THE MORPHOLOGICAL CHARACTERISTICS OF THE OLD LEBANESE CHURCHES IN KOURA, BATROUN AND BYBLOS, FROM THE 8TH CENTURY TO THE 13TH CENTURY

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ABSTRACT

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Taking into consideration the increasing need to define the chronology of the churches based on their architectural elements. This paper primarily aims to develop a wider understanding of ecclesiastical characteristics; this is exactly why an indispensable analysis was carried out to understand these architectural features and to make them easily recognizable. Furthermore, this research is an attempt to monitor how the different morphological characteristics of churches affect the general chronology. For the study of the churches, the methodology of investigation of the architectural elements was used. This tool of investigation has been applied to the direct analysis of morphological evidence for a better understanding and to clarify its relationship with the chronology. This study relates to ecclesiastical temples from the 8th century to the 13th century in Koura, Batroun and Byblos. Unfortunately, there are no remaining churches before the 8th century, especially after the great earthquake that struck Lebanon in 551 AD. The Crusader period takes place from the end of the eleventh century to the end of the thirteenth century (between 1095 and 1291 AD). In the 13th century, the Fourth Crusade left behind a series of important churches that had a great impact on the architecture of Lebanon.

Keywords: Architecture, Old churches, Morphological, Chronology, Lebanon.

INTRODUCTION

Most of the old churches and monasteries of Lebanon are located in the north of Lebanon, especially in the areas of Koura, Batroun and Byblos (Jbeil), where the majority of Christian communities still reside until now.

The era between the 8th and the 13th century is the most important period in our old ecclesiastical architecture. It is located in the middle Ages that lasted from the 5th to the 15th century. At the beginning of the sixth century, a series of terrible earthquakes struck Lebanon in 494, 502, 529, 551 (it was the greatest) and 555 AD. The earthquakes caused large waves of tsunamis, which flooded the entire coast of Lebanon. Unfortunately, as a result most coastal cities and many important temples were destroyed. Then during the crusader period, the Christian Churches have increased in a significant number. After the 13th century, due to the occupation of Lebanon by the army of the Mameluks and the Ottomans, the Christian community had many difficult times until the French mandate.

In total, 128 temples were studied in my article. Later, I will identify them and the morphology and the chronology of these churches will be represented in six tables.

There were major influences of Byzantine architecture in Lebanese temples and we can say that the architecture of our old churches was part of the Byzantine school, although it had an autonomy tendency for local architecture. Most local churches were financed by the inhabitants and were made by local craftsmen, who created an ecclesiastical architecture closely tied to their place, but the dire economic situation prevented the implementation of large temples. Even if most local temples are poor, they are important because they give us the opportunity to study the early architecture of Christianity in our region in relation to their function and history.

The Cistercian monks came along with the Crusaders to various areas of Lebanon and founded many monasteries and churches usually on an elevated ground, due to natural protection, away from residential areas and near water sources. They began to build their big churches with new ideas and new architectural rhythms. The facades of Crusaders' churches are highly important in architecture; the axiality is usually emphasized by the entrance of the churches on the western side, also the idiosyncratic facades, which have a circular window (oculus) in the higher middle area with two rectangular or arched windows (loopholes), are recognized. The complete lack of outer blind arches on the elevations of all churches is distinctive.

The influence was very obvious in the local architecture. The Lebanese people acquired a new architectural and technical school; consequently, many morphological changes were made to the existing local architecture. With the collapse of the Latin Empire, some of Crusaders' Catholic Churches were gradually converted to Orthodox Churches, especially in Koura. Currently, most of the churches in Koura belong to the Greek Orthodox Church of Antioch, while most of the churches in Batroun and Byblos belong to the Syriac Maronite Church of Antioch. Usually, the existence of the iconostasis within the church indicates that it is used for Orthodox liturgy, since this element does not exist in the Catholic Maronite Church. In my study, I don't distinguish between the two doctrinal churches, knowing that all of our old local churches are based on the same Byzantine architecture.

The architecture of old churches is unique because it comes from the cultural intermingling of Eastern and Western Christianity. These different cultures reflect a distinctive situation, a local Syriac and Arab culture colored with western influences, where their effects are evident, to create our own architectural identity. This rich ecclesiastical architecture makes us proud because we are the heirs of the great ancestors, who left us a precious heritage that is a treasure of culture, art, history and faith. That is why it is important to study them, hoping that the competent authorities will take action to repair the damages of these historic churches.

Sometimes it is impossible to determine if some parts were there in the initial phase of the temple. Also serious maintenances, new expansions and windows modifications, which improve ventilation and lighting, make our study more difficult. Unfortunately, the chronology of most churches is a difficult problem, it is almost impossible to be accurate due to lack of written sources; therefore the construction date is estimated.

The purpose of this paper is to conjure up the various architectural features and analyze the chronology concerning morphology; therefore, the morphological categories and the analytical analysis of the morphological characteristics will be presented in the following paragraphs.

Morphological categories

The old churches in Lebanon are classified into three categories, based on morphology:

The local architecture

It is the architecture of all churches that were built before the period of the Crusades and some churches after. The local architecture is based on the Byzantine architectural tradition. Generally, they are small, poor and humble with simple external and internal shapes.

The architecture of the Crusaders

It belongs to a European style of architecture that was mainly prevailed in ecclesiastical architecture from the late of the 10th century until the start of the 12th century.

This European architecture, which was between the ancient Roman and the Gothic style, is called the **Romanesque** style, because of the affinity of its many architectural elements with the Roman art, and thus it was the continuation of ancient Roman and Greek temples.

Some architectural common features of the Romanesque temples with the ancient Roman are the use of vaulted ceilings with reinforcing arches on heavy walls, the reuse of arches in elevations, the cleanliness of the interior area and the strictness of the elevations.

Mixed-character architecture

The morphology of many churches derived from the combination of the two architectural categories, it is known as mixed-character architecture. It is the local renewed architecture, where we see the characteristics of Crusaders' architecture in the local temples. Most of these churches keep the locally humble morphological features on the outside, but on the inside, some basic elements of the Crusaders' architecture are noticed, such as the cross vault.

Morphological characteristics

The local morphological elements and the morphology of the Crusaders are very different. In this article, I will represent a detailed analysis, categorized by items according to their contents.

The general characteristics and traits of the local temples are listed as follows:

External form:

The plainness and the simplicity of its external and internal shape, stemming from the austerity of decorative elements.

- The church is a low and small parallelogram, with flat cover.
- > The walls are too thick (about two meters). Several times, they are not straight.

 \succ The blind walls, which mean the absence of windows, on the southern and northern sides, create simplicity in the construction to avoid the collapse of the temple.

This method of construction is evident in the churches of the first period of the local architecture.

 \succ The dimensions of the used stones are relatively small. But sometimes, large stones are used in our local churches from older ancient temples.

> The carving of the stones is not very elaborated and sometimes the structural blocks are not carved completely.

Construction:

All the internal ceilings are **low** barrel vaulted.

Openings / Faces:

> The door shape is simple, single, small and low. It is usually **rectangular** with a monolithic lintel. Although in a few churches, the lintels are stone segmental arch (less than a semicircle). This lintel is a smooth curved arch and it is made from small lightweight blocks of stone.

> The few windows are without frames, small, single, and **rectangular**; thereby the temple is illuminated by dim light, creating reverence and respect.

> The small **rectangular** window, which is located above the central door of the western wall, is also common in traditional Lebanese houses.

The small **rectangular** window that is noticed above the keystone of the triumphal arch on the eastern wall.

Decorations / Frescoes:

> The original stone cornice, which protrudes from the stone iconostasis, is built to hold the icons.

> The existence of local style frescoes, without any traces of Byzantine style, is usually related to the local temples.

The general characteristics and traits of the Crusaders' temples are listed as follows:

Typology (examples are shown in Figure 1):

> The Single and double nave church acquire both of the local morphology and the morphology of the Crusaders, but the triple nave church acquires only the morphology of the Crusaders.

 \blacktriangleright The double nave church, which is separated by a colonnade or by one column in the middle and not by a separative wall with openings, is characteristic originality of the Crusaders' architecture.

 \succ The exonarthex (outer narthex) and the narthex are directly related to the architectural elements of the Crusaders.

External form (examples are shown in Figure 1):

- > The church is larger and richer than the local one.
- > The roof of the temple may not be flat anymore, it has different shapes: a pitched roof and a pitched or a semicircular roof in the middle with two flat sides.
- > The dome above a cylindrical base is a distinctive character.
- > The original belfry exists only in Crusaders' temples.
- The apse is bigger (wider & higher) and can reach the temple's roof.





Koura-Deddeh-St Anthony Double nave church is separated by one column

Koura-Qolhat-Our Lady of Balamand

Koura-Amioun-St Phocas Semicircular roof in the middle with two flat sides

Figure 1. Typology & external form of Crusaders' architecture.

External walls (some examples are shown in Figure 2):

The walls are straight and relatively thin.

> The structural stones are bigger, well-carved, flatter and with a smoother surface. Sometimes the stones' edges are flatter than the middle surface that protrudes little outward.

External construction (examples are shown in Figure 2):

> The small outer reinforcing arch, in the western wall above the door, is built to support the weight above it.

The outer buttress, exterior support of masonry, is built against a wall to support it.





Koura - Kfar Hazir St George and St Theodoros The stones' edges are flatter than the middle surface

Byblos-Dmalsa-St Nohra & St Sophia The Small outer reinforcing arches



Byblos-Jbeil Town-Our Lady of Najat The outer buttress

Figure 2. External walls & construction of Crusaders' architecture. Internal construction (examples are shown in Figure 3):

The known barrel vaults are now higher.

> The groin vaults appear and are generalized in our area. Usually, they are slightly pointed.

> The internal reinforcing arches that protrude from the vaulted ceiling and look like stone ribs.

The inner blind arches on the northern and southern walls.

> The double triumphal arch is a principal Crusaders' character.

 \succ The interior built column capitals, which are usually in Doric style, are an interesting proof of the ornamental character of the Crusaders.



Batroun-Edde-St Sava Internal reinforcing arch

Koura-Kfar Hazir St George and St Theodoros Inner blind arches

Byblos-Jbeil Town-Our Lady of Najat Double triumphal arch

Figure 3. Internal construction of Crusaders' architecture.

Openings / Faces (examples are shown in Figure 4):

The openings (doors and windows) are now larger.

> The narrow lancet or slit windows, which are many times widened outwards, are usually two in the front facade (arched or rectangular) symmetrically arranged to the central western door. Although fewer times they are found on the side view. These **loopholes** help to convert the church into a shelter in case of danger.

> The large circular window, above the outer central western door, is often located on the triangular pediment's axis, as a remembrance of the western **oculus**. It is widened outwards and sometimes it can get a circular star form.

> The small window, above the triumphal arch, can take various shapes, such as circle, star, and cross, to show the new morphology identity. It is an important indication of the Crusaders' architecture.

> The large arched window and the large arched interior niche, in the middle of the semicircular wall's apse, are not known as local elements, but they are found in the Crusaders' churches. Knowing that they are different from the side interior niches of the Prothesis and the Diaconicon.



Koura-Qolhat-Our Lady of Balamand The openings: loopholes & oculus

Koura-Deddeh-St Anthony Circular skylight above the triumphal arch

Koura-Amioun-St George Al Dahliz Large arched skylight in the middle of the apse

Figure 4. Openings & faces of Crusaders' architecture.

Exterior decorations examples are shown in Figure 5):

> The doors frames of many churches show an important interest. They are framed by double decorative recesses of the same stone material.

 \succ The exterior decorative cornices, especially around the windows, are an interesting characteristic proof of the Crusaders' architecture.

The stone cornices that protrude from the edges of the roof.

> The Crusaders adorned the important buildings with carved stone spout, which protrudes from the roof to convey water away from the gutters. This led to the appearance of Gargoyle that means a grotesque carved human or animal face or figure.







Koura-Enfeh-St Catherine Door frame & decorative cornices

Byblos-Jbeil Town-St John Marcus Stone cornices of the roof's edges

Koura-Amioun-St Phocas Stone spout

Figure 5. Exterior decorations of Crusaders' architecture.

Interior decorations / Frescoes (examples are shown in Figure 6):

> The using of the black stones for decorative purposes especially in the arches.

> The stone cornice, which protrudes from the base of the apse's quarter sphere, can now be found at a high point.

 \blacktriangleright Another interesting evidence of the decorative character of the Crusaders is the stone cornice that protrudes from the base of the main nave's vaulted ceiling and meets the previous cornice of the apse at the same level.

The existence of the Byzantine fresco is linked to the Crusaders' morphology.



Koura-Kousba-St Barbara The cornice of the apse is at a high point

Koura-Enfeh-St Catherine The cornice of the main nave's vaulted ceiling meets the cornice of the apse at the same level

Batroun-Tannourine Fawqa-St Chalita & St George The using of the black stones

Figure 6. Interior decorations of Crusaders' architecture.

Tables of old churches and observations

The total number of churches, which I have examined, is 128 churches:

- 36 churches in Koura (as shown in Table 1).
- 33 churches in Batroun (as shown in Table 2).
- 59 churches in the Byblos (as shown in Table 3).

Table 1. Morphology and chronology of the old churches in Koura.

Nº	Region – Name of the Church	Local architect	Arch. of the Crusaders	Mixed character Architect	Notes & <i>Chronology</i>
1.	Ain Ikreen -St. Edna			•	-Large arched window -Crusader period
2.	Amioun-St. George Al Dahliz		•		-Crusader period
3.	Amioun-St. Phocas		•		-Crusader period
4.	Barghoun-St. Barbara	•			-In ruins <i>-Crusader period</i>
5.	Bhabboosh-Our Lady of Al Rass.			•	-Groin vaulted exonarthex -Around 12th century
6.	Bkeftine-Our Lady of the Dormition & St. George			•	-Groin vaulted ceiling <i>-Crusader period</i>
7.	Bkeftine-St. Elias the River			•	-Groin vaulted ceiling <i>-Crusader period</i>
8.	Bsarma- Our Lady of the Wilderness	•			-Around 8th century
9.	Btaaboura-St. Romanos			•	-Big apse -Crusader period
10.	Bziza-Our Lady of the River	•			-Around 8th century
11.	Bziza-St. Elias	•			-Around 8th century
12.	Dar Bishtar- Our Lady of Dar Bishtar	•			-Crusader period
13.	Deddeh-St. Anthony			•	-Star shaped small window

N°	Region – Name of the Church	Local architect	Arch. of the Crusaders	Mixed character Architect	Notes & <i>Chronology</i>
					-The double frame of the north door <i>-Crusader period</i>
14.	Enfeh-Our Lady of the Natour		•		-Crusader period
15.	Enfeh-Our Lady of the Wind			•	-Groin vaulted narthex -Crusader period
16.	Enfeh-Saint John the Baptist			•	-Circular small window -Crusader period
17.	Enfeh-St. Catherine		•		-Crusader period
18α	Enfeh - St. Simon & Archangel Michael			•	-Groin vaulted ceiling -Crusader period
18β	Enfeh - St. Simon & Archangel Michael	•			-Around 8th century
19.	Ijd Ibreen-Our Lady of Marghala	•			-Around 8th century
20.	Kaftoun-Our Lady of the Dormition			•	-Groin vaulted ceiling -Crusader period
21.	Kaftoun-St Sergius&St Bacchus		•		-Crusader period
22.	Kfar Aaqa-St. George		•		-Crusader period
23.	Kfar Aaqa-St. Nohra(St. Light)	•			-Crusader period
24.	Kfar Hazir- Our Lady of the Dormition	•			-Crusader period
25.	Kfar Hazir-St. George and St. Theodoros			•	-High Building -Large building stones -In 1263
26.	Kfar Qahel-St. Elias the River			•	-Interior semicircular blind arches -Byzantine frescoes -Crusader period
27.	Kousba- Our Lady of Hamatoura			•	-Groin vaulted

N°	Region – Name of the Church	Local architect	Arch. of the Crusaders	Mixed character Architect	Notes & <i>Chronology</i>
					ceiling -Around 12th century
28.	Kousba- Our Lady of the Nativity	•			-Crusader period
29.	Kousba-St. Barbara			•	-Interior ceiling 's reinforcing arch -Crusader period
30.	Kousba-St. Dimitrios & St. Nicholas			•	-Groin vaulted ceiling -Loopholes <i>-Crusader period</i>
31.	Kousba-St. Joseph	•			-Around 8th century
32.	Qalamoun-St. Marina-cave	Ca	avernous chu	rch	-It was used around 10th century
33.	Qolhat-Our Lady of Balamand		•		-In 1157
34.	Rishdibbeen-St. Domitian			•	-Big apse -Crusader period
35.	Rishdibbeen-St. Jacob	•			-Around 8th century
36.	Zakroun-St. Sergius & St. Bacchus			•	-Circular small window -Big apse <i>-Crusader period</i>

I will consider that the following four churches: Koura - Enfeh - St. Simon & Archangel Michael, Batroun - Rachkida-St. Korkis (St. George), Batroun - Tannourine Tahta (lower) - Our Lady & St. Anthony and Byblos – Bahdidat - St. Nicholas & Our Lady of Bzez (breast) as being eight, because each one of them is composed of two independent churches, which are built at different times. It is observed that later connection openings were created within these churches.

Since the characteristics of the local architecture and the architecture of the Crusaders are explained in detail in this article; the following tables will show the notes, which are used only for the mixed-character architecture, to clarify the Crusaders' characteristics in the local temples.

Table 2. Morphology and chronology of the old churches in Batroun.

N°	Region – Name of the Church	Local architect	Arch. of the Crusaders	Mixed character Architect	Notes & <i>Chronology</i>
1.	Abrine-kfarkhollos-St. Sassine	•			-Around 8th century
2.	Abrine-St. Charbel the Martyr			•	-Double triumphal arch -Crusader period
3.	Asya-Our Lady of the Castel			•	-Big apse -Crusader period
4.	Bchaaleh-St. Domitian			•	-Traces of exonarthex -Crusader period
5.	Bqosmaya- Our Lady of Bzez & Simon			•	-Groin vaulted ceiling <i>-Crusader period</i>
6.	Douma-St Challita	•			-Around 8th century
7.	Douma-St. Domitian			•	 -Large arched window -Big apse -Around 12th century
8.	Douma-St. John the Baptist & Our Lady of the Nativity	•			-Around 8th century
9.	Douma-St. Nohra(St. Light)	•			-Around 12th century
10.	Edde-St. Mammes			•	-Big apse -Exonarthex -Around 12th century
11.	Edde-St. Sava		•		-Crusader period
12.	Hamat- Our Lady of Al Nouriyeh			•	-Groin vaulted ceiling -Crusader period
13.	Hardine-St. Challita & St. Nohra	Ca	avernous chu	rch	<i>-It was used around 8th century</i>
14.	Hardine-St Estephan (Stephen)	•			-Around 8th century
15.	Hardine-St. George & St. Edna	•			-Around 8th

N°	Region – Name of the Church	Local architect	Arch. of the Crusaders	Mixed character Architect	Notes & Chronology century
16.	Hardine-St Phocas &St. George	•			-Around 8th century
17.	Hardine-St. Theodoros	•			-In ruins -Around 10th century
18.	Kfar Chleymane-Our Lady of Naya	Ca	avernous chu	rch	-It was used around 12th century
19.	Kfar Hay-Our Lady of Kfar Hay			•	-Circular small window -Crusader period
20.	Kfar Hay-St. Sava			•	-Groin vaulted ceiling <i>-Crusader period</i>
21.	Kfar Hilda- Our Lady of Al Kharayeb			•	-Big apse -Byzantine frescoes -Crusader period
22.	Kfar Hilda-St. Peter	•			-Around 8th century
23.	Kfifan-Our Lady of Ramat			•	-Big apse -Crusader period
24.	Koubba-St. Savior		•		-Crusader period
25	Mrah Chdid-St. Sergius & St. Bacchus			•	-Big apse -Around 12th century
26α	Rachkida-St.Korkis(St. George) The first church		•		-Crusader period
26β	Rachkida-St.Korkis(St. George) The second church			•	-Groin vaulted ceiling -Big apse -Crusader period But it is older
27.	Sghar-Archangel Michael			•	-Double triumphal arch -Crusader period
28.	Sghar-St. Sophia & St. Stephen			•	-Big apse -Large windows

N°	Region – Name of the Church	Local architect	Arch. of the Crusaders	Mixed character Architect	Notes & <i>Chronology</i>
					-Star shaped small window -Crusader period
29.	Smar Jbeil- Our Lady of the Help			•	-Double triumphal arch -Crusader period
30.	Smar Jbeil-Sts Basilios & Nohra		•		-Around 12th century
31.	Tannourine Fawqa(upper)- St. Challita & St. George			•	-Groin vaulted ceiling -Crusader period
32α	Tannourine Tahta(lower)- Our Lady & St. Anthony	•			-Around 10th century
32β	Tannourine Tahta(lower)- Our Lady & St. Anthony	•			-Around 11th century
33.	Tannourine-Ain al Raha Fawqa -St. George	•			-Around 8th century

Nº	Region – Name of the Church	Local architect	Arch. of the Crusader s	Mixed character Architect	Notes & Chronology
1	Abadat-kfour-Saqiet el Khayt- Bouwali valley-St Simon Stylites	Ca	vernous chu	rch	-It was used around 12th century
2	Abadat-Our Lady of Wataya	•			-Around 12th century
3	Ain al Dilbi-Our Lady of al Midan	•			-Around 12th century
4	Ain Kfaa-Sts Simon and Abdas	•			-St Simon is older -Around 12th century
5	Amchit-Kfarsala-St. John			•	-Big apse -Around 12th century
6	Amchit-Our Lady of Naya	•			-Around 12th century
7	Amchit-St. Zakhia	•			-Around 8th century
8	Annaya-St. Joachim & St. Anne	•			-Around 11th century
9	Aqora al-St. Edna	•			-Around 12th century
10α	Bahdidat- St. Nicholas & Our Lady of Bzez (breast)	•			-Crusader period
10β	Bahdidat - St. Nicholas & Our Lady of Bzez (breast)	•			-Around 8th century
11	Bahdidat-StTheodoros Stratilatis	•			-Around 11th century
12	Bejji-Our Lady of al Mazraa	•			-Around 11th century
13	Bekhaaz-St. George	•			-Around 12th century
14	Bentael-St. Mammes	•			-Around 12th century

Table 3. Morphology and chronology of the old churches in Byblos.

Nº	Region – Name of the Church	Local architect	Arch. of the Crusader s	Mixed character Architect	Notes & <i>Chronology</i>
15	Berbara al-St. John	•			-Around 12th century
16	Berbara al-St. Sergius	•			-Around 11th century
17	Blat al-Mdamit-St. Domitian	•			-Around 11th century
18	Blat al-St. Elias			•	-Large building stones -Triple nave church -Around 12th century
19	Bshalli- St. George	•			-Around 8th century
20	Chamat-St Thecla &St. Stephen			•	-High Building -Large building stones -Crusader period
21	Chikhane-St. Simon Stylites	•			-Crusader period
22	Chikhane-St. Thecla			•	-Groin vaulted ceiling -Crusader period
23	Chmout-St. Phocas	•			-Around 8th century
24	Dmalsa-St. Nohra &St. Sophia			•	-Groin vaulted ceiling -Around 12th century
25	Edde-St. Elias	•			-Crusader period
26	Edde-St. George			•	-High Building -Loopholes <i>-Crusader period</i>
27	Edde-Pr. Lichaa	●			-Crusader period
28	Edde-St. Theodoros & St. John	•			-Crusader period
29	Edde-the Arch. Michael&Gabriel	•			-Around 11th century
30	Fdar al Tahta-Beshtlide- Our Lady of the Help	•			-Around 12th century

N°	Region – Name of the Church	Local architect	Arch. of the Crusader s	Mixed character Architect	Notes & Chronology
31	Fidar al-St. Zakhia	•			-Crusader period
32	Gharzouz-40 Martyrs			•	-Big apse -Crusader period-
33	Habil-Our Lady of Habil	•			-Around 11th century
34	Habil-St. George	•			-Crusader period
35	Habil-St. Sergius and St. Bacchus	•			-Crusader period
36	Hakel-Our Lady of Hakel	•			-Around 9th century
37	Hisrail-Kawr al Hawa-St. Theodoros	•			-Crusader period
38	Jbeil Town-Mehrin-St. Marina			•	-Large window -Around 12th century
39	Jbeil Town-Our Lady of Najat		•		-Around 13th century
40	Jbeil Town- Our Lady of the Gate		•		-Around 12th century
41	Jbeil Town-Poor Mother			•	-Large window -Carved stone spout -Crusader period
42	Jbeil Town-St. John Marcus		•		-In 1115
43	Jbeil Town-St. Nohra (St. Light)	•			-Around 9th century
44	Jbeil Town-St. Simon Stylites		•		-Crusader period
45	Jbeil Town-Zgheib St. Aquilina		•		-Crusader period
46	Kafer al-St. George	•			-Around 11th century
47	Maad-St. Charbel the Martyr		•		-Around 12th century
48	Mastita-St. Sava	•			-Crusader period
49	Mayfouk-al Qattara-St. Moura	•			-Crusader period
50	Mayfouk-Bernassa-St. George	•			-Crusader period
51	Mayfouk-Bernassa-St. Sava			•	-Big apse <i>-Crusader period</i>

Nº	Region – Name of the Church	Local architect	Arch. of the Crusader s	Mixed character Architect	Notes & <i>Chronology</i>
52	Mayfouk-Our Lady of Elige			•	-Groin vaulted ceiling -In 1121
53	Mayfouk-St. John	•			-Crusader period
54	Michhlan-St. Edna	•			-Crusader period
55	Moncef al-St. George	•			-Around 12th century
56	Moncef al-St. Mammes	•			-Around 11th century
57	Qassuba Hill-Our Lady of Qassuba			•	-Loopholes -Around 12th century
58	Rihane al-St. Theodoros	•			-Around 8th century
59	Tartij-St. George	•			-Crusader period

As a consequence, we can conclude these following observations:

About morphology

In Koura:

- Twelve churches belong to local architecture.
- Seven churches belong to the architecture of the Crusaders.
- Seventeen churches belong to mixed-character architecture.
- There is only one cavernous church.

In Batroun:

- Twelve churches belong to local architecture.
- Four churches belong to the architecture of the Crusaders.
- Seventeen churches belong to mixed-character architecture.
- There are two cavernous churches.

In Byblos:

- Forty one churches belong to local architecture.
- Six churches belong to the architecture of the Crusaders.
- Twelve churches belong to mixed-character architecture.
- There is only one cavernous church.

About chronology

<u>In Koura:</u>

- Seven churches are dated to the 8th century.
- Twenty nine churches are dated to the Crusader period.
- There is one cavernous church.

In Batroun:

- Eight churches are dated to the 8th century.
- Two churches are dated to the 10th century.
- One church is dated to the 11th century.
- Twenty two churches are dated to the Crusader period.
- There are two cavernous churches.

In Byblos:

- Five churches are dated to the 8th century.
- Two churches are dated to the 9th century.
- Nine churches are dated to the 11th century.
- Forty three churches are dated to the Crusader period.
- There is one cavernous church.

CONCLUSION

As a result of our study, the bond between morphology and chronology is essential; some basic approaches have been attempted; nevertheless, they need further exploration.

It is a fact that each element of the Crusaders' morphology, if it exists in our old churches, shows that the church belongs to the Crusaders' architecture or at least to the mixed-character architecture and leads us directly to the confirmation that the church was built or was modified by the Crusaders or by the local residents at the Crusader period, which is approximately after 1100 AD. While the traits of the local morphology show that the temples were built between 800 and 1100 AD by the local residents.

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REFERENCES

Charalambos, Th. Bouras. 1975. History of Architecture, Volume I and II.

National Metsovio Polytechnic, Athens.

- Davie, May. 2012. Orthodox Church and Chapels of QORNET AR ROUM. Publications of the University of Balamand, Lebanon.
- Davie, May. 2016. A Miscegenation of Cultures, Sacred Architecture of the Orthodox Diocese. Publications of the University of Balamand, Lebanon.
- Lavvas, P. George. 1986. Brief History of Architecture. Aristotle University of Thessaloniki, Greece.
- Research Center of Architecture History. 1979. Churches in Greece after the Occupation, Volume I and II. National Metsovio Polytechnic, Athens.
- Slim, Souad. 2007. Monasteries of the Antiochian Orthodox Patriarchate. Publications of the University of Balamand, Lebanon.