

Reviews

Die Germanischen Funde der späten Kaiserzeit und des frühen Mittelalters in Mittelfranken. By Hermann Dannheimer. 2 vols. 12 × 9 in. Vol. I, x + 234 pp., 8 pls., 49 figs., 4 tables, 1 map; vol. II, 87 pls. Berlin: Walter de Gruyter for Römisch-Germanische Kommission (Germanische Denkmäler der Volkerwanderungszeit, Ser. A, Bd. VII) 1962. Price 136 DM.

The area whose late Roman and early medieval antiquities are surveyed in these handsome volumes lies south of the Main and north of the upper Danube, covering the watershed between the two great river systems which flow respectively through the Rhineland into the North Sea and through Hungary into the Black Sea. Its northern and eastern parts are drained by the Regnitz which, with its tributaries, the Aisch, the Pegnitz and the Rezat, flows beyond its northern boundaries into the Main, while to the south the Altmühl and the upper valley of the Wörnitz lead south-eastwards towards the Danube. Across the southern part of the region ran the weakest link in the frontier between the Roman Empire and Free Germany, the fortified *limes* that covered the re-entrant angle between the Rhine and the Danube. It is important to grasp the historical significance of this geographical setting in considering its archaeology throughout the period here reviewed, and it must be admitted that these volumes, in spite of their lavish provision of visual aids, do not make the task easy for those not familiar with the detailed topography of this part of Germany. The distribution-maps are not provided with scales, in kilometres or miles, nor with any easily recognizable modern features except the smaller rivers mentioned above; and there is no map which connects the area under discussion with the geography of Germany as a whole.

This part of the Roman *limes* had ceased to be an effective political frontier before the period here surveyed began, but its presence continued to affect in various ways the distribution and nature of German settlement as revealed by the archaeological remains. Successive tribal movements forced themselves against and across the old *Limesgebiet*. The peoples concerned, partly Roman provincials but mostly Alamanni and Juthungi to begin with, were compressed during the 6th century into confused congestion by advancing Bavarians from the north and east, and later by the all-conquering Franks from the Rhineland, who eventually spread a veneer of Merovingian culture over the whole complex. By the 8th century the gradual conversion to Christianity—a process not here described in detail—put an end to pagan burial customs, and thenceforward archaeology ceases to make a significant contribution to the social history of the area. It can, none the less, be illustrated further from the changing pattern in the distribution of place-names and types of rural settlement. With these later developments, interestingly discussed by Dannheimer in the concluding sections of vol. I, there is no need here to be concerned.

It is in the treatment of the archaeological material dating from the 4th to the 7th centuries that the value of the book lies. Dannheimer has covered the ground with characteristic thoroughness. He has assembled, described, discussed and illustrated a great quantity of material from a large number of sites including many grave-groups of significance for dating various types of dark-age artefacts both in this region and far beyond its limits. The result is something much more than a formal inventory, for every group of objects is fully discussed and, while the author never likes to leave a group without dating it, he is always careful not to press more certainty from the evidence than it can be made to yield. The same is true of his treatment of the broader historical issues that arise from the occurrence and distribution of different types of object over

the region. He never omits to stress the uncertainties arising from the element of chance in the location of particular discoveries, or in the varying quantity of material available for study from different sites. It is indeed true that, while some 58 different sites are listed in the inventory, a very high proportion of the whole mass of objects that are discussed and illustrated comes from only six of them;¹ and of these no less than five² are in the extreme south of the region, closely related to the line of the Roman *limes*. It is a great pity, as well as a matter of some inconvenience to the reader, that there is no single map to show the position of all the sites mentioned in the text and their relative archaeological importance; on very few of the smaller distribution-maps that are provided is it possible without a great deal of trouble to identify the individual sites at all.

Of the six most prolific sites, five are Merovingian cemeteries of *Reihengräber*, one (Gelbe Bürg) is a hill-fort settlement mainly occupied from the 4th to the 6th centuries, and one (Kipfenberg) has both an early settlement and a later *Reihengräber* cemetery. The material thus falls naturally into two main groups, a smaller one comprising objects of late Roman date largely from occupation-sites, and a larger one containing 6th- and 7th-century objects mostly from the *Reihengräber* cemeteries. The principal categories of objects in these groups are discussed separately by the author, although the illustrations, partly half-tones and line-blocks in vol. II, partly text-figures in vol. I, are not so rigidly distinguished. The illustrations in themselves are of excellent quality, especially the line-drawings, and the care with which individual grave-groups are separately delineated is admirable. But their arrangement does not make for easy consultation, since to follow the discussion of a particular object in the text volume it is often necessary to have the volume of plates open at two places at once in order to study the half-tone illustration side by side with the grave-group to which it belongs; to check parallels it may be necessary also to have the text volume open in two or more places, since the discussion is sometimes widely distant from the relevant figures. The reader's task is made even more difficult by the fact that the front or decorated side of many of the more important brooches and other metal objects is only illustrated by half-tone, the corresponding drawing accompanying the rest of the grave-group being of the back of the object, which in most cases is featureless and without significance. There seems to be no justification for this irritating practice, especially since even the best photograph may fail to bring out the finer points of decorative detail which can be quite easily indicated on a drawing. Examples can be found on pls. 18, 25, 31, 37, 55, 57, 58, 60, quite enough to show that the practice, though fortunately not unvarying, is deliberate.

Attention could be drawn to a great many points of interest in connexion with individual objects, and the author's discussion of them, especially on matters of dating. For those concerned primarily with the contemporary archaeology of Britain, there are of course comparatively few close parallels to be noted in this part of Germany, which was remote from the invasion routes across the North Sea and the English Channel. The Gelbe Bürg in the Roman *Limesgebiet* has, not surprisingly, produced some buckles, strap-ends and attachment-plates (pl. 19) of the type now recognized as forming standard equipment of the barbarized Roman army and its German federates in the late 4th and early 5th centuries, familiar in this country from the Dorchester and Milton-next-Sittingbourne burials, and recently discussed in this journal by Mrs. Hawkes.³ A pair of square-headed brooches from grave 17 at Hellmitzheim in the north-west corner of the region (pl. 76, B 4, 9) are stated by Dannheimer, quoting Kühn, to have a close parallel at East Shefford (p. 48). But the latter belongs to Leeds's type B 3 with

¹ Kipfenberg, Kr. Eichstätt; Gelbe Bürg, Gnotzheim, and Westheim, Kr. Gunzenhausen; Thalmässing, Kr. Hilpoltstein; and Hellmitzheim, Kr. Scheinfeld.

² All except Hellmitzheim, which is in the far north-west beyond the Aisch.

³ *Med. Archaeol.*, v (1961), 1-10.

divided foot,⁴ while the Hellmitzheim brooches are more like one of the varieties of his type A, which derive in any case from a Rhineland origin.⁵

Most of the pottery here illustrated is wheel-made, and related to late Roman and Frankish types. Two vessels, one from grave 20 at Westheim (pl. 37, no. 5) and the other from Dettenheim (pl. 44, no. 11), with their bosses and restrained stamped ornament, show obvious north German (?Saxon) influence, and it is difficult to believe that they are as late as the 7th century (pp. 47, 109), especially as the Westheim example was found with two radiate-headed brooches of about 550, even if these were worn and had been repaired at the time of burial (p. 46). Much of the stamped pottery here dated after 650 illustrates the fashion for close-set continuous stamping in horizontal zones, sometimes without linear demarcation, all over the upper half of the vessel (e.g. Dettenheim, grave 2 (pl. 42), or Gnotzheim, graves 25, 27 and 29 (pl. 30)). This fashion was prevalent also, perhaps before 600, as far afield as Sweden and England, and one wonders whether it may not have started earlier in south Germany also. In view of the obviously professional manufacture of this pottery and the considerable range of stamps employed, it should be possible to identify the products of particular workshops. Dannheimer is aware of this possibility (p. 112) but apparently no instances of the use of identical stamps on two or more vessels in this area have yet been noted.

These are but a few of the many points of interest which emerge from a detailed study of this monumental work. All in all it forms a worthy addition to the great series of *Germanische Denkmäler* on which the Römisch-Germanische Kommission has now been engaged for over thirty years.

J. N. L. MYRES

Arts of the Migration Period in the Walters Art Gallery. By M. C. Ross. 9½ × 7¾ in. 173 pp., 60 pls. Baltimore: Walters Art Gallery, 1961. Price \$7.50 (plus postage).

The amount of migration-period jewellery in American collections is not large, but it has been sadly neglected by European scholars. The greatest collection is undoubtedly in New York at the Metropolitan Museum, but the Walters Art Gallery in Baltimore can justly lay claim to the next best. It has now put its bigger brother to shame by producing this catalogue of sixty items of jewellery of the Huns, Goths, Franks, Burgundians, Langobards, etc. Mr. Ross is to be congratulated on his initiative and the Museum on the fine quality of the production.

Some of the material is run-of-the-mill—a box-shaped brooch from Öland (no. 60), a Merovingian buckle (no. 50), a monogrammed ring of possible Langobard origin (no. 43), a Frankish silvered buckle (no. 30), a radiate brooch (no. 24), etc.—but some of it is remarkable. If the three *Adlerfibeln* are genuine—Mr. Ross claims that they are and there seems little reason to doubt his judgment—they are of extreme importance in the Visigothic series. It is, however, sad to note that two of them have changed their provenience from Estremadura to Tierra del Barros in the last twenty years, a fact not justified in the catalogue. The most fantastic items are undoubtedly the extraordinary Hunnish objects. The fragment of a crown (no. 2) is unique, although reminiscent of the Hungarian Csorna diadem, while the strips and tubes (no. 3) resemble the well-known hair ornaments from Kara-Agač, Kasakstan. The Walters Art Gallery, with the Römisch-Germanisches Museum in Cologne, must have the richest collections of Hunnish material outside Eastern Europe.

The British Isles are represented by a number of Irish pins and brooches, only one of which (no. 56), originally enamelled, is really remarkable. It is odd to see that there is no English material in the collection; perhaps because Anglo-Saxon pagan antiquities are too well-cared-for by the English museums!

The catalogue is accompanied by an introduction and historical summary by P. Verdier.

DAVID M. WILSON

⁴ E. T. Leeds, *A Corpus of Early Anglo-Saxon Great Square-headed Brooches* (1949), no. 82.

⁵ Leeds, *op. cit.* in note 4, p. 33.

The Sword in Anglo-Saxon England. By H. R. Davidson. 8½ × 5½ in. xxvii + 237 pp., 4 pls., 118 figs. Oxford: Clarendon Press, 1962. Price £2 15s.

A study of Anglo-Saxon swords in English collections has long been needed, and in combining this with a full consideration of the literary references to this weapon in both Old English and Old Norse, Mrs. Davidson has made a major contribution to Anglo-Saxon studies.

In the archaeological section of the book, the author is not attempting to provide the sort of detailed reference and typological analysis found in Elis Behmer's *Das zweischneidige Schwert der Germanischen Völkerwanderungszeit* and Jan Petersen's *De Norske Vikingsverd*. In fact *The Sword in Anglo-Saxon England* should be read as a whole for a proper appreciation of its value, although the division into sections and a good index enable specific points to be investigated.

Mrs. Davidson discusses first the making of the blade with consideration of the types of steeled iron known to the ancient world, and modern theories as to how the pattern-welded type was produced. This textual study is supplemented by an appendix describing the experiments carried out by J. W. Anstee in the forging of a pattern-welded blade (see also J. W. Anstee and L. Biek, *Med. Archaeol.*, v (1961), 71 ff.).

The succeeding sections, which describe the differing constructions and the development of the hilt, are packed with useful reference material, and appendages and scabbards are also considered. Here the author examines fully the differing explanations for ring-swords and supports the suggestion that such ringed hilts were owned by kings. She suggests that, since in the Viking period the sword hilt had a special significance as a symbol of kingly power, the earlier ringed hilt might also have been used appropriately in the taking of an oath of allegiance. Of course, no explanation of the ring, whether as originally utilitarian or symbolic, satisfactorily explains its limited period of use in the Germanic world, nor does it answer the special problem of the Kentish group.

In fact there are too few specimens of pre-Viking swords in England for an adequate assessment of local traditions and developments. A fuller treatment of the variations in sword hilts might, however, have allowed some tantalizing hints to be developed. For example, Mrs. Davidson on p. 58 notes that the well-known hilt from Cumberland, now in the British Museum, has a horn grip and hilt, with the hilt indented to fit the fingers, and that this 'together with the broad boat-shaped pommel, suggests an earlier date than the decoration, in plates of gold filigree work, which is at least as late as the seventh century in style'. Behmer puts this sword in his Roman group, and certainly the shape of the hilt is markedly antique in comparison with the ornament. It is quite possible that we have here an antique weapon refurbished, but in view of the swords on the Franks casket it could be that there was a conservative local type in the north in the late 7th century which might be adorned in a prestigious southern manner, rather as garnets are set uneasily in square-headed brooches.

In the second part of the book the author deals in a thorough and lively way with literary references. Here the differing natures of the literary evidence from Old English and Old Norse necessitate a different treatment of the material. It is possible to consider literary references in Old Norse to the component parts under the same divisions as in the archaeological section, but the Old English evidence, being more scanty, is considered under general headings such as Historical Records or Sword Riddles, and there is a detailed important discussion of the various long descriptions of this weapon in *Beowulf*. In the last chapter, however, on the Using of the Sword, the author combines the evidence from both literatures. The non-specialist will find the literary section of the book very readable and clearly set out, even though the author does not skimp discussion of some difficult terms such as the *mæl* or *fah* compounds. The sensible division of the literary material means that there is no temptation to use as explanation for Anglo-Saxon conditions evidence which only appears in Norse literature. Where so many linguistic knots have been untied, it seems carping to suggest that more could have

been said, but one wishes that in the section on historical material Mrs. Davidson had given more time to the evidence from late Old English documents, such as the wills and laws which concern themselves with the value and prestige of this weapon in the late Saxon period. Something might also have been said about the different terms used for the sword in Old English literature, as well as for the appendages to the sword.

The lucid style and the enthusiasm for the material, which is supported by unobtrusive scholarship, make this book compulsive reading, and it is a pity that the author was not better treated in the illustrations. These are quite inadequate in number and quality to complement her lively descriptions and are often too small and indistinct to show points of detail clearly.

R. CRAMP

The Age of the Vikings. By P. H. Sawyer. 8 $\frac{3}{4}$ × 5 $\frac{3}{4}$ in. x + 254 pp., 17 figs., 10 pls. London: Edward Arnold, 1962. Price 30s.

Following the publication of English translations of the works on the Vikings by Brøndsted and Arbman comes this book by an English scholar. It is essentially a general review of the subject which lays special stress on the evaluation of evidence. After a careful description and examination of the different kinds of evidence, with an indication of the limitations of each, the author reviews some of the basic assumptions about the Viking age which are 'more often repeated than tested'.

In particular he claims that the lamentations of clerics against the Vikings have been too uncritically accepted. Unlike the armies of the warring Anglo-Saxon kingdoms, the Vikings did not respect church property and consequently such writers naturally exaggerated damage and numbers. Similarly, since the Chronicle in the relevant years is essentially propaganda for the West Saxon kings as the defenders of England and Christianity, it also naturally exaggerates the numbers of the enemy. In a chapter on the written evidence, the English, Irish, Frankish, German, Scandinavian and Islamic sources are described in excellent detail, which, however, leads the reader to suppose that much more use is going to be made of them than is actually the case. Archaeological evidence, as provided by cemeteries and settlement-sites, as well as coin evidence, is discussed and exemplified, with some necessary warnings on the use of archaeological hypotheses.

On the ships of the Vikings the writer is particularly competent and interesting and makes the points that the sea voyages became possible only when the requisite development in shipbuilding had been attained and that there was a structural limitation on the sizes of ocean-going ships imposed by the maximum length of an unjointed keel, about 20 m. Although the available statistics are occasionally pressed a little hard, the essence of the case that most of the ships to visit the British Isles must have carried fewer than forty men is well argued. The lure of treasure is stressed and the evidence of the rich Scandinavian hoards of silver very carefully explained. A good case is made out for the theory that it was the loss of Kufic silver, which for over a century had been obtained by trading tribute (especially furs) and slaves extorted from the Slavs, that led to the renewal of raids on England at the end of the 10th century and the consequent transfer to Scandinavia of large quantities of English, as well as German, silver.

Raids and settlements are discussed; numbers occurring in both, whether according to the estimates of modern historians for the latter, or medieval chroniclers for the former, are ruthlessly reduced. Perhaps here points that needed making are sometimes reiterated more than is necessary and the evidence occasionally strained further than it will go in an attempt to correct previous errors. For example, as regards place-name evidence, while it is true that the names Denby and Danby may be taken to have been given in a region where Danes were an *uncommon* feature, and that, further, it is perhaps possible that in Denby we have an English name where *by* has become a loan-word, in the case of Danby, on the other hand, it is more likely that there the Danes were a rare

feature in a Norwegian, not English, area. In addition, the evidence afforded by minor place-names is perhaps insufficiently considered.

The work closes with an account of some Viking-age towns—Birka, Hedeby, Kaupang (Scingesheal of Ohthere's voyage), Wollin on the Oder and Novgorod—and with a consideration of the reasons for Viking expansion at this time and the causes of the Vikings' success, which leads to the conclusion that it is only because the exploits have been wildly exaggerated that they have become unwarrantably mysterious. In this closing examination there is a certain amount of repetition, though many points are well made.

A full account of the age of the Vikings would perhaps call for a great deal more detail than can be presented in the scope of this work; for example, the settlement of Iceland is only briefly touched on, though stress is laid on the fact that it was principally land for settlement that many Vikings wanted and that purchase of land was the best use to which they could put their silver. All the same, this suggestive and stimulating book, which is bound to provoke argument, must be regarded as a valuable study of some aspects of the subject, particularly because of its constant reminder to the reader of the need for understanding and continually renewing all the different kinds of historical evidence.

F. S. SCOTT

The Domesday Geography of South-East England. ed. H. C. Darby and E. M. J. Campbell. 9½ × 6½ in. xv + 658 pp., 179 maps. Cambridge: Cambridge University Press, 1962. Price £6.

The Domesday Geography of Northern England. ed. H. C. Darby and I. S. Maxwell. 9½ × 6½ in. xvi + 540 pp., 143 maps. Cambridge: Cambridge University Press, 1962. Price £5 5s.

The great venture of the *Domesday Geography* launched by Professor Darby will comprise six volumes, the third and fourth of which are reviewed here. *South-East England* comprises Beds., Herts., Middlesex, Bucks., Oxon., Berks., Hants, Surrey, Sussex and Kent; *Northern England* is Yorks., Notts., Derbys., Cheshire and part of modern Lancashire. (The other northern counties did not appear in Domesday Book.) In these volumes Professor Darby has assigned the counties to eight contributors and himself has provided concluding chapters in which a broad view of each area is taken. As readers of the previous volumes will know, the inspiration of the work was his, and the arrangement of material within these two volumes follows the pattern of the chapters that he wrote in volumes one and two (*Eastern England* (1952); *Midland England* (1954)).

Since previous volumes have not been noticed in this journal its readers may welcome an account of the general format. A deliberate part of the design is the imposition on all contributors of a standard order in which topics are treated; standard conventions for the expression of the data on maps; and often a standard form of language for the expression of particular information whenever it occurs. Thus, in a broad sense (to be qualified below) the volumes are very similar, and criticisms of style or the conception itself can equally well be based on examples from any volume.

One object of this standardized layout of the material—the verbal equivalent of the standardized map symbols by which a cartographer transmits information—is to facilitate comparison between counties. What one contributor calls a spade is what the next contributor calls a spade. This standardization, together with the editor's decision to repeat explanatory and expository matter in each chapter, was also intended to enable readers studying one county to receive all necessary explanation without having to refer back to introductory material in volume one. With the generous supply of maps the volumes are very expensive and any scholar who buys a regional volume is naturally grateful for not being compelled to buy another volume in order to understand what is going on. The price—in another sense—that he pays is a reduction in literary interest through this reiteration of phrases, sentences and paragraphs. It is like hearing a familiar

symphony played with a conductor who insists on observing all the repeats, even in the slow movement.

What might be tedium is in fact relieved by the great variety of the themes as the Domesday inquiry progresses across Norman England and by the greater liberty that seems to have been given to contributors in volumes three and four to pursue interesting topics on which they had done original work. Thus Mr. Maxwell is allowed forty fascinating pages to demonstrate the algebra and geography by which he has identified Domesday vills whose topography had been obscure or erroneous for too long. His techniques are applicable far beyond Yorkshire, the county where he is allowed to demonstrate them. In Hampshire Mr. Welldon Finn brings another technique of scholarly identification to the tangled thickets of the New Forest. Professor Jope's Oxfordshire chapter is one where the creative romantic imagination is seen to advantage within a superficially classical frame.

In its strictest form Professor Darby's self-limitation is this: to produce, in his own words, not a *Geography of Domesday England* but a *Domesday Geography*; to use the geographer's techniques of presentation by maps and words to redisplay the information collected in the folios of Domesday Book itself: but not to add material from other documentary sources of the same period; nor to add material of the same period gathered by archaeology. Archaeologists must be warned that they will be disappointed if they expect an historical atlas of Norman England as a background to their local or regional studies. Such a work of synthesis remains a daunting task, and with more than 3,000 pages in the six volumes of the *Domesday Geography*, the fruit of an enormous cooperative enthusiasm and an immense organizational energy, it is rather ungracious to ask the organizer to reharness the plough-team and to assart more of the waste land. What we have at the moment are distribution-maps founded on the chance survival of data. Archaeologists will recognize these with sympathy; they are like their own distribution-maps of finds.

In fact, these two volumes show some relaxation of the principle of map-nothing-not-in-the-folios. Thus, in the Kent chapter, Miss Campbell constructs two maps of 11th-century place-names additional to those in Domesday (the cartouche describes the maps less accurately as 'Kent: Place-names additional to those in Domesday Book', which if literally true would take us up to modern housing-estate names). To obtain these place-names, important as indicating that Domesday Book failed to include all the settlements then existing, Miss Campbell draws upon the *Textus Roffensis*, the *Domesday Monachorum* of Christ Church, Canterbury, the *White Book of St. Augustine* and an 11th-century Inquisition. The *Domesday Geography* has allowed a glimpse of what a *Geography of Domesday England* might be.

The student will find in these two volumes two extremes of Norman England. In *The South-East* there were vineyards as well as capital cities (Winchester and London); there were plough-teams rated at more than 4.5 to the square mile and recorded populations of over 20 to the square mile. In this part of William's conquest, so near to Normandy and the beaches of Hastings, only the Weald had low densities of population and low arable acreage presaging the cold north. Similarly, the regional maps of *Northern England* show one traitor in the camp; eastern Nottinghamshire alone had plough-team and population densities such as appear on the south-eastern maps.

A valuable part of the *Northern* volume is the mapping and discussion of the great array of vills that were waste in 1086. The full display of material supports (with qualifications) Mr. T. A. M. Bishop's brilliant hypothesis of a wasting of the plain and recolonization by movement from the vills of the hilly margin. The decision to make each chapter self-contained does lead, however, to the absurd triple repetition of a long quotation from Mr. Bishop, once for each Riding.

The assets that are systematically mapped for comparison are population, ploughs, serfs, sokemen, woodland, meadow, fisheries and salt-pans. In the county chapters relief and surface geology are presented as the inescapable physical basis of the rural

economy and within each county a generalized analysis at the end of each chapter suggests regional sub-divisions. These analyses are disappointingly slight, and with profit there could be microstudies of small local areas where information about soil-types, drainage and other physical factors could be more closely studied alongside the Domesday information.

The mapping of the Domesday material was made possible only by the decision to devise areal units on the maps that were large enough to avoid the awkward problem of assigning composite entries to particular vills, but the result has been a shift of emphasis that has virtually banished the single vill from the study. What was the range of size of identifiable vills? What was the range of density of population in single vills? No answers are given. It would have been impossible to give this information for all vills, but no specimen studies attempt to give an answer for vills where the data are available. The vill comes into its own—paradoxically in the context of a group—only in the maps that show the distribution of vills over a whole county. In the North Riding of Yorkshire the text and maps show that there were very few vills above the 800-foot contour. Might it not be worth commenting on these high-flyers? Of the three on the Pennine heights, for example, one is Marrick. The etymology of Marrick takes us to ‘the ridge of the mares’ (*P.N., Yorks., N.R.*, p. 294) and so to the reason why a Domesday village could subsist at 1,038 feet with an aspect that even today is more akin to a village of the Auvergne pastures than the Pennine dales.

Archaeologists will note in each county chapter a sample of deserted vills now represented by a farm or even by no modern feature. The preparation of each chapter must therefore have involved a labour of vill-identification which has never been before attempted. The nearest approach will be found in the Domesday Book sections of some county volumes of the *V.C.H.*, but the present identifications have been able to benefit from the work of the English Place-Name Society and from the techniques pioneered by Mr. Maxwell. These identifications are not published in the *Domesday Geography*—there would be no room—but it is to be hoped that they will be preserved and published elsewhere.

There is an unintended hazard for the reader as a consequence of these precise identifications. When some fact about a vill is mentioned in the text the name of that vill is given in its modern form; where the vill is represented only by a farm, lodge or grange on the modern O.S. map the name of the farm, etc., is used, and one gets incongruous and rather misleading statements that so many plough-teams (or serfs or mills) were ‘at Such-and-Such Lodge’. To take a specific example, it is not correct to refer to the vill of Ness Hall, from which an innocent archaeologist might think that there was Domesday evidence for the existence of a hall. The vill was Ness and the hall is relevant only because the survival of the name is confined to the present hall.

No doubt in his sixth volume, the great work of inter-regional synthesis, Professor Darby will announce where the working-files from the back-room of this great enterprise will be deposited for the use of scholars. How nice, too, if he could announce that the Syndics of the University Press had decided to celebrate the nine-hundredth anniversary of the Norman conquest by making the text (and translation) of Domesday Book available again in print. Even if a publication date of 1966 is beyond the speed of academic publishing, the Syndics can console themselves. 1966 will be the anniversary of Hastings and Senlac: but 1986 the anniversary of Domesday Book itself.

M. W. BERESFORD

Studies in Building History; essays in recognition of the work of B. H. St. J. O’Neil. ed. E. M. Jope. 10¼ × 8 in. 287 pp., 72 figs., 31 pls. London: Odhams Press Limited, 1961. Price 63s.

This substantial and well produced volume contains fourteen articles, written and published as a tribute to the memory of the late B. H. St. J. O’Neil, Chief Inspector of

Ancient Monuments. The mortar that binds together the fourteen contributions is a common interest in the study of building history, a subject in which Mr. O'Neil himself had done notable work. Here it is given its widest interpretation, some of the articles dealing mainly with structural analysis (E. Dudley C. Jackson and E. G. M. Fletcher, W. Douglas Simpson, H. G. Leask, and D. M. Waterman), some with documentary evidence (A. J. Taylor), some with the techniques of the excavator and the specialist in small finds (I. A. Richmond, Mrs. H. E. O'Neil and G. C. Dunning), and some with a combination of two or more of these methods (D. B. Harden, C. A. Raleigh Radford, J. H. Harvey, W. A. Pantin, E. M. Jope, and H. M. Colvin). The range in time extends from Roman Britain to the 17th century, and in scope from the examination of individual buildings, through studies of regional characteristics, to studies that are of universal application.

Pride of place in the last category must go to Professor Richmond's characteristically penetrating essay on Roman building in timber and in wattle-and-daub, as revealed by excavation. Here the evidence from Hod Hill, Inchtuthil and other British sites is collated with the Dutch discoveries at Valkenberg to produce conclusions on the technique and interpretation of timber structures that are of the first importance to anyone likely to be confronted with a post-hole or confident (like the reviewer until he read this article) of his ability to recognize a sleeper-trench. Dr. Harden is a close challenger, writing on domestic window-glass from Roman to medieval times and establishing, by detailed examination not only of the glass but also of its archaeological context and documentation, that the normal product was cylinder-blown until crown glass came to join it in the 13th century, perhaps with the immigrant Norman, Laurence Vitrearius. Here again are facts and interpretation, admirably presented, that the archaeologist can ignore only at his peril.

The articles by Mr. Dunning, Mr. Harvey, and Mr. Pantin are regional by reason of the distribution of the material that they examine or the experience of the authors, although their titles suggest a wider scope. Mr. Dunning continues his examination of medieval roofing materials with a study of a number of pottery cylinders from southern sites and an argument in favour of their use as chimney-pots. It is difficult to accept that any pot with a smoke vent no more than $1\frac{1}{2}$ in. diameter can have coped with a medieval hearth, and Viollet-le-Duc on *épi* and *faitière* rather than on *cheminée* might have been a better guide to the function of these objects. Nor does the representation of a house on the Otford seal help matters, for here is an undoubted chimney looking little like the examples cited and, so far from serving an open hearth as the author suggests, shows clearly the stack that supports it emerging through the roof. But although different views on the purpose served by these objects may be allowed, there can only be one opinion on the care and clarity with which the known facts are presented, backed by excellent line drawings from the author's hand.

Mr. Harvey pursues his controversy with J. M. Hastings over the origins of the Perpendicular style in an article that demands close attention and is too complex to be summarized with fairness. It goes far towards establishing the contribution of William Ramsey, and it has several interesting and useful by-products including appendices on the meaning of the word *trasura* and on the Kentish style. In the latter, a starting date of *c.* 1300 for split-cusp tracery seems a little late, for the supporting heraldry indicates that the examples on the gatehouse façade of Kirkham Priory cannot well be later than the last decade of the 13th century, a date which would accord better with the appearance of the motif outside architectural circles in the eighties and nineties of the 13th century on such seals as those of Louis of Savoy, Sire de Vaud, and Pierre de la Tour-Châtillon.

Just as the nature of Mr. Harvey's material confines him to the east and the south, with an excursion to the south-west, so Mr. Pantin's study of medieval inns, which he divides into courtyard types and gatehouse types, is mostly concerned with the south, its outliers extending as far as Lincolnshire and Northamptonshire. It is a typically

useful piece of work, well supported by plans and elevations, and it makes one look forward to the day when the author's individual studies of types of buildings, not too easily accessible in various periodicals, will be replaced by the comprehensive account of secular building in all its variety that he is so well fitted to write.

Amongst the articles that are regional by choice rather than accident Mrs. O'Neil contributes a closely observed account of Cotswold building techniques in Roman times, and four of the last five articles in the volume deal with aspects of domestic architecture on the edges of the main stream. Mr. Jope, who has edited the book, surveys Cornish houses from 1400 to 1700; Professor Douglas Simpson is on familiar and congenial ground with the tower houses of Scotland; and both Mr. Leask and Mr. Waterman choose 17th-century Irish houses as their subject.

Another article of regional scope is that of Mr. Taylor, writing most appropriately as an authority on a subject in which his predecessor took particular and practical interest—the building of the great Welsh castles. This is one of the most interesting contributions to the volume in that it shows just how much information can be won from the skilled use of documents alone. It concerns itself with what Mr. Taylor calls the 'indispensable preliminaries' of medieval building, and through it we can follow the recruitment of masons, carpenters and ditch-diggers, their journeys to the points of assembly from counties as far apart as Northumberland and Devon, the provision and transport of money for their pay and of all kinds of materials for their use. Statistics of this sort have indeed been assembled before, only too often as a bare catalogue of facts. What matters here is the sensibility that draws from marshalled facts a story infused with the life and movement of the 13th century. The *fossatores de partibus Hoylaund* cease to be just another contingent of labourers and become the men of the Wash whose experience in drainage works will fit them for the construction of the new Clwyd canal to Rhuddlan; the fifty masons who disappear for a fortnight from their assembly point at Chester are linked to the preparations for laying the foundation stone at the king's Cistercian abbey at near-by Vale Royal; above all, we are taken back even beyond the writs to the sheriffs, and are privileged for a moment to sit with the key officials of the Wardrobe and Household as they discuss and note down the main lines of administrative action needed to set the great machine of the King's Works in action.

In the third category there are three studies of individual buildings. Mr. Jackson and Dr. Fletcher present another of their detailed assessments of Saxon churches, this time the monastic church at Deerhurst, where they isolate four building-periods between the early 8th and late 10th centuries and take advantage of their subject to develop the theme of the porticus church on which they have written elsewhere. Mr. Colvin gives a concise and attractive account, well documented and illustrated, of Haunt Hill House at Weldon in Northamptonshire, built about 1643 by Humphrey Frisbey, a local mason connected with both the Thorpes and the Grumbolds. Lastly, Dr. Raleigh Radford describes and interprets the remarkable manor house of Bishop Robert Burnell at Acton Burnell in Shropshire. This article contains a most ingenious suggestion that the spine wall, of which foundations remain, supported at first-floor level not a solid wall dividing two halls or a hall and a chamber, but the open arcade of a single hall of two aisles occupying the full width of the building. It is a tempting solution to the main problem of an intriguing and difficult building, but one that is unhappily not susceptible of absolute proof. One small point of interpretation might be reconsidered—the suggestion that the first floor of the north-east turret formed the chapel of the house, and that the jamb still surviving there was in fact the southern jamb of its chancel arch. Dr. Radford notices the anomalous way in which the turret doorway faces the 'chapel' instead of the hall, and closer examination of the 'chancel arch' would have shown the spalled stones where a pair of crooks hung for a door. An alternative interpretation fitting both the crooks and the placing of the turret doorway would therefore be that this room was the hall porch at the head of an external staircase on the site of the supposed chancel. In this article the interpretation of the functions

of a secular building is taken to the very limit allowed by the study of the fabric alone. To go further, we need new, equally detailed, and equally inspired study of the composition of the medieval household at all levels, its hierarchy, its economy, and its consequent requirements in accommodation.

The minor nature of the criticisms in this review are in themselves proof of the high standard of all the articles in this book. It is well bound and produced by Odhams Press and, considering the variety of contributors, the uniformly good quality of the line drawings is noteworthy. If criticism be allowed here, it should be reserved for the grouping of the plates, which makes them irritating to consult. For frontispiece there is an excellent pencil study of Mr. O'Neil by Leonard Monroe, and the editor has prefaced the volume with a memoir and closed it with a bibliography of Mr. O'Neil's published works. It serves well to remind us of the stature of a man who, whilst holding a highly exacting official post, could still carry out research notable alike in its quantity, its variety, and its quality.

R. GILYARD-BEER

The History of the King's Works. The Middle Ages. ed. H. M. Colvin. 2 vols. and box containing 4 plans. 10 × 7½ in. 1,139 pp., 72 figs., 52 pls. London: Her Majesty's Stationery Office, 1963. Price 12 guineas.

This eagerly awaited book has now appeared in two volumes with a box of like format containing plans of Westminster Palace and the eastern parts of the Abbey, of the Tower of London and of the castles of Windsor and Dover. It is in every way up to the high expectations formed during its preparation, and, in spite of its greater cost and rather different appeal, ought to achieve sales comparable with those of the highly popular *Archaeological Reports* which H.M.S.O. have recently been in a position to put on the market. It is excellently written, clearly and sensibly arranged, and covers a wide field; much of the matter cannot be found elsewhere; and the book is essential to the proper understanding of English medieval history in general as well as English medieval architecture in particular. Nobody, and no institution, proposing to own even a small collection of the books needed for the intelligent comprehension or the detailed study of either will this time be able to keep their guineas in their pockets.

The work is arranged in three parts. The first five chapters are an historical account of the King's Works as seen, if the anachronism be pardoned, 'from Whitehall' down to the reign of Richard III, in the course of which the actual buildings are discussed only in so far as this illuminates what kind of thing it was on which the kings were spending their money. The next five chapters are devoted to a detailed review of various more-or-less distinct groups of works, of which the Edwardian castles in north Wales are the most obvious and Calais the most unexpected and therefore the most welcome. The third section deals systematically with works in England itself: first royal tombs, then Westminster Palace, and finally the various royal castles and houses, in alphabetical order. There are a few plates, mainly selected to emphasize particular details or publish little-known early views, and a number of plans in the text of which those of the excavations at Yeavinger and Waltham Abbey seem to be in advance of publication elsewhere. There are also some invaluable maps, showing the position of all the castles regularly or frequently in the kings' hands, and all the royal residences and hunting lodges together with principal forests. This simple enumeration shows how many of those things are here which most of us have at some time vaguely wished to know, only to shy off the fearful task of investigating. Even when things have been well and truly done in the past this work has its uses. It is wonderful to be able to refresh one's memory about the essential facts concerning Windsor without having to manipulate St. John Hope, and to be able to have a clear view of Westminster Palace without struggling with a mass of ancient books, while to discover without further effort the whereabouts of (and

scale of accommodation available at) places like Gillingham or Hodsock is an entirely novel experience. The itineraries of early kings acquire thereby a third dimension.

No book covering so immense a topic can of course always meet every claim that anyone is going to make on it, and any reviewer will find a few grumbles. As far as sources go the History appears to embody a complete card index of the relevant material in the Public Record Office so far as this has been calendared or published; but it is a pity the authors have nowhere stated what classes of unpublished record they have actually worked through. These seem to include the Pipe Rolls down to *c.* 1300 and the Foreign Accounts enrolled in the Exchequer thereafter, and anything else which the published lists and indexes specifically indicate as connected with building. But my impression is that 14th-century Issue rolls have not been worked through and miscellaneous oddments not hunted for. C.47/91/1(3) is, for instance, a return by the Sheriff of Bedfordshire and Buckinghamshire on the state of the buildings at my local royal house of Brill which usefully consolidates the earlier information and qualifies the statement, in itself quite true, that these buildings were kept in repair.

There is no reason why the authors should have gone through the Chancery Miscellanea; but, if they do not make it quite clear that they have not, the next man cannot know whether it is likely to be worth his while to do so. They might have drawn them blank. And occasionally there is a little pontifical bluff. For example it is just not true to say that 'the ingenuity with which all the necessities of twelfth century military life were concentrated into a single defensible unit can best be appreciated from the plan' when this plan at the second floor only of the keep at Dover shows a baffling complex of rooms in the thickness of the walls and two separate spiral staircases leading one knows not whence nor whither. 'Necessities of twelfth century military life.' All right; where was the armourer's forge, where were the arrows stored, how many of these cubicles were conceived as married quarters? Is it indeed certain that the planning of the building was thought out on strictly military lines, rather than with a view to intermittent residence by the king? The authors are entitled not to speculate on these matters, but not, I think, to make a layman feel that they know the answers when, in fact, they cannot know them. Nor have all the difficulties of joint authorship been overcome. The description of Dover Castle includes an account of some sally ports claimed to be unique. Reference to the description of Windsor Castle shows that the 'Bowes' there (which I had previously thought unique) have been omitted from the text and deleted from the simplified plan. And a number of historical generalizations are open to question. Cylindrical keeps, for instance, are thought of solely in Anglo-French terms, but some German ones, e.g. at Münzenberg, appear to be older than any in France and England, and if, which is possible, they are irrelevant to the Anglo-French development this should be shown, not assumed.

But grumbles of this kind are entirely marginal. This is a splendid achievement, presenting in readable, indeed thoroughly enjoyable, guise the results of an amount of labour which it is alarming to contemplate. Never before has this aspect of medieval kingship been properly set out, never before has it been possible to see in perspective how much was done, how it was done and what it cost. For the 11th and 12th centuries the book rises to become a major historical source. And among the detailed accounts of buildings, not only is the balance so far as possible restored, as between those that exist and can be visited and those, often equally important, which have disappeared or are relatively inaccessible or little studied; at every turn one meets revisions of earlier opinions, illuminating reappraisals, the documentary reference which solves a puzzle. I have made a great deal of use of this book since it has been in my hands, and can only end by repeating what I said at the beginning, that no one whose concern is with the period from the 11th to the 15th century will be able to afford to do without it. We are all profoundly indebted to those who conceived, who organized and who carried through this admirable and admirably executed project.

C. HOHLER

English Castles. By R. Allen Brown. 7 × 4½ in. 207 pp., 28 figs., 49 pls. London: Batsford, 1962. Price 5s.

In producing a second edition of *English Medieval Castles*, the publishers have removed both hard cover and the central word of the title, cut the page size slightly and the plates drastically; in exchange, the price is less than one-third that of the original edition. The deletion of certain photographs makes some descriptions less apposite, and a foreign printer has introduced misprints more comical than important. For example, the Duke of Normandy becomes Robert *Courthouse* (above pl. 40).

The author has done far more than write a successor to Hugh Braun's pre-war Heritage book, although both show a warm human interest in the way castles were used as well as in their architectural features. The introduction is a masterly summary of the historical situation that required castles, and the later chapters on the details of castle-building and the castle's place in war and peace are equally good. A little more might have been said about the dating evidence of licences to crenellate, since some licensees seem to have jumped the gun, and others used their permits much later. (Another copy of the Allington licence (pl. 46 and Appendix) still hangs in the gatehouse there.)

Defining a castle as a private fortress-residence, Dr. Allen Brown eschews reference to artillery forts, siegeworks and town walls, and keeps strictly to the five centuries after 1050. This makes for occasional difficulties of presentation, since several developments in fortification (notably the introduction of gunloops) first appear in these ancillary works. By following earlier writers in his architectural summary, the author is sometimes led to make rather more definite statements than the evidence warrants. *Pace* Round, the identification of the pre-conquest castles (p. 22) is only probable, not certain, and to say that it is 'certain that very few [castles] were raised without any motte' (p. 28) is a circular argument; it is very difficult to identify a pure earthwork as a castle unless it has both motte and bailey, and what were those *domus defensabiles* of Domesday, not listed by Mrs. Armitage? To be told that 'King Henry II himself was an energetic builder of [tower keeps]' (p. 43) could be misunderstood, especially in view of the later reference to Richard I's controlling interest in the building of Château Gaillard. The revised plan of this castle remains unsatisfactory, and demonstrates neither the scale of the earthworks nor the precipitous fall to the Seine. Its layout appears to have been based on that of Conisbrough (including its defects), and the influence on English military architecture was minimal.

Until recently, little research had been done on the castles of Henry III's reign, and so there is an awkward hiatus in the text, which is not helped by the unchronological treatment of some of the Edwardian works in Wales. More might have been made of the development of the cylindrical keep, from the Anarchic experiment of New Buckenham to the glory of Flint. Even in 1962, round towers on mottes are in use in Vietnam, surrounded by forests of sharpened stakes.

The drawing of four similar crossbows (p. 143) seems quite pointless, and those of trebuchets (p. 141) do not agree with the text. At Raglan, the Yellow Tower of Gwent was reached by a bridge, not a causeway (p. 94), and the plan of Warkworth is not as simple as a Greek cross (p. 107). But enough of *minutiae*: with this evocative paperback in his pocket, the ordinary Englishman can comprehend the castles he sees, and rival his Gallic cousin equipped with Ritter's *Châteaux, Donjons et Places Fortes* (Larousse, 1953). The author has the happy knack of enlivening a cliché with an unexpected twist, so maintaining the general reader's interest.

D. F. RENN

The Quest for Nonsuch. By John Dent. 8½ × 6 in. 320 pp., 24 pls., 12 figs. London: Hutchinson, 1962. Price 40s.

In 1959 the site of Nonsuch Palace was excavated by Martin Biddle under the auspices of the Nonsuch Palace Excavation Committee and in the following year a

second, shorter season was spent on the excavation of the Banqueting House which stood on higher ground about 400 yards away from the main palace building. Before this, in 1958, Mr. Dent had set himself the task of assembling all the known documentary evidence relating to Nonsuch with a view to writing a history of the palace. He also built up an outline plan of the building and, relating it to observations made during trenching in 1933 and 1945, arrived at an estimated position for the palace which, as excavation later proved, was an extremely accurate forecast of its site and was of great help in the early stages of the excavation. Early in 1959 archaeologist and historian came together, resources were pooled and Mr. Dent subsequently became treasurer of the excavation committee.

His book, then, draws on a wide range of material. It brings together all the previously-known facts about the palace, summarizes the results of the excavations, and includes the important documentary finds of recent years. It is, altogether, the most complete history of Nonsuch to date.

Nonsuch was the last of the six palaces built by Henry VIII. It was begun in 1538 and was largely but not entirely finished at the time of his death in 1547. In 1556 it passed to Henry, 12th earl of Arundel, who completed the building, and later to his son-in-law John, Lord Lumley. In 1592 it reverted to the Crown and remained in royal hands, apart from the interval of the Commonwealth, until 1671, when it was granted in trust to Barbara Villiers, Baroness Nonsuch and duchess of Cleveland. Contrary to previously-held opinions the building was not immediately demolished to pay her gambling debts but lingered on until 1682, when the inner court was taken down, to be followed a few years later by the destruction of the outer court. Ruins of part of the building still survived into the 1750s, but by the end of the century the ground had been levelled, a road laid across the centre of the site and, eventually, its exact position forgotten.

Mr. Dent opens with a short account of the manor of Cuddington and its acquisition by Henry VIII, and proceeds chronologically with a chapter on the building of the palace, using principally the detailed building accounts which survive for the short period April to September 1538. He includes a useful analysis of these at the end of the book.

The main part of the book, however, falls into two sections. The first contains a description of the palace buildings and gardens drawn from the available documentary and archaeological evidence. In the second Mr. Dent devotes five chapters to the later history of the palace, its owners and its occupants, keeping one eye on the condition of the palace as reflected in the repair accounts. Finally he rounds off the book with a description of the actual business of excavation, of the enormous interest it aroused, and of the problems and advantages this brought in its train.

It is a very readable book, written in a clear and lively style, is well provided with plans, and has a useful appendix of select documents including an analysis of the 1538 accounts and a transcription of the 1650 survey. It is irritating, however, to have the notes and references relegated to the back of the book without any reference to them in the text and it is a pity that this was thought necessary in the interests of 'readability'.

The most valuable section is the detailed survey of the history of the palace through nearly two centuries. This is a fascinating story and Mr. Dent's account will long be of use. But the outstanding feature of Nonsuch is the character of its decoration and here Mr. Dent whets the appetite but fails to satisfy. To be fair, he does not really set out to do so and refers the reader to the comprehensive report on the archaeology and art-history of the palace now being prepared by Mr. Biddle. One will look for a more detailed account of the extraordinary external plasterwork, its derivation and its iconography, and for a fuller discussion of the interior decoration, or at least of the various features that have in the past been attributed to Nonsuch, since little new evidence relating to the interior seems to have accrued from the excavation itself. Was Nonsuch a freak, a marvellous piece of scenery (kept by the Master of the Revels) but

of no enduring influence, or did it have a decisive affect on English art of the 16th century?

Although a number of crucial questions still remain, this is a very useful addition to our knowledge of this interesting building. It will be of value, too, to the very large audience that would not normally read an excavation report or art-historical monograph but whose interest in Nonsuch was so overwhelmingly demonstrated during the excavation itself.

O. J. WEAVER

Medieval Technology and Social Change. By Lynn White, Jr. 8½ × 5¾ in. xii + 194 pp., 10 pls. Oxford: Clarendon Press, 1962. Price 32s.

Partly because of the nature of written sources from the middle ages, partly because of the general contempt for this period since the Renaissance, medieval achievements in technology have only recently won recognition and esteem. The recent two-volume Penguin book, *A History of Science and Technology*, devotes a chapter to the subject. It was the main achievement of Marc Bloch, to whom White has dedicated his book, to show that we could not understand society in Europe from the 8th century onwards unless we appreciated the technological changes, particularly in agriculture, that differentiated it from Classical society. The present book not only summarizes the study that has been made of this subject in the last 40 years, but also attempts to go further than Bloch and to demonstrate that these technological changes moulded the very form that medieval society took.

The book is divided into three essays, copiously annotated with footnotes and a further 42 pages of notes at the end. The references here collected should prove invaluable for the reader who wishes to pursue the subject further.

The first essay is concerned with the stirrup. There is a useful account of early occurrences of stirrups, and the probable source and date of their diffusion into western Europe. The description of the extent to which medieval society was permeated by the concept of the mounted warrior with lance in hand is excellent, and obviously stirrups are a *sine qua non* for a man using a couched lance. Nevertheless, even assuming the accuracy of the date given for their introduction into Europe—the early 8th century—for which the evidence is slight, our credulity is impossibly strained when the author tries to make this, and not the Arab incursions, the reason for Charles Martel changing from infantry to cavalry in the middle of the 8th century.

The next essay deals with agriculture: the adoption of the heavy plough with coulter and mould board, the need for extra traction leading to communal plough teams, open fields and strips. The change-over from ox to horse for traction in ploughing was a later and more gradual process, and indeed in some parts of France has still not taken place. The introduction of three-field rotation with the improved nutrition that followed is described with great verve by the writer, and owes less to Bloch. The suggestion that Pirenne's thesis, that the real break with Classical antiquity was due to the Arab invasion of north Africa, was too negative, and that the break was due rather to the emergence of a quite independent civilization in Carolingian times adapted technologically to temperate instead of Mediterranean Europe, is brilliant.

The final essay is concerned with mechanical power and takes us into later medieval times. Water-mills had of course been known in Roman times, but in the medieval period they were not only far more numerous, but used also for a much wider range of operations. In addition two new sources of power were tapped, wind and explosives (gunpowder), both apparently first employed on a practical basis in Europe. Among mechanical devices the crank, treadle, spinning-wheel, clock and so on, were all medieval inventions. It is perhaps rather far-fetched to suggest that the search for 'perpetual motion', an idea derived from India, led to generalization about 'the concept

of mechanical power'. However, like much else in the book, it should stimulate thought along new lines on some aspects of medieval society.

There is much in the book that a reviewer ought to discuss, but I shall confine myself to two points. His studies have taken the author into very far-flung parts of the world: China, India, Central Asia, the Middle East and the Mediterranean area. He is normally seeking the source of diffusion of this or that feature of material culture; his method is archaeological, although his sources are primarily, but not exclusively, historical. His methods remind us of those of the prehistorian, but with this main difference: the prehistorian can be reasonably certain that he will find a centre of diffusion in the Mediterranean area, whereas again and again in medieval times it proves to be in western Europe itself. The lead in technology that Europe has enjoyed in modern times we owe to the middle ages.

As archaeologists we still to a great extent lack a *Leitmotiv* in the medieval period; we fumble with brooches and potsherds, not sure whether we are making any really useful addition to knowledge. An analogy may perhaps be drawn with Abercromby or Montelius in prehistoric archaeology, who provided a basis on which a later generation, that of Childe, could build. White's book deserves comparison with some of Childe's work; it provides a synthesis or overall picture into which comparatively trivial objects of material culture can be fitted. Stirrups and horseshoes become something more than museum specimens when we see them as the very basis of medieval culture!

M. W. THOMPSON

Archaeology and Place-Names and History: an essay on problems of co-ordination. By F. T. Wainwright, with a foreword by Sir Frank Stenton. 7½ × 5 in. xiii + 135 pp., 5 maps. London: Routledge and Kegan Paul, 1962. Price 12s. 6d.

In 1955 Dr. Wainwright was appointed the first lecturer in dark-age studies in Britain—at St. Salvator's College, St. Andrews. Having mastered three related disciplines he was much preoccupied with the ill-communication between their respective practitioners, and this little book is his testament in historical theory and method. We must not expect another Collingwood; as his death was premature, so his testament was hasty. Though there are passages of great lucidity, the style and the handling of philosophical problems are sometimes uncouth. Against his clumsy title we may set his expressed purpose that the book was intended as an introduction to a series he was to edit, of studies in history, archaeology and language. Though we have only his interim thoughts on the subject of integration, his example is already bearing such fruits as Dr. P. H. Sawyer's *The Age of the Vikings* (reviewed above, p. 304 f.).

After a judicious analysis of variant definitions of history and archaeology he treats as their equal, not philology, but one small branch of it, toponymy (I do not apologize for the word: the 'place-name-scholar' inhabits an *Urwald* of Teutonic 'ungothrough-someness'). The maps at the end show the concomitant distribution of certain immovable archaeological objects and certain toponymic forms. What distinguishes place-names from other philological entities is simply their immobility, a factor that varies with different categories of archaeological, and even anthropological, objects. The distribution of blood-groups suggests an unexpected stability in some populations. In the inevitable rebound from the ethnographical and linguistic fantasies of the past, our generation, to which Dr. Wainwright belonged, may represent the furthest point. Under 'linguistic evidence' he deliberately confined himself to 'that part which is embedded in place-names'; under 'the conflict of conceptions' he preached to his totally converted intellectual contemporaries (and to a doubtless invincibly unconvertible laity) that 'Celtic' art or 'Celtic' field-systems are unwarrantable phrases—the results of an invalid syllogism. Yet such restriction of evidence may leave many fields fallow. Some of this same generation who dare approach metaphysics again, after the chastening experience of logical positivism, may also face those other problems of

coordination that arise from an awareness that a consciousness of community is a legitimate *object* of study, that a myth fills a need, that a 'Celtic custom' is not a meaningless phrase, but a short way of expressing a less well-defined concomitant distribution, and that a historian who attempts an analysis of such problems is not just mythologizing.

S. E. RIGOLD

Archaeology and the Microscope. By Leo Biek. 9 × 6 in. 287 pp., 26 pls., 12 figs., 8 tables. London: Lutterworth Press, 1963. Price 45s.

The foreword notes the dichotomy between philosophy and science and the philosophic note is sustained by quotations from Kierkegaard, Aldous Huxley, and the Bhagavad-Gita. Gurdjieff, a philosopher not quoted, wrote in introduction to his own difficult book: 'There are things which are said only for disciples', and an uninitiated reader may well consider Mr. Biek's book to be an Unholy Writ from which only prolonged meditation could extract a meaning. For example, from p. 103: 'Although—or perhaps because—the results' (not here specified) 'are in themselves limited, they are within their limits conclusive.'

It would be unimaginative to expect from the title a book dealing with both archaeology and the microscope. There is no dearth of archaeological material. The author has professional experience at the Ancient Monuments Laboratory of the Ministry of Public Building and Works and some 295 archaeological references are quoted in the bibliography. The text, however, has a way of leading the disciple to expect an illumination that never comes.

The microscope has provided few of the illustrations, amounting to only about 15 per cent of the blocks. Indeed, the author actually states that 'this book is not about microscopic techniques applied to archaeology, nor is archaeology as such under the microscope'. Instead, it is said to be 'about the changing boundaries of imagination'.

There are eight chapters. The first, entitled 'What it is all about—Background', is truly about the ground; about digging and bulldozing and aerial photography and parcelling-up pottery: 'But sometimes even commonsense is not enough and one must consult the Printing, Packaging and Allied Trades Research Association.'

The last and longest chapter, entitled 'Scientific Research for Archaeology—Consolidation', is the most solid, deriving largely from a conference held in 1954. It notes techniques that can be applied during various stages of an excavation and to the examination of artefacts. It provides a tabular 'Comparative analysis of scientific investigations' set across eight pages and, like all the other original diagrams, barely intelligible even upon prolonged meditation. Imagination unbounded here supplies a dream of the excavation of the future. It will be directed by an archaeological supervisor aided on the site by a scientific director with his twelve assistants.

Chapter 8 also contains a table of 'standard methods in use at the Ancient Monuments Laboratory' ('for bulk of treatment and treatment in bulk') that contains no cautions against improper use and presents some methods that can leave an object in an unstable condition. In this same connexion it is devoutly to be hoped that Mr. Biek will never solve the single problem noted on p. 202 that alone prevents him from treating a whole basketful of corroded bronzes in bulk, untouched by hand. Automatic treatment would inevitably lead to the loss of important information and to disfigured antiquities, a possibility that he himself recognizes on p. 73.

The imagination of the publishers has clearly been bounded by their usual standards of clear production; the appearance of the book belies its content.

R. M. ORGAN