The Effect of Intellectual Characteristics in Churches Buildings on their Design Characteristics

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Abstract

Architectural studies, both analytical and historical, highlight their interest in dealing with the various aspects of religious buildings, according to their different cultural affiliations. Church buildings are considered one of the important religious buildings that have received this attention, due to their antiquity and their continuity to the present time and their wide spread in multiple civilizations. Studies have focused on dealing with the role of religious intellectual characteristics in influencing the design characteristics of the church building, depending on the objective of each study, but they agree on the clarity of the relationship between the two sides in a way that is no less important than the functional relationship between them. They also agree on the change in design characteristics over time in light of the change in some intellectual concepts related to the change in other factors affecting design.

From the evaluation of the available knowledge about church buildings, the importance of studying the design characteristics of church buildings in Iraq, in general, and the characteristics of the internal space organization, in particular in the light of religious intellectual concepts, was revealed. This is due to the lack of specialized local studies, the dispersion of knowledge in global studies, and the inability to apply their theoretical frameworks to local production. Iraq in the light of religious intellectual concepts. For the purpose of solving this problem, the research methodology came to include building a theoretical framework capable of describing the relationship between form and meaning in the architecture of churches first, then putting forward hypotheses and determining the method of measurement secondly, and then applying it to the buildings of local churches to extract changes in their design characteristics that pertain to internal spaces and related to the change of intellectual characteristics religious.

Keywords: Churches Style, Intellectual Characteristics, Design Characteristics

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[2] المؤلف المراسل

تأثير الخصائص الفكرية في مباني الكنائس على خصائصها التصميمية

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المستخلص

تبرز الدراسات المعمارية، على حد سواء التحليلية والتاريخية، اهتمامهم بالتعامل مع الجوانب المختلفة للمباني الدينية، وفقًا لانتماءاتها الثقافية المختلفة. تعتبر مباني الكنيسة واحدة من المباني الدينية المهمة التي حصلت على هذا الاهتمام، بسبب العصور القديمة واستمرارية في الوقت الحاضر وانتشارها على نطاق واسع في حضارات متعددة.

ركزت الدراسات على التعامل مع دور الخصائص الفكرية الدينية في التأثير على خصائص تصميم مبنى الكنيسة، اعتمادًا على هدف كل دراسة، لكنهم يتفقون على وضوح العلاقة بين الجانبين بطريقة لا تقل مهم من العلاقة الوظيفية بينهما. كما يتفقون على التغيير في خصائص التصميم بمرور الوقت في ضوء التغيير في بعض المفاهيم الفكرية المتعلقة بالتغيير في العوامل الأخرى التي تؤثر على التصميم.

من تقييم المعرفة المتاحة حول مباني الكنيسة، تم الكشف عن أهمية دراسة خصائص تصميم المباني الكنسية في العراق ، بشكل عام ، وخصائص منظمة الفضاء الداخلية ، وخاصة في ضوء المفاهيم الفكرية الدينية. ويرجع ذلك إلى عدم وجود دراسات محلية متخصصة ، وتشتت المعرفة في الدراسات العالمية ، وعدم

القدرة على تطبيق أطرهم النظرية على الإنتاج المحلي. العراق في ضوء المفاهيم الفكرية الدينية. لغرض حل هذه المشكلة ، أصبحت منهجية البحث تشمل بناء إطار نظري قادر على وصف العلاقة بين الشكل والمعنى في بنية الكنائس أولاً ، ثم طرح الفرضيات وتحديد طريقة القياس ثانياً ، ثم تطبيقها إلى مباني الكنائس المحلية لاستخراج التغييرات في خصائص التصميم التي تتعلق بالمساحات الداخلية والمرتبطة بتغيير الخصائص الفكرية الدينية.

الكلمات المفتاحية: أسلوب الكنائس، الخصائص الفكرية، خصائص التصميم

Introduction

Religious buildings acquire a significant importance throughout history be researchers in different fields. Among these fields were the architectural studies of religious building which consider these building as the record for the cultural, social and religious civilization of a nation for fourteen centuries. Most of these studies were of historical and archeological nature and quit few paid attention to the to the impact of the religious aspect on the design characteristics although the agree on its importance.[1]

The importance of studying the churches in Iraq came from the validity of the treaties which connect the architectural form with the religious aspect, and the lack of analytical studies and that constitutes the research problem which can be of the study

To solve the problem the study a new theoretical farm was established in a way to be able to explain the relation between the form and meaning in churches in general and Iraq in particular.

Definitions and terms related to Christian religious buildings varied in terms of their areas of use and the purpose of this use. This chapter focuses on presenting some important definitions and information related to the different aspects of church buildings, with the aim of defining the terms and concepts used accurately and directly related to church buildings in Iraq. This chapter also deals with the general framework of the factors affecting the architectural characteristics of church buildings in general, with a focus on the nature of the influence of the religious factor. This is done by understanding its most prominent aspects and contents, which are common and similar in human thought in general. .[2]

1- Church buildings Concepts in General:

The architectural, archaeological, and historical literature contained abundant and varied information on church buildings with regard to their definitions, types, components, origins, emergence, and functions. This information comes within different frameworks to serve the purpose and scope of each study. For the purpose of defining research directions and the accuracy of the terms and concepts used in relation to churches in Iraq, this information will be presented and dealt with in the following paragraphs.[3]

2- The term of church and its synonyms:

Church is a term with two meanings. The first meaning relates to social-religious aspects, and the second is related to the architectural aspect.

With regard to the first meaning, religious sources indicated that the term "church" was mentioned in the Bible for the first time to denote "the assembly of the people as a political force", and it is a meaning taken from the Greek (Ecclesia) [4]. As for the linguistic sources, they attributed the origin of the term to the Aramaic word "Knoshta" * which means the assembly or the group and can That the meaning of the church as a group is linked site Particular geography(Called local church). And he has It comes to denote the religious group absolutely [5]

As for the Second meaning, it at other times also appeared in religious verses in the Bible to refer to a meeting place for the performance of various collective religious duties and ceremonies As for the synonyms of this term, there were many and varied in the time of its emergence, its cause and the nature of its use. And as listed below [1]

1- church house or community house (Domus Ecclesiae):The name has appeared since the beginnings of the Christian religion, as indicated by historical studies. This name refers to the analogy of prayer to home. [6]

2- basilica (Basilica):It means the king's hall according to the Roman usage, and the buildings of the Roman-Western churches have been specialized in this designation since the fourth century AD. This name was later applied in other geographical locations to buildings constructed in a longitudinal manner, whose longitudinal axis ends with the altar and the priest's chair.[7]

3- In general, this designation has been associated with a specific building style and a specific historical period.

The cathedral: It pertains to a certain type of church building. The name is derived from the word cathedra (Cathedra) which means the chair or the throne, as the church that is the seat of a religious leadership was called the cathedral. The Gothic era was characterized by the emergence of this label in response to the functional-religious need in that period. [8] this designation refers to a limited number of churches associated with religious functional requirements.

In general, this term (church) carries a meaning that indicates belonging to the group and obedience to a religious-social leadership, and carries another meaning related to the architectural elements used. It has specialized in ancient historical sources.

From the foregoing, it becomes clear that the term "church" is more comprehensive than all its synonyms, which varied in the time of its appearance, its cause, and the nature of its use as a definition of the place of prayer designated for the Christian community. Because of the association of this term with social-religious and architectural aspects, the phrase "church building" will be used in the research chapters to clearly indicate what is related to the architectural formation of the building.

3- The Emergence OF churches buildings and its growth

By reviewing various literatures, both historical and architectural, we found that the oldest found model of a church building is a house built or adapted according to religious requirements. The sources mention that its history dates back to the year230 AD and is located on the right bank of the Euphrates River in a location called Al-Salihiya (in Syria) [7]. This church was a space gathering around a central courtyard to avoid any unwanted external interference [7]. The famous historian Osbius states that the emergence of the need for larger places of worship coincided with the increase in the number of believers, so that these places would be their own and not pivotal. From the previous buildings it consisted of a rectangular room as a meeting room for prayer, facing east, and a smaller room for baptisms, which has the same elements as the meeting hall and is connected to it through another space, which is the education space for non-baptized people, and there is a room for preparation The bread and entrance space, in addition to a roofed outer space (Fig. 1) Five types of church buildings can be classified in

relation to the time period of their existence, as follows: [7]

1- Houses of prayer: They existed from the beginnings of the spread of the Christian religion until the third century, and they were houses pivoted to perform rituals of worship collectively. Historical studies indicate its presence in various cities, including Mesopotamia.

2- Funerary churches at the cemeteries: They appeared since the first century AD, as indicated by archaeological and historical sources. It had a specific function limited to performing certain ceremonies at certain times.

3- City churches: They are buildings dedicated to worship that appeared since the second century AD in a limited manner, then this pattern continued and became known in all countries of the world.

4- Monastery churches: - They appeared after the fourth century AD (the beginning of the appearance of monasteries), and they are special for a certain category to perform various religious rituals, both collective and individual, and serve as a center for the monastery. [7]

5- Churches honoring the martyrs: - They appeared in the fourth century (after the Peace of Constantinople). These churches include the remains of people of religious status to honor them with special rites and rituals. These buildings are also called shrines, and some of these buildings have developed to be dedicated to performing collective religious rituals similar to city churches, such as the old and contemporary St. Peter's Church (Vatican) and St. Paul's Church. (The shape) as shown in figure (1). A tradition spread in most Christian sects of the need to build a church building on the presence of the remains of one of the martyrs or part of their property, so that the churches of cities and churches honoring the martyrs merged as shown in figure (2).
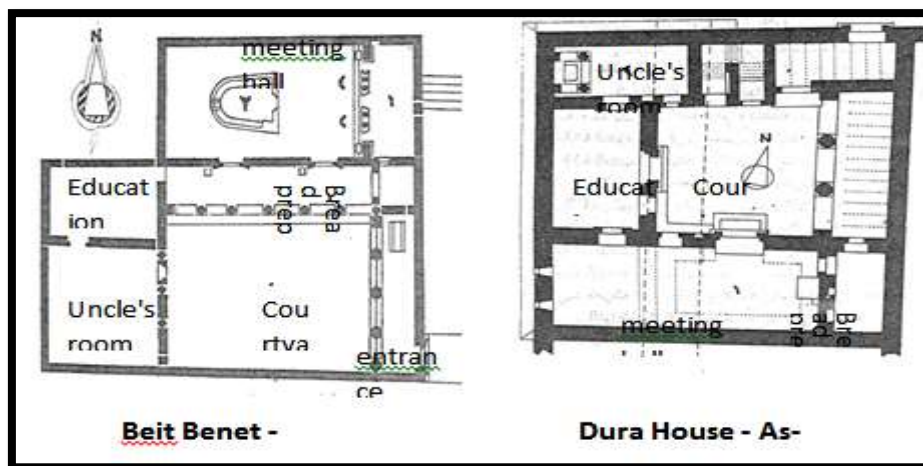

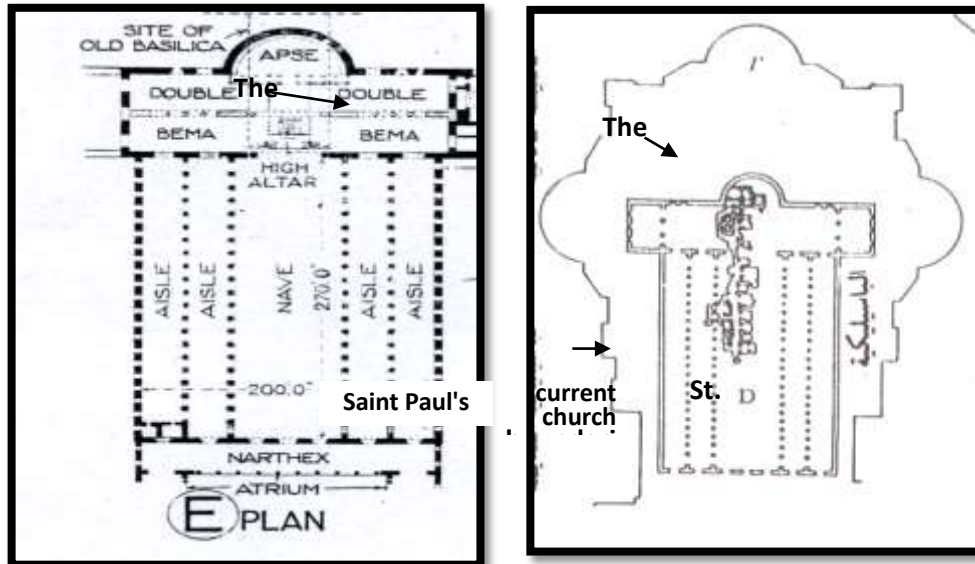**Figure (1): The first place –the meeting**

source [8]

Figure (2): Churches honoring the martyrs and the source Fletcher, 1971

4- Characteristics of intellectual Christian religion:

A lot of literature on the philosophy of religions and the history of civilizations presents the general frameworks and features of all religions in general, and the heavenly ones in particular. Despite the difference in the method of discourse and in the objectives, it can be said that they are unanimously agreed that religions include two basic aspects: the theoretical side and the practical side.

The theoretical side represents the belief and opinion held by man [9]. The theoretical aspect is presented on the grounds that it represents the belief and opinion held by [9]. Or more comprehensively, it represents the theoretical realizations by which man explains his existence [1]. As for the practical aspect, it is embodied through human behavior derived from ethical ideals [4]And in the rituals and religious duties that people perform [9]. One of the most important aspects that is related to this interpretation is the expression of the human position on the idea of death and after death and the view of the universe, as well as the human expression on the theoretical side of his position on nature.[10] Some studies indicate, within the practical aspect, that it is

embodied through the form of governance, politics and administration .[10]

From the foregoing, we can pick up the possibility of presenting the Christian religious intellectual features clearly and objectively on the basis of the theoretical and practical sides.

The Eastern and Western liturgies have agreed, since the beginning of their organization of rituals, to distinguish three main spaces: the space of the Holy of Holies (Sanctuary) and symbolizes the sky, and the space of the choir (choir) and symbolizes paradise, and the space of the nave or temple (nave) and symbolizes the earth [4] All the ritual meanings and the dynamic organization of the rituals revolve around the space of the Holy of Holies as the sacred private space that symbolizes the divine world and defines the space through the presence of the altar within it. The rest of the spaces are organized within the framework of organizing the relationship with the space of the Holy of Holies. The literature also describes the physical characteristics of the altar table in terms of building materials, dimensions, material elements placed on it, and the location of their location within the space of the Holy of Holies. The literature also distinguishes between the laity

and the clergy through the places of seating and the spaces allowed to be used and the function of the laity and the clergy [11]

In churches that adopt a hierarchical view of the Church, emphasis is placed on that view through spatial, functional, and symbolic organization. The role of the word, movement, and symbolic material elements is equally prominent, and the performance of reading, movement, and the use of material symbols is the right of the clergy only and is distributed according to their hierarchy. Where the right to enter the holy of holies and the space of the sacred altar is for those who are in the highest rank in the clergy only, and the rituals that take place in the holy of holies are considered sacred and not available to everyone, but rather they are led by the sole right of certain people on behalf of the public. From this point of view, it appeared clearly that the space of the Holy of Holies is isolated kineticly all the time from the space of the unholy public temple, as well as it is isolated visually through physical isolation with a door or a curtain, and it does not appear visually to the public except at specific times to express bringing to heaven and on earth. [12]

Also, the direction of the worshipers (public and clergy) towards the east is an expression of the appearance of Christ and the expectation of his second coming. [13]

The Syriac churches (Eastern and Western) are distinguished by an emphasis on the movement between the Temple and the Holy of Holies by the clergy (the processions) and the privacy of the sacred space (the space of the altar).

As for the churches that look at the church as a group, the role of education and readings in their rituals is highlighted, and the reliance on movement and rituals almost disappears. To reflect the philosophy of collective participation. [10]

In churches with an organic hierarchical organization, the principle of participation and the orientation of the clergy to pray towards the public was reflected in the spatial convergence between the private sacred space and the public space, the removal of visual insulators, and the reduction of the effect of kinetic isolation, which gives the feeling of access by the public to the sacred space within the framework of a greater role for the word compared to movement. and material symbols.[14]

Thus, it turns out that there are three different theological propositions with regard to the theological view of the Church as a group. It is the hierarchical church, the organic church, and the hierarchical-organic church, but it is based on basic religious constants, which is the declaration of salvation in Christ. The discrepancies appear in the view of the relationship between man and God, in the view of the universe, and in the philosophy of rituals and collective prayer.

Although these three propositions appeared successively over time, they can all exist in a specific temporal or spatial framework, i.e. the evolutionary aspect of the propositions of church theology means the emergence of new intellectual interpretations and directions adopted by a particular group with the existence of other propositions. [15]

Through these three propositions, we can pick up the different schools of thought, each of which adopts one of these propositions in the church's theology.

And through the practical aspects of collective worship, it was found that the organization of the internal spaces plays a major role in performing rituals and reflecting the symbolic aspects associated with the fixed and changing theoretical

aspects, in addition to the role of the word, movement, and various material elements. [8]

5- Church Architectural Styles:-

5-1- The early Christian architecture style (architecture Christian Early) suggests the beginnings of this style to the Roman era in Rome (the beginnings of early Christianity), including the Apostolic architecture style until the third century when there were no church buildings. [16] .

The dead (catacombs) in Rome, and the early Christians used to hold all their meetings and perform their religious rites in secret and delicate circumstance, [Architecture in early Christian art was in its formal form and designs and of two types. [16], as shown in figure (3).
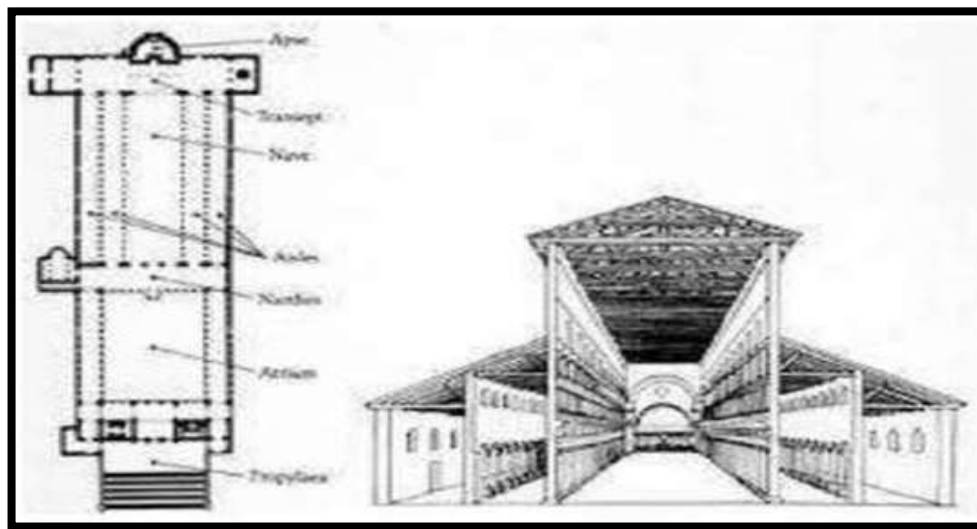

Figure (3): (Illustrating the basilica of the Buried church leaders, plan Source: [16]

5-1-1- Building Centralized: The baptisteries (or mausoleums) or the shrines of the martyrs were Martyria was built on a central plan, and it was either circular or polygonal. One of the clearest examples of the traditional house style is the one opposite the Baptistery of St. John in Laterano (Rome), Parts of it date back to about the year 313.

Another famous example is the tomb of St. Constanta (Constanza Santa) with a dome from the fourth century A.D. in Rome .[17], as shown in Figures (4) and (5) , [16].
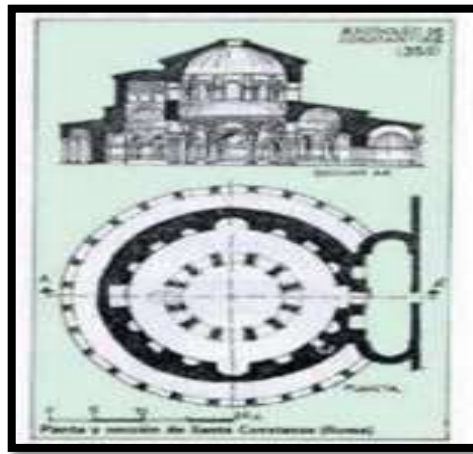
Figure (5): shows buildings with a central axis
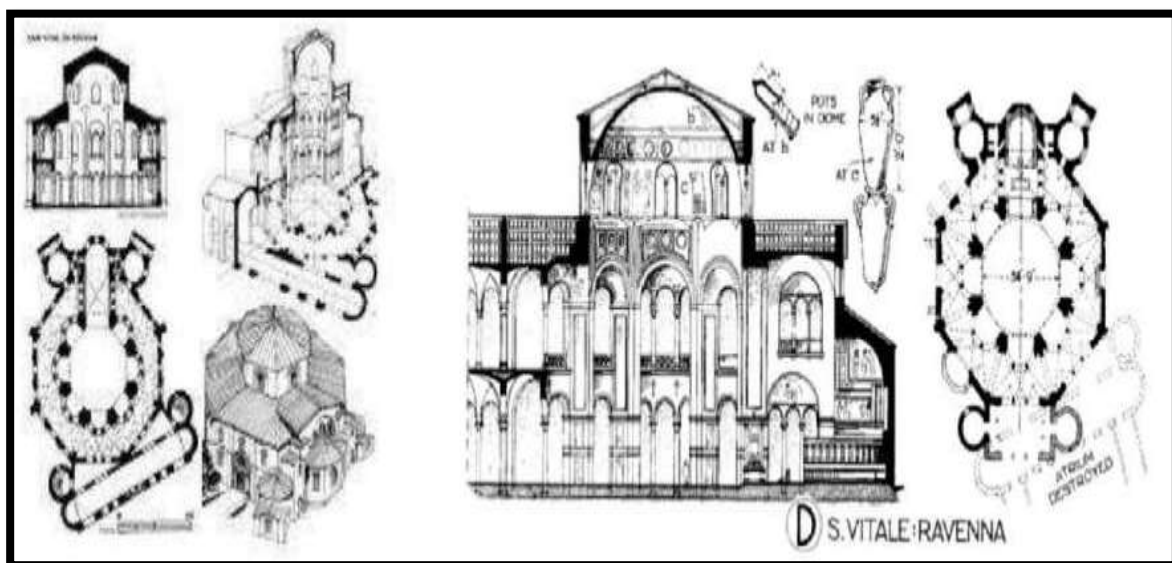
Source [8]

Figure (4): The central buildings

Source [17]

The style of church architecture in the Byzantine era (1453-525 AD):

The Christian religious buildings that were built in the Byzantine Empire are divided into four different styles, which are [18]:

5-3-1- The basilica style with a wooden ceiling, such as the Church of Saint Mary in Constantinople.

5-3-2- Buildings with a central axis such as the Church of San Vitale in Ravenna, Italy, as shown in the two figures.

5-3-3- Churches covered with a dome, such as the Church of Hagia Sophia (Safia Hagia) in Constantinople, as shown in Figure (5), which is one of the glories of Byzantine architecture built by Emperor Justinian It turned into a mosque after the Ottoman conquest, but later it was lost It became a museum and now it is back a mosque.
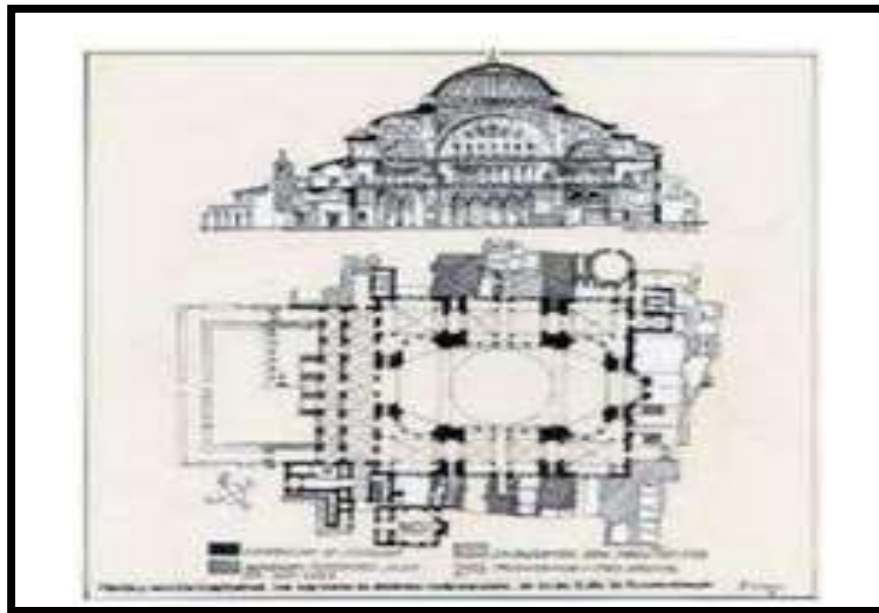
Figure (6): Hagia Sophia Church

Source [9]

5-4- For a church with a plan (the Greek equilateral cross) [9] as in Figure (7).
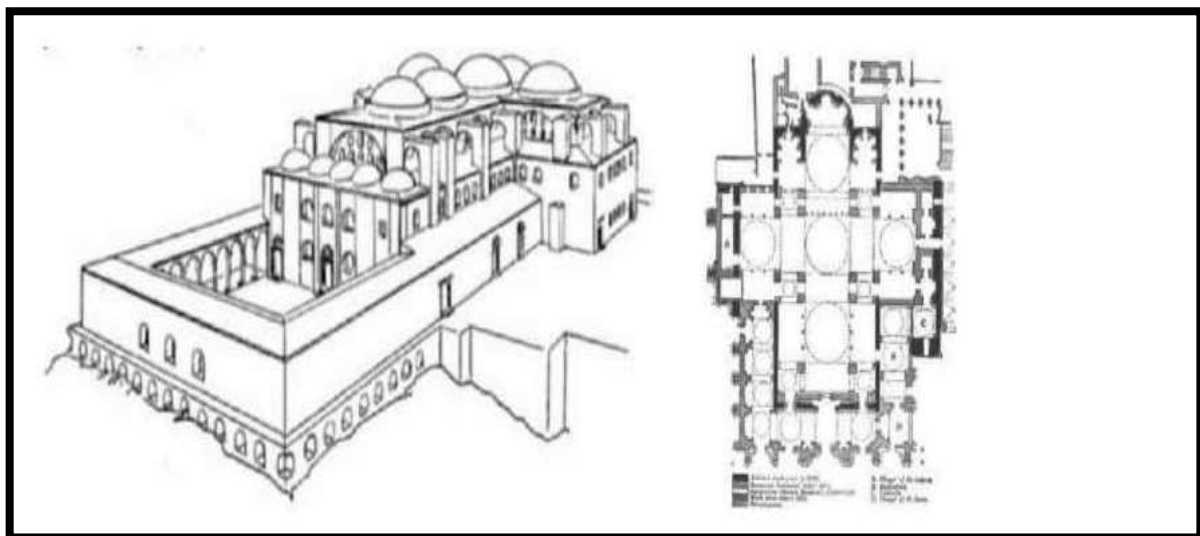

Figure (7): T-style of (St mark's basilica) Cathedral

Source [9]

5-3- Gothic ecclesiastical architecture (1160-1530):

Generally called the pointed style of medieval architecture prevalent in Western Europe from the 12th to the 16th centuries. Its main characteristics are pointed arches, ribbed vaults, flying buttresses, and large windows of stereoscopic art glass. Gothic architecture emphasizes vertical lines as Romanesque emphasizes horizontal lines. The pointed arch made possible thinner and lighter weight than had been possible before. The roof ceased to be just a cover and became one of the dominant architectural buildings [10].

5-4- The style of church architecture of the Renaissance (1420-1600):

It began in Italy in which the Gothic tradition was abandoned, and a return to the forms of ancient Rome for architectural inspiration. There was a revival of the circular domes and other classical features that characterized the orders of Romanesque architecture. Renaissance architects rejected the pointed arches, cross vaults, and vertical features of the Gothic era. Although they rarely attempted to actually copy the ancient forms or types of buildings. Renaissance architecture reflects the era's duality, its love of order, symmetry, luxury, and grace [19].

6- church architectural elements

We will discuss the basic architectural elements that make up the church architecture, which are divided into two parts on the mass level in terms of the number of sections and external parts, and the second on the detailed level (the internal parts of the church).

6-1 The mass level divides the church building from Where a block into several sections:-

1- Services part.
2- 2-An area for external activities (the yard) is the place of prayer, which is an external place in which prayers are held on some days of the year and sometimes in the summer, and most of the time there is a well [20]Classrooms.

Administrative offices, conference roomsA mixed-use facility that includes a gymnasium and church classrooms. This large central space, designed allows for flexibility in its use. (Open areas do not contain fixed pews).

The church tower which Directing the eyes vertically the towers were often the highest architectural feature in the area, which served as a landmark for people to find. The church building is usually low.the church from any part of the city

[8]. The ringing of church bells is to indicate when congregants gather for a church service. It can also be used for other purposes such as warning of danger. [10] Some modern churches may incorporate other elements into the church building that are more commonly found in community centers. It may include a cafeteria for meals. light, nursery and school rooms for the younger members of the church or prayer closets, where one could pray on site but separate from the congregation [8]. In detail, starting with the outer space before entering the inner space and its components the entrance to the church,

6-2 The outer courtyard (Atrium)

6-3- The church building and the church were divided from east to west into four sections.

The internal sections of the church are four:-

The first section: from the east side, the temple and the altar, surmounted by a wooden dome resting on four columns. Behind the altar is the eastern wall in the form of an apse. In front of the apse is a semi-circular amphitheater of marble for priests to sit according to their ranks. Decorated, separating the temple from the rest of the church with a barrier called the veil of the temple, made of precious wood and decorated with relief carvings of Christ, the Virgin Mary, the apostles, and the martyrs [1].

The second section: the choir, which is called the high place, it is located between Jerusalem and the choir, and a barrier of wood or marble separates them) Iconostasis) and in the middle of it is the Jerusalem Gate. Only the priest or bishop and deacons are allowed to enter it during the service. [3]

The third section: It is designated for the worshipers (people), and it contains the nave of the

church and the side wings that contain the pulpit, and on the western side of the section is "the place used to perform special rituals such as (Easter Thursday) and is separated from (Narthex) with a wooden fence.

The fourth section: it is located on the west side and was designated for deacons, it contains the entry doors, and on the last side of this section is the baptismal place, and on the opposite side there is the "baptismal font [2] as in Figure (8).
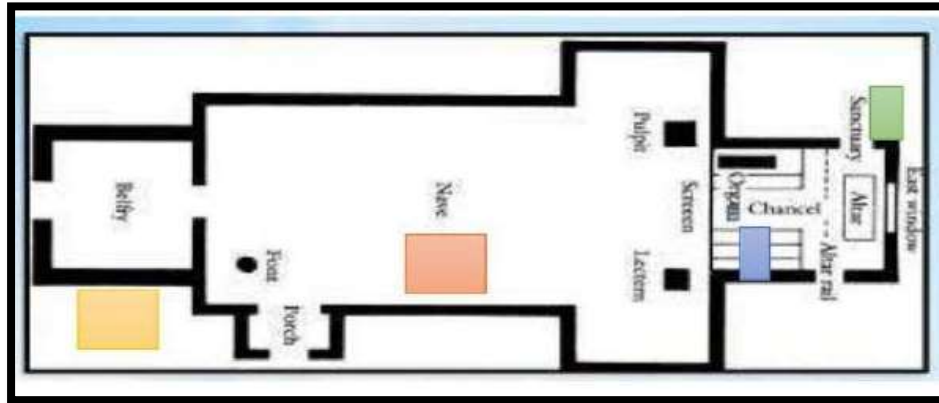

Figure (8) shows the church's internal departments

Source: researcher

Conclusion

1- Christian architecture diversified, expanded and developed due to its response to changes, developments, religious beliefs and rituals. And local traditions, to include churches, monasteries and cathedrals. The monasteries were distinguished by a distinctive feature, which is that they include the educational and residential section for the monks, a small church and other spaces, and cathedral buildings, and they are distinguished as the seat of the bishop.

2- The spatial organization of the architecture of church buildings is characterized by the possibility of looking at all spaces at the same time, to ensure an area free of Obstacles, without corridors, the possibility of expressing relationships in a simplified way, as there are two main spaces, the sacred space and seating space.

3- The styles of church architecture were divided into the style of early Christian architecture, characterized by its formal appearance and designs, and the two types of longitudinal halls and central buildings, the style of church architecture in the Byzantine era, which was formed in the Byzantine Empire into four styles, the style of Gothic ecclesiastical architecture, and the style of ecclesiastical architecture of the Renaissance.

4- The concept of intellectual characteristics in churches buildings includes two different dimensions. The first dimension refers to the physical aspect, which is mainly related to the physical form and the functional aspect. And the group of activities that it contains, while the group of characteristics expresses the appearance of a specific element or the relationship between a group of elements, and the architectural form in terms of mass, size,

scale, and consistency. At any time, the first dimension focuses on the elements associated with the elements that make up the building (structural structure) and materials, and the other dimension focuses on the ritual characteristics.

5- We conclude that the science of liturgy looks at the forms of worship, as it was before and until now, and in the place in which worship is practiced and all related things used and looks at how the practical embodiment of these rituals or intellectual characteristics.

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