

SOME DEVELOPMENTS OF ECCLESIASTICAL ARCHITECTURE

When we enter our churches of today we often admire the beautiful style in which they are built, but we seldom stop to realize that they represent the work of Christian architects for many centuries. The early Christians knew that the buildings dedicated to the service of God, should be as beautiful as they could make them. Thus they put forth their noblest efforts, and it is indeed interesting to follow their development. Each generation of Christians contributed its part, until the climax was reached in the work of the thirteenth century. It may seem strange that since the thirteenth century, little progress has been made in this line of work. Still when we consider the height to which ecclesiastical architecture was elevated at this period, we will realize the difficulty of surpassing it.

To study the early architectural efforts of the Christians, we should first turn to Rome. For as the Eternal City was the center of Christendom, it is only natural that we should seek there, our first examples of Christian art. However, owing to the persecutions, the Christians were not able to build churches to any extent before the fourth century. The catacombs, and rooms in private houses served as churches previous to this time. During the reign of Constantine the Great, in the early part of the fourth century, the faith and perseverance of the rapidly increasing numbers of Christians won for them the right of religious toleration. Then for the first time they were free to build churches, worthy of the divine religion in which they believed. Constantine was himself converted to the faith, and greatly aided them in this work.

The first churches of note were large rectangular halls which were modeled after, and took their name from, the Basilicas or law courts. This style developed rapidly. In order to leave more room for the congregation, an apse, a projection neither as high nor as wide as the church proper, and usually semicircular in form, was built out at one end for the altar. In this period, we also find the transept coming into use. This was the section of the church, between the nave and apse, and was for the use of the clergy. It was, however, quite different than our transepts of today, as it was considerably narrower than the

nave, and did not extend beyond the width of the church. Another feature of this time was the baldachin. This was a sort of canopy which was placed over the main altar. It was either suspended from the roof, or attached to the wall, or most commonly, supported by pillars. The colonade which ran along the sides of the law courts, was retained in the churches, and served to form the two aisles. The center aisle or body of the church was even at this time called the nave. In a few instances we find a double colonade at each side, thus making four aisles. Three of Rome's principal churches, St. John Lateran, St. Paul's and St. Mary Major, were founded during this period. St. Paul's was one of the churches having four aisles, and it retained its primitive style for over fourteen hundred years. It was destroyed by fire during the nineteenth century, and completely rebuilt. The other churches mentioned have been so remodeled during the course of centuries, that they no longer can be considered representative of this period.

Before we consider the Romanesque style, mention should be made of the round and octagonal churches, which were then prevalent in the East. They were never common in the West, although they undoubtedly exercised a strong influence on the development of the Romanesque and Gothic styles. They were not large enough for practical use, and eventually developed a cruciform plan.

From the fifth to the ninth century the growth of ecclesiastical architecture was rather slow. This was due to the unsettled condition of Europe caused by the Goths, Vandals, and Lombards. The slow development of these centuries, however, was more than made up for by the rapid growth in the following four centuries.

The style developed during the tenth, eleventh and twelfth centuries is generally called Romanesque. This name is misleading, as it would lead one to infer that it was exclusively developed in Rome. Such is not the case however, as it was the work of all the Christian countries of Europe. The reason for the name is probably due to the fact that Rome never adopted the Gothic system, and practically all of her churches are built in this style. Although the name Romanesque is generally accepted, we sometimes hear the work of this period called Norman, by writers of France and England.

The work of the architects of this period was not merely to make the churches more beautiful, but to make them more substantial. The roofs of the basilican churches were flat, and thus of necessity, they had to be made of wood. As a result, many of these churches had been destroyed by fire and the need of a relatively fireproof church was felt. The simplest solution of this problem was the rounded arch of stone for the roof of the nave and aisles. This device of vaulting, as it was called, solved the problem, but still it had its defects. A vault like this placed such a thrust, that is an outward pressure, on the walls and pillars, that it necessitated them being made of monstrous size. The outcome of this was that not enough space would be allowed for windows, and the interiors of the churches were dark and gloomy. It was to this problem the architects now turned their attention and the result of their labors was the transverse arch. This was an arch intersecting the aisle arch. It was the same width as the bay, (that is the distance between the pillars) and the number of these transverse arches depended on the number of bays. It is the same as we find in our churches of today, worked out with the pointed arch. This helped very much as the pressure was taken off the entire wall, and concentrated at certain points. To relieve the thrust at these points, the flat buttress was contrived. This was simply a solid structure of stone, projecting from the outside of the church wall.

The next step was to place a series of these transverse arches across the nave, in order to enlarge the clerestory windows, that is the windows in the upper part of the nave wall. Before this was attempted, the idea of the ribbed vault was excogitated. This was a band or moulding, placed at the intersection of the arches, and served to strengthen them. The main objection to the transverse rounded arch was the difficulty of vaulting anything but a square section with it. This problem was never successfully solved until the pointed arch came into use.

There were many other details which were evolved during this period, but it is impossible to speak of them all here. However, the development of the transept and the cruciform plan ought to be mentioned. By enlarging the transept, a square was formed at its intersection with the nave. It was only necessary then to strengthen the four pillars at the corners to enable domes and towers to be built. In this we see the Byzantine in-

fluence coming in. The cruciform plan was the next step. The enlarged transept formed the arms of the cross, and the choir built out behind the main altar completed the work.

Thus at the beginning of the thirteenth century, everything was in readiness for the Gothic arch, with all its useful and artistic effects. Just why the style which was developed almost entirely in this wonderful century is called Gothic, it is hard to say. This name is even more misleading than the name Romanesque. It seems probable that it was first used during the Renaissance, as a term of contempt. If this is true, it has lost that meaning, and now signifies the acme of perfection in ecclesiastical architecture.

The Gothic system was developed with the pointed arch as the main-spring. The source from which this arch came is not definitely known. It may have been excogitated by the architects of the time; or it may have been introduced from the East, where it seems to have been used earlier. If it was first used for its beauty, as seems probable, it was not long before its architectural value was realized. The longitudinal pointed arch crossed by the transverse pointed arches reduced the thrust on the walls and pillars to a minimum. The buttresses of the Romanesque style had relieved the thrust of the aisle arches on the outer wall, but nothing had been done to relieve the thrust of the nave arch. To diminish this pressure the thirteenth century architects devised the flying buttress. This was constructed by building the buttresses of the outer wall as high as the nave wall. This solid tower was weighed down with pinnacles, and from it, arches were thrown across to the nave wall at the point where the thrust was greatest. It did not form a counter thrust, but carried the pressure to the buttresses which were so built that they could easily sustain it. By the development of the Gothic arch and the flying buttress Gothic architecture was completed. The three most prominent features of this arch are the light thrust, the variations in height which it permitted, and finally its beauty from an artistic standpoint. With the flying buttress diminishing even the light thrust of the arch, the churches became mere frameworks of stone, filled in with glass.

As the sculpture, painting and glasswork developed along with architecture, we find in this period some of the most beau-

tiful buildings ever built. There are no churches of today which attract as much attention as those of the thirteenth century. Though showing the effects of age, they still excite admiration, and make one realize that they are buildings dedicated to the service of God. For example, it has been said of the Cathedral of Chartres, which was completed during this century, that "It is unquestionably the noblest interior in Christendom." (Article "Gothic Architecture" in Catholic Ency. by R. A. Cram). Gothic architecture "in its unsurpassed and unsurpassable perfection" (Article "Ecclesiastical Architecture" by Herbert Lucas in Cath. Ency.) is truly the result of man's noblest efforts in architecture. Since this period there has been practically no further development in this line of work.

Thus we have reviewed briefly the history of the architecture of today. We have considered the styles as they were developed in the cathedrals, but in doing this we have also considered the parish churches. For the latter, although they did not need all the structural development of the cathedrals, nevertheless were built on the same general principles. It is in the Gothic style that most of our churches are built. Consequently when we consider their beauty, we should remember that they are our heritages from the ages of faith.

—Bro. George Kinsella, O. P.

THE VOWS OF LOVE

Three living lilies to Thee, Lord,
With joyful hands I bring,
Three lilies white, that from the sward
Of my waste soul did spring!

To Thee, I bring these lilies fair,
Their hearts impearled with tears;
O may they live, a fragrant prayer,
To grace the dawning years!

—Bro. Gregory Herold, O. P.