## ST. BEE'S MAN -AND WHAT 14th CENTURY SHROUDS ACTUALLY LOOKED LIKE...

Lecture to the British Society for the Turin Shroud

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[Cover photo: Inner shroud of St. Bee's Man prior to conservation. The piece used as an 'apron' can be seen in the right foreground] St. Bee's Man was a human body, height about five feet nine or five feet ten, in his early forties, most unusually preserved in a lead-lined coffin in the now ruined south chancel aisle of St. Bee's parish church. I'll say a bit about how he came to be found, show some pictures of the unwrapping of the body and of the subsequent autopsy, and then say a bit about who we think St. Bee's Man may have been.

St. Bee's is a pretty little town a bit north of Windscale in Cumbria, mainly noted for its large public school in which we stayed while digging there. It has a small Priory which mainly survives as what is now the parish church, dating from the early 12th century. An opportunity to excavate here arose in 1979, when a cemetery extension was planned, and the Inspector of Ancient Monuments, now English Heritage, agreed to fund a small trial excavation immediately to the church's west.

The site was unaffectionately known to us as The Swamp. It was completely waterlogged from the top downwards, was extremely difficult to dig, and our funding was only for two years. Preserved mediaeval bodies are not very common, and since anybody buried in that field will be in extremely waterlogged conditions, the possibility of even more preserved bodies being found at St. Bee's is something to bear in mind.

Judging from its architecture the church's chancel aisle was built about 1300, but blocked sometime in the sixteenth century. It is now completely open to the sky, and it was here that there emerged a rectangular burial vault more or less in the middle of the aisle. Digging down inside the vault our first indication of anything exciting was a large iron clamp which was in fact the end of the coffin which contained St. Bee's Man. A lead wrapper contained the preserved body, but originally this was inside a wooden box which had completely decayed at the top and sides, but of which a little was left underneath. The lead wrapper had been placed inside the box and the space between this and the box filled with blue clay. This would have given a very good seal, and was in fact one of the factors that led to the preservation of the body.

Further excavation through the vault revealed alongside the lead coffin burial that of another individual, in a wooden coffin without any elaborate bindings. This was not particularly well-preserved. Quite a lot of the bones had completely decayed in the rib area, and the pelvis was poorly preserved, but it seemed probable that this was a female skeleton, and subsequent anatomical examination confirmed this. From the fact that the burial vault was centrally aligned to the church, which was itself very clearly mediaeval, the burials must have gone into it sometime between 1300 when the chancel was built, and about 1500 when it was abandoned.

Anyhow we had two bodies, side by side. We went on with the rest of the excavation, lifted the skeleton, then at the very end of the

dig - Just two days before we were due to pack it all in and go home - we decided to open the coffin.

Now there are archaeological rumours about what you are likely to find in lead coffins, but these don't include preserved bodies. Most examples of which I have secondhand knowledge suggest you have a sealed box in which everything inside decays quite badly, and you are left with a sort of green soup. It is not at all pleasant to discover, and is occasionally under such pressure that if you make a hole in it it can explode with some force. We considered whether or not to open the coffin at all, and eventually, in the spirit of scientific enquiry, decided the very least we could do was to see what was inside.

There was no clear point of entry. It looked like a piece of lead which had been wrapped around and then annealed down the side. So you could not actually lift it like a lid, but you could see a line of lumps which we assumed would be the vertebrae of the person buried. It was not by any means a perfect seal, for there was a very definite perforation at the foot. So we were at least assured that it was not under pressure and likely to explode; it would just be full of some rather unpleasant green fluids.

To the excitement of the local populace, who turned up to watch, we gradually opened it all the way round, having borrowed a circular saw to get round the coffin's far end. Then we lifted the lid. What met our astonished, and I might say, totally horrified gaze, was something clearly in a remarkable state of preservation. Even if there was no human tissue preserved, it looked as though there was a well-preserved mediaeval shroud - and usually shrouds are found in fragments, if they are found at all in mediaeval graves. So we had a quite remarkable find even if there was nothing extraordinary wrapped up inside.

We felt we had to act quickly, and fortunately one of the locals who had turned up to watch the opening was a doctor. He suggested that since the coffin contained a person who had died in Cumbria the morgue of the West Cumbria Hospital was the most appropriate place for it to be taken. On our behalf he rang the pathologist in charge, who after some consideration decided he could admit this particular individual, whereupon the find was carted off to the hospital freezer.

This gave us a little bit of breathing space in which to find scientists to look at the preserved tissues. At something like twenty past four on a Friday afternoon we rang the Inspectorate of Ancient Monuments who to their eternal credit arranged for pathologist Eddie Tapp and some of their own staff to come to West Cumbria as soon as possible. This was very good of them, because they were not actually funding this stage of the operation, but clearly realised this was a remarkable discovery.

Three days later Eddie Tapp arrived at the West Cumbria Hospital as one of four consultants to be involved, and we began work

unwrapping of the coffin's contents. The first thing we did was to X-ray it. To do that it had to be taken out of its coffin, and our expectations, and certainly Eddie Tapp's, were that we would have just a bag of bones. There would be preserved textiles, but not any soft tissues. There was a possibility that even the bones would not be particularly wellpreserved, although on the surface of the wrappings there could be seen the impression of a nose at the top, and possibly vertebrae down the middle.

In the event the X-rays revealed the skeleton of an individual judged, from general wear and tear, arthritis, etc, to have been in mid to late forties. With the still wrapped and string-tied body out of its coffin, we now most conscientiously began at one end of the string and unravelled this all the way round. We thought this was the right thing to do, but conservators have since told us it was wrong because although quite a few bits of mediaeval string have survived, mediaeval knots are altogether less well-known. So if you ever find another St. Bee's Man, cut the string, leave the knots, and don't bother, as we did, to wind it all into a nice ball. Even so, we did take some good pictures of the knots.

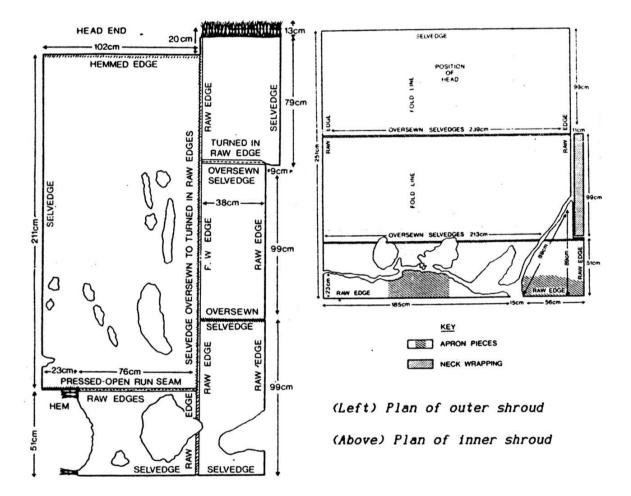
Now our attention turned to the shroud covering the body. I had seen pictures of mediaeval shrouds before. In the fifteenth century there was quite a common device on tombstones in which individuals were portrayed in their dead splendour on the top, then at a lower level their body was shown decayed, often being consumed by frogs and lizards, etc., and shrouded. The purpose was obviously to remind of the perishibility of all flesh.

In fact, St. Bee's Man was not wrapped up at all like these effigies. They are normally shown with the shroud bunched on the top of their heads and a great sprouting of material at the top end. Clearly a real shrouded figure has the face covered, and is not exposed, but in any case this was not actually wrapped like that. Instead it was tied up at the top, then for reasons that I don't pretend to understand the material immediately over the face pulled up and tied in a knot. This actually left quite a dramatic impression on the shroud when it was unwrapped. But it was simply the impression of the knot, not any facial impression.

Now at this stage it was clear that the body was not totally preserved, because at the foot end it was all quite rotten and we could see little toe bones sticking out. So it was not obvious what was going to emerge. It took about eight hours before the whole body was unwrapped, revealing just what a mediaeval shrouded figure looks like when it has been in a shroud for several hundred years. The dark gooey substance which covered everything smelt really evil, was very, very sticky, and took a very long time to clean off the slab. Indeed, it took a conservator a very long time to clean it from the shroud itself. It was first thought to be some kind of resinous substance used as a preservative, but biochemical tests have suggested it more likely to be the decayed end-product of beeswax combined with whatever body fluids the body contained. No elaborate chemical treatment appears to have been used to preserve the corpse.

Inside the first shroud that we removed we found another complete one. So two complete shrouds were used to wrap the body. These were separated by an item which I call the 'apron', which was basically a triangle of linen tied round the middle of the body with a narrow strip. So there were actually two separate pieces. The inner shroud was tied with string around the neck, but not nearly as elaborately as the outer wrappings.

A simplified diagram of the outer shroud as it was preserved shows that it was composed of a number of different pieces of linen which had been joined together [see below, left]



Some were from the same piece, others from a different bale of material. So linens and widths from different 'manufacturers' had been used. There were tassels at the top and at the foot. Those at the top end were much better preserved.

The inner shroud [see above, right) was slightly more baffling. It consisted of two broad widths of cloth to which originally a third strip, half the width, had been attached. For reasons which I cannot explain, though it must have mattered at the time, pieces were subsequently cut off this before it was actually used as a

shroud. These were the triangular bit used as the apron, and the one used to tie it. So the piece used round the middle to separate the two shrouds was for some reason detached from the inner shroud before it was actually wrapped around the body. It is very difficult to think of any reason for this other than some need being felt to use only bits of shroud which had actually been prepared, rather than just any old pieces of rag that were lying around.

About 9 o'clock at night there finally emerged a remarkably well-preserved human body with a certain amount of facial hair. He was pretty bald at the top, and the bit of beard was in a good state of preservation. Clearly we had to reach a decision as to what we would do about him, and the decision we took has been criticised in that we did not try to keep the body as a museum piece. Maybe this would not have been possible anyway, but our plan instead was to try to get as much scientific information as possible from examination of the body by autopsy, then to re-bury it back in the south chancel at St. Bee's. A number of issues were involved. Partly there was the physical problem of preservation followed by keeping the end-product in some deep freeze somewhere. There was also the ethical issue of whether we were actually entitled to disinter someone who had been buried in such a burial ground, then to keep them indefinitely above ground for the purposes of scientific research.

Anyhow, although there have been times since when we wished we could have a second look, that was the decision that we made. The body was returned to the deep freeze in its unwrapped state, the shrouds were put away to be kept for the conservator, and two days later we returned to see what could be learned from an autopsy of the preserved body.

At this point we found that whereas when first unwrapped St. Bee's Man's colour had been yellowy-pink, very bright and very clear, already he had oxidised to a much darker shade. This seemed to indicate that he would probably decay very rapidly now he had been exposed to air. The body had dehydrated. It had lost quite a lot of weight through the tissues, but seemed pretty well full fleshed except for the feet. An interesting feature was that whereas the few other mediaeval bodies which had been found preserved had been eviscerated, St. Bee's Man had not been. His chest was completely untouched. No-one had removed his internal organs. So although the removal of internal organs was practised in some mediaeval attempts to preserve bodies, it was certainly not done in this case.

Archaeologically one of the first interesting things we noticed was the way the body had been prepared in death. All the orifices had been blocked with vegetable matter: the ears, the nose, the eyes, and particularly the mouth had been well packed with material. Besides the stubble beard, and very visible texture to the skin, even the eyes were still intact. There were also the hands, very well preserved, even to the extent of nicely-kept nails, with worn edges, but not bitten, or anything like that. Inside the mouth the teeth could be seen to be extremely well-worn.

One bit of slightly embarrassing pathology was that St. Bee's Man suffered from a hydrocoele or enlargement of the scrotal sac, basically water on the testicles, which according to Dr. Tapp is quite common among middle-aged gentlemen. Also during the preparation for death the penis had been tied up with a piece of string, which the mortuary attendant assured us is still quite usual practice in the twentieth century. For what it's worth, that piece of string was quite different from the string used for the shroud.

After having had a good look all over the body, Eddie Tapp then made the first incision, using standard autopsy technique to cut down the centre of the chest, then through the back, and through the rib cage with a circular saw to reveal various internal organs. The heart, kidney and liver were all well-preserved, looking just like any today. The stomach contents were disappointing. The only recognisable macrofossil was a grape pip, either from imported grapes, or raisins, or from local grapes. After what took several hours, Dr. Tapp then removed the back of the cranium to examine the brains, but these unfortunately had no structure at all, having turned to an unpleasant soft goo.

In the course of all this some interesting discoveries were made about what had happened to St. Bee's Man immediately before his death, for he had a number of serious injuries. There was a broken rib on the left of his chest cavity. In his right chest cavity, although there was no perforation and no external breakage, a large pool of blood-like substances seems to have been caused by a substantial external blow to the chest. Medically called a haemothorax, this was actually what he died from. He also suffered a broken jaw - and as such a much more massive injury than what you would get from any normal fracas in the street. It is the sort of injury you would get when hit with some heavy instrument in a frontal position.

At the end of Dr. Tapp's work St. Bee's Man was looking a very sorry sight indeed, putting completely to an end any of the thoughts of three days earlier of possibly making him a museum piece. A lot of samples were kept by Dr. Tapp for further study, while we archaeologists had the body reburied in the south chancel aisle as near as possible to where he had originally been.

So who was St. Bee's Man? Although we will probably never know for sure, there are some possibilities and clues. We know he was buried between 1300 and 1500 and that in the same burial vault another person, a female, was also subsequently buried. The very prominent siting of the burial vault suggests that whoever was laid here was of local prominence. Again because of this prime spot the evidence also suggests they were more likely to have been buried near the beginning of the period rather than the end.

In the eighteenth century the brothers Buck did an engraving of St. Bee's priory in which can be seen some recumbent effigies roughly in the position where St. Bee's Man was found. At St. Bee's today there are three effigies, one a female discovered in the 1980s, the others two rather sad-looking torsos. The first is from the fifteenth century. The second is from the fourteenth century and shows a fretty shield, a heraldic device common to a number of Cumbrian families. If this effigy is the one that was over the burial vault, as indicated in the Buck engraving, identification becomes narrowed to those families who had fretty shields in their heraldic repertoire.

Historian John Todd, who has worked on this for a number of years, has isolated a number of potential individuals among whom two emerge as fairly strong runners. I personally prefer the first, and he prefers the second. The first is Robert de Harington. He died in 1298, right at the start of when our period allows, and it is known that he was buried at St. Bee's. He was in his late forties, and a definite patron of the church. Also supporting his case is that his son John de Harington was responsible for adding the south chancel aisle to Carlisle Priory, and is buried in a very fancy tomb right in the middle of that. So it would be nice to think we have a case of 'like father, like son'. However, there are problems with the identity of the female who is likely to have been buried with him. Basically his wife is known, and she died before him. And there is no evidence that he had a subsequent spouse.

The second strong candidate is Anthony de Lucy, who was likewise a prominent benefactor of St. Bee's, and died, most interestingly, on a Teutonic Knights' Crusade in 1368. In the 18th century a fairly reliable pair of county historians, Nicholas and Byrne, record his effigy at St. Bee's, but this was of wood, and does not survive. So we are left with the possibility that he might have died abroad, and been brought back in a leaden coffin. The lead is definitely not of the local Cumbrian variety, such as was used in the windows of the priory itself. And we have not succeeded in getting hold of lead from the Holy Land. Indeed, analytical studies on mediaeval lead other than window lead are not very extensively available. But there is nothing to exclude the lead having come from some other source in inland Britain.

So we could have someone who died abroad, or someone who died locally. Clearly the injuries sustained by St. Bee's Man indicate someone who had died in battle. That could have been no further away than the Scottish campaigns of Edward 1, who was himself preserved, and indeed requested that his body should be carried around in the van of the English army until the Scots should be subdued.

[This is an abbreviated and edited version of Deirdre O'Sullivan' lecture, which was vividly illustrated, with slides. A tape-recording of the full lecture is available from Rodney Hoare, 23 Elm Grove Road, Salisbury SP1 1JW, price £2.50. Cheques should be made payable to the BSTS]