VI  Churches in Egypt.

Egypt contains a number of ancient churches, most of them being very humble buildings.

Some of them are supposed to date back in part at least, to the sixth century, but the time at which many of them were erected is extremely uncertain. The basilical type is very prevalent, but domed structures are not uncommon.

It cannot be said that Egypt played any great part in the formation of Byzantine Architecture. The part which it did play was in the sphere of carving. This it did through the great mart of Alexandria.

Possibly there may also at a later date have been influences coming from Egypt which showed themselves in Byzantine Churches elsewhere. The series of niches as is to be seen in the apse of St. Mark's, Venice, is found at an earlier date in Egypt.

On the other hand, Byzantine influence, coming from the north, made itself to be felt considerably by the Egyptian builders. It can hardly be doubted that the use of the dome, in Egyptian churches, was due to Byzantine influence. The brick vaults were constructed in the Byzantine manner. In plan, however, the churches of Egypt differ altogether from the classic Byzantine type. The compact cross-in-square is very unlike the curiously irregular plan so often met with in the Coptic churches. While being influenced so far, by Byzantine Architecture, Coptic

   Freshfield "Cellae Victorae." II. p. 34
   Shoggoz "Kleinasien." p. 112
   Dicleh "Manuel d'art byzantin." p. 58

   Freshfield "Cellae Victorae." I. p. 42
   Claude "Xin Antiquitates." p. 160
   Shoggoz "Diict." as above.
Architecture struck out upon its own and pursued its independent career. It may be mentioned how, Coptic Art in its turn affected Arab Art. Professor Kethaby states, "Arab art is probably largely of Coptic origin." The ramifications of the Byzantine influence in Egypt have thus been great.

Among the most notable Christian remains of Egypt are the White and Red Monasteries at Sühag in the Shebaid. Their churches may be noted, as they have hitherto been described in volumes dealing with Byzantine Architecture. It appears, however, from recent investigations, that the churches are not in their original state, and that the original plan was purely basilical.

Dr. Butler says that "these buildings are doubtless of the fourth century and must be ranked among the most splendid remains of that epoch." The church of the White Monastery (Deir el Abiad) is a basilica. The columns of the nave carry an architrave but may originally have carried arches. At the west end is a narrow narthex. On the east is a trefoil-shaped sanctuary. It does not show externally.

The trefoil-shaped sanctuary is later found in Constantinople and may have been due here to Egyptian influence. The sanctuary is covered by a dome on squinches, which however is not original. The whole church seems to have been roofed with timber.

The church of the Red Monastery (Deir el Ahmar) is built of red brick and almost similar in plan to the White. It was once thought that the cupola over the sanctuary was a copy of an ancient one, but
it is now thought almost certain that the square area could not at first have been surmounted by a dome.

In the Nablus Valley in the Libyan Desert is the Church of the Monastery of Dair Anba Bishoi\(^2\) (not to be confused with the above Red Monastery which has the same dedication.)

The building is rectangular in plan with rectangular chapels built out to north and south. The sanctuary (in three parts) is walled off from the choir and the latter is vaulted transversely from north to south. The nave is also walled off from the choir and consists of nave and aisles and a returned aisle at the west.

One detects a resemblance between this church and the Mesopotamian type, with transverses nave as at Mar Yakiub, Salah. Starghiwati says the Mesopotamian type had no further influence on the development of Christian Art, but if the nave be substituted for the choir the plan of Mar Yakiub bears a strong resemblance to Anba Bishoi.

The central part of the sanctuary and the lateral chambers are all domed. These are said to date from the seventh century. The above-mentioned adjoining chapels are also domed. They may date from the tenth century.

Within the monastery of "Dair-as- Suri\(^2\) are two churches, both dedicated to the Virgin. The smaller is "rather Byzantine in structure and nearly square in plan."

It consists of sanctuaries, choir and nave. The last two roofed laterally with barrel vaulting.

2 Butler "op. cit." p. 298.
The larger church is a basilica. It bears a strong resemblance to Dair Anba Bishoi, but shows an important difference inasmuch as the choir is not vaulted with a transverse barrel-vault but by a dome bulwarked at north and south by two semi-domes. Now this is the same type of roof as in the nave of the Mesopotamian Church at Khattin, and it is curious to note the fact that both types of Mesopotamian transverse-nave churches have resemblances in these churches in Egypt. Ornamental details and the type of lettering in an inscription point to the eighth century as the latest date for this church. There is of course always the possibility of alterations having been made in the building. There are several churches in the Nile Valley which are now domed but appear to have been originally roofed with wood.

The church of Al Qadra at Dair al Baramous has a lofty dome over each portion of its sanctuary. The nave is roofed with pointed arch vaulting. It is of basilical plan.

The monastery of Abu Matisi contains three churches. One is called the Church of the Elders. Both styles of Byzantine in character. He says however, "it cannot boast of any nave or of any very clear plan."

The monastery has groin vaulting. The choir has a dome cutting into its walls. The sanctuary is also covered with a dome. The east end is square.

Another church at Abu Matisi is called "The Church of the Elders." It has a dome over the choir and over the sanctuary. Groined vaulting also appears in church.
Buker, "Ancient Coptic Churches." p. 2371

"These Egyptian domes covered with white plaster have quite a different appearance externally from the Byzantine dome.

Buker, "Ancient Coptic Churches." pp. 7, 8, 247
The sanctuary has a pointed arch which Butler strangely says is "due of course to Byzantine influence." This cannot be the influence which brought about the pointed arch in this church.

The third church of Abu Maker (dedicated to Abu Zakhara) is "rather more basilican in structure than the other churches, but not of a very decided type of architecture."

The monastery was founded in the fourth century but remained at the end of the ninth.

There are a number of churches in Caio. Many of these are wooden-roofed basilicas with peculiarly Coptic features. Some, such as St. Sergius have a dome, but instead of being placed over the nave as in the Byzantine domed basilicas, it is placed over the central apse. These domes are supported by squinches.

Another type is seen in such a church as SS. Cyril and John. This church is roofed with twelve domes. As far as the ground-plan, however, is concerned, "the building is quite shapeless, though by a stretch of language a nave and aisles may be distinguished." The twelve-domed covering is also to be found in the Churches of "Mari Girgis" (built according to Eulychius about 684 A.D.) and Al 'Adra both in Caio. The ground-plans of the two last churches are almost square.

So the churches each consist of a square divided into twelve minor squares, or rather nine squares and three apsidal figures.

Dr. Butler says "were it not for the absence of a cruciform ground plan and perhaps the presence of the triple apse, there
2. " " p. 118

3. Butter
4. Clarke "Christian Antiq." p. 121
5. Clarke "Christian Antiq." p. 123
6. Butter "Ancient Coptic Chr." p. 359

Clarke

5. Clarke "Christian Antiquities in the Nile Valley." p. 50
6. Clarke "op. cit." p. 64, Pl. XIII
little churches might be regarded as typical Byzantine structures. But this method of roofing the whole church with a series of domes is quite unlike the customary Byzantine system, and in adopting such a method, Coptic Architecture has followed its own devices. These domes moreover are all at the same level of height.

This is quite different from the cross-in-square church with its commanding central dome and radiating barrel-vaults and angle-spaces roofed at a lower level or covered with subsidiary domes.

This completely domed type, as it might be called occurs at Edfu (a restoration) at Medinet Habu (Church of St. Theodore) at St. Bakhomius. Medammid, where is to be seen an irregularly shaped church covered by no less than twenty-nine domes in this case not all of one level. At St. Michael, Kamulah, while at St. Victor, Nauchra, seventeen adjoining compartments out of the total twenty are domed.

The church with the one dome over the "nave" (and not over the sanctuary) does however occur in Egypt, and such a church shows a closer approximation to the Byzantine.

A small church at Gendal Satii has a central dome. The dome was buttressed by a barrel-vault to west and (probably) to east, but on the north and south aisles were found vaulted with parallel barrel-vaults.

At Seiris is another church of the same type as the last. In this case the dome rested on a drum. The plan of the church was rectangular, and the sanctuary had three compartments.
This appears in the Church of the Nativity at Bethlehem, which some think belongs to the third fourth century. (v. Harvey, "Church of the Nativity at Bethlehem. p.15). This a building "to be classed rather as early Christian than Byzantine" (ib. p.29).

Butler, "Ancient Coptic Churches in Egypt" p.5
So also in a small church at Naor Sharîm, which has Greek as well as Coptic inscriptions on its walls.

It is therefore seen that while Byzantine influence made itself felt in Egypt, it by no means controlled it in every way. The basilical type of church was the favourite. The type with central dome does not often occur. Instead of the domed basilica there is the basilica with a dome over the central portion of the sanctuary. In some cases this dome is not original work.

The true cross-in-square church is conspicuous by its absence. In its place a type appears whose roof consists of a whole series of small domes. A berofoil sanctuary is observed. Churches often end square showing no projections in the east.

What Coptic Architecture owes to Byzantine is the use of the dome. The possibility that it came direct from the East may be admitted, but it is more likely to have come through Alexandria. Butler suggests that the dome came to Egypt from the East and that Byzantium borrowed it from Egypt. This is not probable. There are no domed churches in Egypt known before the sixth century at the earliest, and many of them - the many-domed type - are of a much later date while the domes over the basilicas are in some cases as has been said not original work.
Ferguson, Diehl, etc.
Syria possessed — and in fact still possesses — a number of ruined churches which date from the fourth to the seventh century and which are of great stateliness and grandeur.

They have been well-known since the middle of last century when they were explored by the Comte de Vogüé, while they have been more recently examined by the Princeton Archaeological Expedition to Syria.

They are predominantly basilicas. They are not domed and their influence on Byzantine Architecture is negligible. As they have often been treated under that classification they may be mentioned, though they should be called examples of Syrian Architecture.

Mention may be made of the basilicas of Baghuz, Roueché, Maalabak, Bakirha, Sourmanin (now destroyed) and Zabb Louzé. They have a nave and two aisles, separated by short piers. They are terminated by a semi-circular aedicule, flanked in some cases by side-chambers. The wide arched western doorway leads to an open portico flanked by towers.

In the side rooms to the aedicule and the western portico they bear noteworthy resemblances to Churches at Bin-bir-tulûn.

Both the Anatolian and the North Syrian churches owe something to the influence of the great centre of Antioch, and this would account for their common traits.

The horseshoe arch, so common in Anatolia, has also been found in Syria.
Dietl "Manuel d'art byzantin." p. 31

Skatram "Short Triheal History of Arch." p. 193
Dietl "Manuel." p. 35

Butler "American Arch. Expedition to Syria." II. p. 112
Dietl "Manuel d'art byzantin." p. 36
An octagonal plan is found in the Church of St. Simon Stylites at Talat Seman, about twenty miles east of Antioch. From a central octagon, eight arms of basilical type, but the octagon itself was open to the sky.

Mention has already been made of domed tombs in Syria, and while it is probable that many such small domed structures may have existed, domed churches are few in number.

The dome construction employed in the Church of St. George at Ezra has already been described. As far as the ground-plan is concerned, the outer walls form a rectangle with an apse polygonal externally and round internally. The main body of the church forms a square; the eastern portion of the rectangle being occupied by rectangular chambers, and a bay between the apse and the square. Small semicircular niches are hollowed out of the walls at the angles of the square. The plan at Ezra is worthy of note as having features in common with the Church of SS. Sergius and Bacchus at Constantinople which dates from twenty-five years later. The ambulatory is roofed with vaults running round. In recent times the Church at Ezra was fortified and walls were carried up so that the dome is almost hidden.

The Cathedral of Bostra bore a resemblance to that of Ezra. It dates from 512. Between each of the eight piers were two other smaller piers. The arrangement of the eastern end is different from that of Ezra. The side-chambers being furnished with apses and separated from the central aisle by hexagonal rooms.
2. There were "noble churches" in the Shephelah (east of Philistia). "Byzantine remains have been discovered at Deir el Bedawiyeh, etc. There are "untraceable ruins thickly scattered over the hills which must belong to that period." Geo. A. Smith, "Historical Geoq. of Holy Land," p. 214.


The angle-niches appear in the square which forms the main body of the church. Secuier compares Boora with the Church of St. George Salonica, which he says may have been a church from which it was copied. But St. George is a rotunda, and the only point of resemblance is the shape of the central apse.

The scarcity of domed churches in Syria and Palestine is somewhat remarkable, but it is certain that some, and it is probable that a great many more, have vanished. ³

Many of the Syrian churches have survived just because the regions in which they are situated were long practically unpopulated, and it is significant that the great basilica of Sourmanin was torn down for the sake of obtaining building material as recently as last century, when its district began to be inhabited again. ³

The Church of the Holy Sepulchre, built by Constantine was a rotunda, and it is impossible to think that so sacred a building was without influence in the land in which it was erected.

The rotunda of the Holy Sepulchre was doubtless due to Roman influence. "In endeavouring to realise the appearance and arrangement of the Holy Sepulchre monument as designed by the unknown architect of the Constantinian Government, it must be borne in mind that the Roman colonisation of the Levant had introduced the current styles of Roman Art. The circular form given to the excavation, unusual in the East, where a square outline is almost

3rd ed. by J.H. p. 86. see Appendix p. 207
the dak is the end of the fourth century.

"Millet "L'Asie Mineure, nouveau domaine de l'histoire de l'Art." p. 100."
universal in tomb-structures, seems reminiscent of the characteristic tomb at Rome, which is itself the descendant of the Etruscan rock-cut circular monument such as still survives at Castel d’Arco (Breda).  

The remains of the Rotunda are quite fragmentary, but the cutting in the rock suggests a circle, in accordance with the earliest descriptions of the place.  

There was an interior circle of columns. It was perhaps hypaethral, but more probably closed, perhaps with an opening in the centre of the dome at the top.  

In addition to the Rotunda, Constantine built a basilica, vestiges of which still survive. The present buildings are medieval and modern. It was proposed to erect an octagon at Gaza. Mark the Deacon in his Life of Porphyry of Gaza, reports that the Maenian had been destroyed. The Bishop went to erect a church in its place and they advised him to build the church “sicut templum earum idoli templum.” Then follows a description of the plan of the Maenian, and the supposed plan has not followed, but a cruciform church was erected and the Maenian was destroyed. According to Origen the Well of Abraham, at Bethlehem was an octagon.  

Choricius of Gaza has also left a description of a sixth-century church. It had eight arches in the centre “four of which were prolonged to the walls.” It seems to have taken the form of a cross superimposed upon an octagon.


There was a great octagon built by Constantine at Antioch. It was destroyed by fire in Julian's reign. 2

Helena built a rotunda on the Mount of Olives.

It has been suggested that the present Church of the Nativity at Bethlehem is Constantinian. 3 It is a five-aisled basilica with transepts. The traveller Bullialdus in the eighth century described it as "a glorious building in the form of a cross."

Octagonal churches have been found at Ta'bul and Mi'ayeh, the latter being of sixth century date.

There is a hexagonal baptistery at Der Seta. 5

A chapel at Moujileia 6 may also be classed as a central-planned building. In plan it shows five sides of an octagon with corresponding interior columns joined to a semi-circular apse flanked by side chambers and connected by a flat east wall. The main body was covered by a tent-like roof.

The type of building which shows a cross with the angle-places filled in, (not the cross in square with the constructively necessary angle-places) appears in the Tomb of Hezar-en-Moujile and in those at Hass and Rumeida, all of which have been already mentioned.

At Hass, the recesses of the arms form a cross with equal arms (as in the other tombs).

The receptacles for bodies were not placed as usual in the arm-arms, but in "low rectangular chambers in the solid angles between the cruciform space and the outer wall."
Additional Note - Between Homs (Aleppo) is a domed basilica, Harat ibn Uwaizan. Plan Szygmonski dates it to the 4th-5th, but Duff to the 8th century. It has a narthex vaulted with a cross-vault and towers at the ends. Galleries run along the sides. They are covered with barrel vaults in main axis of the church. Therefore, round inside shows a straight wall outside. The centre of the nave was covered with a dome now destroyed. The apse is flanked by side rooms.

The building possesses similarities to the Syrian basilicas, but the superimposition of the dome is of great interest. The uncertain date precludes too much when being laid on it as evidence for the domed basilica's origin. The plan presents striking resemblance to that of S. Sophia, Salonica.
Another building which shows a cruciform plan is the Praetorium at Nusairiyeh. It dates from shortly after the middle of the second century A.D. In this case the walls between the angle-chambers have been cut away: the dome rests on four columns, and the cross-arms rest on lintels between the columns and the outer walls. The building was thus transformed into a cross-square. The Praetorium became a church, but when this transformation took place is not known. The alteration may have been late.

Those fore-shadowings of the cross-square type are of interest, but as far as the "cross-square" is concerned (i.e. apart from the question as whence came the idea of the formative lives) one prefers to think it developed directly out of the cruciform church, as has been already stated.

The influence of Syria and Palestine on the ground-plan of the Byzantine Church cannot be said to have been of any consequence. Apart from the significance of the fendentive in Kusur en-Nuqājis, all Syria and Palestine have to show for the cruciform domes is that a octagons and rondelles existed there, testifying to the use of the dome for churches. Such domes may not be supported in the Byzantine fashion, but they show the fondness for that feature which was the crowning element in the Byzantine church. As for the Syrian Architecture as seen in the basilicas: "This is the Romanesque of the Far East: a blended style destined to end in nothing."
De Patein "Etude sur l'architecture lombarde etc"  
p. 32

Antoniades

Jellyby. Jwainson. "The Church of Saneta  
Sophia. (Constantinople"

J. J. Jackson. "Byzantine & Romanesque Arch" 1. p. 82

Pulcher. "Les anciennes églises byz. de CP." p. 98

Reishe. "Manuel d'art byz." p. 141

cfr.
VIII Churches in Constantinople.

"L'architecture byzantine passe 'a juste titre pour être organisée à Constantinople." Thus wrote De Parkin in the middle of last century. Many discoveries have been made since then, but it still seems true to say that, however much other areas may have helped towards the formation of Byzantine Architecture, its definite organisation and establishment, as a popular style, is due to the capital. It gathered together processes from other quarters: it selected and it discarded; it definitely formulated the Byzantine type. It adopted expedients from elsewhere, but it used them on a scale and in a fashion, hitherto unknown.

The most notable monument which Byzantine Architecture has ever produced still stands within its walls. Procopius and Paul the Silentiary, Agathias and Evagrius, lavished forth their praise in grandiloquent terms on Justinian's wonderful church. and although, as a mosque, it has been shorn of much of its finery, beauty, it still preserves the harmony and grandeur of its spacious architectural form.

The Church of the Santa Sophia, Constantinople, was begun in 532 and completed, according to Theophanes, five years later. Its architects were Anthenius of Jocol, and Saizon of Miletum.

In 558, an earthquake caused the fall of the aisle and the eastern part of the dome. Theophanes says "The emperor restored the ruins and raised the dome twenty feet."

In plan the church is a great rectangle. A single aisle juts out from
the eastern end. It is round internally and shows three sides of a polygon on the outside.

It appears that portions of the aisles to which access was gained through passageways in the walls of the bema, served the purpose of prothesis and diaconicon. The absence of actual afores or definitely separated spaces for prothesis and diaconicon is a curious feature and somewhat difficult to explain. It is considered by one writer that these side-chapels came into use in the reign of Justin II. Earlier liturgics only speak of the deacon moving the elements from a prothesis table to the altar, but it appears that the entrance of the celebrants was a distinct ceremony well before the sixth century. (vide supra, p. 88).

There are Anatolian churches, probably before S. Sophia, with side-chambers.

At the west end of the church extends a narthex and in front of this was a great atrium.

The great dome is supported by means of semi-domes on four central piers and is buttressed by two semi-domes, one to the east and one to the west. These semi-domes rest on piers at the east and west and are buttressed by other semi-domes which are supported on semi-circular arcades extending between the central and end piers. These arcades form exedrae to the great central area of the church. Beyond the semi-domes stretch short barrel-vaults to east and west walls.

The great central dome is also buttressed by broad arches to north and south.

These are only arches. They are not prolonged outside the exterior wall as barrel-
1. Strzygowski "Kleinasienn", p. 135,
as in the cross-in-square church. Great external buttresses also support the dome.

From the central space to north and south these open out aisles to which entrance is gained from the former through an arcade.

These aisles are in two stories. The lower story is vaulted with flat domical vaults affuated by a narrow barrel vault. The upper story has a stilted cylindrical vault. The upper story also has an arcade between it and central space.

The remainder of the church is vaulted like the lower story of the aisles. There are galleries in these other spaces also.

The origin of the plan of S. Sophia opens up interesting problems. Attempts have been made to derive it from the great halls of the Roman baths which existed at such cities as Ephesus.

It is imagined that those would be modelled on the Baths of Caracalla, Diocletian, etc at Rome.

Perhaps there were replicas of these in Constantinople. "Ich halte es durchaus für möglich, dass die Form der Sophienkirche in diesen Thermen des hellenitischen Orients vorbereitet war, ja dass in Konstantinopel in einer der Thermen, welche das in zweitlettem Viertel des fünften Jahrhunderts entstandene Regionenverzeichnis aufzählt, der Influs der Sophia Konstruktiv fast erreicht war."

Rivoira calls attention to the likeness of plan between St. Sophia and two halls in the baths of Agrippa and Neon. He maintains a direct inspiration for S. Sophia from Rome. "Everything leads us to believe that Anthemius studied on the spot the great buildings of Rome in order to base on them his plans for S. Sophia."
There is certainly a resemblance between the plans of these halls in the Baths of Nero and Agrippa and the plan of S. Sophia. They show two rectangles cutting each other at right angles—a shorter transverse arm set at right angles to a long hall. The angle places of the cross thus formed are filled up, giving a rectangular plan to the outer walls.

The semicircular aphpèle also appears, but it separated from the hall by a row of columns.

Yet one feels that these resemblances are not striking enough to prove that the Church of S. Sophia was derived from such buildings as these. After all, S. Sophia is a domed structure, while these halls were vaulted. It is in its essentials, a domed basilica, and is it not more reasonable to think that Anthemius drew his inspiration from churches, domed basilicas, in the city of Ephesus rather than from the "théâtrum" of the thermae in Rome? The evolution of the type would rather seem—though basilica, with the suggestion of the dome from the rotunda, and the use of squinches or pendentives, leads to the domed basilica, and S. Sophia is simply a variety of the domed basilica.

It has of course distinctive features, such as the buttressing of the dome by semi-domes to east and west, instead of by barrel-vaults. But the semi-dome was a common feature, being used in the aphpèle of churches, and one may suggest that it was due to the genius of Anthemius that he made use of it here in the way in which he did.


Jackson. "Byz. and Romanesque Arch." I, p. 73.

Some of the churches in Constantinople are also mentioned or described in

Duché. "Manuel d'Art byzantin.

Millet in Michel's "Histoire de l'Art.

Lethaby. "Medieval Art," etc.)
Anthemius and Isidore would draw inspiration from different sources, but supreme credit must be given to their own power. "It is clear that they took a longer step in advance than it is generally in the power of man to do in matters of fine art or building."

Another church built by Justinian was the Church of the Holy Apostles. Constantine's church of that name had suffered from earthquakes and was considered structurally unstable. So Justinian pulled it down and built it in a larger form, as a cruciform church with four equal arms and five domes. Justinian's church was destroyed by the Turks.

The oldest surviving church in the city is St. John of Stuction (A.D. 462). It is not domed, is of simple construction and exhibits detail of a late Roman type. Pulcher calls it a "Roman basilica." It had a wooden roof destroyed by fire in 1782.

The earliest extant domed church is that of S.S. Sergius and Bacchus. The ground plan of the main body of the church is square. An apse projects from the eastern end, a narthex from the western end. The centre of the building is roofed with a dome supported by eight interior piers. Between each pair of piers, except where the choir is situated, is a pair of columns. Those at the corners forming with their piers semi-circular exedrae and supporting semi-domes. The surrounding space - between the interior supports and the exterior walls - is in two stories. The lower forming an ambulatory and the upper a gallery. This is roofed with
Rivera Lombardic Architecture p. 67.

According to Jackson "Byzantine-Romanesque Arch" I.173
barel-vaults. The dome is constructed in a very curious fashion, consisting as it does of sixteen flat and sixteen deeply concave compartments. The latter are set directly above the angles of the octagon and being so deeply concave are set back at these angles and so the use of tenden-
tious, stringers, or corbels, was obviated. "A most skillful expedient and compares favourably with methods employed elsewhere to apply the dome to the octagon."

The resemblance between this church and that of St. George at Egra has already been noticed. It even has the little semi-circular niches hollowed out of the angles of the square.

Rivolta would derive this church's plan from that of San Vitale, Ravenna, which, in its turn, he says came from the Licinian Nymphaeum. But San Vitale was founded by Bishop Ecclesius of Ravenna after a visit to Constantinople and SS. Sergius and Bacchus was well on the way to completion when Ecclesius was there (Mr. Inguain, however, states that San Vitale was founded in 526 "a year before SS. Sergius and Bacchus.") Ecclesius visited Constantinople in 525. San Vitale however was not consecrated till 547. The whole question of the influence of the one building on the other is a difficult one, but it appears more probable that San Vitale was influenced by SS. Sergius and Bacchus.

At the same time, resemblances in plan must not be pursued too far. San Vitale is an octagon, SS. Sergius and Bacchus is square. The inner octagon appears in both. The most striking
Van Millingen " Byz. Churches in C.P. " p. 113
Pulgher " Anc. églises byz. de C.P. " p. 30

"Bien que dans son plan elle présente une jolie forme et nouvelle par les lignes, cependant étant l'intérieur que l'extérieur laissaient beaucoup à désirer, la proportion de la hauteur faisant défaut.

(Pulgher on "St. Andrew in Kioss" p. 30)

Pulgher " Anc. églises byz. de C.P. " p. 31
Jackson " Byzantine & Romanesque Archs. " I. p. 100
feature of the plan common to both is the exedrae which appear at the angles of SS. Sergius and Bacchus and between all the piers (except at the choir) in San Vitale. The resemblance between SS. Sergius and Bacchus and Ezra is far more striking. One would suggest that the former church was derived from such a building in the East as the latter and that the substitution of the semi-circular exedrae for an arch at the angles is to be credited to the inventive genius of the architect of SS. Sergius and Bacchus, who thought of it as a result of his desire to have a more spacious central space.

St. Andrews in 'Kizlo' is also a sixth-century church. It has been very much altered and the type of exterior masonry testifies to changes in Turkish style, but it appears to have been originally a domed central-planned building with an ambulatory, somewhat after the style of SS. Sergius and Bacchus. It has an interesting naos, i.e. in five compartments, three of which are covered with domes.

The Church of S. Savva in the Chora (Kahide-djami) appears to have been originally a sixth-century church, though many important alterations have been made on the building. It is famous for its fine mosaics. There is much divergence of opinion regarding the dates of the parts of this building. It is stated to have been originally a domed basilica.

The church seems to have had to north and south of the dome, an aisle at the ground level and a gallery above the aisle. The arches of dome above the gallery were
Van Mieringen, Byzantine Churches in Constantinople, p. 295
George, "The Church of St. Eirene at Constantinople, Peliger, "Anc. églises byz. de Gr.,” p. 103

George, "The Church of St. Eirene at Constantinople," p. 1

Van Mieringen, "Byzantine Churches in Constantinople," p. 280
not prolonged as barrel vaults above the galleries but stopped short as arches and filled in with walls rising above the inner walls of arches and galleries. The elevation was thus the same as that of S. Sophia.

Kahrid-djami now shows a very irregular plan. To the west lie two narthexes. On the north is a narthex and on the south a gallery. Both of these being later additions. The church was restored in the ninth century. In the beginning of the twelfth century it was found in a state of almost complete ruin and was rebuilt at that time.

The Church of St. Irene is one of the most important in the city. It has not suffered so much from restoration. The Turkish occupation also has only affected minor details leaving the main features true to original style.

"The Church remains substantially as it was towards the middle of the eighth century."

St. Irene is of basilical plan, but the controlling factor in the building is the domical system of roofing. "It shows a more complete fusion of the basilican type of plan with a domical system of roofing than is found in any other example of a similar combination."

In St. Irene the north and south arches which support the dome are no longer mere arches, but are prolonged as barrel vaults to the exterior walls. M. Millet, who would derive the cross-in-square from the domed basilica, takes St. Irene as an intermediate type. It is thus an edifice of great importance for the evolution of Byzantine Architecture.
He said: "La solution décisive consistait à prolonger ces berceaux à travers les collatéraux jusqu'au mur d'enceinte. Elle est réalisée à Sainte-Sève: les petites arcades qui séparent la grande nef des bas côtés ne se répètent pas à l'étage supérieur, l'agrandissement ayant sous les berceaux. Il fut l'aboutissement logique de la basilique voûtée. Les berceaux devinrent, avec ceux de la nef, une croix, que la coupole voulut à branches égales. Ainsi se constituait le plan byzantin à croix grecque. Mais, à Sainte-Sève, cette structure porte pour ainsi dire sa marque d'origine, car le prolongement de la nef centrale, à l'ouest, sous une seconde coupole, basse et aveugle, rappelle encore la plan basilical."

Yet it is highly problematical that the cross-in-square developed out of such a church as St. Irene. St. Irene has no striking indication of the cruciform plan. There are no lower angle-places. The span of the barrel-vaults to north and south is short.

As far as the date of the church is concerned there is a certain element of doubt. It was badly damaged by an earthquake in 440, which did little damage in the city and while it is conjectured it was rebuilt a few years later, and is not mentioned till 854. The rebuilding may have taken place towards the end of the eighth century. When, as has been said, the cross-in-square style was already in existence in Anatolia.
Pulcher. "Anc. églises byz. de CP." p. 41.
Returning to a description of S. Irene—A narthex of five bays extends along the western end. The aisles below the galleries are vaulted with narrow irregularly-curved vaults, while the bays of the narthex have cross-vaults and domical vaults.

One aisle projects from the eastern end, but the aisles terminate in rooms square in shape, roofed with domical vaults and separated by walls from the rest of the church. Openings in these walls lead to the aisles and space before the apse.

The drum with its dome is not of the original date. The drum is of a curious shape, being a rounded square in its lower part and a circle in its upper part. On the outside it is carried considerably higher than the springing of the dome.

From the second half of the ninth century dates the Church of the Panormatariotos (Ktijon Djamioi). This church has been much altered both before and after the Turkish Conquest. It was originally a church with a dome over a rectangular space on the ground-floor. This rectangle was reduced to a square at the dome level by arches thrown across the east and west ends. From the central space wide arches (three of which have now been built up) lead into an ambulatory.

Dichl who dates the church to the beginning of the fourteenth century appears to have considered it to be of the cross-in-square type, but Mr. Thaenair has shown that it was a church with central space and ambulatory.
Van Millingen "B.
R. Churches in CP." p. 128
Pulgher "Anc. cisterns in B.
de CP. Description of the plateau."
Achirona "Begur Tossal Architecture p. 24"
From the beginning of the fourteenth century, however, dates the Panachrantos of the Panachrantites. It is of the true cross-in-square type, and is a graceful and attractive building. Its dome rests on a high polygonal drum. The exterior shows the brick decoration (ziggago in sphendile, radiating bricks, etc.) so characteristic of the later period of Byzantine Architecture.

The Church of St. Mary Panachrantos (Phenera Isa Mepitid.) really consists of two contiguous churches, from one of which entrance is gained to the other by openings in the wall common to both. Each church has a narthex, while an exo-narthex runs right along the west ends (of both churches) and is returned along the south wall of the south church.

The Northern church is the narrower of the two. Its dome originally rested on four columns; now there is a drumish dome while two large pointed arches on piers replace two of the old arches and columns.

The side-apses are of somewhat curious formation. Externally they show the common design of three sides of a polygon, but internally they consist of two small rectangular chambers and three niches in the thickness of the wall. This is preceded by a niched chamber vaulted with a cross-vault from which chamber entrance is gained through openings in the walls to the central bema and the angle-chamber of the arch.

A preceding chamber of this type is characteristic of many of the Constantinopolitan churches.
Dietl "Manuel d'art byzantin." p. 408.

Van Millingen "Byz. Churches in CP." p. 169
Pulcher "Anc. églises byz. de CP." p. 24
Jackson "Byz. Romanesque Arch." I. p. 122
An exceptional feature of the northern Panagia Pantokrator Church is that these side-chambers are of the same height as the central apace.

The southern church is of the type with an ambulatory running round the central apace. This ambulatory is vaulted not with barrel vaults but with a series of cross-vaults. The prothesis of the church approximates to that of the northern church, but has not the preceding chamber. The diaconicon consists of a small apace preceded by a cross-vaulted rectangular room with niches. The central apace is semi-circular internally and seven sides of a polygon externally. It is preceded by a cross-vaulted bay, and is decorated on the outside with a blind arcade.

M. Diehl dates the south church from the end of the eleventh century, and says that a memory of the domed basilica is perpetuated in it. But the ambulatory type - of which this, as has been stated, is an example - connects itself in its origin with the octagon and rotunda, and not with the domed basilica. Mr. Haquin dates the south church to the eighth century.

St. Theodore (Gul-Üzami, the "Rose Mosque") has been reconstructed. It was a church of the cross-in-square type, but the lower part of the north and south cross-arms are screened off from the central apace by an arcade, and a gallery is placed in each cross-arm forming an aisle below. Internally at the ground-level, the church has therefore not the cross-in-square appearance.

Dicht "Manuel d'art byzantin." p. 811
Van Millingen. "Byz. Churches in CP." p. 185

Van Millingen "Byzantine Churches in Constantinople." p. 185
The dome rests on four massive piers of irregular shape. There are little chambers in the thickness of the eastern piers. The side-chambers of the sanctuary present interesting features inasmuch as each one of them runs into the corresponding angle-chamber of the cross, forming one rectangular room in two co-vox-vaulted bays. This reminds one rather of the Greek type of cross-in-square church than of the Constantinopolitan type.

The side-chambers are decorated externally with a series of semi-circular-headed niches.

The church has been variously attributed to the ninth, tenth, and eleventh centuries.

St. Mary Diaconissa has features in common with St. Theodosia. The angle-chambers have however two stories. The north, south, and west cross-arms have no galleries, thus giving to the church internally the true cruciform appearance. "In the development of the domed cross type, the church stands logically intermediate between the varieties of that type found respectively in the Church of St. Theodosia and in that of SS. Peter and Marti." St. Mary Diaconissa used to have three apses, but Turkish alterations have changed the character of the building at the eastern end. The dome is probably Turkish.

The church has a narthex and an exo-narthex both added at later dates.

Various dates have been assigned to the building, but many of these are quite conjectural. There is no reason to think that it is earlier than the ninth or tenth century. It is now a mosque, under the name of "Kalemandar-hend-djami."
'Van Millingen: "Byz. Churches in CP." p. 193
Pulgher: "Anc. églises byz. de CP." p. 28
The Church of SS. Peter and Mark (Hypa Atik Mustapha Famiisi) is a good example of the cross-in-square type, with its four barrel-vaults radiating from the centre to the exterior walls and with its four angle-spaces roofed at a lower level than the arms of the cross. It has the typical feature of the three projecting apses, showing on the exterior three sides of a polygon and in the interior a semi-circle.

The exact date of the church is unknown. It may be tenth century, perhaps earlier.

This church is of the simple cross-in-square type which became so popular in Greece. The difference between it and the typical cross-in-square church of Greece is to be found in the dome-supports. In the Greek churches they are usually columns. In SS. Peter and Mark they are pieces of wall shaped like the letter L.

Now it has been supposed that in S. Peter the last stage in the development from the domed basilica has been reached. It has been thought that the domed basilica led to S. Irene and S. Irene was followed by the cross-in-square type with galleries in the cross-arms. Next comes S. Mary Diaconissa with no galleries but high-vaulted angle-spaces. Lastly comes SS. Peter and Mark, a completion comes in the Greek churches when the dome-supports are simple columns.

But it has been maintained in this thesis that the cross-in-square arose out of the cruciform. And does not the plan of SS. Peter and Mark help to support that view? The L-shaped walls forming dome
DePauw. "Étude sur l'architecture lombarde" p. 43.
supports are the significant feature. Nothing like them appears in the churches suffered to mark the stages from the domed basilica to SS. Peter and Mark, but something like them does appear elsewhere, viz. at Schuchurken, a church in Anatolia of a cruciform shape with one angle space filled in.

Indeed, the plan and elevation of SS. Peter and Mark with the walls dividing angle spaces from cross themselves suggest the development from cruciform to cross-in-square in Byzantine Architecture.

The walls are pierced only by doors these-in-the angle centres being quite low openings. Only strongly mark the cruciform shape.

In the later churches, these openings become wide arches and the typical cross-in-square church is formed.

SS. Peter and Mark would surely seem to be a stage not between the domed basilica and the four-columned cross-in-square, but between the cruciform and the latter.

In dealing with the cross-in-square one other theory may be noted. De Dantin suggested that the Small Metropolis at Athens — a typical four-column cruciform in-square — developed just a miniature S. Sophia. "En changeant d'échelle le type d'un monument se modifie fortement si l'on augmente les dimensions, les formes se compliquent, et elles se simplifient au contraire d'autant plus qu'on fait plus petit." This as a general principle may be true, but the differences between S. Sophia are too striking to admit of the cross-in-square being just a modification of that building. The semi-domes, the exedrae in S. Sophia, and the fact that the north and south dome arches are not prolonged to
Pulcher: "Anc. églises byz. de C.F." p. 27
Il dit: "Le plan est très beau, particulièrement dans les absides et dans le narthex.

as in S. Theodora. vide supra
to the outer walls. Show that other influences
than the example of Justinian's great edifice must
have borne in upon the builders of the cross-in-
square type.

In the Church of the Monastery of the
Myrelaion (Bodroum Jamissi) the L-shaped walls
of SS. Peter and Mark are replaced by simple square
piers. The angle-spaces were cross-vaulted and an
unusual feature is that the arms of the cross have
also cross-vaults and not barrel-vaults. In
respect of the east end the Myrelaion differs
from SS. Peter and Mark. In the latter the apse
follows directly on the eastern cross-arm, the
walls on which the dome rests on the east
being the antae of the apse. But in the
Myrelaion an additional bay is intercalated
between cross-arm and apse.

In Greece the cross-in-square churches also
show two types—one in which the eastern
dome supports are the antae of the apse (two-
columned churches), the other, in which
an additional bay is inserted between eastern
cross-arm and apse (four-columned churches.)

Nevertheless there is a difference between
the normal Greek four-column, cross-in-square, and
the Myrelaion in that in the Greek type (as a
rule) the eastern arm and the additional bay
are under one and the same vault. In the
Myrelaion the vault over the additional
bay is a lower level than that over the
eastern arm. In addition to that, the
cross-vault is used over both spaces in
the Myrelaion. In the Greek churches also
angle space and room before prothesis or
diaconicon are under one vault, while
"Van Millingen "Bp. Churches in CP." p. 203

Pulgher "Anc. églises bps de CP." p. 214
in the Myraclain, the angle spaces are crossed vaulted and the spaces before prothesis and diaconicon have domical vaults.

The Myraclain was destroyed by fire in 1912.

It had also a narthex with a dome over the centre and the unusual feature of apses at the north and south ends of the narthex (cf. S. Vitale Ravenna.) Pulcher, who much admired this building dates it to 918 A.D. Probably it is somewhat later, as the monastery, after Iconoclastic persecution in the eighth century was restored by Romanus Lacrocius (919-945.)

Plan LXXVII

St. John the Baptist-in-Trullo was another cross-in-square church. It is now a mosque (Ahmed Pasha Meviktiti.) and the four central fives have been removed. It also foresees the additional lower vaulted bay before the apse, (as also before the side apses,) but in this case the barrel vault is used there as it also is in the cross-arms. The apses are semi-circular both externally and internally, which is not usual for cross-in-square churches in the East. As in other churches of the type the dome rests on a polygonal (externally) drum. There is no evidence for the date of the church beyond the style, which points to the tenth century.

The much larger Church of S. Saviour Pantokrator is another example of the cross-in-square type.

The fives on which the dome with its drum rests are octagonal.

The church has the additional bay before the apse, barrel vaulted at a
Van Millingen "Byz. Churches in C.A." p. 233
Pulcher "Anc. églises byz. de C.A." p. 24
lower level than the cion-arms. The side-chambers are almost similar to those of the north church of St. Mary Panachrantos, showing a niched space before the corresponding aperse.

The church has a narthex in three cross-vaulted bays and an exo-narthex of later date in three bays of which the two end bays are cross-vaulted and the central bay has a dome.

The central tower of the church rests on a lofty drum, of much elegance, panelled with arched windows in a style characteristic of the later period of Byzantine Architecture. On the exterior the central aperse also shows brucis arranged to form patterns in a typical fashion.

The church is now a mosque (Estiti Emael Mesjedi). It dates from the close of the eleventh century, having been built by Anna Connenna.

Plan LXXXIII

The Church of St. Saviour Pantokrator (Zevek Kilinci Jamami) is a remarkable building consisting of three contiguous churches. But the Turkish dome of the northern church rests on four square piers. These piers are also Turkish.

Originally columns occupied the cionector and this is of interest as it seems that in this church alone of the Constantinopolitan type in square churches, a simple column—as is usual in Greece—supported the dome.

The sixteenth century traveller Gyllius said "hemisferium sustentator quatuor arcubus, quas fulcrint quatuor columnae marmonis. /he baici" (De top. Chr. iv. c. 2.)
Van Millingen "Byz. Churches in CP." p. 266
Pulcher "Anc. Edifices Byz. de CP." p. 24. He says it appears to date from 900.
The additional bay before the aedicule is roofed at the lower level and the spaces before the side aedicules are niched. The vault used throughout is the barrel-vault except in the narthex where the cross-vault is used.

The central church is an irregular oblong covered with two domes.

The southern church is very like the northern but is much more spacious and has thicker walls. Four simple marble columns originally occupied the centre. The narthex communicates with the narthex of the north church. Over both narthexes are gynaeceae. Over one of one of the compartments of the southern gynaeceum is a dome. The southern church has also an exo-narthex. Access is gained from the north to the centre and the centre to the south church through wide arches.

The three churches were built in the second half of the twelfth century.

The Pantokrator is a larger church than most of those of the period. The width across being internally about fifty feet in the south church and about forty-five in the north.

This of course does not make it a large building but the others are even smaller. There is blind niche decoration on the outer aedicule walls.

Plan LXXVI  The date of the Church of St. Theodora

The date of the Church of St. Theodora is uncertain, but it is of the later Byzantine type. It is now a mosque (Yulisma Mesjedis). It shows the cross-in-square plan with a dome and drum resting on four columns in the centre by means of pendentives. The aedicule space is roofed with
domical vaults and the church has a narthex.

Only the centre aisle projects externally and the apses before the apses are of the common Constantinopolitan riched type. An elaborately constructed exo-narthex and a rhomboid-shaped room to the south of the Church were added at a later date. The room is covered with a domical vault. The exo-narthex has two such vaults and three domes on polygonal drums. This is of interest as showing the fondness for a number of domes characteristic of the later period of Byzantine Architecture.

The drums are likewise of a typical style, being octagonal in the exo-narthex and hexagonal in the church decorated with flat round-headed niches and having engaged colonnettes at the angles, carrying hood-moulds.

The exo-narthex takes the form of an open portico with arcades. It is constructed of courses of stone and tiles. Radiating tiles laid over the window-heads enliven the exterior. Similar features appear in other parts of the church.

St. Theodore is of especial interest for these features. It reveals the attention paid to external decoration in the later days of building in the capital. No longer is art reserved for the interior, but a laudable worthy effort is made to add charm to the outside of the edifice also.

It may be conjectured that the church dates from the eleventh or twelfth century.

It is a graceful and elegant little building and shows Byzantine Architecture at its best.
Van Mellegeren "Byz. Churches in CE" p. 271
Pulcher "Anc. reliqua Byz. de CE" p. 40
A final church in Constantinople which may be mentioned is St. Mary Mouchliotissa (St. Mary of the Mongols). It has never been turned into a mosque, but its ground-plan has been very much changed by reason of irregularly-shaped additions. Originally it was a domed quadrifoil church with a narthex in three bays.

On the outside three of the lobes showed either wholly or partially as apses. The dome was buttressed by four semi-domes, three of which rested on the external walls and the other on two fives between church and narthex.

This church is the only example of the type in Constantinople. One immediately notices the features which it has in common with some of the Armenian churches—such as the Cathedral of Athik. It is hardly possible not to think that it was due to Armenian influence and was even designed by an Armenian architect. The circumstances of its erection also point to the probability of this view. It was built in the thirteenth century by a daughter of the Emperor Michael Palaeologus who had been married to a Prince of a Mongolian Principality near the Black Sea.

Nevertheless, the architect did not slavishly follow Armenian models. The narthex with its domes (one alone survives on the narthex) is Constantinopolitan, and possibly also shows western feudal influence for a remarkable feature is the use of the pointed arch in its construction.

Reference might also be made to the curious resemblance in form between.
The church and certain churches in Sicily.

St. Mary of the Mongols, though not of the usual Byzantine type, is a building of remarkable interest in many ways.

Such — not including one or two unimportant examples of the "hall" type — are the Churches of Constantinople.

How far, through an examination of them, can the evolution of Byzantine Architecture in the capital be traced?

Three periods can be distinguished in Byzantine Architecture in Constantinople.

(1) The period before Justinian, to which belongs St. John of the Studion.

(2) The period of Justinian, characterised by the domed basilicas of S. Sophia and Kaisér-alam and the ambulatory churches of St. Andrew in Kizevit and Ss. Sergius and Bacchus.

(3) The period of the Basilian Renaissance, dating from the second half of the ninth century, distinguished by the prevalence of the cross-in-square type.

During the iconoclastic controversy (between the second and third periods) little building seems to have been done, but St. Irene belongs to this intervening time. Having been built it is thought in the eighth century.

The later part of the third period is distinguished by the attention paid to external decoration and to the foundations for additional domes over narthex and exo-narthex. The dome-drum enters in with the Basilian Renaissance but greater attention is paid to its outside adornment as time goes on.
The theory that the later type—the cross-in-square—developed out of the domed basilica has already been discussed. It really all hinges on one building viz. St. Irene. (as far at least as Constantinople is concerned. Dura-Host in Anatolia presents similar features, but it is much later.)

St. Irene is a difficult problem, but reasons have been already given for dissenting from the view that it is a step on a supposed passage between the domed basilica and the cross-in-square.

But another problem arises in connection with the final stage of the cross-in-square church in Constantinople.

In the last chapter of his brilliant and exhaustive study of the churches of Constantinople Mr. Sauvain advances the theory that the cross-in-square type with four columns and without galleries evolved out of the cross-in-square church with galleries. “The typical late Byzantine Church is a development from the domed cross plan. In three examples in Constantinople, S. Theodosia, S. Mary Diaconissa and SS. Peter and Marki we can trace the gradual disappearance of galleries.”

Yet is it certain that the development was in this way? The dates of S. Theodosia and St. Mary Diaconissa are very uncertain. It is very bit as probable that they are after—and considerably after—SS. Peter and Marki as before it. There is no reason to think that the ungalleried church developed out of the galleried one.

The larger and more popular churches had galleries. The smaller ones
had not. One can easily see the need of galleries in such a Church as S. Theodora. It was famed for its miraculous cure. It was thronged with people on ceremonial days.

As for St. Mary Diaconissa. Professor van Melsen himself says that "its rich and beautiful decoration implied its importance. Imperial processions stopped at it and the Emperor placed a lighted taper on its altar."

The small churches are in a different category. They are more in the nature of shrines — places of prayer to which people come and go.

It is true of course that the larger churches were such also, just as it is true that the Liturgy is said and chanted before congregations in the small churches. Nevertheless, the distinction is clear. Now in Athens today one sees the large churches where important congregations gather and most diminutive churches — like St. John of the Column, built round its sacred pillar — which are more in the nature of shrines. It is safe to argue that there must have been innumerable such shrines in Constantinople in its Byzantine days, just as they are innumerable in Athens at the present time. They would not follow on the larger churches. They would be contemporary with them. Built to contain some relic, to commemorate some cure, to notify some sacred place, they would exist as houses of prayer.

The ungalleried church would not develop out of the galleried. The galleries are not in the small church because they are not needed. Owing to the nature of the church
and churches of such a nature would be existence at the same time as the larger churches.

As for the four-columned church of the cross-in-square type, Mr. Hagheir says it is generally considered to have commenced in the eleventh century though he says the Myreliaion may belong to the tenth. But it seems, as has been said, that the Church of St. Stephen in Juglia belongs to the very beginning of the ninth or end of the eighth century.

Much more would one place SS. Peter Mark in the ninth century with its inner walls so strongly marking the crosses.

Finally, in Constantinople, there is the group of ambulatory churches. They are not of the typical Byzantine plan, but preserve the feature of the central dome. They have one feels a close connection with the octagons of the East. The inner octagon is retained. The outer octagon becomes a square. The exedrae might be due to the builder of SS. Sergius and Bacchus himself.

Dichl. "Manuel." p. 112
Rivorie. "Lombardic Arch." p. 37
In Ravenna, the city by the shore of the Adriatic and the city which had so close a connection with Constantinople and was in later days the residence of the Exarch, one would naturally expect to find churches with marked Byzantine traits. The basilicas lie outside the scope of these pages, but it is somewhat surprising not to find in Ravenna more churches of the domed and central-planned type. Of such there is but one.—San Vitale.

The Mausoleum of Galla Placidia, famous by reason of its splendid mosaic of Christ seated among the shepherds, is in plan a simple Latin cross. It was erected in A.D. 450.

The centre is covered with a domical vault with sort of continuous pendentives (v.s. p.) wedged in between ribs jutting out from the angle of the walls. The vault is built of bricks, overlaid by amphorae filled into one another. On the outside, there appears a square tower surrounded by a pointed roof of tiles. The exterior of the church is enlivened with simple flat, round-headed niches, surmounted by tiles arranged in a radiating design. The Tomb of Galla Placidia is interesting for the freest freestone in showing the adoption of the simple cruciform type in the early fifth century.

The Orthodox Battistero at Ravenna, built, it is said, on the foundation of a Roman bath in the fifth century is an octagon. The dome is constructed of terra cotta tiles. Rivoira says that it
2 Ricci "Art in Northern Italy." p. 5


   Lounie "Christian Art & Archaeology." p. 145
   Salkam. "Short Crit. History" p. 203
   Dietl. "Manuel." p. 174
   Rivoira. "Lombardic Architecture." pp. 56 ff
rests on "broad triangular pendentives of perfect form, constructed of courses of brickwork." Rivoira however uses the term in a broad and, one feels, unjustifiable way. Possibly it is better to call these corbels.

They are wedged between arches cut into the walls and rest on engaged colonnettes in the angles of the octagon.

In design this Baptistry bears a resemblance in some particulars to a building in the Temple of Diocletian at Spalato, but in the latter edifice horizontal architraves take the place of the arches.

Of a similar plan is the octagonal church of Santa Maria in Cosmedin, Ravenna. It was the Baptistry of the Arians.

The cruciform church was exemplified in S. Croce, which stood near the Tomb of Galla Placidia, but no longer exists.

That fascinating building, the Tomb of Theodoric, which stands in a quiet garden a little outside the city walls at the end of a long approach, is a polygonal in two stories. It is roofed with one huge stone worked into a dome and dates from the sixth century.

Finally there is the famous and magnificently adorned Church of San Vitale, erected by the Archbishop Ecclesius (521-534). Its points of resemblance with SS. Sergius and Bacchus, Constantinople have already been noted. The outer walls of the main body of the building form an octagon.

In the centre are eight piers, and between each pair except at the east—are arranged two columns so as to form a semi-circular exedra recessed with a semi-dome. The dome itself, constructed
Rivoira "Lombardic Architecture" p. 12

of tura-colta tubes rest on the eight piers through squinch-arches set in the angles of the octagon. The ambulatory and presbytery are cross-vaulted. From the presbytery projects the apse flanked by two circular rooms. A narthex with round ends stood at the opposite side of the church.

Riviera, while admitting that the capitals are many of them the work of Greek hands, contends strongly for the Western origin of San Vitale, but the octagonal shape and the use of squinches makes one rather suspect strong Eastern influence. The octagon, as distinguished from the rotunda, affords to be an essentially Eastern type.

So the same period as San Vitale belongs the Church of S. Lorenzo Maggiore, Milan.

It has suffered much from fire and collapse, and was largely rebuilt towards the end of the sixteenth century. The ground plan shows a square with four flat aches, one on each side of the square. That on the is concealed externally by a straight wall.

It had eight central piers and four exedrae. It is supposed that the original dome had squinches.

The resemblance between San Lorenzo and the "niche-balustrade square" church of Armenia is striking. Shippywski would derive the former from the latter. It goes so far as to say that features in Lombardic Architecture point direct to Armenia. But he dates San Lorenzo to the second half of the ninth century, while Tischendorf states that it must be as early as the time of Justinian and goes on to say that the plan seems to have
have remained unchanged.

Further, while San Lorenzo is similar to the
Armenian examples inasmuch as they are both niche-
buttered squares; these niches or apses are of quite
different form in each. In San Lorenzo they are
more sections of circles. In Armenia they are
approximately semi-circles.

Might it not be suggested that San Lorenzo
is due to a contact of influences coming on
the one hand from Rome and on the other
from Ravenna? There is one striking
dissimilarity between San Lorenzo and S.S. Sergius
and Bacchus. The significance of which (as pointing
to influence from elsewhere) does not appear to
have been sufficiently noticed. In the Ravennese
and Constantinopolitan churches, there is a break
in the interior range of columns at the east.

There are no columns between the eastern
friars, but a free entrance between central and
friary. But at San Lorenzo the columns
are carried right round, i.e. between all the
friars. Now this is more like the Roman
rotunda church such as San Stefano, Rotonda
or Santi Angeli, Perugia. On the other hand,
the inner octagon of friars — though dissimilar
in plan — reminds one of San Vitale. The
outside square reminds one of S.S. Sergius and
Bacchus. The aisle on each side of the
square may be a reminiscence of the rotunda,
so that the church as far as its outside
walls are concerned is a combination
of square and rotunda.

Statham "Short Crit. Itol." p. 213
In a beautiful situation amid the lagoons of Venice lies the island of Soreello. On it stand a noble basilica with a towering campanile and an interesting little church called Santa Tessa, which dates from the twelfth century.

It presents marked Byzantine features. In plan it is a Greek cross, surrounded in part by an open portico. Across the central square squinch arches in three tiers were known as if in preparation for a dome, but the dome was never built, the church being covered with a flat roof.

The most notable Byzantine Church in the west is of course the Cathedral of St. Mark at Venice. St. Mark is not a cross-in-square church but a cruciform with an outer corridor carried round the western arm. It has five domes resting on pendentives. These domes are encased in high bulbous erections which are supposed to be due to Saracen influence. St. Mark's is supposed to have been modelled on the previously mentioned Church of the Holy Apostles at Constantinople built by Justinian and which in its turn is supposed to have followed Constantine's Church of the same name in its design.

It is noteworthy that in St. Mark's the domes do not rest on drums, as in the later Byzantine Churches in the East. The windows are cut into the dome itself, and a low circular walk round the dome is a purely external feature.

In its present form St. Mark's dates mainly from the eleventh century.
The buildings in the North of Italy reveal several facts. They show how in the realm of architecture influences from the East penetrated into the West. It is true that the classic Byzantine cross-in-square type does not appear.

It is true that the domed basilica does not appear. Yet in earlier days the octagon with dome was built and so shows Eastern influence. In later days, St. Mark's and Torcello, though preserving the cruciform plan, draw their inspiration from Byzantium.

In St. Mark's the whole domical and-vaulting system is thoroughly Byzantine.

The use of the cruciform plan in early days as at S. Croce, Ravenna is also worthy of note. It may be compared with the use of the same plan in Anatolia. It is not suggested that the one is derived from the other, but its existence in the West at the time is worthy of mention.
See Additional Note on Chapter X


A word may be said regarding the progress of Byzantine Architecture still further west.

The Church of St. Front at Périgueux in the department of Dordogne shows a striking resemblance to St. Mark's at Venice, so much so that it has been said that "it is obviously based on St. Mark's plan." The Church was suggested on the other hand that the builder of St. Front drew his inspiration not from St. Mark's, but from Byzantine churches in the North of Spain, examples of which exist near Oviedo.

St. Front dates, it appears, from the beginning of the twelfth century. It is a cruciform with five domes, but there are no niches in the apses and no side-apses. Two semi-circular chapels project eastward from the transepts. The arches which support the dome in the centre of the choir are slightly pointed.

St. Étienne at Périgueux is also domed. The exterior decoration of flat niches recalls what is seen at Constantinople.

The church at Souillac is a cruciform with three domes over the longitudinal axis. There is a chevet of three chapels in the apse and the Church presents an interesting combination of eastern and western traits.

At Le Puy the Périgueux form is followed but so many Western features enter into the church there and to others in the area that the classification of them under Byzantine Architecture is not possible. The influence, nevertheless, is there, and it is curious to note in this

4 Shzygnowski, "Origins of Christian Church Art," p. 90

5 Shzygnowski, "Origins," p. 64
connexion, how Le Puy in its turn influenced Byzantine Architecture in Greece in the 15th century in a bell-tower of a church in Mistra.

Still more striking is the Church of St. Gemigny des Prés which is said to date from the beginning of the ninth century. It is a church of the cross-in-square plan and had altars on all sides of the square (one has disappeared). There is a dome over each angle-space and the centre is covered by a dome in a square tower decorated with arcades.

Mention should also be made of the Chapel of Charlemagne at Aix-la-Chapelle, now the Cathedral. "Cet édifice est simplement une loue de copie de Saint-Vital de Ravenne." Even some of the material was brought from Ravenna.

Stzygourstti,4 denies that this building was a copy of San Vitale. The domed churches of Persia and he would trace ultimately to a movement arising in Iran, while of St. Gemigny-des-Prés, he says. "It was probably in the first instance, transmitted to France by Persian or Armenian architects connected with the immigrant Goths from the Black Sea Region."5

The resemblance between St Gemigny and the plan of Etchmiadzin Cathedral is certainly striking. But whether Stzygourstti's bold theory is correct, or whether it is of Anatolian origin, or whether it is an independent creation, seems impossible to decide.

In any case, there was a strong Byzantine influence working in the region more to the south, round Persigueux, two centuries later.
Buhl. "Manuel" p. 120


Diehl. "Manuel." p. 120
XI Churches in Salonica.

Salonica contains several notable churches. Some of them unhappily suffered in the great fire which swept over a portion of the city a few years ago.

Of these **Hagia Sophia** is St. Demetrius, which is supposed to date from the third quarter of the sixth century. It is of basilical plan, but possesses much Byzantine ornamentation.

St. George' is a rotunda, covered with a dome. It is said to date from as early as the end of the fourth century. A-choir and apse project from the east. The walls are extremely thick, and great square round. Reeded niches break the wall in the interior.

It has been suggested that the building was originally a mausoleum "either pagan or Christian", and that the choir and apse were later additions. The main body of the church is quite Roman in its conception. If it be the case that the choir and apse are later, they may have been due to Eastern influence.

There is a certain resemblance between them and the choir and apse of the octagon of Sceasa in Anatolia.

A basilica also is seen in Esti Djouma. The earliest church in Salonica.

These churches do not come under the classification of Byzantine, but in S. Sophia an extremely interesting example of Byzantine Architecture is to be found. It is a domed basilica, and is a church which is of great importance for the history of Byzantine Architecture.
Riviera "Lombardic Architecture" p. 63.
A dome - rather a rounded square than a circle - springs from imperfectly formed pendentives on four massive rectangular piers in the centre of the building. This dome is buttressed by four short barrel-vaults, themselves supported by these piers. The vaults are closed by a screen of piers at their north, south, and west ends.

Round this space run the aisles, vaulted with barrel-vaults and covered with galleries.

The eastern cross-arm rests on the centre of the apse, which flanks an additional bay before the latter. The side-apses, preceded by square chambers are walled off from the rest of the church, access being gained to them by openings in these walls. The central apse shows three sides of a polygon externally but the side-apses are round.

Rivora considers that St. Sophia, Salonica, is the most important link in a chain which connects the Roman basilica system with the Byzantine, the "Byzantine vaulted basilica" arising in Macedonia probably with some influence from Ravenna. He affirms that its age is no matter of hypothesis like that of the Anatolian churches, and that it was designed by Julianus Argentarius, the architect of San Vitale, Ravenna. Until the latter church, he says, it has much in common.

"The points that it [San Vitale] has in common with St. Sophia at Salonica, are the following:

The women's gallery, originally designed with a wooden floor; the apse, semi-hexagonal externally flanked by two sacristies, ending in recesses which project beyond the main wall; the line of the new-tooth.
"Rivera "Lombardic Architektur" p. 164.

Shympowski: "Kleinasi" p. 131.

Shympowski: "Kleinasi" p. 118.
on the exterior: and lastly the arcaded lower story." 1

Such are Riveras views. He contends that S. Sophia is the precursor and not the successor of Anatolian monuments of the type.

On the other hand Dietel says. "C'est à Saint-Sophie que la basilique à coupole, incontestablement inspirée d'un type oriental, malgré l'atrium et le profylaxe qui la précédraient." 2

Styppowskii has also contended for the eastern origin. The domed basilica is a hellenistic type. "Ich sehe den Typus der Kuppelbasilika für einen späthellenistischen an." 3

The design of S. Sophia, Salonica, came according to him, from the great Hellenistic centres of the East, 4 while he compares the arrangement of the apses with that to be found in the Syrian churches. 5

One cannot but feel that Rivera not only over-estimates resemblances between San Vitale and Santa Sophia but even forces them where they scarcely exist. The arrangement of the apses at S. Vitale does not present such a striking similarity to the arrangement of the apses at S. Sophia as to warrant the belief that there was any connection between the two.

Moreover, surely the triple apse is an essentially Eastern feature called forth by the requirements of the Great Liturgy. The gynaeceum is eastern. The arcaded lower story apse is in Eastern basilicas.

The question of the origin of the domed basilica has already been discussed. The church in the East which S. Sophia most resembles is Kar-i-ibn-Warden.
which dates from the middle of the sixth century and to which it has a striking similarity.

It might be thought that S. Sophia should be called a church of the ambulatory type rather than a domed basilica, and that, as Mr. Inaghian says, its plan should be connected with that of SS. Sergius and Bacchus at Constantinople. But if one compares it with the restored plan of St. Andrew in Krizei — an four ambulatory with a square instead of an octagon in the centre and a church which doubtless developed out of SS. Sergius and Bacchus, one will detect an important difference. In St. Andrew, the arcade comes immediately under the dome arches marking off the square covered by the dome from the rest of the church on north, west, and east.

In S. Sophia the arcades appear at the ends of the short barrel vaults buttressing the dome, while the western vault is somewhat prolonged as in a basilica. The church of course has an ambulatory, but this ambulatory might well be described as a narthex and two aisles (to the main body), with the entrances from narthex to aisles completely opened out.

S. Sophia belongs to the reign of Justinian but whether it was built before or after S. Sophia, Constantinople is a question of great uncertainty. If built before, it would inspired by domed basilicas in Anatolia, if after, it is highly probable that it was the work of those who refined S. Sophia Constantinople and who derived from it ideas which they were capable only of carrying out in a maladroit fashion in the
Jackson "Byzantine Rom. Arch." p. 137
Diehl "Manuel" p. 112.

Diehl "Manuel" p. 136

Diehl "Manuel" p. 112.
Salonica Church. The Church of the Holy Apostles, Salonica, may date from the twelfth or thirteenth century. Its plan has certainly been influenced to a certain extent by that of S. Sophia. It takes the form of a typical cross-in-square church of the four-columned plan, with a narthex running along the west end and returned aisles along the north and south ends.

The corner spaces of these aisles are covered with domes. The church thus foresees five domes in all. The rest of the aisles and narthex have barrel-vaults. The narthex is preceded by an exo-narthex, often in front.

The domes rest on high polygonal drums, having blind niches in their sides, and engaged colonnettes at their angles. These caryatid arches which pierce the roof of the dome. The eastern end of the church is richly adorned with brickwork in various geometrical patterns and tall niches also appear in the apse.

The Church of the Holy Apostles is one of the most elegant and richly adorned specimens of Byzantine Architecture in existence.

To the same century may belong St. Elias, a domed church of trefoil plan preceded by a rectangular narthex. It may be compared with certain churches in Sicily as well as with S. Mary Monachistria, Constantinople. It is adorned with brick ornamentation and blind niches.

Yatir: pack: apamai (n.c.) is of much the same type as Holy Apostles. Other four subsidiary domes were over the narthex.
At Philippi there are some ruins of what Strzygowski supposed to be a church of the type of St. Irene at Constantinople. The actual remains consist of four massive piers, two of them being united by a wall in which is an arched entrance.

The ruins, however, appear to be too scanty to enable such a deduction to be drawn from them as that the Church of St. Irene was a sister-church to St. Irene. It may possibly have been a domed basilica of the true type i.e. with arches and not barrel-vaults supporting the dome on the sides. On the other hand doubts have been cast on the supposition that these were the ruins of a church at all.
Churches in Old Greece.
(The term "Old Greece" refers to Greece as it was before the Balkan Wars)

Greece is far excellence the home of the cross-in-square church, numerous examples of which are still to be found in the land. They are of small, sometimes of quite diminutive size. Several examples still exist in Athens, although many Byzantine churches there were unhappily destroyed last century to provide building material for the construction of the present Cathedral.

Several remain in other towns in Greece and many lie in sequestered parts of the countryside. These churches are often carefully and beautifully built and the little buildings with their lofty dome have a great attraction, which their isolation and the classic memories of their site often increases.

Mention has already been made of the fact that the cross-in-square type of church at Constantinople presents differences to the same type as found in Greece. In the Constantinopolitan type, an additional bay is intercalated between eastern cross arm and apse and this bay is vaulted at a lower level than the eastern cross arm.

In the Greek churches (a) the eastern dome and there is thus no additional support are the antae of the apse. (b) an additional bay is interlined between eastern cross arm and apse, but it is vaulted at the same level as the cross arm and thus is simply a prolongation of that cross arm.
Millet "L'école grecque dans l'architecture byzantine."
p. 55 ff.

2 Millet "L'école grecque." p. 84
Lambakes. " Mémoire sur les antiquités chul de la Spèce. " p. 19. The western angle-spaces are filled up, according to his plan. The church has a naosex with five doors.
(a) is the two-column type of church. (b) is the four-column type. The dome rests on four columns, not on two columns and the aphi-antea.

M. Millet has shown with good reason that the Greek type was not derived from the Constantinopolitan type. The churches of Constantinople—along with those of Mt. Athos, which they influenced—from a compact group. They almost all follow the type. On the other hand, the Constantinopolitan type appears only exceptionally in Greece, while the Greek type appears again in other regions such as South Italy and Anatolia. The Greek type is the simpler and it seems more reasonable to think that it did not evolve out of the type which is more complex. The Greek type does occur at Constantinople, as has been mentioned, in the Church of SS. Peter and Mark. It has been already been suggested that this church is the earliest cross-in-square in the capital, and that the type passed neither from Anatolia nor Constantinople.

The Constantinopolitan builders, however, modified the type in their own fashion. The Greeks preferred the simpler plan. It is probable that it passed over direct to Greece from Anatolia. It is more likely to have done that than to have come from the single example of SS. Peter and Mark in Constantinople. The final possibility remains that the cross-in-square church in Greece developed out of the cruciform in Greece. The cruciform appears at Malousa (Achaia) and Progo (Maina). But these are late, and one would have to conjecture prototypes. It seems more satisfactory to say the type came direct.
'Diole.  "Manuel d'art byzantin." p. 412
Millet.  "L'école grecque." p. 84

from Asia Minor.

The surviving churches of Greece are of a comparatively late date. One of the earliest is at Skríphon in Bocotía. It dates from 813 and is a curious and heavy-looking building.

The dome rests on portions of wall which separate the angle spaces from the longitudinal cross-arms.

A narthex extends along the west end and from the east project three apses, round both outside and inside. The walls of the cross-arms rise high above the roofs of the angle spaces and the gable of the eastern wall is high above the apse. Most interesting of all, the north and south cross-arms project some distance beyond the line of the walls of the angle spaces, so that the church has in reality a cruciform plan.

Such a church as this might make one feel the possibility of the cross-in-square in Greece having developed out of the cruciform in Greece. But Skríphon stands by itself and probably has to be considered as an isolated building wrought by men who had not mastered the problems of the type. The church is constructed of stone and has very thick walls.

The most famous Byzantine Church in Athens is the so-called "Small Cathedral." 1 — "ein seltsames Bauwerk, ein Kleinod, einzig in seiner Art, charakteristisch für die altchristliche Baukunst." 2 It has about a hundred sculptured slabs, friezes, etc. both pagan and Christian built into its walls. It is of the cross-in-square four-columned type, but differs.
from the usual plan in that only the central affar projects. The dome rests on a high drum, polygonal externally. The angles of the drum are decorated with engaged colonnettes tied together with hood-moulds over the windows which penetrate each side of the drum. These hood-moulds cut into the round roof of the dome. This form of drum and dome often appears in medieval Byzantine churches in Greece.

The use of the drum is perhaps worthy of special note. It is characteristic of the second period of Byzantine Architecture. In churches of the era of S. Sophia, Constantinople, the dome is low, and the windows cut into the dome itself. In churches of the eleventh century onwards the drum appears and becomes a regular feature. In some such as the Panagia of Arta it becomes extremely high. Whence, for what reason, was the drum introduced and why did it become so popular? The real reason seems never to have been given. Most writers assume it was merely a fancy on the part of the originators. Ferguson merely states that "it seems not have been considered desirable not to break the semi-sphere of the dome."

It might be suggested that the following may have been a reason. It has been customary in Byzantine churches to paint a fresco of Christ Pantocrator in the dome. In one sense this is the most important of the many paintings in the church. Now the span of the domes in those medieval Greek churches is extremely small.
There is a very large drum at S. Sophia, Salonika.

1. Buchon "La Grèce continentale et la Mésie" p. 129.
Windows in the dome would leave a much smaller space for the painting. There was an aversion to many windows elsewhere in the body of the church, because it was desired to get as much wall-space as possible for the frescoes. Even as it is, one is struck by the dimness of many a Greek church.

The drum provided a means for more light without taking away space which would be used for paintings, though even there between the windows paintings affixed.

It is true that the first use of an elevated drum, as far as is known, is in S. Irene, Constantinople, which is a large church. The dome and drum there are however of a peculiarity type and were built after the previous dome had been shattered by an earthquake.

In any case, the widespread use and popularity of the drum might, one feels, be reasonably explained in the above fashion.

Returning from this digression, it may be said that the small Cathedral dates from the tenth or eleventh century. Its proper name is St. Eleutherios. Buchon considered it to have been built in the thirteenth century, by the 'trench Geoffrey, Prince of Achaea.'

The Church of SS. Theodore (1049) presents features characteristic of the Greek cross-in-square.

The western dome supports are not however, columns, but pieces of walls, which separate the western cross-arm from the corresponding angle-places. The eastern cross-arms are the antae of the apses. The apses are round internally, but also three sides of a polygon on the outside.
Struck "Griechenland," p. 146.
Millet "L'École grecque," pp. 86, 305.
A narthex extends all along the west wall of the church. It is divided into three bays, barrel-vaulted in different directions. It has doors between narthex and angle-spaces, but between narthex and western cross-arm has a wide arch almost equal in span to that arm. The exterior of this charming little edifice is also very typical. Its type of building well exemplifying a normal mode. It is built of brown squared stone laid in courses with a thin red tile placed in each joint both horizontally and vertically. The roofs are of reddish tiles.

The windows are double. The lights being arched and separated from one another by a column with a small capital on which rest the arches.

A saw-tooth moulding runs around the window-heads in a semi-circular arch and the space between it and the head of each light is filled in with brick ornamentation. The cross-arms are roofed with roofs which finish off as gables on the exterior walls. The roofs of the side-altars reach almost up to the roofs of the angle-altars.

There are three double windows in the central afos and one in each side-altar as well as others elsewhere in the building. The drum and dome are of the type described in the description of the "Small Cathedral."

The Church of the Panagia Capnicarea, in the middle of Hermes St. in Athens is a structure of a more complex nature. Several additions have been made to it. It dates from the eleventh century.
"Strucki "Griechenland" I. p.141
Lambelès. "Mémoire sur les Antiquités chrétiennes
opinion, affuée sur des sérieuses observations,
celle église était l'ancien Baptistère de
l'église d'Athènes. L'agrandissement
inintelligent
de l'église a entraîné la modification du
plan primitif."
but the additions, consisting of an exo-
narthex and a narthex were built in the
thirteenth. Over one of bays of the narthex
is a dome and one of the compartments of the
exo-narthex is cross-vaulted. The church
has the usual type of central dome, and is
of the four-columned plan.

The most noteworthy feature of the Cap-
nicarea is the arrangement of the eastern
end which follows not the Greek but the
Constantinopolitan rule. The extra bay before
the afores being vaulted at a lower level than
the eastern cross-arm. One also notes
Constantinopolitan influence in the hollowing-out
of niches in the north and south walls of
the bema. The side-apse chambers, on the
other hand follow the Greek rule and are under
the same vault as the corresponding angles.

St. Elias. Athens is also of the cross-in-square

The Holy Apostles at Athens shows a different
type. It has been described as an octagonal
building, with eight projecting apses alternately
large and small. The dome rested on four
central columns from which barrel vaults ran
to the large apses. Externally however the
smaller apses are concealed by walls at right
angles, so that the building is really what
Shirvavar calls in Armenia "the niche built square" with interior supports. It shows the
same general plan as appears in Echmiadzin
Cathedral in the East and St. Germigny des Prés in
the West. It dates from the twelfth century.

The present dome is a restoration and a

2 Enlart "Rudques monum. d'arch. Goth." p. 311

3 Enlart "Rudques monum. d'arch. Goth." p. 312
added to the church. In regard to the windows, external decoration the church shows the usual features. It is not necessary to suppose that this church had any direct connection with Armenia. Churches of trifoliate plan appear in Greece at Tastoria and elsewhere and the Church of the Holy Apostles can be thought of as a combination of the cross-in-square and trifoliate plans with the addition of the smaller niches in the angles of the square.

The Church of the Agoramai was of the cross-in-square type. "Im Grundriß ist er so gegliedert, wie die so genannten Vierzylinderkirchen im Aufbau heutzutage eine hohe Kuppel vor." It has however been much restored.

Other plans appear in Athens as well as the cross-in-square - such as the simple plans with apses (S. Demetrius Pouloubouges, S. John of the Column etc) and the three-nave basilica (the Seraphin, S. Philip.)

St. Nicodemus, now the Russian Church is of the type where the dome is supported by means of pseudo-pendentives and eight piers. This type will be discussed later.

Mention may be made of a slight Western influence which came in when Athens was a Duchy. The Church of the Hypapanti is ruined but still preserves ribbed Gothic vaults in its structure. "Elles ont conservé un archaïsme et une lourdeur qui contraster avec les voûtes gothiques bâties par des architectes et des maîtres français dans l'autre comté d'Oront." The relics of the Frankish period are Influencing and no lasting influence was made on Byzantine Architecture as
Hamilton. The Church of Kaisariani in Athens and its frescoes.
as a result of influences which may have come in from the West—with the Frankish Dukes.

The cross-in-square type is much in evidence in the Attic countryside. The monastic church of Kaisariani on Mt. Hymettus is a good example. It is of the four-column type, with an additional bay before the aisle vaulted at the same level as the western cross-arm. The columns are from a classical building.

Kaisariani shows a different kind of drum from that which appears in St. Theodora, Athens. It is a simple polygon on the outside, and there are no arches cutting into the roof, which projects beyond the walls of the drum.

Noteworthy are the additions which have been made to the church at a later date—a domed narthex and a parecclesia. The original church is built of fine squared stones and hela while these additions are built of uncoursed rubble.

Of other churches on Mt. Hymettus and on the Attic plain, that of the Monastery of Asteri is of the four-columned cross-in-square type. On the plain are two churches dedicated to St. John. One of these stands within its monastic enclosure of which the walls still remain as well as an interesting round tower in the south-west angle of the court. The church is of the cross-in-square type. On the other hand, a little church dedicated to St. George, at the foot of Hymettus, towards the south, is a simple hall with broad dome breaking the barrel-vault in the centre and resting on the outer walls.
Schultz and Barnsley. "The Church of St. Luke of Stiria in Phocis, etc."
Perhaps the most charming of all the smaller churches of the Attic countryside is Omorphi Ekklesia, which stands solitary on the plain to the north of Atticus beyond a grove of pine-trees. It is beautifully constructed of marble with tiles in the vertical and horizontal joints. Saw-tooth bands run round the windows and along the walls. The church has a narthex of later date and furnishes the unusual feature of an additional aisle running along its south side.

At In Phocis stands the Monastery of St. Luke, with two churches, the smaller of which is a cross-in-square with four central columns.

The angle spaces have cross-vaults. The barrel vault is more usual in Greece over the angle spaces. The cross-vault and domical vault occur more rarely. The narthex is of double breadth, due perhaps to the fact that the church was one of a large and important monastery and that certain offices were said in the narthex. It is divided by two central columns into two parts of three bays each. Beyond it extends an exo-narthex and an often cross-vaulted porch adjoining it on the north. The south wall of the narthex and part of the north wall of the church also form part of the north wall of the larger church.

It is interesting to note that the four central columns are of granite. The exterior of the church is ingeniously decorated and the building possesses fine sculptured friezes.

The church, however, is not of
Millet "L'école grecque" p. 64
The usual Greek type. It is of the Constantinopolitan type, with a square space before the apse under its own vault. This feature has come to St. Hilarion (via Mount Athos). The double narthex is also an Athonite characteristic. The church dates from the first half of the eleventh century.

It may be mentioned that the Constantinopolitan type appears also at Chonika, Hagia Moni and Mervaca in Argolida.

The Church of Samari, in Messenia, is of the two-column cross-in-square type. In many respects the church presents the usual features.

The drum and dome resemble those of SS. Theodora, Athens. The church has a narthex in three barrel-vaulted bays. It has also an exo-narthex, the vaults of which are supported on the west by two friezes and two columns. The exo-narthex being open on north, south and west. The exo-narthex is not common in Greece. Though it occurs in the Capnicarea and at Nauplia. Mr. Uye in his "Journey in the Peloponnesus in the Year 1847" gives a drawing of a church at Pylos, with an exo-narthex in the form of an open portico.

In the Church at Samari the domical vault appears in the two end bays of the exo-narthex and also in the western angle-spaces of the church. Elsewhere the barrel-vault appears. Mr. Millet considers that the domical vault and exo-vault in the angle-spaces of cross-in-square churches are due to influence from Constantinople. It is true that the churches of Constantinople do prefer such roofing in the angle-spaces.
i.e. in the Mistra churches of the simple cross in square type.

2 "Iraigheir op. cit." p. 180

3 Iraigheir "op. cit." p. 181

4 Iraigheir "op. cit. p. 183.

5 Iraigheir "op cit p 186
but in Mistra, an important town which had close connection with the capital, the barrel-vault appears in the angle-spaces. It seems more likely that the cross-vault and domical vault in the angle-spaces of churches in Greece where they occur arose independently of influence from the capital.

Saniti dates from the 11th or 12th century. The Peninsula of Mani in the south of the Morea possesses a considerable group of churches, most of which are of the cross-in-square type.

St. Stratigos in the village of Ano Boukarii has its dome resting on two old classic columns and the antae of the afaie. (In this connection, one might ask if it was the use of classical columns which first led to the preference for columns to piers in cross-in-square churches.)

The church has a narthex preceded by a square porch, covered with a dome. The angle-compartments of the church are barrel-vaulted and the afaie present the unusual feature of being round both without and within.

In St. Soter Gardenitza, the afaie are polygonal externally. An interesting feature is that the western cross-arm runs right through to the western wall of the narthex. The eastern piers remind one of those in SS. Thodore, Athene

St. Nicholas, Ochia, closely resembles Gardenitza in plan. It has the drum charac
trie of the Athenian churches.


Vamvaka are also of the two-columned type.

On the other hand the dome at Asomata "a curious little mountain church" above Kitta, while resting on two piers
Mr. Iraquair suggests that this church was built in the ninth century, but he considers that the type of plan came from Constantinople. Now if it is a ninth-century church, it is one of the earliest in Greece of the type. The horseshoe arch makes one at once think of Anatolia. It seems to be a strong piece of evidence corroborating the view that the type of the church itself (the cross-in-square) came also from Anatolia.
and on the antae of the apha - but in this case the openings through the antae (from prothesis and diaconicon to central apha) have been so enlarged that their western portions of the antae on which the dome rests have become fieris.

The church has no narthex, but has a square porch at its western end.

SS. Sergius and Bacchus of Kilta (also called S. George) also has the antae cut away by the openings being enlarged, but instead of four fiers as at Aomak, there are four columns. This church seems to be a "four-columned church." These are not true four columns, but it is not a four-columned church as defined above. In a four-columned church the additional bay (vaulted at the same level as or a lower level than the cross-arm) appears before the apha. In SS. Sergius & Bacchus this is not so. In fact, the columns are but fragments of the antae.

The church has one very striking feature - a strongly marked horseshoe arch in the western door. Whence did this design come? The horseshoe arch is characteristically Anatolian and one might be permitted to think it flared over to Greece here in the ninth century from Anatolia, just as the cross-in-square church did to Greece from Anatolia.

Another interesting feature of this church is the use of faience pots for external decoration. They are half-arces flanking windows in the gables. Such faience pots are also to be found at Mistra.

2. "Iraquin "op. cit." p. 191


4. "Iraquin "op. cit." p. 190

"all in Iraquin "op. cit."


6. "Iraquin op. cit p. 194

"Iraquin op cit p. 195

8. "Iraquin "op. cit." p. 198."
St. Michael (M. Varvaritis) Karouda is of the true four-column type. The additional space appearing before the aphi is planted by the antae, through which entrances lead to the side-chambers.

S. Marina, Pyrgos is of the same type. The Church is of the same type as S.S. Sergius and Bacchus, Kifia. The dome rests however not on columns, but on octagonal piers.

St. John Plata is of the two-columned type with the ends of the antae, on which the dome rests forming L-shaped piers.

St. John Karia is of the familiar Greek four-columned type with the additional bay under the same vault as the eastern eave-arm. These are all the cross-in-square churches of Mani. Only mention need be made of other types: the simple oblong with apse (Panagia at Nama; M. Paraskivi at Plata), almost a square and used further occupying the oblong with a dome in the centre (S.S. Kosta and Argyro), the cruciform, rare in Greece (S. Peter Pyrgos).

St. Nicholas, Plata resembles Mesopotamian churches in consisting of three barrel-vaulted rooms placed side by side. Here however they are afraid. The central vault is broken by a later dome.

S. Sophia, Koutifhuri and S. Elias, Abyssola, show a curious type with a barrel-vault cut through by another at a higher level and a small dome at the crossing.

Stylo Church is an oblong with a dome in the middle resting on wall-arches thus spanning almost the entire breadth. It may be compared with St. George, Hymettos, Athens.
These churches in Mani, small in size though they are, form an interesting group. Care has been taken in their planning and construction and in several of them, successful efforts have been made to enliven their exterior with decorative devices. While the Cross-in-square is the favourite plan, the builders did not confine themselves to it, but launched out into different designs.

The only churches of which the date is use definitively known is Vasvarta (1075). Mr. Jaquelin suggests that the churches belong to dates from the ninth right down to the eighteenth century.

He also considers that the two-columned church, the Kilta type, and the four-columned church all entered the district simultaneously. One would rather have expected that the four-columned type developed out of the two-columned type. It must have done so somewhere, either in Anatolia or in Greece or independently in both places.

It is, however, a very natural development and would readily occur to builders in different areas where more space in a church was required.

On the other hand, the type of Kilta (with the antae cut away) appears in Anatolia ('Istabul, etc.). The true four-columned type does not seem to have been in vogue there. It seems reasonable to say that the two-columned type and its variation, the Kilta type, spread from Anatolia to Greece, and that simultaneously in different parts of Greece (including Mani) it developed into the four-column church.
Hamilton. "A Medieval City in Greece."
Struck. "Mistra.
Millet. "Monuments byzantins de Mistra" (photographs)
Magne. "Mistra" in Gazettes des Beaux Arts 1897. p. 301

² Hamilton. "op. cit." p. 8,
Struck op. cit. p. 105
also with the other churches in Magne & Millet

³ Struck op. cit. p. 93,
Hamilton op. cit. p. 10
Much more important than the churches of the Mani Peninsula are those of the ruined city of Mistra, which stands on a spur of the Taygetos overlooking the plain of Laconia and the town of Sparta.

In Mistra there is preserved a whole series of Byzantine churches dating from the thirteenth to the fifteenth century. They are noteworthy not only for their architectural features but for many of the interiors, adorned as these are with singularly fine wall-paintings.

After the cession of part of the Morea to the Byzantine Empire by William Villehardouin, Prince of Achla, as the price of his ransom, Mistra was established as the capital of the Byzantine Province in the Morea. There was close connection between it and Constantinople and it became an important and flourishing town.

The Church of the Evangelistria dates from the beginning of the fourteenth century. It is of the two-column cross in square plan. An interesting variation is that the western cross-arm is slightly prolonged, giving the church the aspect of a Latin, instead of a Greek, cross. The church has three apses and other features of the usual type.

A porch and other erections have been built on to the walls of the Church at a later date.

The Church of the Acheiropoietos is of basilical plan on the ground floor and of the cross in square plan on the upper story.
Struck, "Mistra," p. 113

Struck, "Mistra," p. 134
Barrel-vaulted aisles run along the sides of the church and they are separated from the central bays by arcades. Thus on the ground floor appear the two aisles and the nave of a basilica.

Above the aisle on either side appears a gallery

Yet the arms of the cross extend to the outer walls. The church is not a domed basilica, but a galleried cross-in-square. In this it may be compared with S. Mary Deaconissa and St. Mary Deconissa at Constantinople.

The date of the Church is 1312.

The Church of the Monastery of the Pediokteri dates from the end of the fourteenth century. It is a two-columned cross-in-square church with a heightened western arm like the Evangelistria.

This church possesses many curious and interesting features. It is partially built into a cliff. There is no narthex, but there is built on to it an additional aisle and a very irregularly shaped room with an afice.

The usual type of Byzantine decoration appears on the outside, but the projecting arched cornices of the drum belong to the school of Constantinople and not to that of Athens. A fleur-de-lis between two rinceaux on an outside wall, and a trefoil window within a Gothic arch in a tower in the monastic enclosure are Western traits due doubtless to influences coming from the neighbouring Principality of Achaia.

The Church of Santa Sophia, built about 1350, resembles the Evangelistria. A porch of later date runs along the north wall.
Enlart "Ruesques monuments d'architecture gothique en Grèce," p. 310 (Revue de l'art chrétien, 1897.)

"Struck "Mistra," p. 44.

"Hamilton "Medieval City," p. 12.

The Church of the Monastery of the Pantanarum, which stands high on the hillside, dates from the first half of the fifteenth century. Like the Aghondiko, it is a cross-in-square above and a basilica below.

The gallery runs round three sides. The church is noteworthy as preserving five domes with drums. This is certainly due to influence coming from Constantinople. It is to be noted also, as in the other churches of the type, that the angle-spaces are almost as high as the cross-arms. This of course had to be, owing to the galleries, and it takes away to a great extent the cruciform appearance of the church.

Very interesting are the partially western bays in the church and other monastic buildings. A tall bell-tower with trefoils and pointed arches recalls in its style the earlier bell-towers of the Puy-de-Dôme. It has also been compared to those of Champjagne.

No less noteworthy are the aisles decorated as they are with an arcade of pointed arches on the centre of each arch sitting two broad stones supporting curved stone-stones terminating in palm-like finials. This is derived from Western Gothic Art. Yet the Byzantine type of decoration prevails along with the Western. For the pointed arches contain designs of radiating files, and above, there is a second arcade, with semicircular arches, and within each arch another, composed of radiating files.

The Church of St. Pantaleon resembles the Pantanarum in being a cross-in-square
"Heagrain "Monemvasia." in B.S.A. No.XII

Sir. J. Hope in "Excursion in the Peloponnesus" mentions a church (St. Peter) "with a decidedly Western appearance."
above and a basilica below. It has the un-usual features of aisles round on the outside.

It appears to have been originally a single basilica and to have been reconstructed in the fourteenth century when the upper portion was added. The round aisles suggest an early date for the original building.

Another church at Mistra, that of the SS. Theodore will be examined later.

The churches of Mistra reveal the beauty and ingenuity of Byzantine Architecture at a late period in its history. They show skill and dexterity in their construction and present striking variety in plan, elevation and adornment. They present a mingling of diverse influences. That from Constantinople is strong, being particularly observable in the churches which are a combination of the basilica and the cross-in-square. The others cling to Greek ideas, but even in them—in their exterior decoration—Constantinople is not without its influence.

Mention may be made of one or two late (13th century) churches at Monemvasia, on the east coast of the Morea. Our Lady of Crète, St. Nicholas and St. Stephen. They show Venetian influence—in their pointed vaults and have Renaissance detail.

Numerous cross-in-square churches exist in Greece, many of which have been little studied. The two-column type appears at St. John, Koroni, Argolis, a church which has niches in place of side aisles, and cross-vaults in the western angles of the square. St. Saviour, Amphiara, has three aisles and a narthex in three
Suetz Barnaby "The Church of St. Luke of Sinai in Phoecis, etc."
cross-vaulted bays. At Chryssopha, Perperi, Geraki, Scala, Isounni, and Veiza, all in Laconia, are churches of the two-column type. At Kalamata in Messenia the barrel-vaults are reduced to arches and the church partially more of the cruciform plan.

The church of the Holy Apostles at Leoniai (Arcadia) is like the Pantheon at Mistra a combination of the basilical and cross-in-square types.

More important is a type of plan which is exemplified in the larger Church of the Monastery of St. Luke of Shin in Phocis. In this type the dome springs from an eight-fold support. It rests on eight arches four of which are semi-circular and are buttressed by vaults which extend to the semi-dome of the ariph and the four external walls. The other arches—at the angles—are carried down to form semi-domes, or, as they have been called, each one “pseudo-pendentives.” They rest on two of the octagon piers and the pier at the corner of the square. Arches cut into them beneath, and the spaces between them and the outer walls are filled in with cross-vaulted chambers.

In this way the weight of the dome is distributed to the ground and to the exterior walls.

The octagon in the centre at the level of the arches is transformed to a circle by means of eight small pendentives—each placed between each pair of arches. Thus the transition is made from square to circle via the octagon, and on the circle thus formed rests the dome.
The Church of St. Luke dates from the twelfth century. The dome internally is almost hemispherical but shows a very flat curved roof outside. This roof rests on a surrounding wall of sixteen sides.

The span of the whole three afores is equal to that of the central space. (In the cross-in-square church of course only the central afose covers the width of the central space.

The central afose is preceded by a square space covered with a dome and having wide niches hollowed out of the walls between it and the side afose chambers. This feature reminds one strongly of the Constantinopolitan churches and it is clear that influence has come to St. Luke from Constantinople. It also appears to have come via Mount Athos.

Two pillars, carrying an arcade are placed between the central space - north and south arms. Above the afoises is a gallery.

The church is adorned with fine marquise. It is one of the most beautiful in Greece, both for its construction and adornment. Wheeler said of it in the seventeenth century. "And truly this is the finest Church I saw in all Greece next to Santa Sophia at Constantinople, notwithstanding it is very old and hath suffered much by Earthquakes and time. It is built after the Greek manner, almost square... Then there is an indifferent large Cuppola in the middle and it is proportioned within in the shape of a Cross. All the walls are cased with polished marble." Mann, Scull and Barnsley call it a fine example of its type. It may also be mentioned
Deichl "Manuel d'art byzantin." p.
Millet "L'école grecque." p.

Enlart "Quelques monuments d'architecture gothique en Grèce." p. 310.

Boespflug "Monte-Cristo." in E. C. N. p. 278.
Hamilton "Red. Cty." p. 10
Strock... "Mistra." p. 88.
That it has a narthex in three cross-vaulted bays.

The monastic Church of "Daphni" on the Sacred Way between Athens and Eleusis of the same century and belongs to the same type. There is however greater symmetry between the two sides of the church and the whole three aisles project beyond the eastern wall.

An absence of galleries leads to the omission of the arcade between the central space and the north and south cross-arms.

The church has a porch built by the Catholic monks who dwelt here when Athens was a medieval Duchy. It has pointed arches and belongs to a type common in Burgundy and Champagne.

This church has also notable mosaics.

The interior is spacious and finely proportioned and many of the mosaics are of great beauty.

The Church of the SS. Theodore at Mistra is a smaller example of the same type. It dates from the end of the thirteenth century.

All three aisles project. The side chapels are vaulted with barrel-vaults (not cross-vaults as at S. Luke and Daphni.) The eastern side chapels have entrances into the cross-arms, but the western ones are entirely isolated from the main body of the church and open only into the narthex.

It is worthy of note that while the roofs of the east and west cross-arms terminate in triangular sediments on the exterior walls, the roofs of the north and south cross-arms are curved. The exterior lines thus mimicking the interior shape of the vaults.
Diagoras in Monemvasia. RSA III. p. 173
Millet "L'école grecque." p. 112.
In the open country a few miles to the north west of Striphou in Beechia stands a church belonging to a *pissopi* or monastic farm of the Monastery of St. Luke. It is "a beautiful little church, which in the arrangement of its plan and its general composition reminds one of the great church of the parent monastery, from which indeed it is said to have been copied."

It differs in having no real narthex, but the west angle spaces and the intervening spaces run into one. A long compartment is formed thus on the west extending along the whole breadth of the church and forms as it were a pseudo-narthex.

The Church of S. Sophia at Monemvasia was built toward the beginning of the fourteenth century. It is of the same type. The central aisle with its niches in the antae is exactly like that of St. Luke except that it is cross-vaulted instead of domed. Elsewhere the barrel vault is used. As at Mistra, the western angle spaces are completely shut off from the body of the church.

Mr. Iagoum suggests that they had originally entrances into the church but as they have entrances into the narthex it is possible to say that they followed the Mistra type and were isolated. They may have been mortuary chapels as they were at Mistra and an entrance only from the narthex would be all that was necessary. The narthex is in three semi-vaulted bays and had a gallery.

A loggia in front is Venetian rather than later date. A declared ran down part of the north wall.
1. Millet "L'école grecque." p. 109

2. Diehl "Manuel d'art byzantin." p. 126
The Church of St. Nicodemus (or rather the Phyco-
demou) built on the site of a Roman bath. 
closely resembles St. Luke in plan. It has 
however domical vaults over the angular spaces. 
It has galleries and a narthex.

The church dates from the eleventh century.

The Church of Christianou in Triphylia 
also has the eight-fold dome-support, but it 
differs in important particulars from the above-
mentioned churches. The side-apse. rooms 
and the corner chambers on either side are 
merged into one dome-covered compartment. 
These angular chambers run into the cross-arms. 
Thus continuous aisles are formed along 
the north and south sides of the church. 
The bays are covered with barrel-vaults 
and avoid domes.

Another example of the type with 
which we are dealing is the Church of the 
Panagiotisina at Arta. In this case the 
dome-support consists of no less than four 
stages of pillars. the one stage controlled out 
over the preceding one. On these raised 
galleries in two stages surround the interior 
The dome rests on a lofty drum and 
four domes on drums cover the angles. 
These are three aphasis.

The Panagiotisina is a great solid-
looking building, very different from the 
neat and elegant constructions exemplified 
in the cross-in-square churches of Athens. 
It dates from the century.
On the island of Chios stands the Church of the Nea Moni. It is a curiously compressed form of the eightfold-support type of church.

The dome in this case covers the whole breadth of the building resting on wall-arches and corner semi-domes. The wall-arches themselves merge into semi-domes in the thickness of the walls.

Three apses project from the east. They are of horse-shoe shape internally—a plan doubtless carried over from the neighbouring continent of Asia. The central apse is preceded by a barrel-vaulted bay, and the side apses by small domed chambers.

There is a narthex in three bays, two of which are domed.

Of the exornarthes Shyngowski says ‘Der Exornarthes ... hat bedeutendere Dimensionen und ladet über die Mauerflucht ... mit zwei Apsiden aus.’ He considers the church to date from the eleventh century.

The type of church which shows an eightfold support to the dome is a hype apart. It is out of the main stream of Byzantine Architecture, although it does have features in common with the usual plan. Whence did it come? What influences led to its adoption? Mention has already been made of the niches in the antae of the central apse—features to be found in such churches as S. Saviour Pantocrator and S. Theodosia, Constantinople.

There is however another plan in Constantinople which seems to have
'Jewell and Hasluck. "The Church of Our Lady of the Hundred Gates at Tunis."
influenced it. That is SS. Sergius and Bacchus. If for the two columns at each angle which form semi-circular eaves, a pier at the corner of thesquare is substituted; if in place of the ambulatory a series of vaulted chambers is inserted; an approximation to the S. Luke plan is reached. Yet another influence entered in and that is the cross-in-square church. In both cross-in-square and eightfold-support church barrel vaults spring from the centre to the outside walls.

The St. Luke type thus appears to be a combination of the SS. Sergius and Bacchus type and the ordinary cross-in-square.

Similarities have been pointed out between the type and a Nestorian church at Amida in Mesopotamia. But it is more natural to think that the Greek architects derived their ideas from the capital when they devised this plan. In doing so they favoured a design which though it lacked the elegance of the better of the cross-in-square churches was spacious and well-furnished and was a Byzantine style especially suited for a larger building where more accommodation was needed.

There has within the last five years been published an account of a church "by common consent acknowledged the finest in the Cyclades." This is the Church of Our Lady of the Hundred Gates at Paros. It consists really of a small church, a large church, and a baptistery.

The small church is dedicated to
'Jewell & Harbuck. "op. cit." p.51
St. Nicolas. The ground plan is divided into nave and aisles by arcades. The portion of the nave beside the bema is covered by a dome buttressed by four cross-vaulted arms extending to the outer walls on north, south, and east. This dome, with its cruciform structure of vaults is a later addition (cf. SS. Pemtrini, Mistra.) The original date of the church appears to be before the time of Justinian.

The larger church is dedicated to the Assumption of the Virgin. The plan of the church is cruciform. It consists of nave and aisles, and transepts. Beyond the nave is the bema. Galleries extend above the aisles and along the west end. The galleries are roofed with barrel vaults and nave and aisles with cross vaults. The church is covered with a dome on pendentives. It is buttressed by vaults extending on three sides to the outer walls.

"In type and character the Great Church seems unique." St. Mark's Venice is somewhat similar to it.

It is indeed a cruciform church with galleries.

It is considered to belong to the ninth century. The type cannot be said to have persisted in Byzantine Architecture. It is from the smaller cruciform churches that the cross-in-square structure arose.

The Churches of Greece showed considerable variety of plan, but the predominating type by far is the cross-in-square.
The question as to how the type came in Greece has already been discussed. But it is certain that from the time of the tenth and eleventh centuries at latest it became widely popular throughout the land.

On the cross-in-square type Greece set her own peculiar characteristics. Noteworthy among the influences which the best of these churches give is that of completeness and is that of compactness. There seems to be nothing lacking and all the component parts group themselves well round the central dome. No less noteworthy is their simplicity. The decoration of brickwork is sober and restrained. There is nothing fantastic about them. There is a total absence of unnecessary features. Everything in the building has its purpose and yet art is not lacking.

Their completeness and simplicity are appropriate to the soil of Greece. They are attributes which are classical.

Hasluck. "Athos." p. 180
Duve. "Manuel" p. 716
The Churches of Mount Athos.

Perhaps the most striking feature in the monastic churches of Mount Athos is the termination of the cross-arms. In the typical Athonite church, the round inside and polygonal outside project from the cross-arms on north and south. The use of these apses reminds one of Armenia, and it is quite possible that the idea may have been carried to the mountain by Armenian monks.

On the other hand, it cannot always be assumed that, when similarities occur in churches in different areas, that one of these areas influenced the other. Practical necessities might cause the same results in different regions. There was a practical need for additions such as these in the Athonite churches. These apses were reserved for readers, singers and dignitaries, and it is obvious that such apses would be suitable for them as side-aisles or additional chambers would not be.

Another Athonite feature is the double narthex. Otherwise the typical church is of the Constantinopolitan four-column, cross-in-square plan with the additional bay before the apse vaulted at a lower level than the eastern cross-arm.

Many of the churches of Mt. Athos are of comparatively recent date. Others have been much restored. The oldest monastery on the peninsula is that of Lavra. It's church dates from the second half of the tenth century and presents striking differences from the usual type.
Hasluck, "Akhoo" p. 150  
Duchêle, "Manus" p. 266

Gyong, "Monasteries in the Levant," p. 377
A large dome covers a central square. It rests on pendentives and four arches which are supported on the arches of the aisle and on two great piers to the west. On north and south these arches (not short vaulted) by very short cross-arms, which are terminated by apses, round both without and within. What with the shortness of the cross-arms and the thickness of the piers, the angle-apses are reduced to tiny proportions.

East of the eastern dome arch there appears the rectangular bay before the apse. The side-apses are preceded by long narrow chambers. The west cross-arm is also short and is buttressed by the wall of the narthex. The narthex itself is a wide rectangular hall, roofed with a dome and two semi-domes and it is flanked by two interesting chapels planned as little cross-in-square churches, with dome, four columns and eastern apses.

Along the whole length of narthex and chapels there extends an exo-narthex and beyond that there is a portico of recent date. It is said to have been used as a model for the 11th c. church of Vatopedi Monastery, "the largest and richest of all the monasteries of Mount Athos." Other influences however appear to have entered from without. Certain features distinguish it from Lavra. The cross-arm apses are polygonal externally. The dome rests on four central columns. The cross-arms extend right to the apses on north and south. The angle-apses are clearly defined squares. The two chapels flanking the
2. Curzon "Monasteries" p. 368.

narthex appear as at Lauro, except that the southern one is (roughly) of trifoliate shape.

The church of Suron was founded in the tenth century, but the present domes are fifteenth century. Curzon thus describes it: "The church is dedicated to the 'home of the Virgin.' It has four or five domes, and is of considerable age, standing by itself as usual in the centre of the court, and is ornamented with columns and other decorations of rich marbles. Together with the usual fresco-paintings on the walls."

The type is that of Vatopedi. The angle-chambers are domed. The narthex is double. The chapels flanking the narthex are simple oblong with domes.

The Church of Chilandar is later (A.D. 1200) It was founded by the Serbian King, Stefan Nemanya, and restored in 1893.

In plan and elevation, the main body of the church is very like that of Vatopedi, but all the angle-spaces are domed and the space before the

The narthex is of a type which became general on the mountain. It consists of six bays in two rows of three. Two central columns separate the rows. Beyond this extends another narthex (called the "kite") also of six bays. These narthexes are vaulted with cross-vaults and domes.

The side-chapels to the narthex no longer appear.

This church had a considerable influence on the architecture of Servia.
   Diehl "Manuel" p.417


3. Hasluck "Athos" p.189
   Diehl "op. cit." p.717

4. Hasluck "Athos" p.130

5. Hasluck "Athos" p.159.
The Pantokrator is a fourteenth-century church that has been much restored, but follows the usual plan, but has domes with drums placed over the prothesis- and diaconicon-chambers.

The Koukoumavion (sixteenth-century) shows the same feature. It does not seem to appear outside of Mt. Athos. In Egypt it was common to place a dome over the space before the central apse.

The sixteenth-century Church of the Dioniou shows the same feature. The old type of double narthex with side-chapels and an exo-narthex appears in it and in the Esphigmenou. In Stavenikita, Xenophon, and the other churches the Chilandari type of narthex is the rule.

The Church of Docheiariou was rebuilt in 1588 by Alexander of Moldavia. The use of buttresses in it is through Moldavian influence. The narthex in this building is larger than the church itself. The high proportions are also notable. In the Stavenikita the apses to the cross-arms have been omitted but evidently only because of the exigencies of the site.

These churches in other respects follow the normal type, the above being the different individual features.

There have been many disastrous fires on Mt. Athos and re-erection has often taken place. The other churches date from the eighteenth and nineteenth centuries.
\textquote{"Havelock "Athos." p. 169.}

\textquote{"Dawkins "A Visit to Skyevo." p. 77. in B.S.A. Annual. No. XI"}
One other church in the sacred mountain is worthy of mention—that in the village of Kayes in the centre of the Peninsula. It differs from the normal type in having no dome. The three apses are round both without and within. There are four chambers in the church—isolated by walls from the rest of the church. A narthex runs along the west end and a room abuts on the north wall of the church. It is said to belong to the tenth century and to be the oldest building on Athos.

Until it has been compared a ninth-century church in the island of Skiros. "The rounded apses. The absence of a dome the piers instead of columns, the absence of side-choirs are common to both. The only differences are that the Protaton [the Kayes Church] has an extra narthex on the north side and a flat roof instead of barrel-vaults." 2

Apart from Kayes, the churches of Mount Athos present features common to the cross-in-square type. Yet as has been pointed out, the mountain has added features of its own. Features which have mostly arisen owing to the necessary demand for space in a church belonging to a large monastery. Such are the great six-bayed narthex and the cross-arm apses.

It should be noted that the churches are mostly built of rubble not of the squared stones and tiles, as is so often the case in Greece.
It may also be mentioned that one of the most interesting features of each monastery is the kibla or sacred well. It is composed of a basin under a dome resting on eight or more columns and stands in the court apart by itself.
'Pufin. *South Slav Monuments.* p. 14


'S Pufin. *South Slav Monuments* p. 12
Serbian architecture really begins with Stefan Nemanja in the last half of the twelfth century. He established himself as ruler in 1169 and brought the country to a state of considerable prosperity. He founded numerous churches and monasteries and the work which he began was carried on by his successors.

"The Serbian kings, during the thirteenth and fourteenth centuries were not rude slavemen: they were educated at the Imperial Court of Constantinople or at Venice, and gave great attention to the development of the country. German colonists were invited to come and exploit its natural resources... A brisk general trade was done with Ragusa and especially with Venice."

Stefan II obtained the autonomy of the Serbian Church in 1219 and established eight bishoprics.

Under Dushan the powerful, Serbia's sway extended over practically the whole of the Balkans. He reigned from 1331-1355.

After the Defeat of Kosovo (1389) Serbia's centre of gravity shifted to the north, and the churches from that date, situated in the region of Morava, reveal special characteristics. Serbia was annexed by Mahomet II in 1454.

In the earliest churches of Serbia Dalmatian influence is to be found. In the latest there are Arab traits. At the end of the thirteenth century French Gothic characteristics appear. The

2. Millet "L'ancien art serbe," p. 52
   (There are also illustrations of the most important churches with short notices in Pugin: "South Slav Monuments."


4. Millet "L'ancien art serbe," p. 56
result of the settlement of the country of Benedictine monks by Queen Helena, who was a daughter of
the Latin Emperor of Constantinople.
Yet in spite of these clivar influences, Byzantineism predominates. In their plan and structure, the ecclesiastical monuments of Sevna are Byzantine. Though they have a decided individuality of their own.

One of the earliest of the Sevnaian churches was that of St. Nicolas at Kurumulja. It is in a ruined state and dates from about 1140.
The church was an oblong building in two parts covered respectively with a dome and barrel vault. The dome arches appear round externally. The one above is of peculiar internal shape with chamfered edges.
A porch abuts on the south wall.
An exo-narthex, which has been added at a later date, has two square chambers on the west projecting beyond the walls, and an open porch between. This reminds one of churches at Bin-bir-kilise in Anatolia.

At Studenitja, a porch abuts on the north wall in addition to the one on the south. The church has thus been given a cruciform plan externally. The church dates from the end of the twelfth century.
The church has three alices and a narthex.
The Church of Five, of the beginning of the thirteenth century shows a realisation of the cruciform plan. It has one large aisle, round both outside and inside.
The wall between narthex and western crown- arm has been cut away, and only an arch marks off the one from the other.
Millet "L’ancien art serbe." p. 60

"Millet L’ancien art serbe" p. 65
Hanging the narthex are two domed chapels. At a later date a vast exo-narthex in twelve bays and a projecting porch have been added to the church.

It is obvious that several features in this building have come from Mt. Athos - the side-chapels to the narthex, and the great exo-narthex of the later Athronikite type.

On the other hand, the single round aisle and the long nave are western features. So too is an arcade of pointed arches recessed in several orders, which runs below the dome roof on the exterior of the drum.

M. Millet considers that the projecting cross-arms are derived from the aghios at the ends of the north and south cross-arms in the churches of Athos. It seems more natural to think that they developed out of the idea of placing a porch against one of the side-walls as at Kursunluja.

The one porch at Kursunluja is followed by the two at Zica and the entrances between them and the church are widened out at Zica, giving a cruciform plan internally as well as externally.

The Church at Miloseva (c. 1334) appears to have had transepts and narthex chapels as at Zica. The present building is a complete restoration of 1863. The original church was destroyed by the Turks in 1754.

The Church of the Annunciation at Gradac bears a strong resemblance to that of Zica. The one aisle has however given place to three aghios. The narthex chapels are of a much simpler type.
Millet "L'ancien art occupe." p. 65
The narthex is walled off from the western cross-arm. The church dates from the end of the thirteenth century. It was built by Helena, and western traits appear in the edifice — buttresses outside the apse, and a fine Gothic doorway with mouldings and recessed in several orders.

The Cathedral of Atride dates from the beginning of the fourteenth century. It follows the same type but the western angle-structures have been filled up to form side-chambers of the sanctuary. Only one true apse appears.

The western cross-arm has two bays and terminates in a large square narthex.

The Cathedral of Atride possesses several important features which are characteristic of many Sevian churches.

The drum of the dome does not rest immediately on the arches of the square and on pendentives between them. Walls extend above each arch, forming a square tower.

At a higher level arches project from the walls of this tower. Between these upper engaged arches pendentives are inserted and on these the drum of the dome rests.

This heightening of the dome became a favourite feature with the Sevian builders, and is one of the most distinguishing marks between Byzantine Architecture in Serbia and in Greece.

The other notable feature in Atride concerns itself with external decoration.

The church shows arcatures of drip-mouldings on the drum, apses, etc.

This also appears in other Sevian churches.
Millet : "l'ancien art serbe" p.68
The simple Latin cross type appears in the Church at Fec (1268) where the narthex-chapels are absent. There are also no chambers in the eastern angle-spaces.

Plan CXXXIV

The Church at Deani marks an advance on the type. All the angle-spaces are filled up. Additional aisles flank the church. Three apses appear, as well as two others at the end of the outside aisles. A dome, on drum and tower, surmounts the church. Elsewhere ribbed cross-vaults cover the building. They appear to have been derived from Dalmatia.

The drip-mouldings appear on the façades etc. below all the caves. The church has a nine-bayed narthex. The central bays of the narthex are roofed with saddle roofs on walls rising above the side-bays, which have lean-to roofs. This fact, with the feature of the drip-moulding, gives the façade quite a Lombard appearance and at once calls to mind such churches in Genoa as...

So far it will be seen that while Byzantine influence has been considerable, it has by no means completely dominated the Servian churches. The dome has entered in from Byzantium but—it is placed just over a simple oblong.

M. Millet would derive the Kursunlija type from S. Sophia, Constantinople. Would it not be better to say that while the dome, as well as types of windows, etc. came from the capital, they were used in connection the simple ground-plan, which must have existed already on Servian soil?

Then Kursunlija with its one floor.