# Reviews

Hillfort and Hilltop Settlement in Somerset in the First to Eighth Centuries A.D. By Ian Burrow. (B.A.R. British Series, 91). 21 × 29 cm. 328 pp., 42 figs. Oxford: Brit. Archaeol. Rep., 1981. Price £12.00.

The essentially independent topics of Roman to post-Roman continuity, and of the post-Roman building or re-use of hillforts, are obviously of great interest to readers of this journal. A key area for research has been SW. England, where Dr Ian Burrow is one of the leading workers. We must therefore welcome this detailed statement of his views, based on his doctoral dissertation.

The intellectual background to Burrow's research was one in which it was thought that any unexcavated hillfort in Somerset was as likely to belong to post-Roman as to pre-Roman times; and in which it was firmly believed that the occurrence of chance finds of Roman material on a hillfort was in itself evidence for occupation in the period A.D. 400–700. We now have, thanks to Burrow, the data for evaluating these beliefs.

This review will concentrate on hillfort use after A.D. 400. It should be noted, however, that Burrow appears reluctant to admit that significant changes occurred in the 5th century. He makes no mention of the fiscal and economic effects of the removal of the Roman taxman and army, or the political effect of the expulsion of officials owing their allegiance to Rome rather than to a native rex or tyrannus. He very rightly stresses the need to see hillfort developments in a wide social and cultural context; but he fails to appreciate the significance of the removal of Britain from the imperial political and economic context.

The statistics for hillfort re-use are as follows. Out of 89 hillforts and hilltop settlements in Somerset, about 26 have been sampled by excavation. Of these, some 20 have produced Romano-British material, which is largely indicative of domestic occupation or religious use, rather than of burial or coin-hoard deposition. Not more than three hillforts have yielded evidence for a post-Roman presence in the form of Mediterranean or Gaulish imported pottery. At a handful of other sites there is surface evidence, untested by excavation, which is

regarded tentatively as indicating post-Iron Age or even post-Roman structural activity.

At present, however, any discussion of re-use and continuity must be founded on the three examples of Ham Hill, Cadbury by South Cadbury (Cadbury–Camelot) and Cadbury by Congresbury (the barbarously nicknamed Cadcong). Ham Hill has produced three dubious B-ware sherds from meaningless contexts. At Cadbury–Camelot, Burrow accepts that the stratigraphy indicates a clear hiatus between the late Roman (3rd and 4th century) and post-Roman (late 5th and 6th century) occupations. Empirical justification for late Roman to post-Roman continuity must therefore depend entirely on the evidence from Congresbury.

There, it is claimed, stratigraphic and distributional analyses show that Romano-British pottery was already in use on the site before the appearance of imported wares; that this pre-import phase was not an isolated episode, and that the phase with imports flowed from it without any hiatus; that the pre-import phase, in which some of the pottery is typologically of the 3rd century, is actually to be dated to the late 5th; and that typologically Roman pottery continued in use alongside the imports. To this reviewer, at least, the discussion of these claims appears convoluted and obscure, and it is not well supported by the text illustrations. It is also admittedly confused by the well argued inference that some

Roman pottery and other material were brought to the hillfort in an already broken condition.

It is, however, certain, that some Roman pottery is stratigraphically isolated before the appearance of any import wares. Moreover, some of the pottery which was actually broken on site, and which, therefore, we may infer had been used there, belongs typologically to the 3rd century. It seems reasonable, then, to believe that the pre-import phase begins as early as that date, however late it may continue. The large admixture of Romano-British and imported pottery can be seen as the result of dumping and building activities in the late 5th and 6th centuries, and also of post-usage disposal — a topic, incidentally, which is not discussed in the light of either modern taphonomic theories or of widely-based empirical observations.

At the end of the day, it must be admitted that there is no basis, whether in theory or in observation, for establishing how long Roman pottery continued to be made, or how much longer it continued to be used. It is conceivable that, one day, Roman pottery may be found stratified along with import wares in such a way as to demonstrate unequivocally that they were in use contemporaneously. At present, it cannot be affirmed that this has been demonstrated at Cadbury–Congresbury. It was no doubt Dr Burrow's misfortune that he had to write his thesis at a time when the stratigraphic analysis of the excavation was still incomplete (see p. 125, lines 12–13 from bottom).

The other topic of especial interest to readers of *Medieval Archaeology* is Dr Burrow's discussion of various generalizing interpretations or 'models' of hillfort re-use. These are treated as a number of discrete models without any full exploration of their interrelationships. For instance, he examines what he calls 'the Alcock' (recte Dinas Powys) 'llys model' in terms of political/social function alone, without appreciating firstly that it necessarily includes within itself all four of his economic models — as, indeed, his own quotation from Dinas Powys, p. 55 makes clear. Secondly, given the reasonable postulate of royal circuits, the individual llys may have been part of a wider political, social and economic system; and might indeed, merit the Latin term urbs regis.

Beyond this, it has long been acknowledged that the relatively large size of Cadbury-Camelot and Congresbury requires some further explanation. I would endorse entirely the parallel which Burrow draws between the relationship of Cadbury and Ilchester in the late 5th century and that in the early 11th, when the mint was removed from the low lying Ilchester to the emergency burh of Cadbury. I would not myself use the expression 'burh model' here, but would prefer the Bedan term civitas. But Burrow does not really look beyond Somerset to the wider fields of post-Roman Celtic Britain. Consequently, highly relevant categories like villa regalis, and multiple (or discrete) estate do not occur in his vocabulary.

This review has concentrated, in some depth, on two topics; but these are far from representing the whole volume. Among other valuable sections are surveys and gazetteers of the Somerset hillforts; a survey of Celtic place-names and church dedications; and some relatively up-to-date statements about the very important Cadbury–Congresbury excavations. The excessive frequency of typing errors — some of them seriously misleading — should not blind us to the good service which the B.A.R. organization has done in making available Dr Burrow's data and his contentious conclusions.

LESLIE ALCOCK

The Anglo-Saxon Cemeteries of the Isle of Wight. By C. J. Arnold. 22 × 28 cm. 127 pp., 76 figs., 10 pls., 1 in colour. London: British Museum Publications Ltd, 1982. Price £35.00.

Early Anglo-Saxon Sussex (B.A.R. British Series, 112). By Martin G. Welch. 2 vols. 21 × 29 cm. 654 pp., 184 figs., 7 pls. Oxford: Brit. Archaeol. Rep., 1983. Price £27.00.

Both of these works deal with finds of the early Anglo-Saxon period in the south of England, one covering the area of the Isle of Wight, and the other the county of Sussex. The

first catalogues and illustrates grave goods from eleven cemetery sites, and uses extant material in museums and also records left by the 19th-century excavators who stand accused of eccentricity and dishonesty. For grave 13 at Chessell Down only an extant button brooch is illustrated (wrongly labelled fig. 5, 12iii), although the catalogue itemizes the missing objects, i.e. four knives, a bronze ferrule and a bronze buckle 'with kidney-shaped loop and attachment plate with three rivets'. These descriptions must be taken from the drawings in the Dennett MS<sub>1</sub>, although an illustration therein shows that it is the buckle plate and not the loop which is kidney-shaped, and no illustration of the MS drawings is given, nor even a reference to their earlier reproduction in a publication of 1965, when the Dennett drawings of grave 12 were also published. Arnold illustrates only the extant tweezers from grave 12. and gives short descriptions of the other objects without reference to the already published reproductions. A reference to an unidentified buckle on p. 68 is presumably to that in grave 12, and suggests that he is unaware of the connections between the kidney-shaped loop and rectangular plate of what is probably an inlaid iron buckle and the catalogue items 11 vii and ix. Similarly, for grave 7 three extant items are illustrated, but there is no reproduction of, or reference to, the MS illustration of item 7vi which was probably a silver applied disc brooch with a plait border.<sup>2</sup> These few examples show that all evidence available in the records has not been presented.

The two volumes on Sussex are far wider in scope, dealing with settlement as well as cemetery material, and including place-name studies. Throughout the approach is painstakingly comprehensive, as befits a doctoral thesis. In the catalogue each site is provided with an exhaustive list of primary and secondary accounts, and the discussions of object types contain useful summaries of studies on the subjects to date. The analysis of the Alfriston cemetery is carried as far as possible with the defective records available. The theory of Highdown as a late Roman cemetery used by an isolated Germanic group and the area between the Ouse and Cuckmere as an area ceded by treaty to another group of Germanic mercenaries is an attractive one, and the few 5th-century finds which have so far appeared in the territory between, such as the Brighton spear, are not sufficient to shake it severely. Nor, so far, is the new site at Keymer, which has already produced a 5th-century buckle and brooches, so that the special pleading brought forward without good reasons for deposition

some graves in Sussex, but frequently any grave group containing one continental object datable to the mid 5th century or earlier has been regarded as deposited in the 6th century on the grounds of stylistic considerations of other associated, undatable objects, or without any stated reasons.

of these new finds in the early 6th century is superfluous. A 5th-century date is conceded for

The interpretation of a pattern on the tongue base of a shield-on-tongue buckle as a 'stick man figure' is not acceptable, for it may be recognized as a Christian cross with forked terminals, a form frequently used by the Merovingians,<sup>3</sup> and the tongue base is a normal place for a cross.<sup>4</sup> It is unfortunate that fig. 5 shows an ivory ring, a female possession, in an important 5th-century warrior's grave, Alfriston No. 14, while it actually belongs to a separate grave, No. 14a. In a 1983 publication it is surprising to find no metric system, but

measurements given in inches, to the nearest sixteenth.

Both publications are large in size and costly, and no attempt seems to have been made to economise on space. In the Isle of Wight text there are several nearly empty pages, and in both the layout of the catalogue is unnecessarily spacious. In both the choice of scale at which drawings of objects are reproduced is strange and uneconomic. The scales in the Isle of Wight book for bronzes vary, 1/1, less than 1/1, 1/2 and 3/2, and undecorated and simple pots are unnecessarily large at 1/2. Measurements are placed with the drawing instead of in the catalogue. The captions 12iii and 13iii have been reversed, and the diameter measurement of 9.1 cm for a bucket plaque 3viii must be incorrect. In the Sussex volume most of the bronzes are reproduced 3/2, a large scale which results in a single square-headed brooch taking up the whole of p. 534. Such an inflated scale of reproduction would be pointless and space-wasting even if the drawings were expertly made from the objects themselves, but these are all made second-hand from photographs so that details are unreliable and do not bear enlargement.

The beads are mostly illustrated in strings, a useless repetition of uninformative drawings. On the other hand, the small pin from Jevington is unrecognizable at 1/2.

We are indebted to the two authors for their industry, for both works fill a great need for the recording in illustrated catalogue form of a total collection of early Anglo-Saxon finds in a selected area, a valuable achievement even if the full potential of the Isle of Wight records was not exploited, and the illustrations of both are of low quality. The commentary is competent in both, although more extensive in relation to the larger scope in Sussex. The dating of the beginning of Germanic presence in the Isle of Wight to the late 5th or early 6th century favoured by Arnold is too late in view of the amount of 5th-century finds. The quoit brooch style products in Sussex are still attributed here to Romano-British manufacture because of lack of due regard to their exclusive occurrence in Germanic graves in close association with Frankish inlaid ironwork, early glass and bronze-bound buckets, and to the existence of similar continental forms, techniques and designs, and the complete absence of comparable Romano-British work. At least however, the date for the beginning of the style in the first half of the 5th century is accepted on the evidence of the immediately post-Roman characteristics of the Mucking buckle.

The size of these reports show that serious thought must be given to similar publications in the future for methods of shortening, and in the commentary this may be achieved by reference to, rather than repetition of, published accounts of object types, and comment limited to areas of disagreement or new developments.

VERA I. EVISON

### NOTES

<sup>1</sup> V. I. Evison, The Fifth-century Invasions South of the Thames (London, 1965), 37, pl. 7a and b.

<sup>2</sup> Trans. Brit. Archaeol. Ass., Winchester vol. (1845) fig. on p. 153; V. I. Evison, Early Anglo-Saxon applied disc brooches', Antiq. J., LVIII (1978), 267-68.

<sup>3</sup> E. Salin, La Civilisation Merovingienne, IV (Paris, 1959), fig. 159.

<sup>4</sup> Ibid., I (Paris, 1950), 358, fig. 123; ibid., IV, fig. 82.

Celtic Leinster: towards an historical geography of early Irish civilization A.D. 500–1600. By Alfred P. Smyth. 30 × 21 cm. xvi + 197 pp., 58 pls, 16 maps, 4 aerial photographs. Dublin: Irish Academic Press, 1982. Price £25.00.

A. P. Smyth, senior lecturer in history at Kent, sets out in this unusually lavish book to reconstruct the geography and settlement of Celtic Leinster (excluding Meath) in the pre-Norman period. Based ultimately upon his Dublin M.A. of 1969 the reconstruction of tribal territories is presented by means of a series of four scholarly central chapters and an historical 'atlas' of sixteen detailed maps drawn, with great clarity, by Mr C. Panton. While I am not convinced that the territories of c. A.D. 800 can be determined and delineated as precisely as the text and maps would suggest (especially as much of the detail derives from surviving surveys of the late 16th century) it seems likely that this part of Smyth's work will remain a major contribution to the political geography of Dark-Age Ireland.

His reconstruction of the associated settlement is, however, far less convincing for while attention is focused upon monasteries and hillforts there is barely a mention of the commonest form of earthwork associated with this period, namely the circular enclosed farmsteads variously called raths or ring-forts in the archaeological literature. This is an extraordinary omission: there is no mention of McCourt's published map of the distribution of raths in Ireland — which raises interesting questions, not least of the Leinster evidence nor is there any discussion of Proudfoot's work on the economy of the raths, or of more recent studies such as Barrett's which have stressed the important role of aerial photography in the rediscovery of settlements of this period. Elsewhere in the book field archaeologists are given less credit than is their due.

Based upon his maps the author offers an interpretation of Irish culture and of its reemergence in the later medieval period. His approach is via an environmental determinism the like of which has not been seen for years; it is akin to what used to be called 'the geography behind history'. His main thesis is that Gaelic society flourished in numerous small kingdoms in the central boglands between the Shannon and the Liffey; he argues that this environment, or what he calls a 'monastic ecology', was the ultimate source of much Early Christian Irish literature including the Book of Durrow. The general concept of the continuity of culture in areas of relative isolation, as put forward by Cyril Fox, is of course unexceptionable. But here we are asked to believe that it was the bogland environment per se which produced and succoured this culture. Yet the monastic life and Irish culture flourished in different environments in other parts of Ireland, notably in Ulster and Munster which could hardly be described, to use his irritatingly recurrent phrase, as being 'barricaded behind a wilderness of forest and bog'. Did environment really determine societal organization in the pre-Norman period and its survival into the later Middle Ages? Surely it was in part the inadequacy of the Anglo-Norman territorial conquest, i.e. political and military ineffectiveness, which contributed so much to the survival of Celtic culture in the central bogland area? The 'wilderness', incidentally, which appears, undefined, on almost every page and the 'vast expanses' of forest give a false impression of scale. The author needs to be reminded that he is looking not at a continent nor even Ireland as a whole but at a piece of country no bigger than 80 miles (N.– S.) by 60 (W.-E.) — relatively small even in the Dark Ages. On the one hand he constantly stresses the isolation of groups and of their culture, yet on the other he is at pains to remind us that monastic houses were invariably founded on routeways (and that they were in constant touch with each other), that aristocratic inter-marriage between groups was normal, that clerics, craftsmen and traders moved throughout the region and that the Irish had an intimate knowledge of their environment. He mainly argues for isolation as a reason for the survival of Gaelic culture and yet in E. Leinster, as the reason for its decline. There are inconsistencies in the general thesis in both reasoning and scale, as there is also in a detail (p. 4) where he asserts that England is four times larger than Ireland (it is less than twice as big), a serious miscalculation which has contributed to his estimate of a figure of 250,000 for the population of Ireland in the Dark Ages. We are also told (p. 7) that the early Irish disliked reality (meaning?) yet (p. 31) that they had a keen eye for the nature of local terrain and for the quality of its soils. Interesting though it is, looseness of argument and lack of consistency make me doubt whether this book will mark a 'turning point in the historiography of Early Ireland' as the wording inside its colourful dust-jacket would have us believe.

ROBIN E. GLASSCOCK

Kings and Vikings: Scandinavia and Europe A.D. 700–1100. By P. H. Sawyer. 13 × 21 cm. 182 pp., 19 figs., 16 pls. London and New York: Methuen, 1982. Price £7.50 hardback, £3.95 paperback.

Peter Sawyer's Age of the Vikings is a landmark in Viking studies. Not only was it an imaginative and well-argued account of an important era, but it made available in its appendices Sture Bolin's numismatic studies to a wider readership. Kings and Vikings, we are told, is a sequel to his earlier book. It is, Sawyer states, a general survey, conceived of as a work of synthesis. The author also tells us on p. vi that 'it is, indeed, my hope that this book will stimulate discussions that will contribute to its own obsolescence'. In short, its aims are well set out.

Kings and Vikings is definitely a survey rather than a synthesis. It reads like a ten-lecture course on Vikings, given, I should emphasize, by an eloquent historian. Theme by theme it proceeds to review the period, drawing time and time again upon the great flurry of publications arising from the vogue for Viking exhibitions in the early '80s. Some themes are

well-argued, some are thin. Sawyer's interest in Scandinavian society (chapter 4) stops short of spending too many sentences on paganism (the first part of chapter q). The section on Danelaw land-holding (pp. 102–08) is a valuable synthesis — one with plenty of archaeological implications; but Normandy is described in barely a page (pp. 108–10). Trade with the E. Baltic and down the W. Russian rivers is well covered in chapter 9, though more might have been made of Thomas S. Noonan's numismatic analyses. By contrast, trade between the Carolingians and the Danes is not discussed at length, although it is mentioned on pp. 70, 73 and 77. Raids on the west, inevitably, are given great emphasis (pp. 78-97), while Viking raids further south are barely considered, and those on Slavic and eastern Baltic areas are subsumed into the chapter on 'Baltic and beyond'. Professor Sawyer's interests are clearly revealed, and these constitute the strength of the book; but, then, these reveal at the same time a very traditional approach. The Vikings occur as raiders not traders in the Carolingian documentation, for example; yet, as Sawyer appreciates, the archaeology of Dorestad and Hedeby indicates that commerce and then the collapse of commerce was a vital component in the age of the Vikings. Throughout the book, in fact, archaeological evidence is employed as ancillary information, and is often treated in a cavalier manner.

As might have been predicted from his earlier books, Sawyer's archaeology is of a traditional kind. He has to use recent archaeological evidence because the Viking Age is the end of Scandinavian prehistory, and documented only by later writers or by partisan Christians and Arabs scarcely enamoured of these pirates. Archaeology, however, consists of sites that add a little colour to the documentary survey. No attempt is made to comprehend the prehistorian's approach to data of this kind. The prehistorian's task — reading between the lines on pp. 37–38 — is regarded as fraught with difficulties. Using the town of Hedeby as an illustration he seems to question the merits of assessing the settlement from a 5% sample. Moreover, he seems to be dismissing the cultural remains found in these excavations because these amount to 'a vast rubbish tip, in which few object of any value have been found' (p. 37). Of course, he is wise to question the sampling, as he is right to consider the character and, in particular, the complex nature of the material culture. Nevertheless, as many analyses of this rubbish have shown, it contains an immense amount of information about Scandinavian exchange systems and the societies that generated them.

This restricted, old-fashioned use of archaeology occurs throughout the book. For example, on p. 70 Dorestad is described as a settlement, but the size and significance of the site are nowhere described. Dorestad in these pages, as in countless histories before now, exists as a place visited by missionaries and Vikings. Sawyer adds that it had jettles where pots were broken and millstones were lost. He does not mention the vastness of the emporium in Carolingian terms — a size evidently linked to trade with the Baltic; nor does he comment on the interesting conflict between the chronology of the site, declining around 830, and the familiar story of the Viking raids on the place (described on pp. 81–82). He evidently chose to ignore the same point when he considered *Hamwih*, middle Saxon Southampton. Yet when the chronology of the Danevirke timbers neatly coincides with Charles Martel's campaign in Saxony mention is made of the fact (p. 73).

Archaeologists are as cavalier about historical data, of course, but we might have hoped for more integration of the evidence from Professor Sawyer. He is clearly familiar with recent archaeological developments in Scandinavia, but he chooses the data to fit the historical mood. This is most clearly revealed in his deliberate omission of Randsborg's much praised work on Viking Age Denmark. The author makes one brief reference to Randsborg's research, picking the Danish prehistorian up on a matter of topographical detail (p. 53). Randsborg's attempt to analyse the rise of the Danish state, and his innovative analyses of Viking material, are not mentioned, let alone considered. These matters, many archaeologists would now agree, have stimulated discussions and have advanced the field.

Sawyer has missed his opportunity to use archaeology to examine these pirates in the light of a flood of new research. Archaeology puts measurements on the figures from monkish tales. The quality of the information, collected over many centuries and still collected in exemplary fashion, must rate as some of the finest data pertaining to a complex society

worldwide. Given the nature of the history of the age, and given the traditional picture of this society, it is ripe for an intelligent, inter-disciplinary analysis. The book falls far short of such an achievement. As a survey it will prove useful — a reassessment of one source of data; as a synthesis it scarcely succeeds. It will stimulate discussion, of course, but as an illustration of the traditional approach to the Viking Age. Will it generate its own obsolescence? I doubt it. Perhaps we might ask, though, if Professor Sawyer would consider making it a trilogy on the Viking Age, beginning with the archaeology, and then reflecting on its implications for the documentary sources before compiling the history we should all like to read?

RICHARD HODGES

Viking Age Denmark. By Else Roesdahl. 16 × 24 cm. 272 pp. 53 figs., 51 pls. London: Colonnade Books for British Museum Publications, 1982. Price £16.95.

The publication of this book coincided with the opening in York of the 'Vikings in England' exhibition, and in many ways added depth and detail to the section on the Danish homeland that could only be summarily dealt with in the exhibition. It has also provided for the first time in English a comprehensive and reliable summary of the archaeology of Viking Age Denmark (it has no pretensions to deal with historical material), as it stood in 1980 (when the book was written in Danish). It is so fundamentally different from *The Viking Age in Denmark* by Klavs Randsborg, also written in 1980, that it is futile to compare them; suffice it to say that Rocsdahl's work is that of a specialist in full command of the material . . ..

The book is divided into twelve chapters, of which the first two are essentially introductory (Denmark's Viking Age; the Country and the People), and the last a short conclusion. Apart from some rather irritating elements (e.g. the reference forward for basic maps to figs. 39 and 51) these introductory sections are adequate, but a little workmanlike. The main chapter headings indicate the scope of the work: Transport and Communication; Settlement and Survival; The First Towns; Trade, Industries and Crafts; Daily Life; Arms and Fortification; Pagans and Christians; Art and Ornament; Foreign Contacts. Those on Dr Roesdahl's own special areas of work in recent years are, of course, assured and authoritative, and none more so than the discussions of Fyrkat and its related sites and pagan graves. The chapters on industries and craft, and the foreign contacts are especially useful, with the emphasis in the latter on the contacts with the Western Slav area and the Continent. Sometimes the distribution of material between chapters seems strange: buildings are not discussed with rural settlements, but in the section on 'Daily Life'. Sometimes, too, there are instances where text and illustrative material are not exactly matched up (e.g. pp. 100 and 104).

One of the more imaginative elements of the book is the List of Dates at the end — which would be improved if it stated the basis of the dating (annal entry, dendrochronology, etc.). However, in the text, at some places discussion of dating is a little unsure: on p. 45, for instance, in one paragraph we are told of dating by radiocarbon 'to the 8th century' and 'to about A.D. 1000 or to the first half of the 11th century'. Such statements gloss over the problems of valid expression of the range within which a date may fall, and could well mislead unwary undergraduates. The section on dendrochronology and radiocarbon dating in the Introduction is too short, and in the case of radiocarbon cryptic to the point where it is positively unhelpful.

In terms of production, this book is excellent — free of basic mistakes of proof-reading, and with good reproductions of both photographs and figure drawings. These have been carefully chosen and are integral to the book as a whole. The translation does not show as such and is a credit to Else Roesdahl's original text and to Susan Margeson and Kirsten Williams

With all academic works of synthesis, there is the inevitable danger of over-compression. The chapter on Art and Ornament is, unfortunately, far too abbreviated to be much use and

glosses over too many problems in its nine short pages. However, this is the only major topic that does not receive adequate treatment, and, it will be remembered, did not even merit mention at all in Randsborg's book. Perhaps it is a topic that is now too dependent on a familiarity with a wealth of basic material for treatment except in an extended form. Similar chapters in Foote and Wilson's *The Viking Achievement* and Graham-Campbell and Kidd's *The Vikings* also suffer from over-compression.

In all chapters, except that on Art, little basic knowledge is assumed, and the book is ideal as an undergraduate text-book. Although Dr Roesdahl warns us that 'it will not be many years before at least some parts of every book on the Viking Age will be outdated', in the following chapters her comprehensive notes and referencing ensure that her book will be for long a standard work. It is always possible to move from the summary to the more detailed

primary works upon which it is based, and the bibliography is invaluable.

In summary, this is a comprehensive coverage of a period and country in which there has been an explosion of work in the past twenty years. We are all greatly in debt to Dr Roesdahl for her careful treatment of the theme, and for her considerable contribution to the archaeological research on Viking Age Denmark.

CHRISTOPHER D. MORRIS

Die Ausgrabungen in St Pantaleon zu Köln (Kölner Forschungen, Vol. 11). By Helmut Fussbroich. 21 × 29 cm. 367 pp., 53 figs., 110 pls., 10 folding plans. Mainz: Verlag Philipp von Zabern for Römisch-Germanisches Museum der Stadt Köln, 1983. Price not stated.

This important work on the post-war archaeological investigation of St Pantaleon in Cologne has been keenly awaited for two decades, because the former abbey church is one of the key monuments of 10th-century architecture in Europe. The excavations were conducted from 1955 to 1962 by W. Lung and F. Mühlberg, but the delayed publication was eventually entrusted to the present author, who has striven to provide as complete a record as possible.

The site lies on a low hill SW. of the city, and was occupied by a Romn villa suburbana (the excavation report of which is not included in this volume). A two-phase timber building, W. of the villa, of which the construction and orientation might have suggested an early medieval church, is here shown to be Roman in both phases (with a mid 4th-century terminus post quem for the later) — although the possibility of a continuing post-Roman use as a workshop is not ruled out.

The ecclesiastical history of the site has no demonstrated connection with the earlier phases, but is first mentioned in a charter of 866 when a church of St Pantaleon is recorded as belonging to the bishopric of Cologne. No archaeological evidence of this first church has been discovered, and earlier suggestions that it underlay and determined the plan of the present building are here discounted. To this phase, however, do belong thirteen graves lined with stone slabs that are published here.

Circa 964 Archbishop Bruno of Cologne, the brother of the Emperor Otto I and an important political figure, founded a Benedictine monastery in the church. Bruno's death in 965 prevented him from seeing the completion of the project but, with the help of funds left by him, the necessary domestic offices were finished and the rebuilding of the church carried through to a dedication in 980. Thereafter the abbey came under the patronage of the Empress Theophanu (972–91) and it is suggested as likely, despite the silence of the documentary sources, that further building work was carried out at this time.

The church of c. 964 × 966–80 comprised an unaisled nave, flanked at its E. end by low transcpts, and probably terminating in an apsc. Beneath the E. end was a ring-crypt. At the end of the nave was a westwork with a vaulted ground storey. This was preceded by an atrium leading to an octagonal building with alternating apses and rectangular arms projecting. The octagon may have been intended as a baptistery, as a martyrium and as the

burial place of Bruno; but it seems to have been abandoned incomplete, perhaps on Bruno's death — and the archbishop was in due course buried in the ring-crypt. It is suggested that the first westwork also was never completed.

In the second main phase the nave was extended and a grander westwork was built (sc. that surviving substantially intact, though heavily restored). At the same time the apse and crypt were reconstructed, but without enlarging the building. The excavations alas have provided no new archaeological evidence to settle conclusively the date of these alterations—whether as early as the 980s and 990s, or whether after 1000. Stylistic dating, therefore, remains the principal guide: especially the appearance of pilaster strips in association with cornice arcading; and, if they were contemporary, the monumental sculptures of the W. façade. Fussbroich, however, suggests, that the westwork was built under the patronage of Theophanu, and that it served as a place for the relics and altar of St Albinus, and also for her

own burial in 991.

The church of both phases is of considerable importance for understanding late Anglo-Saxon architecture, since it provides evidence at the highest level of Ottonian society for such features as: a monastic church with unaisled nave and low transepts (albeit without a crossing tower); the continuation of the westwork tradition into the late 10th century; pilaster strips in long-and-short work; monumental external sculptures. Whatever the precise origins of these features at St Pantaleon (and Fussbroich's discussion here does not throw much new light), they serve to provide an international parallel for similar features in contemporary England. The reviewer cannot fail to observe, furthermore, a remarkable parallel between, on the one hand, Bruno's starting on the rebuilding of the church, his intervening death and his burial in the place of honour in the new crypt and, on the other hand, the possible scenario suggested (*Archaeol. J.*, (128), 1971, 196–201) for a partial rebuilding of Canterbury Cathedral, the death of St Dunstan and the latter's burial in association with a new crypt, a few years later than the events at Cologne.

For other than architectural historians this volume has perhaps less to offer: there is, for instance, no publication of the pottery. However, it is worth noting here the existence of a bronze workshop of late 10th- to early 12th-century date occupying the site between the nave and the cloister (the cloister buildings are not otherwise published here), in a position closely analogous to the Plumbery at Salisbury Cathedral. One can but wonder what sort of bronzework was here being produced, and whether the workmen were monastic or lay.

Finally, the publishers should be complimented on the high standard of production of this book: it will serve the volume well in its undoubted role as a standard work of reference for the future.

RICHARD GEM

Excavations in Stamford, Lincolnshire, 1963–1969 (Society for Medieval Archaeology Monograph Series, 9). By C. Mahany, A. Burchard and W. G. Simpson. 19 × 25 cm. 186 pp., 78 figs., 10 pls. and 1 microfiche. London: Society for Medieval Archaeology, 1982. Price £10.50.

This volume, though equipped with the phasing diagrams and fiche that hallmark the post-heroic phase of urban archaeology is, however, very much a mirror of its own time. The excavations that it records took place largely within the rapidly developing context of openarea recording (for a 'prehistoric', or 'heroic', phase of which see Antiq. J., XLV (1965), pl. LXXIV) but well before even the most rudimentary provision was made nationally for post-excavation work. The consequent delay in publication further postponed by the authors' later commitments, has meant that others more single-mindedly focused on the problems have, like Kathy Kilmurry, perhaps beaten them to the post. It is interesting in this context to note that Dr Kilmurry's misgivings about the mid 11th-century archaeomagnetic date for the Wharf Road Kiln, which on stylistic grounds she felt should be of c. 1000, is now vindicated by a recalculation of that date.

What, then, does the volume offer? Not, as the conclusion makes clear, a blow-by-blow account of all post-1963 excavations in Stamford but primarily those that should have thrown light on problems central to the understanding of the town and its origins. That light, however, is fitful; and the epilogue, which concludes that it is 'the historian, rather than the archaeologist, who will write the next chapter in Stamford's complex history' reads as the agenda of a forthcoming campaign rather than the minutes of one past.

Mahany's stress on the tertiary character of the pre-Conquest burh seems to revive Levitsky's artisanal theory, for her sequence, in contrast to the models put forward by Biddle, has a phase of massive 9th-/10th-century iron-working sandwiched between the planned Edwardian street system and a clearly pre-urban phase. Plausible as this hypothesis is the evidence as presented will not sustain it, for we are not offered proof of the statement that 'the layers of [iron-working] fines evidently continue below the metalling of the High Street'. Figures 9 and 57 both show excavation stopping short of the street frontage and the argument hangs on 'an apparently undisturbed layer of roasted ore residue ("fines") in a commercial excavation in the centre of the High Street, almost equidistant between the Co-op site and Site A'.

Similar unease is occasioned by the presentation of the ceramic sequence from Sites A and D, not least because here, as exemplified by fig. 30, the chronological framework is almost non-existent. This is not a consequence of the author's evasiveness: for the problems are faced up to squarely in an introductory section; but it still seems inadequate to present phasing diagrams without some attempt, however hopeless, at periodization.

In many ways, then, the most exhilarating part of this volume is that on the Saxo-Norman iron-smelting site at the 'Co-op': for not only is this evidence largely unknown but it also provides the basis for some wonderfully fleshed-out reconstructions. There are reservations, as always, about the problems of an urban sample but these melt away in the face of the authors' speculation about process and chronology. These are based on calculations of the volume of fines (the residue produced on sieving the roasted and crushed ore) and are related to the size of the furnace and the roasting hollow. From the yield of a furnace the argument turns to the length of time during which the site operated; and this introduces a new dimension to the discussion of relative chronology. Phases 1 to 4, for instance, are separated, it is suggested, by a matter of only a few weeks whereas phases 6 to 7 might both represent separate seasons of iron-working activity.

Chris Mahaney and her co-authors, with the assistance of Ann Morley (whose valued services as editor of the Monograph Series the Society has now regrettably lost), have, in conclusion, produced an urban report that is as incomplete, as frustrating and as tendentious as most others; but also one that kept this reviewer awake long after any non-self-respecting archaeologist should have gone to bed.

ALAN CARTER

## NOTES

<sup>1</sup> K. Kilmurry, The Pottery Industry of Stamford, Lincs., A.D. 850–1250 (Oxford, 1980).

Bordesley Abbey, Redditch, Hereford-Worcestershire: first report on excavations 1969–1973 (B.A.R. British Series, 23). By Philip Rahtz and Susan Hirst. 21 × 30 cm. 277 pp., 41 figs. + 20 figs. in separate wallet, 20 pls., 11 tables. Oxford: Brit. Archaeol. Rep., 1976. Price when published £5.90. Now out of print.

Bordesley Abbey II (B.A.R. British Series, 111). By S. M. Hirst, D. A. Walsh and S. M. Wright. 21 × 30 cm. 298 pp., 101 figs., 11 pp. of pls, 10 tables. Oxford: Brit. Archaeol. Rep., 1983. Price £13.00.

The publication of the first Bordesley Abbey volume in 1976 was a significant event for monastic archaeology. It demonstrated that by applying the range of techniques available to

the modern archaeologist many aspects of the structures and surroundings of a religious house as well as the life of its inhabitants and their patrons could be illuminated. The precondition for this approach is high quality area excavation, meticulous recording and comprehensive surveying. Techniques which had been standard for decades in other branches of archaeology only penetrated the monastic precinct in the 1970s. Bordesley

proved a particularly appropriate choice for treatment.

Volume 1 presents a brief history of the site (the Cistercian abbey was founded in 1138 and dissolved in 1538) and an account of Woodward's diggings in 1864. A survey of the magnificent series of earthworks which exist alongside the abbey is an important section; it includes an attempt to define the monastic precinct and to describe the origins and operation of the water control system. There is also a description of the excavation of the precinct boundary bank and north entrance. The greater part of Volume 1 is taken up with the results of the excavation of the south transept of the church, its nightstair and its side chapels. The excavation revealed the problems that the monks of Bordesley had suffered in consequence of their establishment in a valley site. They were repeatedly troubled by dampness and occasionally affected by flooding in the church. This resulted in a succession of refloorings, each higher than the last, in an attempt to keep ahead of the water table. For the archaeologist this resulted in a depth of stratification which required considerable investigation and elucidation. A comprehensive description and synthesis is provided and periods of activity are identified. There are specialist reports on the many classes of finds including the human burials.

Two novel features of the way in which the evidence was presented in Volume 1 were the landscape A4 format adopted for the main publication, and the inclusion of a series of loose plans in a subsidiary folder. All previous publications in the British Archaeological Reports series had been in the usual portrait A4 format. It was an experiment that B.A.R. would not wish to repeat, according to Philip Rahtz's preface to Volume 2. That is a pity for the great majority of the plans and sections which illustrate Volume 2 have to be presented using the length of the A4 sheet, which involves turning the book through 90 degrees when cross-referring between text and illustration.

Volume 2 is published under the names of Sue Hirst, David Walsh and Sue Wright, all of whom were responsible for aspects of the project described in Volume 1. They have produced an excellent second publication which extends the examination of the church from the south transept to the presbytery, crossing and eastern choir (Section 1) and the northern rooms of the cloister range (Section 2). Everywhere one is impressed with the quality and detail of the information that skilled excavation has retrieved. Of particular note are the emplacements for the timber-based choir stalls, the choir bench end re-used by a medieval builder to keep his feet out of the ever present Bordeslev morass, and the changes in the position of the successor masonry stalls which retreated from the crossing to the first bay of the western arm of the church. There is an important succession of floors from the earliest (reeds strewn on soil) through the first tile floor (plain tiles laid at the notably early date of c. 1200) to a series of decorated floors involving much re-use but with other dirt floors on occasions. The tiles are published in some detail in the finds report in which the opportunity is also taken to reproduce Woodward's somewhat idealized drawings from his book of 1866. The overall scheme for several floors is presented, based largely on tile impressions in bedding rather than in situ tiles.

Catastrophe struck Bordesley in the early 14th century when the NW. crossing pier collapsed. Dramatic evidence for this was revealed by the excavators – five courses, still articulated, of the eastern respond of the pier had fallen and become embedded to a depth of a metre in accumulated floor surfaces and the subsoil beneath. On a smaller scale but similarly noteworthy is the discovery of fittings from books in the dirt which had found its way under the choir stalls, and in one of the rooms at the northern end of the cloister range which the excavator identifies as the armararium (bookstore). One of the reports on finds in Section 3 discusses the book fittings as well as two books from the Bordesley library now in the Bodleian Library, Oxford, and a list of books given to Bordesley by one of its patrons Guy de

Beauchamp – an example of the correlation of information from different sources which in a project of this kind can be so informative.

Section 4 is an architectural study of the church. The north transept and the nave had not been excavated when this section was written but the detail from the bulk of the east end provides plenty of scope for discussion. The value of having an architectural historian (D. A. Walsh) as an integral part of the project team who by observing and taking part in the archaeological exercise is fully acquainted with the detail of the results is fully borne out by his contribution to this volume. Bordesley is placed in its context with respect to developments in Cistercian architecture on the Continent and in Britain. The subsequent developments, whether necessitated by structural problems or changes in taste and liturgy, are similarly presented against a broad background. The necessity for precision in excavation and survey again becomes apparent when Walsh examines the questions of measurement and ratios. He produces convincing evidence of the use of a foot of 29.5 cm and ratios of 1:1, 1:2, 1:3 and 3:4 in the original building. Less convincing is his conclusion, on stylistic grounds, that the church was largely built in the 1150s, probably begun carlier rather than later in the decade! The foundation date for Bordesley is 1138, and Empress Matilda's confirmation was granted in 1142. By 1148 Bordesley had established its first daughter house (Merevale); its second (Flaxley) followed in 1151. This reviewer finds it improbable that the monks waited at least a decade before commissioning masons to start their church. If the stylistic date is correct, is it possible that the monks had made a start elsewhere on their Bordesley land, and found it even more unsuitable than the site at which building began in the 1150s? A related point is the suggestion by the excavators that features found in the earliest levels of the crossing and choir may be slots for timbers of a temporary wooden church. It is improbable that a temporary church would be built on the site destined for construction of the permanent church – it would provide an unwanted obstruction to the builders, would need to be removed before the permanent church had been completed, and it would provide considerable scope for conflict between masons and monks. A much more substantial timber church and other temporary buildings probably await discovery away from the main areas of building activity. At Norton Priory, an Augustinian foundation of similar date, the excavations directed by the reviewer found large temporary timber buildings to the south-west of the main claustral buildings.

On a site as complex as a medieval religious house, there is a law of incremental return from continuing excavation. This is already apparent at Bordesley; these two volumes are in themselves a notable contribution to monastic archaeology which will be further enhanced by volumes that are promised on the remainder of the church and the industrial areas.

J. PATRICK GREEN

Castellarium Anglicanum: An Index and Bibliography of the Castles in England, Wales and the Islands. By David J. Cathcart King. 2 vols., 18 × 26 cm. lxviii + 676 pp., 23 pls, 60 maps. Millwood, New York: Kraus International Publications, 1983. Price \$150.

When the Society for Medieval Archaeology was founded, it was apparent that neither the Royal Commissions on Historical Monuments nor the Victoria County Histories would complete their task this century. Small wonder then that dedicated enthusiasts have been compiling and publishing their own lists and surveys. For 35 years David Cathcart King has been writing both detailed accounts of individual castles, from Damascus to Pembroke, and more general surveys of castles in Wales. Now we have his inventory covering England and the offshore islands as well. The date range is taken down to the death of Henry VIII, and the natural no-man's-land of the Border is not crossed. We all have to stop somewhere.

I am sure that Dugdale would pardon the title — this work deserves to stand out from the dreary adjectival permutations around the noun 'castle'. Physically the book's well-

designed cover has no dustjacket — rightly, since this is a working reference book, well bound to stand up to the heavy use it should get in every library. The one disappointment is that some of the plates are so ancient and shrouded that they should have been decently buried rather than revived.

The introductory chapters give an account of earlier list-makers, from Gervase of Canterbury onward, followed by a magisterial study of the definition and character of a castle in terms of its functions, and concluding with an overview of their distribution in time and space within the above limits. A lot of sound sense comes through here: Cathcart King points out that very few castles were technically 'adulterine' and it was more cost-effective to improve an old castle than to build a new one (Owain Glyndwr was living in a timber hall on a motte in the 15th century.) There is a clear explanation of the differences between English and Welsh law and customs which led to so many anomalics, although this lacks the fire which made his Cambrian Presidential Address 'The Other Side of the Hill'1 so memorable.

The lists are organized alphabetically under the pre-1974 counties, with a simple single-symbol distribution map of each county. Descriptions are necessarily brief (occasionally too brief: the solitary word 'motte' needs some sort of qualification) and sometimes ambiguous. Thus at the beginning of volume II, Castle Rising has 'a small square gatchouse but no curtains' and Horsford is anonymously 'said to have been built at the Conquest'. To be fair, the technical meaning of 'curtain' is given in the glossary and there are references to the documentary sources. Cathcart King lists sites exhaustively (the only major omission I have spotted being Thornbury, Glos.), giving his reasons for downgrading some to 'strong houses' and for rejecting others entirely. Local residents may disagree with his verdicts: thus I do not regard Bletchworth, my local castle, as Vanished (p. 466) since there are medieval windows and mouldings in the ruins of the later house on the site, which had two licences to crenellate — 1379 (not 1377) and 1449. $^{2}$ 

Very conveniently, the bibliography is set out alongside the description of each site. It is particularly useful to have the older references: G. T. Clark's articles in *The Builder* were often illustrated more fully than in his collected works, 3 for example. Some judicious pruning of the bibliography had to be made in the case of the most written-about castles, and it is the fate of every bibliographer to be out of date directly he sends his material to the printer. Microprocessors will eventually resolve this problem, but it is unfortunate that there is an information explosion currently taking place in castle studies, including fundamental reappraisals of sites as familiar as the Tower of London and Raglan. John Kenyon's two bibliographies<sup>4</sup> illustrate this. They are of approximately equal length, but the first covered over 30 years (1945–76) and the second, a little over five years (1977–April 1982).

There is a useful discussion of documented castles whose identification is not obvious. Here again there are cases which need following up by local fieldwork. For instance, Cathcart King points out that William de Boterells, granted ten marks in 1195 ad firmandum domum suam de Matefelun, was lord of Clun jure uxoris and identifies Matefelun with the Crugyn near Clun (Salop) (p. 563). However the late A. J. Bird, who lived nearby, recorded<sup>5</sup> a farmhouse with Norman-looking windows beside a mound just north of Clun village, which could be the place in question.

Indexes of people and places round off the book, which will be an essential source for anyone writing about any castle in England or Wales from now on. Any work as extensive as this lays itself open to criticism on points of detail, but Castellarium Anglicanum triumphantly achieves the objectives of its subtitle. My own card index is now in the wastepaper basket.

DEREK RENN

### NOTES

<sup>&</sup>lt;sup>1</sup> Archaeologia Cambrensis, 126 (1977), 1-16. <sup>2</sup> Calendar of Patent Rolls 1377-81, 380; Calendar of Charter Rolls VI, 102.

<sup>&</sup>lt;sup>3</sup> Medieval Military Architecture (London, 1884).

<sup>&</sup>lt;sup>4</sup> Council for British Archaeology Research Reports 25 and 53.

<sup>&</sup>lt;sup>5</sup> History on the Ground (Cardiff, 1977), 53. I believe the windows are considerably younger.

Sandal Castle Excavations 1964–1973. By Philip Mayes and Lawrence Butler. 21 × 29 cm. 372 pp., many figs., tables, graphs, 23 pls. Wakefield: Wakefield Historical Publications, 1983. Price £30.00 plus postage from Seckar House, Seckar Lane, Wakefield, Yorks.

When an excavation that continued over ten seasons is published it is perhaps legitimate to ask just what has emerged from a very considerable expenditure of time and public money.

Sandal is a very large motte and bailey castle site, spectacular in its commanding situation, to whose visible masonry the excavation has added very considerably. The stonework was consolidated as the excavation progressed and provided always that the local authority in whose care it lies continues to look after it, the public has gained a monument of enhanced interest. In the present climate of opinion this can be counted a positive gain. So too can the local interest generated by a long excavation as ably and generously presented to the public during the whole period of excavation as was Sandal.

For this Society however it is of greater interest to know whether or not the excavation has increased our understanding of medieval castle development. It was possible to establish that the motte itself, a 12th-century earthwork, was of what may be termed Bayeux-tapestry type, thrown up for the Warennes in layers of local rock, not a scarped outcrop or a motte stuffed with internal timbers. It was separated from its bailey by a keep moat and palisaded bank. Reorganization in the 13th century added a third unit by scooping a very considerable barbican from the bailey and surrounding it with yet another moat. The report presents this earthwork development clearly and concisely

At much the same time as the barbican was built the whole castle was reconstructed in stone and unfortunately the process destroyed even the foundations of Warenne's timber castle, apart from those of a five-bay timber hall in the bailey with its attendant kitchen, an oddly planned pair of buildings if the attempted reconstruction is credible.

Perhaps the wholesale destruction of early evidence, together with the paucity of surviving documents that made absolute dating for the most part impossible, discouraged those who produced the report on the excavation, for the volume allocates just a third of its pages to excavation, interpretation and historical sources and the remaining two-thirds to the finds, a reversal of the usual balance which may be considered justified in view of the excellence of their presentation.

Building materials, metalwork, pottery, glass and environmental evidence were thoroughly discussed, amply illustrated where possible, and relevance to the site explored. Of all these it is Moorhouse's report on the pottery that stands out and not only for the space it occupies. The new ground it breaks in methodology will concern mainly the specialist; of more general interest is the way in which the function of the various pots has been worked out from such things as the presence or absence of sooting, the amount of wear present and the nature of residues contained. Interesting too is the manner in which the distribution of sherds has been used to relate the construction period of different buildings one to another and to identify the purpose of various rooms according to the pottery associated with them.

The book itself is unattractive in its type and its unrectified margins. It is also fragile. The many illustrations however are uniformly clear and informative, even if north points are sometimes forgotten. At a time when serious consideration is being given to banishing specialist reports to microfiches the relative interest of Sandal buildings to finds may be pondered. Until further advances in printing technology release us from the necessity of choice, better perhaps unrectified margins and even collapsing spines than that we should not have the full range of evidence plain before us.

JEAN LE PATOUREL

The Archaeology of Rural Dorset. (Dorset Natural History and Archaeological Society Monograph Series, 4). By L. M. Groube and M. C. B. Bowden. 21 × 30 cm. 60 pp., 16 pls., 8 maps and diagrams. Dorchester: D.N.H.A.S., 1982. Price £5.50 to non-members, £4.00 to members.

Excavations in Christchurch. 1969–1980. (Dorset Natural History and Archaeological Society Monograph Series, 5). By K. S. Jarvis. 21 × 30 cm. 144 pp., 76 figs., 41 pls., Dorchester: D.N.H.A.S., 1983. Price £12.00.

These volumes are the latest in the new series by the Dorset Natural History and Archaeological Society. The Society is to be congratulated on its bold decision to publish

such papers on topics of major archaeological interest.

The volume on Christchurch is a good solid report on a group of small excavations carried out within and on the defences of the burh and the medieval town, and on a Saxon cemetery. It adds to our archaeological knowledge of another Wessex burh and will no doubt be a very useful source for comparative material for future local excavations. It also illustrates some of the problems of modern urban archaeology. Certain basic and important facts concerning the origin, layout and early development of Christchurch were confirmed, though with the very limited areas available for examination and the complexity of the sites themselves, little information came to light about the medieval town. Having read the report very carefully, this reviewer is not sure that he has learnt much more about the history of Christchurch than he knew before. But perhaps that is not the purpose of urban archaeology.

The Archaeology of Rural Dorset is more important. In essence it is an implication survey, but very different from and conceptually much more exciting than the mass of apparently similar surveys. It is an attempt to produce a theoretical framework on which future policies for preservation and archaeological research can be based and includes a neat system of priority scores for every period and major topic. As such it has a relevance far beyond Dorset and the first chapter particularly is a useful and timely summary of the basic problems of British archaeology.

Readers of this journal will be most interested in the priorities given to the medieval period. The discovery and examination of Saxon settlements is given a particularly high rating but excavations on deserted villages are well down on the overall scale. The suggestion that all deserted villages should be preserved until archaeologists can decide what to do with them is a nice, if unworldly, idea.

Here indeed is the difficulty, for in the end the resources and will necessary to carry out even the basic needs of Dorset archaeology as seen by the authors are far in excess of what is likely to be available. This survey is magnificent. It is splendidly logical, mathematically correct, statistically impeccable and, if implemented on a national scale, it would solve most of the problems of British archaeology at a stroke. But to succeed in its aims its arguments will have to be accepted by the holders of the archaeological purse strings. Yet the politicians, and in the final analysis the taxpayers, are not noted for the acceptance of logical and statistically correct arguments about what is the best part of the heritage to be preserved or studied.

Even more difficult is the matter of presentation. The politicians and not a few archaeologists know precisely what archaeology does — it recovers the story of the past. It will be some time before these people can be persuaded that archaeology is really concerned with the production and testing of socio-economic models. To ask people to accept such views is perhaps to demand a change in society's thinking on a scale which at present seems unlikely to be forthcoming. Or at least not in the short time that remains before most of the traces of the past have been destroyed.

Meanwhile we are asked by the authors to forget about our present inadequate methods of making archaeological choices and replace them by 'free discussion and debate' leading to 'controlled speculation and hypothesis testing'. This, depending on one's interpretation, is either a recipe for chaos, or precisely what has been going on for the last 30 years — or perhaps both.

C. C. TAYLOR

The Vernacular Architecture of Brittany: an essay in historical geography. By Gwyn I. Meirion-Jones. 22 × 27 cm. 407 pp., 240 figs. Edinburgh: John Donald, 1982. Price £30.00.

Brittany lies on the Atlantic fringe of Europe, like the British Isles, and was settled by groups of the indigenous Celtic inhabitants of our country when these were displaced by the Anglo-Saxon invasions. Largely isolated from metropolitan France on the east, 'Little Britain' has remained out on a limb and remarkably untouched by European trends in general. The disadvantage of this to the Bretons is that the province has always been remarkably poor; but the advantage to the researcher is a conservatism so staunch that the buildings, their contents, and the way that life is carried on in them has until recently remained unchanged for centuries. This means that we may expect to find in Brittany houses that are in some respects similar to those lived in by our own ancestors, and we should be able to draw a number of close parallels.

It is only recently that regional studies of vernacular buildings with this kind of scope and depth have become possible in England, let alone in France, and this one is particularly welcome. Whilst we all look back with admiration to Fox and Raglan's study of Monmouthshire in the early 1950s, not until 1975 did a securely-based study of the whole of Wales appear. Brittany forms a strong contrast to Wales, the country with which, perhaps, it may most appropriately be compared, not merely in the relative wealth of Wales but also in the far wider range and complexity of Welsh building traditions which no doubt result from that wealth. A further important factor is that poverty and conservatism in Brittany have combined to preserve links between standing and excavated buildings which are now lost in Britain.

An early chapter of Professor Meirion-Jones's book is devoted to circular buildings, in which the reader is shown an apparently continuous line of development from prehistoric to recent historic times. We tend to shrug off round buildings such as dovecotes, pigstyes or windmills, as special-purpose structures outside normal building traditions, but to find them treated in this systematic way must make us think again. Another chapter is given to subrectilinear and other primitive buildings, which include shelters in the form of roofs set directly on to the ground, without walls or windows, and with an open fire whose smoke found its way out through a hole in the roof. Structures of this type still survive all over Brittany, and moreover in the recent past were built as dwellings. Similarly, the author discusses sunken-featured buildings (grubenhäuser), which were commonly built in Brittany up to the time of the last war, and illustrates two examples which were being used for storage in 1978 when they were recorded. Though short-lived buildings, they had the advantage of maintaining an equable temperature, and may also in the past have been used as dwellings although no certain evidence of this has so far emerged. In this country, J. R. Mortimer's A Victorian Boyhood on the Wolds describes sunken-floored dwellings used as such in 1833, which must have resembled the Breton examples closely.

It is evident that the consistent use of stone for building marked a major advance in permanence, since stone in Brittany largely consists of ancient rocks such as granite which are particularly hard and weather-resistant. Walls were more often built in rubble than ashlar because of the difficulty and expense of working such intractable stone, but by the later 16th and 17th century some of the more prosperous farmers were able to build finely-detailed doorways and fireplaces comparable to the best vernacular work of the time in England. These stone houses, however, seem surprisingly tiny by our standards. Throughout Brittany the single-cell house, which in England is so uncommon as almost to escape notice altogether, is identified as 'the standard form of dwelling for the rural classes who were either landless or who did not own livestock'. When we add to these houses the equally large number of longhouses that have a single living-room built in one with the cattle-byre, which was the standard form for stock-owning families, the total is substantial although single-cell dwellings form a higher proportion of the whole in the eastern half of Brittany than on the west coast. This is probably due to later rebuilding in the west. Long-houses are well enough known in this country, both from excavation and from standing examples although cattle are not now found in them; they differ from the Breton long-houses in almost always having an

inner room, and there are other minor differences which have led Meirion-Jones to modify the British definition of a long-house, but in a way that seems wholly acceptable. Meirion-Jones is well placed to discuss long-houses not only from the ten or more years spent researching for this book in Brittany, but also in view of his contributions to the study of British long-houses, for example with the Medieval Village Research Group. This detailed and lengthy chapter is alone worth getting the book for.

A very different category of single-cell house, one reserved for the better-off in the countryside of Brittany as in England, was the first-floor hall, in which the residential part was upstairs and the ground-floor used for animals, or in some cases as a kitchen in which the servants also lived. In Britain, first-floor halls went out of fashion by the end of the 14th century; in Brittany, they came into fashion in the 16th century and continued to be built at least into the 18th and used well into the 19th century.

Two-cell houses only became common in Brittany in the 19th century, although 18thand even some 17th-century examples are found. Allowing for different local building styles, parallels can be found in this country for most of the two-cell forms, and we begin to feel we are on more familiar ground in reading of these and of the larger houses. What are so surprisingly absent are the large numbers of substantial farmhouses of three rooms in line found in many parts of England and Wales but almost unknown across the Channel, certainly among ordinary farms.

In a later section, Meirion-Jones uses a very large and varied body of evidence to describe the interior of the Breton house and the way it was used. Official reports, probate inventories, the writings of travellers, geographers and historians have been brought together with some telling photographs and a series of plans to build up a picture of the background to family life. Up to the time of the First World War, material possessions were pitiably few. Furniture consisted of box-beds, cupboards, chests and a table with benches and perhaps stools. Floors were of beaten earth and the smaller animals of the farmyard might often find their way inside. Space being so confined, the disposition of the furnishings in the single living-room was all-important in distinguishing areas allocated for each activity. This section deserves careful study as an aid to understanding the way houses were lived in during the historic past.

Whilst Brittany is poor in surviving medieval buildings, the rural buildings commonly in use up to very nearly the present time and the way they were used, have hardly changed during historic times. This fact offers a welcome insight into primitive living conditions which must materially assist in the interpretation of buildings known from excavation in Britain, of which standing examples no longer remain in this country. The ideas of personal privacy and independence which characterize our present society and which are illustrated in the design of our homes, are completely lacking in the Breton houses described in this book, as they must have been for us in earlier times. Professor Meirion-Jones gives us the opportunity to understand such a way of life in a poor and extremely conservative region that is nevertheless closely similar geographically, and even historically, to our own.

BARBARA HUTTON

Land, Family and Inheritance in Transition. By Cecily Howell. 24 × 15.5 cm. 332 pp., 19 figs., 14 maps. Cambridge: C.U.P., 1983. Price £32.50.

Few scholars concerned with villages and their evolution do not secretly dream of a body of evidence such as is presented in this book: were the Leicestershire village of Kibworth Harcourt depopulated, and hence available for excavation, it would be a Wharram Percy with records, to be quarried for decades. Dr Howell has written a fine-grained study, drawing upon not only the splendid series of Merton College muniments and other public and private material, but also on the landscape itself. It is to be regretted that her publishers failed to advise her to include more than one small-scale air photograph. Such evidence is important. To the archaeologist the most arresting section of the book is that on village morphology and

buildings; this is immediately noteworthy because of the series of maps, beginning in 1086, with further reconstructions in 1340 and 1484, and concluding with estate maps of 1609, 1635 and 1780. Here at last, a historian, following leads given by such scholars as Chibnall, Harvey and Ravensdale, appears to have brought together documents and landscape to produce results which at Wharram have taken 30 years of work. This initial statement on the morphological evolution of the village is bold and generalized, but in support evidence is set out for each of the 55 tenements which 'can be read in conjunction with the maps'. This is a challenge worth accepting.

A first question concerns the maps: they all lack scales and while the three estate maps are evidently based upon tracings, the medieval reconstructions are seen to be built upon the estate maps of 1780. To examine these the reviewer transcribed them on to the First Edition 1:2500 Ordnance Survey map (sheets XLV 2 and 6), 1886). Of the order of 70% of the 1789 boundaries could be identified clearly, and the remainder are reconstructable with a high degree of accuracy. The same exercise was repeated for the 1635 maps with similar results, and it is at this point that a ground check or detailed air photograph would have aided interpretation. The map of 1600 is more diagrammatic; the essence of the structure is there but individual plot shapes are simplified. The value of this exercise is two-fold: first, it presents all of the maps at the same scale. Early maps are often faithful in detail, but because of the problems involved in establishing a secure framework are less accurate in portraying overall shapes. The use of the Ordnance Survey allows details appearing in the estate maps (sharp dog-legs in boundaries for instance) to be set in a correct spatial relationship with each other. In Kibworth this exercise suggests that at the western end of the north row of the village a boundary once ran parallel to, but some 100 or so m north of, the present roadway. Obscure as this small point may seem it has repercussions on the interpretation of the plan: does this represent a former toft tail line or was it once the boundary between arable strips (over which this part of the village was surely established?) and the public land of the green road into which the houses of the north row were eventually intruded? As in most villages, and as Dr Howell correctly emphasizes, the history of Kibworth's morphology is contingent upon changing relationships between public, communal and private land, and the consequent redefinition of the settlement land, i.e. the area where it was legal to erect houses.

In this particular case, and as a second point, transcription was a necessary preliminary to a careful reading of the history of each village enclosure or toft. There is no doubt that for the reconstructions to be properly evaluated an even more detailed account is needed: there are frequent failures to document the evidence for the conclusions presented. This is not to doubt Dr Howell; it is merely to emphasize the difficulties of presenting such evidence, when the conclusions, let us admit, often involve elements of intuition. Paul Harvey chose the right phrase when he talked of the 'conjectural plan of the village' of Cuxham. The essential conclusion of this important chapter, that 'the early village layout would appear to have been a group of customary holdings to the north of the main E.—W. roadway, a group of manorial buildings to the south and the various utility buildings, such as the horse mill and fold, lying between the two' has a ring of truth. It is to be hoped that the author will see her way clear to publishing another version of this analysis, integrating more precise statements of the documentary evidence with a careful study of those landscape features, earthworks, changes of level, details of boundary construction and underlying topography, which appear on no map. Kibworth is rich earth, requiring further tillage.

BRIAN K. ROBERTS

Habitats fortifiés et organisation de l'espace en Méditerranée médiévale (Collections Travaux de la Maison de l'Orient, 4). Edited by A. Bazzana, P. Guichard and J. M. Poisson. 21 × 30 cm. 219 pp., 27 figs. and maps, 2 tables. Lyons: Maison de l'Orient Méditerranéen, 1983. Price 95 francs, from 1 rue de Raulin, 69007 Lyons.

Since 1980 a dozen French medieval historians and archaeologists based in Paris, Lyons, Madrid and Rome have met informally to discuss the application of archaeological

techniques. In 1982 it was enlarged to include 'all' those (seventeen French persons and three Italians) working on the settlement and landscape of the Byzantine, Catholic and Islamic Mediterranean. Fifteen short (2–5,000-word) accounts of regional research were circulated to discussants whose task was to see to what extent generalizing trends linked these apparently disparate cultural areas. The resulting 4–10,000 word reports on five set themes were presented and discussed at a two-and-a-half-day meeting at Lyons in 1982. The entire proceedings (except F. Menant's contribution on Lombardy) are published in this volume with an introduction and conclusion by the two organizers J. M. Pesez and P. Toubert.

The regional contributors dealt mainly with what is now the European littoral of the W. Mediterranean with papers on Italy (seven) and Iberia (four) predominating. Two were devoted to S. France and one each to Greece and Morocco. Syrian and Palestinian analogies were considered in the Sicilian paper. A more useful division reflecting central-medieval geopolitics is between accounts treating core areas and those frontier regions subject to conquest or reconquest. On the whole, catholic core-area contributors structured their papers around Toubert's concept of incastellamento, that is the replacement (or subjection) of a dispersed pattern of settlement by walled villages which occurred in Italy from the 10th century. The Greek and Moroccan regions examined are perhaps marginal. Limited supplies of water and exploitable land apparently determined an unchanging pattern of small scattered settlements in the Rif. The only fortifications were imposed from outside. Byzantine power was secured in Macedonia between the 9th and 11th centuries by restoring fortified towns. Under their aegis undefended nucleated villages multiplied in order to exploit new (or abandoned classical?) lands. Researchers of areas where one cultural system overlapped another (i.e. Catholic Europeans replacing Islam in Iberia and in Sicily and Byzantium in S. Italy and in Sardinia) tended to emphasize centrally controlled defence preceded, however, in Spain (and perhaps even in Portugal, S. Italy and Macedonia) by a system of unoccupied refuge enclosures apparently made by and serving nearby hamlets. Catholic conquest in most cases led eventually to seigneurial fortifications.

In all, this first part of the volume consists of a motley bunch of papers which reflect recent individual research, in some cases ill or not adapted at all to the seminar's theme of fortified settlements. For example the contribution on the Perugian contado is a summary of late medieval demographic and economic developments derived from Herlihy's Pistoian model. Fortifications were rare in both the Moroccan Rif and Sardinia. Most contributors made use only of documentary sources which means they had to rely on imprecise medieval terminology, data biased in favour of institutions and larger settlements, and indirect information on the early medieval pattern. Archaeological methods were only employed in the absence of written records (in particular for Islamic areas or periods of domination). Where field survey has been undertaken, excavation has not apparently been employed to confirm the form of sites at a particular period. Only in the Valencian province have a number of researchers combined both approaches and have thus established the most complete picture (although to appreciate this readers will have to turn to works published elsewhere). The Macedonian account is perhaps the most satisfactory; but surprisingly only the paper on peninsular Italy's extreme south outlined the preceding proto-historic and classical patterns and advocated a longer-term perspective.

Many of these defects were recognized by the reporters who have provided an invaluable service by bringing into focus the main issues. The themes treated were: typology, methodology, structures, East and West, and fortifications and power. Above all they clarify why the topic was chosen: fortified or hilltop villages were seen as synonymous with feudal instability. They represented a radical reordering of the rural population into nucleated settlements controlling the surrounding territory not only for defence and to ensure dominance but as a more effective form of economic exploitation. They thus resembled the castle-dominated village of Atlantic Europe. In contrast state societies were often characterized by a dispersed pattern of small rural settlements, part of a settlement hierarchy in the Roman and Byzantine worlds and autonomous (even tribal) in west Islam. However, it emerged (mainly in discussion) that nucleation could precede feudalism and may even be undertaken by the

villagers themselves, and that dispersed settlements persisted and in some areas the new fortified hilltop sites did not even become the administrative centres. The common denominator of village formation in the Catholic and Byzantine regions studied was demographic expansion. Other points raised included the heritage of previous settlement patterns, centrality, and the possibility of an earlier medieval move to hilltops. The only report based entirely on material forms raised the problems of present-day terminological comparability (e.g. no common definition of a village) but recommended empirical classifications following the experience of Caen's unwieldy French castle inventory form. The reporter concluded disappointingly that on the basis of the existing inadequate archaeological evidence it was not yet possible to assert that analogous situations evoked analogous defensive responses.

The reports section is certainly stimulating and raises fundamental issues of extra-Mediterranean significance. A curious omission is the role of Italian towns which were fortified and presumably the motor of demographic expansion. Understandably the seminar was limited largely to French scholars; but why ignore research written in English such as that by C. Redman in Morocco, by the British School at Rome in North Lazio, by T. Brown, C. Wickham and especially D. Andrews, who has written a pertinent synthesis of the medieval castrum in Italy? (This failing is shared by English researchers in Italy who rarely cite French works.) The main defect of the seminar was to make castellologie the central issue of settlement studies. A series of similar seminars is planned on the relationships of man and animal, settlement and land, and war and settlement. But what is needed, now that this seminar has so admirably provided models of settlement, is to design archaeological research programmes in a sample of well-documented core and frontier regions to test their validity. Perhaps the various interested national institutions should meet to share experience and ideas and to ensure the best use of limited resources and expertise — preferably under French acgis as they seem to structure their seminars so well, and to publish them promptly at a reasonable price.

HUGO BLAKE

The Church in British Archaeology (C.B.A. Research Report 47). By Richard Morris. 21 × 30 cm. 124 pp., 27 figs. London: Council for British Archaeology, 1983. Price £17.00.

This report, sponsored by the Churches Committee of the C.B.A., set out initially to make a political point about the rate at which archaeological evidence from churches was being destroyed and about the need to take urgent action to meet this situation. However, it was found that the case for church archaeology was already being accepted widely in principle, and so the report moved away from a political statement and towards a definition of some of the academic problems that need solution through this method of study.

No-one could be better qualified than Richard Morris to undertake the writing of this report, in view of his extensive and up-to-date knowledge of the field and his ability to throw a great deal of new light on problems that many others have looked at before. Thus in the chapters that form the heart of the book we have not only a clear summary of the present state of knowledge (together with detailed bibliography) concerning a series of key issues, but at the same time an important definition of future directions for research.

The problem of Christianity in Roman Britain is one of the most difficult areas in which to suggest practical ways ahead. The evidence so far recovered is fragmentary, albeit meticulously studied, while the absence of any adequate documentary history makes it impossible to identify the sites that will produce fuller results. The message must be that any site deserves excavation which promises to elucidate the key issues of the extent to which Christianity in Roman Britain was an urban or rural phenomenon, and an aristocratic or popular one.

For the period from 400 to 700 Morris isolates as central the problem of 'continuity', whether in the Celtic parts of Britain or those that came under Anglo-Saxon control. In this field there has been fairly detailed researching of particular areas, but the author suggests

that an inadequate integration between the work of Celtic, pagan Anglo-Saxon and Christian Anglo-Saxon specialists may mean that the right questions are not always being asked. But it is not only a matter here of reinterpreting material that has already been excavated for, as is pointed out, there has been no excavation whatsoever of an early post-Roman British church site, nor any modern excavation of a complete 7th-century Anglo-Saxon church (except at Yeavering).

A chapter is devoted to the origins of churchyard burial, where it is suggeted that a reexamination is needed of the theory that an appearance of church graveyards in the 8th century is marked by a transfer of site from the 'Late' cemeteries which constitute a final phase developing from the main series of pagan cemeteries. The latter may sometimes be the pattern, but elsewhere a different sequence may obtain. More excavation of graveyards is needed: especially of ones where the development has been arrested before modern times.

The period from 800 to 1100 is defined in terms of the growth of the parochial system. It is pointed out that for too long there has been a neglect of the problem of the rural church and the extent to which it is an expression of rural settlement patterns, or itself a stimulus to those patterns. More recent excavations have concerned themselves with this area of study (e.g. Raunds and Wharram Percy), but much more needs to be done before it is possible to reach any general conclusions.

In the chapters on the later medieval and post-Reformation periods (the latter by Lawrence Butler) the report rather changes gear. It provides less an analysis of particular problems that need solution, and more a summary of the general areas — technology, demography, economics, liturgy, etc. — upon which church archaeology may be expected to

throw light.

Even for the period before 1100, however, the report — valuable as it is — cannot be regarded as a complete statement of the academic problems in the field. There are major issues that are not touched upon. Among these may certainly be numbered that concerning the effects of the Scandinavian raids and settlements from the late 8th to the early 10th century: did this period, in whole or in part, see a continuity in the growth of the Church, or was there a significant change of pattern? Again, for the 10th century the monastic reform has been seen as perhaps the most important single influence, yet there has been no excavation of a church of a new monastic foundation of the period, no excavation of an entire monastic precinct, and no archaeological examination of the relationship between a monastery and its outlying estates. The second of these areas of omission in the current report is partly a reflection of the fact that monastic sites fall under a differerent C.B.A. committee: but it should not be allowed to colour the determination of priorities in deciding what archaeological projects should be most urgently forwarded.

Morris is certainly right in his basic contention that the selection of church sites for archaeological investigation should be placed upon a more positive basis, and that technical and intellectual precision should be reserved for appropriate sites. One should add, however, that it is important also for public funding to be more clearly geared towards solving major problems in this branch of archaeology, and a little less wedded to the idea that the main determinative factor in funding research should be whether a narrowly defined 'rescue' situation exists. The practical circumstances under which most church excavations have to take place (tied to fabric repairs, parish finances and so on) are such that special arrangements are essential if we are not to strain at the gnat and allow what is of real importance to pass us by. We need more than lip service to the idea that church archaeology is important.

RICHARD GEM

Cloth and Clothing in Medieval Europe: Essays in Memory of Professor E. M. Carus-Wilson (Pasold Studies in Textile History, 2). Edited by N. B. Harte and K. G. Ponting. 14 × 22 cm. 401 pp., 111 figs. London: Heinemann Educational Books Ltd, 1983. Price £19.50.

The collection of essays in this volume forms a fitting tribute to the life work of Professor Carus-Wilson, sad though the circumstances of its publication have been. Originally

intended as a tribute on her 80th birthday, her sudden death less than a year before that anniversary turned a celebration into a memorial, further saddened by the deaths, after work on its production had started, not only of one of the editors, K. G. Ponting, whose work with the Pasold Institute has inspired so much study of textile history, but also of a contributor, Veronika Gervers of the Royal Ontario Museum, whose tragic death in 1978 closed what promised to be a life of outstanding value in this field.

It is difficult in a short space to do more than mention many of the contributions, such as the delightful discussion of the development of bedclothes by Marta Hoffmann, the interesting research by Irena Turnau into the transition from single-needle knitting to production of knitted garments, and Veronika Gervers' fine study of the development of the medieval tunic in the Mediterranean, with particular relation to the cut, and the light this throws on the looms in use.

Three papers dealing with more recent archaeological finds, all from Sweden, are closely linked. Agnes Geijer's reappraisal of the textile material from the great Viking trading centre of Birka, which she originally published in 1938,1 is developed and extended by Inga Hägg's study of the women's costume there, a well-reasoned interpretation making use of modern techniques, and presenting a strong plea for the better recording and preserving of organic material on site, before removal for conservation and museum study. Dr Geijer raises again the question of the origin — Syrian import or European production — of the fine broken diamond worsted twills. Professor Carus-Wilson, comparing the lattice pattern of the weave to the chainmail hauberks of warriors in medieval representations, suggested that this might be the fabric haberget, which features in English and French records and verses of the 12th to 13th centuries,<sup>2</sup> and this question is again raised by Margareta Nockert, describing a 13thcentury burial at Leksand, Dalecarlia, where the woman's cloak is a late example of this twill. Her suggestion that it might be of English origin is interesting. There are indeed numerous examples of the weave from English sites, many showing the mixed spinning (Z warp, S weft) to which she draws attention in the Leksand twill. The English material, however, is mainly from Anglo-Saxon cemeteries and, apart from some 7th-century examples, not of very high quality; <sup>3</sup> 9th- to 11th-century pieces have also been published, <sup>4</sup> though nothing as late as the references on which Professor Carus-Wilson based her interpretation.

Two other papers complement each other. John H. Munro sets out to resolve the questions surrounding 'the most renowned luxury textile manufactured in medicval Europe . . . successor to the famed royal purple of the classical and Byzantine worlds', the medieval scarlet. A first section on the importance of certain dyes — for the Romans the murex dye, 'purple', for the medieval world the insect dyes, 'grain' — leads to a discussion of the etymology of the world 'scarlet'. He suggests a possible combination of the Arabic and Germanic roots favoured by other writers, resulting perhaps in a term constructed by popular usage from a foreign words, siklatun, an extreme luxury fabric; and a local word, scarlachen, fine napped and sheared cloth. Detailed study follows of what was required to produce a 'scarlet'— the fineness of the wool, the dimensions of the woven piece, the number of nappings and shearings, and particularly the dyeing; tables from mid 14th- to late 15thcentury Flanders, showing the costs for the cloth, the dye, and the labour of finishing and dyeing, seem to bear out Professor Munro's contention that one of the main reasons for the high price of scarlets was the use of the insect dye, grain. His explanation of the puzzling term 'white scarlets' as undyed cloth prepared to be dyed with grain, or used as background for a grain design, is supported by documentary evidence. In the following very useful paper Judith A. Hofenk-De Graaff gives the chemical analyses, not only of the dyes to which Professor Munro refers, but of all the red dyes known to have been used in medieval and early modern Europe, describing the most modern methods of extraction and analysis, as used by her on many samples of early textiles.<sup>5</sup>

Most of the other papers deal with the economic and legal history of the medieval cloth industry. Flanders and Brabant, so long the market for fine English wool, and manufacturers and exporters of luxury woollens, are naturally well-represented: there is a careful vindication by Herman van der Wee and Erik von Mingroot of the authenticity of one of the earliest

ducal charters, granted in 1275 to the clothiers' guild of Lier, later one of the most important cloth centres in Brabant; a fascinating calculation of the problems of production — the scasonal fluctuations, the short light hours of the winter months, the weavers' reluctance to change outdated processes — which led to the decline of the Flemish industry in the 16th century is made by Walter Endrei; and Raymond van Uytven gives a charming picture of the fame of Netherlands cloth-making assembled from more literary references than accounts and merchants' stocklists. The field covered extends to other less often considered parts of Europe, Hidetoshi Hoshino on Florence, Manuel Riu on Catalonia and Jerzy Wyrozumski on Poland, where difficulties caused by fluctuations in trade supplies and attempts to replace imported goods with local imitations led to new flowering of the industry. Herman Kellenbenz's paper on the expansion of fustian weaving in Ulm, though not so closely connected, shows the same pattern of changes caused by difficulties of supply and industrial unrest, as well as tracing, in the Fugger family, the effect on an industry of one powerful mercantile house. In many of these papers, the work of Professor Carus-Wilson has clearly been a seminal influence.

Eight probate inventories of the estates of cloth merchants in Dijon show another side of the picture, with only a small proportion of expensive imports and many local cloths of varying qualities and unusual names, for some of which François Piponnier is able to suggest the probable quality and style. Town excavations are now producing a large body of medieval textile fragments; the question of how much hope there is of fitting names to the surviving fabrics was raised by Professor Carus-Wilson herself, when a few years before her death she examined some of the mass of material from Baynard's Castle in the City of London, on a visit to the Ancient Monuments Laboratory. She would have been delighted with Philippe Wolff's contribution, the shortest paper in this volume, on a document about the sale of some English woollen cloth in Toulouse in 1458. Here we have, sewn to the contract, three undoubted samples of the famous 'broadcloth' with which so much of the English trade was concerned.

ELISABETH CROWFOOT

## NOTES

<sup>1</sup> A. Geijer, Birka III. Die Textilfunde aus den Gräbern (Stockholm, 1938).

<sup>2</sup> E. M. Carus-Wilson, 'Haberget: a medieval textile conundrum', Medieval Archaeol., XIII (1969), 148–66.
<sup>3</sup> E. Crowfoot, 'The Textiles', in R. L. S. Bruce-Mitford (Edited by A. C. Evans), The Sutton Hoo Ship-Burial, III

(London, 1983), 409-79.

<sup>4</sup> F. Pritchard, 'Textiles from recent excavations in the City of London', in L. Bender-Jørgensen and K. Tidow (eds.), Textilsymposium Neumünster: Archaeologische Textilfunde (Munich, 1982), 197-204); and this volume above; J. W. Hedges, P. Walton in A. MacGregor, The Archaeology of York: The Small Finds, 17/3 (London, 1982), 102-32.

<sup>5</sup> The statement on p. 75 that kermes was fully displaced in Europe by the beginning of the 17th century by Mexican things applification. It was still used in the Welsh woollen industry in the 19th century (J. Geraint

cochineal requires qualification. It was still used in the Welsh woollen industry in the 19th century (J. Geraint Jenkins, 'Traditional methods of dyeing wool in Wales', Folk Life, 4 (1966), 72). I am indebted to Penélope Walton for this reference.

Environment and Living Conditions at Two Anglo-Scandinavian Sites (The Archaeology of York, 14/4). By A. B. Hall, H. K. Kenward, D. Williams and J. R. A. Greig. 18 × 24 cm. 84 pp.. 23 figs., 23 tables (incl. 16 on microfiche), 1 pl. London: Council for British Archaeology, 1983. Price £6.75.

The aims of environmental archaeology in the urban context are laudable, but difficult to attain, not least because of the problems of assessing the representativity of the evidence. This compact study concerns the plant and animal remains (apart from the bones of fish, birds and mammals) from two small groups of 10th- and 11th-century deposits in York recovered during a constricted excavation at 6-8 Pavement and a watching brief at 5-7 Coppergate. Some speculative remarks in a preliminary report on material from the former

site have been widely quoted as fact, although they are not now regarded as an acceptable interpretation. This has spurred the present authors into a rigorous examination of the evidence and the means of drawing from it conclusions of archaeological significance. They expose the limitations both in the data and in the existing store of knowledge necessary for its interpretation. In so doing, they have provided a piece of essential reading for all concerned with the interpretation of urban archaeology and with its cost effectiveness.

The difficulties began with the sites: those who eventually undertook the examinations were not present at excavation, and so were able neither to influence the sampling strategy nor to contribute their own in situ observation towards an understanding of the origin of the deposits. The small extent of the sites limited the contribution which even the excavators could make to this. In some respects the book is a methodological pilot-study for work on samples from the large, open-area excavation at 16-22 Coppergate, where such matters were ordered better. Secondly, the conditions which might give rise to certain populations of weeds, beetles, or insects seem not always to be well understood, and the challenge of the archaeological material has stimulated some practical research in this direction. But the plant and animal world in medieval towns was neither a closed nor an undisturbed system. Complex processes were involved, for which the authors provide an outline model. As the study shows, a single layer might be of uneven make-up, indicating a confusing of environments, and therefore difficult to sample. Deposits of a 'closed' and definably representative character thus have a special significance. One such, a splendidly illustrated and periphrastically described turd, is dealt with in an appendix. A third area of difficulty concerns the means of defining significant combinations of plant and animal taxa. Some statistical and other methods of doing this are explored, and lead to a fairly convincing distinction between indoor and outdoor deposits. Only measurement, rather than mere listing, will enable us effectively to compare site with site and town with town.

York, like most other early medieval cities so far investigated, was a dirty settlement containing large quantities of rotting organic matter; the pests associated with grain storage were absent. York's Roman predecessor was a much cleaner place and contained substantial stocks of grain. It seems that in later medieval York conditions resembling those in the Roman city may have been re-established, although the possible effect on the deposits of changes in soil conditions, population size, and building techniques will have to be considered. Other indicators suggest climatic change. The results of large-scale examinations of material from well-understood contexts in medieval York are thus cagerly anticipated. They promise to show that the sociology of plants and beetles can make a large contribution to our knowledge of the economic and social organization of the humans who lived with them in towns. So far as this particular study is concerned, however, it has to be admitted that a heavy hammer has been used to crack a nut of somewhat restricted nutritional value.

DEREK KEENE

Timber and Iron Reinforcement in Early Buildings (Society of Antiquaries Occasional Paper (N.S.), 11). By R. P. Wilcox. 19×24 cm. 112 pp., 72 figs., 32 pls. London: Society of Antiquaries, 1981. Price £15.00.

This is a slim volume but of considerable importance in that it pioneers an aspect of historic building technology that has been but little recorded or studied but which profoundly affects our understanding of the structural engineering skills of early builders and the extent to which they appreciated the forces acting within masonry structures. Reinforcing implies an addition to the natural capabilities of the material necessitated either by mistrust or by a desire to design to closer limits or, indeed, both. Professor Wilcox directs his attention to three forms of reinforcement: intra-mural timber reinforcement, foundation reinforcement

and extra-mural reinforcement used for joining opposing piers across the naves of churches or for containing the thrust of an arcade. For each of these an astonishingly wide and convincing series of examples is put forward. Intra-mural reinforcement, he points out, has its origins in the lacing of earthern ramparts to stabilize or contain the soil from which they were formed. This is followed through to the Roman and medieval lacing of the core of walls, giving a particularly interesting example from the Roman period of the bonding of the solid turrets into the curtain wall at Richborough, Kent, by means of intra-mural timbers. Examples are given of later and more sophisticated uses where the timbers within the wall are jointed to floor framing as at St Ethelbert's gate, Norwich, a most important development which, though not covered by Wilcox, was to lead to much 17th- to 19th-century practice on the same lines.

From here the study proceeds to examine the use of timber reinforcement in foundations. This covers 10th-century examples at Winchester Old Minster to the 15th-century additions to the nave at Westminster accompanied by the interesting thought that it was only intended that these timbers should last long enough for the building and the subsoil on which it stood to settle before allowing the timber to rot harmlessly away. Whether this be true or not, Wilcox, in confining himself to early buildings, does not include the continuance of the practice up to the 19th century.

The greater part of this work, however, is concerned with iron and timber reinforcement not encased in masonry, or, as the author puts it, extra-mural reinforcement, which he sees as a deliberate design feature only partly outmoded by the introduction of the flying buttress with the aisle tie. Its origins he firmly and most reasonably places in the Byzantine area of influence where, perhaps fortuitously earthquakes and engineering skills flourished side by side, a point which emerges strongly from his fascinating examination of the reinforcement of

Sta Sophia and, indeed, of the great cisterns of Byzantium.

This intriguing link between the Byzantine and the Romanesque is worked out mostly in what is now Turkey, Yugoslavia and N. Italy and we must be grateful to Wilcox for drawing these threads together from Byzantium to N. Italy and, surprisingly, to Burgundy. In this sort of area and even more so, in the area of some of the great churches quoted, Laon, Soissons, Reims and Amiens there was no need for reinforcement against earth tremors. Moreover the buildings, themselves, in the high Gothic tradition, would embody the most sophisticated of engineering skills available. The sawn-off beams of Laon certainly argue for the timber being part of a temporary erection process. There are several mentions of prop beams such as those at Brancion (Saone-et-Loire) of the second half of the 12th century and illustrations of two churches from Vicenza, San Lorenzo, of 1281, and Sta Maria dei Frari, of 1340, with prop beams across the nave supported by corbels or wall posts. This might be taken to indicate that the builders were well aware of the dual purpose of a connection between the walls of an aisled or basilican church, which might be called upon to withstand either tension or compression — in other words, that they were general-purpose stabilizing beams placed there because the high, thin arcade walls had not sufficient stability to contend with all the probable stresses that might arise. Alternatively it may mean that the need for some permanent stabilizing element was recognized. There is considerable evidence that this was provided, again with a Byzantine origin, by tension-tie trusses placed at wall-top level and that the Gothic builders designed their tie beams specifically to withstand either tension or compression with the same probabilities in mind. Our own Westminster Abbey, equipped around the chevet and triforium with permanent iron ties at arch level, had such a roof and the same building shows, in the Chapter House, as Lethaby has demonstrated, that the designer was well aware of the potentialities of a combination of metal and stone. This is speculation and only suggests that Professor Wilcox has opened the door to much future research into the technological limits of the early builders. We must ever be grateful to him for doing so in so small a volume. This short study will form an essential piece of equipment for all those who would study the history of building technology.

The Accounts of the Fabric of Exeter Cathedral, 1279–1353. Part 1: 1279–1326; Part 2: 1328–1353. Edited and translated with an Introduction by Audrey M. Erskine. 14×24 cm. Part 1: xxi+212 pp. Part 2: xxxvi+137 pp. (the latter paginated continuously with Part 1), 1 pl., 1 plan. Exeter: Devon and Cornwall Record Society, New Series, vol. 24, 1981; vol. 26, 1983. Price £8.00 per volume, postage included, from Assistant Secretary, D.C.R.S., 7 The Close, Exeter.

Buildings and documents need each other if either is to be understood fully. Yet all too rarely does their pattern of survival coincide. The publication of a series of accounts relating to the fabric of a major cathedral at a time when almost total rebuilding was taking place is therefore greatly to be welcomed; the more so as the information those accounts contain is (as such things go) detailed and, being compiled week by week, precisely datable. They are, moreover, comparatively numerous: even so, fewer than half of the annual accounts for this period survive, in varying states of completeness and legibility. Further, the first eight accounting years, starting in 1279–80, are covered only by a summary and incomplete memorandum. Besides these there are five so-called 'altar accounts', concerned with the construction of the high altar, reredos and (probably) the sedilia. Appendix II contains an apposite selection of seven related documents.

Each account-roll is preceded by a brief indication of its form and condition and, where appropriate, endorsements are transcribed and previous publication noted. Ad hoc difficulties are dealt with in an admirably concise and informative series of footnotes, which reveal the breadth of the editor's learning and her command of local history. Calendaring is almost entirely confined to the sections on the provision of fodder and the wages-lists of named craftsmen, the latter being presented in tabular form at the end. Otherwise, the text is printed in extenso throughout—though not in the original Latin. What is given here is essentially an English translation, Latin being confined to the first appearance of technical terms and to words and phrases the transcription or translation of which is in doubt (1/xx). A select Latin

transcript of a single specimen roll is also included (appendix I).

This policy is defended on the grounds that the content of the documents is highly repetitive and the extension of the heavily abbreviated Latin often uncertain (1/xix-xx). But a (virtually) in extenso translation is just as repetitive as the original, and takes up considerably more space on the page; while a brief discussion of doubtful extensions, where these make an appreciable difference to the sense, would not have been unduly onerous. Who, then, are the beneficiaries of this compromise? Surely not the non-latinate layman, who will still lack the expertise to interpret evidence of this sort unaided, whatever the language? Yet certainly not the specialist, for whom nothing less than the Latin will do. The latter will particularly regret the absence of a comprehensive index of Latin terms, for which the 'Select Notes on Vocabulary and Terms' is not an adequate substitute. This considerably diminishes the usefulness of the edition as a lexical tool.

One is grateful for what Latin there is, but it would have been better left consistently unextended, to make the precise basis of the translation clear. Where the latter can be checked against the original, the inevitable occasional slips as well as some alternative interpretations emerge: (pp. 2–3) (sc. 'sabbato') post purificationem — surely the feast of the Purification, not 'the purifying'?; (p. 24) summas fenestras — 'high' rather than 'great' (cf. p. 35); (p. 93) procuratio is perhaps used here in the technical sense of 'procuration fees', not simply 'maintenance'; (p. 145) clavis (if correctly extended) must be dat. pl. following in — i.e. 'nails', not 'a key'. The translation is sometimes over-literal: tabula is consistently translated by '(altar)-table', but (p. 163) tabula argentea is surely 'a silver retable'; while it seems at least once (p. 91) to be equivalent to tabulatura, and to refer to the reredos project in general. This approach extends to the use of obsolete or even non-existent English terms, such as (e.g. p. 32) 'formes' and (pp. 148, 165) 'interclose'. Occasionally, anomalies lead to obfuscation of the meaning. For example, the term denoting beating-out of tools is given in single quotation-marks when it occurs in English ('batring'), but is translated when in its latinized form ('bateria').

The introductory material is divided between the two parts: in Part 1, the architectural history of the cathedral, the nature and quantity of its surviving muniments, and the organization of its finances are briefly outlined. The history of the fabric fund is considered in more detail (note the convincing refutation of Hamilton Thompson's theory, reiterated by H. E. Bishop and E. K. Prideaux, *The Building of the Cathedral Church of St Peter in Exeter* (Exeter, 1922), 7–8), that the master-mason also regularly acted as a joint warden of the works). The section (1/xvi—xviii) on the history of previous extracts and transcripts makes fascinating reading, particularly since subsequent decay of the documents has made these notes on occasion the only witnesses to the text. Finally, the form and arrangement of the rolls themselves and the methods used in editing and translating them are described.

Part 2 contains sections describing the funding of the work; the sources of the building materials (a series of maps would have been useful here); the composition and wages of the workforce; the master-masons; and the building sequence. The results of this last are rather disappointing: there is little of importance which escaped the attention of Bishop and Prideaux. The only major new hypothesis (2/xxxiii–xxxvi), that the nave vaults were complete by 1342, and are not to be identified with the *novum opus* begun in 1353, is seriously weakened by the failure to find a convincing alternative explanation. Clearly the real fruits of this material — and it is a fine crop — are going to be harvested by economic rather than architectural historians.

Mrs Erskine deserves much credit for bringing to completion a project which has been on the stocks for half a century, and for making the rich contents of these accounts more accessible than hitherto. As she herself recognizes (2/xxv, n. 1), they are documents of European importance. It is therefore the more to be regretted that it did not prove possible to publish them as they so clearly deserved: in the language in which they were written.

ERIC CAMBRIDGE

Nordisk Form om Djurornamentik (Museum of National Antiquities, Stockholm, Studies, 3). By Lennart Karlsson. 16 × 24 cm. 196 pp., 200 figs., English summary. Stockholm: Statens Historiska Museum, 1983. Price not stated.

This useful publication presents a perceptive and clarifying appraisal of the study of Nordic animal ornament. One of its stated goals is to attempt to illuminate the growth and survival of Scandinavian forms of zoomorphic ornament from the 5th-century metalwork forms of the Migration Period to the rune-stone ornamentation of the 11th century. The suggestion that detailed studies already exist cannot be denied, but this would overlook Karlsson's achievement as a lucid commentator and critic of the style concepts and muddled methodology which have all too often complicated and confused the study of zoomorphic ornament.

Karlsson's thesis is that from the standpoint of art history, the continual development of animal ornament in Scandinavia (surviving in secular folk art well beyond the medieval period) has been artificially divided into all too large a number of strictly separated styles. In discussing the various manifestations of animal ornament Karlsson stresses that too often scholars have sought to explain style variations as a product of external influence, either ignoring or underrating the continuation of domestic tradition. For the student, whose understanding of the development of zoomorphic ornament has been confused by a welter of misleading and inappropriate style nomenclature and a miscellany of contradictory theories about origins and development, this book provides helpful guidance.

The book is conveniently divided into two sections. In the first 90 pages we are presented with a sequential outline, century by century, of the development of Scandinavian animal ornament from its 5th-century manifestations on relief brooches into late Viking art of the 11th century. Its occasional survival, beyond the Middle Ages, in decorative folk art and secular woodcarving, is an evolutionary development which Karlsson wisely avoids analysing. Much of the material is high-class craftsmanship. In particular the art and ornament

from the Vendel graves, from Oseberg and from Jellinge is court art, but how closely and by what processes the art and ornament styles of the lower social classes mirrored aristocratic art is difficult to ascertain.

Inevitably there are omissions and generalizations in Karlsson's outline. The important interplay between animal motif and anthropomorphic elements is totally ignored. Thus there is no mention of the sumptuously decorated gold filigree scabbard mounts of the 6th century where the prominent face-mask motif dominates the design arrangement, but is itself a 'split representation' composed of two confronted animal heads. The so-called 'gripping beasts' of Oseberg and Broa are seen as style motifs which emerged spontaneously around the year 800 and disappeared during the 10th century without any lasting traces on later developments of ornament. Here again Karlsson overlooks the possible contribution of anthropomorphic elements, evidenced in several of the schemes of ornament at Oseberg. Similarly the importance of vegetative motifs, the vine scrolls, the palmette, and the acanthus, are seen as intrusive, but are considered of little importance in affecting the development of Scandinavian ornament. Karlsson is therefore especially critical of Signe Horn Fuglesang's perceptions of the Ringerike style, where zoomorphic lappets are interpreted as vegetative elements. In general, however, in the outline development of seven centuries of ornament, Karlsson avoids debate, concentrating with the aid of a judicious choice of appropriate illustrations, drawings, photographs and line-engravings, on the metamorphosis of the animal motif.

In the second section of the book, which is arguably the more useful, Karlsson presents a critique of the archaeological and art-historical concepts of style in the form of an alphabetically arranged catalogue of 100 style terms. It is indeed bewildering to comprehend how in almost a century of study, since the pioneering work of Sophus Müller and Bernhard Salin, such a confusing equivalent of terms and labels could have arisen. A plea is made for an unconditional review of the fundamental purpose, classification principles, style criteria and nomenclature of Nordic animal ornament. Karlsson admits that such a revision would mean that much of the literature about Scandinavian animal ornament would therefore be of interest only as a history of scholarship. It is clearly evident in the catalogue of styles that the very disparate style criteria reflect both the interpretative concepts of the archaeologist and art historian and their highly subjective attitudes as to how Scandinavian animal ornament should be structured. Thus we find the concept of 'style' referring to places, periods, regions and peoples, with further style descriptions and terms referring to the formal elements or motifs, technique and qualities. Of these categories, by far the largest is the group of stylistic terms based upon accidentally discovered find complexes, or single monuments. Certainly most students of Viking art will admit that the style terms Borre, Broa, Gokstad, Jellinge, Ringerike and Urnes are confusing. The fact that the Jellinge stone, once part of the so-called Jellinge Group Style, is now classified under the Mammen Style or the South Scandinavian Style is one example of the muddle that has been created. A fusion of styles is indicated by the addition of a geographical epithet as in Insular Jellinge Style, Irish Urnes Style and more explicitly in Müller's (1880) Gallo-Carolingian Fusion Style. The merits of the neutral, association-free classificatory systems of Salin (1904) Styles I-III and Haseloff (1981) Style I A–D, are that they avoid the pitfalls of ambiguity inherent in other style terms.

What we have in Karlsson's book (with its admirable English summary) is an uncomplicated outline of the development of animal ornament in Scandinavia and a guide through the confusing labyrinth of style terminology and methodology. For this all students of Nordic art must be grateful.

GEORGE SPEAKE

The Towns of Medieval Wales. By Ian Soulsby. 19 × 24 cm. 276 + xvi pp., 111 figs. Chichester: Phillimore & Co. Ltd, 1983. Price £9.95.

In his introduction to this survey of towns in medieval Wales Ian Soulsby analyses the origins and early development of Welsh towns and discusses problems of site and topography. This is followed by a detailed gazetteer of 105 towns, with plans of 89 sites. Those who

have attempted to resolve topographical difficulties from inadequate evidence will sympathize with the author; his towns range from large, well-recorded boroughs to tentative settlements. Even where evidence is plentiful, boroughs produce intriguing problems which can be explored, but not solved, by resort to inference and speculation. The elongated street plan of Cardiff, with castle and church widely separated; the site of the earliest motte at Swansea; the expansion of Haverfordwest and the virtual eclipse of St Martin's, the church so closely associated with the castle; these issues might be matched at a number of sites where Norman settlers established a castle and borough. At Llanelli there are two 'old castles'; which one was the caput of the lordship of Carnwyllion and the nucleus of the small borough which grew up there? Llawhaden illustrates a different aspect of the problem. It was by no means insignificant as a borough, for in the early 14th century 1741/2 burgages are recorded. There the site is dominated by the palace of the bishops of St David's. At some distance away, below the bluff on which the palace was built, were the parish church and the mill. To the west lay the hospital founded by Bishop Bek in 1287. Today these are linked by country lanes which give little suggestion of urban development and it is necessary to assume the likely areas near the palace where so many tenements might be built. A well defined and well defended site like Tenby offers the historian many initial advantages.

The Edwardian conquest of N. Wales was the occasion for establishing newly-planned bastides, military units in which castle and borough were designed as a single concept. The royal foundations not only encouraged renewed baronial activity in town planning but also fostered urban life even where defence was not a primary consideration. The military foundations do not present problems of layout or purpose, but they raise many interesting questions as to the nature and racial composition of an urban community and the regulations

by which it could maintain its identity and character.

Some boroughs were distinctively Welsh and housed Welsh communities. At Dinefwr two boroughs were associated with this stronghold of the princes of Deheubarth. Old Dinefwr, a Welsh community, was small; it had 26 plots at the end of the 13th century, and was said to have eleven burgages in 1301-02. New Dinefwr, heavily if not overwhelmingly English, contained 60 tenements in 1302. The exact location of these two communities is a matter of conjecture. Here the pattern of a castle as the basis for the development of a borough, so characteristic of Normanized areas, was repeated at a comparatively early date. Much later, in 1273, when Llywelyn ap Gruffudd built his castle at Dolforwyn, he wanted to establish a borough. Did it lie under the shadow of the eastle walls on the hill-top site, or at Abermule in the valley below? A number of Welsh communities seem to have developed as undefended markets; Nefyn, Dolgellau and Wrexham, for example, owed nothing to castle and town defences. Wales affords a number of instances in which a community remained so small that its urban status must always be in doubt. In the 13th century at least six places which might be called boroughs had fewer than 20 burgesses; another fourteen had between 20 and 30 burgesses. Even a slight decline in population or prosperity might prove disastrous for them, and certainly there was decline in the later Middle Ages. Dinas Mawddwy, a thoroughly Welsh community, had 35 burgesses in 1393, but only fourteen in 1592.

The strength of this book is that it provides the material for a comparative study of Welsh boroughs. It has two weaknesses. One is that any attempt to draw general conclusions is fraught with danger. Ian Soulsby draws up an urban hierarchy for Wales in the late 13th century. But too many of his 105 boroughs have to be omitted for lack of evidence. On one set of criteria he must leave out 54 boroughs; on another set of criteria he must ignore 28 settlements. The statistical error is too great for safety. The other weakness lies in the town plans, which include surviving medieval features and an outline road system. His text often relies on street names which are not included in the plans. That means that a serious student must either know the site or have access to more detailed maps and plans before the sketch can make its full impact. In fairness, the author is well aware of the gaps in our knowledge, and his own appeal is for more work, and especially more excavation, at some of the critical sites. The Welsh boroughs still have much to yield to historian and archaeologist alike.