

THE GRAVE OF SIR HUGH DE HASTYNGS, ELSING

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Introduction

The burial of Sir Hugh de Hastings (ob. 1347) disclosed by contractors in St. Mary's Church, Elsing, was subjected to archaeological and anthropological examination. The body lay in an elm coffin with iron fittings within a brick chamber beneath a Purbeck marble grave slab with a memorial brass, described by Pevsner (1962, 155) as 'the most sumptuous of all English church brasses'. The brass is described and illustrated by Clayton (1968 15-6, pl. 4).

Description of Excavation

The brass of Sir Hugh de Hastings set upon a Purbeck marble slab in the chancel floor of St. Mary's Church, Elsing, (Fig. 1) was removed for restoration in the 1970s. In September 1978 the slab was lifted so that it could be reset on a plinth projecting above floor level (the slab had been set on a plinth before being lowered to the floor in 1906). Contractors then excavated the soil beneath the slab to a depth of *c.* 1.3m. below floor level, and partly revealed and disturbed a human burial. The limits of this trench were the inner faces of a rectangular brick chamber on the upper surface of which had rested the marble slab. Subsequent archaeological investigation by the Norfolk Archaeological Unit involved cleaning up the skeleton and the surrounding soil stain of the coffin, and recording these and the metal coffin fittings in rather poor light conditions. Limited excavation was then carried out to assess the depth of the surface of the natural soil. The skeletal remains were removed for anthropometric examination, and were immediately reburied on the instructions of the Rector. The whole investigation was carried out over parts of two days in September 1978.

Natural gravel occurred 1.6m below floor level. The base of the brick walls of the chamber were set 5cm below the surface of the natural. At a depth of 1.3m the coffin was clearly discernible as an area of dark soil within yellowish-brown sandy gravel with occasional mortar flecks. Environmental sampling has indicated that the soil within the coffin contained domestic debris, but it is not known how far upwards this deposit extended. Any trace of the coffin lid had been removed by the contractors, but the sides were faintly visible as light grey lines around the edges of the dark soil stain, while wood was preserved where it was in contact with the iron coffin fittings. The base of the coffin was visible as a thin layer of dark brown and greenish silty soil lying directly on the natural gravel. The burial was laid supine (Pl. 1 and Fig. 2) with head to the west and hands drawn together at the waist. The cranium was slightly raised and the mandible had dropped downwards. A mass of hair was found adhering to the sides of the mandible and the whole of the back of the cranium (Pl. 2 and 3). It has been identified as cow hair and may perhaps have formed the material of a wig or hat. The iron coffin fittings are described below.

Little could be learnt of the brick chamber. Its inner faces were obscured by a mortar rendering but the bricks appeared to be laid in English bond, and were coloured pinkish-red, purple and yellow. The thickness of the walls was not measured because of the proximity of tomb-slabs and floor tiles. On a stretch of the north side, broken *?*peg roof tiles were used in the uppermost course. These may have been inserted at the time of the lowering of the grave slab in 1906.

CHURCH OF ST. MARY THE VIRGIN, ELSING

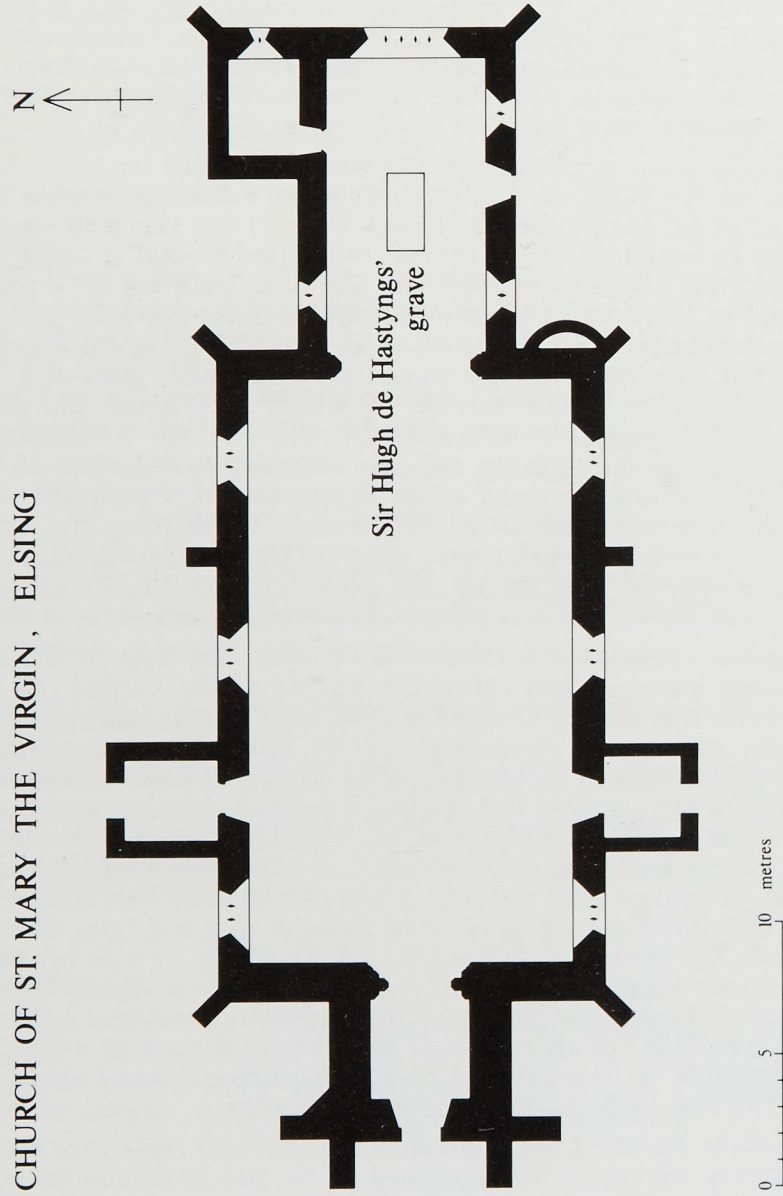


Fig. 1
Plan of St. Mary's Church, Elsing, showing location of grave. Scale 1 : 300

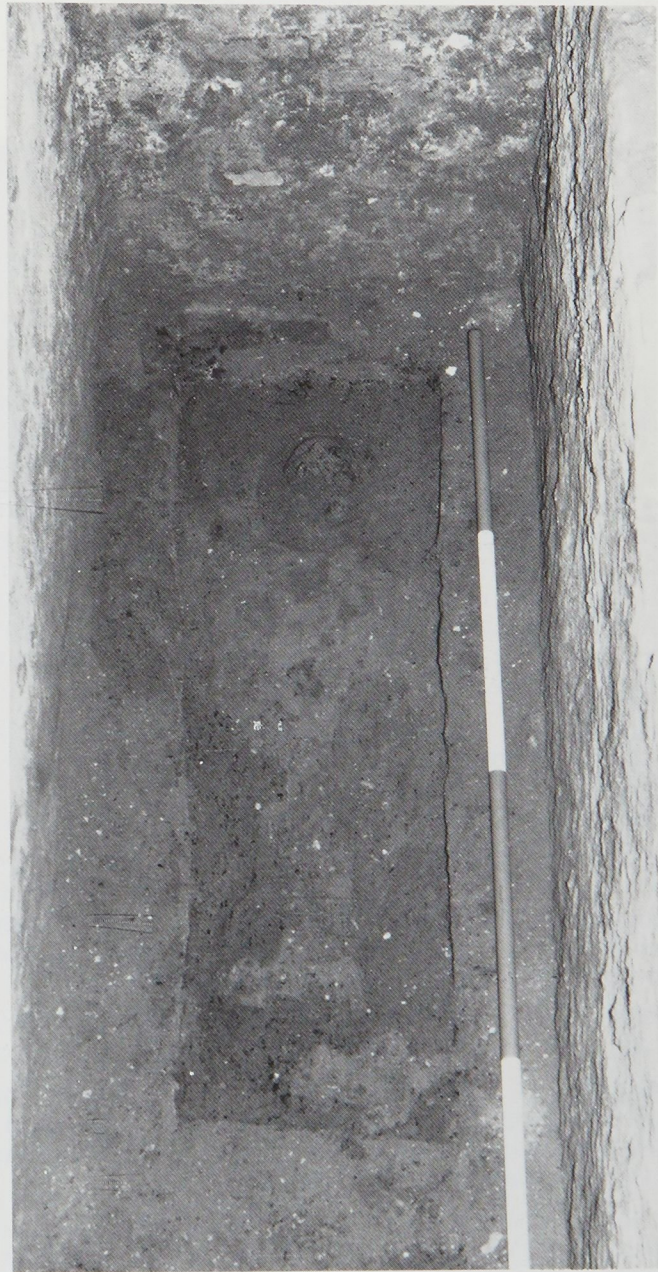


Plate I
The burial after initial cleaning, showing the outline of the coffin.

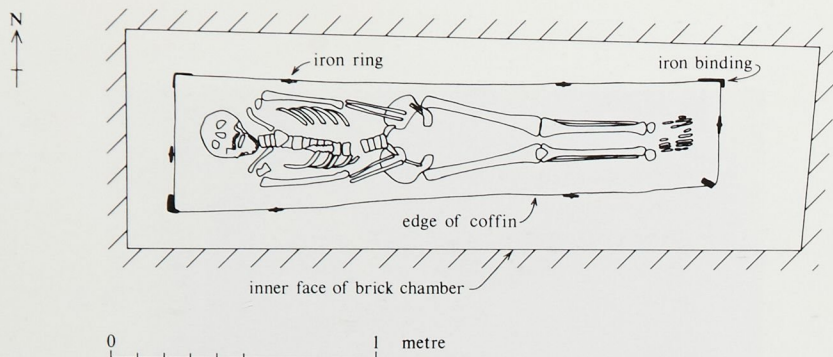


Fig. 2
Plan of burial, coffin and iron fittings. Scale 1 : 30

The Iron Coffin Fittings

At about the level reached in the contractors' excavation disturbed fragments of iron bindings were found at each corner. The best preserved, at the south-west corner was held in place by three nails (Fig. 3 no. 1). Four larger nails were driven into the wood from two directions close to each corner below the bindings (Fig. 3 no.2). A part of a similar binding was recovered 5cm below the illustrated example while excavating a hole down to natural. It is likely that further bindings existed below the other three corners.

Iron rings, two on each long side and one at each end, were held in place by iron staples hammered through the wood from the outside (Fig. 3 no.3).

Notes on the life of Sir Hugh de Hastings by Susan Yaxley

Sir Hugh de Hastings was the son of one of the foremost barons of the reign of King Edward I, John, 2nd Baron Hastings of Abergavenny (1262-1313). After campaigning in Scotland and France this John de Hastings acquired a considerable reputation as a soldier and was described in the contemporary 'Song of Caerlaverock' (cited in D.N.B.) in the following words:

'In deeds of arms he was daring and reckless, in the hostel mild and gracious, nor was ever judge in eyre more willing to judge rightly.'

He was also, by virtue of his descent from David of Huntingdon (D.N.B.), one of the three main claimants to the Scottish throne in 1292, when eighty assessors met to settle the succession. His chief rivals were Robert Bruce and John Balliol, the latter being the eventual choice of the assessors.

John de Hastings' first marriage was to Isabel de Valence, daughter of the king's uncle, William de Valence. His first son by this marriage, another John, inherited the barony. His second marriage was to Isabel le Despencer, daughter of the Earl of Winchester (Cockayne, p.340). She bore him two sons. Thomas, the elder, died in 1331 without issue. The second son was our Sir Hugh de Hastings, born between 1305 and 1310. (He was described as '24 years and more' when his mother died in 1334; (Cockayne, p.352).

At his death John de Hastings had held lands in ten English counties as well as property in Wales and Ireland, but the only manor we know to have been held

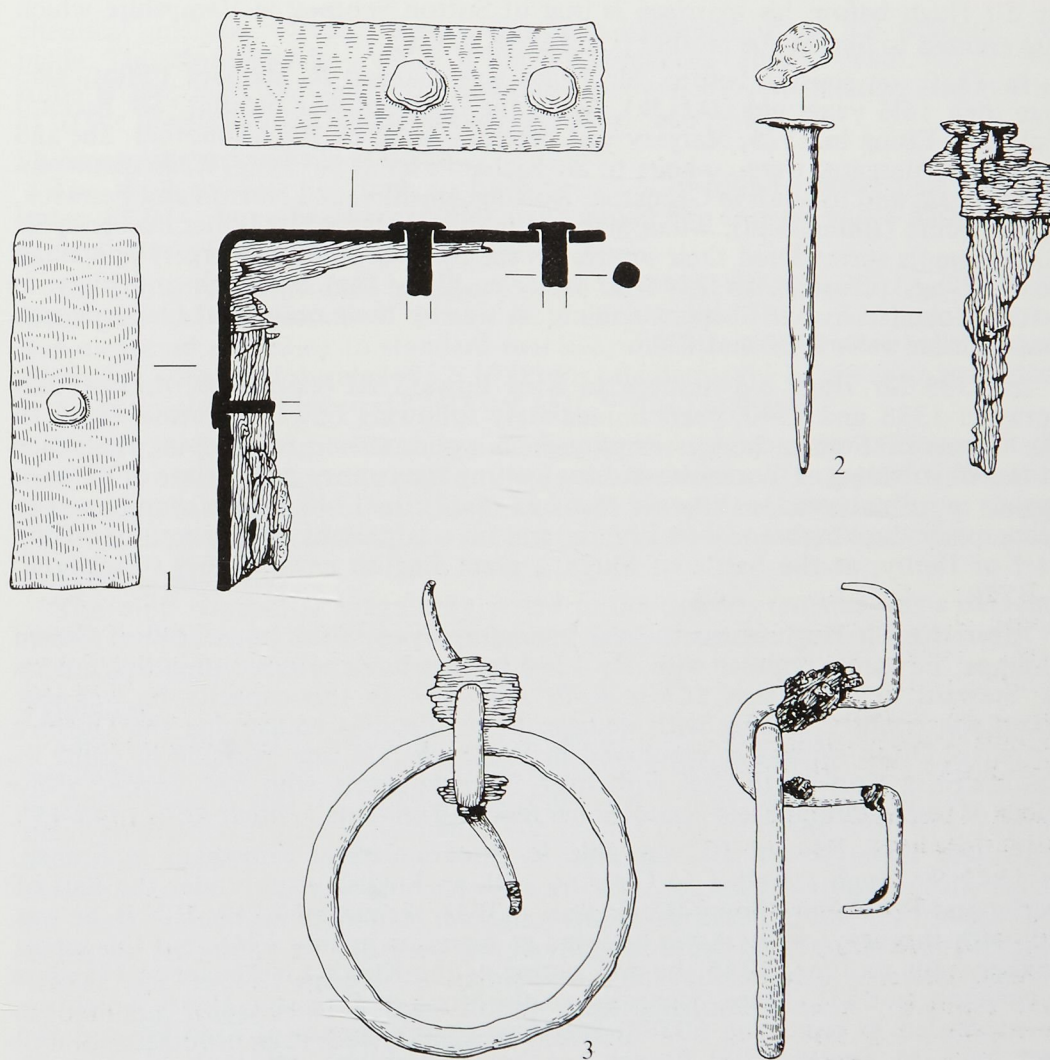


Fig. 3

Iron fittings from coffin. Scale 1 : 2. No. 1, binding with remains of wood from south-west angle of coffin; No. 2, nail with remains of wood from south-west angle of coffin; No. 3, ring and staple with remains of wood from northern edge of coffin close to north-west angle.

by Sir Hugh before his marriage is that of Sutton Scotney in Hampshire which was granted to him by his mother (Cockayne, p.352).

In 1330, or shortly before, Sir Hugh was married to Margery Foliot, who was then 16½ years old (D.N.B.). Since the death of her brother, Sir Richard Foliot of Elsing in 1325, Margery had been the ward of Hugh's mother. She and her sister, Margaret were co-heirs to Sir Richard's lands in Elsing, Weasenham and Gressenhall, and to lands in Grimston, Nottinghamshire, and Norton and Fenwick, in Yorkshire (Blomefield). When Margery married, Margaret and her husband, Sir John Camois surrendered their interest in the Norfolk lands to Margery and Hugh de Hastyns (*Close Rolls 1346-9*). It seems likely that Sir Hugh and his wife settled down to live at Elsing. Certainly, it was by their order that Elsing church was built between 1330 and 1347.

In 1335 Sir Hugh did homage to King Edward III (Cockayne, p. 352) and between 1338 and 1340, years immediately following Edward's formal claim to the throne of France, he was employed on a commission for keeping the peace in the West Riding of Yorkshire and for putting the county into a state of defence against possible invasions (*Patent Rolls 1338-40*). In 1340 he was summoned to accompany the king's army to France, and he was present, in the retinue of the Earl of Derby, at the battle of Sluys, a great English naval victory (Cockayne, p. 352).

After this Sir Hugh seems to have been employed in the household of Queen Philippa, Edward's popular wife. By 1344 he was being referred to in documents as 'Steward to the Queen' (*Close Rolls 1343-46*). In this capacity he was sent about the country dealing with damage to or disputes concerning the Queen's property. Often he was so employed in Yorkshire. On one occasion he came to Castleacre in Norfolk to deal with over 50 malefactors who had 'carried away goods of Queen Philippa and assaulted her men and servants' (*Patent Rolls 1343-45*).

By this time Edward III was able to finance further campaigns in France. In 1345 Sir Hugh travelled to Gascony with an English army under the Earl of Derby and Sir Walter Manny (Cockayne, p.353). According to the D.N.B. he was still with this army when it was besieged at Aiguillon in July 1346, but this seems unlikely, for in June, 1346, he was acting as the King's Lieutenant in Flanders (Cockayne, p. 353). There, according to the Monk of Leicester, Henry Knighton, he succeeded in recruiting 60,000 Flemings to the service of King Edward and sent back to England 300 French captives (Knighton). He took his Flemish recruits into France to join the King in time to take part in the battle of Crecy in August, 1346.

Sir Hugh was again summoned to France in May 1347 to assist at the siege of Calais, but was back in England in the July of that year dealing with a serious riot at Boston, Lincolnshire (*Patent Rolls 1345-48*). Less than two weeks later he was dead. His will was made at Old Ford in Middlesex (Cockayne, pp. 353-4), and his body was buried at Elsing where he is commemorated by the famous brass and by the marble slab inscribed:

'This church hath been wrowt by Howe de Hastyng and Margaret hys wyf.'

Report and observations upon the skeleton of Sir Hugh de Hastyns by Bari Hooper

The skeleton was found to be in an excellent state of preservation, affording all of the basic anthropological measurements to be taken without difficulty. A restriction upon the removal of the bones from within the confines of the church building did however prevent the taking of samples for radiological and

chemical analysis. Despite this, a thorough examination of the skeleton was made. This close scrutiny, whilst it did not reveal the cause of death, did provide some interesting pathological information from which a few tentative conclusions as to the life-style of Sir Hugh de Hastings have been made.

Physique, stature and age at death

The skull showed Sir Hugh to have been a very round-headed man (cephalic index 87.91 : hyperbrachycephalic), with broad eye sockets and a narrow well-bridged nose of perhaps an aquiline profile.

The robustly constructed long-bones with their well defined muscle attachment areas gave the impression of a man of good physique. Each of the long bones was measured according to standard practice, and by using Trotter and Glesser's regression equation formula (1952, 1958) for calculating the height of an individual, it was estimated that he was 177.07 cm. (5ft. 9³/₄ins.) in height.

Using the following criteria: age changes in the speno-occipital suture at the base of the skull and in the pubic symphysis; the degree of attrition of the molar teeth (see below under Dentition); and the amount of osteo-arthritic disease present, it was estimated that he was between 35 and 40 years of age at his demise.

Congenital anomaly

The only congenital irregularity noted in the osseous remains was a detached neural arch of the 5th lumbar vertebrae, a fairly common lumber variation of no particular significance in this instance.

Pathology

Like so many other medieval (and modern) people Sir Hugh suffered from the degenerative condition of the joints known as osteoarthritis. The exact cause of this disease is still the subject of debate, but it is generally agreed that trauma plays an important part in its origin. The trauma may be in the form of a fracture, but more usually it takes the form of repeated episodes of minor stress. The disease was very common in Anglo-Saxon and medieval Britain, especially among the rural population. This high incidence among agriculturalists may be seen as an unhappy testimony to the hard unrelenting working conditions then prevailing among this class of people. In such persons the disease was generally focussed upon those joints most stressed during rural activities, namely, the lower back, the shoulder, hip and elbow joints and the feet.

In the case of Sir Hugh, the disease manifested itself in the lumbar-vertebrae, the right hip joint and both acromio-clavicular and humero-ulnar joints, (that is to say, the point of the shoulder where the collar bone meets the shoulder blade, and the elbow). In all of these regions it was still at a fairly early stage of development, and apart perhaps from stiffness and occasional bouts of pain, it was unlikely to have seriously restricted the movements of any of the affected joints.

The high incidence of osteoarthritis and related arthritic diseases among the medieval population was a cause for contemporary concern, and in the search for cures these ailments were closely studied, and as a consequence, described in medical texts. The celebrated Franciscan, Bartholomeus Anglicanus, in his great encyclopaedia *De Proprietatibus Rerum* (circa 1230), defined *arthetica* as an 'ache and evil in fingers and toes, with swelling and sore pain. And when it is in the fingers it is called *cyragra*, and in the toes *podagra*. If it is in the whirlbones [either the vertebrae or hip joints] it is called *sciatica passio*.' Sir Hugh's osteo-arthritic lower back would almost certainly have been classified as the latter ailment, and if he had submitted himself to a doctor, would have been treated

like so many other disorders at that time, by blood-letting, purging and a change of diet. Poultices were also sometimes applied directly upon the affected region. Bartholomeus, following a recipe of Dioscorides, speaks of the efficacy of a hot poultice of ox dung tempered with galbanum, frankincense and vinegar for the treatment of *sciatica passio*.

The presence of osteoarthritis in both shoulder and elbow joints is particularly interesting since neither of these areas is commonly subject to the disease unless some previous damage has occurred to the articular surface. Such damage usually occurs as a direct consequence of some occupational activity such as regular woodchopping or heavy digging. That a nobleman should be engaged in either of these activities on a regular basis is most unlikely, therefore some other cause must be looked for. Given his military disposition as a campaigner in foreign wars, is it not reasonable to assume that he took some form of regular military exercise to maintain that fitness for battle expected of a medieval knight? If his shoulder and elbow lesions were a consequence of some such exercise it is interesting to speculate as to what form this training took. Strutt (1801), 105-7, writing of medieval military exercises mentions an early 14th century French MS entitled *Les Etablissements des Chevalerie*, wherein the author recommends an exercise in which a warrior on foot practices his martial prowess against a post-quintain or *pel* (from the Latin *palus*, a pale or stake). This device was simply a stout wooden post or trunk of a young tree fixed firmly into the ground, at which the warrior, armed with sword and shield, made a resolute attack. The *pel*, which stood six feet in height above the ground, represented a standing opponent, upon which the attacker aimed sword blows at different levels representing the head, body and limbs. An anonymous early 15th century poem entitled *Knyghthode and Batayle*, also describes this activity, with the 'yong knyght' pitting his strength and skill against the *pel* using a mace and a shield of 'doubil wight'. By using extra heavy weapons the warrior thus acquired greater physical strength and, it was hoped, an improved facility with weapons of normal weight in battle. The poem recommends sixty pounds as the weight of the weapon to be borne in practice combat against the *pel*. There can be little doubt that the regular practice of striking an unyielding post with a heavy weapon and shield would have had a marked effect upon the joints of the shoulder and elbows.

The incipient osteoarthritis in the right hip may well have been caused by a previous injury to this joint, perhaps in falling or jumping from a moderate height with the unflexed right leg taking the initial shock of impact. Further evidence of an active life-style, with its concomitant hazards, was noted upon the left tibia. An exostosis upon the tibial tubercle indicates that the patellar tendon had at some time been torn here from its attachment point. This injury can only have been caused by an unexpected flexion force being automatically resisted by the sudden contraction of the quadriceps muscle. This too could be the result of a fall, or perhaps by the unexpected shifting of the weight of the body onto the flexed left leg during some abnormal exercise.

Dentition

The upper and lower 3rd molars were found to be congenitally absent. This congenital absence of teeth is known as hypodontia, the commonest form of which is in the third molar region. Few frequencies for third molar hypodontia in earlier British populations have been published, and none are available for the medieval period. The causes of the disorder seems to be primarily determined by genetic factors (Grahnen, 1956).

All of the premolar and molar teeth were seen to have well-worn occlusal

surfaces with moderate exposures of the underlying dentine. This attrition was a consequence of a coarse and abrasive diet, the principal item of which would have been bread made from flour containing a high level of grit particles from the quernstones with which it had been ground. From Roman to early post-medieval times these quernstones were often manufactured from imported Rhenish lava, a rock infinitely more friable than the conglomerate rock much used by the Romans in East Anglia. Attrition of the molar teeth can often be used to assess the ages of individuals (Zuhrt, 1955), and Brothwell (1963, 67-70) noting that the rates of wear in earlier British populations seem to have changed little from the Neolithic to the medieval period, produced an attrition chart to assist in this method of age determination.

The degree of wear from the 15th century is much less, especially among the upper classes who took to eating bread made from a more refined flour. This bread was made from wheaten manchet bolted through fine cloth to remove most of the bran and the coarser particles of grit. Sir Hugh's worn dentition shows him to have been a consumer of a much less refined article.

Some damage to the enamel on the buccal surface of the upper right 2nd premolar may also have been sustained during the mastication of food. Attempting to crack a nut, a bone or some other intractable foodstuff could easily have chipped the enamel in this way. Such minor damage could, however, have been a consequence of biting upon some other hard substance during some working task.

At some time during his life Sir Hugh received a severe blow in the mouth, either as the result of a fall, by walking into a hard object, or by being struck with a heavy instrument. This episode did great damage to his incisor teeth, at least five being broken off close to the gum-line and another being badly chipped. The upper right 2nd incisor may also have been broken in this incident, for it, or what remained of it, had been extracted only a few weeks before his death. The upper left 2nd incisor may also have been damaged, but unfortunately it was not available for examination. Its empty socket showed no trace of healing, suggesting that the tooth had either been extracted immediately before or after death, or it had been accidentally lost during the excavation of the grave.

The exposed pulp cavities of all the broken teeth were undiseased. Slight coating of dental plaque upon some of the damaged surfaces suggests that the violent episode must have taken place some months at least before his demise.

Full metrical details are held with the excavation archive by the Norfolk Museums Service.

Hair from beneath the skull (Pl. 2 and 3)

Samples of the hair beneath the skull were examined by J. G. Craddock of the Home Office Forensic Science Laboratory, who kindly supplied the following notes.

'The hair is animal, not human, and in my opinion is cow hair. Most of the recovered hairs were in a random jumble, but some were in the form of regular layers and examination of one of these layers proved most interesting.

The hair roots were all on one side of the layer, which had therefore been formed by the skin rotting away; the hairs had not been cut for use as, for example, padding for a cushion. The distal ends of the hairs had been cut so the skin had been trimmed.

The survival of the cow hair, and the absence of human hair lends credibility



Plate II
Sir Hugh's skull showing adherent cow hair, and hair within the depression beneath the skull.



Plate III
Details of some cow hair from beneath the skull.

to the idea that Sir Hugh was bald, and wore a wig made of cow hide, although the possibility that he wore a hat cannot be discounted.'

This unusual survival of hair has not been subjected to scientific analysis. Soil conditions do not appear to have contributed to its preservation, and it must be presumed that some method of preparation of the wig or hat had acted as a preservative specifically on the hair, while allowing the skin of the hide to deteriorate normally along with the rest of the non-bone elements in Sir Hugh's cadaver.

Miscellaneous biological remains *by* Peter Murphy

During the renovation and investigation of the tomb of Sir Hugh de Hastings several samples were taken.

Wood

Although the grave-fill was aerobic the corrosion of coffin fittings had released metal salts into the surrounding soil, inhibiting microbial activity and permitting the preservation of some coffin wood. Some metal-replacement of wood has also occurred. The wood is identified as *Ulmus* sp. (elm). It has wide annual rings with a large proportion of smaller late-wood vessels.

Soil samples

Samples were taken from the abdominal region in an attempt to recover food residues and parasites, and from elsewhere in the grave for comparison. The sample from the abdomen produced brick and mortar/plaster fragments; white concretions of insoluble salts; fish-bone, small mammal bone and chips of large mammal bone (burnt and unburnt); avian eggshell; shell fragments of mussels, oysters and unidentified freshwater bivalves; insect remains; carbonised cereals and crop weeds; and large quantities of charcoal. This material appears to represent debris from a domestic hearth, and clearly is not the original contents of the abdomen. Possibly the grave was cut through earlier occupation deposits, which then became incorporated into the grave fill.

Since the origin and date of this deposit is uncertain detailed study of the biological material which it contains is not thought to be worthwhile.

Conclusions

The disturbance to Sir Hugh's grave in 1978 offered the opportunity for the anthropological examination of a major figure of the mid-fourteenth century. The close correlation between his actual age at death (37-42 years) and Bari Hooper's estimation (35-40 years) is satisfying to both documentary research and anthropology, while Sir Hugh's osteoarthritic joints and worn-down teeth attest to his involvement in the martial arts and to his consumption of the same unrefined bread that abraded the dentition of the lower orders at this period. The coffin, however, with its iron bindings and carrying rings mirrored Sir Hugh's high status in society just as much as the brick chamber, marble slab and monumental brass centrally placed within the chancel of his magnificent parish church.

Acknowledgements

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