

# An Analysis of Ecclesiastical Stone Cut Backs

John F Potter

*A recent analysis of the geological orientation of stones used in the construction of the quoins, pilasters and arch jambs of British ecclesiastical buildings (Potter 2005), clearly indicated the very distinctive techniques of stone use employed by Anglo-Saxon craftsmen. The work demonstrated that Anglo-Saxon builders possessed a significant understanding of the quality of the stones which they incorporated into their churches. Their appreciation of the physical properties of the rocks enabled them to use certain stones for building purposes in selected ways. These techniques were not copied by others that followed. In the analysis, reference was made to the stones of quoins, pilasters, and in one instance, jambs, occasionally being cut back. This paper examines the phenomenon of cut back in more detail.*

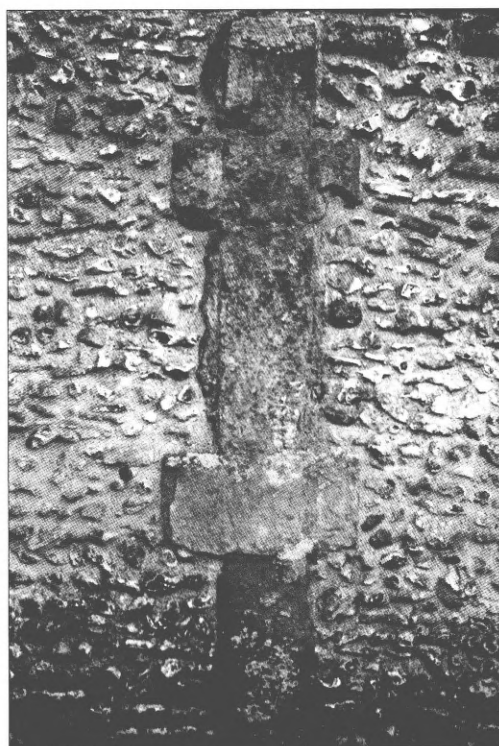
## Quoins, pilasters and ‘plaster’

That certain stones in quoins and pilasters of Anglo-Saxon churches were on occasions cut back, first appears to have been observed by Brown (1903, 88). He noted that,

*‘parts of flat slabs that lay along the walls were cut back level with the wall-faces and covered with the plaster so that only that portion of them was visible which corresponded with the width of the uprights.’*

In making this observation Brown was employing the term ‘flat slabs’ to describe the short stones of long and short work, and making an assumption with reference to the use of plaster, for he supported the view that plaster was the ‘normal finish to Saxon walling’. Brown illustrated his observation by reference to the south-east quoin of the nave of All Saints, Wittering and a pilaster at St Mary, Breamore (Fig 1), but chose to ignore the fact that in each case the long stones in his illustrations were also cut back. Subsequently the term ‘cut back’ has been used frequently, and, on occasions, incorrectly.

Pilaster strips were invariably created by setting stones into a wall so that they stood proud of the wall surface. Typically this was achieved by positioning the stones slightly forward of the building line of the wall at the time of construction of the wall (Fig 2, b & c), with no subsequent or additional working of the stone being required. However, if ashlar stones were



*Fig 1 – The partial pilaster strip of long and short stones on the north wall of the nave at Breamore chosen by Brown (1903) to be illustrative of cut back stones. Both ‘long’ and ‘short’ stones can be observed to be cut back, although Brown made the case that only the ‘short’ (‘flat slabs’) were cut back ‘to provide a stop for plaster’. Note that the lower ‘short’ stone has traces only of a possible cut back, and that the strip width relates to the width of the lowest stone which is not cut back*

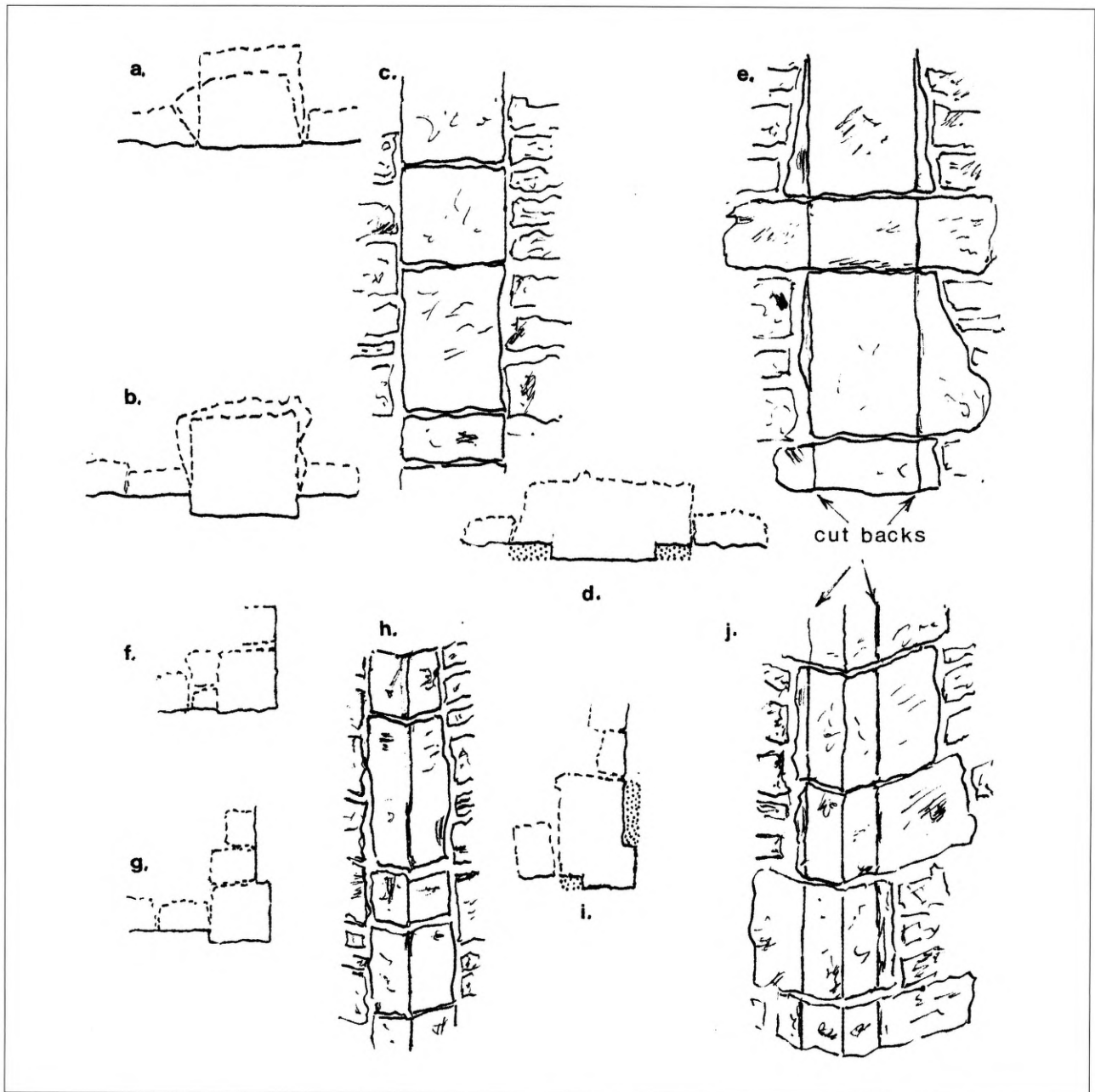


Fig 2 – Plans and elevations of pilaster strips and quoins without and with cut backs:

- a. Plan of a pilaster stone set in a wall so as not to stand proud of the wall
  - b. Plan of a pilaster stone set in a wall so as to stand proud of the wall
  - c. Elevation of a pilaster strip created from pre-cut stones
  - d. Plan of a pilaster stone (typically) cut back after insertion in a wall to give a proud strip
  - e. Elevation of a pilaster strip created by cut backs
  - f. Plan of a stone set in a wall quoin so as not to stand proud
  - g. Plan of a stone set in a wall quoin so as to stand proud
  - h. Elevation of a quoin, viewed obliquely, and created to provide a pilaster matching strip effect from pre-cut stones
  - i. Plan of a stone (typically) cut back after insertion in a wall to give proud faces
  - j. Elevation of a quoin, viewed obliquely, and created by cut backs
- In a, b, d, f, g, and i, the possible shapes of the stones behind the wall faces are shown by dashed lines: in a, and b, two alternative shapes are shown. In d, and i, the stippled areas indicate the stone removed by the cutting back process

employed to create the pilaster strip, each stone would have to have been dressed to the pilaster face dimensions prior to insertion in the wall (Fig 2b). Less commonly, the same technique was used for wall quoins, two of the corner stone faces standing proud of their respective wall faces. To achieve this, if ashlar stone was used, each of the quoin stones required an approximately square shape of equal size, in a horizontal cross-section (Fig 2, g–h). In these cases, the appropriate stones of both the pilaster and the quoin were set forward rather than being cut back, although it is in circumstances such as these that the term ‘cut back’ has been erroneously used to describe their projection as a band beyond the wall surface. As early as 1836, Rickman (p 28) had noted ‘a peculiar sort of quoining’ of this nature and suggested that these quoins were raised ‘to allow for the thickness of the plaster’.

A similar vertical band or projection can be achieved in a pilaster strip or quoin if the stones possess unlike horizontal cross-sections. To attain such an appearance successive stones would have to be cut or chiselled to a like shape; that is, the stones would have to be cut back over the depth of their projection from the wall surface to produce as required the straight side and arris<sup>1</sup> of a vertical band (Fig 2d & 2e, 2i & 2j). In almost all instances this appears to have been undertaken *after* the quoin or pilaster stones had been set firmly into the wall. Evidence in support of this cutting back occurring subsequent to the erection of the quoin or pilaster is given below. In instances where the ornamental effect of a pilaster is more greatly enhanced by the stones occurring in front of the wall surface, either as a result of their original setting or by means of stone cut back, the pilasters are usually referred to as ‘pilaster-strips’, and the overall outcome as ‘stripwork’ (Taylor & Taylor 1980). No specific, commonly-used, term has been applied collectively to Anglo-Saxon quoins which project slightly forward of the wall surfaces.

An attempt was made to discuss the origin, evolution and purpose of Anglo-Saxon quoins and pilasters (and pilaster strips) in two separate papers (Fletcher & Jackson 1945; Jackson & Fletcher 1949). In the earlier of these two works, these authors proposed the name ‘long and short strip quoin’ for those quoins which had been cut back. The term does not appear to have been extensively used elsewhere. In the same work they argued (p 24) that,

*‘the refinements of cutting-back and producing the strip effect must have come later’*

in the evolution of Anglo-Saxon workmanship. In their second paper (Jackson & Fletcher 1949), the authors classified the cut back quoin as of a different type (*Type 3*). Their classification into three types of long and short quoin is, however, somewhat ambiguous and a better classification is offered by Taylor and Taylor (1980).

Fundamental geological errors flaw much of the reasoning in both of the Jackson and Fletcher papers. In the first paper (Fletcher & Jackson 1945, 18), they argued that many Anglo-Saxon walls were built of chalk which made the walls

*‘susceptible to penetration by rain and in turn ... quickly defaced by frost’.*

They suggested

*‘The Saxons were familiar with the cure for this problem and covered the whole wall-face ... with plaster-like-mortar’.*

Although the Anglo-Saxons may have incorporated pieces of chalk into the internal cores of their walls in the same manner as had the Romans in south and east England, and they used chalk occasionally in internal walls, there is no evidence that they were ever foolish enough to use chalk extensively for external walls. Their stone for external dressings was always selected with extreme care (Pearson & Potter 2002; Potter 2004; 2005). Nor is there any evidence countrywide that the Anglo-Saxons used plaster, render or mortar on *external* wall surfaces as had been advocated by Rickman (1836) and Brown (1925, 88). Most of the stone lithologies used in Anglo-Saxon walls are impervious to water (for example, flint), or relatively impervious, the requirement for protective renders, therefore, being reduced. External render was certainly sometimes applied by Norman craftsmen, as at Bradwell-juxta-Coggeshall Church, Essex (Rodwell 1998, 82) and many Anglo-Saxon walls are currently covered with renders from later periods.

In 1949, Jackson and Fletcher further developed the theme of Anglo-Saxon craftsmen utilising chalk as a building stone. These authors incorrectly concluded that the building stone of Anglo-Saxon churches could be related directly to the site of each church, and therefore, if a church appeared to be situated on a specific geological formation, as for example chalk, the church would of necessity be built of this stone. In fact, the Anglo-Saxons always sought out a suitable stone; in the chalk region of the South Downs, for instance, they used Palaeogene Quarr Stone from the Isle of Wight for structures such as quoins.

Brown (1903) required a plaster or render finish to be present on Anglo-Saxon church exterior walls to enable him to propose, as has been indicated, that short quoin stones were cut back to permit a plaster finish to terminate at, or in line with, the vertical edge of the long stones in certain quoins. He considered these quoins and similar pilaster strips, therefore, to be purely decorative. Fletcher & Jackson (1949), accepting that external Anglo-Saxon church walls were generally plastered, argued that the pilaster strips were decorative, but more especially, functional. The pilaster strips were thought to be functional in that they separated large areas of plaster into smaller areas which would be less susceptible to weathering. In 1925 (p 58), Brown listed a number of localities where plaster of Anglo-Saxon origin could be observed. All but one of Brown's cited examples actually occur on either an internal wall or in a floor. The exception, stated by Brown to be an example of external plaster, had been recorded by Ponting (1883-4, 194) at the church of St James, Avebury. Ponting's record, however, related to plaster used on the *inside* of a circular nave window, which in turn is similar to a window visible at St Mary, Bibury, in Gloucestershire. The observations made by Brown (1903; 1925) and subsequently in the papers of Jackson & Fletcher (1945; 1949) have been followed or supported by numerous other authors (eg Taylor & Taylor 1980). The phrase 'stop end for plaster' has become common parlance with reference to the vertical edges of pilaster strips and raised quoins.

Having viewed the vast majority of Anglo-Saxon churches, the present author has not been able to confirm the presence of plaster or render of that period on any exterior wall surface. Enquiries of a range of other persons known to have studied early churches produced only two suggested Anglo-Saxon buildings where external rendering was thought to be evident. One of these, the tower at Barnack, is discussed below; the other likewise involved structures modified at a more recent date. Had pilaster strips similar to those on external walls been found on internal Anglo-Saxon walls, the case for the strips being used as stops for plaster would surely be much stronger.

Glaber's early 11th century reference to a new '*white mantle of churches*' (Glaber 1989, 114-7) has been variously interpreted. The reference probably referred to the rise of Romanesque architecture across Italy and France (Schapiro 2007). It would appear to have described the ubiquity of new religious architecture rather than, as has been suggested,

construction in limestone and marble or an external coating of white render or plaster.

### *Quoins, pilasters and jambs exhibiting cut backs*

Of the total number of ecclesiastical buildings now known to possess Anglo-Saxon workmanship in their fabric, the quantity exhibiting elements of cut back in quoins, pilasters or jambs is relatively small. Just over 30 churches exhibit this type of modification and these are listed and described in Table 1 and the Appendix. Figure 3 illustrates the terminology used in the Table. In a study of this nature it will never be known whether or not all examples of cut back have been observed and analysed; the author has, however, scrutinised many thousands of churches for such workmanship.

Arches, doorways, and any ornamental pilasters or strip-work associated with these structures have frequently been cut, carved or sculptured as part of their ornamentation. Such craftsmanship is similar to the work undertaken in creating any other Anglo-Saxon sculptured stone. The term 'cut back' is occasionally applied to aspects of such sculpture,

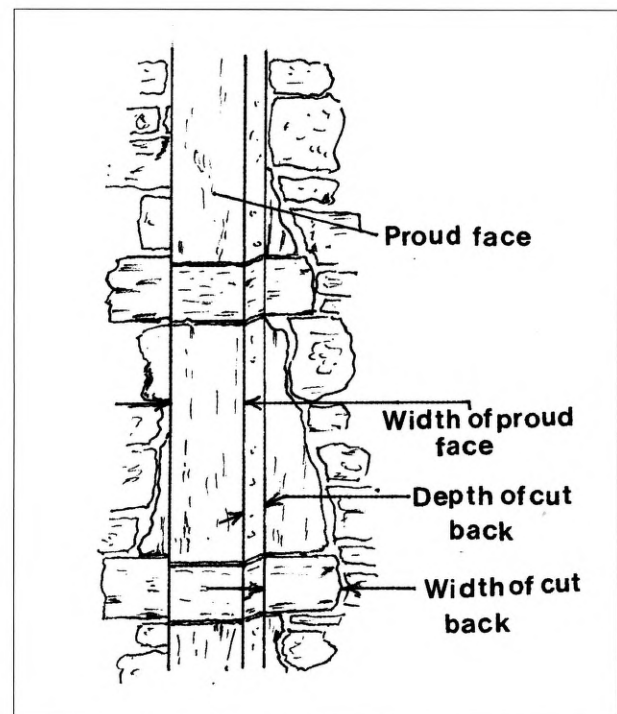


Fig 3 – The cut back nomenclature used in Table 1 and throughout this paper, as illustrated on a pilaster strip

and again, is not treated in this paper. The term here refers only to the creation of arrises cut to develop a proud face on a stone or series of stones. As a technique it was almost without exception applied only to arrises that were vertical. Stones that were cut back to provide horizontal arrises do, however, occur at St Laurence, Bradford on Avon and All Saints, Earls Barton and these will be discussed in more detail below.

Careful examination of all the known examples of cut backs detailed in Table 1 reveals that the Anglo-Saxon craftsmen were clearly aware of the 'grain'

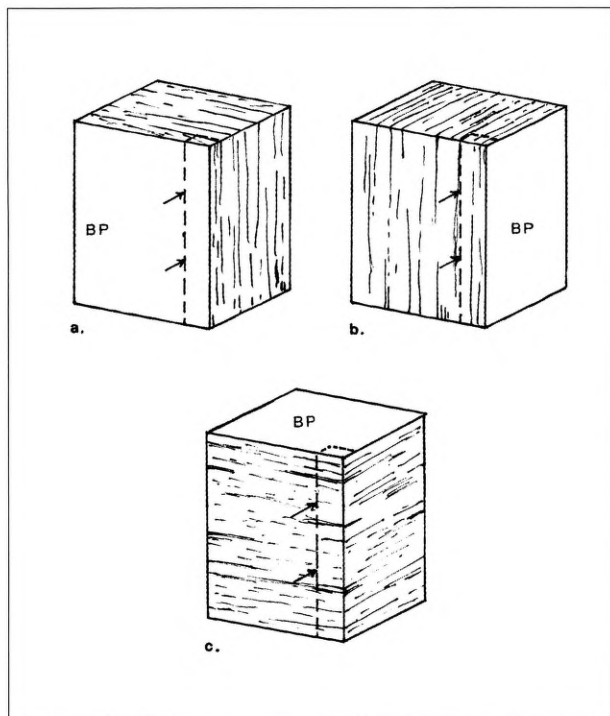


Fig 4 – Rock bedding planes and cut backs. Three ashlar stones of identical size and shape are shown; their bedding planes (BP) and the traces of these have been illustrated in the three different orientations that are possible. The potential success in trying to create a clean vertical arris and smooth cut back (by chiselling in the direction of the arrows) will differ in each case

- Will produce the best result. Having chiselled into the rock to the depth required the cut back should 'fall away', parting along its bedding planes
- Chiselling will tend to weaken the rock and the cut back portion will be difficult to remove
- A complicated chiselling task and difficult to achieve smooth cut back surfaces

of the rocks on which they were working. They appreciated that a rock would split more easily and provide a smoother surface if cut back parallel to the rock bedding planes (Fig 4). Although not universally applied, presumably because the shape of the rocks available to the mason was variable, the majority of cut backs reveal this knowledge in the method in which they have been fashioned. Quoin stones, if cut back on both faces, automatically were more difficult to cut back on one of the two faces, if the bedding orientation was vertical (Fig 4a or 4b). Where the stone was set with its bedding planes horizontal (Fig 4c) it would have been equally difficult to create cut backs on either face.

Potter (2005) recently described the common setting for stones in Anglo-Saxon quoins and pilasters as with a vertical bedding orientation. The small number of instances where cut backs occur makes it clear that the vertical setting was not chosen to enable cut backs to be more easily undertaken, rather as suggested, the vertical attitude was selected for ornamental reasons.

As applied by the Anglo-Saxons, cut back style and detail proves to be extremely variable. Details of the cut back particulars for each of the churches given in Table 1 are for this reason provided in the Appendix.

### Norman and later cut backs

The process of cutting back stones to permit portions of wall to stand proud has been used by stone masons infrequently in the construction of buildings right up until the present day. The Normans in particular occasionally utilised cut backs, but their technique of use was unlike that of the Anglo-Saxon builder. Norman ashlar walls tended to be laid in courses.

Individual stones were cut with much greater precision by post-Conquest craftsmen, so that rows of stones of equal thickness could be carefully built into courses which had to be bonded to provide wall strength, much as is the case with bricks. Any requirement to insert a change in the wall surface, for ornamental or structural purposes, tended under these circumstances to involve an element of cutting back of stone (Fig 5). Both the Norman masons' shallow buttress and their typical clasping quoin may involve such cut backs. The cut backs often result in a side-alternate appearance to the structure (see, for instance, Taylor & Taylor 1980, Fig 4a).

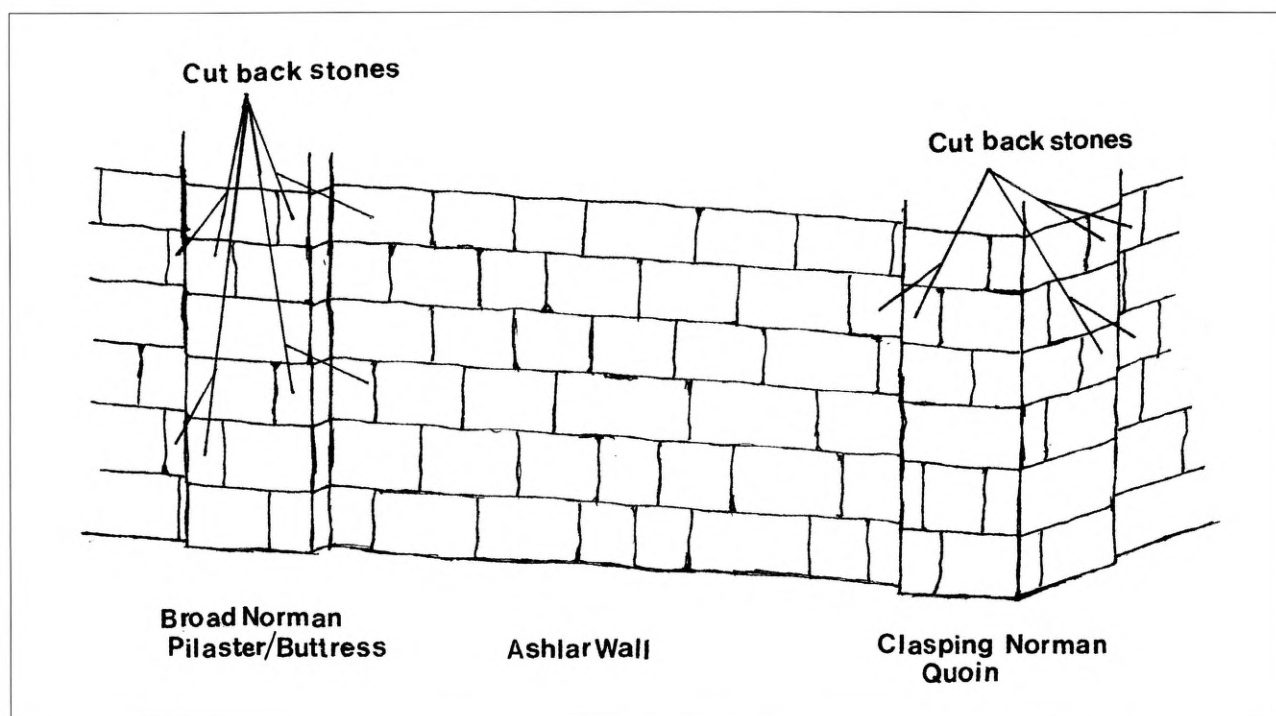


Fig 5 – A typical post-Conquest, bonded ashlar wall with a broad shallow pilaster and clasping quoin. Where they overlap the proud faces, stones will have been, of necessity, cut back. The vast majority of the stones in the wall and the structures will have been placed with their bedding orientation horizontal

Examples of Norman cut backs can be observed in churches such as St Mary, Dymock in the broad pilaster strips and the south-east nave clasping quoin, and St Nicholas, Worth, the higher stones in the south-west nave quoin (Fig 6). These examples have been included in this paper since the churches incorporate both Anglo-Saxon and Norman work, and where the structures of the two periods are sometimes confused. Parts of the decorative workmanship at St Laurence, Bradford on Avon exhibit great similarities to this Norman style of cut back (Fig 7).

Both quoins and pilasters at St Nicholas, Worth, were repaired and replaced by post-Conquest masons, mainly during Victorian restoration. The work undertaken in 1871 (Fletcher & Jackson 1945, 21) attempted to copy the Anglo-Saxon styles but remains distinguishable, as is described under the notes on the church. With the exception of the illustrative example of Dymock in Table 1, the cut backs occurring rarely in churches and other buildings of an exclusively Norman or later period are not included in the present analysis.

A view that the transition from the Anglo-Saxon style to the Norman style of ecclesiastical construction was gradual, has been propounded for many years and

is frequently advocated today (eg Fernie 1983, 162 *et seq*; Stocker & Everson 2006). During this transition it is claimed that there is an ‘overlap’ of styles. Although it must be accepted that the new Norman Romanesque building styles must have arrived, according to geography, later in Scotland and Ireland than in the south of England; within any limited geographical area, the changes in style of use of ashlar stonework appear to have been fairly abrupt. Certain churches in north Lincolnshire for instance exhibit style changes that apparently occurred during the period of construction of the church (Potter 2005, 184).

Much of the argument for a fairly lengthy period of overlap in styles must stem from the inability to distinguish clearly between the different periods of workmanship within particular structures in individual churches. The example of Barnack’s famous tower may be cited (see also the Appendix). It is clear that the tower’s pilaster strips follow the typical Anglo-Saxon style with many of the stones laid with their bedding orientated vertically (Potter 2005). In its first stage, the tower quoin stones, however, have horizontal bedding and they are replacements of a later period. Because this has not been recognised previously the rendering has been considered by some to be Anglo-Saxon.

The detailed study of both the geology and the disposition and orientation of the stones in the various structures in early churches does much to assist in the interpretation of their age. The change in cut back form between the Anglo-Saxon period and the Norman period is distinctive, with no obvious intermediate types.

### *Cut back stones: why were they created?*

The number of churches exhibiting evidence of proven Anglo-Saxon workmanship which incorporates the cutting back of stones proves to be relatively small (Table 1). If those in which there are construction

doubts, namely Bradford on Avon, Dymock, Freshwater, Leonard Stanley, Lewes, Nassington, Sompting (above the tower's first stage), Swavesey and parts of Worth are excluded, cut back stones of Anglo-Saxon date occur in the quoins of only 18 churches. Cut back stones in pilaster strips are believed to be present in only 12 churches. Six Anglo-Saxon churches, Barnack, Barton-on-Humber, Breamore, Coln Rogers, Headbourne Worthy and Worth, possessing cut back stones in both quoins and pilasters, are included in both counts. Arch, doorway and window structures preserve cut back stones in four instances externally: Barnack, Barton-on-Humber, Loughton-en-le Morthen and Stow; and two internally:



Fig 6 – The south wall of the nave at St Nicholas, Worth, showing a number of cut back stones in the pilaster strips and also the south face of the south-west quoin. In the upper portion of the quoin, where the proud face suddenly changes in width, the quoin and the adjoining wall are of post-Conquest age and the cut back stones are of a different style

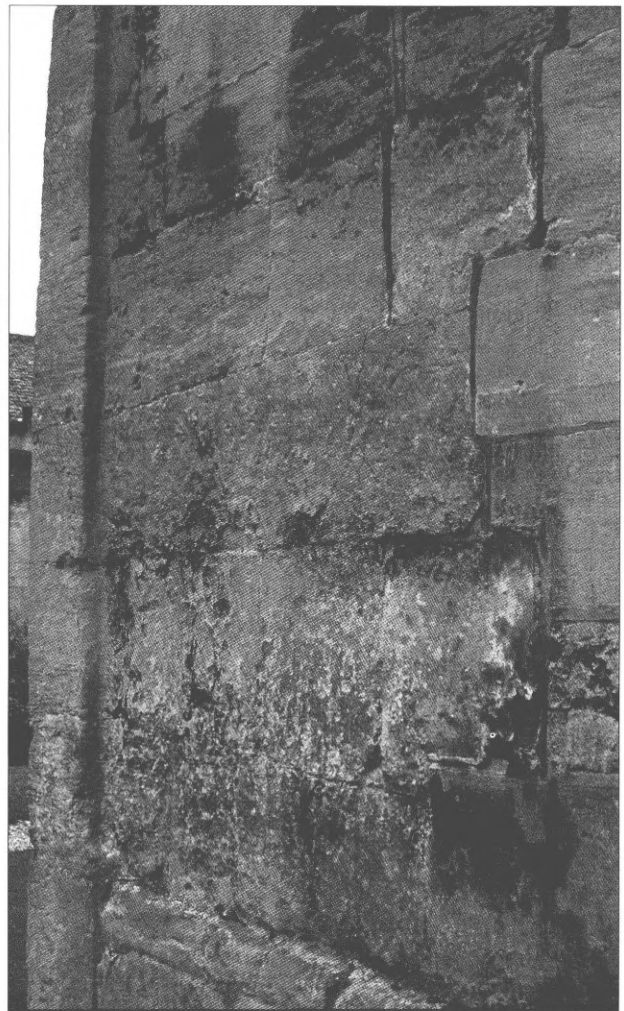


Fig 7 – The east wall of the chancel of St Laurence, Bradford on Avon to show the post-Conquest style of cut back stones. Stones at the extreme right of the photograph are of more recent insertion in the wall



*Fig 8 – The west end of the nave at Stanton Lacy church showing five proud, partial pilaster strips, in which a few stones exhibit small cut backs. It should be noted that the quoins, although of Anglo-Saxon age, are flush with the wall; evidence that originally the wall was unlikely to have been rendered*



*Fig 9 – The north door to the Anglo-Saxon porticus at Laughton-en-le-Morthen church. The north face to the north-east quoin of the porticus in long and short style remains and is noticeably flush to the north wall. The hood-moulding and the voussoirs of the arch to the Anglo-Saxon doorway are constructed of cut back stones to provide both structures with a constant ornamental width. A later medieval door now fills the entrance*



Cambridge, St Bene't and Stow. The only noted example of the cutting back of the stones of a horizontal string course can be seen at Earls Barton.

On the evidence currently available the argument first made by Brown (1903), that cut back stones provided the Anglo-Saxons with 'stops for plaster', can now be refuted.

- a) There appears to be no known instance of Anglo-Saxon use of thick plaster or render on external church walls.
- b) Of the churches under consideration, only three, Barton-on-Humber, Earls Barton and Little Somborne, carry an external, and relatively modern, render. Alton Barnes church is largely finished in modern cement pebble-dash, but this excludes the areas of the partial pilaster strips. Therefore, most of the churches have never been rendered or plastered.
- c) Although there is evidence that the Anglo-Saxons plastered at least some of their churches internally, and most churches remain in this state today, pilaster strips built for interior walls are absent. Cut back stones on internal walls are extremely rare.
- d) In many of the churches with proud pilaster strips in which the strips contain cut back stones, the adjoining Anglo-Saxon quoins are flush with the wall surfaces. This may be observed at Alton Barnes, Coln Rogers (except one quoin), Corhampton, Headbourne Worthy, Sompting (first stage of tower), Stanton-by-Bridge, Stanton Lacy (Fig 8), Stow and Tedstone Delamere. It occurs at Loughton-en-le-Morthen in relation to the cut back stones of the doorway (Fig 9). This again suggests that plaster was never originally applied to the wall surfaces.
- e) An original absence of Anglo-Saxon external wall plaster or render is further supported by churches such as Breamore and Debenham, where neither quoins nor pilaster strips really stand proud of the wall surfaces.
- f) Only at Barnack (tower, second stage) and Stow, do the exteriors of Anglo-Saxon windows exhibit cut back stones. Had external render been applied universally and 'plaster stops' been

deemed necessary, the cutting back of windows and similar structures of the same age in the walls of other churches would have been commonplace.

Clearly, if Anglo-Saxon plaster or render was absent from external church walls the cut backs could not have served as 'stops for plaster'. Fletcher & Jackson (1945) argued that in both pilaster strips and quoins, the Anglo-Saxon horizontally bedded stones or 'shorts', in the long-and-short building technique, had a particular structural significance. They believed that the cutting back of these stones occurred as a consequence to this construction, to create or preserve



Fig 10 – Detail of part of the north-west quoin, north face, of St Peter, Claydon. Only the 'long' stones have been cut back, apparently to make the sides of the stones parallel for they do not line up vertically in the face. The neighbouring churches of Debenham and Hemingstone possess similar quoins of Barnack Stone and it is possible that all three obtained their stone already worked in this way directly from the quarry. The inserted pen is 145mm long

an ornamental effect. The pilaster strips close to the south-west quoin of the tower of Sompting church were given as examples of this structural support. The two pilaster strips in question at Sompting (Potter 2007) are exceptional in their position; no other strips are known to be similarly placed. It seems more likely that they owe their position to those of the original doorways, for each of the three openings that are present on the ground floor of the tower today is also off-set from its wall centre. ‘Short’ stones were certainly used by the Saxon craftsmen to help to tie quoins, strips and arch jambs into the adjoining walls, but there is no evidence that these structures served in a functional way as buttresses. The ‘Escomb fashion’ arch, lined with long and short stones, commonly present in ecclesiastical Anglo-Saxon buildings, fails in any way to perform the functions of a buttress.

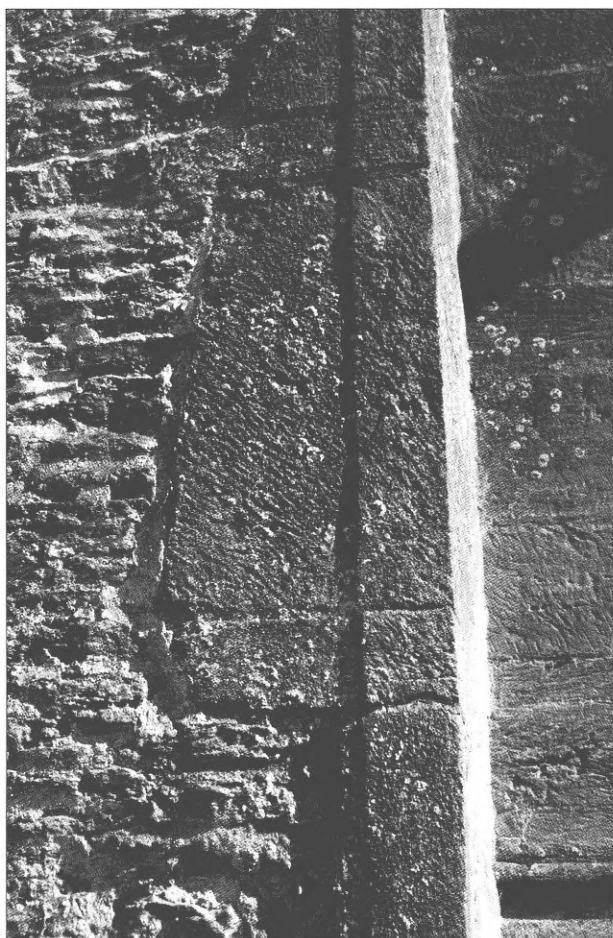


Fig 11 – Typical cut back tooling marks seen in the north-west nave quoin (north face) of Daglingworth church. In many of the churches examined the work seems to have been undertaken with a small pointed chisel

That Anglo-Saxon masons used their stones to decorative effect in constructing quoins, pilaster strips and arches is now clear (Potter 2005). The cutting back of what are normally over-large stones can in almost all instances be related to further decorative enhancement. Some of the stones can only have been cut back subsequent to their placement in the wall. The cut back stones in the hood moulding of Laughton-en-le-Morthen church, for instance, would have been extraordinarily difficult to create and match prior to the erection of the arch (Fig 9). It is suggested that Anglo-Saxon cut back stones are as much a decorative phenomenon as the presence of ornamented bases to pilaster strips and quoins, string courses, plinths, and ‘Escomb-fashion’ jambs.

### *Cut back stones: when were they created?*

Of the various examples of quoins with cut back stones, those at Wittering church most readily illustrate the manner in which the work was completed. As explained in the description of this church in the Appendix, the two proud faces of each individual quoin are generally of dissimilar widths, differing by as much as 25mm, and each proud face is cut to the width of the narrowest stone in the quoin. The trimming back would be most effectively performed with the stones set in the wall and with the assistance of a plumb-line. Very similar quoins occur at Cambridge, Coln Rogers, Hannington and Ropsley churches. As with the cut backs seen in arches, the work was performed after installation in the wall. In the vast majority of other quoins and pilasters the amount of cutting back can be associated with the width of the narrowest stone or stones. In a few instances, whether this was done subsequent to the stones’ installation in the walls has to remain uncertain.

Quoins and pilaster strips which show that the incipient, tentative or partial development of cut back stones can be observed at a number of churches such as Barton-on-Humber, Breamore, Deerhurst, Tedstone Delamere and Worth. These display occasional evidence in the form of broken or chipped stones that the work ceased because the stone was difficult to work, and already mounted in the wall. It is hard to prove that the error was at the hands of the mason and not damage created in the subsequent millennium, but further examples of errors can be observed also in completed work, such as one stone in the hood moulding at Laughton-en-le-Morthen.



*Fig 12 – The south jamb of the Anglo-Saxon tower arch of St Bene't, Cambridge viewed from the east side. Certain stones on the inner side of the strip-work have been cut back to bring them in line with the width requirements of the narrowest stones*



*Fig 13 – Detail of an unusually cut back, 'long' stone in the west face of the south-west nave quoin at Hemingstone church. The cut back has been worked parallel to the 'wrong' edge of the stone. It is possible the stone (from Barnack) was cut in the quarry originally for another purpose*

In three churches, Claydon, Debenham and Hemingstone, of very close proximity in Suffolk, quoins constructed of Barnack Stone appear to have had their cut backs (in 'long' stones only) worked prior to their placement in their respective walls. Their varied style and amount of cut back suggests that the work was undertaken off-site where there were no guidelines as to the requirements of the quoins. The work was certainly executed with care, as can be seen particularly well at Claydon (Fig 10). There, the cut backs were achieved with a pointed chisel rather than with a wedge as might have been expected. The same technique can be observed at other churches such as Coln Rogers and Daglingworth (Fig 11).

There is a noticeable absence of Anglo-Saxon churches displaying cut backs in the north of England, with Barton-on-Humber being the most northerly representative. This geographical distribution cannot be related specifically to the kingdoms of the period, although Northumbria contains no churches exhibiting cut backs. It seems more likely that the distribution relates more to the ease of creating the cut backs; the rock types of the south of Britain being softer and simpler to cut or carve.

The answer as to historically when the Anglo-Saxon masons introduced the technique of cutting back stones is hard to determine, for none of the churches has explicit documentary evidence relating to their phases of building. All the work would appear

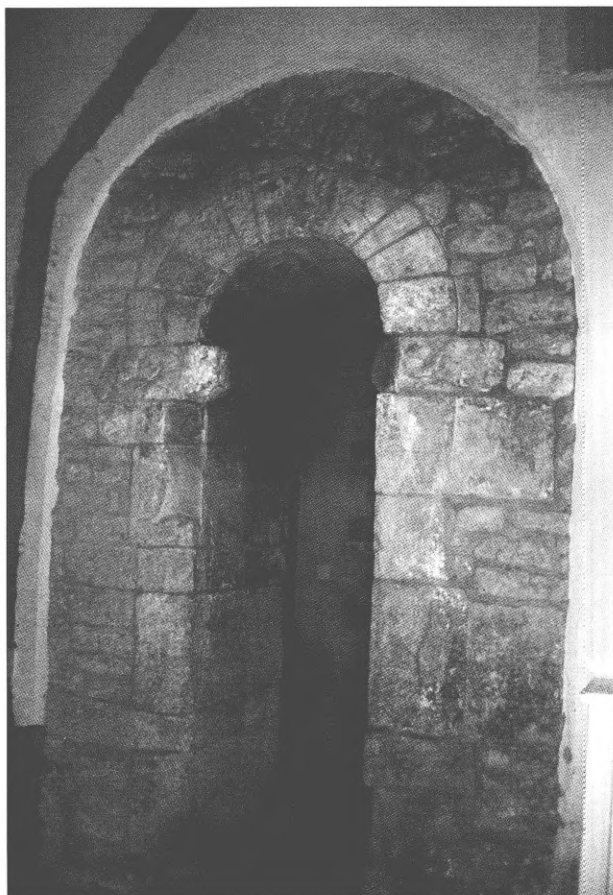


Fig 14 – The east face of the Anglo-Saxon doorway on the west wall inside the north transept at Stow church. The voussoirs have been cut back on their external circumference to the width of the smallest stone. Some of the jamb stones are slightly cut back but this has failed to produce a continuous vertical arris through the height of the jambs. Note that the wall plaster has not been brought up to the cut back arrises. The west face of the same doorway has no cut back stones

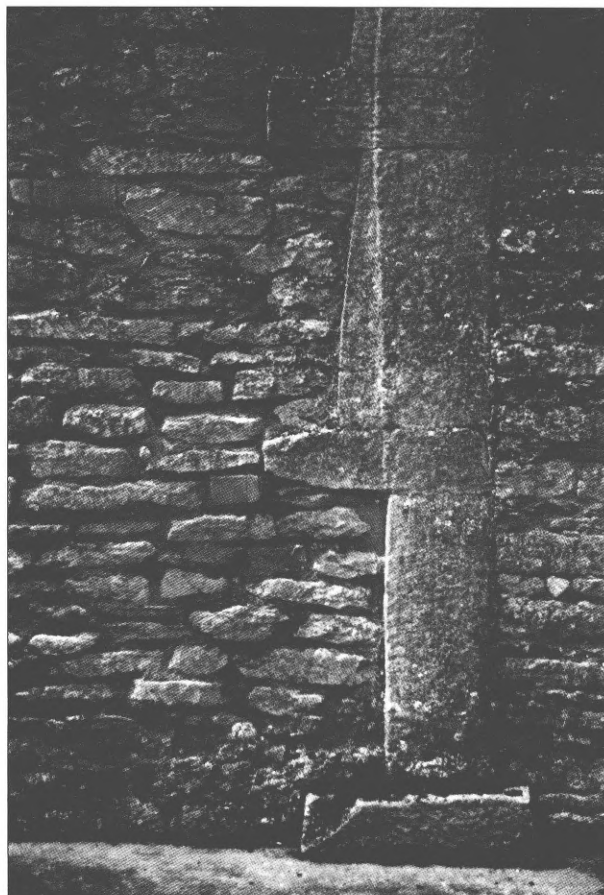


Fig 15 – The east face of the north-east chancel quoin of All Saints, Wittering. Stone 3 above the pediment to the quoin shows the typical 'pear shape' (Jackson & Fletcher 1945) of the 'long' stone prior to cut back. The stones are cut back to meet the width of the narrowest stone in the pilaster strip – in this case the lowest stone

to fall into Period C (Brown 1903), post 950 AD, with perhaps some of the earliest cut backs occurring in the lower parts of the central crossing and transepts at Stow.

### ***Principal Conclusions***

The cutting back of stones to help provide ornamental, proud pilaster strips and quoins was essentially a relatively late Anglo-Saxon practice. The practice was undertaken for decorative reasons and to present a uniformity of width to (mainly) vertical successions of

proud stones. In most instances the stones were cut back after being set into the wall and the amount of cut back was determined by the width of the narrowest proud stone. There is no indication that cut back stones provided 'plaster stops': nor is there any existing evidence that Anglo-Saxon external church walls were thickly rendered or plastered.

Typically, the less common Norman (and later) cut back stones are associated with ashlar coursed stonework and, in particular, with areas of wall face, such as shallow buttresses built to stand proud of the wall, or recessed to meet the requirements of panel-work.

Locality	Dedication & Grid Reference	Position	Proud Face Width mm	Cut Back Depth mm	Cut Back Width mm	Detail	Stone Type
Alton Barnes (Wilts)	St Mary the Virgin SU 107 620	Pilasters – NW & W nave	270	Up to 38	Up to 100	Part pilasters, 2 stones	Mid-Jurassic Oolite
Barnack (Northants)	St John the Baptist TF 079 050	Quoins – NW, SW, SE, tower (second stage) Pilasters – N, W, S, faces tower Doorway – W jamb, S, tower	250–270	Up to 106	Up to 97	Also second stage window jambs	Mid-Jurassic shelly Oolite (Barnack)
Barton-on-Humber (Lincs)	St Peter TA 035 219	Quoins – NW and NE, SE tower (inside) Pilasters – N tower S tower; Arcading Doorway – W tower (E face)	280 215 240	Up to 15 Up to 55 Up to 21	Up to 405 Up to 390	Cut back to narrowest long stone Render obscures much cut back detail. Strip-work and hood moulding	Millstone Grit
Bradford on Avon (Wilts)	St Laurence ST 824 609	Quoins – SE, SW nave; NE, SE chancel. Pilasters – W & E, N porch; E chancel	495 360	Up to 30 43–52 48	Up to 560 Up to 1185 Up to 500	SW much renewed, NE in part Chancel part renewed	Mid-Jurassic shelly Oolite
Breamore (Hants)	St Mary SU 153 188	Quoin – SW tower Pilaster – N (west) nave	295 290	Up to 27 0–30	0–94 190	1 stone 4 stones. Also incipient cut backs	Upper Greensand Hurdcott? Stone
Cambridge (Cambs)	St Bene't TL 449 583	Quoins – All four, tower. Pilasters – W and E faces of tower arch	245 280 395	Up to 28 Up to 94 Up to 87	Up to 740 Up to 77 Up to 88	On all stages N and S sides	Mid-Jurassic shelly Oolite (Barnack)
Claydon (Suffolk)	St Peter TM 137 498	Quoins – NW, SW nave	Up to 225	Up to 5	Up to 92	Only long stones cut back	Mid-Jurassic shelly Oolite (Barnack)

Locality	Dedication & Grid Reference	Position	Proud Face Width mm	Cut Back Depth mm	Cut Back Width mm	Detail	Stone Type
Coln Rogers (Gloucs)	St Andrew SP 087 097	Quoin – SE nave	255	Up to 19	Up to 260		Mid-Jurassic shelly Oolite
		Pilasters – N, S nave	275	Up to 25	Up to 10		
		N, S chancel	250	Up to 35	Up to 23		
Corhampton (Hants)	– SU 610 204	Pilasters – N, S, W nave; S chancel	118 156	Up to 75 Up to 83	Up to 35 Up to 65	Central 2 All others	Quarr Stone
Daglingworth (Gloucs)	Holy Cross SO 994 050	Quoins – NW, SW, SE nave; NE, SE chancel	160	Up to 10	Up to 295		Mid-Jurassic shelly Oolite
Debenham (Suffolk)	St Mary Magdalene TM 174 632	Quoin – NW tower	Varied 205–235	Up to 18	20–30	Cut back not vertical	Mid-Jurassic shelly Oolite (Barnack)
Deerhurst (Gloucs)	St Mary SO 870 299	Pilasters – S side apse	155	Up to 50	Up to 40		Mid-Jurassic shelly Oolite
Dymock (Gloucs)	St Mary SO 700 312	Quoin – SE nave Pilasters – N, S nave; S chancel	530 170–380	Up to 72 Up to 80	Up to 245 Up to 380	No stones set in Anglo-Saxon style	Lower Old Red Sandstone Devonian
Earls Barton (Northants)	All Saints SP 852 638	String course	About 140	About 140	About up to 120	Horizontal	Mid-Jurassic shelly Oolite (Barnack)
Freshwater (Isle of Wight)	All Saints SZ 347 873	Quoins – N face NW, S face SW, nave	315 315	Up to 25 Up to 50	Up to 95 Up to 370	Some stones only cut back	Eocene, Lower Headon Limestone
Hannington (Hants)	All Saints SU 538 555	Quoin – NE nave	270	30–34	Up to 490	N face only	Mid-Jurassic shelly Oolite
Headbourne Worthy (Hants)	St Swithun SU 487 319	Quoin – NE nave Pilasters – N nave; S chancel	146 135–160	Up to 10 Up to 50	Up to 54 Up to 67	Flush with wall, one stone	Quarr Stone
Hemingstone (Suffolk)	St Gregory TM 144 536	Quoin – SW nave	Up to 250 Varied	Up to 10	Up to 30	Only long stones cut back	Mid-Jurassic shelly Oolite (Barnack)
Laughton-en-le-Morthen (West Yorks)	All Saints SK 517 882	Doorway – N. porticus, jambs, hood moulding	180	75–100	Up to 140		Sherwood (Bunter) Sandstone

Locality	Dedication & Grid Reference	Position	Proud Face Width mm	Cut Back Depth mm	Cut Back Width mm	Detail	Stone Type
Leonard Stanley (Gloucs)	Chapel of St Leonard SO 802 032	Quoin – SW nave	170	Up to 72	Up to 320	Later? chamfered edge of angle	Mid-Jurassic shelly Oolite
Lewes (East Sussex)	St John-sub-Castro TQ 414 104	Doorway – Arch and jambs	420–450	Up to 83	Up to 450	Rebuilt	Hastings, Ashdown 'Beds'
Little Somborne (Hants)	All Saints SU 382 326	Pilaster – N nave	155	Up to 100	Up to 170	1 stone	Quarr Stone
Ropsley (Lincs)	St Peter SK 992 342	Quoins – NW, NE nave	250–335 380	Up to 53	Up to 340 Up to 185		Mid-Jurassic Oolite
Skillington (Lincs)	St James SK 895 259	Quoin – NE nave (E. face)	205–270	Up to 15	Up to 315		Mid-Jurassic shelly Oolite
Sompting (West Sussex)	St Mary TQ 161 036	Quoins – Second stage, tower Pilasters – W, S, first stage, tower	225 215–225	Up to 70 Up to 85	Up to 250 Up to 270	3 stones 3 stones	Uncertain Quarr Stone
Stanton Lacy (Salop)	St Peter SO 495 788	Pilasters – N, and W, nave; N transept (W & E)	128–142 135 135	80–115 110 Up to 110	Up to 70 Up to 45 Up to 108	9 stones 4 stones 7 stones	Lower Old Red Sandstone (Lower Devonian)
Stanton-by-Bridge (Derbyshire)	St Michael SK 367 271	Quoin – SE nave	160	Up to 14	Up to 360		Millstone Grit
Stow (Lincs)	St Mary SK 882 819	Quoins – NW, NE, N. transept. NE, SE, crossing Doorway – Arch and jambs W. side, N. transept Window – S. transept	350 410 Varied 233–280	Up to 25 Up to 25 Up to 20	Up to 560 Up to 770 Up to 144	Low only Not at top E. face only Exterior	Mid-Jurassic Oolite

Locality	Dedication & Grid Reference	Position	Proud Face Width mm	Cut Back Depth mm	Cut Back Width mm	Detail	Stone Type
Swavesey (Cambs)	St Andrew TL 362 693	Quoin – NE nave (N. face)	290				Mid-Jurassic shelly Oolite
Tedstone Delamere (Herefordshire)	St James SO 695 585	Quoins – SW, and corbels SW, NW nave	About 145	About 120		Trace on one stone Corbels	Travertine
Wittering (Northants)	All Saints TF 056 020	Quoins – NW, NE, SW, SE nave; NE, SE chancel	285–315	Up to 45	Up to 110		Mid-Jurassic shelly Oolite
Worth (West Sussex)	St Nicholas TQ 302 362 <i>(Anglo-Saxon features only)</i>	Quoins – SW (part), SE nave; NW, NE, N. transept Pilasters – S nave; N. transept; SW, S. transept	330–80 165 280–385 250–406 325	0–55 0–10 73–87 Up to 108 57–83	Up to 690 0–115 Up to 108 125	(incipient)	Lower Cretaceous, Hastings ‘Beds’ Possibly Tilgate Stone

Table 1 – Anglo-Saxon churches exhibiting cut back stones and particulars of the stone occurrence



## APPENDIX

### *Alton Barnes, St Mary the Virgin*

All five pilaster strips terminate part way up their respective walls. Two stones only are visibly cut back (others may be cut back under the wall pebble-dash render); one on the north nave (west) pilaster, cut back on one side only, and the other on the west nave wall, cut back on both sides. It appears most pilaster stones, of those visible, were cut to shape prior to insertion in the wall. The cut backs on the two stones were apparently undertaken to bring exceptionally wide stones into the approximate proud face width of the pilaster strips.

### *Barnack, St John the Baptist*

Jackson & Fletcher (1949) gave the quoins in the tower at Barnack as an exemplar of their cut back 'Type 3 quoins',

*'with a raised vertical band clasping the corner and worked on both exposed faces'.*

Their figure (p19, a) showed quoin stones set slightly forward (about 40mm) of the building line with no cut backs (as they actually occur in the tower's first stage). However, in their earlier paper (Fletcher & Jackson 1945, 24) they indicated that the cut back quoins occurred, as they do, in the tower's second stage.

In that stage a number of both 'long' and 'short' stones are cut back, as far as can be determined to approximate to the width of the narrowest stone in each quoin face. In 1949, other 'Type 3' quoins were stated as occurring at Barton-on-Humber, Nassington, Stanton by Bridge, Wittering and Worth: each of these churches is discussed below. Within the first stage of Barnack's tower, the stones in the pilasters are occasionally cut back to comply in each case with a uniform strip proud face width. The jamb stones of certain windows in the second stage are also cut back as are the western jamb stones in the first stage south doorway.

### *Barton-on-Humber, St Peter*

As at Barnack, all four tower quoins at Barton were classed by Jackson & Fletcher (1949) as being illustrative of a type of quoin which supposedly displayed cut backs on both faces to provide a square cross-section, and therefore, a raised clasping appearance. However, those few cut backs that are visible are shallow, up to 15mm deep, so that much

of each quoin surface remains flush with the current render on the walls, whilst their proud faces appear to relate to the width of the narrowest quoin stones. Better exposed are the two eastern quoins inside the church which display minor, discontinuous cut backs on their east faces. On the east face of the tower doorway both the strip-work and the outer edge of the hood moulding show cut backs on a few stones apparently to bring all stones to the width of the proud face. The first stage of the tower at Barton carries eight pilaster-strips -four on each of the north and south walls; these are narrower at the higher level where an additional strip occurs on the south wall. Although render obscures much of their cut back detail, the pilasters stand proud of their respective walls by as much as 120mm. Cut backs are visible on the pilaster strips, particularly at the higher level, and also rarely on the arcading, and appear to represent trimming subsequent to construction.

### *Bradford on Avon, St Laurence*

This church remains something of an enigma for a number of reasons. The whole church is built of almost identical dressed stone and precisely how much of the complex visible exterior was rebuilt (as the west wall) or repaired in relatively recent times is difficult to ascertain (Potter 2005). Jackson and Fletcher (1953) have argued that the church reflects two periods of Anglo-Saxon workmanship, the lower faces being created by incision (cutting back) at the time (two centuries later) when the upper walls were being built. Fashioned in this way, the panel stones would be thinner than those that surround the panels. Taylor and Taylor (1980, 87) and others do not accept this view. An opportunity to examine the detail of the stones and their settings in the upper walls should provide clarification. Both views as to the construction of the walls have proposed their very extensive cutting back to produce the large set back panels between pilaster strips and quoins. Had the panels been created, however, during the building process, the majority of the panel stones would require no modification, only to be set back from the wall's building line. Even around the periphery of the panels, with careful measurement, the stones could have been cut prior to insertion in the wall.

Externally, possibly the eastern wall of the chancel has been least modified. A count of the stones comprising the two quoins, the central pilaster and the two inset panels shows that it is composed of 22 cut back stones (three being 'modern' replacements), and

64 panel stones (nine being 'modern') which would have required no modification if set to the building line (Fig 7). Relatively 'modern' workmanship in the southern panel of the west wall of the nave portrays four stones exhibiting cut backs that are horizontal. These replacement stones appear to have been sawn to shape to fit into the lower edge of the panel. Within the lower parts of the church only three areas display work that appears to be principally Anglo-Saxon, these are the north doorway to the nave, and the south-east quoins to the nave and the chancel (Potter 2005). Some areas are closely comparable in style to those seen in the early Norman craftsmanship at Dymock church.

### *Breamore, St Mary*

The nave of Breamore church displays four pilasters (one on the north wall being very incomplete) if that continuing below the south-west quoin of the tower is included (Potter 2006, 140–2). This figure tallies with that of Green & Green (1951), but not with either Taylor & Taylor (1980), or Rodwell & Rouse (1984). Brown (1903) believed Breamore to be illustrative of cut backs, and Taylor & Taylor (1980, 94) made a general statement about the broad pilaster strips at Breamore appearing

*'as a raised rib cut on the face of stones which are otherwise only roughly dressed and are generally appreciably wider than the pilaster itself'.*

Only in one pilaster (that on the north wall, west end) do three successive stones exemplify the Taylors' statement (Fig 1). A fourth stone shows faint vertical lines where a cut back would, if completed, have been cut. In the main, the Anglo-Saxon preserved quoins and pilaster strips fail to stand proud of the walls of quarried and generally unbroken, flint cobbles. The quoins and strips might be described as relatively untidy for there are a fair proportion of replaced stones. There are a number of additional stones (stones 2 and 6 above the pedestal of the south nave west pilaster; stone 2, east face of the south-east quoin of the south transept; lowest stone, east face south-east tower quoin) where cut backs appear to have been initiated with a shallow vertical incision but not completed. In each case, the incisions can be related to the width of a higher, narrower stone and were, therefore, made subsequent to the construction of the quoin or strip. The south face of the lowest stone in the south-east tower quoin exhibits a cut back which is set well behind the wall face (probably indicating that

the wall has been rebuilt). Generally, the inferior quality and incomplete form of the cut backs may relate to the Anglo-Saxon mason's inability to create sharp arrises on the relatively soft, green sandstone.

### *Cambridge, St Bene't*

Each of the tower quoins has, over all three stages, its long and short stones occasionally cut back in a style not dissimilar to those at Wittering, described below. The proud faces are, however, of somewhat irregular width. Jackson & Fletcher (1945, 24) did not appear to note that the cut backs also involved certain 'short' stones. Inside the church, the strip-work on both the west and east sides of the tower arch shows a number of carved stones exhibiting cut backs, in each case to meet the requirements of the narrowest stone (Fig 12). The cut backs occur on the outer and inner sides of both the north and south strips.

### *Claydon, St Peter*

The north-west and south-west angles of the nave provide good examples of Anglo-Saxon, long and short quoins (Potter 2005). Various 'long' stones are cut back but the width of these stones in the proud faces remains variable (Fig 10). The cut backs seem to have been undertaken to make the stone faces appear to have nearly parallel sides. Quite possibly this work was undertaken in the Barnack quarry from which the stone originated. In support of this view, certain 'long' stones appear to have been placed into the quoins in an inverted position, had they been placed correctly the proud faces of the 'long' stones would have approximately fallen into line. Hemingstone church, not very distant from Claydon, possesses a quoin which shows very similar workmanship.

### *Coln Rogers, St Andrew*

Four pilaster strips remain, either complete, or, in the instance of the south chancel wall, in part. That in the south nave wall has six stones slightly cut back on one side only; one of these stones is inscribed with an Anglo-Saxon sundial. On the north nave wall the pilaster strip has a stepped pedestal and at least five stones slightly cut back on one side. The cut backs again appear to be a post construction 'tidying' of the pilaster strip. Three of the Anglo-Saxon quoins to the nave (north-west, south-west, and south-east) are preserved, those on the south side being more complete (Potter 2005). Only the south-east nave quoin (which has a stepped incised pedestal only on its south side) stands proud of the wall. Its stones are cut back, often

with diagonal tooling, especially on the south face, whereas the other quoins show no cut backs. The absence of a stepped pedestal on the less visible east face of the quoin relates to the lack of stone width in this direction. On this east face the cut back on individual stones has been determined by the width of the higher stones, fairly emphatic evidence that the cut backs were created post the construction of the quoin.

#### *Corhampton, dedication unknown*

As at Stanton Lacy the pilaster strips stand proud of the walls although the quoins are flush with its surface, although Taylor & Taylor 1980, 177, suggested '*a slight projection*'. In the pilaster strips, the cutting back is frequently deep if only small in width, often on only one side, suggesting completion after the construction of the wall and strips. Some of the strips preserve their original ornamented plinth (Potter 2006, 142–3).

#### *Daglingworth, Holy Cross*

Of the Anglo-Saxon quoins only the north-east nave quoin failed to be preserved. Five quoins show typical long and short style, each stands proud and all original stones show cut backs on both sides. Where cut back, some of the stones show diagonal tooling (Fig 11). There is no evidence that the extent of the cut backs has been determined by the width of the narrowest stone. It could, therefore, be suggested that the cut backs were completed before the stones were inserted in the wall. However, certain stones at the top of the quoins appear to be replacements and these are also cut back in part. Taylor & Taylor (1980) suggested that the east quoins of the chancel were possibly rebuilt in 1845–50. If so, the Victorian restoration made a very close copy of Anglo-Saxon workmanship. Part of the cut backs could, therefore, represent a continuation of earlier work and even be as late as Victorian. There are, however, two periods of Anglo-Saxon construction in the church (Potter 2005).

#### *Debenham, St Mary Magdalene*

Both western quoins of the tower show a long and short structure which remains flush to the wall surfaces. In the north-west quoin the Anglo-Saxon construction stands to a considerable height and, although not observed by Taylor & Taylor 1980, four of the 'long' stones are cut back. In each, the cut back is most unusual for it follows a line parallel to the edge of the stone and not to the vertical. Possibly this minor trimming was undertaken in the Barnack quarry prior to the construction of the wall.

#### *Deerhurst, St Mary*

The two pilaster strips preserved on the south side of the apse contain stones which are slightly cut back, with one exception on one side only. Rahtz (1976), Taylor & Taylor (1980), and others have suggested that the apse was rebuilt in the early 10th century. The cut backs do not seem to have been previously noted. One stone in the more easterly pilaster strip displays a slight vertical incision on one side where a cut back might have been constructed. The inference must be that the stones in the pilaster strips were trimmed subsequent to the building of the strips.

#### *Dymock, St Mary*

None of the stones in this church are set in typical Anglo-Saxon style and Taylor & Taylor (1980, 221) suggested that the walls were early Norman but constructed upon pre-Conquest foundations. The broad pilasters are built of stones that are coursed with the main wall fabric, set forward of the building line and created by cutting back individual stones (Fig 5). The coursework imposes a pattern of stones in the pilasters tying alternately into the stones of the walls. The style appears to be typically Norman and there are similarities with the work at Bradford on Avon.

#### *Earls Barton, All Saints*

Jackson and Fletcher (1945, 23) suggested that in the west door of the tower

*'the upright and flat stones appear to be cut to give the impression of strip-work'*.

The doorway gives no evidence of cut backs although the stones which make up the frame and the surrounding strip-work were obviously shaped prior to use in the structures. Although both quoins and pilaster strips in the tower stand proud of the plastered walls, the variable widths of the stones of which these are built suggest that vertical cut backs are absent. Unusually, Earls Barton displays an example of horizontally cut back stones on the underside of the string course between the first and second stages of the tower on the north, south and west faces (see Clapham 1930, Plate 40). It appears that the horizontally bedded stones have been cut back to create a string course of the same proud face width as higher string courses, from which it must be concluded that the cut backs were made subsequent to the tower's construction.

*Freshwater, All Saints*

Traces of the side walls and quoins of the nave of this church have been completely enclosed by later 12th and 13th century building (Taylor & Taylor 1980). The two western quoins may be viewed from the church aisles. The quoins display their respective north and south faces. Each contains long and short stones preserved in a limestone which occasionally encloses the fossil freshwater gastropod *Galba*. The rock closely resembles the local How Ledge Limestone from the Eocene, Lower Headon Formation. In the north face of the north-west quoin one short and two long stones are cut back, and in the south face of the south-west quoin one stone of each type is cut back. The quoins, enclosed as they are within later walling, follow no obvious pattern in their cut backs, although the proud faces in both instances, where present, are of the same width. Interestingly the stones were hewn using chisels of two blade widths, 15 and 6 mm.

*Geddington, St Mary Magdalene*

The interesting Anglo-Saxon arcading visible at Geddington was referred to by Jackson & Fletcher (1945). The work contains no obvious cut back stones.

*Hannington, All Saints*

The only Anglo-Saxon quoin standing at Hannington shows good long and short construction (Hare 1980; Potter 2006, 143–4). The chancel wall overlaps the stones in the east face of the quoin and the cut back on the north face follows the narrowest part of the lowest stone. It, therefore, appears to have been cut post the construction of the quoin.

*Headbourne Worthy, St Swithun*

Although the walls containing the pilaster strips were rebuilt in 1865–6 (Slessor 1888; Green & Green 1951) it is stated that this was done with great care and exactitude. As at Corhampton and Stanton Lacy, the Anglo-Saxon quoin stones in the east wall of the chancel and the north-east nave are set flush with the wall (Potter 2006, 144–6). Only one stone, the sixth from the ground on the north side of the north-east nave, shows a cut back. Four pilaster strips can be observed; three in the north nave wall and one in the south chancel wall. It should be noted that Green & Green (1951, 19), who described cut backs as ‘rebates’, indicated that the strips ‘do not show rebates for plaster’. However, cut backs are present. On the south chancel it is clear from the pronounced joint, that the wall was re-constructed up to the pilaster

stones so that the small cut back would remain exposed.

*Hemingstone, St Gregory*

Several of the ‘long’ stones in the long and short south-west quoin to the nave exhibit cut backs. The width of the proud face is, however, variable, similar to the work at Claydon. It would seem probable that the cut backs were created prior to the placement of the stones in the wall (perhaps in the quarry) to make the stones appear parallel-sided. As at Debenham, at least one ‘long’ stone has the cut back parallel to the edge of the stone and not vertical (Fig 13).

*Laughton-en-le-Morthen, All Saints*

Taylor & Taylor (1980, Fig169) figure the east quoin to the *porticus*, visible at the north-west end of the church, as being cut back. No cut back is visible on this Anglo-Saxon quoin, but it is possible that the vertical ‘cut back line’ shown, actually was intended to represent a line of junction of two walls inside the church. However, the figure correctly illustrates that the nine large stones which make up the hood-moulding to the arch are cut back flush with the wall at their external surface, and (not shown) less so on their internal surface, with two stones being excluded internally. The work is clearly decorative for the cut backs were created to the *radii* of the narrowest stones in the hood moulding after the arch had been constructed; one stone appears to have suffered damage during this modification. Fashioned in this way the hood moulding proud face width is similar to that of the strip-work, two stones of which are cut back (Fig 9). The voussoirs of the doorway are also cut back or rebated along their inner arris.

*Leonard Stanley, Chapel of St Leonard*

This building has long been used for farm purposes. The lower part of the south-west quoin has its stones set in an Anglo-Saxon style (Potter 2005). The stones in the south face of the quoin are cut back, although the quoin was probably reset slightly south of its original position when the west wall was re-built (Swynnerton 1921). The angle of the quoin is bevelled and it is probable that the bevel, and possibly the cut back, form part of the many later alterations to the building. Bagshaw (1998) has provided a stone by stone description of this building.

*Lewes, St John-sub-Castro*

The outer face of an early doorway was rebuilt into a wall of this church in the 19th century. The major part of the doorway is built of calcareous, fine-grained sandstone from the Ashdown 'Beds' (Lower Cretaceous, Hastings 'Beds' Formation) in which the bedding orientation is difficult to determine. However, an Anglo-Saxon age is reflected in the architecture of the structure. In each impost, two of the three stones, are constructed of Quarr Stone. On both the inner and outer edges of the arch and jamb mouldings many of the stones are decoratively cut back to provide a fairly uniform proud face width.

*Little Somborne, All Saints*

Pilaster strips are visible on the north and south walls of the nave. That on the south wall is mainly covered in cement. Only the lowest stone in the north wall strip has been cut back (on one side), presumably subsequent to the wall construction. The lowest stones in the two west quoins, which are flush with the wall and have probably been rebuilt (Webster & Cherry 1976), exhibit Anglo-Saxon workmanship (Potter 2005; 2006, 146–7), but no cut backs.

*Nassington, St Mary the Virgin and All Saints*

The south-west nave quoin has been described as being similar in style to the quoins at Wittering (Jackson & Fletcher 1949). Viewed internally from a vestry, only the west face is partly visible and this is covered with plaster. Slightly proud features can no longer be interpreted as possessing cut back stones, nor can the interpretation of Taylor & Taylor (1980) be confirmed.

*Ropsley, St Peter*

Brown (1925, 477) indicated that all four nave quoins were cut back 'for plastering'. On examination, only the north-west and north-east nave quoins exhibit cut backs and these are on one face only, the second face in each case being obscured by later walls. In these two quoin faces the stones are cut back to the width of the lowest stone, with the cut back being executed subsequent to the erection of the quoin. The width of the higher stones in the faces is sometimes less than the proud face width.

*Skillington, St James*

Brown (1925, 478) stated that the north-east quoin of this church exposed a long and short arrangement

in which stones were cut back for plaster. Taylor & Taylor (1980, 549) elaborated upon this description, stating that three long and short pairs stood

*'above eight courses of rather random quoining which... indicated...the same pre-Conquest date by the cutting back of part of the outer surface of each stone so as to present a straight vertical joint as a stop for the original plaster covering of the wall face.'*

At least three of the stones in this quoin are bedded vertically, two of these being 'long' stones the width of which have approximately determined the cut back dimension for the very slightly proud face. Certain stones have been broken and others probably reset.

*Sompting, St Mary the Virgin*

The pilaster strips in the first stage of the tower have been described by Taylor & Taylor (1980, 559), Aldsworth & Harris (1988) and Potter (2007).

The pilasters are well exhibited in the south and west walls, and today, they incorporate within the first stage three varieties of stone. The stone from the Hythe Beds is certainly a replacement. Quarr Stone is more abundant than the third rock type which is Caen Stone, typically utilised in Norman and later construction. In the pilasters the Quarr Stone is probably, therefore, the original Anglo-Saxon stone. In a small number of instances, 'short', horizontally bedded, bonding stones of Quarr have been cut back to the standard decorative width of the pilasters.

The quoins in the first stage of the tower are flush with the wall and their stones are not cut back. In the second stage, however, with the exception of the top 1.5 m which revert to the style of the first stage, the quoins are clasping with proud faces and occasional cut back stones. Viewed with difficulty from a distance, the stones of the second stage quoins all appear to be bedded in a horizontal style.

The suspicion, supported by Aldsworth & Harris (1988), must be that these clasping quoins, the pilaster-strips and the string course separating the stages (Potter 2005) are not of Anglo-Saxon origin. Taylor & Taylor (1980, 560) indicated that the south-west tower quoin was both cut back and proud of the wall but this, as stated, applies only to the second stage. The proximity of pilaster strips to this quoin led Fletcher & Jackson (1945, 22) to propose that the strips had some structural significance.

*Stanton-by-Bridge, St Michael*

Both the north-east (in part) and south-east nave quoins illustrate Anglo-Saxon setting (Potter 2005). The south-east quoin (*'the only Anglo-Saxon feature'* of Taylor & Taylor 1980, 568), which more clearly also shows long and short style, has cut backs on both the south and east faces. The insignificant amount of cut back would be insufficient to permit a plaster coat to cover stones in the wall fabric: ie the quoin fails to stand proud of the wall. Jackson & Fletcher (1949) cited this quoin as one of six only in England with cut backs on both faces to leave *'a raised vertical band clasping the corner'*, and in this instance they argued that the cut backs were *'designed to give a decorative or artistic appearance'*.

*Stanton Lacy, St Peter*

As many as 16 pilaster strips can be observed at this church. Each stands proud of the wall and, in contrast, the four Anglo-Saxon quoins (west wall of nave and north wall of transept) are flush with the wall surface (Fig 8). The stones of the pilaster strips appear to have been shaped and inserted into the wall as it was built. None of the strips is preserved over its full original height and, exclusive of the basal corbel-like plinth stones upon which some strips stand, 130 stones in total remain in the strips. Subsequent to the wall construction, a number of stones required cut back trimming to preserve the neat vertical lines of their respective strips. Eighteen stones (14%) have small cut back portions on one side, and a further two stones are cut back on both sides.

*Stow, St Mary*

The lowest stones in the quoins at the north-west and north-east corners of the north transept possess very shallow cut backs in both walls to each quoin. The depth of the cut backs is such that they could not have acted as plaster stops, for the proud faces of the quoins do not rise above the wall faces. It would appear that the cut backs are ornamental and were inserted after the quoins were built for they line up with the smallest width of stone in each quoin face. That a fire affected the Anglo-Saxon parts of this church has been noted by others (eg Taylor & Taylor 1980, 592), and it is suggested that those parts of these quoins that are not cut back form part of a later Anglo-Saxon rebuild. Three quoins associated with the crossing may be seen externally, these may be observed to pre-date the Norman buttresses which abut against them; they may also be rebuilt, for they appear to be

later than the transepts. The lower two-thirds of two of the quoins also exhibit cut back stones. An internal Anglo-Saxon doorway in the west wall of the north transept possesses unusual cut backs on its east face in both its voussoirs and jambs (Fig 14). Those on the voussoirs closely resemble the structure at Laughton-en-le-Morthen, but affect the external radius only. The jamb stones (north side) are not cut back along a vertical line (as indicated in Taylor & Taylor 1980, Fig. 293), nor, in either jamb, are all stones cut back. The cut back where present is shallow. The external jambs to the south window in the south transept contain stones with a shallow cut back: these relate to the widths of the narrowest stones.

*Swavesey, St Andrew*

Inside the present Swavesey church the two eastern long and short quoins of the original Anglo-Saxon nave are preserved. Cut back stones are visible only on the north side of the north-east quoin, but currently these are difficult to study in detail.

*Tedstone Delamere, St James*

It appears that this church may have been built on the site from which the original stone fabric, Devonian, Old Red Sandstone, was extracted for the walls. The western nave quoins, especially the north-west, preserve their original Anglo-Saxon stone setting in travertine blocks (Potter 2005) which are set flush to the wall. On the west face of the south-west quoin, the third stone from the ground level displays a faint vertical trace, cut in line with the width of the overlying stone, and is presumably the line of a potential cut back. At the top of each of the western quoins a corbel has been hewn out of a large block of travertine, each has been cut back on one side to the width of lower quoin stones.

*Tichborne, St Andrew*

Brown (1925, 482), Fletcher & Jackson (1945, 23), Green & Green (1951, 28) and others have considered the unusual quoins and pilaster strips set in the chancel of Tichborne as of Saxo-Norman age. Built of Quarr Stone, they exhibit no cut back stones, the stones are generally set with their bedding horizontally, and the features are of post-Conquest age.

*Wittering, All Saints*

Wittering church probably illustrates the occurrence of cut backs better than any other. The six major, long and short, quoins each show cut backs on the majority

of their stones, with the three wholly exposed quoins – north-west and south-east, nave; south-east chancel – displaying these on both faces. Jackson & Fletcher (1949) described these quoins as ‘Type 3’, each with a cut back, raised vertical clasping corner. It is possible to show that the quoins were first erected using stones hewn approximately to shape.

Masons in the original quarry probably discovered that the stone possessed only poor incipient bedding planes and in many instances the cut stone failed to have parallel sides. The ‘long’ stones, with their two external faces at right angles, were built into the quoins to stand with bedding planes vertical (Potter 2005), and on their broadest surface for stability. They would appear in the quoin as ‘pear-shaped’ (Jackson & Fletcher 1949, 10). A plumb line would then have been placed from the top of the quoin to enable the stones to be trimmed decoratively to the width of the narrowest stone (Fig 15). Because the stones were not square in cross-section the width of the raised band in the faces in various quoins differs. The technique described has been discussed with modern stonemasons. All agree that with the simple tools available to the Anglo-Saxon it would be easier to trim the stone when it was fixed into the wall, than to cut the stone to a range of different measurements in the quarry.

### *Worth, St Nicholas*

Aldsworth (1991) described the building of Worth church as occurring over four phases; the second phase he suggested might be 13th or 14th century. The present author proposes, from the stonework, that this may be Norman. Aldsworth used the expertise of Bernard Worssam to identify the rock types as Tunbridge Wells Sandstone. This fine-grained sandstone from the Hastings ‘Beds’ Formation, possesses only weak bedding traces. The quoins and pilaster strips at Worth are both varied and complex, and strictly the detail of each should be described independently. Their construction ranges from Anglo-Saxon and Norman to Victorian, in origin, and cut backs can be identified in workmanship from each of these periods.

Had the stone used for these structures possessed more clearly definable bedding, the craft of the original Anglo-Saxon masons would have been readily distinguishable with the recognition of vertically orientated stones (Potter 2005). Only the lowest stones in each of the south-west and south-east clasping quoins of the nave, and the three south nave pilasters,

and in full height the south-west pilaster on the south transept, unmistakably illustrate such orientation.

As at Wittering church, the cut backs on certain stones in these structures decoratively match the width of the narrowest stone in the proud face. Like these quoins and pilasters, those of the north transept, illustrate a further feature which appears to be distinctive of the Anglo-Saxon craftsmanship in this church. In all instances the width of each proud face decreases vertically. Certain structures with cut backs appear to be of Norman construction – as the topmost nine stones in the south-west nave quoin (see text and Fig. 6), and it should be noted that their proud faces are of different width to those in the church which are of Anglo-Saxon origin. The church was restored in 1871 (Fletcher & Jackson 1945, 21) and the ‘half-round’ pilasters on the walls of the apse are evidently Victorian reconstructions – all stones are horizontally bedded, the strips do not taper upwards, and each stone is cut back on both sides. Of other features present, the existence of an incipient cut back on the stones of the north face of the north-west and north-east quoins of the north transept in an unsuccessful attempt to produce a narrow proud face should be recorded. This work is of indefinite date, but is probably of Anglo-Saxon origin.

*John F Potter is Emeritus Professor of geology, currently attached to the Archaeology Department of the University of Reading*

### **Notes**

1. Arris: the sharp edge that describes the angled edge formed by the intersection of two surfaces, such as the corner of a masonry unit (Editor)

### **Bibliography**

Aldsworth, FG, 1991, ‘Observations on the church of St Nicholas, Worth, 1987–88’, *Sussex Archaeological Collections* 129, 39–44

Aldsworth, FG and Harris, R, 1988, ‘The tower and ‘Rhenish helm’ spire of St. Mary’s Church, Sompting’, *Sussex Archaeological Collections* 126, 105–44

Bagshaw, S, 1988, ‘Early medieval church to tractor shed, building survey at Leonard Stanley chapel’, *Glevensis* 31, 3–12

- Brown, GB, 1903, *The Arts in Early England: Ecclesiastical Architecture in England from the conversion of the Saxons to the Norman Conquest*, London
- Brown, GB, 1925, *The Arts in Early England: Anglo-Saxon Architecture*, London
- Clapham, AW, 1930, *English Romanesque Architecture before the Conquest*, Oxford
- Fernie, E, 1983, *The Architecture of the Anglo-Saxons*, London
- Fletcher, EGM and Jackson, EDC, 1945 “‘Long and short” quoins and pilaster strips in Saxon churches’, *Journal of the British Archaeological Association* 3rd Series 9, 12–29
- Glaber, Rodulfus, 1989 (11th century), *Historiarum libri quinque*, ed and trans J. France, N Bulst and P Reynolds, Oxford
- Green, AR and Green, PM, 1951, *Saxon architecture and sculpture in Hampshire*, Winchester
- Hare, M, 1980, ‘The Anglo-Saxon church and sundial at Hannington’, *Proceedings of the Hampshire Field Club and Archaeological Society* 36, 193–202
- Jackson, EDC & Fletcher, EGM, 1949, ‘Further notes on ‘long and short’ quoins in Saxon churches’, *Journal of the British Archaeological Association* 3rd Series 12, 1–18
- Pearson, A and Potter, J F, 2002, ‘Church building fabrics on Romney Marsh and the marshland fringe: a geological perspective’, *Landscape History* 24, 89–110
- Ponting, CE, 1883–4, ‘A description of the Saxon work in the church of St James, Abury’, *Wiltshire Archaeological and Natural History Magazine* 21, 188–94
- Potter, JF, 2004, ‘*Viviparus* Limestone (‘Purbeck Marble’) – a key to financially well-endowed churches in the London Basin’, *Church Archaeology* 5 & 6, 80–91
- Potter, JF, 2005, ‘No stone unturned – a re-assessment of Anglo-Saxon long-and-short quoins and associated structures’, *Archaeological Journal* 162, 177–214
- Potter, JF, 2006, ‘A geological review of some Hampshire Anglo-Saxon churches’, *Proceedings of the Hampshire Field Club and Archaeological Society* 61, 134–52
- Potter, JF, 2007, ‘A review of some early West Sussex churches’, *Sussex Archaeological Collections* 145, 81–96
- Rahtz, P, 1976, *Excavations at St Mary’s Church, Deerhurst 1971–73*, CBA Res Rep, 15, London
- Rickman, T, 1836, ‘Further observations on the ecclesiastical architecture of France and England’, *Archaeologia* 26, 26–46
- Rodwell, W, 1998, ‘Holy Trinity Church, Bradwell-juxta-Coggeshall; a survey of the fabric and appraisal of the Norman brickwork’, *Essex Archaeology and History* 29, 59–114
- Rodwell, W and Rouse, EC, 1984, ‘The Anglo-Saxon rood and other features in the south porch of St. Mary’s Church, Breamore, Hampshire’, *Antiquaries Journal* 64, 298–325
- Schapiro, M, 2007, *Romanesque Architectural Sculpture*, The Charles Eliot Norton lectures, Chicago
- Slessor, JH, 1888, *Notes on the church of St Swithun, Headbourne Worthy*, Winchester
- Stocker, D and Everson, P, 2006, *Summoning St Michael: Early Romanesque Towers in Lincolnshire*. Oxford
- Swynnerton, C, 1921, ‘The priory of St. Leonard of Stanley, Co. Gloucester, in the light of recent discoveries documentary and structural’, *Archaeologia* 71, 199–226
- Taylor, HM and Taylor, J, 1980 (1965), *Anglo-Saxon Architecture*, 2 vols, Cambridge
- Webster, LE and Cherry J, 1976, ‘Medieval Britain in 1975....Hampshire, Little Somborne (SU 382325)’, *Medieval Archaeology* 20, 182