The Chronology of Perpendicular Architecture in Oxford

By R. H. C. Davis

PERPENDICULAR architecture started at the point at which Gothic architecture had reached its logical end. The history of Gothic architecture had been the story of the gradual discovery of the structural principles of the arch, of the application of that discovery, and of repeated attempts to build bigger and better stone roofs poised on ever slenderer supports. By the 15th century the masons had mastered the science of arched building. They had reduced the structural supports to a minimum, they had already invented the four-centred arch and the fan vault. The structural development of Gothic was then complete. The builder was free to concentrate on points of taste.

For this reason there was a uniformity within the diversity of Perpendicular architecture. The structural framework was always the same, however much the ornament might vary. For this reason also it is hard for us to guess the date of a Perpendicular building. There was no longer the universal race to keep up to date with the latest inventions. Instead there were fashions, and most of these fashions were local, as in East Anglia or the Cotswolds. But even the fashions did not form, as it were, water-tight partitions. Both the patrons who paid for buildings and the actual masons could, and did, travel about England and carry their personal tastes from one district to another. The nave arcades of the Cotswold church of Chipping Norton are a case in point; they apparently date from the middle years of the 15th century,[1] yet they are copied from the nave arcades of Canterbury Cathedral (1377-1405).

The incidence of such 'freaks' is sufficient to discourage any attempt to trace the process by which Perpendicular architecture developed into Tudor. But by confining ourselves to the city and university of Oxford we can, I think, trace the development that occurred in one particular place. For in Oxford the amount of external influence does not seem to have been great. The founders of the colleges came, it is true, from outside, but they would seem to have been tactfully aware of the local patriotism of the university. The masons, on the other hand, were nearly all local men, schooled in the quarries of Headington and Taynton. Oxford did not, like London, get its stone—and with its stone its masons—from quarries as widely scattered as Huddleston in Yorkshire and Caen in Normandy. It was situated close to some of the

[1] See my article 'Masons' Marks in Oxon. and the Cotswolds', *Oxfordshire Arch. Soc. Report*, no. 84 (1938), 80.

finest quarries in England—quarries of sufficient importance to have a proud tradition of their own.

It is not surprising therefore that an Oxford school of architecture arose. Its strength can be seen in the college buildings. Throughout our period there was general agreement on what a college should aim at looking like. If it were of the ' grand ' type, like All Souls or Magdalen, it should look like New College. If it were of the ' little ' type like Brasenose or Corpus, it should aim at looking like Lincoln. But just as imitations of Michelangelo are not the same as Michelangelo, so All Souls is not the same as New College, nor Magdalen the same as All Souls. The differences may be in points of detail only, but it is just those points of detail that are revealing, for they show where the later master-masons failed to understand, or to sympathize with, their models.

It is my intention, therefore, to concentrate on these minor differences in an attempt to discover what, if anything, was developing behind the apparent uniformity of Oxford's architecture. But to do this it is necessary to establish a chronology of the buildings. Such a task, fortunately, is easier in Oxford than it is elsewhere. The archives of the colleges and of the university contain much information about the buildings, including in several cases the actual building accounts ; and these archives have mostly been published, thanks to the efforts of the Oxford Historical Society. Furthermore, in about the year 1668 Anthony Wood copied many documents, inscriptions, and coats of arms that have since disappeared, and David Loggan portrayed in a companion volume the aspect of the colleges before they had been embellished with attic storeys and battlements, or before the old buildings were swept away to give place to new.

I have therefore thought it profitable to collect (see the Appendix to this paper, pp. 83-9) all the available evidence for dating buildings in Oxford between 1350 and 1550. This has been done as a first step towards an architectural history of the period. But as the compiling of such a history will take time, I hope that I will be excused if I make a few preliminary and tentative observations now. Such observations, however, must be understood to apply to Oxford alone.

First, it is clear that Perpendicular architecture was introduced comparatively late into Oxford. The hall of Canterbury College (1364-78) and New College, begun in 1380, were the first buildings in the Perpendicular style. Moreover, if we exclude the chapel of St. Bartholomew at Cowley, whose date is unknown, there was no gradual transition from Decorated to Perpendicular in Oxford. Queen's College chapel, built between 1373 and 1380 was a purely Decorated building, with tracery somewhat like that which can still be seen in the east window of the south aisle at St. Mary Magdalene.

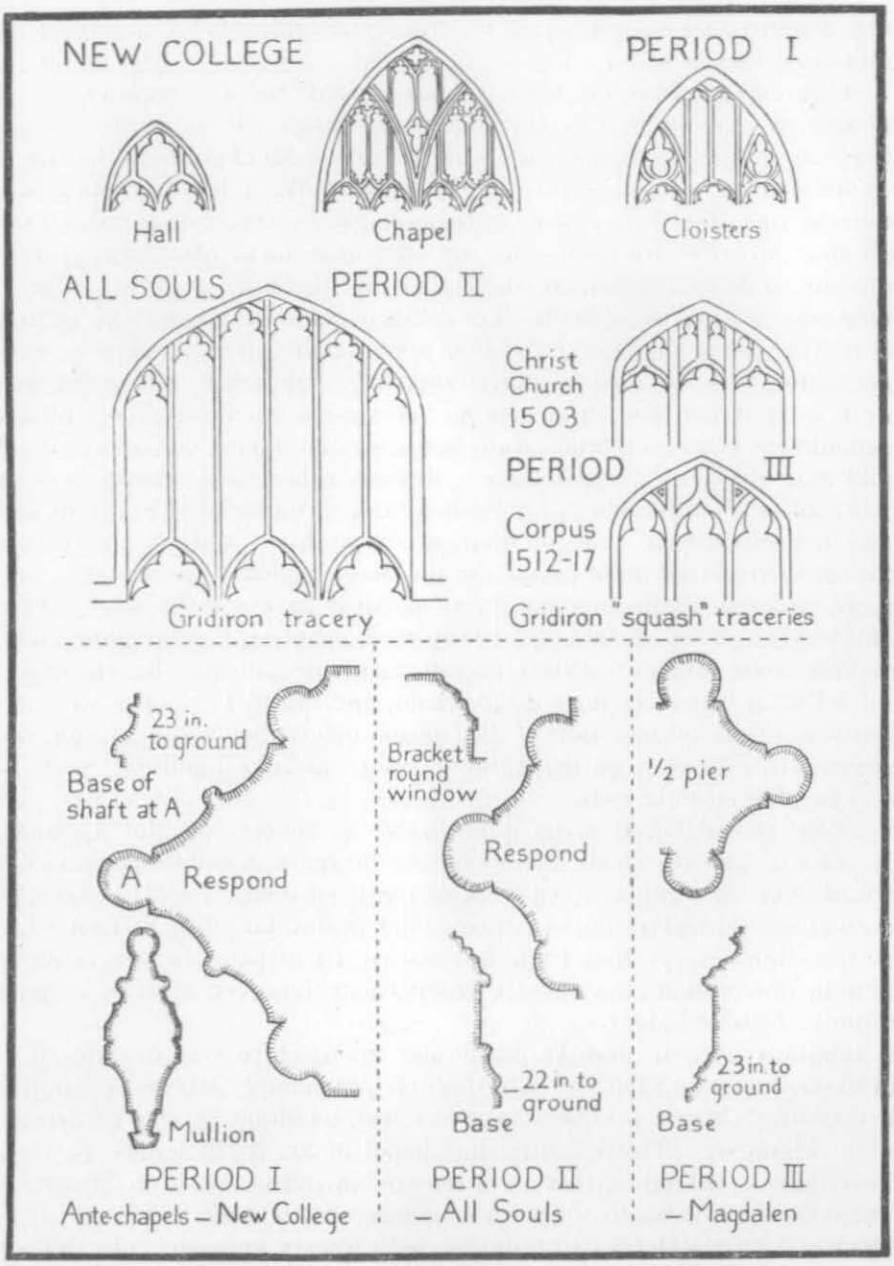

FIG. 21
WINDOW-TRACERIES AND PIERS TYPICAL OF THREE SUCCESSIVE STYLES OF PERPENDICULAR ARCHITECTURE IN OXFORD (pp. 78 ff.)

Secondly, it seems clear to me that there were three, or, if we put Cardinal College in a class of its own, four successive styles of Perpendicular architecture in Oxford. They are most obviously distinguished by their different window-traceries, the 'rectilinear reticulated', the 'gridiron', and the 'squash-tracery' (FIG. 21). I shall try to describe each of the three styles in turn.

The *first style* was obviously the offspring of Decorated architecture. It continued the Gothic idea of perpetual progress. 'Decorated' masons had been able to carve with greater freedom and with finer detail than their predecessors. The new masons thought that they could do better still. At New College the art is concealed, though all the mouldings are worthy of notice. But in the north transept of Merton College chapel (1416-24) the art is consciously clever. There are little carved corbel tables, nookshafts in the windows, window-tracery with compound-cusping, and a doorway in which the mouldings cross each other in the manner of German 'Sondergotik'. Yet for all that, the work at Merton is merely variations on an old theme. The window-tracery for instance, with its pointed-oval eyes, is merely an elaboration of the tracery in New College cloisters. The New College windows themselves show traces of their Decorated ancestry. There are windows (as, for example, over the hall stairs) with reticulated tracery stiffened out and made rectilinear instead of curvilinear. Even the chapel windows are only modified 'rectilinear reticulated' with sub-arches thrown in. In New College we cannot find a single window which is frankly 'gridiron'. The mason has given way to the glazier, but he has always slurred over the fact, and never descended to making mere bars of his tracery (see PL. VII and FIG. 21).[2]

The plan of New College, with its T-shaped chapel and its hall placed end-to-end on one side of the quadrangle, made an enormous impression. It became, as we have already said, the type for the 'grand' foundations of the 15th century. But although All Souls and Magdalen both copied New College, there was one general feature of its plan which they did not copy—the deliberate lack of a street-front. New College, except at its actual gate, was completely shut in by the city walls, the cloister, and the wall and 'long room' (or common latrine) in New College lane (PL. VII). Similarly, at Merton in 1367 a wall was built between the porter's lodge and the north transept of the chapel. Old Queen's and Lincoln faced on to Queen's lane and the Turl respectively, but their street-fronts were defensive in appearance and devoid of ornament (PL. IX, A and B). There was no desire to 'show off' to passers-by; these colleges gave more the impression of retreats, of walled cities set within a city. Perhaps the most symbolic illustration of them is to be found on the misericord of the warden's stall in New College chapel. There is shown the city of Oxford

[2] Incidentally, the glazier portrayed Decorated windows in the canopies of his glass.

surrounded by its walls, and inside them New College chapel and the spire of the University church. On one side of the city, bishop William of Wykeham welcomes five students, who, when they have entered in, drunk of the springs of knowledge and purified their souls, emerge as a bishop, archbishop, monk, doctor, and cardinal. They had come from the world and they returned to the world, but as members of the other city.

The colleges of this period then were introvert. They faced inwards, into the quadrangle. Once inside the gate there was no gauntness to be seen. On the contrary there was, as we have already said, much fine detail, degenerating even by the 1420's into 'finicketiness'. By the time that Richard of Wynchecombe was commissioned to build the Divinity School (1430) the passion for detail was beyond control. It could not be repressed or shut in. But it could be outlawed. In 1439 the university appointed a new master-mason, Thomas Elkyn, to complete the south side of the Divinity School, and him they instructed as follows :

> 'Since several magnates of the Kingdom and other wise men do not approve of, but object to, the excessive curiosity of the said work as it has been begun, therefore the said University desires that the said Thomas should refrain, as he has already begun to refrain, from such superfluous curiosity, viz. in the niches for statues . . . casements, and fillets, and other frivolous curiosities which are irrelevant, but lead the university to too great and sumptuous an expense, and delay the progress of the said work.'[3]

These instructions by the university to their mason give us the clue to the *second period* of Oxford's Perpendicular architecture. From motives of economy and impatience, and from a distaste of overloaded detail, it was decided that architecture should be austere. But even without the help of this documentary evidence, we would have been able to recognize the distinct style of this second period. For it is the period of gridiron-tracery, in which every mullion travelled in a straight line from the sill to the soffit of the arch, and in which the sub-lights were equally rigid. Such tracery occurred under either two-centred or four-centred arches. In the latter case the tracery always started lower down than the springing of the arch (i.e. 'drop-tracery', see FIG. 21). We have early examples of it in the east and west windows of the south transept at Merton (1416-24). The only other dated Oxford buildings in which it occurs are the Divinity School (1430-40), Balliol (upper) library (1431 and *c.* 1477), the north chapel of St. Peter's in the East (1433), All Souls (1438-43), University College hall (1448-9), Merton tower (1448-51), St. Aldate's north aisle (1458), St. Mary's chancel (1462) and Magdalen College (1474-90). It is a curiously close distribution of dates for what is at once the most austere and the most typical of Perpendicular traceries.

[3] *Epistolae Academicae Oxon.*, ed. H. Anstey, I (O.H.S. xxxv, 1898), 192.

There is a conscious austerity about the buildings of this period.[4] The exterior of the chancel of the university church (1462) is deliberately simple, with its plain parapet and tall gridiron windows which give beauty of proportion to an unornamented design. There was quite a fashion for mouldings running up the whole height of a wall (as in All Souls ante-chapel), but windows had no nook-shafts, piers had no fillets, and often a wall was allowed to stand without any ornament at all (PL. IX, A). It was not necessarily ugly for being plain.

Indeed it may well have been thought that the plain style was more beautiful than the diffuse ornament of the old. No doubt the unsettled state of the country during the Wars of the Roses, difficulties of finance, and the impatience born of political uncertainty were all in part responsible for the new 'austerity' architecture. But it seems to me that there may also have been a connexion between this architecture and the Italian travels of English humanists. It is notorious that the influence of these humanists was much less than might have been expected, and that the copy of Vitruvius given by Humphrey, Duke of Gloucester, to the university library exercised no apparent influence on English architecture at the time. But it does seem possible that the English travellers were struck by the simple grandeur of Italian buildings and consequently revolted from the 'excessive curiosity' of Richard of Wynchecombe's work.[5] One is tempted to wonder if Duke Humphrey could have been one of the 'magnates of the realm' who so complained; and one is struck by the coincidence that the finest Italian library north of the Alps, that of bishop Grey of Ely, was housed by Balliol College in a magnificent 'austerity' library to the building of which many of the dilettante humanist nobles contributed funds (PL. VIII, B). Such speculation may be idle, but it is at least profitable to compare the glass windows in the ante-chapels of New College and All Souls. At All Souls, instead of prophets and priests in all the grandeur of unreality, we have saints who are almost human. St. John is a charming young man, and St. Agatha has been drawn as finely as any court lady was portrayed by Holbein (PL. X, A).

Our *third style* can be identified nearly enough with the Tudor period, and within it we will find a further development just about the time when Henry VIII succeeded his father. But the coincidence of dates must not be pressed too far. Indeed the new style started in the reign of Edward IV and can be likened more to the luxury of that monarch's court than to the miserliness of Henry VII. For it was an exuberant style and gives the impression of post-war fever and of *joie de vivre*.

[4] Merton tower, apparently of Somerset design, is the exception. But it is possible that its design dates from 1422 when appeal was made for funds with which to build it.

[5] Mr. Pantin has pointed out to me a similar development in handwriting at the time. Capital letters are made simpler, in bold curves.

The master mason who dominated Oxford building from 1474 to about 1503 was William Orchard. His earliest known work, and also his largest, was Magdalen College (1474 onwards) (PL. VIII, A); but it is also his least typical work. In it he shows himself to be struggling against the tradition of the austere gridiron period, but not emancipating himself from it completely. In one of his contracts it was actually stipulated that his work should be 'as good as or better than' that at All Souls. Magdalen therefore marks the transition from our second to our third period. It has gridiron tracery, and the west front of the chapel (at least as Wyatt has left it) looks austere. But there are signs enough of a new spirit also. Orchard gave the chapel an elaborate west doorway, though he was unable to integrate it into the general design—as if he had not yet worked out a complete system of design alternative to that of austerity. But in the founder's tower he liberated himself completely from the old tradition. It was a masterpiece of invention and elaboration. The president who lived in it could be proud of his lodging, which was no longer a superior porter's lodge, but like a little 'castle' or 'court' with its panelled bay window. Even the fellows could be proud; theirs was the first Oxford college to be crowned with battlements entire, in the manner worthy of gentlemen.[6] They had a bay-window too, by the high table in hall. By 1492 a bell-tower had been begun which was frankly ornamental, and proclaimed to all who crossed the bridge the lordly patronage of the college. Poorer colleges could not afford such luxuries. But both Queen's (1518) and Balliol (1522) did their little best with spirelets at the corner of their ante-chapels.

The colleges no longer looked inwards, but outwards. The street-fronts of St. Bernard's and (formerly) of Balliol, both probably by Orchard, are cases in point. They looked grander by far than the old front of Lincoln College. But it is noteworthy that the effect of opulence was all gained by a simple trick. The walls are really as plain as in any other college front. But over the gateway there is (or was), in each case, an oriel window flanked by two niches for statues and crowned with a cluster of 'Tudor flower' ornament. This concentration of ornament inevitably attracts the eye and makes one overlook the bareness of the walls. Though an old trick, it was one that had not been practised in the previous styles of Oxford's Perpendicular; at New College and Merton north transept for instance, the ornament had been carefully diffused over the whole building. But now, in the Tudor period, ornament was always massed into one particular spot, or into horizontal bands as at St. Mary's nave, or at the summit of a tower as at Magdalen.

[6] Of the college buildings in this series only four are shown by Bereblok and Loggan with battlements round the main blocks—All Souls, Magdalen, Christ Church, and St. John's. Those of All Souls had been added in 1510, and those of St. John's in the early 17th century. Those of Christ Church, however, were removed by Sir Christopher Wren, who preferred balustrades.

This was made all the more feasible by the fact that ornament, like almost everything else in these buildings, was mass-produced. Orchard treated building as a business and could supply any part for any edifice. 'Item solvi' we read in the Magdalen accounts 'Willelmo Orcheyerd—pro v fenestris fiandis Cancello X lb'. He seems to have kept a large stock of his goods, for piers similar to those in Magdalen ante-chapel are found in the Harcourt chapel at Stanton Harcourt, signed even with the same mason's mark;[7] at Minster Lovell house and elsewhere there are more details that seem to come from his shop.

But the most easily recognized feature of the period is once again the window-tracery. Windows that were not purely domestic usually had four-centred arches.[8] That was no novelty in itself. But now the tracery always started at the level of the springing of the arch; there was no 'drop-tracery', but (if I may coin the word) 'squash-tracery' (FIG. 21). Consequently tracery-lights were minute; the glazier found them large enough only for Tudor roses. It was perhaps no coincidence that at the same time the statuesque style of stained glass which had fitted so admirably into gridiron tracery, was being abandoned in favour of a more scenic style, as in the east window (PL. X, B) of Balliol chapel (1529).

We have already noted that the accession of Henry VIII marked a development within this period. During his reign the post-war fever, exuberance, or *joie de vivre* 'sobered up'. Architecture became, not austere again, but quieter in tone. The gatehouse of Brasenose (1509-18) is based, obviously, on the design of the founder's tower at Magdalen. But it is quieter, less ostentatious. The street-front of Corpus (1512-17) is an extremely sober version of St. Bernard's, without the ornament. Even Cardinal College, despite its size, and despite the endless repetition of 'my Lord's grace's arms' has a poise which is not found in the exuberance of Orchard's work.

But Cardinal College marks an entirely new epoch in Oxford architecture. It was a palace as compared to a country house. It was built by the King's masons from London (Henry Redmayne and John Lubbyns), by the King's carpenter (Humphrey Coke), and by James Nicholson 'glazier from the dominion of the Emperor'.[9] Even of the common masons who worked on Cardinal College at least eight had worked previously on Wolsey's palace of York Place in Whitehall.[10] It is not surprising therefore that Wolsey

[7] *Op. cit.* in note 1, p. 78.

[8] Exceptions are Magdalen (transitional from the previous style) and the great gable windows at the W. and N. ends of St. Mary the Virgin and the Cathedral respectively.

[9] He also worked at King's, Cambridge, and Trinity, Oxford. It is not unlikely that he was responsible for the E. window of Balliol chapel.

[10] *Op. cit.* in note 1, p. 83.

abandoned the 'grand' type of Oxford college plan. He intended placing his hall and his chapel on opposite sides of the quadrangle. Like Orchard at Magdalen he united the quad and the cloister. But it was the very grandeur of his schemes which showed most markedly their novelty. We have seen how in our first period the college faced inwards, shutting itself off from the world, and how in the third period the colleges adorned their façades, showing themselves off to the world while retaining the inner intimacy of their quadrangles. Wolsey's college showed itself off to the world too, but Tom Quad was so vast that it could no longer shut the world out; on the contrary, it seems to contain the whole world. It has a sense of space and completeness which put the spirit at rest. But it is not even an incomplete cloister. It is a piazza, a place from which to get a complete view of the buildings.

What Wolsey's college might have started in the way of new architectural styles we can only guess. In Oxford there is hardly a building that can be dated to the period between his fall and the end of the century—and then Wadham College took up (with a difference) the idea of the college as it had developed under William Orchard. Cardinal College proved to be only an interlude, but it was fitting that its quadrangle should have been completed by the greatest architect of the English Renaissance, Sir Christopher Wren. For despite its Gothic idiom, he understood the intention of the design.

APPENDIX[11]

CHRONOLOGY OF OXFORD BUILDINGS FROM 1350-1550

c. 1364-78 [Canterbury College, hall and two chambers.][12] This building is illustrated in Loggan's view of Christ Church and has Perpendicular windows like those in New College, Balliol, and (old) Queen's halls. The site was acquired in 1364 (*V.C.H. Oxon.*, II, 46). All the buildings except the hall and two chambers were rebuilt by Prior Chillenden

[11] The following bibliographical abbreviations have been adopted:
Anstey = *Epistolae Academiae Oxon.*, ed. H. Anstey, I (O.H.S., xxxv, 1898); II (O.H.S., xxxvi, 1898).
Henderson = B. W. Henderson, *Merton College* (London, 1899).
Jackson = T. G. Jackson, *The Church of St. Mary the Virgin, Oxford* (Oxford, 1897).
Magrath = J. R. Magrath, *The Queen's College*, 2 vols. (Oxford, 1921).
Stevenson and Salter = W. H. Stevenson and H. E. Salter, *The early history of St. John's College, Oxford* (O.H.S., n.s. I, 1939).
Wood/Clark = *Wood's History of the City of Oxford*, ed. Andrew Clark, I (O.H.S., xv, 1889); II (O.H.S., xvii, 1890); III (O.H.S., xxxvii, 1899).
Wood/Gutch = Antony Wood, *History and Antiquities of the Colleges and Halls in the University of Oxford*, ed. John Gutch (Oxford, 1786).

[12] Entries in square brackets denote that the building in question has been destroyed.

(1378-1411) ; see *Epistolae Cantuarienses*, III (Rolls Series, LXXXV), 116. I am indebted to Mr. Pantin for this information.

1367-8 £60 11s. spent on building works in Merton College chapel (Henderson, p. 202). The sum includes payments for Taynton stone for building the wall 'inter le logge et ostium ecclesiae' and for 'iii Carpentariis operantibus sub area occidentalis Campanilis'. It is possible, though not certain, that these accounts may mark the end of the building of the transepts which later (*c.* 1417-24) were given new windows. But the chapel already in 1360 had a doorway over which corbel tables were made.

1372 [Oriel College chapel], described as 'novam capellam', licensed to be used for divine services (C. L. Shadwell and H. E. Salter, *Oriel Records* (O.H.S., LXXXV, 1926), 455). Work still in progress 1409 (E. M. Jope in *Oriel Record*, April 1946, p. 8).

1373-80 [Queen's College old chapel without the ante-chapel.] Dated by building accounts (Magrath, I, 71). There are many old prints of the chapel (e.g. Loggan and Skelton) and they show that the east window was in the Decorated style, something like the east window of Merton College chapel (PL. IX, B).

1377-8 Merton College library. In these years, at any rate, £450 7s. 2½d. was spent on building the library (Henderson, p. 228). See also H. W. Garrod, *Ancient Painted Glass in Merton College, Oxford* (Oxford, 1931), p. 48, note 1 : 'The master-mason was William Humberville. But (Warden) Bloxham accompanied Humberville to London, to Sherborne, to Salisbury, and to Winchester on what seem to have been journeys of architectural exploration—of one of the London journeys it is expressly said that it was undertaken " with the purpose of viewing the Library of the Preaching Friars ".'

c. 1379-97 [Canterbury College, chapel, and east and south sides of quad.] See *Epistolae Cantuarienses*, III, 116 and stray references in the accounts of the college printed in W. A. Pantin, *Canterbury College, Oxford*, I, II (O.H.S. n.s. VI-VII, 1947).

1380 5 March, 1379/80. Foundation-stone of New College laid (H. Rashdall and R. S. Rait, *New College* (London, 1901), p. 38 ; see also *ibid.*, pp. 30-2).

1383 13 December. Bull for dedication of New College chapel granted by Urban VI (*ibid.*). The front quad must have been largely finished by 1387 (*ibid.*, pp. 38, 64).

1390-2 Masons fined for taking excessive wages in the NE. ward of the city. As one of the masons was Willelmus Broun (*v. infra* 1395) and the jury professed not to know the name of the employer, it is fair to assume that the work involved was William of Wykeham's New College; see *Mediaeval Archives of the University of Oxford*, ed. H. E. Salter, II (O.H.S., LXXIII, 1919), 5, 21, and 23.

1395-1403 New College, bell tower and cloister. The mason-contractor in charge was Willelmus Broun. Building accounts for 1396 are printed in *Oxford City Documents*, ed. J. E. Thorold Rogers (O.H.S., XVIII, 1895), 306-14. The cloisters were finished in 1395, the tower in

1405 (New College Expense Rolls, *ex inf.* Mr. E. A. Gee). The master-mason of New College, as of Winchester College, was probably William Wynford. He, together with Henry Yevele, dined with Wykeham on more than one occasion, both at New College and elsewhere ; see J. H. Harvey, *Henry Yevele* (London, 1944), pp. 68, 69 and 38, and also the MS. Hall Book of New College (*ex inf.* Mr. J. H. Harvey). New College has the first dated Perpendicular architecture in Oxford. It is also the first of the typical college plans, and the first Oxford college to have a gate-tower. The vault over the hall-stairs is almost a fan-vault. Four-centred arches are used on the gate-tower.

1398-1402 [Queen's College, old hall.] Building accounts, see Magrath, I, 82. William Broun (*cf.* 1395-1405) was the contracting mason. Loggan, etc., show it to have been in the Perpendicular style, very similar in design to Balliol College's old hall (now the lower library).

1406-8 [Durham College chapel (cost £135 18s.)] ; see H. E. D. Blakiston, *Trinity College* (1898), p. 21.

1417-24 Merton College chapel ; north transept rebuilt and south transept restored. The historical evidence is from inscriptions in the glass windows read by Wood *c.* 1668 (Wood/Gutch, p. 35), and confirmed by the will of Richard Baron (1418) which is printed by E. F. Jacob in the *Register of Henry Chichele*, II, 175. On 6 November, 1424, the whole chapel was 'rededicated to the same saint as before' (Henderson, p. 204). But satisfactory as this evidence seems, it is clear from the building itself that the work belongs to two different 'campaigns'. Not only was the north transept rebuilt *in toto* while little more than the window tracery was altered in the south transept, but the design of the tracery and the moulding of the mullions are different in the two transepts. This contains the first gridiron tracery datable in Oxford. (Gridiron tracery is tracery in which the mullions reach in a straight and unbroken line from the sill to the main arch of the window : see FIG. 21.)

1418 Merton College gate-tower, licence to crenellate (Henderson, p. 250). The first crenellated gate-tower in Oxford. *Cave* restorations, and see Loggan.

1417-21 East side of Durham College quadrangle (Blakiston, *op. cit.*, p. 25).

1430-40 Divinity Schools started (W. H. St. John Hope in the *Archaeological Journal*, LXXI (1914), 217-60). The vault belongs to 1480-3. At this period the master masons were (1) Richard of Wynchecombe, the master mason of Adderbury chancel (1408-19) and (2) Thomas Elkyn, who was appointed Jan., 1439/40 and ordered to abstain from elaboration 'especially in images, casements and fillets and other idle quaintnesses'. From this it would seem that Wynchecombe was responsible for the north side, Elkyn for the (plainer) south side (Anstey, I, 192).

1431 Balliol College (upper) library, west part (Wood/Gutch, p. 89, reading from inscriptions in glass no longer extant).

1432	[Exeter College, north front] and Palmer's tower (Wood/Gutch, p. 110, and Ingram, *Memorials of Oxford*, I (1837), Exeter Coll., p. 7).
1433	North window of the north chapel of St. Peter in the East (Wood/Gutch, p. 36, n. 82).
c. 1437-8	Lincoln College, hall, old chapel, library, kitchen and chambers; i.e. front quad, north range and most of east and west ranges. Evidence from John Forest's legacy and in the title deeds of the site (A. Clark, *Lincoln College* (1898), pp. 8-12; *cf.* Wood/Gutch, p. 245).
1438	Some building in progress at St. Bernard's College (i.e. St. John's). This building was probably not on a large scale; it may have been the west end of the north range (with low gable and undercroft). See A. J. Taylor in Stevenson and Salter, 83 f., 93 ff.
1438-43	All Souls College, front quadrangle. Building accounts extant and described by E. F. Jacob in *Essays in honour of James Tait*, ed. Jacob, Galbraith, and Edwards (Manchester, 1933), pp. 121-33. The master mason was Richard Chevynton, and Robert Jannyns was apparently the mason in charge (*cf.* Merton tower, *infra*, 1448-51).
1448-9	[University College hall.] £5 spent 'circa *novam* aulam promptuarium et coquinam et circa ortum'. The accounts for the previous and subsequent year are missing (*ex. inf.* Mr. Arthur Oswald, reading from the college Bursar's Rolls, v). A sketch of the hall by Wood is reproduced in Wood/Clark.
1448-51	Merton College, tower of chapel. The base of the tower and its arches are of earlier date. Building accounts exist to show that the main part of the tower was built at this time. They are printed in J. E. Thorold Rogers, *op. cit.*, pp. 314-37. Robert Jannyns was the mason in charge till February, 1449, when he moved on to Eton College. The design of the tower resembles that of many Somerset church towers. The project of building the tower had been seriously mooted as early as September, 1422 (Henderson, p. 207) and it is not impossible that the design of the tower may have been drawn then.
c. 1456	St. Aldates' church, north aisle (but *not* the arcade); see H. E. Salter, *Mediaeval Oxford* (O.H.S., c, 1936), 129.
1462	Chancel of St. Mary the Virgin church. An inscription read by Lyhert gave the date (Jackson, p. 113; *cf.* Wood/Clark, II, 21).
1464	Holywell church, upper part of tower (Wood/Clark, II, 51-2). We have nothing but Wood's word for it.
1465	Lincoln College. Legacy for building the old rector's lodgings, south of the hall (Wood/Clark, II, 24).
1472-3	[University College: £9 12s. 6d. spent 'circa turrim', presumably the gate tower.] - But see also 1509-17. *Ex. inf.* Mr. Arthur Oswald, from the college Bursar's Rolls, v.
1474-90	Magdalen College. Building accounts, e.g. west window of chapel 1475; windows of north, east and west ranges of cloisters 1475; buildings occupied by 1480 when 'Magdalen Hall' (*not* the dining hall) was started; south range of cloisters 1490; bell-tower started 1492 (*q.v.*). The contractor master mason was William Orchard (d. 1480). Extracts from the accounts are printed in J. R. Bloxam,

Magdalen College Register (Oxford, 1892), II, appendix I, pp. 226-34; see also H. A. Wilson, *Magdalen College* (1899), *passim*. In the contracts the standard for the work in the chambers and library was that it should be 'as good as or better than' at All Souls. This is the first college to have had crenellations on all, or almost all, its buildings. Previously, as reference to Loggan will show, only gate-towers had been battlemented. The battlements of the hall, chapel, and library are referred to in the building accounts. All Souls front quad received its battlements in 1510 (*q.v.*).

1475-8 [University College: more than £5 spent on the chapel, the first item being for its dedication.] *Ex. inf.* Mr. Arthur Oswald, from the college Bursar's Rolls, VI.

c. 1477 Balliol College (upper) library, east part, at the expense of bishop Grey of Ely (Wood/Gutch, p. 89). He got bishop Grey's name from inscriptions in the glass; where he got the date from he does not say.

1479 Lincoln College. Front quadrangle, south range built or completed (Wood/Clark, II, 24-5). But it has rebuses of bishop Bekington suggesting a reference to his donation of 1465.

1480 Vault of Divinity Schools. William of Worcester saw it being built 'Voltam novam modo operatam in anno Christi 1480' (*Itineraria Symonis Simeonis et Willelmi de Worcestre*, ed. Nasmith (Cambridge, 1778), p. 282). *Cf.* heraldic evidence, St. John Hope, *op. cit.*, pp. 217-60; and *cf.* Anstey, II, 446, for a letter of 1478 asking permission to employ the bp. of Winchester's masons (from Magdalen College). William Orchard may have been master mason.[13] The initials W.O. are to be found on a vaulting boss; and in August, 1483, he sold stone to the proctors for the sum of £10 6s. 8d. (Proctors' Accounts, printed in *Mediaeval Archives of the University of Oxford*, ed. Salter, II (O.H.S., LXXIII, 1919), 339).

1483 St. Bernard's College (i.e. St. John's) 'proceeded right well in buylding' (Stevenson and Salter, p. 84). Though it is impossible to determine from documents what part of the building was involved, A. J. Taylor (Stevenson and Salter, pp. 93 ff.) suggested on archaeological grounds that the west range and gate-tower must belong to this period. A. J. Taylor has since found on the south face of the tower a mason's mark which still further strengthens his argument, since it is found also at Northleach (1458), Winchcombe (1454-61), Cricklade, and Fairford, which we know to have been built at some time in the last two decades of the 15th century (Davis, *op. cit.*, in note 1 above, pp. 80-2). The central niche on the west face of the tower was added soon after the tower was built (Stevenson and Salter, p. 59).

1486-7 [Merton College chapel, rood loft.] By John Fysher, citizen and joiner of London, modelled on those of Magdalen College chapel and St. Mildred's in the Poultry at London (Henderson, p. 210).

[13] Quite possibly he invented the 'pendant' vault; the only other 'pendant' vaults which might be earlier than this one, are that in Ch. Ch. Cathedral whose date is unknown, though it can be presumed to be pre-Wolsey and that at Christchurch, Hants.

1487-95	Nave of St. Mary the Virgin church. University's appeal for money 26 February, 1486/7 (Jackson, p. 116). In 1495 a letter of thanks to one donor of funds implied that the work was largely, but not completely, finished (Anstey, II, 631). Wood/Clark, II, 17-18, has further evidence to suggest that the work was not finished till 1503.
c. 1489-99	Cloisters of St. Frideswide's priory 'quod a fundamentis erexit' Robert Shirborn, bp. of Chichester. Letter dated 14 March, 1499, printed in *Sussex Arch. Coll.*, XXIX, 25. The present tracery is modern.
1491-	[All Souls cloisters]; but they had been begun 'in the founder's time' (Wood/Gutch, p. 305).
1492-1505	Magdalen College bell-tower (Ingram, *op. cit.*, Magdalen Coll., p. 11, note x.) William Raynold was the mason in charge, although it may be that Orchard provided the design. Wolsey was bursar for part of the time.
c. 1494-7?	[Balliol College; south front and old gate-tower]; see Wood/Gutch, p. 88. He will only commit himself to the 'time of Henry VII', but Mr. William Bell was master 1494-7. The gate-tower was very similar in design to that of St. Bernard's College (*vide* 1483, *supra*).
1497	[Merton College choir new ceiled, and wainscoted; new stalls replacing those of 1394]; see Henderson, p. 211.
1500	Battlements added to the tower of St. Michael at the North-gate; see Neale, *Oxford 1431-1500*, p. 260 (Bodleian MS. Top. Oxon. c. 254).
1502-3	Merton College library roof (Henderson, p. 231, who quotes the accounts).
1503-6	St. Frideswide's Priory, recasing of north transept. Evidence from a will in S. A. Warner, *Oxford Cathedral* (London, 1924), p. 47. As the recasing was to have involved the vaulting of the transept, it is reasonable to suppose that the chancel vault had already been completed.
1503-5	St. Bernard's College (i.e. St. John's) contracting with William Orchard for supplies of stone for 2½ years in 1503 (Stevenson and Salter, pp. 83-4); ? for the hall.
c. 1504-27	SW. 'cottage' of Worcester College (then Gloucester College). Rebus of Wm. Compton, abbot of Pershore, 1504-27 (C. H. Daniel and W. R. Barker, *Worcester College* (1900), p. 30).
1504	Merton College, brass lectern (Henderson, p. 211).
1509-17	[University College: sums varying from £17 16s. 0½d. (1511-2) to 6d. (1516-17) spent 'circa turrim' (Bursar's Rolls, VIII).] See also 1472-3. But the money 'pro aedificatione unius turris et principalis introitus nostri predicti collegii' had been given in 1458 (College Muniments, Box B.B. Fasc. 4, no. 2). *Ex. inf.* Mr. Arthur Oswald.
1509-18	Brasenose College, front quadrangle. (Facsimile) inscription over doorway in SW. corner. A plumber was paid £14 14s. for lead roofing on 10 June, 1518 (*Brasenose College Monographs* (O.H.S., LII, 1909), pt. III, pp. 5-6).
1510	St. Mary the Virgin. Adam de Brome's chapel repaired (Jackson, p. 108, following Wood/Clark, II, 21).

1510	All Souls College, crenellations of front quadrangle. In 1509/10 the Recepta of the Computus Roll of the College show a legacy of £3 'pro edificacione ly batylments' (*ex. inf.* Professor A. H. M. Jones).
1512-17	Corpus Christi College, front quadrangle. William Vertue and William Est, master masons; Humfrey Coke, carpenter; see T. Fowler, *Corpus Christi College* (1898), pp. 37-8, and building accounts (in MS. at the college) 1516-17.
1517-18	[Merton College chapel, transepts ceiled anew]; see Henderson, p. 211.
1518-21	[Queen's College, old ante-chapel]; see Magrath, p. 167. It was dedicated in 1521 and William Est was master mason (*ex inf.* Mr. E. A. Gee from the building accounts).
1520-1	Chapel of St. Mary at the Smith-gate (now Hertford College J.C.R.). In March, 1520-1, a B.C.L. was forced to pay £20 towards its building (Wood/Clark, I, 260, n.2).
1522-8	[Balliol College chapel.] Two contracts, of 1522 with Wm. Est, mason, and of 1528 with John Lobbens and William Jonsons masons, pasted into the first volume of the College Register are printed in Frances de Paravicini, *Balliol College* (1891), p. 289 f. The glass in the east window of the new chapel bears the date 1529, and several panels follow the design of Dürer engravings.
1524	Ceiling of St. Bartholomew's chapel, Cowley. Carpenter, Robert Carow (E. M. Jope in *Oriel Record*, April, 1946, p. 8).
1525-9	Wolsey's work on Cardinal College (Christ Church), i.e. hall (*not* the stairs) and lower storeys of SE. and W. ranges. See Bereblok's view. Building accounts in part extant, in part copied by Gutch (Bodleian MS. Top. Oxon. 616). See references in *Letters and Papers of Henry VIII*, vol. IV, nos. 2538, 2734, 3183, 3676, 6023, 6748, 6788; also J. G. Milne and John H. Harvey, 'The Building of Cardinal College, Oxford,' *Oxoniensia*, VIII-IX (1943-4), 137-53, and John H. Harvey, 'The Building Works and Architects of Cardinal Wolsey', *Journal of the British Archaeological Association*, 3rd ser., VIII (1943), 48-59. John Lubbyns (*cf.* 1522-8, *supra*) and Henry Redmayne were the master masons.
1530	Dedication of St. Bernard's College chapel (i.e. St. John's); see Stevenson and Salter, p. 84. *Cave* restorations.
c. 1535	[Oriel College, old hall]; see D. W. Rannie, *Oriel College* (1900), p. 81.

NOTE

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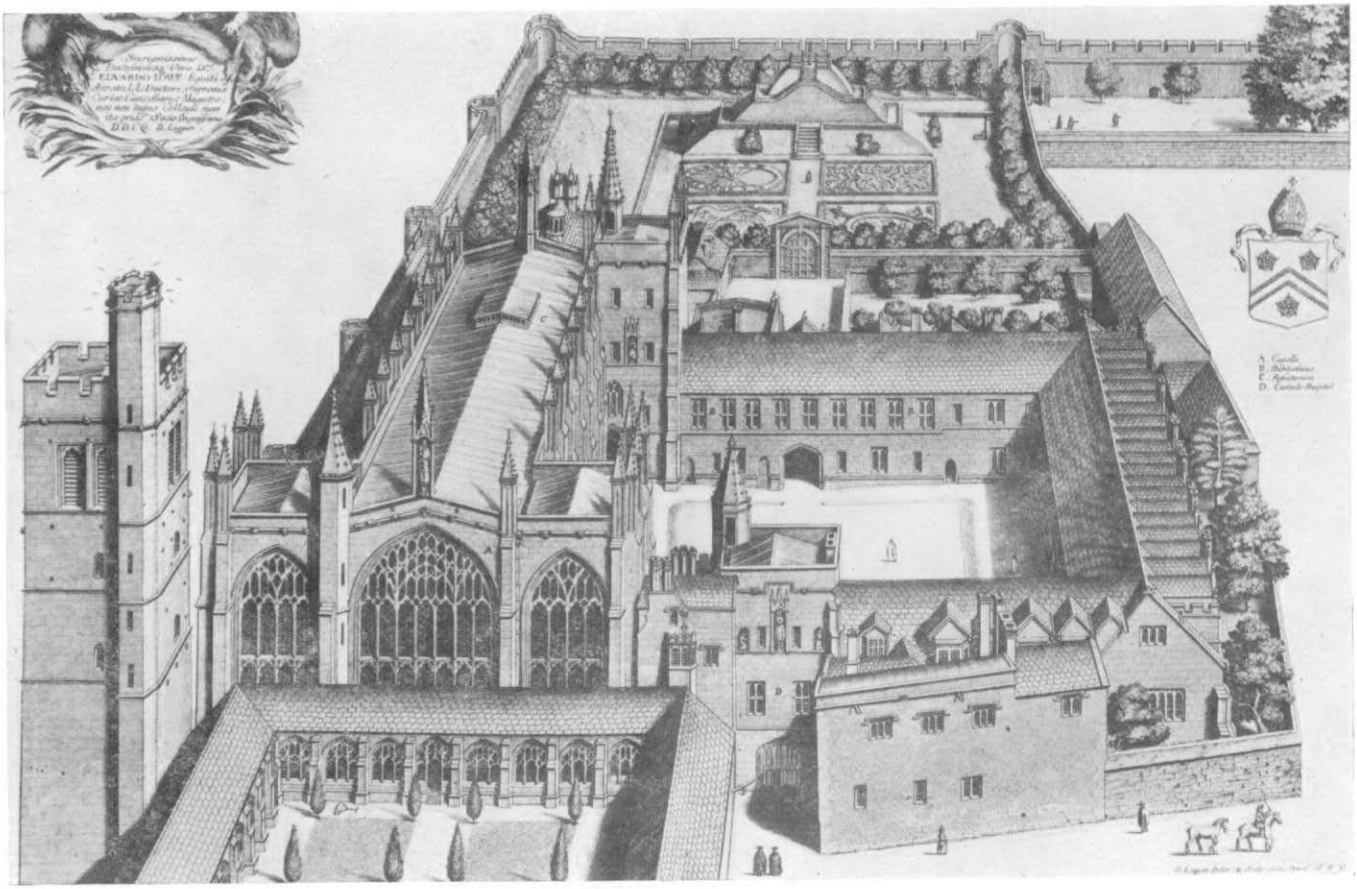
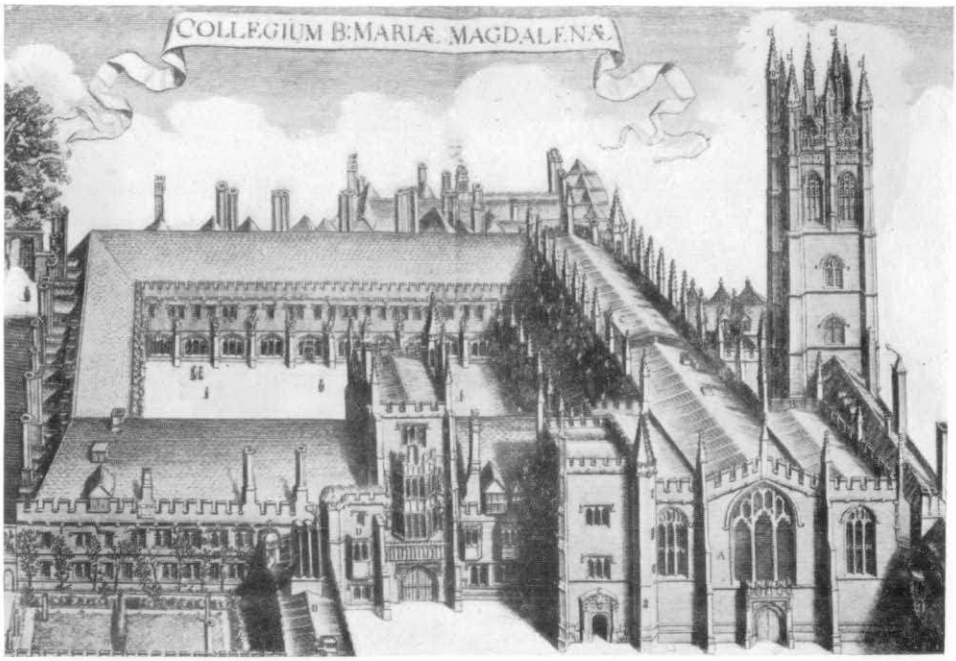


BIRD'S-EYE VIEW OF NEW COLLEGE, OXFORD (1380-*c.*1403)
After Loggan, *Oxonia Illustrata* (1675), pl. xix



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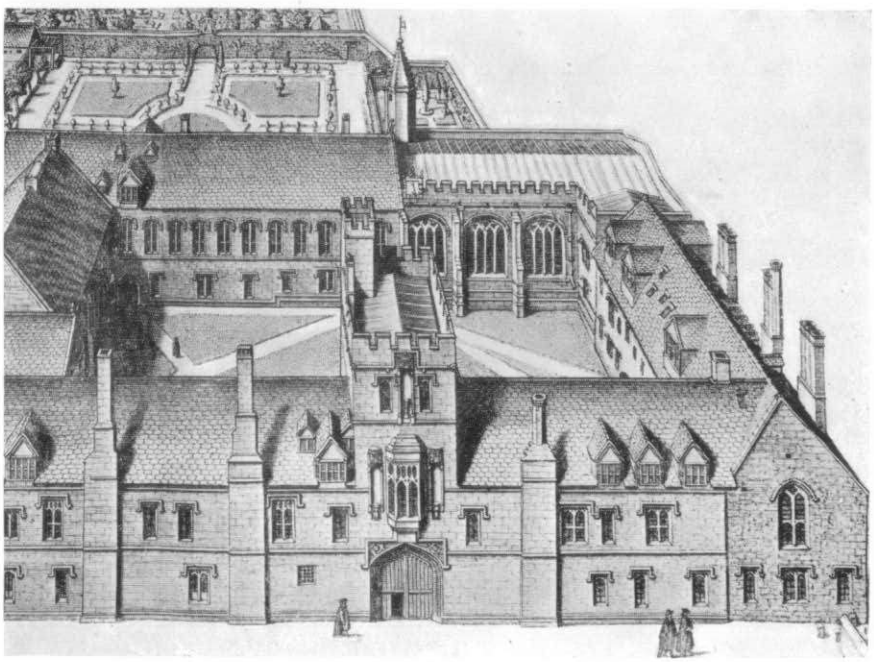
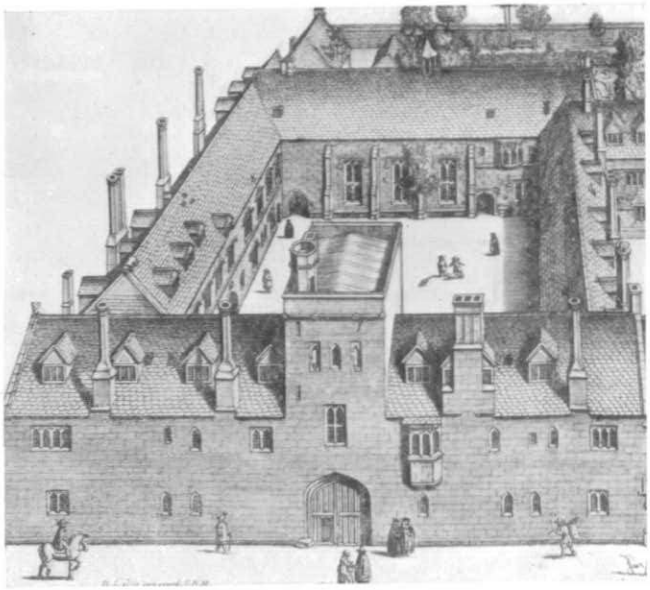


B

BIRD'S-EYE VIEWS OF (A) MAGDALEN COLLEGE (1475-1505); (B) BALLIOL COLLEGE, OXFORD (1431, *c.* 1477, 1494-7, 1522-8)
After Loggan, *Oxonia Illustrata* (1675), pls. xxiv, xiv.



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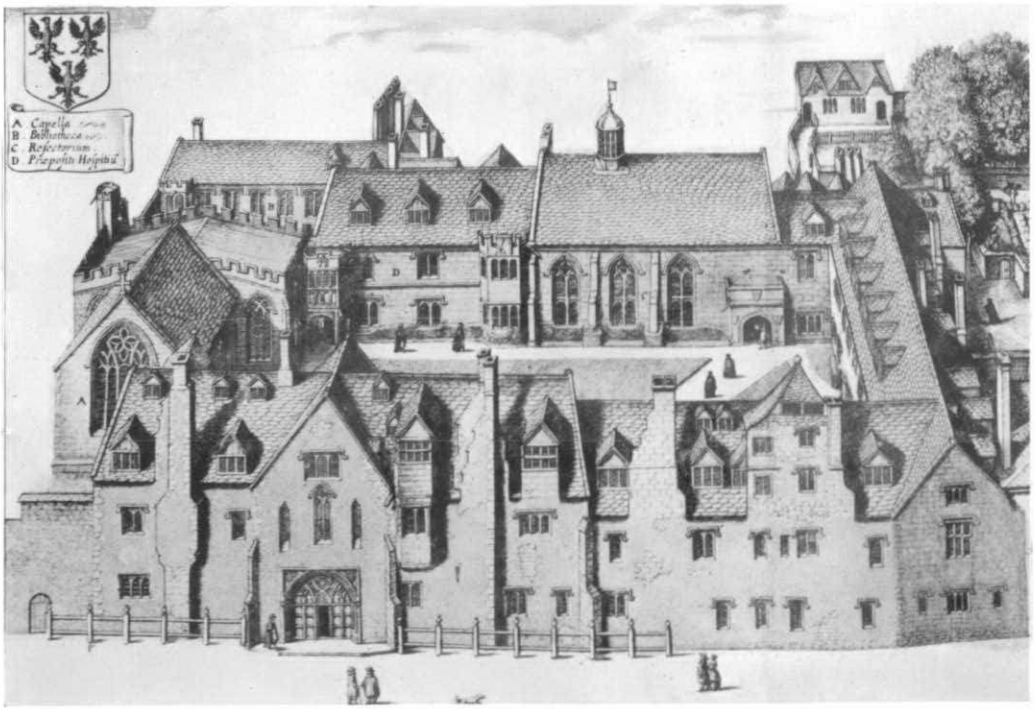
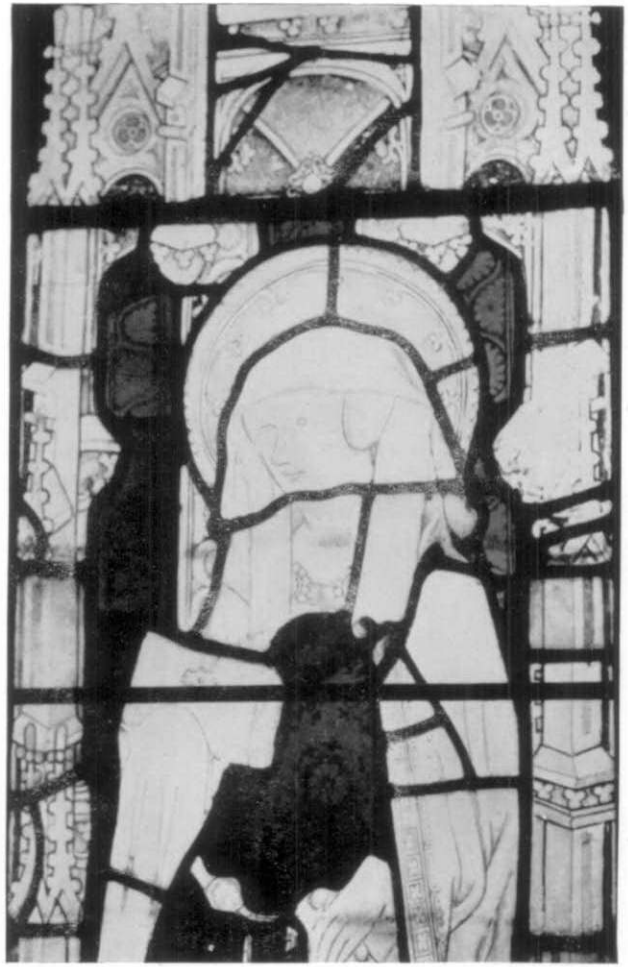


B

BIRD'S-EYE VIEWS OF (A) LINCOLN COLLEGE (1437-79) ; (B) THE QUEEN'S COLLEGE, OXFORD (Chapel, 1373-80 ; hall, 1398-1402)
After Loggan, *Oxonia Illustrata* (1675), pls. xxii, xviii



A

B

A. PART OF WINDOW DEPICTING ST. AGATHA, ALL SOULS COLLEGE ANTE-CHAPEL, 1438-43
B. PART OF WINDOW DEPICTING THE AGONY IN THE GARDEN, BALLIOL COLLEGE CHAPEL, 1529

Phh. R. H. C. Davis