

## Reviews

*Land and Work in Medieval Europe*. Selected Papers by Marc Bloch, translated by J. E. Anderson. 8½ × 5½ in. xii + 260 pp. London: Routledge and Kegan Paul, 1966. Price 30s.

Three of Marc Bloch's monographs are available in English translation and some of the readers of this review will have read the untranslated ones, but there can be few disciples so dedicated that they have turned up the reviews and articles of the master. This is a pity since like many acute thinkers Bloch was at his best when the line of thought did not have to be sustained over a long period. For this reason the selection and translation of eight of Bloch's most memorable articles will be welcomed by historians and archaeologists alike. Bloch, it may be recalled, was interested in archaeology and through his influences on the former Professor of Economic History at Cambridge indirectly played some part in arousing interest in deserted villages and so at a very long remove played some part in the formation of our society.

The book contains eight articles written in the 1920s and 1930s, four of which may be regarded as exclusively historical and the remaining four, nos. 2, 4, 5 and 6, as having some bearing on medieval archaeology.

Metaphor-simile-analogy-comparative method, so we might describe the origins of Bloch's comparative method, a development and extension of normal forms of speech and writing into the study of history. The matters that are compared must of course have some resemblance but this need not be very close: '... is it really necessary to go to such trouble to "discover" historical facts? They are and can only be known through documents: in order to bring them to light, isn't it enough to read texts and monuments? Yes, but one must know how to read them. A document is a witness; and like most witnesses it does not say much except under cross-examination. The real difficulty lies in putting the right questions. That is where comparisons can be of such valuable help to the historian...' The argument applies perhaps even more strongly to the mute objects handled by the archaeologists.

The other three articles are concerned with what today we should call technology, that is technical change and invention. The first, on the slow adoption of the water mill in medieval times, is a classic, and I would merely comment on one point. The dislike of water mills evinced so often by the peasantry was not surely against labour-saving devices as such, but against milling passing out of their hands and becoming a monopoly in the hands of a landlord. The other two were to some extent prompted by Lefebvre de Nöettes who, it may be recalled, had been preaching for some years that changes in harness in the early middle ages had led to an improved horse traction that had caused slavery no longer to be necessary. (A rather analogous idea that the invention of stirrups led to feudalism has since been put forward by White; see review in *Med. Archaeol.*, VIII (1964), 314-15). Few people probably would seriously accept the views of Lefebvre de Nöettes (or White), but they do stimulate two lines of thought on the process of technical change generally and of medieval technical change in particular, which are roughly speaking the subjects of Bloch's two articles. It is permissible to disagree with Bloch on more than one point, but it would take us far from the subject of medieval archaeology to discuss the matter fully.

Discovery is perhaps the less important part of invention; it is the collective will of the society that desires the change and sees advantage in it that puts the discovery to work and turns it into an invention. Medieval society no doubt did not welcome change as we do today, but there is every reason to suppose that there existed already the beginnings of that will to improve technically, which has so marked off Europe from the

rest of the world in the last few centuries. I have suggested elsewhere that we can appreciate this by comparison with the much more static society in the Novgorod excavations. The reasons for this may be a matter for discussion, but its significance, in relation to the part played by technology in modern life, is surely incalculable.

The subject of medieval technology is therefore worthy of our attention and the more so since, as Bloch shows (p. 173), the changes often passed unnoticed by the writers of the period and for want of written we must employ material evidence. Medieval archaeology, if used for this purpose, might acquire an objective and sense of direction which it sorely lacks at the moment.

M. W. THOMPSON

*The Changing Climate.* By H. H. Lamb.  $9\frac{1}{2} \times 6\frac{1}{2}$  in. 236 pp., 2 pls., 92 figs. London: Methuen, 1966. Price 45s.

Medieval archaeologists often assume that medieval and modern climates are the same. This collection of papers by a well-known British meteorologist deals with climatic fluctuations over the world as a whole on various time-scales, but there are many items of significance for the medievalist.

In his opening chapter Lamb discusses medieval vineyards in England and concludes that summer temperatures were 'perhaps 1 to 2°C higher than today' and that there was 'general freedom from May frosts (particularly suggested by the exposure to the north of several low-lying vineyard sites, e.g. at Tewkesbury, in the Fens and at Teynham, Kent) and mostly good Septembers'.

These views are later amplified with quantitative precision and illustrated by stimulating maps and charts. Thus on p. 186, fig. 10, the period 1150-1300 is indicated as one of outstanding warmth with temperatures about 10°C in high summer (July and August) compared with 9°C in the period 1550-1900 and 9.4°C in 1900-1950. Winter temperatures have shown a parallel fluctuation from 4½°C in the Little Optimum of 1150-1300, to 3½°C in the Little Ice Age of 1550-1850 to 4.2°C in 1900-1950.

There is some discussion among palynologists about the date of the onset of the warm conditions but from 1150 these views represent, with more precision than previous suggestions, orthodox meteorological opinion. In a further graph (p. 187) on raininess, it is suggested that in 1150-1300 rainfall was less than 90% in July-August and over 105% in the remaining ten months of the year. Decadal data are included in Appendix II and it is clear that certain decades (e.g. 1160s, 1180s, 1200s, 1270s, 1320s, 1420s, 1470s) were much drier in July-August in the north European plain than others (e.g. 1140s, 1210/29, 1250s, 1310s, 1360s, 1450s).

Winters were particularly mild in 1170/1200, 1220/39 and 1270/99. Cold winters after 1400 in England are tentatively tabulated in Table 2, but this list appears to include various ghosts (e.g. 1429, 1431, 1436, 1439 . . . 1590) caused by the unreliability of the dating of English secondary and sometimes even European primary sources. The group of cold winters 1432/35 were indeed very cold, and the 1460s were cold, but the coldness of the 1430s appears to be exaggerated by the lack of information about the mild months at this time.

The peculiar weather anomalies of each decade are very much in agreement with those in the reviewer's M.Sc. thesis (London, 1953, esp. pp. 214-255), despite the fact that a different form of decade (1-0) and a different selection of continental sources was used. The dates in many meteorological compilations are unreliable (e.g. Vanderlinden in the 12th century, Hennig to c. 1400), but for decadal means this does not matter. The sources used by Lamb for different areas of northern Europe are indicated on p. 96. The coverage of different sources is very uneven. Thus the collection from the British Isles (for which acknowledgement is made to the reviewer for unpublished material connected with his thesis) is good from 1100-1300 but poor in most of the 15th century, by which time the Flemish sources become reliable. Russian sources (cf. p. 220) are intermittent and are sometimes inconsistent with the Polish material used by

Walawender. Thus in Poland the winters of the 1480s are much warmer than those of the 1450s. Nevertheless, the general agreement between north-west and north-east Europe shown by Lamb's fig. 11 (p. 97) is striking and convincing. Even running 50-year means (fig. 4, p. 209) show some correspondences, although here the absence of evidence in the period 1400–1550 may explain why summers appear to be dry and winters cold. Documentary evidence from c. 900–1090 in northern Europe is unfortunately scanty, but this chart is tentatively extended back to 800.

In another paper on 'Trees and climatic history in Scotland' Lamb points out (p. 163) that the later part of the 13th century has been described as 'a golden age in Scottish history' and suggests that some of the unrest in Scotland in the later middle ages (1396, 1426, 1430s) may be partly explained by climatic crises.

Decadal characteristics are not in dispute, but there are alternative views as to the character of different half-centuries, and, in particular, the date of the onset of the 'Little Ice Age'. Its severe phase is here dated 1550–1700 (p. 102) but its onset is given (p. 65) as 1430, and Lamb is able to point (p. 171) to the papal letter of 1492 stating that, because of ice, priests had not been able to visit Greenland for 80 years. In his recent book, *Histoire du climat depuis l'an mil* (Flammarion, 1967), E. Le Roy Ladurie regards the lack of evidence for glacial advances in Europe between 1430 and 1513 as evidence for a late medieval Optimum whereas he points to earlier glacial advances in the 13th century as evidence for a much colder phase in the later part of Lamb's Optimum. The resolution of these varying viewpoints may well lie with the medieval archaeologist.

Environmental archaeology should take into consideration the changing vicissitudes of climatic history. New techniques such as dendrochronology, pollen-analysis, radio-carbon dating, trace-element analysis may indeed provide the objective evidence that can test and amplify the various suggestions that Lamb, on the evidence of the chronicles, has so boldly expressed in quantitative terms.

D. J. SCHOVE

*An Archaeological Survey of County Down.* By the Archaeological Survey of Northern Ireland (Ministry of Finance). 11 × 9 in. xxiv + 478 pp., 213 pls., 288 figs. Belfast: H.M. Stationery Office, 1966. Price £7 7s.

The work of cataloguing Ulster antiquities has been in hand since 1933, and in 1940 the Ancient Monuments Advisory Council published a preliminary survey of the ancient monuments of Northern Ireland. The war years intervened and it was not until 1950 that the present Archaeological Survey of Northern Ireland came into being. This volume presents the results of the first comprehensive county survey undertaken by that body.

The Archaeological Survey holds a central position in the archaeology of Ulster. The relatively small size of the province permits and enforces a close liaison with both the University and the Ulster Museum—a liaison which is evidenced by the specialist contributions to the present volume and is one of the main strengths of Ulster archaeology. Moreover, the Survey is charged with duties normally carried out in Britain by the Inspectorate of Ancient Monuments and the Royal Commissions on Historical Monuments. The officers of the Survey are thus responsible not only for the compilation of county surveys, but also for the maintenance of monuments in state charge and for all emergency excavations. In these circumstances, to have produced the present volume in some sixteen years is a most remarkable achievement. The volume is in the main the work of two men, Mr. D. M. Waterman and Mr. A. E. P. Collins. Their achievement is even more remarkable when it is realized that field work in co. Down was largely completed by 1960, and parts of the text would appear to have been set up in print since 1961. This delay of some five years in publishing the results of their labours does less than justice to the officers concerned and also imposes an unnecessary strain on the relevancy of the introductory sections of the text.

A delay of this sort is in the present case doubly unfortunate, for it is in the extent and scope of these introductory sections that a new standard is set. The arrangement of the volume enlarges upon the trend towards taxonomic classification and discussion seen in the recent Scottish R.C.H.M. volumes. The whole county is treated as an entity. After a General Introduction dealing with geology, soils, vegetation and fauna, etc., the volume is divided into three sections covering Prehistoric, Early Christian and Medieval, and Later Monuments. Each section comprises a fairly detailed synthesis of both monuments and 'antiquities' followed by an inventory of sites of its period classified by type. Monuments are numbered in sequence, leaving gaps for new discoveries. While this works well enough for the Prehistoric section, the practice of giving towns (and even some townlands) an inventory number with distinguishing additional numbers for monuments within the town or townland results in some anomalies. Thus Ardkeen Castle (no. 791·1) appears under the heading *Mottes with Baileys* (nos. 791-797). Ardkeen Church, reasonably enough, appears a hundred pages further on under *Mediaeval Churches* (nos. 931-956), but still retains its townland number of 791·3. It is thus impossible to locate a site in the text by its inventory number alone—its chronological period and townland location must also be known. Even the general index omits the inventory numbers of the sites. The arrangement of the volume is nevertheless a major step forward in making these county volumes less of a bald inventory and more of a survey, and the editor (Professor E. M. Jope) is to be congratulated on producing a book which is both considered and usable.

The actual proportion of synthesis to inventory decreases throughout the volume. The introduction to the Early Christian and Medieval section, for example, starts with an historical outline of seven pages, follows with twenty pages of discussion of the various classes of monument, and ends with six pages of 'Antiquities' (pottery, metalwork, etc.). The inventory covers one hundred and sixty-seven pages, the monuments being classified under such headings as 'Earthworks and Allied Structures', 'Crannogs', 'Raised Rathes and Mottes', 'Stone Castles', 'Tower Houses', 'Monastic Buildings', 'Early Churches', 'Medieval Churches', etc. For the Prehistoric period the introductory synthesis is almost twice as long as the inventory of sites. The Later Monuments, on the other hand, receive a very brief discussion indeed.

It is in this final section dealing with post-medieval monuments that we are introduced to a principle of recording that marks a radical change from the methods adopted by the Royal Commissions on Ancient and Historical Monuments. The Scottish Commissioners have published their most recent county inventory in two volumes, divided on a chronological basis. Their English and Welsh colleagues have hitherto divided their published records on the basis of geographical subdivisions of the county being studied. The Archaeological Survey has gone a step further, and has introduced the principle of selective recording. Thus monuments after 1780 are included on the basis of their degree of 'interest and merit'. The same principle is also applied to certain classes of earlier monument. In the case of the 1,100-odd surviving rath earthworks this is a realistic approach and may be seen as a natural corollary of the increased emphasis on editorial synthesis. The Later Monuments, however, are not discussed in such depth, and as a result one has to rely on the judgement of the general editor and the officers of the Survey. The standard of recording, presentation and discussion is such as to inspire considerable respect, but 'interest' and 'merit' are subjective qualities and a rigid application of such a test is bound to lead to a certain amount of frustration on the part of some specialist readers.

The section dealing with Early Christian and Medieval Monuments presents a somewhat unfamiliar facies to the English archaeologist or historian, though inviting comparison with some aspects of Scottish culture and society. The arrangement of the volume deliberately emphasizes the basic continuity of early and later medieval life up to the mid 17th century. Because of the relatively slower rate of agricultural destruction, a considerable number of defended settlements survive from an early date:

on the other hand, because of the nature of Celtic society, some types of medieval monument familiar to English readers are rare—and this in co. Down, which we are told is 'of all the Ulster counties the one which has had in historic times the most continuous contact with the sister Island'.

For the period before the Anglo-Norman incursion the most prevalent type of monument is the rath or cashel, of which nearly 1,200 survive in co. Down. Indeed, apart from four hut-groups, some thirty crannogs and six early stone churches, they are the only monuments listed as of this period. While they present an almost unparalleled opportunity for studying the layout of individual farmsteads, the paucity of datable finds makes it almost impossible to determine the degree of contemporaneity of neighbouring sites. The extent to which such single-farmstead units were served by undefended (and as yet undiscovered) hut-clusters is also uncertain: the burning of the fort of Duneight with the *baile* at its gate in 1010 strikes a warning note. The use of raths continued into the period of the Anglo-Norman settlement. The exact inter-relationships of raths, raised raths and mottes in co. Down is complicated by the fact that some pre-Norman rath-holders appear to have built (albeit almost accidentally) mounds of motte-like proportions. It is clear that in many parts of the British Isles native chiefs had been building private defended residences for many generations, and in this context it is significant that the whole question of the form of the earliest Norman military earthworks in England, and the extent to which they were a real innovation, has recently come under discussion. Problems of this sort have a direct relevance to the study of political and social institutions at this time, and it is in this respect that the editor can justly claim that the problems discussed in this section of the volume have a relevance to the whole of the British Isles and beyond.

After the initial success of De Courcy's lightning campaign of 1177 the story is one of gradual repossession by the Irish. Only the eastern lowlands remained in Anglo-Irish hands, like a northern Pale. It was not until the 15th century that trade and manufacturing became concentrated in towns. Standing medieval buildings are surprisingly few—some thirty medieval churches are listed, all ruinous and for the most part featureless. Co. Down boasts, however, a fine series of tower houses spanning the 15th to 17th centuries which deserve, and receive, detailed study as reflecting the warfare of the later middle ages, the intensive campaigning of Elizabeth's reign and the systematic plantation of immigrant settlers in the 17th century.

The various monuments are lucidly described and most attractively illustrated by Mr. Waterman's drawings. The printing of some of the photographic plates, however, does not do justice to Mr. Collins's skill as a photographer. Moreover, not all of the 704 photographs would appear to be really essential: one air-photograph of a crop-mark, for example, is printed upside-down, but is not really much more informative the other way up. It would perhaps have been preferable to have had more colour-printing on the distribution maps instead, or better still a list of those monuments 'weeded out' by the principle of selective recording.

Such criticisms, however, are almost inevitable in considering a work of this kind. It is clear that Professor Jope and his colleagues have been faced with a series of hard decisions as to the form that this—the first of the Northern Ireland County Surveys—should take. The ordering of the material in this volume is proof that these decisions were taken and adhered to. The result is a credit to those concerned and a landmark in Ulster archaeology.

BRIAN K. DAVISON

*Wijster: a Native Village beyond the Imperial Frontier, 150-425 A.D.* By W. A. van Es. 10½ × 7½ in. 595 pp., 24 pls., 289 figs., 11 plans (in separate portfolio with large figs.). *Palaeohistoria*, xi. Groningen: J. B. Walters, 1967. Price 95 Fl.

The 11th volume of *Palaeohistoria* is entirely devoted to a massive and detailed account of the excavations undertaken by the Groningen University Biologisch-

Archaeologisch Instituut at Wijster in north Holland between 1958 and 1961. The results impinge on English archaeology at various points so that it is a positive advantage rather than a graceful compliment that the text is also entirely in English. The report reads smoothly and clearly and the few solecisms and mis-spellings can be ignored with the exception of the penultimate paragraph on p. 51, where the description of the internal layout of the Type Ala long-house is somewhat confusing.

The site itself lies in the province of Drente, about 45 km. south of Groningen, and occupies a slightly elevated sandy ridge near a small fen close to the village of Wijster. The first excavations were undertaken by van Giffen in 1926 and were largely concerned with pre-Roman sites in the area, although the cemetery belonging to the settlement was explored. Further excavations in 1953 and 1956 culminated in the main campaign of 1958-61 when a total of 9 acres was explored without reaching the limits on all sides. As a result of continuous ploughing stratification was virtually non-existent, so that chronology depended on an exhaustive study of the finds, particularly the pottery. The latter consisted principally of hand-made native wares, but the settlement was close to the Imperial frontier and also on the trade-route connecting Batavia with the lower Elbe, so that cross-dating by Roman imports makes it possible to check the proposed chronology. It is true that only two Roman coins were found, a *denarius* of Marcus Aurelius dated after A.D. 160 and an otherwise unidentified *antoninianus* of the 2nd half of the 3rd century. But datable pottery was plentiful enough to offset this lack of coins and also of metalwork. With the exception of a few sherds of the Zeijen culture of c. 600-400 B.C. from a limited area, the pottery, both Roman and native, extends in time from the mid 2nd to the early part of the 5th century A.D.

Within this overall occupation, van Es has established a relative chronology of three main periods, I-III, each subdivided into two or more phases. The evidence for these rests largely on the presence and orientation of successive palisade-trenches, a common feature of settlements of this period in north Holland and presumably to be interpreted as boundaries. Corroborative evidence is provided by houses, huts, granaries and other structural features which, on the evidence of orientation, can be associated with the different palisade-trenches. The absolute chronology was broadly established by plotting the distribution of datable material, particularly pottery, over the site as a whole, and more precisely by noting the association of closely-dated groups with particular features. Van Es proposes the following periods: I, A.D. 150-225; II, A.D. 225-300; III, A.D. 300-425. Briefly, the settlement began life as a single family unit, with some development up to the end of period I but not sufficient to class the site as a village. In period II, a hybrid situation developed: a few houses and associated features represent a small number of family units, while at the same time a larger settlement with rows of houses began to appear. In period III, a large and completely new settlement appeared and showed various evolutionary phases. Throughout its history, the site was occupied by a farming community principally engaged in cattle-breeding (there was no evidence for sheep), but also engaged in agriculture to a limited extent.

Within the overall duration of settlement, interest in this country will naturally centre on the final phase of period III and its relevance to the *adventus Saxonum*. In fact, van Es thinks it probable that the abandonment of the settlement was a consequence of the migration of its inhabitants to England, as happened with other villages of eastern Holland and possibly the *terp* villages of north Holland also. He adopts a modified version of the Boeles thesis, the mingling of Anglo-Saxon elements from the Elbe-Weser region with the inhabitants of the Frisian *terps*, though peacefully rather than aggressively, a largely coastal movement which may have been paralleled by a land movement into the Wijster area. Here then, it is claimed, we may have one of the sites which led to the first settlements in eastern England, so giving rise to that Anglo-Frisian ceramic complex noted by Myres on both sides of the North Sea. In this connexion, it is interesting to note that grave 116, the latest burial of the first period of use of the Wijster cemetery (the second is dated c. A.D. 650-850 and is unrelated to the settlement under discussion)

produced typical German mercenary equipment familiar to us from the Dorchester burials. Similarly, the Anglo-Saxon *Buckelurne* from grave xxiv must also be significant.

If Wijster served as one source of the Anglo-Saxon invasions of England in the 1st half of the 5th century, one naturally wonders about its earlier history before the Anglo-Saxon element was introduced. Van Es sees Wijster as the product of migration from the clays of the coastal *terps* to sandy districts as the result of population pressure. The character of the settlement founded *c.* A.D. 150 seems to have changed *c.* A.D. 225 when the known marine transgression adversely affected living conditions in the *terps* and caused further migration to the sandy regions further inland. This growth in period II was accentuated in period III when Wijster achieved its high point in size and sophistication, with a wealth of Roman imports, a phenomenon to be explained by its position on the Batavia-lower Elbe trade route and the restoration of the frontier under Valentinian.

If this is the development of an agricultural settlement which may eventually have provided settlers for 5th-century England, special interest must attach to the house-plans and their architectural reconstruction. Van Es has isolated and published 86 ground-plans although he frankly admits that the soil conditions were not conducive to complete confidence in the disentangling of the post-holes which were the main evidence; the depths of the latter are represented diagrammatically with the plans. Generally the houses are mostly identified as large farm-houses, with living-quarters and byre combined, with a subdivision into long-houses and short-houses, depending on whether the length is greater or less than twice the breadth.

Long-houses are by far the larger group, comprising 72 of the 86 house-plans, and all are classed in the family of so-called *dreischiffige Hallenhäuser*. Such aisled hall-houses might be added to the continental list put forward by Radford in the first volume of this *Journal* in discussing the probable form taken by Saxon houses in this country, particularly when one reads that the *Grubenhütte* was the commonest form of outhouse at Wijster. Van Es goes on to subdivide these long-houses into those with two rows of roof-posts as the main supporting posts for the roof (the smaller group) and those with double wall-posts as their main feature (the bigger group) where the inner posts of each opposed pair served, so he claims, as the seating for the curved beams of a cruck-built house. Chronologically, the first type is present from period I onwards and belongs to the house-plan characteristic of the southern shore of the North Sea, from western Holland to Scandinavia; the cruck-built house, however, does not appear until the beginning of period II and may have originated in Westphalia, whence it spread to the sandy soils of north-east Holland.

There is ample food for thought in all this for the student of the origins of vernacular architecture in Britain. There is no space to develop the arguments here but there is clearly some conflict between these views and those recently put forward by J. T. Smith, both on aisled buildings and the technique of cruck-construction, unless evidence can be found for independent evolution. Only more research coupled with excavation will provide the answers. Perhaps a large-scale exploration of a Romano-British village in the Fenland might give a clue. Meanwhile, the Wijster report provides a thorough (one is tempted to say exhaustive) account of the exploration of a native settlement of the Roman period which has not been achieved in this country since the days of Pitt-Rivers.

F. H. THOMPSON

*Das römisch-fränkische Gräberfeld von Krefeld-Gellep.* By Renate Pirling. 10 × 7 in. 1 Teil: 239 pp., 10 pls., 25 figs., 1 folding plan. 2 Teil: 15 pp., 133 pls. Berlin: Verlag Gebr. Mann, 1966. Price 130 DM.

Dr. Pirling must hold the world record for excavation of graves in a single grave-field. At the time of writing (April, 1967) some 3,350 graves have been opened, excavated and recorded, and there are many more to come. Not all these were excavated by

Dr. Pirling, for between 1934 and 1955 a remarkable polymath, Professor Albert Steeger, found time, amid many varied duties in Krefeld, to excavate some 1,200 graves. Dr. Pirling took over the cataloguing of the finds in 1956 and, after his death in 1958, she began to plan the complete excavation of this remarkable cemetery. It shows great dedication that, while acting as director of a growing museum and as supervisor of this giant excavation-campaign, she could also manage to publish in this double volume the first 1,300 graves of the cemetery. The volumes are beautifully produced—if wretchedly expensive—and like their predecessors in this series (*Germanische Denkmäler der Völkerwanderungszeit*, Serie B) will be constantly used as standard works of reference by archaeologists of the late Roman and migration periods. Especial tribute must, however, be paid to the draughtswoman, Miss Franziska Lenartowski. Without her great skill and expertise this book could not have been produced, while the quality of her drawings could well serve as a model for similar publications throughout western Europe.

A number of objects from the Gellep cemetery have already become well known in archaeological literature, and two graves—the *Fürstengrab* and the claw-beaker grave (no. 43) with its famous sword—have already received a great deal of attention. By means of a few articles in an obscure local journal by Steeger, and by his short guide-book *Germanische Funde der Völkerwanderungszeit aus Krefeld* (published in 1937), some of the less important finds from the cemetery have reached a broader public, but apart from a small number of scholars who have taken the trouble to travel to Linn during the last few years, few people have appreciated the totality of this cemetery and its extreme importance in the history of the lower Rhine during the period from 400 to 650.

The cemetery is situated some 700 metres from the southern bank of the Rhine which, when the cemetery was begun, flowed in a different bed further to the west. The grave-field lay outside a Roman fort, traces of which have been discovered under the modern hamlet of Gellep (to the north of which lie the Roman cemeteries of the first to third centuries). No trace of a migration-period settlement has yet been found in the neighbourhood and its absence is one of the great puzzles of German archaeology. The cemetery excavated by Professor Steeger and Dr. Pirling was in continuous use from the late Roman period until the 7th century, but at the time when this book was prepared it was thought that there were two cemeteries—the late Frankish cemetery (Gellep-Süd) and the late Roman cemetery (Gellep II)—and Dr. Pirling has listed the finds under these two headings.

The report consists of a text volume which includes a description and discussion of the site, but which is mostly devoted to a typological discussion of the objects, and a volume which includes a catalogue and illustrations of the grave-finds. The latter volume is carefully worked out and the descriptions are in an easily understandable shorthand form. The pictures tell their own story and the text gives the bare narrative of each grave and its contents. It is perhaps a pity that there is no reference back from the catalogue to the text volume, but in such a vast work one can only sympathize with the author's problems of space.

The first volume contains more subjective material. Here are discussed in some detail the various types of object found, together with a short discussion of certain problems connected with the general excavation of the cemetery. Perhaps the most interesting group of material in this grave-field, and one which receives the attention of a colour plate, is the fantastic group of late Roman glazed pottery of which twelve major types have been recognized. This material is of a character only barely familiar in other Roman contexts on the Rhine; no example is recorded, for example, in Gose's *Gefäßstypen der römischen Keramik im Rheinland*. It might, in the light of some of the material recorded here, be worth while looking again at certain glazed pottery from English cities, for some of this material could easily be confused with pottery labelled 'medieval' in some local collections. The glass from Gellep is of a very high quality, but little that is unique occurs. The most remarkable example of Roman glass found on this site is the glass dish of Wint Hill type which has already been described by D. B. Harden in



*Journal of Glass Studies*, II (1960). The Frankish glass is very run-of-the-mill. Among the weapons, the Gellep sword mentioned above is interesting in relation to the English parallels, which have been much discussed recently by Mrs. Hawkes and Miss Evison.

If one is to quarrel at all with this book it is perhaps over certain omissions and at least one questionable identification. I am a little unhappy about Dr. Pirling's identification of certain glass objects (fig. 25, nos. 4, 6 and 10 and more especially no. 7) as spindle-whorls—I would sooner accept them as beads. I also feel very unhappy that there is no technical discussion of the stone mould from grave 34. This is an extremely interesting object forming part of a composite mould to which less than justice has been done on p. 30. Two of the holes in the photograph in pl. 123 pierce the corner of the stone and show that the mould must have been tied together and the molten material poured through the jet holes which can be seen in the photographs. As far as I am aware this is a unique feature in dark-age moulds and would bear further consideration.

But it is not really my intention to quibble about the contents of this book. It is a remarkable work which stands as a monument to the skill, ingenuity and application of one of Germany's younger scholars.

DAVID M. WILSON

*La Damasquinure mérovingienne en Belgique: plaques-boucles et autres accessoires de buffleterie.* Dissertationes Archaeologicae Gandenses, IX. By Berthie Trenteseau. 10 × 6½ in. 206 pp., 16 pls., 43 figs., 1 table. Bruges: De Tempel, 1966. No price stated.

The material dealt with consists of the belt-buckles, plaques and strap-ends, and the shoe-buckles and corresponding strap-ends, which together comprise practically all the metal-inlaid work of Merovingian Belgium, and so another valuable study is added to the recent work in this subject from Sweden, France, Germany, Switzerland and England. It is sad to learn from the introduction that the study was hindered from efficient completion by a museum refusal to allow examination of objects in its care.

The inlay techniques used are listed to begin with, then the shapes of the mounts and the types of decoration employed are set out clearly. The core of the book consists of a descriptive catalogue of all the objects, museum by museum, with references to comparative material. Finally, there are detailed analyses of the typology according to shape, decoration and technique, and conclusions based on these factors. At the end are sixteen plates of a selection of objects, and illustration is increased by some drawings in the text.

The number of objects listed comes to 249, plus a supplement of eight, so that it forms a weighty body of material carefully recorded and analysed which will be of great use in further work on the Merovingian period of Belgium in general. The main points in the text which need illustration are allotted a photograph, but the quality of these reproductions does not always allow enough of the detail to be visible, and as most of the objects are not accessible elsewhere, either in publications or on exhibition, it is more to be regretted that only 68 are illustrated here.

Of the five techniques listed, four are well-known: repoussé plates, strips or wires inlaid in grooves, plating on a criss-cross scored background, strips inlaid on a criss-cross scored background. The fifth, silver strips inlaid on a background rusticated by dotting, or a jabbing action with an engraving tool, has only recently been discerned, and is here defined as a characteristic of the area of Namur. This technique has been described by the author in an earlier article, to which reference must be made for illustrations.

The shapes are divided into six main types with sub-divisions: rectangular, trapezoidal, parabolic, triangular, circular and elongated, of which one sub-division of the trapezoidal group appears to be indistinguishable from the parabolic group. The decoration falls into four groups: geometrical, geometrical with zoomorphic elements, zoomorphic, and degenerate zoomorphic. Analysis shows that each shape keeps in the main to one kind of technique and decoration.

The conclusions do not reveal many unexpected facts, but previous assumptions are

now supported by statistics. A limited amount of this metalwork is evident in Belgium, as elsewhere, between the mid 5th century and the beginning of the 6th, but this part of the story is not discussed to any extent by the author. During the 6th century there was very little activity in this craft, but future study on the animal ornament of one group may enable it to be ascribed to the 6th century. Most of the Belgian material, much of which is ornamented in Style II, belongs to the 7th century, while the latest type, consisting mainly of large plates with degenerate animal ornament in the third technique, was current from A.D. 675 to 725. The author has been able to distinguish various probable production-centres with local characteristics in Belgium, and has plotted them on a map, but notes connexions between these regions themselves and with south and south-west Germany, north-eastern France and northern Switzerland. VERA EVISON

*Sylloge of Coins of the British Isles: Royal Collection of Coins and Medals, National Museum, Copenhagen*, I, *Ancient British and Anglo-Saxon Coins before Aethelred II*, II, *Aethelred II*. By Georg Galster. 2 vols. 10 × 7¼ in. vol. I, viii + 117 pp., 30 pls., 1 map; vol. II, xiv + 148 pp., 71 pls. London: Oxford University Press and Spink & Son for the British Academy, 1964, 1966. Price £3 10s., £6 10s.

*Sylloge of Coins of the British Isles: National Museum of Antiquities of Scotland, Edinburgh*, I, *Anglo-Saxon Coins with associated Foreign Coins*. By R. B. K. Stevenson. 10 × 7¼ in. xxxii + 64 pp., 29 pls., 1 map. London: Oxford University Press and Spink & Son for the British Academy, 1966. Price £4.

The syllogizing of the great public collections of our older coinage goes on apace; only the gap left by the lack of any but a now very antiquated and always (by contemporary Swedish standards) inadequate catalogue of the British Museum Anglo-Saxon collection looks ever more immense. The reviewer can testify from experience to the utility of the project in hand. The volumes here reviewed are of special interest, describing as they do non-English collections largely formed from local finds. With one reservation, the Danes had no coinage of their own until the early 11th century and the Scots had none until well into the 12th century. Both nations, but the Danes more readily, learned the use of coins from the Vikings' lust for bullion.

The sources of silver were three. First, *via* the lands of the Rus, from the east, and particularly from the Sāmānid *dawlah* in central Asia, which provided some, but not all, of the metal recoined in northern Europe, but was purely a source of bullion, without influence on metrology, and was exhausted by the mid 10th century. Second, and best known, from England, in great quantity from Aethelred till the end of the 11th century, by Danegeld and also by trade, but before Aethelred only in small quantity in Scandinavia and rather more in the Norse settlements off Scotland. Third, from the Western Empire; the rarity of 9th-century coins in Viking hoards is surprising, since the practice of Danegeld had clear precedents in the realm of Charles the Bald, but there is a 10th-century (pre-Aethelred) element, largely French, in the Scottish Viking hoards, and a huge German element, usually outnumbering the English by two or three to one, in the great Scandinavian finds of the Danegeld period, a testimony of ordinary commercial intercourse, since the Ottos did not submit to Viking importunities in the measure that Aethelred did.

The Danish collection forms a most valuable corpus of archaeological data; the sources are unusually well-controlled, since, encouraged by a certain nationalistic pride in their heroic age, the Danish scholars, from Ole Wurm in the early 17th century, through the compilers of the catalogue of 1791, have often been ahead of their English contemporaries and the Treasure Trove law was both more uniform (the king reserved all rights, everywhere) and, at least from 1752, more practicable (the finder was awarded the bullion value). The book contains a table of finds in chronological groupings, beginning with two single British staters. Twelve hoards contain only a few English

coins each, from Alfred to Edward the Martyr, but thirty-four from Aethelred's time, usually with a massive English content, begin a series, averaging about one per year for every English reign 'through' Edward the Confessor, followed by a few after the conquest. The hoards of the Danegeld period normally contain one or two issues only; the later ones include many earlier coins, but it is evident that much English silver of the Confessor was reaching Scandinavia in peaceful commerce. The few pre-Aethelred hoards are relatively strong in Danelaw coins, and bear particular witness to intercourse between the homeland and the Viking kingdom at York. It is hoped that the more recently found of the pots that held at least fifteen of these hoards are somewhere described. The distribution-map, which extends over the *medieval* confines of Denmark, shows a great concentration around Roskilde and in southern Skaane, which was later to become such an entrepôt, but western Jutland is almost barren. Of the coins themselves about half of the great Aethelred assemblage have proveniences, but rather fewer of the special collection of local imitations of Aethelred and these mainly from relatively late hoards. There is also a large collection of earlier coins, with an accent on the Danelaw, but purchased and generally without provenience (except, of course, a good sample from Cuerdale).

The Scottish collection has likewise benefited from officially-impounded treasure for over a century, but in moments of economy it has been depleted by the sale of so-called 'duplicates'. The table of finds is not chronologically classified and the distribution-map, with its *terminus post quem* for each find, may be misleading. These are fair enough in the case of the few 'normal' Viking hoards, but in the majority of finds it is almost better to regard them as close *termini ante quos*. The characteristic of Scottish and Irish hoards—all from the Norse area—is the retention of coins from before Edgar's reform for a few years into the 'reform' period. It may be no accident that the 'reform' type, with the effigy, is an extension of an exceptional earlier type, favoured in the Danelaw, but not in the west. Another remarkable fact is that the short-lived copper 'styca' coinage of mid 9th-century Northumbria, which hardly ever travels south, penetrated into the Western Isles and at Talnotrie in Galloway was hoarded with slightly later silver pennies. If one omits Lothian, which was English Bernicia anyway, and the hoards laid down during the Norse dominion of the Isles, including the stray but completely Viking-type hoard from Lindores in Fife, one has a true picture of coinage, or lack of coinage, in Scotland and Pictland before *c.* 1140. It is an astonishing picture, not of barbarism but of utter poverty—one, spurious, Saxon 'thrymsa' with a copper core, a scatter of miserable copper 'stycas' and one sizable hoard of them (was this strange coinage aimed partly at a Scots market?), and a few pence, mostly pierced as 'jewellery'. This was the cradle of one of the half-dozen 'great little' commercial nations of the world.

S. E. RIGOLD

*Anglo-Saxon Architecture.* By H. M. Taylor and Joan Taylor. 2 vols. 11 × 7½ in. 734 pp., 280 pls., 362 figs. Cambridge: University Press, 1965. Price £10 10s.

These two handsomely-produced volumes are the first part of a project which every student of medieval architecture will applaud. The work involved in preparing this publication must have been enormous, carried out during many years of patient research and travelling.

The present volumes consist principally of a catalogue of surviving monuments. The arrangement is purely alphabetical and therefore it is not intended as a presentation of a development of Anglo-Saxon architecture. Obviously, such catalogues are not meant to be read from cover to cover but to be used as reference books, in which it is easy to find information on any surviving building. The third volume, which is to appear at some future date, let us hope before too long, is to give the general conclusions based on the catalogue. It will, of course, be the most important part of the entire work.

It must be a matter of great sorrow to all admirers of that remarkable scholarly partnership that the untimely death of Mrs. Taylor brought this fruitful collaboration to an end. In his work on the completion of the final volume, Dr. Taylor will have the best wishes of all students of medieval architecture, and their deepest sympathy.

In comparison with continental ideas about artistic periods and styles, the term 'Anglo-Saxon architecture' means little. Such terms as Merovingian, Visigothic, Carolingian, Asturian, Mozarabic, Ottonian in each case apply to buildings with numerous common characteristics, erected within a reasonably short time. The Romanesque period, which was used to describe the art of the 10th to the 12th centuries, is now sub-divided into the 'First Romanesque' and Romanesque proper. It is difficult to draw any parallel between these various styles and Anglo-Saxon architecture, which bridges five centuries *c.* 600 to *c.* 1100, while none of the continental styles lasted longer than two centuries. When we compare, for instance, two churches: Escomb in county Durham (dated by the authors between 650 and 800) and Bosham in Sussex (between 1050 and 1100), we at once realize that these buildings have nothing in common except the name, 'Anglo-Saxon'.

The concept of architectural space of Escomb, or of the even more complex and later church at Bradford-on-Avon, is based on an arbitrary grouping of unrelated spatial units as far removed from the basilican hall as can be imagined. Such buildings are in a sense archaic and even primitive. Late Anglo-Saxon churches on the other hand, though of modest dimensions, such as, for instance, Langford in Oxfordshire, are infinitely more complex and sophisticated, and are related to continental developments. Their component parts are fused into a more logical spatial grouping and without doubt these churches should be termed English 'First Romanesque architecture'.

Thus it is obvious that the name 'Anglo-Saxon' as a stylistic architectural term is useless. The name is not intended to describe English architecture up to the Norman conquest, for it will be seen that a fairly large proportion of churches catalogued by Dr. and Mrs. Taylor are post-conquest in date, falling within their period C3, *i.e.* between 1050 and 1100.

However, we must be patient and await the concluding volume of this study. We shall then see to what extent the views on pre-conquest architecture, so brilliantly put forward by the late Sir Alfred Clapham, have to be modified.

As a work of reference the first two volumes are already proving invaluable. In no other book is such a wealth of plans, sections and photographs available, and in no other book can such a convenient and thorough description and bibliography be found. In welcoming this valuable book one can only wish that the third volume may be published shortly.

G. ZARNECKI

*The Place-Names of Gloucestershire.* By A. H. Smith. 4 vols.  $9\frac{1}{2} \times 5\frac{1}{2}$  in. xiii + 268, xiv + 264, xiv + 272 and xv + 274 pp., 7 loose maps. Cambridge: University Press, for the English Place-Name Society, 1964-5. Price, for each volume, 42s.

The first three volumes of this book by the late Professor A. H. Smith, who did so much to advance the study of place-names in England, are devoted to tables of individual place-names grouped in regions. They cannot therefore be other than reference books, to be used with the caution proper to undigested material; yet they constitute not only the best of such compilations for this area, but, apart from a small collection by W. St. Clair Baddeley (1913), the only one. The fourth volume—such is the odd order of things found also in the corresponding set of volumes on the West Riding of Yorkshire—contains, enumerating backwards, a neat set of transparent and superimposable maps, allowing a three-dimensional comparison that could well be copied in many archaeological publications, indices, tables of proper names and 'elements', which form a concordance to the whole and, being logically classified, give a much fairer conspectus than any mere alphabetical table, a bibliography, a phono-

logical section, and then an 'introduction' to the whole—in fact a summing-up and the one continuous essay in the whole work.

The first page of this belated 'introduction' provides us with an unfamiliar and fundamental historical datum, which poses an even more fundamental question. Why the place-names of 'Gloucestershire' at all? What are these English counties that raise such passionate loyalties in the face of the Royal Commission on Local Government and bedevil not only archaeology but even natural history with boundaries that impose a curtain on our vision? An innocent insect once strayed across the invisible frontier into Somerset to be slain forthwith by a *grande dame* of the shire on her own demesne, *felix opportunitate mortis*—for it was 'new' to the county. Now we know the root of such absurdities; though the counties of Wessex and of the south-east have a more ancient and spontaneous origin, Gloucestershire (and probably the rest of the midland shires too) was set up not long before 1016, and is as artificial as the 'godless' *départements* of France or the London Borough of Camden—a fiscal and juridical convenience and part of the administrative softening-up that made the conquest easier for the Conqueror. To be fair the Gloucestershire of today is not the Gloucestershire of 1016, or even of 1086; Dean was taken from Herefordshire, where it naturally belongs, and a short-lived Winchcombeshire (one borough, one shire) had earlier been absorbed.

Gloucestershire, then, is a moderately ancient monument, in moderate preservation, and fairly easily explicable. The primary texture of toponymy within it is older, more eroded and more enigmatic. It is for the archaeologist and more-than-parochial historian to evaluate the latter. As the introduction shows, Celtic and Romano-British names are surprisingly few, even in Dean. As in Devon, the completeness of repopulation that seems to emerge from the place-names is historically significant, but we cannot be certain whether it was completed in the late 6th century in the part violently occupied by Gewissa chieftains from Wessex, or whether there was some cohabitation until the mid 7th century, when the whole was seized by that English Shaka Zulu, Penda, the virtual founder of Mercia. Thereafter it formed part of the sub-kingdom of the Hwicce, the boundaries of which were preserved by the old diocese of Worcester. On the whole, the place-names, while preserving the West Saxon settlement on the upper Thames, reveal the Hwicce as an Anglian folk, who might naturally ally themselves with Penda. It is for the disciples of E. T. Leeds, the students of cemetery-distribution, to see whether their evidence supports this hypothesis.

As part of Hwicce-land, Gloucestershire is fortunate in its early records. Hwicce-land, like east Kent, was more than usually dominated by great and ancient religious foundations—a land not only of continuity of tenure and preservation of land-books, but probably an area where the 'booking' of land was precociously developed, for, as Dr. E. A. John has shown, the existence or absence of early charters in different regions may not be entirely an accident of survival.

The latest important element in the toponymic texture concerns the students of early industrial archaeology. The west Cotswold valleys have a continuity of evolving factory-economy from the middle ages to the present, unparalleled in the north, except a few patches in Yorkshire, and the coal and iron workings of the Forest of Dean have left a residue of place-names traceable at least to the later 13th century. Can we argue, *ex silentio*, that this was the beginning?

S. E. RIGOLD

*Three Viking Graves in the Isle of Man* (Society for Medieval Archaeology, Monograph Series, 1). By Gerhard Bersu and David M. Wilson. 9¾ × 7¼ in. xiv + 100 pp., 18 pls., 47 figs. London: Society for Medieval Archaeology, 1966. Price 40s.

A special welcome must be given to the first volume in the Society for Medieval Archaeology's Monograph Series, and cordial thanks are due to the Calouste Gulbenkian Foundation for its grant towards launching the series. It is a happy circumstance that the volume should fulfil the role of a memorial to a great European excavator and

archaeologist, and friend of this country, the late Gerhard Bersu. Graves, and very few at that, are the only clue to pre-Christian Viking settlement in the Isle of Man. This volume publishes the first series of properly excavated Viking burial-mounds in that island, and virtually indeed, in Britain. The mounds are dated on stylistic evidence *c.* 850–950. The excavation was carried out by Professor Bersu during and shortly after his internment on the island during the war, and it is no surprise that the work of so fine an excavator should result in a wealth of information about burial rites, and that vivid conclusions of social importance should follow. Dr. Bersu died in 1964 before completing the writing up of these sites, a work on which he was actively employed, and we are extremely fortunate that an expert on Viking archaeology, Mr. David Wilson, was able to accept the invitation to edit and complete Dr. Bersu's work, and that he was able to do this so promptly. Broadly, the accounts of the excavations are Dr. Bersu's, the descriptions and evaluation of the finds Mr. Wilson's. The conclusions are in general Dr. Bersu's and Mr. Wilson's occasional doubts are confined to footnotes. Mr. Wilson has, however, also added a general discussion and conclusions (ch. iv). There is an admirable bibliography.

The information on burial ritual which Dr. Bersu recovered is particularly interesting. These three pagan burials, all under tumuli, two near each other in the north of the island (at Ballateare and Cronk Moar), and one, a boat-burial, in the extreme south (at Balladoole), differ in interesting respects. The presence on the tops of the mounds, above the boat-burial at Balladoole and the wooden cist or coffin at Ballateare, of layers of cremated domestic animal bones—ox, horse, sheep, goat, pig, dog and cat—show that it was thought proper that the dead man should be accompanied by his livestock. The presence of plough-marks of the Viking period in the soil surface under the mound at Cronk Moar, and the building of the mound at Ballateare with turves brought from a number of different outlying areas, instead of with the sand and heath vegetation on which the burial was sited, further suggest that the dead men were farmers buried in the one case on his own fields, and in the other, with his fields symbolically brought like his livestock, to the burial.

Both at Ballateare and in the boat-burial at Balladoole second female skeletons, without grave-goods, the woman at Ballateare being manifestly struck down by a violent blow from a blunt instrument, indicate the practice of *suttee*, or something like it. Some gruesome larval evidence at Cronk Moar seems to indicate that the body of the dead man lay in state for something over three weeks in the summer before interment. The placing of the boat at Ballateare directly on top of a group of Celtic Christian cist-burials follows a familiar pattern of continuity of burial-sites, whether pagan superimposed on Christian, as here, or Christian taking over on pagan sites. I would agree with Mr. Wilson in thinking that at Ballateare this probably indicates respect for a hallowed spot rather than a deliberate slighting of the graves of the vanquished natives. The rapidity with which the pagan burial succeeded the Christian ones is indicated by the articulated state of disturbed hands and feet dislodged from the cist-graves. A massive post marked both the boat-grave at Balladoole and the mound at Cronk Moar.

Grave-goods are normal—swords, shields, spears, horse trappings, iron cauldrons, strap-mounts and strap-distributors—but present a mixture of Norse objects with objects from Celtic, Saxon and continental sources. Textile remains at Cronk Moar, described by the late Mrs. Crowfoot, are notable. They include pile coats, with long tufts, paralleled earlier in Anglo-Saxon contexts at Snape, Broomfield and Sutton Hoo. A rare find is that of painted gesso—red, black and cream—from the shield in the Cronk Moar burial.

The excavation of the boat-burial at Ballateare, on top of the cist-burials, was a tough assignment. The iron nails and rivets which alone survived of the boat were disturbed by the settling of the overlying cairn, following the decay of the ship's timbers, as invariably happens in such burials. Dr. Bersu notes that, 'owing to wartime conditions

this complicated part of the burial could not be excavated with the care which it deserved' (p. 4, note 23). In the interests of future excavations of such sites it should be said that here both the account and presentation leave something to be desired. The published plan (fig. 4) is on much too small a scale. There is no plan at legible scale of the main burial and its grave-goods, complicated though this feature was by the presence of bones representing four individuals, two of which are eliminated as probably from the earlier Celtic stratum. Types of rivet are not differentiated on the plan, and the numbers of each of the four classes present are not given. A mysterious element in the boat was the presence of short spikes or open nails (not clench nails). These are said to number between 15 and 20, and to have varied in length between 5 and 10 cm. The nails are said to have lain along the axis of the boat, which would rule out their possible interpretation as gunwale spikes. Mr. Wilson says (p. 92) that their position suggests a rising prow. Using a lens on the too-small plan one can, however, locate unmistakable examples amidships and, if one accepts the statement (p. 14) that on the plan fragmentary rivets are shown as if they were complete, then one can see appreciably more of these distinctive spikes than 20. They seem to be concentrated not only at the ends of the boat but also in the middle. The two sections of the mound were cut without reference to the axis of the boat. They are the only indication of the relative levels of the rivets and the only guide to the extent to which the form of the boat might have survived. Since, however, they are not true sections of the boat-remains, either longitudinally or laterally, the true picture is not given. The fact is that more can be made out of collapsed rivet patterns than might be supposed, if the rivets are both planned and levelled individually; but this is a very slow process. The nails at bow and stern may perhaps have had to do with the fastening of an iron runner, subsequently disintegrated, on to the stem and stern, and perhaps amidships. The boat probably had more strakes a side than the five suggested.

Editing does not seem quite as thoughtful as we might expect for the first of our new monograph series. The line drawings are mostly reproduced at quite unnecessarily large scale (e.g. figs. 21, 22, 23, 24). This is not only pointless, and a waste of paper, but liable, since blocks are charged per square inch, to be a waste of money too, and further undesirable since the drawings were manifestly made for reduction. Objects are shown at  $\frac{1}{4}$  which could stand reproduction at  $\frac{1}{2}$ . The sections of Balladoole (fig. 3) to which there is much detailed reference in following pages should have been tipped in a page earlier and folded out to the left, not the right. The plates are excellent.

These reservations are not meant to criticize work laudable in the circumstances of its execution and in its fruition. The posthumous production of someone else's largely unfinished account is always a difficult job, and the field-work, especially at Balladoole, was done in far from ideal circumstances. The monograph is an important publication cordially to be welcomed both as heralding the new monograph series and for its valuable contribution to the history of the Vikings and of the Isle of Man.

R. L. S. BRUCE-MITFORD

*Viking Art.* By David M. Wilson and Ole Klindt-Jensen. 10 × 7½ in. 173 pp., 80 pls., 69 figs. London: George Allen and Unwin, 1966. Price 63s.

For something like six hundred years an animal shape formed the basis of the vast majority of works of art produced in Scandinavia. Beginning with hesitant and rather unsure experiments in the use of animal bodies in the late Roman iron age, a style developed during the migration period which was both original and self-assured, and all future developments grow organically out of it down to the end of the Viking age. The simple animal form on which all this art was centred imposed considerable limitations on the artist, and tended to channel his originality into intricate variations rather than into obviously new departures; but originality exists abundantly in this art, though the details which reveal it may appear at first sight to be small and insignificant.

To understand it—to see how creative artists showed their power within a rather narrow framework—is no easy matter. It demands familiarity with a rather large body of material, much of which has not been easily available to the non-specialist reader. Now at last the situation is most happily transformed, and we have from two distinguished authors a clear and business-like description of the last three centuries of the style, together with a most concise and useful account of its earlier phases. Insisting gently but firmly on the essential independence and originality of Scandinavian art in this period, they avoid being side-tracked into sterile arguments about external influences. They make it clear that although a certain amount was borrowed from abroad, the really significant feature is the independence and self-assurance with which, on the whole, the Viking artist rejected foreign examples. With the help of generous and generally high-quality illustrations they have provided a survey which surely will lead to a much wider appreciation of this fascinating but relatively neglected chapter in the history of art.

As many readers will be novices at disentangling the more intricate patterns, a little more help might have been given in the form of analytical drawings like those provided by Salin in his *Altgermanische Thierornamentik*. They are really invaluable for the beginner, and this is above all an art in which appreciation is impossible without correct analysis. It is true that some help of this kind is given, and that it is in any case less essential for Viking than for Vendel art; but the inexperienced eye will have some trouble with, for instance, the patterns on pl. xxxiv, *b*, *c* and *e*.

The authors would have put us even more deeply in their debt if they had had the courage of their convictions and had dropped the term 'Jellinge style' altogether. We read at the beginning of the relevant chapter that 'it is practically impossible to define the Jellinge style'. One would only wish to exclude the word 'practically'. As a name for a style it will have to be dropped sooner or later. The authors may not wish to regard their book as a text-book, but they must know in their joint heart of hearts that those who teach the subject will be recommending it as a standard work for some time to come, and so this unfortunate term is given a new lease of life. To abandon it would involve considerable reclassification, but none are better qualified than the authors to do just that. As it is, the author to whose lot this period falls struggles manfully to give us the impression of a coherent group, but on almost every page he seems to be wryly aware that he is attempting the impossible.

But all in all this is an excellent book, being both useful and pleasurable, and the authors are to be warmly congratulated.

The following points may be noted individually:

p. 31. Sutton Hoo. There might have been some mention of the possibility that the date of the burial is appreciably earlier than *c.* 655.

p. 87. The Borre style. One of its characteristics is the free ring. This is not in general a common motif, so it might have been worth remarking on its popularity on the Whithorn group of crosses. But it is hard to say what, if any, is the significance of this.

p. 108. The connexion between the Borre style and Gaut's ring-chain must have been fairly close, to judge by some patterns which seem to combine elements of both which have turned up in 12th-century contexts in Danzig (*Polska Sztuka Ludowa*, vi, 1954). Gaut's ring-chain pattern is really a very old one, occurring on Roman mosaics, and surviving in post-Roman times at least in the eastern Empire (e.g. *Anatolian Studies*, vii, pl. x). Perhaps Gaut's contribution was to make it look metallic.

(It is, incidentally, one of the puzzles of the Viking Age that Orkney produced no stone carving to compare with that of Man. The necessary skill was there in Pictish times, as is shown by the well-known slab from the Brough of Birsay, and the Orkney stone was a suitable material.)

p. 148. A better metalwork example of the Urnes style might have been found than the one on pl. lxxiii, *f*; e.g. one found at Lindholm Høje (*Kuml*, 1959, p. 64).



*Mittelalterliche Burghügel ('Motten') im nordlichen Rheinland.* (Beihefte der Bonner Jahrbücher, xvi.) By Michael Müller-Wille. 10½ × 7½ in. vii + 115 pp., 6 pls., 59 figs. Cologne: Bohlau Verlag, 1966, Price 22 DM.

Not since the controversy about eoliths in the early years of this century has there been a subject in archaeology that has aroused such heated debate as mottes, their nature and origin, and the related (or perhaps unrelated!) subject of ring-works. Notable additions to our knowledge have been made by a number of students and it is indeed perhaps the number of people involved that has caused passions to become inflamed. We must hope that the work upon which the Royal Archaeological Institute is about to embark will shed further light on the dark areas of this subject. Meanwhile it is a relief to turn from the controversy in this country to a straightforward catalogue of 'castle hills' (perhaps a better term) in the N. Rhineland of Germany.

The area dealt with in this catalogue is roughly triangular, 75 miles east-west along the base and 100 miles north-south, comprising the administrative districts of Düsseldorf, Cologne and Aachen. It is in this region, it will be recalled, that Dr. Adolf Herrnbrödt has made his memorable excavations in the last few years on mottes at Hoverberg, Husterknupp and Büderich. The author is a pupil of Herrnbrödt who, like him, until recently worked at the Rheinisches Landesmuseum in Bonn. The book therefore constitutes a very useful piece of background information, providing a brief account of other mottes in the area for those using Herrnbrödt's excavation reports.

The inventory is a model of its kind with notes of position, condition, plan (if one exists), literature, where finds (if any) are housed, and dimensions. A small number were specially surveyed by the local authority, but in other cases an old survey has been illustrated. In figs. 13 and 14, plans of the same monument made at different times strikingly show the wide variations in interpretation open to surveyors. The list is preceded by a brief description of researches on mottes in this region, and a well-chosen list of recent works in German and other languages on mottes in other areas. This is accompanied by three maps showing the position of certain and doubtful examples, those that have been excavated and those that have two parts (i.e. a bailey or Vorburg as well as the motte). It is a pity that this list could not form the basis of one of similar thoroughness covering the whole of Europe.

After his definition of a motte the author tells us that 81 of the 148 sites listed fall into this category and another 46 doubtful sites probably do, but the evidence for the remainder is dubious. He then proceeds to classify them according to the size: over 10 m. high are big, 5-10 m. are normal mottes and under 5 m. can be regarded as small mottes. It is interesting that the examples of large mottes he gives are north of Aachen and virtually out of the Rhineland. The great majority of Rhenish earthworks fall into the category of the small mottes, 2.5-5 m. high. He is doubtful, quite rightly, as to whether mounds less than 2.5-3 m. high are entitled to the name motte. Mottes with baileys predominate. A substantial amount of excavation evidence is available. So far as the mottes proper, high mottes, are concerned the evidence is not very different from that in England: they do not appear to be earlier than the 11th century and various later buildings were erected on them in the 13th century. The real difference is, of course, that earlier settlements have in more than one case been found underneath a motte. Is the 'Kernmotte' at Husterknupp more in the nature of a Dutch terp or is it really an ancestor of the motte? We have returned to our initial controversy!

The English reader will note two distinctive, no doubt interrelated, features of the Rhenish mottes, certainly due partly to geographical circumstances: I refer to the general lowness of the mounds, and of course, use of a wet moat. The Rhenish motte was conceived of more as an island defence (that is the mottes in the area of the tributaries of the Rhine, not the rather large examples in the group north of Aachen) than is the case in this country. In England wet moats are not uncommon (e.g. Pleshey and Rayleigh in Essex) but high ground was usually preferred, if available. One thinks for

instance of Pickering where the Vale was avoided. No doubt a steep gradient was a strong defence, but the desire for display in a prominent position was surely almost as powerful a motive. There is however no reliable basis for comparisons between English and Rhenish mottes, since at present no survey containing data of this kind exists for this country.

M. W. THOMPSON

*Warfare in England 1066-1189*. By John Beeler.  $9\frac{1}{2} \times 6\frac{1}{4}$  in. xiii+493 pp., 13 figs. Ithaca: Cornell University Press, 1966. Price \$12.50.

Before 1776 the Americans and ourselves shared a common history and we need, therefore, feel no surprise that English medieval history has been the subject of much, often distinguished, American scholarship. Two American scholars' names, Sydney Painter and Warren Hollister, have already become permanently associated with English military history of the Norman period and we must now add another, Professor John Beeler of the University of North Carolina, whose book was appropriately enough published on the 9th centenary of the battle of Hastings.

Professor Beeler's book is divided into eleven chapters. The first seven follow military events in a straight chronological narrative from Hastings to the death of Henry II, three chapters being devoted to the fighting of Stephen's reign. There follow two chapters on warfare in the Marches of Wales which must prompt the reviewer to ask why the title of the book does not mention Wales. The last two chapters deal with how the armies were raised, knight service, the *fyrð*, mercenaries and so on. The book concludes with three appendices that are lists of castles and a valuable bibliography.

In this review I propose to start at the end and work backwards for the very good reason that for the medieval archaeologist it is in many respects the lists of castles that are the subject that touch him most. Mr. Renn has published a map of mottes, we may recall, and Dr. Allen Brown a list of castles recorded in documentary sources up to 1216. Appendix A lists castles in England, 1052-1189, by counties, including any documented castle and any motte-and-bailey. It is a pity that it is not explained how exhaustive the search for mottes was; were all 6-in. O.S. maps combed, for instance? On the assumption that any earthwork motte in England (not in Wales or Ireland of course) is earlier than 1189, it seems a fairly foolproof method. I estimate the total listed at about 900 which probably means that the real original figure was something over 1,000. Appendix B sets out reign by reign the castles for the first time recorded while Appendix C sets out tabularly castles recorded in the pipe rolls of Henry II's reign and the first year of Richard I's. Although most of this information is already available in the *History of the King's Works*, tabular presentation makes it quickly appreciated. These appendices should be of great value to the student of this period.

Dr. Brown has shown how there was a tendency for an increasing proportion of castles to become concentrated in the hands of the crown. The crucial period was the reign of Henry II, when first the construction of unauthorized castles was prohibited, and then the crown embarked on castle-building on such a scale that it really altered the concept of what a castle ought to be and made the costs of construction almost prohibitive for anyone except the king. One need only compare the probable costs of the work of Earl Randolph of Chester in the 1220s at Beeston, Chartley and Bolingbroke with those of castle-building in Stephen's reign to appreciate the change that had taken place.

The sources of military manpower are described with great clarity by Professor Beeler. No doubt the main source was always feudal, the service of knights, but in many ways the additional sources, the pre-conquest militia duty that produced the *fyrð* and use of mercenary troops, are more interesting. Mercenaries were used at Hastings and whenever there was prolonged fighting. One wonders indeed whether the circumstances that are alleged to have produced 'bastard feudalism' in the late middle ages might not to some extent have obtained during the period of 'high feudalism'; the motives

alleged to have influenced the constructor of the tower at Tattershall may perhaps have not been entirely out of the mind of the builder of Hedingham keep.

The two chapters dealing with the Norman attempts to conquer Wales are of absorbing interest. Why is it that over 120 years these efforts, which included major expeditions, proved abortive, while Saxon England after one major battle and a few years of fighting was so thoroughly subdued? Wales was much smaller, although its mountains were no doubt a formidable obstacle. As Professor Beeler shows, the real obstacles were social and political and comparison of the Norman efforts in the two countries is perhaps an example of Bloch's comparative method. However much the historians may argue about what institutions may or may not have been taken over from the Saxon kingdom, the fact is that the conquest was so rapid and successful in England precisely because it was a relatively mature country, administratively and politically, that confronted the Normans, and so unsuccessful in Wales because this basis was so entirely lacking.

The first seven chapters of the book deal with military events from the Hastings campaign in straightforward narrative form. From the nature of the sources available it is inevitable that on many crucial points we do not know the answers and there will be certain matters where some students will disagree with the author. We may well doubt whether castles were sited strategically (pp. 51 ff.), since they were built by a number of different people and it is very improbable that their strategic needs coincided. However there is no need to quarrel about minor points when we must all be indebted to the writer for disentangling the military from the political events of the period.

There is however one problem, indeed the central enigma of the subject, on which the author seems unable to help us. If the main instrument of warfare was the mounted knight with lance why is that the main form of warfare, in castles, totally excluded his use? The period opens with a pitched battle at Hastings where a portion of Duke William's army were cavalry, but thereafter field fighting seems with rare exceptions to have stopped. The exceptions were often almost accidental (Lincoln) or where the opponents were largely Welsh or Scottish (the Standard). There seem to be two possible alternative explanations. First, the lance was still only used in jousting and not employed in proper fighting. The battles of the Standard and Lincoln seem to suggest that this was so since in these cases the combatants fought on foot. The second alternative is that the object of the fighting was precisely to avoid a decisive conflict by confining it to castle warfare. The interminable fighting of Stephen's reign and some curious events (as at Winchester when the enemy were allowed to escape) make one doubt the will to win on one side or the other. Perhaps there is some truth in both possibilities, but the student of the subject must make up his mind (perhaps study of warfare on the continent and in the crusades would help) if the military history of the period is not to remain an enigma.

M. W. THOMPSON

*Winchester Excavations 1949-1960*, vol. 1. By Barry Cunliffe and others. 9 $\frac{3}{4}$  × 7 $\frac{1}{4}$  in. xiv + 190 pp., 9 pls., 66 figs. Winchester: Museums and Libraries Committee, 1964. Price 15s. (paperback), £1 5s. (cloth bound).

In undertaking the publication of the results of archaeological research in Winchester between 1949 and 1960 the City of Winchester, through its Museums and Libraries Committee, has adopted a farsighted policy which will place all those interested in the history of English towns greatly in its debt. The initiative taken by the City, and Mr. Frank Cottrill's systematic recording of building sites since his appointment as Museums Curator in 1949, together with the results of formal excavations by the City Museums and the now defunct Winchester Archaeological Society, have alone made this book possible. It is the first of perhaps three volumes which will describe work done before 1961, when excavations under what is now the Wessex Hotel led to the formation of the Winchester Excavations Committee. Professor Barry Cunliffe's contribution in

publishing this work (some of which he directed in the field) is the more welcome because Winchester was not lucky in its antiquarian observers in the 18th and 19th centuries—or indeed until the middle of this century. What in other towns had been recorded and published, often many years ago, has in Winchester been lost. In 1900 Haverfield, writing in the *Victoria County History (Hants, 1, 285–93, pl. opp. p. 286)* could point to only 26 Roman discoveries, the result of observation over two centuries. As for the pre-Roman, Saxon and post-conquest periods little except the greater architecture had received any attention whatsoever until well on in this century.

Over half the present volume is devoted to the medieval period. The remainder, dealing with the Roman and pre-Roman periods, has already been reviewed elsewhere (*Antiquity*, xxxix (1965), 309; *Archaeol. J.*, cxxxii (1965), 246–47). The area examined lies between High Street and St. George's Street, bounded to the west by Jewry Street and to the east by St. Peter Street. The excavation of another area on the west side of Staple Gardens is also described. The finds and structures range in date from the 10th to the 16th centuries. Mr. J. G. Hurst and Mr. G. C. Dunning have contributed long and important sections on medieval pottery, and Mr. R. J. Charleston has discussed the medieval and later glass.

Mr. A. B. Norton has outlined the documentary evidence relating to the two areas. In the St. George's Street area there is a reasonable correlation between this evidence and that of archaeology. In Staple Gardens the situation concerning the 12th-century hall and chapel is not so clear. There is much more documentary evidence than has been used and, until this has been studied (work now being undertaken by Dr. Michael McVaugh of the University of North Carolina), the speculations here (pp. 171–76) must be treated with the greatest caution. Unfortunately the report does not do this (p. 164), while the dating of the pottery is as usual much less closely defined than one would wish (p. 182, fig. 63, nos. 5–10).

If we turn to the major structures excavated, pride of place after the hall and chapel in Staple Gardens must go to the church of St. Peter-in-Macellis. The very large number of churches in medieval Winchester, certainly over forty, is surely a reflexion of the establishment of proprietary churches during the consolidation of the late Saxon *burh*. Four churches have now been, or are being, excavated: St. Peter-in-Macellis, St. Rumbold, St. Maurice and St. Mary in Tanner Street. The interpretation of St. Peter's put forward in this volume depends on two assumptions: first, that the earliest stone church is that mentioned in 1012; second, that the lane leading to the church led across St. George's Street to the now lost Alwarene Street. The first may be correct, but is not capable of proof. The walls of the church were not removed to check the possible existence of an earlier timber church and the evidence for the structural sequence of the church is not presented in sections and photographs. With regard to Alwarene Street, subsequent research has shown that it was the name of St. Peter's Street down to c. 1290, but that after that date the name was lost, the street being called Fleshmonger Street until the 18th century. It is thus unnecessary to postulate changes in the alignment of the lane leading to St. Peter's Church (p. 25).

Other problems concern the sequence of floor levels north-east of the church. On p. 25 these are attributed to the 'late eleventh or early twelfth century'; on p. 45 this becomes 'eleventh century or earlier', while the fact seems to be that they are cut by pit M.31 datable to the second half of the 11th century (pp. 46, 109). Pits M.25 and perhaps M.27 pre-date the earliest church and look 10th-century in date; the floors could belong to the same phase. The point is important: the existence of domestic occupation in this area before the construction of the church is of interest for the growth of the built-up area in the late Saxon *burh*.

Turning to the finds, it is useful to have so much medieval pottery published in groups, but it must be recognized that these are groups and not stratified sequences (as one reviewer seems already to have accepted). Pottery is published from 23 closed deposits, and of these only four have any kind of independent dating: pits M.25 and M.27 are

probably earlier than 1012; the cellar at 102 High Street may well have been filled c. 1337 (pp. 27, 51-52) and the 'Tudor' cellar at Kingdon's Workshop ought to have been abandoned before 1604 (pp. 25, 51). The other groups have no evidence of date, except that derived from typological comparisons with medieval pottery elsewhere in southern England, and this reviewer finds himself in disagreement with several of the suggestions put forward. This is only to say that the quality of the evidence must be recognized; it is not to decry the great value of the publication of so much associated material: pits M.4 and M.31 (11th-century), M.35 (13th- to 14th-century) and M.1 (1500-50) are particularly noteworthy.

As there are to be further volumes, however, something must be said about the general arrangement of the finds. There seems to be no advantage gained and much confusion caused by publishing the groups in their serial and not their chronological sequence: fig. 28, for example, has material from seven locations ranging from the 11th to the 14th century. One may hope that in future volumes the pottery will be presented by groups in chronological order.

Lastly, it is inconsistencies in dating which make this volume difficult to use. These are not confined to the medieval period for they occur also in the iron-age and Roman sections. In the medieval period the confusion over the early floors has already been noted, and the same can be said of pits M.4, 23, 31 (pp. 25, 94, 109, 184) and the Tudor cellar. It is clear that many of these dates are by nature imprecise, but a reasonable bracket having been chosen, it should be adhered to throughout and not changed, sometimes at a crucial point as with pit M.31. The outcome is that in order to use the volume with safety, one must check through every mention of a feature and its associated finds (not all of which are mentioned in the tables) and correlate the different dates given. There is room for improvement here. But this should not obscure the very real service that Professor Cunliffe has done in making this otherwise inaccessible material generally available, and the great difficulties of correlating other people's work carried out in difficult conditions and with varying degrees of competence. We all look forward to further volumes and at the same time express our thanks to the City Council for their wisdom in making this publication possible and to Professor Cunliffe for making it practicable.

MARTIN BIDDLE

*The Glass Industry of the Weald.* By G. H. Kenyon. 10 × 7½ in. 221 pp., 22 pls., 21 figs. Leicester: University Press, 1967. Price 50s.

Mr. Kenyon's title promises less than he gives, for he deals not only with the Weald itself but, by drawing on evidence from other forest glasshouses, presents a picture of the whole of the forest glass industry which flourished in England from sometime in the 14th to the early 17th century, when coal-fired furnaces came into use and a royal proclamation of 1615 prohibited the use of wood as fuel.

The book is very easy to use, for the subjects are clearly divided into chapters: the documentary evidence for the beginning of the industry, the raw materials, the fuel and crucibles, the descriptions of the furnaces, the products, the administration, the glassmaking families, and, finally, a catalogue of 42 sites, 26 proved, the rest probable or possible. The author's determination to make each chapter complete in itself has caused some duplication, but not excessive repetition. The material used is not, for the most part, easily accessible to the student: documents in the Guildford Muniment Room, the typescript of T. S. Cooper's pioneer work, an unpublished thesis by Mrs. E. S. Godfrey and widely scattered published work. The author himself worked with S. E. Winbolt and is reassessing his work and the earlier work of Cooper as well as adding the results of his own studies and recent excavations. This is not a revised edition of Winbolt's *Wealden Glass*. It is a far fuller account of the industry.

It is far from easy to put any convincing flesh on the bare bones of medieval glass-house sites and to say who worked there. Even the approximate date of a furnace is

rarely possible.' For the archaeologist therefore, through no fault of the author, this book is slightly disappointing. The only full excavation of a Wealden site is that at Blunden's Wood by Mr. E. S. Wood. The recent work at the Jamestown glasshouse is also drawn upon. Even they present some difficulties of interpretation, for the use of the various parts of the glasshouse are not beyond dispute. Only 4 plans of Wealden sites are reproduced: Winbolt's plan of Hazelbridge Hanger, which is unintelligible; Fernold, which is too schematic to be of real use; a revised plan of Vann; and the plans and sections of Blunden's Wood. Bishop's Wood (Staffs.), which is similar to Blunden's Wood larger furnace, is put in for good measure, but the sections (half the scale of the plan) cannot relate to it in the manner indicated by the lettering. The illustrations of vessels are few and some are sketches where a conventional style of archaeological drawing would have been more acceptable. Only fragments found on the sites of the furnaces, pieces which have escaped reuse as cullet, are illustrated. The record might have been filled out by using material from other sites, although this is open to the objection that the glass, even though it be forest glass, is not proven Wealden glass. As Kenyon remarks, not all the glass found on a furnace site is made there. Some is imported cullet and it seems certain that most of the coloured glass is imported. Only the small crucible of ruby glass from Lower Chaleshurst (p. 161, pl. iii) is evidence that anything other than green glass was made. Two types of green glass are distinguished, type X, which is Late (post-1567), and type Y which appears in both Early and Late contexts. The distinction is in the appearance of the glass, not in the raw materials.

The book should not be judged on its strictly archaeological content. The documentary evidence, which is presented fully with much direct quotation, is of the greatest interest and importance. The statistics for fuel are particularly valuable. The abundance of fuel was the reason for the industry settling in the Weald, for any other necessity was brought to the site more easily and cheaply than the large quantity of wood used each year—not however, it seems, a full year. Two local glassmaking families, the Peytoves and the Strudwicks, were substantial landowners farming their own land and probably making glass in the season when there was least to do on the land. Even Carré, who was not a landowner, reckoned to close down for the 8 or 10 hottest weeks of the year. The price of glass, surprisingly cheap when it is set against the cost of fuel and labour, is discussed and the methods of distribution both by carrier and by sea, which means that it could easily reach the whole country and may be the source of much of the glass in the northern monastic houses. The payment of 18 shillings a day (compared with the 1 shilling to other trades) to skilled workers and the fact that landowning families engaged in the business indicates the social and economic position of the glassmakers. The quantity of window and vessel glass produced annually and the number of furnaces in use at any one time cannot be assessed. Kenyon thinks it doubtful whether half the sites are known. But the picture created from these scattered and incomplete sources is coherent and convincing.

Obviously this is a beginning, but it provides more than a 'provisional framework'. It is a very solid foundation on which the archaeologist can build.

DOROTHY CHARLESWORTH

*The Historic Architecture of Scotland.* By John G. Dunbar. 10 × 7½ in. 268 pp., 208 illus. London: Batsford, 1966. Price £5 5s.

The publication of a book on Scottish architecture is a rare event and this one is doubly welcome in times of 'comprehensive development' and 'package deals'. By covering the field down to the beginning of the Victorian era, Mr. Dunbar effectively nails the wearisome myth of 1707 being 'the end of an auld sang' and all that. It is greatly regretted, however, that he stopped there. In addition to the more familiar realms of castellated, ecclesiastical and burgh architecture, well-ordered chapters cover lairds' houses, country mansions, industrial building and the vernacular work of

rural houses and villages. It was also a happy thought to provide lists of buildings and sites worth visiting and thus encourage study 'on the ground'.

The chapters on domestic building give a narrative of developments from early castles to Georgian Gothick ones. The enfilade ineffectiveness of the towers round the curtain of Rothsay is rightly pointed out, but not the fact that the evidences indicate their being of secondary date. The simple hall-house plan of Rait illustrates the description, but plans of the more complex Morton and Tulliallan are not given. The development of later dwellings, lairds' houses and country mansions is lucidly treated and due reference made to the work of Bruce, Smith, the Adams, Elliots and other architects.

The subject of burgh architecture, first dealt with by the late Ian G. Lindsay in Batsford's *Stones of Scotland* (1938), is given ample and well-detailed treatment. It is surprising, however, to find Dunbar Tolbooth given as 'about the same date as the Glasgow Steeple'—that is 1626—for while this may be true of its tower, the deep gabled crowsteps of the main building seem significantly earlier.

Like the domestic work, ecclesiastical architecture is dealt with in a piece down through the post-Reformation period. The Irish antecedents of the 12th-century church of Egilsay are rightly remarked, but not those of St. Oran's, Iona, whose doorway details look fixedly towards Aghadoe or Clonmacnoise rather than to Dunfermline or Durham. Strange too is the comparison made between the west ends of the abbey churches of Kelso and Kilwinning. Surely the former is a characteristic Rhenish arrangement of transept and short west limb (not a Galilee porch) and the latter a *westerblok* complex with twin towers, possibly never completed.

The study of industrial architecture, though necessarily brief, is a timely one. Of the early 'bloomeries' of the highlands, Goatfield—better known as Furnace—is wrongly dated as 1775. Its iron beams bear the date 1751. The discussion of vernacular techniques in rural building is likewise a valuable incentive towards further study in this field, but it is too sparingly illustrated.

The whole text is marked by scholarly orderliness and an easy readable style enriched by a wealth of contemporary quotations. The line blocks are incisively clear, albeit with an irritating lack of compass points in plans, and the photographs are profuse, but of much too uneven a quality. Whatever its shortcomings, this volume is a massive achievement which will long continue to be essential reading for all interested in the architecture of Scotland.

GEORGE HAY

*The Uses of Air Photography, Nature and Man in a New Perspective.* Edited by J. K. St. Joseph and published under the auspices of the Cambridge University Committee for Aerial Photography. 12½ × 9¾ in. 166 pp., 84 pls., 5 figs. London: John Baker, 1966. Price 65s.

The Director of Aerial Photography at Cambridge has made many notable contributions to medieval archaeology, particularly by taking the photographs that formed the basis of the two books, *Monastic Sites from the Air* (Cambridge, 1952) and *Medieval England, an Aerial Survey* (Cambridge, 1958), with texts, respectively, by Professors D. M. Knowles and M. W. Beresford. He is now the editor of this general work that contains an editorial introduction and twelve essays by specialists on various fields in which aerial photography can be applied. These are indeed fascinating and illustrated by superb photographs, but, although some of them deal with closely allied subjects, only the last four can be said to be archaeological. Most of the photographs are new, but little of the matter, although we must except the essay by the late Sir Ian Richmond with its discerning and sensitively written meditations (one might say) on aerial views of Shrewsbury, Caernarvon, St. David's and Castle Acre. This attractive book should even further enhance the high esteem in which aerial photography is held by the medieval archaeologist.

M. W. THOMPSON

The following book has also been received:

*Archaeology for the Historian*. By D. P. Dymond.  $5\frac{1}{2} \times 8\frac{1}{2}$  in. 28 pp. London: the Historical Association, 1967. Price 5s.