## Hales, St Margaret by Stephen Hart





All photos are by Simon Knott

The church consists of a nave with a narrower apsidal chancel, both with thatched roofs, and a round west tower.

The walls of the nave and chancel were probably originally finished with plaster, most of which has been weathered away to expose a fabric of irregularly coursed flints, erratics, ferricrete and some pieces of Roman tile. However, the dressed stone elements of nave and chancel, all of Caen stone, is of skilled Norman workmanship of the highest quality.

The nave has nook-shafted quoins, a blocked shafted window in the south wall, and the north and south doorways with several orders of mouldings are among the finest in the county. The chancel has buttresses, also nook-shafted, a string course and blank arcading.



The nave is only 15ft 6ins wide, and because of this and the external overall width of the tower and the re-entrant angle fillets, there is no external nave west wall as such; the short returns at the western quoins are in fact the ends of the three foot-thick side walls. However, as measured from the north and south doorways to the face of the nave west wall internally, and externally to the NW and SW nave corners respectively, the notional thickness of the west wall is found to be 3ft 1 inch on the north side and 2ft 7.5ins on the south. Its thickness at the crown of the tower arch is 4ft, and within the tower the wall above the arch is flat for a width of about 5ft, but where this flat area meets the tower's internal circumference there are not straight joints; the flintwork merges with gentle curves.

The tower is circular to the top. It has an internal north-south diameter of 11ft 6ins and 3ft 4 ins thick walls. Fillets in the re-entrant angles between tower and nave west wall differ from the normal type in that their profile is flat or concave rather than of the usual quadrant section and their girth is greater, 2ft 4ins on the north and 1ft 7ins the south which adds to the disparity established by the 5.5ins difference in the notional thicknesses of the nave west wall at each end. They seem to course with the tower flintwork rather than with that of the nave, although breaks in bonding noticeable within their width suggest discontinuities and re-bonding to later work.

Partial thin plastering and irregular areas of repointing stifle much of the tower's external flintwork, giving the walls a fairly uniform appearance. Even so, four distinct architectural stages are identifiable externally, which correspond with the internal stories. The lower stage extends from the ground to first-floor level (about halfway between the two lower west windows); from there the second and third stages comprising the first- and second-floor stories of the tower extend up to just below the cills of the belfry openings, and the belfry and its later parapet form the fourth and top stage. At a level between the windows of the second and third stages, an indistinct demarcation in the facing flint can be detected, most noticeably on the north side and at this level one our two putlog holes with medieval brick bridging can be seen, above which the wall contains some medieval bricks and differs a little from that below.

The tall ground-floor compartment in the lower stage contains two double-splayed circular windows blocked almost unnoticeably outside but internally showing impressions of conical basketwork shuttering on which the circular flintwork splays were formed. The tower arch is 6ft 4ins wide and 9ft 1 inch high to the springing of its round-headed arch, and has dentilled imposts, an unusual decorative variation from the more common Norman once-chamfered type. In the west wall, a pointed window has stone dressings externally and a brick hoodmould.

In the second stage (first floor) there are three narrow windows facing south, west and north, with stone dressings and round heads externally. Their round rear arches with flint voussoirs incorporating occasional dressed stones were built on shuttering and the board marks on the arch soffits can be seen to be in uninterrupted contact with the backs of the external stone dressings, indicating that the exterior stonework was part of the original wall and not a later enhancement. Internally the east wall of this stage is a flattened curve and accommodates a narrow, now-blocked, triangular-headed upper door recess, about three feet deep, which does not show in the nave. It is only 4ft high to the triangular apex and its threshold level is about 5ft above the present floor. Its uninterrupted flintwork at the reveals and shuttering boardmarks on the head for the full depth of the recess imply that it was built with the wall, not cut through later. Continuity of the internal flintwork around the recess with that of the walling containing the three windows provides evidence of a triangular-headed flint opening and stone-dressed windows in the same building phase.

In the third stage, i.e. at second floor level, the east wall is curved, and at the cardinal orientations four internal unsplayed openings with semi-circular heads have radially-laid arches of flint or undressed stone and occasional dressed stone in their jambs. Wider than the first-floor windows, they must have been the original belfry openings. Those facing south, west and north have been partially blocked, and

smaller pointed stone lancets inserted within the blocking, and the east one is fully blocked. Although these alterations are obvious inside, no external evidence of the outlines of the original openings remain and the flintwork surrounding the inserted lancets merges uninterruptedly with the wall fabric with no signs of "making good" where previous dressings had been removed and the openings reduced, nor is there any external evidence of the blocking of the eastern one in the tower east wall above the nave roof.

The external flintwork of the top stage is not dissimilar to that of the stage below, both containing some medieval brick. The lancet belfry openings with stone dressings are positioned in an unusual arrangement; two separate lancets side by side face west and west, a single one with cusping in the head faces north, and the corresponding south opening has been blocked. The shallow, level parapet with a chequer pattern of knapped flint and brick, rising from a brick string course is probably later. The internal flintwork of the top stage is different from that in the third stage below and incorporates medieval brick.

## Interpretation

In order to elucidate the constructional history of his church and tower, it is important firstly to establish whether church and tower were contemporary ort whether one has been a later addition to the other. Deduced from the evidence described above, the following constructional chronology is proposed.

Phase 1 Originally there was probably a small Early Norman church with contemporary round tower comprising the present three lower stages. The tower's lower stage incorporated the double-splayed windows and the tower arch with its dentilled imposts; the second stage contained the triangular-headed upper door and the present three round-headed slit windows, stone-faced externally; the third stage would have been the original belfry stage. Its present four internally round-headed wider openings at the cardinal positions, when belfry openings, would no doubt have had stone dressings.

The tower arch impost detail, the stone dressings of the second-stage windows and probably also of the former round-headed belfry openings in the third stage all point to an early Norman attribution for the original church and tower. As stone was probably not available before the commencement of Norwich Cathedral in 1096, the tower is unlikely to have been earlier than that. Nevertheless, apparently contemporary with the stone features, the double-splayed windows and triangular-headed upper door suggest early post-Conquest work, still incorporating Saxon techniques.

Phase 2 The stonework detail of the present mature Norman nave and chancel suggest they were built in the mid-12<sup>th</sup> century. It seems therefore that the earlier church was demolished but the original tower was retained with the nave west wall, tower arch, upper door and original belfry. Removal of the original nave's side walls would be likely to have left at least part of the fillets each side of the tower which were then apparently widened to meet the west ends of the new nave's three-foot-thick side walls that would have been bonded to the tower's retained east wall. This

could account for the different notional thicknesses at each end of the present "west wall."

A symmetrical relationship to each other of the new nave's quoins would not have been as important as if built as the ends of an originally independent wall. The reason for the re-entrant fillets of larger girth than normal in the angles between the new nave walls and the tower would have been to fill the increased gaps between the retained former ones and the different nave west wall alignments each side.

The different notional thicknesses at each end of the present "west wall" and the apparently slightly non-axial alignment of the tower arch relative to the nave could suggest that the new church may have been built on a different alignment from the present one.

Phase 3 In the late 13<sup>th</sup> century or early 14<sup>th</sup> century the nave and chancel walls were heightened to accommodate taller Y-traceried windows then inserted in the nave and in the chancel east wall. There seems to be no reason to suppose at the time, the nave's west corners and gable walls would not have been raised in the same way as the eastern ones, with the new roof covering them. The present thin half-gable parapet walls on the west walls, with ashlar copings, kneeler-quoins and weatherings above the nave corners, look more like 19<sup>th</sup> century alterations than medieval work. Similar 19<sup>th</sup> century modifications are seen at other round-towered churches, East Walton, Syleham and Snailwell to name a few.

With a heightened nave, the ridge of the roof would probably have been higher than the early belfry opening, and it seems likely therefore that the addition of the present lancet belfry was probably contemporary with the nave alterations. The medieval brick putlogs holes at the base of the Norman belfry stage (the third stage), the similarity of its external fabric to that in the added belfry above (both containing medieval brick, absent in the two lower stages) and the absence of external indications of the blocked east opening or of "making good" around the inserted lancets in the others suggest that this stage was refaced at this time. The exterior dressings of the Norman belfry openings would have been removed, some of them perhaps being reused in the replacement windows in the new belfry's openings. The new facing flintwork around and below the inserted smaller windows and that blocking the east opening was extended into the former openings to a considerable depth, presumably to provide optimum bonding of the new facing to the existing structure. Then followed the new belfry walls.

In the light of the practical difficulties of removing the outer flintwork of a solidly built wall, the refacing of the third stage could also imply that the outer face of the original Norman belfry stage may have been inset a few inches like the early Norman belfry of probably similar date at nearby Thorpe-next-Haddiscoe. This would have facilitated its refacing. A comparable procedure was carried out to a former belfry stage below the added 14<sup>th</sup> century octagonal belfry of the round tower at Rickinghall Inferior.

The tower's ground-floor west window may have been inserted at the same time as the belfry addition, concurrently with the external blocking of the double-splayed circular windows.

## **Discussion**

Two opposing theories have been advanced that seek to reconcile the stylistic contrast between the mature stonework on the nave and chancel with the circular flint windows and the triangular-headed upper door in the tower, but there are unconvincing aspects to both which are discussed below.

The first theory holds that the double-splayed circular windows and the triangular-headed upper door in the tower define it as Saxon and that it had been added to an earlier towerless church. Subsequently in the mid-12<sup>th</sup> century that early church was lavishly embellished with dressed stone by Norman masons, who also provided external stone dressings to the first-floor tower windows; later the original belfry openings, claimed as Saxon, were partially blocked and small pointed windows inserted into them and the tower was raised with an Early English belfry.

The idea that Norman dressed stone details had been inserted into the fabric of an earlier Saxon church is unconvincing because of its impracticability. The extent of such work, in particular rebuilding the nave corners and the extent of the chancel's elaborate stonework suggests that it would have been more practical to build anew. The claim that the stone dressings of the tower's first-floor windows were Norman embellishments of former Saxon flint openings is disproved by the shuttering board-marks on the rear arches being in contact with the backs of the outer stonework.

The second theory is that the nave and chancel were built about 1140 without a tower and that the tower, even though apparently of more archaic technique, must have been added shortly after when the tower arch with imposts described as crudely carved would have been formed in the church's west wall, and presumably, the upper door also cut through it.. The explanation given for the contrast between the primitive technique of the double-splayed windows in the tower and the sophisticated workmanship of the nave and chancel is that sufficient wealth was no longer available for stone embellishments when the tower was built and that it was the product of indigenous workmanship.

It seems unlikely that a Norman church of this quality would have initially been envisaged without a tower, or that one should have been added apparently so shortly after the church was built. Moreover, it seems inconceivable that, if it had initially been towerless, a building less than 16ft wide of this standard of workmanship would have been built with a six-inch difference in the thickness of its nave west wall at the north and south ends and with a thicker middle section. Regarding the suggestion of deficiency of funding for stonework in the tower, ashlar was in fact used externally for its first-floor window dressings and perhaps also for the original Norman belfry openings; furthermore, the carved dentilled imposts of the tower arch imply more expense than if they had been the common chamfered type or the arch had been formed without moulded imposts.

Both the theories are based on the assumption that the tower is a later addition to an earlier church on interpretation of the flat east wall in the ground stage of the tower above the tower arch as the external face of the west wall of a formerly towerless church (whether Saxon in the first case or Norman in the second). However, several factors suggest otherwise. If the tower's east wall had been the west wall of an

earlier towerless nave, the upper door opening would have had to be cut through a wall that, shown by the depth of the opening's recess and the wall thickness at the tower arch apex, is well over three foot thick. Shuttering at the head as evidenced by the board-marks would though have been unnecessary for such a narrow opening. and in fact building its plumb reveals and setting the shuttering in a wall of this thickness would have been impracticable without considerable disruption of the surrounding flintwork, for which there is no clear evidence around the recess; the opening therefore seems contemporary with the wall. The flat area above the tower arch occurs only in the ground stage and is not in alignment with the west walls outside the tower. In the second and third stages, the tower east wall is curved and clearly not a former nave gable such as is sometimes seen within the upper stages of some added towers, e.g. Gayton Thorpe and West Dereham. These considerations, and the seamless union between the flat area above the tower arch and the tower's curved walls, together providing convincing grounds for the conclusion that this wall is more likely to be the east wall of an earlier tower than the west wall of an originally towerless church.

It might be argued that the flat area above the tower arch and the curved internal east wall in the stages above, are facings to a nave wall behind, but their uninterruptedly continuous flint coursing, and the constructional detail of the upper door recess described above show that the tower's inner circumference is an integral part of a thick wall, not a superimposed facing. (In cases where a later curved tower wall has been superimposed on a flat nave wall, evidence of that is likely to show in the upper door recess, as for example in those at Edingthorpe or Rushall).

Neither theory explains the wide re-entrant fillets nor the different notional thicknesses of the nave west wall at each end and its greater thickness at the tower arch. Such anomalies imply that the present Norman nave and chancel are most unlikely originally to have stood as an independent building without a tower; equally, they would be unlikely if the tower had been contemporary with the nave.

Why, it may be asked, if the flat wall in the tower's lower stage is not the face of a former nave west wall, is it flat? The answer is probably that the lower part of the curved east wall was built flat in order to simplify construction of the tower arch. In an archway formed in the curved wall of a round tower, the plane of its face will vary between the springing level and the apex, producing an odd distorted arch profile which would be more awkward to build. Although many are built like that, the east walls in the ground stage of some round towers were built flat, apparently to avoid this distortion. Among other examples, Herringfleet and Beachamwell have a flat east wall in the tower's ground stage and curved walls in the stages above.



St Christopher.