1954a, 33 for his theory that the Danegeld payments were melted down). A full discussion is obviously beyond the range of this paper, but if we take Birka and Hedeby as representative of the grave goods material, fibulae and mounts of Carolingian workmanship have been found in many burials (the finest are graves 507, 526, 550 and 649 at Birka and 269 at Hedeby; for full lists of Carolingian material in Scandinavian graves see Arbmann 1937; Callmer 1977, 12–32, 230; Wamers 1985; the earlier Merovingian evidence is discussed in Bendixen 1974). Even allowing for the presence of some Frankish merchants in Scandinavia, the amount of Carolingian wealth that was taken back to the Viking homelands was obviously considerable.

As to future archaeological strategy in Brittany, a problemorientation approach would clearly serve best for extending our understanding of the Viking occupation. While most excavation obviously relies primarily on opportunity and finance, investigation of more rural settlements and monasteries needs to be carried out to examine the effects of dislocation resulting from the occupation.⁸ An extensive open-area excavation in a large fortress would surely illuminate the nature of the Scandinavian presence itself, with the Camp de Péran being ideally suited for a research programme. Above all, excavations are needed in Nantes, the heart of Scandinavian Brittany, as it is in this city that the answers to our questions lie.

4. CONCLUSION: BRITTANY IN THE VIKING WORLD

In the two preceding chapters the historical and archaeological evidence for the Scandinavians in early medieval Brittany has been assessed against the general background of western European politics. It has become apparent that after the raiding of the ninth century Brittany underwent a profound change from the Scandinavian viewpoint, a familiar pattern echoed elsewhere and similarly reflected in the excavated material. In order to understand this more fully, in addition to reviewing the Bretons' changing relationships with the Carolingians and Anglo-Saxons, we must compare the history of Scandinavian contact with Brittany with that in the other Scandinavian settlements and areas of operations in the west. Such a comparison is particularly valuable for assessing

the importance of trading networks and the growth of Breton independence.

First, it is helpful to examine briefly the composition and logistics of the raiding forces themselves, for which the records of the Great'Army's campaigns in Wessex preserved in the Anglo-Saxon Chronicle are of great value since they give a much fuller account of its movements and actions than the Continental sources. Given that the various ravages, winter bases and marches of the Great Army of Danes and its predecessors have been mapped and discussed by Hill (1981, maps 46-64 and annotations), the present treatment will be confined to what the English sources tell us of the army itself.⁹

It is obvious that the Great Army was no mere raiding force or loose assembly of opportunists. From the precision of its movements and base locations in the 880s and 890s in England it must have had a cohesive command structure with powers of delegation and intact lines of communication and supply. To suggest that such a host simply moved about the countryside supporting itself from the land, without fairly advanced reconnaissance and prior knowledge, would certainly be unjustified.

Some indication of the magnitude of the army's influence is surely contained in the Anglo-Saxon Chronicle entry for 893, when the Danes marched to Boulogne after campaigning in France ond bær wurdon gescipode 'and were there provided with ships', a fleet estimated later in the annal as at least 250 vessels. This may perhaps have involved a coercive or cooperative arrangement with a local town or an area sympathetic to the Danes, as is indicated too in the Chronicle entry for 866 when the East Anglians provided the army with horses. The Great Army may have operated as coordinated royal bands, surviving continual re-formation and division, as in 879, absorbing reinforcements as necessary to replace losses sustained in battle or resulting from elements of the army choosing to settle (Brooks 1979, though see chapter 2 above for the looseness of the term 'kings' at this period; Christopherson 1981-2 discusses the intricate structure and loyalty of the royal retinues in Scandinavia, together with conditions of service and reward).

The size of Viking armies at this time is also open to question, with considerable differences of opinion. Sawyer has argued that the hosts numbered only a few hundred men and that the sources tend to exaggerate (1971, 123-32), but Brooks (1979) has put forward a convincing refutation of this by comparing a wide variety

of sources from all over Europe, and finding a broad uniformity of estimates for fleet sizes. While some references are more likely to be gross distortions (such as the 600-ship raid on Hamburg in 845), Brooks notes that major armies are usually described as comprising 50-250 ships, with 100-200 not uncommon. The tactics of the Vikings seem to vary in accordance with the size of their armies, as do the corresponding defensive measures taken against them; compare the situations in Belgium (d'Haenens 1967) and Frisia (Braat 1954, especially 225; Trimpe Burger 1973) with the burh system (Brooks 1979). The effect of the Viking occupation on the surrounding areas during these campaigns has been examined by Brooks and Graham-Campbell 1986, 108 by comparing dated hoard depositions with the location of Great Army winter bases.

The Loire army operating in Brittany seems to have been smaller, possibly a force from Westfold in Norway, numbering 70-80 ships. Though a separate force, its leaders may have connections with the Great Army via Ragnarr loðbrók and his 'sons', together with Hásteinn (discussed by Brooks 1979, but see Smyth 1977, 17-35; the dispute about Smyth's work was mentioned in chapter 1).

The kingdom of York

York, more than any other of the Scandinavian colonies, provides a particularly clear contrast to the Viking occupation of Brittany. Although only 0.025% of the estimated area of the Viking Age city has been excavated so far, the work of the York Archaeological Trust has revealed a bustling commercial centre with trading connections spreading throughout the Viking world. Commanding the vital north-south land route along the Vale of York and situated at the confluence of the Ouse and Foss rivers, York occupied a similar strategic position to Nantes with its control over the mouth of the Loire. The city was taken by the Vikings in 866 and 867, but full settlement did not begin until 876. The situation remained turbulent until the early 920s, with a series of Scandinavian rulers governing the city, issuing coinage from c. 900 which shows considerable affinities with Carolingian examples (see Dolley 1978 for a review of the Viking coinage; and Pirie 1986 for the excavated evidence, especially p. 54 and plate IV for comparison with the Péran coin). The early tenth century saw a contest for power in the city between the Danes and the Norse from

Dublin, with a Hiberno-Norse victory at Tettenhall in 910. Ragnall of Dublin took command in 914, to be followed by more Irish Vikings until Æthelstan's conquest of the city in 927, after which it remained in English hands until 939. From that year York was ruled by Scandinavians until the death of Eiríkr blóðøx in 954, when it was absorbed into the Anglo-Saxon kingdom. (A brief guide to York's history may be found in Hall 1984, 43-66; see also Smyth 1978 and Sawyer 1978.)

Under Scandinavian rule York's economy flourished as a result of the new commercial contacts brought by the invaders (the relationship of Jorvík to its Anglian predecessor Eoforwic is still uncertain). Evidence of the city's prosperity was unearthed in abundance at 16-22 Coppergate, and in 1989 at the Queen's Hotel site in Micklegate, where a series of craftsmen's tenements was excavated, excellently preserved in the waterlogged soil. In the buildings and backyards, crowded along a street frontage, evidence was found of woodworking, shoemaking, leather-working, jewellery manufacture in several precious metals, needle and comb manufacture and coin minting, along with pottery and a full environmental record (see Hall 1981). York's prosperity as a trading centre led to a flourishing of Anglo-Scandinavian stone sculpture with distinctive regional styles (see Lang 1978 and 1984).

The contrast between the booming commerce of Jórvík, with its links to Scandinavia, the Continent and the East, and Vikingoccupied Nantes is obvious and striking. However, Brittany certainly offered potential for trade of this kind; the extensive Breton commercial network has been mentioned above, and mints are known from Rennes and Nantes (McKitterick 1983, 244). None of this mercantile apparatus seems to have been maintained by the Loire Vikings. York has numerous documentary references to its economic functions in addition to archaeological confirmation, Nantes has none at all. Despite the damage done to the Carolingian empire by the Scandinavian raids, in view of their past record of advantageous alliances it seems likely that the Franks would have been willing to set up at least a basic trading system with Viking Brittany in the early tenth century, if one had been offered. Close commercial ties and a degree of economic interdependence would also have lessened the Scandinavian threat to Frankia. In later tenth-century York, although it was then under nominal Anglo-Saxon control, there coexisted definite English and Scandinavian communities which traded freely. On this evidence, the conclusion that the occupation of Brittany was never intended to establish an independent commercial state like York is inescapable. While it is unlikely that any such commercial drive existed as a deliberate policy of the first Scandinavians who settled in northern England and Normandy, in these areas the newcomers very soon began to establish themselves as traders with an eye to the markets, as in towns like Hedeby. On present evidence this development is entirely absent from Brittany.

Celtic Britain: Wales, Cornwall and Scotland

If we turn to the Celtic regions in the west of Britain, a different picture again emerges. In Wales it is not yet clear whether the Viking impact consisted simply of a succession of raids and continual small wars, or involved a definite crisis and confrontation as in Wessex. In discussing such events in relation to the source material, we must remember that from the viewpoint of a contemporary Anglo-Saxon or Welsh chronicler the Viking situation can rarely have seemed anything but bleak and hopeless.

The Welsh political background seems to have consisted of a pattern of allegiance to small groups and individuals, but organised into rudimentary territorial units and kingdoms such as Gwynedd. Wales shows a history of alternately hostile and interactive relationships with England like that we see between Brittany and the Carolingian Empire, and also a similar pattern of Viking raiding except that in Wales the attacks continue until c. 954. Like Brittany, Wales offered poor prospects for conquest in the ninth century, owing to a mixture of geographical factors and perhaps the relative poverty of the Welsh compared with the targets in England. From the 850s, raiding was initially confined to the north and south coasts but in the later ninth century there were probing attacks through the lowlands, linked to the assault on Wessex. Gwynedd also had a strong leader in Rhodri Mawr until 878, just as did the Bretons in leaders like Nominoe and Salomon.

The raids persisted into the mid tenth century, with the emphasis shifting to the exiled Dublin Norse after 902. By this time Wales had achieved a measure of unstable cohesion and independence similar to that in Brittany, under the direction of Hywel Dda who fought the Vikings in alliance with the Anglo-Saxons, which parallels the Franko-Breton campaigns in France. In Wales too, the Scandinavians became part of the existing political scene, which added an extra factor to the civil power struggles. The extent of

Anglo-Welsh connections under Hywel is shown by the Welsh absence from Brunanburh (see the discussions of the Armes Prydein in chapters 1 and 2 above, and the references to the Vinheiðr campaign in Egils saga Skalla-Grimssonar 1933, chs. 51-5; further accounts of this period are given in Loyn 1976 and 1977, 35-62 and Davies 1982a, chapter 4). The lack of serious Viking assault at this time was also due to the peripheral position of Wales in relation to the main colonies in Ireland and the Danelaw.

With the deaths of Hywel Dda (c. 950) and Eirskr blóðøx (954) the Scandinavian impetus against Wales increased. Although this was still generally limited to raiding, concentration on the Bristol Channel and the Chester region is evident from the place-names, which show possible settlement around Milford and perhaps the establishment of basic trading posts in Pembrokeshire (see Davies 1982a, 116-20 and Loyn 1976); Anglesey may also have been occupied for a time. These settlements seem to have been temporary and the majority of the Scandinavian place-names are navigation points. There were certainly no substantial fortified centres like those in Ireland. The meagre documentary sources and the archaeology (limited to eight hoards and a few problematic pieces of sculpture, see Davies 1982a, 117-9 and Boon 1986, appendix) reinforce this picture.

The northern and southern colonies, if such they were, seem to have been maintained into the early eleventh century as a result of their proximity to the Danelaw and Man in the north, and Bristol's links with the southern kingdom of Knútr and Sveinn (the Bristol slave-trade may be referred to by Wulfstan in 1014). It is Wales's connections with areas of major Scandinavian interests which Brittany lacked, and which make the Vikings' failure to exploit the great centre at Nantes so unusual. But despite the close involvement of Wales in the political and military upheavals of the Irish Sea and the Danelaw, the ultimate Scandinavian impact there remains comparable with that in Brittany; in each case it had little linguistic or institutional effect, but was a significant factor in the development of independence and opposition to the Anglo-Saxons and Franks respectively.

The documentary evidence for Scandinavian influence in Cornwall is even more scarce than that for Wales. There is one ninth-century reference to a Cornish-Danish alliance against Ecgbryht of Wessex in 838, and there were Danish campaigns in the south-west in 981, 982, 988, 997 and 1001 (the sources are reviewed by Wakelin 1976-7). The Vikings seem to have fought as

mercenaries in the Cornish struggles for autonomy, as in Wales and Brittany, but generally appear to have restricted their activities to raiding. Lydford, Tavistock and Bodmin or Padstow are known to have been sacked, but the Cornish put up a spirited defence in 988 and 1001, repulsing the Scandinavians from Exeter on the latter occasion. Wakelin lists all the place-names and loan words of Scandinavian origin (1976-7, 46-7), all of which concern the sea and topography except for three which incorporate personal names; together with a few interlace crosses in the Anglo-Scandinavian styles of the Danelaw and three hogbacks (see Laing 1975, 140), these are the only indications of settlement. With such indirect and insubstantial evidence, no adequate model of Scandinavian activity in Cornwall can really be suggested, but it is interesting to note the familiar pattern of Viking raiding and simultaneous involvement in civil politics.

The Scottish material is peripheral to the subject of the Vikings in Brittany, representing as it does the complete and lasting take-over of an area by the Scandinavians; Orkney and Shetland remained under autonomous Scandinavian control well into the medieval period. Scotland and the Northern Isles belong as much to the North Atlantic sphere of Scandinavian operations as they do to the Irish Sea, and as such the points of contact with Brittany are slight.¹¹

Ireland

York has already been discussed as an example of a booming trading centre in an area of basically English culture which was settled and influenced by Scandinavians. In Ireland we see a similar situation, but in a Celtic land and thus of great relevance to Brittany. After initial raids in the late eight century, the Vikings established a *longphort* on the site of Dublin at the Liffey mouth in 841, which grew into a small settlement (of this early Dublin settlement, only the cemetery has been located archaeologically, at Islandbridge; see Wallace 1985, 103-5). Until 876 the Scandinavians' interests lay mainly in Scotland and the Hebrides, but they became progressively more involved in the struggles for power in York. The Irish managed to expel the Dublin Norse in 902, as mentioned above, and they did not return until 917, although they are known to have remained on a few coastal islands. During their exile the Norse established closer links with York and set up a

dynasty there after their return to Ireland. By 919, the Vikings had founded towns at Wexford, Waterford, Limerick and Cork. Throughout the 920s and 930s the Hiberno-Norse were key figures in the wars with Æthelstan, but after the Brunanburh disaster of 937 their interests were increasingly confined to Ireland. Their rôle in Irish politics, similar to that in Wales and Brittany, grew less influential as the tenth century advanced, with serious setbacks in the 970s and 980s. By 1014 and the Battle of Clontarf, the zenith of Scandinavian power in Ireland was already long past.

Scandinavian activity in Ireland focused on the urban centres more than on any other kind of settlement. The towns came to occupy a position of considerable importance in the Irish civil strife of the tenth and eleventh centuries; as new foundations, their influence and monopoly of luxury imports and long-distance trade led to a gradual shift in emphasis from prehistoric cult sites like Tara and Cashel to the urban centres as symbols of power and royal authority.

As a result of large-scale redevelopment, archaeologists in Dublin have been fortunate enough to uncover the remains of more than 200 structures of the early medieval period. Grouped into four types, the buildings can be reconstructed as the homes and workshops of metalworkers, jewellery manufacturers, weavers, leather-workers and many other craftsmen; particularly fine woodcarvings have been preserved by waterlogging. Dublin's trading connections, seen in the imported goods, stretched mainly northwards to Scandinavia and Scotland but contact is also evident with England (an Anglo-Irish element may have played a significant rôle in Dublin, see Wallace 1986) and the Carolingian Empire. Between them, the commercial centres of Dublin and York dominated the Scandinavian mercantile operations in the British Isles and north-western Europe.

In spite of the dearth of archaeological evidence and the ambiguous nature of much of the documentary material, it has been possible to construct a remarkably coherent picture of the Scandinavian impact on Brittany. Against the background of the dispersal and settlement of the great Viking armies that had been characteristic of the ninth century, and seen in the context of the establishment of the Duchy of Normandy, Brittany emerges as a final target for the raiders and looters. Although small Viking raids on England continued up to and even after the Norman Conquest, it is only in Brittany that we see true Viking activity on such an

ambitious scale in the tenth century. As to its long-term effect on Brittany, most scholars have argued for a minimal impact (cf. Smith 1985 and Davies 1988, 24, 213). This is true to the extent that there is nothing in the social organisation and institutions of Brittany after 939 that is specifically due to Scandinavian influence. To take this line, however, is to ignore the massive impact of the Vikings as a catalyst for political coalition and the formation of an independent Brittany. Without the deleterious effect of the Viking raids on the Carolingian empire, it is arguable whether Brittany would have developed the degree of autonomy that it enjoyed in the mid to late tenth century.

In this paper I have tried to do no more than present a summary of the evidence for the Vikings in Brittany and an assessment of its significance. Much research remains to be done, especially on the French sources; future archaeological work may radically alter our perception of this most enigmatic of Scandinavian colonies. It is to be hoped that this paper can at least provide a basis for a fuller understanding of the Vikings in Brittany.