EXCURSION

Southwell Minster

Leader: Ian Thomas, National Stone Centre

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A large number of Society members turned out on an idyllic summer evening, to view the various building and decorative stones used in the Minster and former Bishop's Palace. The visit was also intended to explore some of the history behind the main material used, currently the subject of research by the leader. The phasing of construction of the building as we see it now, is an important part of the story.

Apart form its twin steepled towers and the famous "leaves of Southwell" (carved in stone), the most striking feature of the Minster must be the beauty of its stone. Today's Minster was built in two main phases, replacing an earlier saxon church. The nave is in the bulky Norman style. It was begun in 1108 and took 50 years to build. Shortly after completion, the altar and choir were taken down, and rebuilt on a larger scale, beginning in 1234 in the graceful Early English style. Initially this involved the building of a new eastern end beyond the pre-existing structure. Work progressed westwards; the old building was partly demolished and some stone was reused in the new structure. The original and new sections (completed in 1241) were slightly misaligned, as can be seen in the south wall of the choir. Smaller changes followed: 1288 saw the start to the building of the celebrated Chapter House. The choir screen, intricately carved in the Decorated style was erected in c.1320-40, and the great perpendicular west window was inserted in the Norman façade in the 15th century.

The Trent lies only 3 km south east of Southwell, and east of the river, many of the churches are of Middle Jurassic limestone. The limestone scarp from which they were supplied can be seen on the skyline from near Southwell and navigable Roman waterways such as Foss Dyke had been reopened for traffic by c.1121. Medieval, and many post-medieval, historical references suggest that the bulk of the stone was quarried in the Mansfield area, and these are repeated time and time again in more modern accounts. So why did the builders arduously haul Magnesian Limestone (Cadeby Formation) across such alien territory, through Sherwood Forest, rather than rely upon the Jurassic oolites? We shall probably never know the true reason, but it is likely to be related to rights to land and minerals and possibly the dominance of Lincoln over those eastern sites. Or maybe the challenge of trudging heavy stone across the clay vale of the Trent was too great. It is also likely that Southwell held land or interests in the Mansfield area from an early date. This deserves further investigation.

The so called "Mansfield" source itself deserves further scrutiny. The first written account covering stone is the grant of a licence to the chapter of Southwell by Edward III on 16th October 1337, to permit the carting of stone for the Minster, through Sherwood Forest, free of toll, from their quarry at "Mansfield". In this period, Mansfield was often used to describe a much larger area than the town or district of today. Also, by the time of the grant, the main structure of the Church had been built, and already extended to provide the new choir and altar almost a century earlier. By the 1340s, only the choir screen, by comparison a small feature, was being constructed, but even this timing is not fully substantiated.

Local tradition in Mansfield Woodhouse has it that the stone came from there, and not from Mansfield itself. The most likely scenario is that the western portion, i.e. the older Norman building, was of stone from Mansfield Woodhouse (which is unlikely to have been differentiated in documentation from Mansfield at the time). The C13th eastern extension and later works appear to be largely of real Mansfield stone.

The Norman walling is generally of a stone yellow ochre in colour, that usually lacks veining, is notably consistent, but has blackened in response to pollution. In subtle contrast, the eastern portion is stone of a lighter hue, more buff/light grey, apparently having a much higher sand content with some slightly blue/green clay veining. Weathering in this stone has preferentially removed areas, highlighting bedding planes (with cross bedding) or following clay veining. Cadeby dolomitic limestone locally has more sand in the Mansfield material than in that from Mansfield Woodhouse.

The west front of Southwell Minster; with the twin steeples (or 'pepperpots') that were added in the 19th century.

The leaves of Southwell, carved in dolomitic limestone.

The most obvious and worst example of the effects of clay veining is seen inside the Chapter House where (even without external weather), some of the famous carved leaves have exfoliated along the planes of clay veins. Society members also noticed a small section of Mansfield stone, on the southwest side of the eastern transept, with barite mineralisation.

This general picture is complicated by the re-use of old stone and by a significant amount of later repairs by replacement. Much of the repair stone, in both main sections of the church, is from Mansfield, but also includes some blocks of the shelly Ancaster Stone of Middle Jurassic age from near Sleaford.

The precise source of the stone has yet to be verified, but appears to be an area between Mansfield Woodhouse and Warsop for the older building, possibly that marked on some maps as "Hills and Holes" (a common indicator of ancient quarries) not far from a "Minster Wood" (now under a coal waste tip) at the latter village. The Stuffyn family held land in the area and had close connections with the Archbishop of York; they also promoted the rebuilding of Mansfield Woodhouse church in stone in 1304. The Mansfield material could well have been won from the quarries (later called Gregory's, and operating up until the last few years) between Nottingham Road and Sheepwash. In terms of bulk, most of the stone was probably from the Mansfield Woodhouse and Warsop areas, while the post-1200 material was from Mansfield.

There is an interesting stone-related sidelight. The weather-resistant qualities of the stone employed at Southwell attracted the attention of the Commissioners seeking stone to rebuild the Houses of Parliament (reporting in 1839). They accordingly recommended the use of stone from "Bolsover Moor or thereabouts". It was later realised that the main source was in fact Mansfield Woodhouse, and that stone was at first used in the reconstruction. However supplies were too limited for such large works and most was eventually sourced from South Yorkshire. The so-called Parliament Quarry at Mansfield Woodhouse was later owned by the leader's great grandfather in the 1920s and then in the 1930s by the Rouse family, coincidentally related to another member of the group.

Inside the Minster, most of the structure and fabric conforms to the exterior, with the Norman work in stone from Mansfield Woodhouse stone the later work in Mansfield stone. However there is one intriguing exception. The western façade of the stone rood screen (or pulpitum) dividing the choir from the nave is of a distinctly pink, locally red, sandstone with occasional grey/green veining. This is likely to be the so-called "Red Mansfield" (from the area west and northwest of that town), but there is a passing reference of about the same vintage to some stone being delivered via the Trent, which might raise the prospect of other sources.

Members also viewed a range of decorative stones inside the building. The C19th stone semi-chequered floor around the altar is of black and white "marble". The lighter is almost certainly Hopton Wood, while the black could be from various sources - but is probably Carboniferous Limestone from Belgium, Kikenny in Ireland, or Ashford in Derbyshire. Other marbles used are green Connemara, red (probably Italian) and white Carrara. The kneeling steps are of another darker stone, possibly "birds eye" marble from either Ashford or Wirksworth, both in Derbyshire. Whereas the imported marbles are all true metamorphic marbles, those derived from Britain are highly polishable sedimentary limestones.

Ironically the only Minster stone mentioned in Nikolaus Pevsner's Architectural Guide is 'Purbeck Marble', the attribution he gives to the eight narrow columns framing the entrance to the chapter house. In fact, these are not Purbeck, but are richly crinoidal Carboniferous Limestone. The most likely source on

Thirteenth Century exterior work in Mansfield Woodhouse stone, with barite mineralisation visible top centre.

palaeontological evidence, according to Murray Mitchell (via the late Ron Firman, who was then attending his last EMGS field visit) is Derbyshire (not Co Durham as suggested by Alec Clifton-Taylor). Assuming this was a Victorian replacement, the potential quarries would be Ricklow (Monyash), Once a Week (Sheldon) or Dene (Cromford). Other "marbles" form a floor slab in the north transept (probably Purbeck), and the three slender columns of the portal to the corridor from the chancel to the chapter house; Ron Firman identified the latter as Adwalton Marble from near Peterborough (with concurrence from Jenny Alexander).

In the north transept, the plinth of the 1925 memorial to Bishop Hoskyns is of an attractive, green, metamorphosed, ultrabasic rock (a variant on serpentine). This rests on a base of white-flecked, black, bird's eye marble, again almost certainly from the Hopton Wood Stone Firm's works at Coal Hills, Wirksworth.

There are two notable and large alabaster tomb chests. That in the north transept to Archbishop Edwyn Sandys is regarded as a superb example of Elizabethan work. The Trent Valley was a European centre of alabaster production, with Nottingham and Burton being the focus of carvers ("kervers"). Although it is virtually impossible to distinguish between sources, the 1588 date suggests Chellaston in Derbyshire. The second alabaster tomb chest is that below the memorial to Bishop Ridding (d. 1904), on the south side near the altar rail; the date here implies Fauld, in Staffordshire, rather than Chellaston or Red Hill.

At the time of the visit sculpture by Nicolas Moreton in Hoptonwood and Portland roach stone was on display in the Chapter House.

Records apparently suggest that most of the flooring was replaced by local stone – in which case this would imply the fine sandstone lenses (skerries) interleaved in the Mercia Mudstone, although the colour is buff rather than the more typical grey of the skerries. However, the floor of the choir side aisles (or 'quire' as sometimes referred to), is of the fine cream Hoptonwood Stone, a mid-C19th introduction from near Wirksworth (also often known as a marble).

The adjacent Bishops' Palace, now in ruins, was built between mid-C14th and 1436. Many materials were employed, and the rough stonework was probably hidden under limewash. The main stone was the only local, reasonably robust material available – the fine-grained lenses of skerry sandstone in the Mercia Mudstone. The nearest available would have been just to the west at Norwood in the scarp overlooking Halam, but there were other possible sources capping the hills to the south. Alex Clifton Taylor (in Pevsner) suggests that the main building material here was Blue Lias limestone, but that rather indifferent stone, although similar in general appearance, was not seen in significant amounts, and would have had to travel from the far side of the Trent.