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**The Principles
of Gothic
Ecclesiastical Architecture**

 **Publio**

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Elucidated by Question and Answer

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Minden jog fenntartva!

CHAPTER I.

DEFINITION OF GOTHIC ARCHITECTURE; ITS ORIGIN, AND THE DIVISION OF IT INTO STYLES.

Q. What is meant by the term "Gothic Architecture"?

A. Without entering into the derivation of the word "Gothic," it may suffice to state that it is an expression sometimes used to denote in one general term, and distinguish from the Antique, those peculiar modes or styles in which most of our ecclesiastical and many of our domestic edifices of the middle ages have been built. In a more confined sense, it comprehends those styles only in which the pointed arch predominates, and it is then often used to distinguish such from the more ancient Anglo-Saxon and Norman styles.

Q. To what can the origin of this kind of architecture be traced?

A. To the classic orders in that state of degeneracy into which they had fallen in the age of Constantine, and afterwards; and as the Romans, on their voluntary abandonment of Britain in the fifth century, left many of their temples and public edifices remaining, together with some Christian churches, it was in rude imitation of the Roman structures of the fourth century that the most ancient of our Anglo-Saxon churches were constructed. This is apparent from an examination and comparison of such with the vestiges of Roman buildings we have existing.

Q. Into how many different styles may English ecclesiastical architecture be divided?

A. No specific regulation has been adopted, with regard to the denomination or division of the several styles, in which all the writers on the subject agree: but they may be divided into seven, which, together with the periods when they flourished, may be generally defined as follows:

The Saxon Or Anglo-Saxon Style, which prevailed from the mission of Augustine, at the close of the sixth, to the middle of the eleventh century.

The Norman style, which may be said to have prevailed generally from the middle of the eleventh to the latter part of the twelfth century.

The Semi-Norman, Or Transition style, which appears to have prevailed during the latter part of the twelfth century.

The Early English, or general style of the thirteenth century.

The Decorated English, or general style of the fourteenth century.

The Florid Or Perpendicular English, the style of the fifteenth, and early part of the sixteenth century.

The Debased English, or general style of the latter part of the sixteenth and early part of the seventeenth century, towards the middle of which Gothic architecture, even in its debased state, became entirely discarded.

Q. What constitutes the difference of these styles?

A. They may be distinguished partly by the form of the arches, which are triangular-headed, semicircular or segmental, simple pointed, and complex pointed; though such forms are by no means an invariable criterion of any particular style; by the size and shape of the windows, and the manner in which they are subdivided or not by transoms, mullions, and tracery; but more especially by certain minute details, ornamental accessories and mouldings, more or less peculiar to particular styles, and which are seldom to be met with in any other.

Q. Are the majority of our ecclesiastical buildings composed only of one style?

A. Most of our cathedral and country churches have been built, or had additions made to them, at different periods, and therefore seldom exhibit an uniformity of design; and many churches have details about them of almost every style. There are, however, numerous exceptions, where churches have been erected in the same style throughout; and this is more particularly observable in the churches of the fifteenth century.

Q. Were they constructed on any regular plan?

A. The general ground plan of cathedral and conventual churches was after the form of a cross, and the edifice consisted of a central tower, with transepts running north and south; westward of the tower was the nave or main body of the structure, with lateral aisles; and the west front contained the principal entrance, and was often flanked by towers. Eastward of the central tower was the choir, where the principal service was performed, with aisles on each side, and beyond this was the lady chapel. Sometimes the design also comprehended other chapels. On the north or south side was the chapter house, in early times quadrangular, but afterwards octagonal in plan; and on the same side, in most instances, though not always, were the cloisters, which communicated immediately with the church, and surrounded a quadrangular court. The chapter house and cloisters we still find remaining as adjuncts to most cathedral churches, though the conventual buildings of a domestic nature, with which the cloisters formerly also communicated, have generally been destroyed. Mere parochial churches have commonly a tower at the west end, a nave with lateral aisles, and a chancel. Some churches have transepts; and small side chapels or additional aisles have been annexed to many, erected at the costs of individuals, to serve for burial and as chantries. The smallest class of churches have a nave and chancel only, with a small bell-turret formed of wooden shingles, or an open arch of stonework, appearing above the roof at the west end.

St. Martin's, Leicester, circa A. D. 1250. St. Martin's, Leicester, circa A. D. 1250.

CHAPTER II.

OF THE DIFFERENT KINDS OF ARCHES.

Q. Do the distinctions of the different styles, as they differ from each other, depend at all upon the form of the arch?

A. To a certain extent the form of the arch may be considered as a criterion of style; too much dependence, however, must not be placed on this rule, inasmuch as there are many exceptions.

Q. How are arches divided generally, as to form?

A. Into the triangular-headed or straight-lined pointed arch, the round-headed arch, and the curved-pointed arch; and the latter are again subdivided.

Q. How is the triangular-headed or straight-lined pointed arch formed, and when did it prevail?

A. It may be described as formed by the two upper sides of a triangle, more or less obtuse or acute. It is generally considered as one of the characteristics of the Anglo-Saxon style, where it is often to be met with of plain and rude construction. But instances of this form of arch, though they are not frequent, are to be met with in the Norman and subsequent styles. Arches, however, of this description, of late date, may be generally known by some moulding or other feature peculiar to the style in which it is used.

Triangular-headed or straight-lined pointed arch

Q. What different kinds of round-headed arches are there?

A. The semicircular arch (fig. 1), the stilted arch (fig. 2), the segmental arch (fig. 3), and the horse-shoe arch (fig. 4).

Figs. 1-4

Q. How are they formed or described?

A. The semicircular arch is described from a centre in the same line with its spring; the stilted arch in the same manner, but the sides are carried downwards in a straight line below the spring of the curve till they rest upon the imposts; the segmental arch is described from a centre lower than its spring; and the horse-shoe arch from a centre placed above its spring.

Q. During what period of time do we find these arches generally in use?

A. The semicircular arch, which is the most common, we find to have prevailed from the time of the Romans to the close of the

twelfth century, when it became generally discarded; and we seldom meet with it again, in its simple state, till about the middle of the sixteenth century. It is in some degree considered as a characteristic of the Anglo-Saxon and Norman styles. The stilted arch is chiefly found in conjunction with the semicircular arch in the construction of Norman vaulting over a space in plan that of a parallelogram. The segmental arch we meet with in almost all the styles, used as an arch of construction, and for doorway and window arches; whilst the form of the horse-shoe arch seems, in many instances, to have been occasioned by the settlement and inclination of the piers from which it springs.

Q. Into how many classes may the pointed arch be divided?

A. Into two, namely, the simple pointed arch described from two centres, and the complex pointed arch described from four centres.

Q. What are the different kinds of simple pointed arches?

A. The Lancet, or acute-pointed arch; the Equilateral pointed arch; and the Obtuse-angled pointed arch.

Q. How is the lancet arch formed and described?

A. It is formed of two segments of a circle, and its centres have a radius or line longer than the breadth of the arch, and may be described from an acute-angled triangle. (fig. 5.)

Q. How is the equilateral arch formed and described?

A. From two segments of a circle; the centres of it have a radius or line equal to the breadth of the arch, and it may be described from an equilateral triangle. (fig. 6.)

Figs. 5-7

Q. How is the obtuse-angled arch formed and described?

A. Like the foregoing, it is formed from two segments of a circle, and the centres of it have a radius shorter than the breadth of the arch; it is described from an obtuse-angled triangle. (fig. 7.)

Q. During what period were these pointed arches in use?

A. They were all gradually introduced in the twelfth century, and continued during the thirteenth century; after which the lancet arch appears to have been generally discarded, though the other two prevailed till a much later period.

Q. What are the different kinds of complex pointed arches?

A. Those commonly called the Ogee, or contrasted arch; and the Tudor arch.

Q. How is the ogee, or contrasted arch, formed and described?

A. It is formed of four segments of a circle, and is described from four centres, two placed within the arch on a level with the spring, and two placed on the exterior of the arch, and level with the apex or point (fig. 8); each side is composed of a double curve, the lowermost convex and the uppermost concave.

Figs. 8, 9

Q. When was the ogee arch introduced, and how long did it prevail?

A. It was introduced early in the fourteenth century, and continued till the close of the fifteenth century.

Q. How is the Tudor arch described?

A. From four centres; two on a level with the spring, and two at a distance from it, and below. (fig. 9.)

Q. When was the Tudor arch introduced, and why is it so called?

A. It was introduced about the middle of the fifteenth century, or perhaps earlier, but became most prevalent during the reigns of Henry the Seventh and Henry the Eighth, under the Tudor dynasty, from which it derives its name.

Figs. 10 to 12

Q. What other kinds of arches are there worthy of notice?

A. Those which are called foiled arches, as the round-headed trefoil (fig. 10), the pointed trefoil (fig. 11), and the square-headed trefoil (fig. 12). The first prevailed in the latter part of the twelfth and early part of the thirteenth century, chiefly as a heading for niches or blank arcades; the second, used for the same purpose, we find to have prevailed in the thirteenth century; and the latter is found in doorways of the thirteenth, fourteenth, and fifteenth centuries. In all these the exterior mouldings follow the same curvatures as the inner mouldings, and are thus distinguishable from arches the heads of which are only foliated within.

DOORWAY. St. Thomas's, Oxford, circa 1250. St. Thomas's, Oxford, circa 1250.

Anglo-Saxon Doorway, Brixworth Church, Northamptonshire. (7th cent.) Anglo-Saxon Doorway, Brixworth Church, Northamptonshire. (7th cent.)

CHAPTER III.

OF THE ANGLO-SAXON STYLE.

Q. During what period of time did this style prevail?

A. From the close of the sixth century, when the conversion of the Anglo-Saxons commenced, to the middle of the eleventh century.

Q. Whence does this style appear to have derived its origin?

A. From the later Roman edifices; for in the most ancient of the Anglo-Saxon remains we find an approximation, more or less, to the Roman mode of building, with arches formed of brickwork.

Q. What is peculiar in the constructive features of Roman masonry?

A. Walls of Roman masonry in this country were chiefly constructed of stone or flint, according to the part of the country in which the one material or other prevailed, embedded in mortar, bonded at certain intervals throughout with regular horizontal courses or layers of large flat Roman bricks or tiles, which, from the inequality of thickness and size, do not appear to have been shaped in any regular mould.

Portion of the Fragment of a Roman Building at Leicester. Portion of the Fragment of a Roman Building at Leicester.

Q. What vestiges of Roman masonry are now existing in Britain?

A. A fragment, apparently that of a Roman temple or basilica, near the church of St. Nicholas at Leicester, which contains horizontal courses of brick at intervals, and arches constructed of brickwork; the curious portion of a wall of similar construction, with remains of brick arches on the one side, which indicate it to have formed part of a building, and not a mere wall as it now appears, at Wroxeter, Salop; and the polygonal tower at Dover Castle, which, notwithstanding an exterior casing of flint, and other alterations effected in the fifteenth century, still retains many visible features of its original construction of tufa bonded with bricks at intervals. Roman masonry, of the mixed description of brick and stone, regularly disposed, is found in walls at York, Lincoln, Silchester, and elsewhere; and sometimes we meet with bricks or stone arranged herring-bone fashion, as in the vestiges of a Roman building at Castor, Northamptonshire, and the walls of a Roman villa discovered at Littleton, Somersetshire.

Q. Have we any remains of the ancient British churches erected in this country in the third, fourth, or fifth centuries?

A. None such have yet been discovered or noticed; for the ruinous structure at Perranzabuloe in Cornwall, which some assert to have been an ancient British church, is probably not of earlier date than the twelfth century; and the church of St. Martin at Canterbury, built in the time of the Romans, which Augustine found on his arrival still used for the worship of God, was rebuilt in the thirteenth century, but, to all appearance, with the same materials of which the original church was constructed.

Q. Do any of our churches bear a resemblance to Roman buildings?

A. The church now in ruins within the precincts of the Castle of Dover presents features of early work approximating Roman, as a portal and window-arches formed of brickwork, which seem to have been copied from those in the Roman tower near adjoining; the walls also have much of Roman brick worked up into them, but have no such regular horizontal layers as Roman masonry displays. The most ancient portions of this church are attributed to belong to the middle of the seventh century. The church of Brixworth, Northamptonshire, is perhaps the most complete specimen we have existing of an early Anglo-Saxon church: it has had side aisles separated from the nave by semicircular arches constructed of Roman bricks, with wide joints; these arches spring from square and plain massive piers. There is also fair recorded evidence to support the inference that this church is a structure of the latter part of

the seventh century. Roman bricks are worked up in the walls, in no regular order, however, but indiscriminately, as in the church at Dover Castle.

Pilaster Rib-work Arch, Brigstock Church. Pilaster Rib-work Arch, Brigstock Church.

Q. What peculiarities are observable in masonry of Anglo-Saxon construction?

A. From existing vestiges of churches of presumed Anglo-Saxon construction it appears that the walls were chiefly formed of rubble or rag-stone, covered on the exterior with stucco or plaster, with long and short blocks of ashlar or hewn stone, disposed at the angles in alternate courses. We also find, projecting a few inches from the surface of the wall, and running up vertically, narrow ribs or square-edged strips of stone, bearing from their position a rude similarity to pilasters; and these strips are generally composed of long and short pieces of stone placed alternately. A plain string course of the same description of square-edged rib or strip-work often runs horizontally along the walls of Anglo-Saxon remains, and the vertical ribs are sometimes set upon such as a basement, and sometimes finish under such.