

Building stones in the churches and church yards of the Stretton Hills

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PANNETT, D. (2006). Building stones in the churches and church yards of the Stretton Hills. *Proceedings of the Shropshire Geological Society*, **11**, 2-4. The field excursion which met at Craven Arms on May 15th 2004 focused on churches around the Stretton Hills, since this area is already well known for its complex geology and associated landscape patterns, which might be expected to be reflected in the choice of building stones. Geology and local history have made each of the churches different, but they nevertheless reveal some common trends. Three of them (St Laurence Church Stretton, St James Cardington, and St Peter Rushbury) still have Norman naves built of very locally derived rubble, later enlarged with better quality stone from fewer, specialised quarries. Meanwhile, the church of St Margaret at Acton Scott persevered in its use of the stone won from its own local and unique outcrop of Ordovician limestone.

Implications for conservation are discussed and the role of render is considered.

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1. INTRODUCTION

Church guidebooks, however well produced, often fail to mention what the buildings are actually made of. For instance, whereas John Leonard's recently published book (2004) provides an excellent summary of their history and architecture, mention is rarely made of their building stones. This is in spite of the general inspiration given by the writings of the late Alec Clifton-Taylor (1962) and a more recent local survey of building stone by Ann Scard (1990). This is sufficient justification for the Shropshire Geological Society to attempt to plug this gap in the appreciation of our heritage.

The field excursion led by David Pannett and Andrew Jenkinson (Rosenbaum, 2006), focused on churches around the Stretton Hills, since this area is already well known for its complex geology and associated landscape patterns, which might be expected to be reflected in the choice of building stones (Greig *et al.*, 1968; Toghill, 1992).

The examination of church walls can often reveal 'clean' specimens which can frequently reveal the differences between the various lithologies. These stimulate discussion between observers concerning the environments which may have produced them and lead to a general debate on identifying sources.

2. NORMAN TIMES

Geology and local history have made each of the churches different, but they nevertheless reveal some common trends. Three of them (St Laurence Church Stretton, St James Cardington, and St Peter Rushbury) still have Norman naves built of locally derived rubble. One suspects that these building stones may have been won by surface clearance of weathered outcrops and glacial drift rather than deliberate quarrying into the bedrock. When placed in position, the most naturally flat faces would be presented to the outside leaving the more uneven parts hidden by the thick mortar or within the body of the wall.

The skills of the masons at the time, and the nature of the material, were such that 'courses' could only be roughly achieved. Nevertheless broader bands of work, representing distinct episodes of building, between pauses for settlement and drying, can still be recognized at Rushbury. The original source, and even the identity, of all this mixed-up material is not always easy to sort out, especially since glacial ice may have transported the odd erratic from further afield. However, erratics usually appear as well rounded pebbles or small boulders and may include familiar red 'granite' from as far away as the Lake District.

Building stones won from local outcrops may sometimes be distinctively recognisable by their character in the wall. For example, weathered dolerite often appears as 'rusty' rounded

‘corestones’, whereas hard pink Uriconian rhyolites preserve their fresh appearance.

At St Laurence Church Stretton (Figure 1), Longmyndian shales and grits are well represented, but some have a red colour, rather more like ‘Western Longmyndian’ than the more local Stretton Series. Could some of it actually be Keele Beds from Pitchford? At Rushbury, Wenlock Edge is close by, but the limestone has been used less often than the basal Silurian Pentamerus Beds, finely laminated siltstones, and Ordovician sandstones. (The Pentamerus Beds are named after a distinctive mollusc which had a reinforcing septum in the middle, which gave an impression of a broad arrow when exposed in broken section; hence local people call it ‘Government Rock’.) Presumably these would have been easier for the quarrymen to extract and the masons to work.

Some of the stone may have been formerly used in a Roman building nearby, since Roman tiles appear in Saxon ‘herring-bone’ work at the base of the Norman walls. The associated thin stone slabs (Cheney Longville Flags) may be recycled roofing tiles.

Door jambs and corner stones (‘Quoins’) demanded the best ‘freestones’, i.e. stone which could be cut to the required shapes. All three churches (St Laurence Church Stretton, St James Cardington, and St Peter Rushbury) therefore turned to the pale Ordovician sandstones at Hoar Edge and Chatwall. The red ‘tympanum’ (rounded infilling of a door head) at Cardington probably came even further afield, from the Keele Beds at Pitchford.

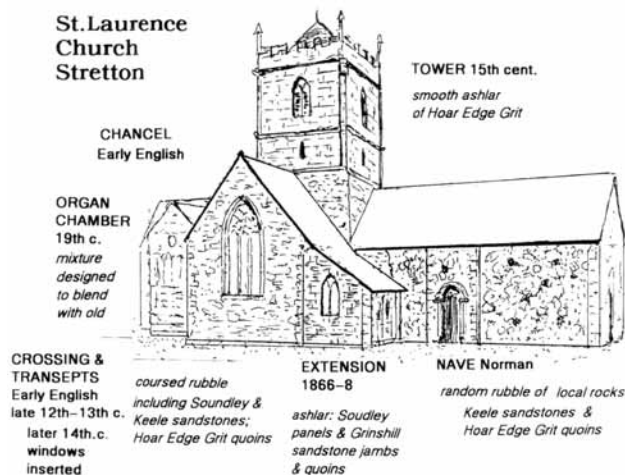


Figure 1. St Laurence Church Stretton, with notes concerning the varied use of building stones.

3. EARLY ENGLISH TIMES

By the 13th Century, there is yet more evidence of quarrying in such selected formations. This led to more homogeneous walls, aided by improved masonry techniques. This is particularly well shown by the chancel at Cardington. The chancel and transepts at Church Stretton show the first use of Ordovician Soudley Sandstone (from Hope Bowdler), chosen for ease of cutting rather than its characteristic decorative banding. Consequently its use tends to present a somewhat irregular visual appearance due to its insertion at a variety of odd angles. This wall remained rather mixed however, perhaps because the original Norman chancel may have been constructed from recycled stone used elsewhere. One clue to this is the appearance of Keele Sandstone as a rubble stone, whereas one would have expected it to have been brought in originally for use as a quoin. It is also a reminder that all these rubble walls would have been originally covered with render and whitewashed, hiding all the geological detail now so clearly displayed!

Also by the 13th Century the stone of preference for quoins had become the Hoar Edge Grit which, incidentally, also proved to be a useful sharpening stone (e.g. on the SE corner of St Laurence Church Stretton). In the succeeding centuries this trend continued, with use of quality ‘free’ stone quarried from selected sites, thereby enabling masons to produce fine smooth walls of ‘ashlar’ out of well cut blocks. The final stage of the St Laurence Church Stretton tower demonstrates such use of Hoar Edge Grit at its best, visible at the top.

Meanwhile, the church of St Margaret at Acton Scott persevered in its use of the stone won from its own local and unique outcrop of Ordovician limestone, although the workmanship improved. Church and village are good examples of an estate exploiting its own natural resources.

4. VICTORIAN TIMES

Masonry techniques continued to improve, notably in 18th Century repairs. By the 19th Century, the Ordovician ‘Soudley Sandstone’ at Hope Bowdler was being used to build most of the village and also rebuild the church of St Andrew, in 1863. Parts of the formation have distinct purple banding, the origin of which causes much geological debate. Was the pattern produced by

original deposition or by subsequent staining by minerals, such as iron, in the groundwater? Did distribution of organic matter in the current bedding trigger the necessary reactions? By Victorian times such patterns were being appreciated for their decorative effect, as this was an age when 'naked' stone rather than rendered and lime washed walls had become the new fashion.

At Church Stretton, the 1868 extension to the north transept fully exploits these decorative patterns of the Soudley stone along with quoins and jambs of hardwearing, pale Grinshill stone from north Shropshire. Grinshill stone, originally a typical red Triassic dune sandstone but later leached of its iron by hot groundwater, had come to dominate the quality market throughout the county, and indeed was in demand nationally. It appears in many restored doorways and windows, as at Church Stretton, and many other churches; today it is the only building stone quarried in any quantity within the county, other than those for specialist local conservation work.

The 19th Century south transept extension at St Laurence Church Stretton shows the use of Grinshill sandstone together with walls constructed from more local stones in what appears to be a deliberate attempt to blend with the polychrome effect of the adjacent older walls, which by then had lost their former render. The organ chamber off the chancel is similar. At Rushbury, a new vestry of Soudley stone has likewise been 'rusticated', i.e. tooled to a rough surface, in order to blend with the older rough stone walls around about.

For similar reasons, many builders in north Shropshire chose red Triassic sandstone to match existing walls instead of using the superior 'white' Grinshill sandstone. However, this is now leading to problems with significant weathering! There may even be a case for the reintroduction of render and whitewash!

5. PRESENT DAY

Fortunately, for geologists, the current fashion still favours naked stone and official conservation

attitudes encourage the use of matching materials for new work or repairs. It was therefore in reflection of this that the Society's visit in May 2004 to Soudley quarry actually witnessed a small scale reworking of the site for this very purpose. Although a geological SSSI, English Nature had granted leave for such extraction at the request of the local planning authority.

In this way our involvement with research on building stones may be seen to have practical as well as purely academic interest, and indeed helped to justify our excursion that day.

ACKNOWLEDGEMENTS

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