Recent Excavations at the Cluniac Priory of St. Mary, Thetford, Norfolk

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In order to finish laying-out this site, which has been in the guardianship of the Ministry of Works since 1933, excavations were recently undertaken to find out the exact position of the chapter-house apse and its contents. The chapter house lies in the eastern range to the south of the monastic church, separated from the transept by a sacristy.[1] It was part of the original priory and was built between 1107 and about 1120 (more probably nearer the latter date). An eastern apse was not uncommon in early chapter houses of the Black Monks. The one at Thetford was demolished sometime during the fourteenth century and the building reduced to a rectangle by a straight wall with a chamfered plinth and two buttresses (FIG. 21). Much of the area within the apse had been greatly disturbed by this fourteenth-century reconstruction and later agencies, and no pottery or other evidence for closer dating of any of the contents of the apse was found. Sections did not, therefore, give much information.

The Twelfth-Century Apse Wall had been almost entirely torn down to its footings, only a few blocks of the first course of ashlar of the inner face remaining in the southern part and one single block (probably disturbed) representing the exterior face. Very little of the wall-core of flint and chalk rubble survived, but the footings, laid in natural reddish sand, could be traced quite clearly, although they gave no hint of buttresses. Only in the south corner of the apse did the original twelfth-century interior features survive to any extent. Both the bench and foot-pace had chalk-block cores. Only a single paving slab remained in position on the mortar floor of the apse although the impressions of several other 'robbed' slabs could clearly be seen. Beneath this floor ran several chalk blocks, 10 in. deep, carefully mortared together (C, FIG. 21). This was evidently a similar structure to 'B', which was a long 'box' about 4 ft. long and 10 in. deep of mortared chalk blocks with a thin mortar floor cut into the natural sand. It was quite empty when excavated except for a small scrap of indeterminate medieval pottery and was overlaid, and partly cut into, by the fourteenth-century buttress. The position of 'C' suggests that both it and 'B' were early features of the twelfth-century apse[2] (assuming that the paving was contemporary with the

[1] F. J. E. Raby and P. K. Baillie Reynolds, *The Cluniac Priory of Thetford* (London, H.M. Stationery Office, 1939).

[2] Chalk-block coffins have been noticed during repair work further west, inside the chapter-house.

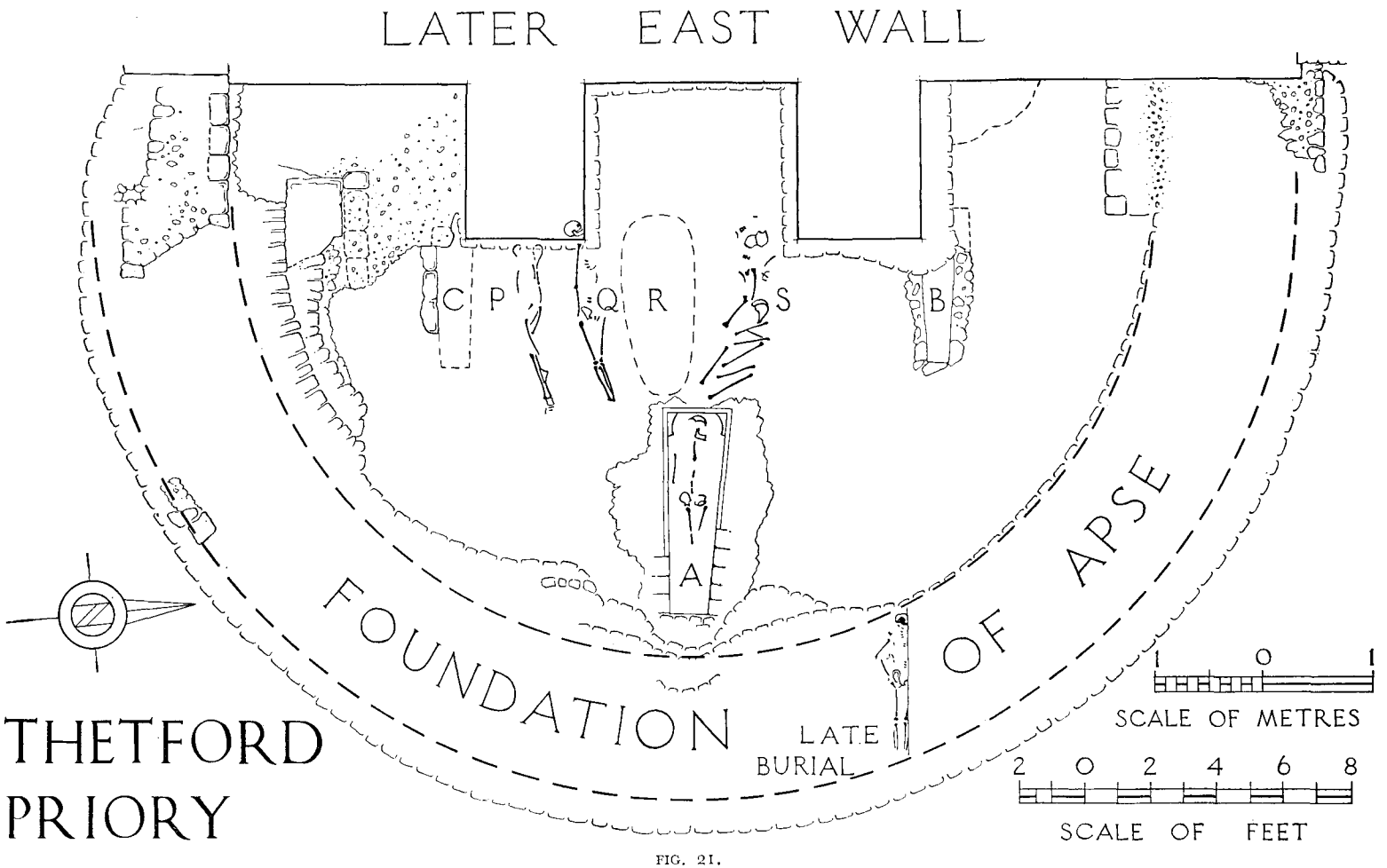

FIG. 21.

PRIORY OF ST. MARY, THETFORD

The apse of the chapter-house, showing positions of burials, and of the east wall of the building, with buttresses, built after the apse was demolished.

walls) and since 'B' was too small for an adult burial it may have contained either a translated burial or the body of a child. Whatever the contents, they seem to have been removed during the fourteenth-century alterations.

THE FINDS[3]

The Stone Coffin (A, PL. XII, A-B; FIG. 21) was very finely dressed with a convex bottom pierced by a lewis-hole. The bones of the skeleton which it contained were in a very soft and decomposed condition, the skull having been badly smashed by a fall of rubble. No trace of a lid was found, but this may have been lifted during the fourteenth-century alteration, and despite careful search no objects or traces of fabric came to light in the coffin. The apse footings had been cut through to allow this coffin to be inserted, and a packing of chalk blocks and ashlar masonry carefully built up all round the foot (perhaps to avoid weakening the wall above) the rest of the coffin being surrounded by a packing of chalk rubble set in mortar. The coffin sloped markedly down to the east, owing to which, and to the camber, the lewis-hole was certainly useless for drainage purposes. This, like all the burials within the apse, was inserted into undisturbed natural sand. The nearest parallel to the coffin seems to be no. 8 from the Lincoln chapter-house,[4] which dates from sometime after the period 1220 to 1235, but is stylistically late in the Lincoln series, so perhaps a late thirteenth-century date might be suggested. It differs from the Lincoln coffins in having a cambered bottom.

As priors were normally buried in the chapter house until the fourteenth century, we can perhaps assume that this coffin contained the body of an early prior. The foot of the coffin would be beneath the president's place in the apse.

Burials P, Q, R and S. There is some slight evidence that these are all later than the stone coffin A, but they are obviously earlier than the fourteenth-century wall. R and S were very much disturbed subsequently, but P and Q were in very good condition and buried in a long narrow 'bundle', which suggests that the bones were not all in articulation. To judge from fragments of material found between some of the long bones, they may have been sewn up in black woollen shrouds or habits (*v.* Appendix B; PL. XII, C).

The 'Late Burial' of a child of 7-8 years had no trace of a coffin. Little can be said except that it is probably later than the fourteenth century, and seems to form part of a small graveyard extending further east. This is confirmed by the few adult bones which were found with it, which probably belong to a previously-disturbed burial.

An anatomical survey of those buried within the apse (*v.* Appendix A) seems to show that they are all fairly tall males (5 ft. $9\frac{1}{4}$ in. to almost 6 ft.), mainly falling within the age group 40/50 and of possibly late Saxon stock. Osteo-arthritis would seem to have been common.

[3] I am grateful to Mr. R. L. S. Bruce-Mitford for information in advance of his publication of the Lincoln chapter-house excavations, and to Dr. Calvin P. B. Wells of Norwich, Mr. H. B. Carter, of the Animal Breeding Research Organization, Edinburgh, and Miss A. S. Henshall of the National Museum of Antiquities of Scotland for their reports, which are published in Appendices A and B.

[4] *Archaeol. J.*, CIII (1946), 103.

APPENDIX A

THE MEDIEVAL BURIALS

By CALVIN P. B. WELLS

Method. Cranial measurements and coding follow the practice of Morant (1923);[5] those of long bones, Trevor (1955);[6] estimation of stature, Dupertuis and Hadden (1951).[7]

The following inhumations were examined:

1. *Burial P.* ♂ Age 45-50. Most of this body is present except the cranium, upper cervical vertebrae and the small bones of the hands and feet. The following measurements are obtainable:

	L	R
HuL_1	331·1	337·2
FeL_1	486·2	—
FeL_2	477·3	—
FeL_3	453·8	—
FeD_1	29·0	30·7
FeD_2	33·6	35·1
TiL_1	388·6	392·2
TiL_2	384·5	390·1
TiL_3	367·2	373·2
TiD_1	42·0	42·1
TiD_2	27·8	26·9

These give Meric Indices of L=86·3 and R=87·4 (Eurymeric) and Cnemic Indices of L=66·1 and R=63·8 (Mesocnemic). Stature estimation gives 176·8 (5 ft. 9½ in.). A well marked squatting facet is present on the distal articular surface of the R. tibia.

(*a*) A second L. fibula was present with this burial.

2. *Burial Q.* ♂ Age 50. This body is also substantially complete. Unfortunately the cranium is in very bad condition and would not permit restoration with any confidence. It is in about five dozen fragments, some, however, being quite large, and the facial skeleton is moderately well preserved. The following measurements are available, almost all those of the cranium being somewhat uncertain:

L	Perhaps about 188-192	G1	45·8
B	137·5	G2	38·2
PH	17·0	EOW	108·0
NH	52·0	IOW	102·4
NB	26·6	GB	94·3
		J	125·0

[5] G. M. Morant in *Biometrika*, XV (1923), 193 ff.

[6] R. Mukherjee, C. R. Rao and J. C. Trevor, *The ancient inhabitants of Jebel Moya* (1955).

[7] C. W. Dupertuis and J. A. Hadden, in *Amer. J. Phys. Anthrop.*, n.s., IX (1951), 15 ff.

	L	R
HuL_1	—	361·8
RaL_1	—	269·4
FeD_1	24·3	—
FeD_2	37·9	—
TiL_1	—	423·2
TiL_3	—	410·6

Meric Index 64·1 (Platymeric); Stature estimation 182·4 (5 ft. $11\frac{3}{4}$ in.). A small squatting facet is present on the distal articular surface of the R. tibia.

Pathology. Osteoarthritis is widely present in this body. It is gross throughout the spine with spondylitis deformans and 'bamboo spine'. It is also severe in the tarsus and both femora. In the mandible severe protrusion of the incisor teeth is present. M1 and M2 had been lost bilaterally ante mortem.

(*a*) A second L. calcaneus and a fragment of a second sternum occur with this burial.

2*a*. *Burial P and Q*. A bag marked as 'Mixed bones from burials P and Q' was examined. It contained a R. capitate and hamate; an ulnar fragment; a L. and R. patella (arthritic); a R. patella; a grossly arthritic L. talus; a L. and R. cuboid and a few other fragments.

3. *Burial R*. ♂ Age 40?. This contained five lumbar vertebrae; pelvic fragments; some damaged long bones, a R. capitate and some metacarpals. The following measurements are obtainable on the L. femur:

FeL_1	467·4
FeL_2	466·1
FeL_3	445·2
FeD_1	25·4
FeD_2	36·7

Meric Index: 69·1 (Platymeric). Stature estimation 175·9 (5 ft. $9\frac{1}{4}$ in.).

4. *Burial S*. ♂ Age 35. Most of this body is present although the cranium is very deficient. The frontal bone, L. parietal and L. temporal are substantially complete, and there is a fragment of occiput from the R. asterionic region. Few measurements are obtainable. L. must have been at least 185·0 and probably well in excess of this value. B′ is 99·1; B″ 124·3; S_1 132·0? and S'_1 121·0? The frontal bone rises sharply from a weak glabella and negligible brow ridges. It is full and rounded in the region of metopion. The vertex was apparently smoothly curved. There is no trace of post-coronal sulcus or obelionic depression. The mandible is stout but not large. It lacks the L. ramus and gonial angle. The R. gonial angle is not everted. All teeth are present. There is no caries but crown wear on the molars and premolars is very severe. The incisors show faceting from marked overbite. The skull as a whole was probably a long ovoid in norma verticalis and almost certainly dolichocranial. The following measurements of long bones are obtainable:

	L	R
HuL_1	335·2	338·6
UlL_1	264·1	263·4
FeL_1	473·2	475·6
FeL_2	465·2	469·1
FeL_3	444·1	450·0
FeD_1	25·3	25·5
FeD_2	32·8	32·0
TiL_1	393·1	—
TiL_2	380·6	—
TiL_3	370·5	369·1
TiD_1	34·3	35·2
TiD_2	26·9	26·3

Meric Indices: L=77·1; R=79·6 (Platymeric). Cnemic Indices: L=78·4; R=74·7 (Eurycnemic). Stature estimation: 176·5 (5 ft. 9½ in.).

Pathology. Gross osteoarthritis is present throughout the vertebral column, with spondylitis deformans. It is present on the costovertebral as well as the intervertebral joints and at the sacroiliac joint.

(*a*) This burial also contained a second male L. innominate, R. femur and L. and R. tibia. These give the following measurements:

	L	R
FeL_1	—	465·6
FeL_2	—	462·3
FeL_3	—	436·1
TiL_1	379·6	376·1
TiL_2	379·1	375·8
TiL_3	359·4	—
TiD_1	38·2	34·7
TiD_2	24·2	24·3

Cnemic Indices: L=63·3 (Mesocnemic); R=70·0 (Eurycnemic). Stature Estimation: 175·2 (5 ft. 9 in.). No squatting facets are present on any of the bones in this burial.

5. *Late Burial.* This contained:

(*a*) The remains of a child aged 7-8 years, consisting of many hundreds of small fragments of cranium, vertebrae and long bones. Most were in very poor condition.

(*b*) An adult, probably male, represented by a L. and R. zygoma; a fragment of mandible; tibial and metatarsal fragments and a L. 3rd cuneiform.

6. *Body from Stone Coffin.* Surviving bones from this inhumation are all in very bad condition and apart from identification of some of the fragments almost nothing can be said about them. Present are: 3 fragments from cranial vault; the R. half of the body of the mandible with two molars *in situ*, eroded to their roots. The remaining teeth lost

post mortem. A maxillary L. 1st incisor; 6 fragments of pelvis; the distal fifth of a R. radius; a few damaged carpals and metacarpals; short lengths of shaft from femora and tibiae; most of the tarsalia and metatarsalia, and some hundreds of tiny eroded fragments from most parts of the body. This individual was probably a male aged about 45-55.

SUMMARY

This material is neither sufficiently abundant nor well enough preserved to pass a safe opinion on its physical type. The evidence, however, suggests that as far as burials 'P', 'Q', 'R' and 'S' are concerned we are dealing with a late Saxon or medieval type. The skull fragments of 'Q' and 'S' strongly suggest this. The tendency to combine platymeria with mesocnemia or eurycnemia, the very small carpalia and tarsalia and the general proportion and build of the limb bones all combine to suggest that these men may have been of late Saxon stock, and no recognizable feature in any way contradicts this.

The bones from burials 'P', 'Q', 'R' and 'S' seem to have been moderately burned, although it is difficult to be quite definite about this. If true, the most probable explanation would be that they were the accidental victims of a fire.

APPENDIX B

THE FABRIC (PL. XII, C) FROM BURIAL Q[8]

By H. B. CARTER and AUDREY S. HENSHALL

The material of the fabric is wool. It is now in a very dry and degraded state and the fibres break down readily into small fragments during examination.

The fibres were examined at magnifications of about ×100 and ×500 diameters. The yarn was composed of filaments ranging in thickness from about 15 to 30 microns, which in general appeared smooth on the surface except where obvious damage in handling or by erosion had occurred. Here and there portions of some few fibres of all sizes showed regular serrations on the surface associated with very faint lines similar to the scale patterns on the surface of animal fibres. After careful study these were diagnosed as the last vestiges of the cuticular scales on the fibres from a sheep's fleece. In the larger fibres of about 30 microns diameter varying degrees of (mostly) continuous medullation could be seen, as is common in certain types of sheep's fleece. In general the substance of the cortex was amorphous and fractured by numerous transverse cracks.

All fibres showed varying degrees of a diffuse colouration which, by transmitted light, ranged from pale yellow to a deep reddish-brown. In portions of some fibres there appeared to be aggregations of small brownish granules orientated more or less in the normal manner of melanin pigment in naturally-coloured fibres of the sheep's fleece. This appearance under the microscope is consonant with a naturally-coloured brown fibre in the fleece itself, and is consistent with the rusty brown of the fabric itself. Although it cannot be said with finality that the fabric has not been dyed, it is on the available evidence more probable that the yarn was prepared from a naturally brown, or even black, sheep's fleece. Moreover this seems to have been of the coarse or so-called carpet-woolled type characteristic of so many heath or mountain breeds of the present and former centuries in the British Isles and Europe. Even today the fleece type from which this rough fabric appears to have been made is common to approximately half the world's sheep population. It may well have been present as a much higher proportion in the medieval sheep population, in which possibly black or brown fleeces were

[8] The cloth from burial P was similar.

extremely common or even cultivated as a source of naturally-coloured fibres of fairly stable properties. It is to be noted, however, that even the most intense black fibres in the natural fleece will tend to oxidise more or less rapidly (according to the intensity of the light) to a rusty brown not unlike that of the present sample. Similar changes of colour could doubtless occur in buried material over a long period of time by chemical agencies. These are also without doubt responsible for the general disappearance of the cuticle cells on most of the fibres and many other changes.

The yarn used for both warp and weft is a 2-ply, hard twisted Z. There is practically no spin visible on the component threads, which were presumably spun S. The yarn is heavy and rather uneven. The weave is plain, averaging 6-8 ends and picks per inch. The cloth is closely woven, and much felted with a heavy cover which obscures the weave over most of the surface. Along one edge is a selvedge; no extra threads have been inserted and the plain weave continues to the edge, though the warp threads are spaced closer, owing probably to the natural tendency to close up at the edge of the warp. The resulting cloth is thick, heavy, coarse and rough.

There is a very closely similar fragment of cloth from a burial found in 1864 near Kelso Abbey, Roxburghshire (*Proc. Soc. Antiq. Scot.*, LXXXVI (1951-52), 17). It seems probable that it also is woollen, and it is hoped to have the fibre re-examined.

NOTE

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