# ARCHITECTURAL PATTERNS AND TYPOLOGY OF WESTERN SASSANID TERRITORY CHURCHES

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# **Abstract**

As large religious minorities in the Sassanid dynasty, Christians influenced the social and political history of this era. In the reign of the Parthians government, Christianity came to the Western Iranian regions where they could expand by exploiting the Parthians' religious tolerance. The religious tolerance of this era gave more freedom of action to the Christian missionaries to propagate their religion in the western regions. However, large-scale domestic and foreign power outcomes ensued when the Sassanids seized power. The Christians required different religious service needs before separating their churches from Western churches. A review of the studies suggests that all the churches have a certain architectural fixture, though differentiated by architectural details and spatial elements. Various classifications are provided for the Western Sassanid territory churches, including geography, functioning, and architectural features. This research seeks to classify the churches and analyze their plans to provide architectural features of the Sassanid ecclesiastical patterns.

**Keywords**: Church of the East, Christianity, Nestorians, religious architecture, Sassanid era.

## INTRODUCTION

Before becoming the official religion in Rome, Christianity spread in the late Parthian era in Iran and then consolidated in the Sassanid era. In the Sassanid era, Zoroastrianism had, for the first time, become a government religion in Iran. Though Christians enjoyed relative freedom to propagate their religion in the Parthian era, the reign of the Sassanids and their religious ideology transformed the situation for the Christians, compelling them to adapt to the situation under the political and social pressures in the Sassanid era. With the eruption of the wars between Shapur I and Valerian, followed by the former's victory over the latter, Christian lands in Anatoly were seized where Shapur I exiled people of this region to the Mesopotamia and Khuzestan areas to increase the number of their Christian population. In the wake of this, the necessity of

proselytism as a fundamental principle of Christianity led it to become the center of attention as a major religious issue in the Sassanid era for many political and religious functionaries of the central government. This added to the concerns of both Christians and Jews to feel some ruthless domestic policy which is also reported in Syriac documents of the 5-12th centuries. However, Christianity managed to continue its life in the Sassanid era, where the central power had integrated into the religious doctrine. The Christians also managed to set up their religious buildings among the most important religious structures of the Sassanid era. which further warrants investigations. The churches found in the Western Sassanid territories are not few which include the Kharg, Ctesiphon, Hira, Qasr Serij, Museifneh, Qusair, Failaka, Sir Bani Yas, Marawah, Akkaz, Ain Sha'ia, Rahaliya, and Qala't Shila churches (Simpson. 2018, Houser.

2018, Amin Ali. 2020). Excavations by German (1928-1929, led by Reuther) and German-American (1931-1932 led by Connell) missions resulted in the discovery of the Ctesiphon Church, which was among the first excavations that revealed the presence of a church in the Sassanid era (Pope, 2008). Later, a British archaeological mission led by Talbot Rice managed to discover other churches in Hira (T. Rice, 1932, 1934). More excavations were performed by Iraqi, Japanese, and French missions in the Persian Gulf, south and north of Mesopotamia (Fuji et al., 1989, Okada. 1991, 1992, Bonneric. 2015, 2019). The first analyses of architectural spaces of the churches found in the Mesopotamia and the Persian Gulf were also derived from works of Okada in 1991 and 1992, which were followed by Cassis s (2002), De Langhe (2008), Horn and Hunter (2012), Houser (2018).

In addition, the present research uses analytical papers of the researchers who have worked on the Byzantine churches and their views on these churches. The books and articles published by Loosley are also key for the better analysis of the churches and tracking some elements of ecclesiastical structures (Loosley, 1999. 2009, and 2012). This research investigates the church plans found from the Western Sassanid territories in Iran and highlights their features and differences to derive their construction patterns. To answer the question and better understand the architectural spaces of the churches, their features, and the plurality of the forms, we focus on the plan changes and various functioning of the churches consistent with the research done on the Byzantine churches and then describe the features of the Western Sassanid territory churches. In essence, the main goal of the research is to classify the ecclesiastical structures and their architectural features found in the Western Sassanid territories. The research uses an interpretive method and analyzes the architectural spaces based on library studies. This research focuses on ecclesiastical architectural findings in the western parts of the Sassanid era. The key questions of the research are: Which elements or architectural features do the Sassanid era churches have? What are the uses of the spaces? Are there any differences of plan in the Westerns Sassanid churches? What are the causes? Furthermore, how can these churches be classified?

Ecclesiastical Forms and their Spatial Separation Organization

One of the major accomplishments Christianity was its ecclesiastical architecture. Historical documents such as Eusebius History refer to available Christian buildings which date back to the 2nd century and were established in houses. These buildings were aimed to change and modify the residential structure into a gathering place for the Christian congregation (Loosley, 2012:3). Christians or their offshoots used to gather at a prayer room to meet each other and practice their services. One of the oldest houses of this kind was found in Dura-Europos before the reign Constantine I. At houses of this kind, the gathering place was on the eastern part, which did not seem to create a specifically spatial separation in the Christian congregation. In the second half of the 4th century, when the church was organized, and special ecclesiastical hierarchy took place, we see the emergence of ecclesiastical structures with their parts separated (Ibid).

The first sacred Christian buildings appeared in Jerusalem by Constantine I, where churches underwent their development path (Bani-Masud, 2012:97). This was followed by the emergence of various small and big churches of simple and decorated patterns in the 4-5th centuries in different regions, which indicated the number of Christians taking part there. From the 4th century onwards, church forms took on two forms: a) centralized plan form (e.g., square, circle, polygonal or cross-shaped) and b) longitudinal plan like a rectangle. A centralized plan form is not directional but enjoys a specifically geometric order used to create concentration at a specific point. This kind of form allows for creating a space for the circumambulation and congregation of people along with each other (Ching, 2012:207). This form was used in the 4th century as a church, baptistery, tombs, and cemetery of the martyrs,

the most notable of which was the Rome's Santa Costanza Church constructed in the Byzantine territories that date back to 350 A.D. (Bani Masud, 2012:100). The longitudinal and rectangular plan was inspired by the civil Greco-Roman architecture of the 4th century, i.e., by the urban Basilica form, which was people and for gathering conventions. Basilicas were long halls with semi-circular recess or apses on either side, which could be accessed from the longitudinal sides. Basilicas removed structural problems using column rows and wooden structures as well as the truss systems (Ibid, 97). The basilica space reduced the two apses into one, emphasizing the directional axis by eliminating the symmetry on both ends of the plans (Loosley, 2012:3).

Regarding the ecclesiastical longitudinal plan, we have two general parts: the sacred eastern part, which represents the position of the clergies, and the gathering place of the laity public. The congregation place, i.e., the nave section, could take two forms: single and three-nave and foyer church forms. These structures were initially covered by simple wooden and gable skeletons on low-diameter columns; later, stone arches, gradually constructed on thick piers, were used for the space covering. The single-nave basilica of arch-shaped covering was advantageous because it created a broader field of vision and a wider gathering area (Ribak, 2007:21).

The sacred eastern side of the church was divided into three parts: central prayer room on whose sides laid two more rooms, one was to keep the memorial of the martyrs and the other to hold the sacred book and dishes or store the clothes. The central prayer room could lead to these two rooms via openings or even be placed above other spaces using a stairway. It could also be divided into two or three parts: 1. Eastern altar or what is known as apse; 2. the altar, and 3. Some central prayer rooms had a distinct section which was reserved for the church hymn choir, protruding outwards towards the nave (Qanke or Qastromo) from the central room body (Williamson, 2004:119-120) (Image, 1). The eastern wall of the prayer room could also take on three forms: 1. The flat

or rectangular form prevailed in northern Syria since the 6th century, with fewer examples in southern Syria and the Levant area, and 2. Curved apse which sat either out of the plan and was noted on the exterior or hidden using a flat uncurved wall not seen on the exterior phase; examples of which are abundantly reported in southern and northern Syria (Image, 2). The central prayer room's plan is mostly square or rectangular; however, some crossshaped plans are also noted with a domed or semi-domed construct. In early Syrian and Palestinian churches, the entrance started from the north or south sections in a long direction, gradually shifting to the western side (Butler, 1903; Ribak, 2007:25). In three-nave churches, the central nave may be wider than those of both sides, but the heights are the same. Its structure height may be higher than that of the lateral naves, leading to windows under the nave ceiling (Butler, 1913:154) (Image, 3). At the forefront of the nave stood a pre-nave area at the western section in three forms: 1. completely closed form inside the church space; 2. being open on one side, the half-open or half-closed form could lead to the outdoors, and 3. Completely open form (Butler, 1903:1913).

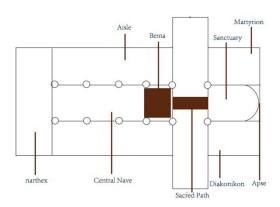


Image 1: Introduction of church spaces (in general) (author)

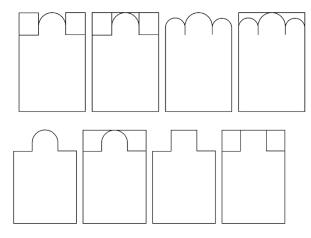


Image 2: Diagram showing apses in relation to flanking structures (Ribak. 2007)

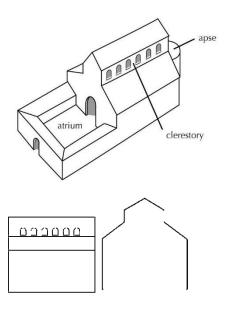


Image 3: Central nave and clerestory(author)

The general church plan direction was eastwards, which reflected the idea of the origin of Jesus's light (Harrak, 2009). There were also some exceptions. For example, the

northern Syrian church had a 12° deviation while churches in the south and Jordanian regions had 20 and 25° deviation northwards. In eastern Mediterranean areas in the intra-city monastic churches of the 5th century onwards, there were some annexations and yards in the southern parts of the churches, which were mostly residential single or two-story buildings, baptisteries, martyrs' rooms which also contained cisterns and underground channels (Butler 1913: 171\_179; 1900:132, Ribak. 2007: 25). The burials were usually carried out on the apse wall or martyrs' room or the floor. The

campus had a cemetery from which contained burial caves or catacombs. This last case was specially reported in the churches of Palestine. The tombs had a western-eastern direction, and the deceased were completely lying on back. The tombs could be filled with inscriptions or lack of which (Ribak, 2007:38-40).

Types of Churches and Monasteries

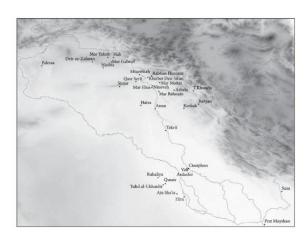
Generally, the Churches of the Eastern Mediterranean had four functions:

- 1. The Cathedral church was usually located in a metropolis, larger than other churches and situated in the middle of the city, had an outdoor space around itself, and was individually constructed.
- 2. The local church of a city was smaller than the cathedral church, surrounded by residential buildings where the laity or the clergies were living. Local churches, unlike cathedral ones, could be many because cultural or linguistic differences in cities could lead to two or several groups of local churches.
- 3. Cemetery of the martyrs, and
- 4. Monastic churches (Loosley. 2012:277 280, Butler. 1913: 183).

The economic and social role of the monasteries seemed to be critical in the Late Antiquity Era, as their architecture was so similar to the caravansaries or suburban villas, which made them difficult to be recognized as monasteries, especially if their liturgical structures would not be constructed in the form of an ecclesiastically recognized structure. Types of eastern Mediterranean monasteries, especially those of Syria, and classification were extensively studied by Butler (1929) and Tchalenko (1953). The first monasteries were constructed inside the cities or villages subjected to those communities or were held based on specifically historical conditions (Loosley, 2018:421). Some outsideof-the-city monasteries were set up on the pilgrimage paths since the 5th century and included motels and inns, probably provided for the pilgrims and trading caravans (Butler, 1903:140-155). These monasteries worked along with notable monasteries, known as Pachomius or Cenobitic [1] monasteries of Egypt. Archeological excavations in the Eastern Mediterranean and Egypt reveal that these monasteries grew along the major trade roads (Books, Loosley, 2012:7; Hedstorm, 2018:148-149). These monasteries constructed on the outskirts of the villages and cities that had their ecclesiastical structures in the middle, surrounded by many major buildings such as monk chambers, inns, restaurants, among other things. The space in these monasteries could be divided into two religious and non-religious parts, with the accommodation part of the Cenobitic monasteries reflecting the "definite spatial hierarchy" (Popovic, 2007:48-50). In addition to this type of monastery, some villa monasteries were on the edges of the villages that lacked any specific accommodation hierarchy as they were more religious in nature (Ibid, 52-62).

Introducing Architectural Space of Western Sassanid Territory Churches

Western Sassanid territory Christianity involves parts of Iraq, south of Turkey, and the Persian Gulf. Western Sassanid territory churches can be noted in three areas: 1. Boundaries of the Persian Gulf; 2. South of Mesopotamia, and 3. North of Mesopotamia (Image, 4).



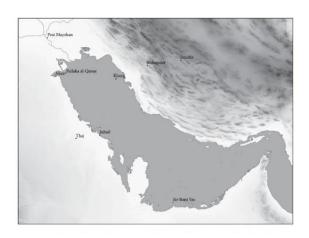
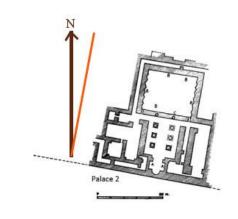


Image 4: map of Christianity sites in the western Sasanian territory (Houser.2018)





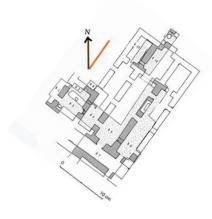


Image 5: Right to left: orientation of some Structures (Ain Sha'ia (church), Sarvestan Pallace, Kish Palace) (Okada.1991, Pope.2008, Tahmasebi. 2013)

Church and monastery structures (compounds) in the boundaries of the Persian Gulf include the following:

- 1. Kharg monastery structure in the Kharg Island, south of Iran
- 2. Al- Qusur compound structure in the Failaka Island, Kuwait
- 3. Al\_Khawr compound structure in the Sir Bani Yas Island, U.A.E.
- 4. Akkaz compound structure
- 5. Structure suspected of monasteries in the Thaj area, and
- 6. Jubail compound structure in Saudi Arabia (Table 1).

Table 1: Persian Gulf and South of Mesopotamia churches (author)

Nave and Roofing System	Sanctuary	Nave	Entrance	Materi al	Proport ion	Orientation	Dating	Plan	Church	
Domed_ vaulted	Rectangle, straight end wall	Nave of three aisles, Thick and Long walls	West, North, South	Stone , Plaster	9:5 (1,8)	deflected 30° north from the due east	7_9th AC	IEEE I	Kharg	
Domed_ Wooden Structure	Rectangle, straight end wall	Nave of three aisles, Thick and Long walls	West, North, South	Stone, Mud, Plaster	7:5 (1,4)	deflected north from the due east	7_9th AC		Sir BaniYas	
Domed_ vaulted	Rectangle, straight end wall	Nave of three aisles, Thick and Long walls	West, North, South	Stone, Mud, Plaster	9:5 (1,8)	deflected 15° north from the due east	7_9th AC	F	Al_Qusur	Persian Golf
Wooden Structure (?)	Rectangle, straight end wall	Nave of three aisles, Thick and Long walls	(?)	Stone, Mud, Plaster	(?)	deflected south from the due east	8_9 <sup>th</sup> AC		Akkaz	
(?)	Rectangle, straight end wall	Nave of three aisles, Thick and Long walls	West(?), North, South	Stone, Mud, Plaster	19:10 (1,9)	deflected 60° north from the due east	8_9thA C		Ain Sha'ia	South of Mesop otamia
Domed_ vaulted	Rectangle, straight end wall	Nave of three aisles, Thick and Long walls	West, North, South	Stone, Mud, Plaster	9:4 (2,2)	deflected 29° north from the due east	5_7 <sup>th</sup> AC		Qusair	

Church structures in the south of Mesopotamia include the following:

1. Ctesiphon structure or the Kokheh church

- 2. Hira churches and monasteries and other structures suspected of monasteries
- 4. Rahaliya compound structure (Table
- 2).
- 3. Qasr Serij compound structure

Table 2: South of Mesopotamia churches (author)

Nave and Roofing System	Sanctuary	Nave	Entrance	Material	Propor tion	Orientation	Dating	plan	Church	
vaulted	Rectangle, straight end wall,	Single aisle (Nave)	North and South	Baked Breaks, Plaster	11:5 (2,2) (2.2)	Due East	Middle or Late 6 <sup>th</sup> AC		Ctesiph on	
Domed_ vaulted	nearly square, straight end wall,	Nave of three aisles, with Bema	North and South	Mud, Baked Breaks, Plaster	23:12 (1,9)	deflected 41° south from the due east	6(?)_8 <sup>th</sup> AC	CEA	Hira 11	
(?)	nearly square , straight end wall,	Nave of three aisles, with Bema	North and South	Mud, Baked Breaks, Plaster	7:4 (1,7)	deflected 43° south from the due east	6(?)_8 <sup>th</sup> AC		Hira5	South of Mesop otamia
Possibly domed (?)	square , straight end wall	Nave of three aisles, with Bema, with Sacred Path	West and South (?)	Stone, mud and Plaster	3:2 (1,5)	Due East	6 <sup>th</sup> AC		Ain Sha'ia	

In the end, church structures in the north of Mesopotamia include the following:

- 2. Museifneh compound
- 3. Bazian church and

1. Qasr Serij church

4. Sheila Castel church (Table 3).

Table3: Table 2: North of Mesopotamia churches (author)

Nave and Roofing System	Sanctuary	Nave	Entrance	Materi al	Proport ion	Orientation	Dating	Plan	Church	
half dome	Shallow, semicircula r apse with the back concealed by a straight wall	Nave of three aisles, with square columns	West, South (?)	Dresse d stone blocks	15:14 (1,07)	Due east	7 <sup>th</sup> AC		Museifne h	
half dome_ Wooden structure	Shallow, semicircula r apse with the back concealed by a straight wall	Nave of three aisles, with rectangle columns	West, South	Dresse d limesto ne blocks	5:3 (1,6)	Due east	6 <sup>th</sup> AC		Qasr Serij	North of

?	Shallow, semicircula r apse (?)	Nave of three aisles, with Bema	West, South	Stone, Plaster	?	deflected south from the due east	7_11 <sup>th</sup> AC	Bazian	Mesopota mia
ć	Shallow, Rectangle, straight end wall	Nave of three aisle, with square columns, with Bema	South	Stone, Plaster	?	deflected south (?) from the due east	Late Sassanid_ea rly Islamic era	Qala't Shila	

The said churches are spatially characterized by the following:

#### Church Nave and Plan:

No churches in the Western Sassanid territories have a central plan (Okada, 1991:78). All the available remnants have a longitudinal plan divided into two parts: single- and three-nave plans. The three-nave church plans fall into two categories:

- 1. The naves separated from each other by a row of circular and relatively narrower section columns (Museifneh , Qasr Serij, Rahaliya, Hira, Tikrit, Bazian and Qala't Shila churches), and
- 2. Naves separated from each other by longer and thick columns (Qasr Serij, Ain Sh'ia, Sir Bani Yas, and Akkaz)

Only is the Ctesiphon Church single-nave. The plan proportions of the churches are almost similar, with proportions of Hira-Ctesiphon and Qusair, Qasr Serij - Mosefneh and Rahaliya, Al-Qusur-Ain Sha'ia and Kharg churches being more similar. The Museifneh church plan proportions tend to be square-shaped, also noted in the intra-city Syrian churches (Houser, 2018:439). However, the Ain Sha'ia, Kharg, Al- Qusur and Sir Bani Yas churches emphasize the rectangularly longitudinal plans. In addition, the nave-prayer room proportions of the Kharg church tend to emphasize a golden proportion (Okada, 1991:78). The largest church is the Hira church (33.5\*58 meters), while the smallest one is the Museifneh church (12.6\*13.5) (Carter, 2013; Okada, 1992).

Excavations on the Al-Qusur church revealed that the central nave was completely closed and protected. The church nave was divided into two private and public parts. The lateral naves and the pre-nave section were available for the public, but access to the central nave and its prayer room was restricted, which could open on some special occasions or be available only to be clergies (Bernanrd & Salles, 1991:11). Without the doors, "the position of extended and thick walls with small openings in between emphasized the spatial separation and privacy of the space" (Ching, 2012:159). Okada also suggested that the Kharg church was a singlenave church that then extended to three naves. In addition, the stone remnants of the central nave of the Qusair church, reminiscent of the Kharg church, indicate that the central nave was more important than and distinguished from the lateral naves because they were made of clay. A small single-nave church was also found in Al-Qusur, which serves as the nave structure and the central prayer room constructed outside the church, and was used for the practice of the services by the clergies (Bernard & Salles, 1991:11).

Describing the construction of Sir Bani Yas monastery, Loosley suggests that the main part of the church like the nave or the central prayer room, which was specifically aimed at prayer, was first constructed, followed by the completion of the whole building when enough budget was available (Loosley & Elders, 2009:7). The central nave in the churches of long walls seemed more significant and more private. Houser writes: "The long and thick

walls not only removed the structural problems but could also be used for the separation of liturgical sections between men and women on of either side the central nave" (Houser, 2018:442). Regarding the separation of women and men in the naves o the Syrian churches, especially those who had bema, Loosley maintains that the Syriac traditions suggest that women stood behind men at the western part facing the central prayer room. The presence of cavities on the stone columns in Syria indicated the presence of wooden fences for this spatial separation (Loosley, 1999:19; 2012:9; 2018:421).

This spatial separation in Syrian churches is noted in the last two-thirds section of the nave path. This separation indicates the ratio of men to women in ecclesiastical participation, which reveals men outnumbering women. As we concluded, one should consider that these ratios were varying in some churches that do not apply to all regions. No cavity is seen in the Churches of the East, neither on the stone churches nor on the brick churches. Thus, one should signify the major role of the bema in Hira and Bazian churches in this spatial separation (Loosley, 1999:20-21).

# Eastern Part and Central Prayer Room

All the churches have three parts on the east, though this case does not apply to the Bazian church (Houser, 2018:435). In these churches, the rooms on either side are cloakrooms (Bita Gaza in Syriac) and memorial of the martyrs' room (Bit Qanki in Syriac). This latter room has a structure that excavators define as the baptistery, which, in some other churches, also serves as a place for purification with water or holy oil (Loosley, 33-38). In some churches, there was a furnace or stove for baking bread. In the current Assyrian churches, the place to hold holy dishes was also the place to bake the Holy Communion bread, which involved a furnace or a stove for baking (Curtis, 1977:375). This structure is not seen in Syrian churches, a Church of the East-specific space (Loosley & Elders, 2009:8). There was also a larger room in two churches of Kharg and Al-Qusur that faced the nave to provide direct access to the central nave through an opening,

while no such element is seen in the northern room plans. The eastern wall of most of the Western Sassanid churches were uncurved flat walls with rectangular altars. However, the eastern walls of the Qasr Serij, Museifneh, and Bazian churches were curved (Okada, 1991:79). At the Bazian church, the eastern wall curve can be detected on the exterior side; however, the curved altar of the remaining churches was hidden by a flat exterior wall (Houser, 2018:437). The width of the central prayer room in churches of Hira, Bazian, Sheila Castel, and Qasr Serij were completely open and greater. The Rahaliya church, unlike those churches, had a small opening in the central prayer room which fully separated it from the nave space. To Butler, the central prayer room' openings of the Syrian churches were wider in most cases and led to the central nave by a semi-circular arch like the triumphal arch (Butler, 1903:25). The wide opening of Qasr Serij church was characterized by a semicircular arch, reported by Oates, making it highly similar to the northern Syrian churches (Oates, 1962: 79-84). Besides, in some churches like Hira, Kharg, and Al-Qusur, the central prayer room was distinguished from the central nave by several steps (Sarfaraz, 1989:135; Bernard Salles. 1991, T. Rice. 1932).

# Structures and Materials

The presence of thick and long piers instead of narrow columns creates larger mouths for the interior-constructed arches, while narrower columns indicate a lighter structure like a wooden truss system. Examples of the use of rectangularly thick piers and construction of large-mouth arches in the 5th century are noted in the northeastern parts of Syria and the Qasr (Oates, 1962:80-83). Serii church Ctesiphon church is seen removing thick piers and closing them into the lateral walls, indicating the barrel vault structural system as famous in the Sassanid era. This structure is also noted in the palaces of Sarvestan and Damghan. The interior-constructed plans are also noted in the ruins of two churches in Hira, which take the form of three-nave columned halls. For Reuther, this kind of plan/structure cannot be associated with the Syrian Basilicas (Pope, 2008:700). Kharg, Al-Qusur, Sir Bani

Yas, and Akkaz structures are possibly covered by a barrel vault administered on the thick walls and piers. These walls are well protected in the central nave of the Qusair church, which can help reconstruct the parallel naves covered by a barrel vault (De Langhe. 2008, Oates. 1968, Simpson. 2018, Okada. 1991: 56, Finster and Schmidt. 1976: 29 30, Houser. 2018: 441). The materials used in the southern parts to set up the structures mostly included bricks, stone, and clay. For instance, in Rahaliya, the nave columns and the foundation to bear the dome were made of stone. Stone and mortars were also used to construct the central nave of the Qusair church, while the lateral nave walls were made of clay with stone foundations. In northern areas, stone and mortar were used for construction. Excluding the second church in the Al-Qusur, which is made of stone and seldom in the Failaka Island, the remaining structures seem to have been constructed with local materials (Al-Mutairi, 2012:275). The interior and sometimes exterior walls and the floors were coated with thick layers of plaster (Okada, 1991:78; De Langhe, 2008:606).

## Orientation

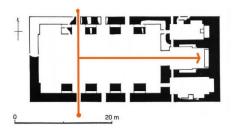
Most churches were constructed in a westernorientation on the eastern Mediterranean, deviating from 12 to 25° northwards. The reported churches in the Western Sassanid territory show 15-60 ° deviation moving towards the south and the north. In the Ain Sha'ia church, the westerneastern orientation seems to have been neglected. The churches constructed in the western-eastern orientation were Museifneh, Ctesiphon, Rahaliya, Qasr Serij, and Qala't Shila churches. This indicates the predominance of western-eastern orientation in the north of Mesopotamia than the south of it or the Persian Gulf (Okada, 1991: 79). De Langhe suggests that failure to attend to the said orientation could be affected by the local architecture or Sassanid palaces like Kish Palace in Mesopotamia (Image, 5) or be the result of changing liturgical services (De Langhe, 2008:607-608).

Access and Entrance Orientation

The entrances to the churches can be divided into three parts: 1. Entrances from the west and south (e.g., Oasr Serij, Museifneh, Rahaliya, and Bazian) or only from the south (e.g., Qala't Shila); 2. Entrances from the north and south (e.g., Ctesiphon, Hira) and 3. Entrances from the north, south, and west face symmetrically and have a pre-nave section in the western part (e.g., Kharg, Al-Qusur, Ain Sha'ia, and Akkaz). On the south of many churches, like Ctesiphon, Rahaliya, Museifneh, Qasr Serij, Kharg and Ain Sha'ia lay yards and structural annexations that could lead to the southeastern room of the churches. To Simpson, despite the presence of pre-nave section and western accessibility, access was mainly made through the southern entrances because remnants of paved or brickyards in Kharg and Ain Sha'ia churches could confirm this. The plan of the Qusair church also indicates a similar access path from the southern part of the monastery. This accessibility is also noted in the Kokhe /Ctesiphon church (Simpson, 2018:12).

Horn and Hunter maintain that a porch on the southern part, like the Museifneh church, can indicate the main or public access (Horn & Hunter, 2012:1110). The presence of only one access point on the southern part of the Qala't Shila church through a column-surrounded yard can complete the researchers' analyses (Amin Ali, 2020). Okada argues that the presence of the porch can be a product of local architecture; however, attention to other ecclesiastical features as in the Qasr Serij church can be inspired by the northern Syrian ecclesiastical structures (Okada, 1991:79). Butler suggests that the presence of numerous openings on one side may have been due to the separation of men and women's entrances or the laity from the clergies. He also remarks that one of these entrances on the southern part of the Syrian churches closer to the eastern end appeared to have enjoyed more decorations that may belong to the clergies (Butler, 1903:89). Loosley also stated that the lack of western entrances would lead the women to enter through the southwestern door and the men through the southeastern door (Loosley, 2012:9). Thus, in Syrian churches, women had to stand behind the men, with the former' entrance made

through the southwestern door (Loosley, 1999:19). In Syrian churches, Syriac or Greek language inscriptions are seen on some entrance doors containing the dates construction or reconstruction and the names of the architecture or the patron of the churches (Butler, 1903:132 & Loosley, 2018:422). These kinds of inscriptions are not reported in the western Sassanid territory churches, with the only stone inscription reported in the Hira monastery belonging to the Al-Ka'bi who supposes that the inscription bears the name of the patron, though not indicating the date of the construction or reconstruction of the monastery (Al Ka'bi, 2012:7-8).



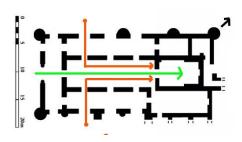


Image 6: Entrance axis in churches Left: Ctesiphon church, Right: Kharg monastery) (Bonneric. 2015, Okada.1991)

The churches whose entrances are laid in the north and south have the movement towards the nave and central prayer room made possible through a curved axis of 90°; however, if the entrance is in the west, the movement orientation is western-eastern in a straight way (Image, 6). This has to be focused on all the churches with multiple western entrances, especially when the middle opening is larger

than others, such as Qasr Serij, Kharg, and Al-Qusur churches. The remaining lateral openings of the Kharg and Al-Qusur churches are of the same value in terms of dimensions. Okada also suggests that the symmetrical arrangement of the openings was innovated by the local Christians of the south of the Mesopotamian region (Okada, 1991:80-81).



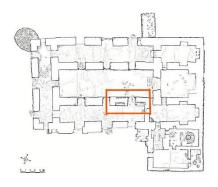


Image 7: the built\_in chest in pier wall (Right: Al\_Qusur, Left: Ain Sha'ia) (Bernard and Salles. 1991, Okada.1991)

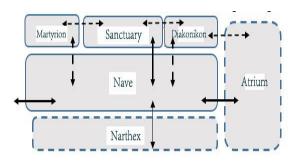


Image 8: Diagram of the spatial relations in the churches of the western Sasanian territory (in general) (author)

# Tombs and Burials

In Ain Ash'ia, Akkaz and Al-Qusur, there are small tombs in the form of closets which are exactly situated at a point, i.e., at the

easternmost of the wall of the southern nave which according to the archeologists and analysts, contained the remains of the martyrs and saints (Image, 7). Simpson believes that these tombs could explain why the southern entrances to the churches were important (Simpson, 2018; Okada, 1992; Okada, 1991; Bernard & Salles, 1991). The burial sites are located in the Kharg church in the northern part of the northern nave, which differs from the remaining churches (Ghirshman, 1965:19). The important point was that few bone remnants could be found in these tombs, which, according to the archeologists, had been gathered before the church had been abandoned and transferred to another church. In the Sir Bani Yas church, there were burial sites inside the yard, which, according to the analysts and Jullien, the isolated tomb inside the church compound most likely pertained to the monastic tombs. (Jullien, 2006:203). The bone remnants of these burial sites were found almost completely, and the burial orientations were western-eastern, with the head lying on the west and the deceased buried on the back. Another burial site of this kind was found in the Tikrit's churchyard (Harrak, 2009:105). Next to the eastern altar of the Tikrit's church were niches that highly likely contained the tombs or were the places to hold the memorials of the saints. For Amir Harrak, these niches or recesses were the "burial sites of the saints" (called Beth Qadishe in Syriac); they were places to bury the church leaders. Describing the burial niches of the Saint Gabriel Monastery in Tur Abdin and Saint Matthew in the north of Iraq, he says that these niches accounted for parts of the traditional western Syriac church plans (Harrak. 2009: 2, Keser-Kayaalp. 2019:196).

Classification of the Western Sassanid Territory Churches by Architectural Features and Functions

Architectural space analyses suggest that all churches in the Western Sassanid territory do not fall under a certain architectural category; thus, one can include the north and south churches of the Mesopotamia and Persian Gulf into a geographical category. However, they have common features. Cassis s states: "There

are little Byzantine and Greek impacts in each of the three categories, and the structures are highly likely to have used local architecture and Syriac tradition of Syria" (Cassis s, 2002:67). Researchers like De Langhe, Simpson, Horn and Hunter, Okada, and Houser maintain that churches north of Mesopotamia are similar to those of the 6th and 7th centuries in northern Syria in terms of architectural features and materials. A clear example of this is the Qasr Serij church, which has many similarities to the northern Syrian churches (Oates, 1962:79-82); the remaining churches under this category include Tikrit and Bazian, Tur Abdin, and Oala't Shila. The churches south Mesopotamia are also affected by the local architecture and materials (bricks and clay) and construction techniques of the Parthian dynasty, especially the Sassanid era. It is seen that part of the Christian community had defined a standard architectural form of their own and then spread it to the Persian Gulf regions (Okada, 1991:88). These churches are mainly characterized by the following:

- 1. Flat and uncurved altars
- 2. The presence of western, southern, and northern entrances laid symmetrically on each other
- 3. Thick and long walls in the nave
- 4. Western pre-entrance, and
- 5. A myriad number of them have a western-eastern deviation

In terms of the importance of the church in the village or city or identification of the type of the church and monastery, one cannot propose a specific categorization of the churches in the Western Sassanid territories, thus making it difficult to categorize them (Okada, 1991:78). To Okada, De Langhe, Cassis s, and Houser, the churches of Hira and Ctesiphon are situated in a metropolis. Okada says that the scales of Hira churches reflect the scales of cathedral churches in a Syriac-speaking region such as Saint Sergius Church in Rassafe, which has large space enough for peoples' congregation. However, one cannot call them cathedrals for sure, nor consider the Ctesiphon church the

same church home to the headquarters of the Catholicos in the Church of the East. Cassis s maintains that more evidence is needed to confirm this, the most important of which are: 1. Inscriptional evidence, and 2. Isolated burials, specifically Catholicos (Cassis, 2002:66: Okada. 1991:78 & Houser. 2018:441). For De Langhe, the small-tomedium-sized churches can be considered monastic churches of the villages (De Langhe, 2008:606-607). Okada includes Rahaliya and Qasr Serij churches in this category (Okada, 1991:80). Qasr Serij church was a monastic cemetery of martyrs dedicated to Saints to Oates. (Oates, 1962; Houser, 2018: 439). Houser, Cassis s, and Okada consider the monastic churches of Qusair, Rahaliya, and Ain Sha'ia to be outside the city areas. To Okada, the monastic function of the Ain Sha'ia church was beyond simple austerity and ritual-based monasteries as it provided amenities for pilgrimage and trading relations (Cassis s. 2002: 67, Okada. 1991: 72, Houser. 2018: 439). Even though many churches fall under monastic churches, their monastic typology could differ. In other words, the Rahaliya, Qasr and Museifneh monasteries were different from those of Ain Sha'ia, Kharg, Al-Qusur, and Sir Bani Yas (De Langhe, 2008:606). Here, the residential feature of the Bazian's monastery can be differentiated from the monasteries mentioned above. Steve and Jullien provided more details of the Kharg monastery and used historical documents to conclude that the said monastery is, by no means, similar to the conventional rural and urban monasteries. This is because it was a powerful Cenobitic institution that was greatly similar to the architecture of St. Pachomius in Egypt, founded following reforms by Abraham (Steve. 2003, Jullien. 2006: of Kashkar 201\_204).

Later, other churches like Al-Qusur and Sir Bani Yas fell into the Cenobitic monasteries for their resemblance with the Kharg compound (Payne 2011:98, Bonneric. 2015). The other classification proposed for the Sassanid churches is one based on the faith of the Christians who founded and used them. In this way, Monophysite churches can be

differentiated from Nestorian churches [2]. As historical documents suggest, Monophysite adherents were scattered in large swathes of the north of Mesopotamia. Some researchers have concluded that constructing a rectangular altar instead of a curved altar can be associated with divinity and faith. Accordingly, they argue that the north of Mesopotamia church with curved and shallow altars could be considered Monophysite churches while the south of Mesopotamia churches with deep rectangular prayer rooms as Nestorian and Dyophysite churches (De Langhe, 2008:607). Horn and Hunter suggest that "The central prayer room of Churches of Ctesiphon, Hira, Ain Sha'ia and Rahaliya which use a locally homogenous architecture are categorized in the Eastern Nestorian churches. This is evidenced by the linear inscriptions and special types of plastermade crosses. The churches of Al-Qusur, Jubail, and Kharg also fall in this category for their resemblance with the Ain Sha'ia church.

In contrast, the Qasr Serij and Museifneh specifically churches have architectural elements such as curved altars and different Syriac language to differentiate from Nestorian churches" (Horn & Hunter, 2012:1110). It is difficult to separate the Nestorian church from the Monophysite church by analyzing spatial relations and architectural elements. It is also unclear whether the Monophysite creed has developed into different architectural elements in the churches (Balderstone, 2020:7). On the form of the altar, Okada and Houser maintain that only due to the old familiarity of the local people in the south, the rectangular or deep square plan of the central prayer room was preferred over the shallow and curved altar, which resulted from the use of local construction materials and techniques (Okada, 1991:80-81 & Houser, 2018:442). Loosley maintains that most of the curved altars were covered by a flat exterior wall in regions with a greater portion of the Syriac population, and the curved altar churches with no flat exterior wall could reflect the Greco-Roman traditions. He continues to say that the more we move eastwards, the altar curve tradition becomes less as in the south of Mesopotamia or the Persian Gulf, where there is no trace of the

curved altar (Loosley, 2012:22). Therefore, there is conclusive evidence on the separation of the churches based on theological perspectives. The only church which contains the name of Monophysites in the 7th and 8th centuries is the Tikrit church which can be said for sure that was home for the adherents of the Monophysite (Harrak, 2020:7 & Balderstone, 2009).

#### **Conclusion**

A review of Western Sassanid territory churches indicates that all these buildings have a certain architectural fixture that includes eastern parts, central prayer room, cloakroom, a place for the memorial and commemoration of the martyrs and the nave itself into three parts. On this basis, a diagram of almost similar spatial relations can be drawn (Image, 8). Church, probably excluding the Ctesiphon and Museifneh churches, dates back to no earlier than the 6th century. In the meantime, we do not have appropriate archeological information about earlier churches and monasteries of these regions. We neither have access to churches that could reveal their architectural transformations. However, some researchers have reviewed archeological documents of Mesopotamia and Persian Gulf regions to conclude that we have failed to identify the early churches and monasteries due to their greater similarity with residential architecture. A review of residential architecture in the eastern Mediterranean region shows that the use of residential complexes as places for worship lasted for at least until the 5th century (Bonneric. 2015, Loosley. 2002, Okada. 1991, Potts. 1994, Payne. 2011, Horn & Hunter. 2012: 1096). However, one would see that the element of bema was found in the naves of some 7-8th century churches of Bazian and Museifneh while Ctesiphon and churches, which probably belong to the 7-8th centuries, lacked such an element.

Thus, the element of the bema, added to the churches, was used in the following centuries (Loosley, 2002; Cassis s, 1999, 2002 & 2012). To answer the second question, one would say

that there were differences between the northern churches and those in the south of Mesopotamia and the Persian Gulf, which was due to the local architecture in the region. Analyses by researchers suggested that the architectural patterns and the proportions used in some churches in the south of Mesopotamia and the Persian Gulf had been adopted from the local architectures formed in the Sassanid era. In contrast, some churches in the north of Mesopotamia, such as Qasr Serij, were highly similar to the Syrian churches in the Byzantine territories (Okada. 1991, Simpson, 2018, & Houser. 2018). One more factor which differentiates the various churches was the place dedicated to the burial of the martyrs or the Saints which the eastern part had been designated for this in most churches, except for those of the Persian Gulf and south of Mesopotamia such as Kharg, Al-Qusur Ain Sha'ia and probably in Akkaz. However, in some churches, one side of the naves had been allotted for the burial site, especially in Ain Sh'ia, Al-Qusur, and Akkaz churches, the burial site was at a common point in the nave (Okada. 1991, Gachet. 1998, Ghirshman. 1965, Bernard & Salles. 1991). Western Sassanid territory churches can be classified from different perspectives. From a functional perspective, the researchers consider most of the churches excavated in the western regions, excluding Ctesiphon and two Hira churches, to belong to monastic complexes; monasteries extended from the north of Mesopotamia to its south differed from each other. Historical documents suggest the presence of Cenobitic monasteries in Kharg and Sir Bani Yas, which follow Egyptian St. Pachomius' Cenobitic patterns; as regards the Al-Qusur church, however, no fences were found (Payne. 2011, Loosley and Elders. 2009, Jullien. 2006, & Steve. 2003).

A review of ecclesiastical architecture patterns of these monasteries, which have thick and long walls with narrow openings in between, suggests that these types of patterns are only used for the Cenobitic monastic churches because the situation of the Qusair church in the south of Mesopotamia and Akkaz in the Persian Gulf which is similar to those of Kharg

and Sir Bani Yas is not clear. Unlike Cenobitic monasteries in the south of the Persian Gulf and the Mesopotamia, those in the north of Mesopotamia, like the Bazian monastery, clearly lack the architectural indices of the Cenobitic monastery, which, according to archeologists, its residential features were greater than those of other monasteries. It is also seen as a residential compound to which the church was later added (Deroche. 2013). Some churches were also introduced as a cemetery of the martyrs, like the Qala't Shila Church in Erbil (Amin Ali, 2020). Some architectural structures function as churches, some of which were located west of the Persian Gulf, like the Thaj and Jubail. We still have little knowledge of whether they were churches or monasteries and which era they belonged to. This requires further investigations. The western structure, the Qasr\_i Abu Nasr, and the unknown Siraf structure could, due to their architectural similarity with the Kharg structure, be recognized as a church, though no findings available conclusive are (Whitcomb, 1985). Findings from this place should be compared with those of other areas. There are also assumptions that state the Chahar Ghapi structure of the Qasr-e Shirin Church dates back to the late Sassanid era, and its surroundings could serve as chambers similar to those of the Kharg monastery (Hozhabry, 2012:153-173). As for the identity Qasr-e Shirin Church, of the more investigations are warranted to conclude whether these or not structures were monasteries and which categories they belonged to.

## **Endnotes:**

1. Cenobitic Monasticism is derived from the Greek word Koinos Bios meaning Common Life. Cenobitic monasteries were first founded in Egypt by Pachomius in the 4th century. Following this, the tradition was expanded to the eastern Mediterranean and Mesopotamia. Abraham of Kashkar is considered to be the founder of the Cenobitic Mesopotamian monastery.

2. Nestorius was the archbishop of Constantinople in 428 and was ousted in Ephesus and exiled in 43. Nestorius believed in the distinction between the divine and human nature of Christ and emphasized his human nature. This belief generally underlies the Dyophysite doctrine, against which we have views of Cyril of Alexandria, who emphasize only the divine nature of Christ. He is called the father of Monophysit.

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