements, the Bimah and the sanctuary of holy coffin. The *bimah* (elevated place) is the raised platform that contains the table on which the Torah scroll is placed when it is read. Holy coffins are a symbolic sign of Ark of the Covenant. Both are traditionally located in the center of the synagogue, emphasizing the central role of the Torah in synagogue [15].

Tva' is another part of the building which is in the central part of the main hall. In this location, main speaker placed for reading holy sentences for prayers. Torah scrolls are kept in another place, named Hakhal space. Individual seating positions and the women's space are also in other areas of synagogue architecture that can be seen in this building. The

Hebrew words such as candlesticks on the door of the building (Fig. 2) are created to show specific religious beliefs of belonging to this minority group. In this building, the style of Islamic decoration can be seen alongside other decorations. The words of Hebrew plaster can be seen in Figs. 3 and 4; plaster technique is common in local architecture. Besides this, decoration with arabesque motifs of flowers and leaves are found in this building. Arabesque motifs and writing holy sentences on shrine walls are mostly seen on Islamic architecture. Except decorations, a kolahfaranghi on the roof of this building is another element that has no relevance to the synagogue architecture and that is an adaptation from national architecture is prevalent in the Qajar era (Fig. 5).

A kolahfaranghi [k F I] (or compound) is the building to the arena or the arena building with a dome-like cone. [2] Kolahfaranghi is composed of two words, "kol" which means shell and "afrang" which means inverted. It refers to a building that is being built in the middle of the garden area as or is a skylight is above a dome-shaped roof [16].



Fig. 1 A stone inscription found at the site of the Uremia Jewish synagogue



Fig. 2 Entrance of the Uremia Jewish synagogue



Fig. 3 Part of Uremia Jewish synagogue decorations



Fig. 4 Decoration of capital, Uremia Jewish synagogue



Fig. 5 Kolah faranghi in roof of uremia Jewish synagogue

The Jewish people obeyed their main religion beliefs in construction of this building; they built all needed elements and spaces; they used their alphabet and holy sentences of Torah for decorations. Alongside this, because of location, they borrowed Iranian architectural elements [17].



Fig. 6 Uremia Jewish synagogue, Minority architecture in the context of the old market

B. The Armenian Quarter of Isfahan, Julfa

Isfahan Julfa urban context is at the intersection of Shariati Avenue and Tohid Crossroads, from side to side streets Mohtasham Kashani and Khaghani to Nazar Triode. This neighborhood consists of two parts, the Old and New Julfa. The Old Julfa is geographically near Nowabad town from the Zayandehrood River to the Chaharsou (sanghtarashha), in length nazar Street and Big Square, small squares, streets Shyrkkhaneh, Hakvchyan Chaharsooghi neighborhoods (Hsyrbaf neighborhoods), Qarakl (Kenan) are in this context. New Julfa neighborhoods include the Iravani and Nakhjivani, Sheikh bana and Shams Abad neighborhoods. Vank, Mary, John, Hovans, Mgrpbch, bit Allhm, Gregory Churchs and the late nuns, a Zoroastrian fire temple, Martapytzr house, the house of David, Svkyas house, ayyubi house and Stepanian house are such monuments in texture.

Formation of the Julfa district started from 1605 when Shah Abbas started to move Armenian people from Julfa to Isfahan to support them in the Ottoman attacks. Armenia is the home country from which these minorities were displaced from. The region was very prosperous in the period the Great Shah Abbas and especially Shah Abbas II [18].

This neighborhood architecture is a fusion of Armenian architecture with the prevailing climate and local materials and Architectural Specification of the Safavid period. The architecture of the area can be described as eclectic and combines Armenian local architecture with Byzantine architecture. [19] In other words, a minority architecture is contrasted with the local architecture, a combination of Western and Eastern architecture (Eastern Roman Empire, or Byzantium and Islamic Iranian architecture)

The floor is made of stones and extends even in the car lanes. There is also a special type of roof and ceiling of the church, which is not quite Safavid architecture and not quite Byzantine. Most domes of churches in Julfa were adoptive of Safavid architecture so they have domes with Tyzehdar arc (Tyzeh in Persian means sharp, sharp arc: Arcs that have a sharp tip which is drawn from the intersection of two ellipses is made [14]). Other names of this kind of arch in Persian are Zighzagh and Jenaghi. These are like the mosque covers, but without the decorative tiles on the dome mosques, are built with bricks. Often Armenian church domes are Rack (tapered) or domes with Mazeh arc (half-circle, are part of a circle) with

cut or rubble stone materials. Julfa neighborhood churches decorated with impressions of Safavid architecture seen in the exterior elevations, brickwork and framing with zigzag arches, while the example of their fellow churches in Armenia are generally decorated with carving stones. However, churches in Julfa stem from Armenian church form (Bazylika).

Cathedral Basilica or Bazylika are generally elongated rectangular plans with a row of upper windows or a sloping roof with spaces similar to nave, two-or four-way (Longitudinal sections of each row of a column or pillar of the church is separated from the nave), a apse (protrusion behind the altar) and the bell tower and sanctuary space are on a platform. [20] However, changes in layout can occur from the design of the rooms on either side of the altar, to the creation of a courtyard between the sanctuary of the church and the floor of the bell tower. These changes are adoptive from the church plans before the Safavid era. Elaborate tiling produced with seven colors and a variety of plasterwork and Karbandy of interior decorations are present and are inspired by the domes of the Safavid architecture. However, this architecture was influenced by European styles, which were inspired by Armenian architecture, which were motivated by paintings by Persian and Armenian artists. These inspirations are a fusion of Motherland art and location art that can be seen in the church. The same combinations can be seen about houses of Julfa neighborhood (Fig. 7) and decorating on the facade of front yards. The niche of entrances from the streets seems to mimic Muslim house styles with Tyzehdar arches and Karbandy below the arches. There are Pymeshyn platforms in this niche and use separate Kobe (A door knocker is an item of dooer furniture that allows people outside a house or other dwelling or building to alert those inside to their presence.) for men and women in doors. They have arisen in response to the word privacy (Fig. 8). Pymeshyn or take-all, platform and living are built in the front of the house [21] along the platform [22].



Fig. 7 A lane in Sanghfarsh neighborhood



Fig. 8 Typical facade decoration, Karbandy and doors two kobes of the building in sanghfash neighborhood

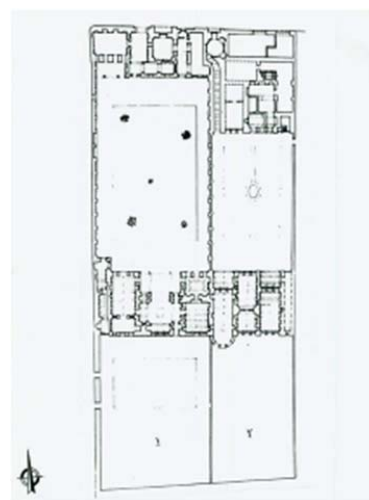


Fig. 9 Plan of Sukyas house, case Records book



Fig. 10 Flowers decorating, the facade of a building in the Armenian quarter of Isfahan

The hierarchy of space around a central courtyard can be seen in the hashti space. This has been incorporated by some of the Isfahan houses and that the Native Muslims are living in. The hashti area is originally a polygon and an octagonal or circular plan and built between entrance and courtyard, on its

both sides locate the platform or a bench to sit on [21].

Fig. 9 presents the layout of Sukyas home plan, which is an obvious, space around a central courtyard. Figs. 10 and 11 show ornamental plants with no living engravings, while most non-Muslim designs exhibit traces of the patterns of humans and animals. European style can be seen in Interior House Painting with human and animal motifs that are shown different portions of Julfa houses to and like Armenian architecture (Fig. 12).



Fig. 11 Flowers decorating in a picture frame of a building in the Armenian Quarter



Fig. 12 Home Interior Decorating

C. Christian Neighborhood of Tabriz (Barnava)

Barnava (Barvnavak) is one of the neighborhoods in the central city of Tabriz, located between Ahrabi, Lylabad and Myarmyar neighborhoods (Fig. 13).

The sponsor of this neighborhood was dean of Armenians in the city - Barnava - during Naseraddin Shah. He destroyed one of the eight towers and walls of Tabriz that was built after the earthquake 1780 and the middle class and poor Armenians of city and immigrants Armenians who came from other cities and villages of Azerbaijan to Tabriz Settled in its place [23].

Ancient monuments were surrounding Ali Shah, shops rock (Fig. 14), Tamara school Tvmanyans (Fig. 15) and Sarkis Church (Fig. 16), Saint Mary Church, Assyrian Church. The plan of churches in this neighborhood withdraws from the Armenian church plans in Armenia. Tabriz churches are larger than the churches of Isfahan, in studying Isfahan churches we found some differences in the architectural plans from the original plans of Armenian churches in Armenia, but here in Tabriz, there are not lots of differences with Armenia. Plans are cross-shaped, altars often flush up with the floor of the sanctuary, and rectangle chambers are located at the parallel edge of the altar. Column foundations are stone and even at the Mother Church can be seen stone columns. The dome form

is simple, and this form of dome pattern is borrowed from Armenian churches' forms. Stone carvings of decorative style in these churches are similar to Armenian churches. But besides all these cases, influence of Qajar and then Pahlavi architectural characterize is undeniable. Materials of churches incorporate Armenian architecture and Tabriz climate: a mix of brick and stone, as the bodies are generally made of stone with brick domes. The Tyzehdar arches of buildings especially at the base of the domes are taken from Persian architecture. Given the climate of Tabriz (it is too cold), for using the natural lighting in churches, the windows are orientated to the central courtyard. It contrasts with Armenian architecture; the church is in the middle of the yard. In Tabriz houses like Julfa neighborhood in Isfahan and contrast of Armenian Houses in Armenia, the houses are oriented and into the inner courtyard, the south elevation is important to the light, and especially to use winter sun, so the main spaces are in front, there is a wide porch which is built as a barrier in the front for severe summer sun. Like many old neighborhoods in the context of Tabriz, the alleys of Barnava are narrow and only one person can enter the house simultaneously. The input section and the central part of Barnava neighborhood (Figs. 13 and 14) have different face from other urban context of Tabriz, with two-story shops storefronts and that are part of the service upon them, Particularly, semicircular arches and stone materials of storefront show the influence of Armenian-Byzantine architecture.



Fig. 13 Central District of Barnava neighborhood



Fig. 14 Stone stores, neighborhood input Barnava

Due to instability, Iranian architects never use circular form of arches. In fact, they have a simple explanation for this: "if you keep the egg upright, it will not break if the camel stands

on it". [14] But no doubt, pointed arches are alongside of house entrance, windows and doors and way of their made, brick decorations show influence of Tabriz architecture on the settled Armenians architecture. (Figs. 17 and 18) Armenians School form in this neighborhood has a very simple form (a simple cube), made by brick materials, without extra decorations. This kind of simple style in architecture was inspired by Pahlavi architecture (a national Iranian architecture style).



Fig. 15 Tamara Tvmanyans School of Tabriz



Fig. 16 Sarkis Church of Tabriz



Fig. 17 Typical openings and decorative brickwork facade of a house in the neighborhood Barnava



Fig. 18 Typical transom and decorative brickwork facade of a house in the neighborhood Barnava

D.Kerman Zoroastrian Community (Fire Temple Neighborhood)

An old neighborhood of Kerman's Zoroastrian communities is in the eastern part of Kerman and is known as the temple neighborhood because of the fire temple (Fig. 19). The neighborhood leads Kamarbandi Avenue from northern part, from East, Zrysf neighborhood, from West Shuhada Street and from south Nazareth Street (martyr Bahonar Street). Accommodating of Zoroastrians and the formation of the current setting date back to the Qajar period. Some monuments around the neighborhood are Nooria Hospital and Medical School (school management), Iranshahr and Keykhosro and Shahrokh schools (Fig. 20), Zrysf refrigerator and Rostam Frkhzadast houses and old temple. Zoroastrianism influence on the architecture of the houses along with some elements from Kerman architecture has given different face to the neighborhood than other parts of Kerman. Similar to the Armenian Quarters in Isfahan (Fig. 21) and Christian houses in Tabriz, the houses in this neighborhood are taken from the vernacular architecture of Kerman, withdrawn to a central courtyard. The brick materials are made to suit the climate of Kerman. (Fig. 22) Tyzehdar vault in entrance of houses and homes views, doors with two kobes, the pit of entrances from lane, Pirnshyn platforms front door, decorative plants with the lack of organisms, are taken from the architecture of position area (Fig. 21), which is integrated into the architecture of the Zoroastrian minority. There are differences in decoration of Zartostian houses in comparison with Muslim homes; cypress motifs are used in decoration. (Fig. 22) In this part of town, in the opposite direction of Muslim homes (Muslim homes are oriented to the Mecca and located in North East- South West), most of the houses are in the east to the west, so by using this technic, the sun and the moon entered the house during the day and night.

According to Zoroastrian, they can worship the brightness of the sun and moon, rather than the fire. [24] Rooms dedicated to women during childbirth and menstruation times are built above the ground. These rooms differ from the plans for Zoroastrian houses in this neighborhood.

In Zoroastrianism, water and fire will be protected from pollution. [25] These houses do not have constant drain wells and fluid storage, used for domestic sewage. Fire temple building in this neighborhood is built on a common

architecture of fire temple. Elements that are usually seen in fire temple buildings include thick piers, four piers with wide opening, domed roof, a square plan, and a corridor on one side or the surrounding square. [26] The fire area is accessible indirectly, but not everyone can enter the fireplace. The Kerman fire temple has two buildings: old building is lit with a wooden fire, using the gas fire in new building which was opened in 2001. Part of the new building has become the Anthropology Museum and the library of Zoroastrians in Kerman. The old building was Jahangir Ashydry's house, changed after the death of his daughter, and is dedicated Zoroastrian as a fire temple. The fire of temple comes from another temple in Kerman that is located in Mahaleshahr neighborhood. The new building architecture is quietly modern with the combination of round and square forms and a large entrance. The entrance continues the path of columns around a circular corridors area. The museum space and a place of worship are located within this space. At first glance, the building looks modern, but also indirectly located on a common architecture of fire temple; the podium with a filter reaches the input space. Old building is a simple square on a platform that is above ground level. Before entering the area, a corridor that is more like a small hall located in a side of fire position and then there is a small room. The small room is before the main fire room and a window is between this space and fire room, worship occurs in this section. The new building has no decoration except the Ahura picture on its big entrance. This decoration is worked with tile, materials and methods like the construction of new buildings in Kerman. The structure is concrete, and its façade is one with brick. In fact, if the entrance is removed from the surface, perhaps its use is not detectable. In the old building with a white facade can be seen Pahlavi architectural patterns. The building is located on the platform with four steps. The stairs to the front porch and roof are built on the four pillars of the field square and octagonal body. The base of the columns and the columns are simple. The upper parts of columns have circle arches. In Iranian buildings, circular arches are seen from Qajar architecture. The arches with a frame are lagging of adjacent columns. Retreat in the middle of the frame in Pahlavi architecture is less than the Qajar. Pahlavi's method is seen in the main face of the building. White spaces, no special decoration of interior are other properties of Pahlavi architecture. The same can be said of two religious' buildings, both old and new species are similar in plan but the method of construction and materials follow Kerman popular architecture as their own course, hugely.

IV. PRINCIPAL FINDINGS

Above examples have been examined as samples from minority architecture found in Iran. Additionally, here are specific objects of this minority architecture that reflect on the religious beliefs of that minority group.

- Used candlesticks are pictured on the door of the Jewish Synagogue as one of the important symbols of this minority group.

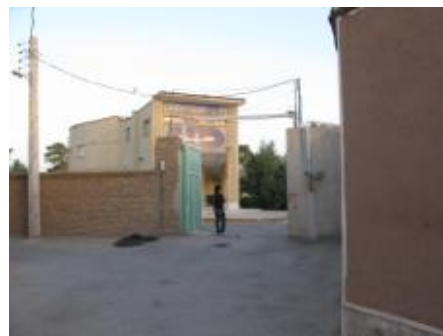


Fig. 19 Building of Kerman Zoroastrian Fire Temple



Fig. 20 Iranshahr School

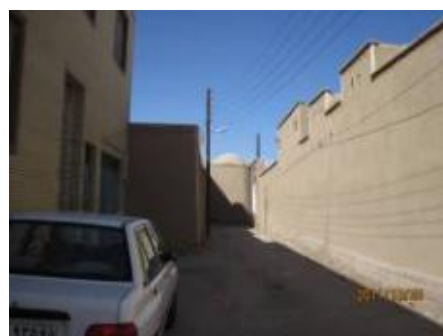


Fig. 21 Urban texture of Zoroastrians in Kerman



Fig. 22 Typical building the Temple neighborhood of Kerman

- The spaces are divided according to Jewish Synagogue morphology. The plan includes sacred cassettes space, Tva', Hkhal and Bima.
- There is no invitation in the form of the Synagogue building located in the urban context of Urumieh.



Fig. 23 Gate and decorations and Pynshyn platform of fire temple neighborhood Kerman



Fig. 24 Gate and decorating a house in Temple neighborhood served Kerman

- In the Armenian neighborhood, application of stone in pavement is noticeable. It is not a common material in Isfahan and is an adoption of architecture in Armenia.
- Application of stone on the facade of the building by early inhabitants of the Barnavay neighborhood of Tabriz is an adoption from Armenian architecture, because the most common material of Tabriz was brick at that time.
- The cross sign is located on the roof of Armenian church in Tabriz.
- A semicircular arch is used in buildings of the Barnavay neighborhood in Tabriz. Semicircular arches are not common arch in Iranian architecture.
- The simple view of Tamara Tvmanyans School in Tabriz (Christian school) is raised from Pahlavi architecture, without any sign which showed that this is not a Muslim's building.
- The dome of churches' material is brick in Tabriz, while the cathedrals in world have stone dome, often the churches' dome is brick in Iran.
- Basilica Churches or Bazilykayy Plans are used in the design of Isfan Julfa churches.
- European style, with human and animal motifs, was used in the paintings of Christians interior decorating.
- Stone columns are used in several churches; it is not a common material in Iran cities.

- There are cypress trees in the decorative motifs of the Zoroastrian buildings; cypress is a holy tree in this religion.
- Zoroastrian homes are stretched in the East–West direction, while Kerman buildings direction is north-east to south-west (in direction of Muslim Qibla)
- A room for women is dedicated in Zoroastrian homes for special times (menstruation days).
- Storage of waste is removable in Zoroastrian buildings, because they believe, earth is holy, and it should always be kept pure.
- On the entrance of Zoroastrian fire temples and other buildings of Zoroastrian neighborhoods in Kerman, a Faravahar sign is hung.
- Building of fire temples is located on the podium, to keep fire on top place of pilgrims.
- Entrance of fire spaces is indirect, because the fire is holy for them and it is better to have indirect view to its place.
- The educational sacred word of each religion is written on building's walls as a part of decoration. But signs can be found in the harvesting of indigenous architectural and policies rules. These symptoms are the result of climate, social interaction, and a simple imitation of the natural and built environment among people of every religion and every nation is exchanged.
- Arabesque decoration with motifs of flowers and leaves are used in the synagogue building in Urmia.
- Kolahfarangi was used in the synagogue's roof in Urmia, it is not a typical roof for this kind of building.
- Simple vault used in fire temple of Kerman is clearly a sign of Pahlavi method.

In residential architecture, following can be seen in all samples examined:

- The pointed arches were used in Iran to reduce height and splendor of building.
- Flower decoration on the design's façade is used without the use of living organisms that are often seen in Islamic designs.
- Doors have separate Kobe for men and women.
- Pynshyn is used at the entrance.
- Half vault and Karbndy are applied as a decoration above the doors.
- Using brickwork and zigzag framing arches is common at external facades.
- Different types of Karbndy and interior decorations are inspired by the domes of the Safavid architecture.
- Hashti space is used in entrance area of houses.

The conversation between cultures and religious beliefs embedded in the architecture can be seen in studied single buildings and neighborhoods in the context of ethnic and national, minority neighborhoods. However, the color and texture of the buildings overall creates a cohesive unit, a concept called Iranian. Every minority brings its own particular architectural markers but merges them with the architectural markers of Iran.

V.CONCLUSION

Evaluation of minority communities in different periods of architecture after the Safavieh era shows that the architecture of each of these communities is not entirely related to minority or national architecture. Minority architects have reduced the divergence from national architecture, prioritizing the outside. For example, because a building may be public, minority architects may follow common patterns of national architecture, so it follows the aesthetic of the area and the area's history. However, decorating interior spaces is done more freely. Mixing the two elements, national architects' identity and minority architects' identity, shows that the religion minority of Iran update themselves with local architectural parameters, most of these elements are related to climate limitations and use of local materials. However, in some cases, we witnessed using architectural styles in construction and decoration. In all buildings, what is related to beliefs and main religion rules are never neglected. In other words, architects try to express their religious affiliations in a sustainable mainland architecture.

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