

NOTES AND NEWS

invalid. Dr Bryant Bannister (University of Arizona, Tucson) described how, by cross-dating the growth rings of trees, especially the sequoia and bristlecone pine, it has been possible to construct an absolute chronology extending for more than seventy centuries. Besides its usefulness in its own right for archaeological research, this dendochronology provided wood of known age for directly checking the radiocarbon time scale. Careful measurements made in laboratories of the Universities of La Jolla, Pennsylvania and Arizona have demonstrated that the radiocarbon concentration has varied by 1 to 2 per cent during the past 2,000 years and that the deviation progressively increases for the next 5,000 years back in time. This has the effect of foreshortening the carbon-14 time scale and all radiocarbon dates appear younger than historical dates by periods of time increasing to about 750 years at a range of 7,000 years. This effect was confirmed by several speakers who have dated critically chosen objects from Egypt.

Dr V. Bucha (University of California, Los Angeles) explained these past changes by the interaction of the Earth's magnetic field with impinging cosmic rays. The varying field he has measured affected the radiocarbon production in a manner which correctly predicted the results of the radiocarbon calibration scale. Minor fluctuations remaining can be explained in terms of radiations associated with sunspots. The calibration curve contains some 400 measurements by Professor H. Suess (La Jolla) and slightly fewer by Dr E. Ralph (Pennsylvania) and Professor P. Damon (Arizona), and surely must be the most extensive calibration curve of all time.

Professor Harry Godwin (University of

Cambridge), who established radiocarbon dating in Britain, showed how it has facilitated the solving of various types of archaeological problems, even though a revision of Mesolithic and Neolithic chronology by the order of a thousand years has been necessary. In Britain radiocarbon dating has been particularly useful in relating cultural changes to geographical, climatic and vegetational changes.

Describing advances in the relatively new method of dating fragments of pottery by thermoluminescence, Dr M. J. Aitken (University of Oxford) modestly claimed an accuracy of only about 5 per cent, which will surely improve as work continues. This is an independent method of dating which might well be used in monitoring the radiocarbon time scale.

Professor D. G. Kendall (University of Cambridge) led the audience through the complex mathematical process of a practical problem of seriating tombs in a cemetery. Information about the presence or absence of certain chronologically significant features within the tombs was all he required to produce a similarity matrix, which was used in the ubiquitous computer for beginning a multi-dimensional scaling procedure leading to the placement of the tombs in correct chronological order. This method could be generalized, he explained, and should be most useful for the archaeologist.

The principal difficulty in making use of such techniques as Mr H. Barker (British Museum), among others, emphasized, is the need for scientists and archaeologists to collaborate inside and outside the laboratory, and to establish intelligible information exchange. With such communication, the impact of the natural sciences on archaeology would be only just beginning.

A Possible Saxon Palace near Stratford-upon-Avon

PLATE XXII

Among the air-photographs of the Avon valley published in 1964 was one (PL. XXIIA) displaying a remarkable group of buildings and other features, 5-8 acres (2-3 hectares) in extent, then named site 61 by Webster and Hobley (1964, 17-18, pl. xa). It was Sonia Chadwick Hawkes who first suggested that these might be a series

of 'palace' buildings of Saxon date comparable with those of Yeavinger (Colvin, 1958, 2-6, fig. 3; Wilson and Hurst, 1957, 148-49) Milfield (Knowles and St Joseph, 1952, pl. 125) and Cheddar (Rahtz, 1962-3). This note expands this idea and suggests that two phases can be recognized.

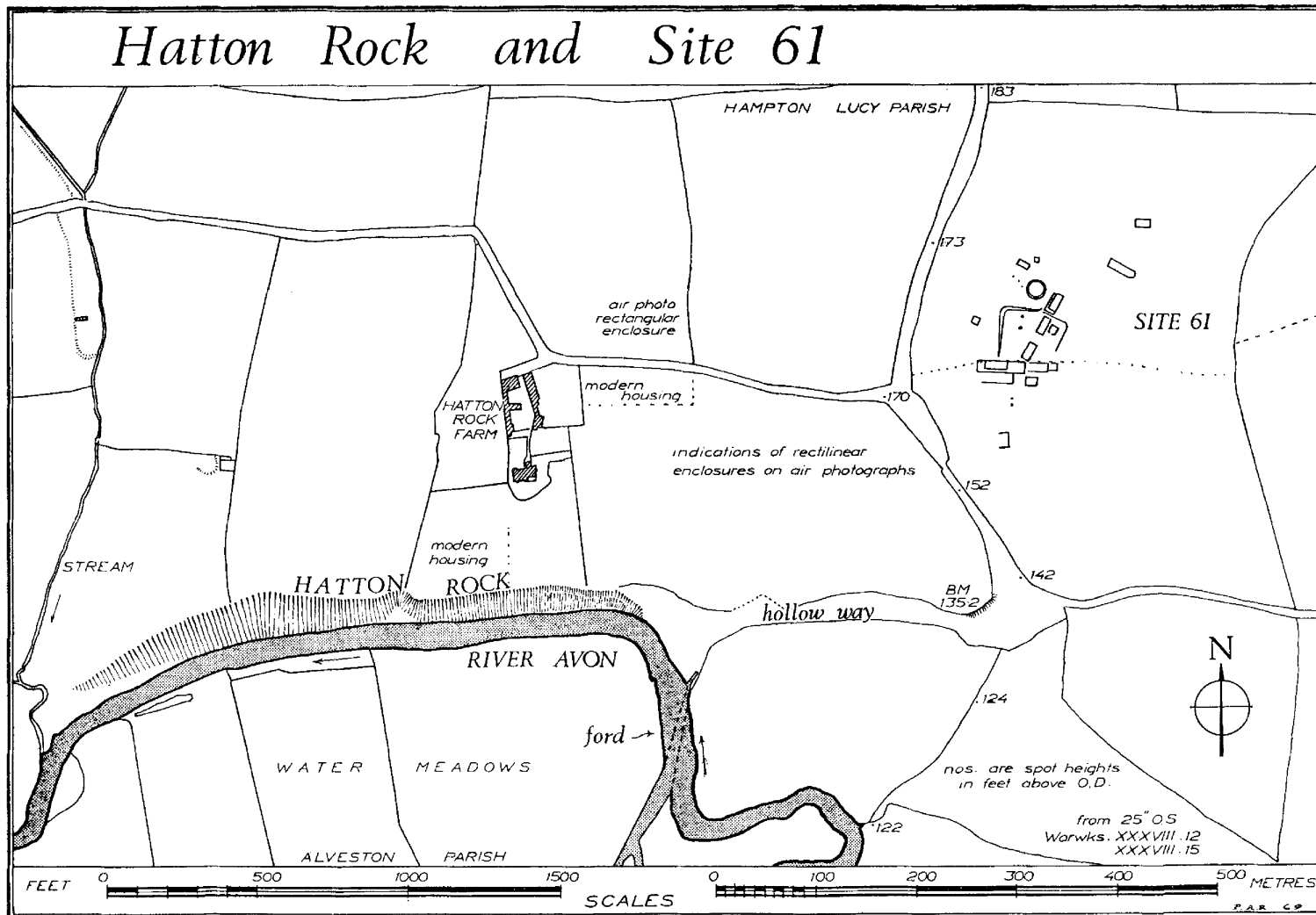


Fig. 1. Hatton Rock and Site 61

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The site* (FIG. 1) is on the south end of a spur overlooking the Warwickshire Avon close to Hatton Rock, about 4.5 km. NE of Stratford-upon-Avon. The river here flows at the foot of a cliff (Hatton Rock) of clay and gravel, an unusually dramatic feature in this area. At the east end of the cliff there is a ford, formerly a bridge, and from this a hollow way leads to the foot of the hill on which the site lies.

The earliest references† to the Manor of Hampton Lucy or to Hatton are two charters of 781. One (CS 241, Finberg, 1961, 95–6) is an agreement between Offa and the Bishop of Worcester; in return for other land, the king confirmed the bishop's ownership of Hampton Lucy, Stratford-upon-Avon, Bredon and two unidentified places both called *Sture*, which had formerly belonged to Offa's predecessor Aethelbald. The second (CS 239, Sawyer, 1968, S 120) is a grant of twelve hides at Hampton Lucy and five at *Foehhaleagh*, an unidentified place probably near Stratford; the bishop agreed to allow Eanberga, a kinswoman of Offa, to keep the lands there for her lifetime.

There are other royal connexions with this area: a piece of land adjoining Hatton to the west, called Ingon, was apparently sold by two princes of the Hwicce in c. 704–709 (CS 122, Finberg, 1961, 135; Sawyer, 1968, S 1177). At nearby Wellesbourne, there was apparently a palace in the 9th century; in 840 a bishop of Worcester handed over horses, plate, jewellery and other items to Berhtwulf, king of Mercia (CS 430, Finberg, 1961, 46). In the year 862 a charter was granted to Gloucester Abbey there; the witness list on this occasion included the Archbishop of Canterbury, five bishops, two abbots, and six *duces*; this would seem like a meeting of the Mercian council (Finberg, 1961, 153–66).

These references suggest that much of the land in the area was part of a large royal estate; that it was being gradually diminished in the

* Grid Ref. 237577; 1 in. OS map 131, Birmingham. Scheduled Warwickshire 133.

† I am indebted to C. C. Dyer for drawing my attention to these.

‡ Site 60, J. Pickering, July 1961; negative unnumbered.

§ We are indebted to Miss Elizabeth Creak, Clyde

8th century by grants; that some was acquired by the bishopric of Worcester, partly before or in Offa's day, and partly soon after 781. Wellesbourne however was apparently retained as a royal palace as late as 862; Finberg (1961, 229), comments on the relationship between Wellesbourne, Tamworth and Winchcombe.

The nucleus of the manor was later at Hampton Lucy, about a kilometre to the east of site 61, where the present village and church lie. A secondary settlement had developed by the 12th century called Hatton, near Hatton Rock. This settlement gradually declined in the later 14th and 15th centuries, as the bishop found it more and more difficult to find tenants for the holdings at Hatton, and was finally deserted (Dyer, 1968). There is no reason to think that this is represented by site 61; it is more likely to be around Hatton Rock Farm. Here, in the areas shown (FIG. 1), are faint earthworks and air-photograph‡ markings which probably represent the deserted settlement.

Site 61 has been regularly ploughed, but fieldwork has never yielded a single find, which argues against a Roman or medieval date for the building-complex. A preliminary survey was done in 1965§ to try to relate the air-photograph to the 25 in. OS map, and at the same time a geophysical survey was done, by resistivity meter|| and proton magnetometer.** The former did not produce any significant results. The magnetometer survey is reproduced (FIG. 2) and the area covered by it (FIG. 3). It will be seen that there may well be a correlation between the groups of strongest readings and some of the darkest marks on the air-photograph. The survey does not add anything to the information on the air-photograph; it was undertaken mainly to assist the location of the site within a 16-hectare field, but did demonstrate that the buried features were susceptible to magnetometer survey.

Higgs Farm Ltd., Stratford-upon-Avon, the owner of the site, for permission to work on the site.

|| Kindly undertaken by A. Pacitto (then at the Dept. of Archaeology, University of Leicester).

** By M. Weaver for the Research Laboratory for Archaeology and the History of Art, Oxford, by kind permission of Dr M. J. Aitken.

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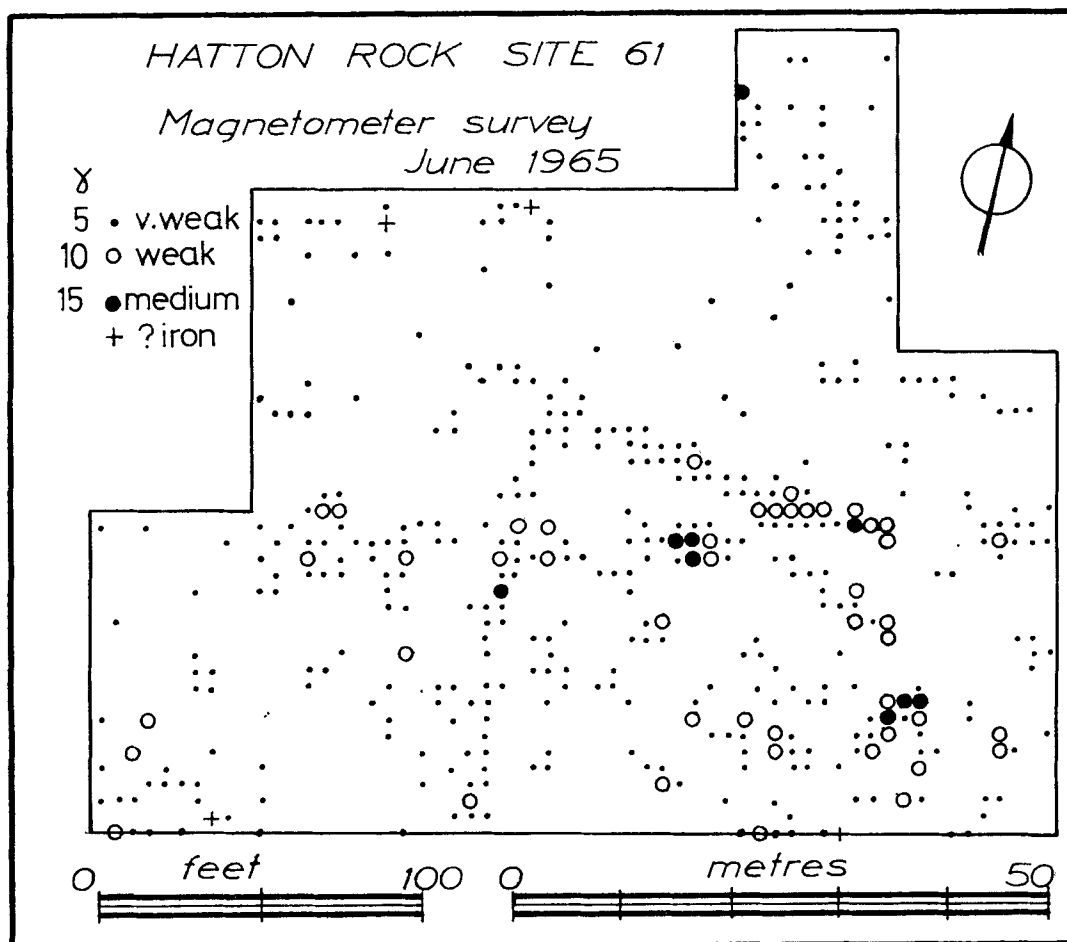


Fig. 2. Magnetometer survey

An attempt has been made to make a sketch-plan of the crop-marks (FIG. 3). It has been done by eye from the photograph (PL. XXII*a*) (that originally published by Webster and Hobley), and from another taken by James Pickering (PL. XXII*b*),* using guide lines plotted on the ground in 1965. No reliance can be placed on this plan either for its location, orientation, or scale, but it provides a basis on which the complex can be discussed and analysed. Two phases are suggested, mainly on the basis of their relative orientation; there are other features, such as a probable ring-ditch and pits, which cannot be related to either phase, and

* Negative 28.21A22, July 1962.

may belong to neither. Such indications of possible prehistoric or Roman features occur frequently in the area. There is no definite evidence that phase 1 is earlier than phase 2, as there is no obvious point at which one overlies the other. The phase 2 marks are however rather sharper, and it is possible that the foundations of the buildings represented by phase 2 have been left in the ground; while the more blurred marks of phase 1 suggest the possibility of their building timbers having been dug out, perhaps for re-use in phase 2. This is of course pure speculation, but is the only basis on which phase 1 is so named. The relationship could easily be the other way round,

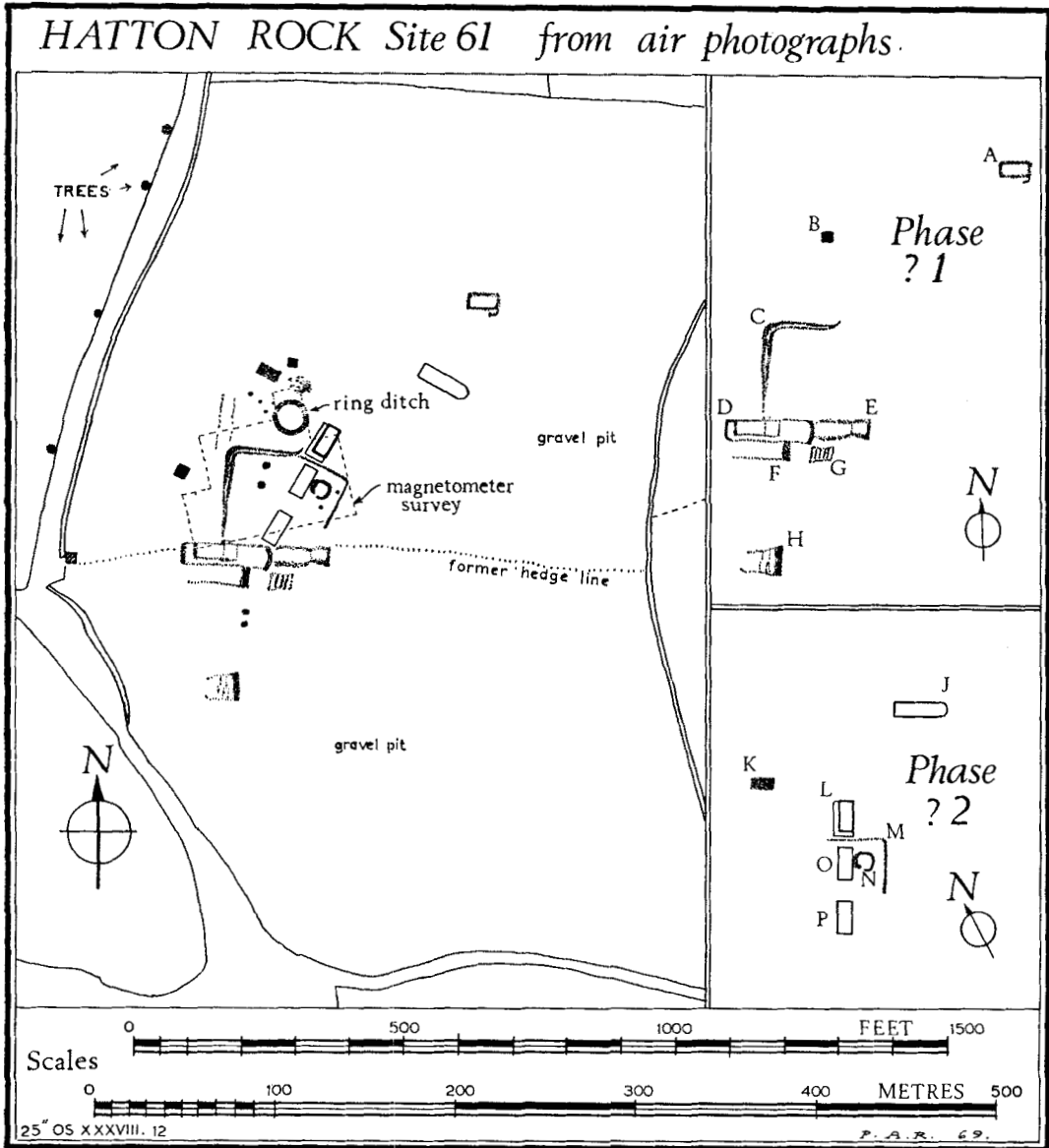


Fig. 3. Interpretation of plan

the blurring of 'phase 2' being due to plough-damage of shallower foundation trenches. Nor does similarity of orientation prove contemporaneity of the structures, but this seems a more reasonable hypothesis.

Each phase consists of a group of rectangular buildings, which are presumably of timber,

other structures, and an L-shaped ditch or timber alignment; in each group three or more buildings are in line with each other.

In the suggested list of buildings and features which follows, the measurements may be up to 20 per cent more or less in each direction.

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Phase 1, apparently orientated on the points of the compass, all buildings east-west:

- A (shown only on pl. xxii**b**) *c.* 18 × 8 m. ?porch at SE corner.
- B *c.* 6 × 6 m. sunken floor or burnt?
- C L-shaped ditch or timber foundation trench with inner and outer members converging at each end; probably of two periods.
- D *c.* 50 × 9 m. with another (of different period?) inside it *c.* 24 × 6 m.; end walls more massive than sides.
- E in line with D, possibly annexe, bipartite *c.* 30 × 8 m.
- F *c.* 30+ × 9 m., west end obscured by ?gravel pit, ?secondary to E outer, could be contemporary with E inner; massive east end wall like E.
- G irregular structure *c.* 9 × 6 m., possibly with north-south ?joists.
- H east end of ?building also with joists? possibly not of same orientation, west end destroyed by gravel digging?

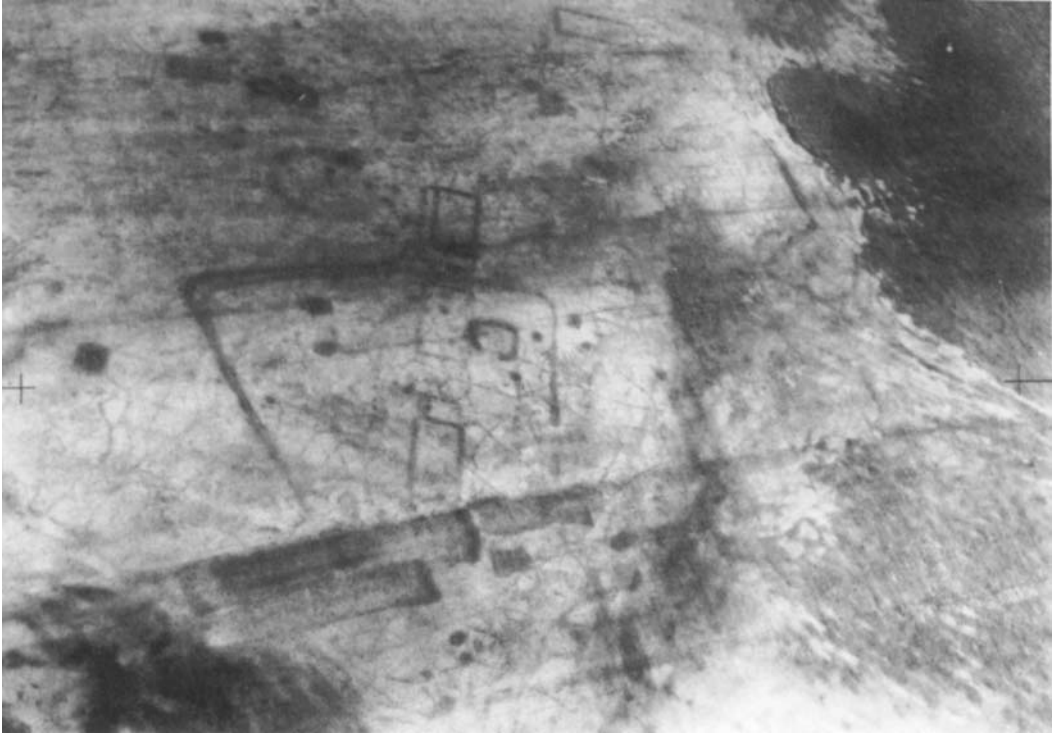
Phase 2, apparently orientated *c.* 25° off compass points, most buildings NNE-SSW, two at at right-angles to these.

- J *c.* 30 × 8 m., east end not clear but possibly apsidal; could this be a church?
- K *c.* 24 × 9 m., sunken-floor or burnt?
- L inner *c.* 18 × 9 m., ?secondary to outer 22 × 12 m.; inner one has more massive foundation trenches.
- M L-shaped ditch or timber alignments.
- N rectangular enclosure or building *c.* 12 m. square, south sides not aligned either side of a wide gap; possibly nothing to do with this complex.
- O *c.* 20 × 9 m., shallow foundations?
- P *c.* 20 × 9 m.

Whatever their exact dimensions, most of these buildings are large, too large to be those of a 'normal' settlement site. They may justifiably be called halls, of similar scale to the great 7th century halls of Yeavinger, or the 10th to 14th century halls at Cheddar. Dating can only be guessed at, but there is at least the possibility that the site belongs to the period of Mercian supremacy, centering perhaps on the 8th

century and the reign of Offa. Its location in an agriculturally rich area of Mercia, close to an important waterway, crossed here by a ford, and easily found by reference to the landmark of Hatton Rock, all seem appropriate. If the identification and dating were to be maintained by excavation, Hatton Rock would be a most interesting comparison for Yeavinger of Northumbria and Cheddar of Wessex, lying as it does geographically between them, of intermediate date, and of the third great kingdom of England.

Postscript. While this article was in the press (February 1970) a water-pipe trench was cut across the site from SW to NE. Its exact course has not yet been related to the buildings, but it appears to be cutting the L-shaped ditch C and Building L, and passing SE of J. The trench was only 30 cm. wide, and this, together with prevailing snow and ice conditions made observation and interpretation difficult. About a dozen features were recorded including what appeared to be a hearth, a post-hole 1.5 m. deep from the present surface, and ?timber-slots of similar depth. None was very obvious, soil texture and colour differences being slight. The only exception was what appears to be a sunken-floor building, with a SW-NE dimension of *c.* 6 m., cut into the natural sand and gravel to a depth of *c.* 25 cm. It may be the dark mark shown in the combined plan west of C (FIG. 3), which was not included in phase 1 or 2 because it was not orientated with either. This seems to have been filled with a rubbish layer of very dark soil, which yielded in the trench width about 20 kg. of animal bone, including horse, cow, pig, sheep, deer and bird; thirty sherds of Saxon pottery, including sandy and grass-tempered wares and the complete profile of a bowl; some ?plaster, iron slag, and a bone bodkin, similar to examples from pagan Saxon contexts at Bourton-on-the-water and Sutton Courtenay. The bone concentration was considerable and reminiscent of the 9th-10th century rubbish levels at Cheddar. The pottery is not at present closely datable, but would seem to fit better into a pagan or middle Saxon date than a late Saxon one. Elsewhere in the trench there were a few other Saxon sherds and



a

PLATE XXII: A POSSIBLE SAXON PALACE NEAR STRATFORD-UPON-AVON
Hatton Rock, site 61: air photographs from (a) south-west and (b) south-east

b

See pp. 137-43]

[Photos: (a) Arnold Baker (b) James Pickering



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bones, some charcoal slag, and (near Building J) a fragment of Roman brick and a piece of

- COLVIN, H. M. 1958. (ed.) *The History of the Kings Works*, I.
 DYER, C. C. 1968. Population and Agriculture on a Warwickshire Manor in the Later Middle Ages, *Univ. B'ham. Hist. J.*, XI, no. 2, 113-27.
 FINBERG, H. P. R. 1961. *Early Charters of the West Midlands*.
 KNOWLES, D. and J. K. ST JOSEPH. 1952. *Monastic Sites from the Air*.

building stone. No finds of any other date were seen.

PHILIP RAHTZ

- RAHTZ, P. 1962-3. The Saxon and Medieval Palaces at Cheddar, *Medieval Archaeol.*, VI-VII 53-66.
 SAWYER, P. 1968. *Anglo-Saxon Charters* (Royal Hist. Soc.).
 WEBSTER, G. and B. HOBLEY. 1964. Aerial Reconnaissance over the Warwickshire Avon, *Archaeol. J.*, CXXI, 1-22.
 WILSON, D. M. and J. G. HURST. 1957. Medieval Britain in 1956, *Medieval Archaeol.*, I, 147-71.

Travelling Rugs

The drawing (FIG. 1) shows a wall painting from a chamber tomb found at Dion in Macedonia, and published summarily by Soteriades in *Praktika tes en Athenais archaiologikes Etaireias*, 1930, 36ff., with 7 figs. The size is not recorded but it was apparently a narrow frieze on the back wall of the tomb above the funeral couch. The date of the tomb is 3rd-century BC, on architectural grounds, and Dr Tomlinson tells me that the second half of the century may be preferred. There are several Macedonian tombs of this type with wall paintings, all executed in a purely Greek Hellenistic style, and in the same tomb at Dion the marble funeral couch was painted with spirited figures of horsemen in the Greek manner. Beside these the painting shown here stands out as utterly foreign in style and conception. For an explanation we have to look 3,000 miles away, to the thrilling Russian discoveries in the frozen barrows of the Altai, at Pazirik. Two illustrations will suffice, and words are unnecessary to point the similarity to the Macedonian painting. The frieze of lions (FIG. 2) is from Pazirik Mound 5, on a woven textile; and the frieze of stylized lion heads (FIG. 3) is from Mound 1, executed in felt on cloth. They have been often illustrated—a useful conspectus of the find is given by T. Talbot Rice in *The Scythians*. Clearly the Greek painter was familiar with these rugs and hangings and he painted a copy on the tomb wall just as he would have hung the originals on his house wall. The lions are strongly Persian in style, but the lion heads are stylized in a manner well familiar in Scythian art. This is not the place to discuss the source

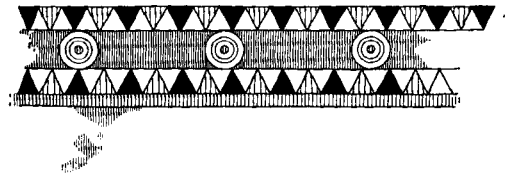


Fig. 1

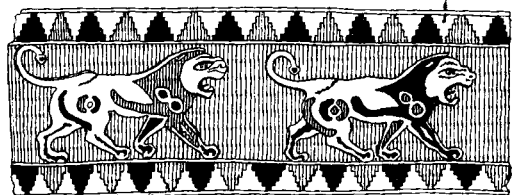


Fig. 2

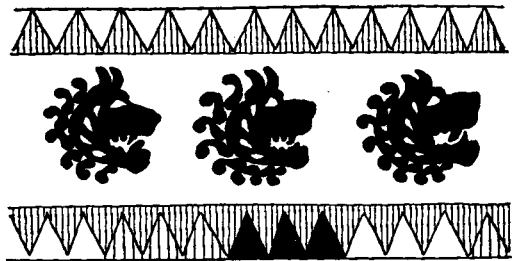


Fig. 3