Carolingian Cavalryman AD 768–987

David Nicolle • Illustrated by Wayne Reynolds

Born in 1944, DAVID NICOLLE worked in the BBC's Arabic service for a number of years before gaining an MA from the School of Oriental and African Studies, London, and a doctorate from Edinburgh University. He has written numerous books and articles on medieval and Islamic warfare, and has been a prolific author of Osprey titles for many years.

WAYNE REYNOLDS attended art college in Middlesborough and has worked as a professional artist since 1991, providing illustrations and source material for many gaming companies, creating figures, landscapes and interiors, as well as core characterization. He is best known for his work on titles such as '2000 AD', 'Slaine', and 'Judge Dredd'. Wayne is also a keen modeller and historical re-enactor.

Carolingian Cavalryman AD 768–987

David Nicolle · Illustrated by Wayne Reynolds

Artist's note

Readers may care to note that the original paintings from which the colour plates in this book were prepared are available for private sale. All reproduction copyright whatsoever is retained by the Publishers. All enquiries should be addressed to:

Wayne Reynolds
5 Kirkstall Mount
Kirkstall
Leeds
West Yorkshire
LS5 3DT
UK

The Publishers regret that they can enter into no correspondence upon this matter.

Author's Dedication

For Selina Majumdar, the beautiful mathematician.

CONTENTS

CAROLINGIAN CAVALRYMAN 768–987

INTRODUCTION

The kingdom of the Franks emerged from the ruins of the collapsed western part of the Roman empire in the late 5th century AD. From their homeland in what are now the Benelux countries, northernmost France and westernmost Germany, the Germanic-speaking Franks overthrew not only the last Roman governors of what is now France, but also pushed their Germanic rivals, the Visigoths, into southern France and the Iberian peninsula. Here, the Visigothic kingdom survived until overthrown by Islamic armies in the early 8th century. Meanwhile, the Franks also imposed their rule over most of southern Germany.

Until the mid-8th century the sprawling Frankish kingdom was ruled by the Merovingian dynasty which, though Christian, was credited with semi-divine origins rooted in the Franks' own pagan past. Even before the mid-7th century this Frankish state began to fall apart and the last hundred years of Merovingian rule was the period of the so-called 'Lazy Kings'. Order was occasionally re-established by members of the Pepinid family (named after their founder, Pepin of Landen, who died in 640). As 'mayors of the palace', the Pepinids emerged as military and political strongmen, yet even they could not prevent outlying regions like Celtic Brittany, Germanic Bavaria and the entire south-west of France, then called Aquitaine, from regaining independence in the later 7th century. Between 711 and 721 the Umayyad Islamic caliphate conquered the
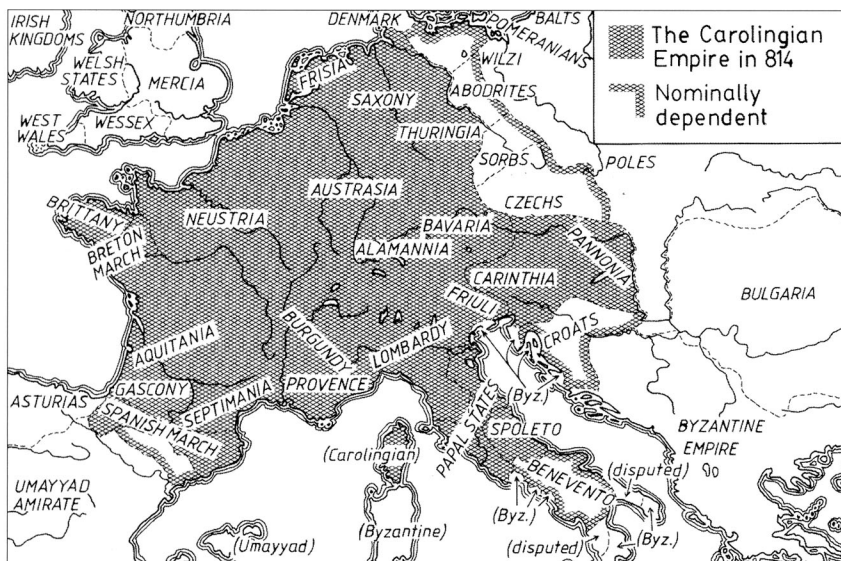
The Carolingian empire and its dependencies at the death of Charlemagne, 814.

Visigothic kingdom, including part of southern France, and went on to impose a tenuous suzereinty over Aquitaine.

In 714 Pepin of Heristal, Mayor of the Palace and grandson of Pepin of Landen, died. This was followed by civil war between members of the Pepinid clan, often nominally waged on behalf of members of the Merovingian royal family. Five years later Charles Martel, an illegitimate son of Pepin of Heristal, seized control as Mayor of the Palace and ruled in the name of the last Merovingian kings until 741.

Charles Martel defeated a substantial Islamic raiding force near Poitiers in 732 or 733, re-established Frankish control over Bavaria and conquered Frisia. His work was continued by his sons Carloman and Pepin, who governed the Frankish kingdom as joint mayors until Carloman's death in 747, after which Pepin, known as 'the Short', remained sole mayor until, four years later, the Pope agreed to the deposition of the last powerless Merovingian, King Childeric III. Pepin then became King of the Franks and a new age began. Whereas the wars of Charles Martel, Carloman and of Pepin before his coronation had been defensive or to re-establish the unity of the kingdom, the Franks now went on the attack.

This period has been clouded by myth and misunderstanding. The Islamic presence in southern France, for example, was more of a temporary occupation than a conquest. Existing military and political élites suffered from changes in the balance of power, but for ordinary people, life was largely unaltered. It has also been assumed that Roman

'Charlemagne and one of his wives,' in a manuscript produced between 817 and 823. His long staff is a mark of status rather than a weapon. (Klosterbibliothek, St Paul, Carinthia, Austria)

The Lombard relief carvings on the facade of a Romanesque church in Pavia probably date from the 8th century. This example portrays a mounted falconer and indicates that Italian horse harnesses had much in common with those of the Islamic world. (West front, Church of San Michele, Pavia, Italy)

law 'disappeared' with the fall of the Roman Empire, to be 'rediscovered' during the 12th century Renaissance. In fact, Roman law continued to be known, and was used in many southern parts of the expanding Frankish kingdom. This was the Theodosian Code, however, rather than the Justinianic Code to which medieval lawyers later switched. Roman art, architecture and Latin literature similarly survived, through what are still misleadingly called the 'Dark Ages', along with many Roman military concepts and technologies. Men descended from troops who had served in the last western Roman armies were also recorded throughout the early medieval period, despite the fact that Germanic peoples and 'barbarian' warrior ideals dominated most of Western Europe.
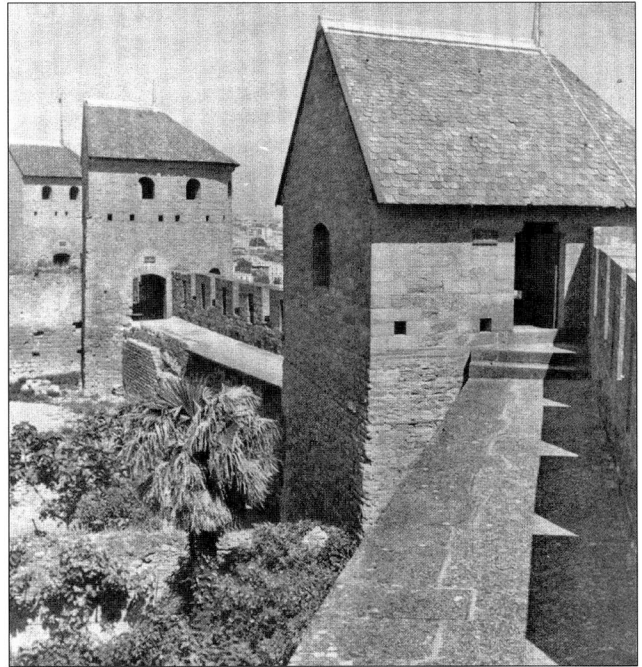
CHRONOLOGY

|	
751	Deposition of Childeric III; Pepin becomes King of the Franks, 751–768.
759	Franks take Septimania from the Muslims.
768	Charlemagne (Charles I) and Carloman (until 771) joint kings of the Franks; Charlemagne conquers Aquitaine.
772	Charlemagne's first invasion of Saxony.
773–74	Charlemagne conquers Lombard northern Italy and Spoleto.
776–85	Charlemagne conquers Saxony.
777–78	Charlemagne's invasion of northern Iberia is defeated.
780	Campaigns by Charlemagne in Italy.
786–99	Charlemagne imposes suzereinty on Brittany.
787	Lombard Duchy of Benevento submits to Charlemagne.
788	Charlemagne imposes direct rule on Bavaria and Carinthia.
789	Charlemagne's first campaign against the Avars; Slav tribes east of the Elbe accept Carolingian suzereinty.
795–96	Charlemagne establishes the Spanish March and destroys the Avar kingdom.
799	Slavs of Slovenia accept Carolingian suzereinty.
800	Charlemagne becomes emperor (800–14).
801	Carolingians conquer Barcelona.
804	Final submission of Saxons to Charlemagne.
805–06	Bohemian Slavs accept Frankish suzereinty.
808–10	War between Charlemagne and Danes.
812	Islamic territory north of the River Ebro accepts temporary Carolingian suzereinty.
813	Start of Islamic naval raiding against Italian and Carolingian coasts.
814	Louis I becomes emperor (814–40).
826–27	The Spanish March fails under Andalusian-Islamic pressure.
827–29	Carolingian Balkan March fails in the face of Bulgar pressure.
830–34	Carolingian civil wars.
835	Start of Viking raids into Carolingian empire.
840–43	Carolingian civil wars.
841	Vikings establish base at the mouth of the Rhine.
843	Treaty of Verdun divides Carolingian empire between kings who recognise Lothar I as emperor (840–55).
845–46	Vikings sack Hamburg; Aghlabid (Tunisian) fleet sacks Rome.
855	Louis II becomes emperor (855–75).
862	Magyar raids into eastern Carolingian empire.

870	Treaty of Mersen divides Carolingian empire into three kingdoms: Louis II as emperor and king of Italy, Charles II as king of the Western Franks (France), Louis the German as king of the Eastern Franks (Germany).
875	Charles II becomes emperor (875–77).
877–81	Period of confusion and civil wars.
879–92	Viking 'Great Army' operating in northern France and Germany.
880	Treaty of Ribemont redefines the frontiers between the Carolingian kingdoms and adds the kingdom of Provence under Boso (879–87) (later known as kingdom of Burgundy or of Arles).
881	Charles III becomes emperor (881–87).
882	Muslims establish base at the mouth of River Garigliano in Italy.
885–86	Unsuccessful Viking siege of Paris.
887	Charles III deposed; end of nominal unity of Carolingian empire; Duke Odo of Paris becomes ruler of France; Arnulf becomes king (subsequently emperor) of Germany and Italy (887–99).
891	Guy of Spoleto becomes a rival emperor in Italy (891–94).
893	Charles III is nominal king of France (893–929).
894	Arnulf of Bavaria invades Italy; Muslims establish base at Fraxinetum and seize control of most of Provence.
896	Arnulf of Bavaria crowned emperor of Germany and Italy.
899	Louis IV becomes emperor of Germany and Italy (899–911); Magyars raid Italy.
906–10	Magyars destroy kingdom of Great Moravia, defeat Bavarians at Pressburg, defeat Eastern Franks at Augsburg.
911	End of Carolingian rule in Germany and Italy; Carolingians recognise Viking settlement in northern France (Normandy) and Rollo becomes first Duke of Normandy.
911–19	Confusion in Germany and northern Italy.
913	Swabians and Bavarians defeat Magyars.
916	Muslims expelled from mouth of the River Garigliano.

The massive narthex and choir of the Collegial Church of St Vincent in Soignies date from the second half of the 10th century. Their style is believed to reflect the lost secular architecture of the Ottonian empire. (Author's photograph)
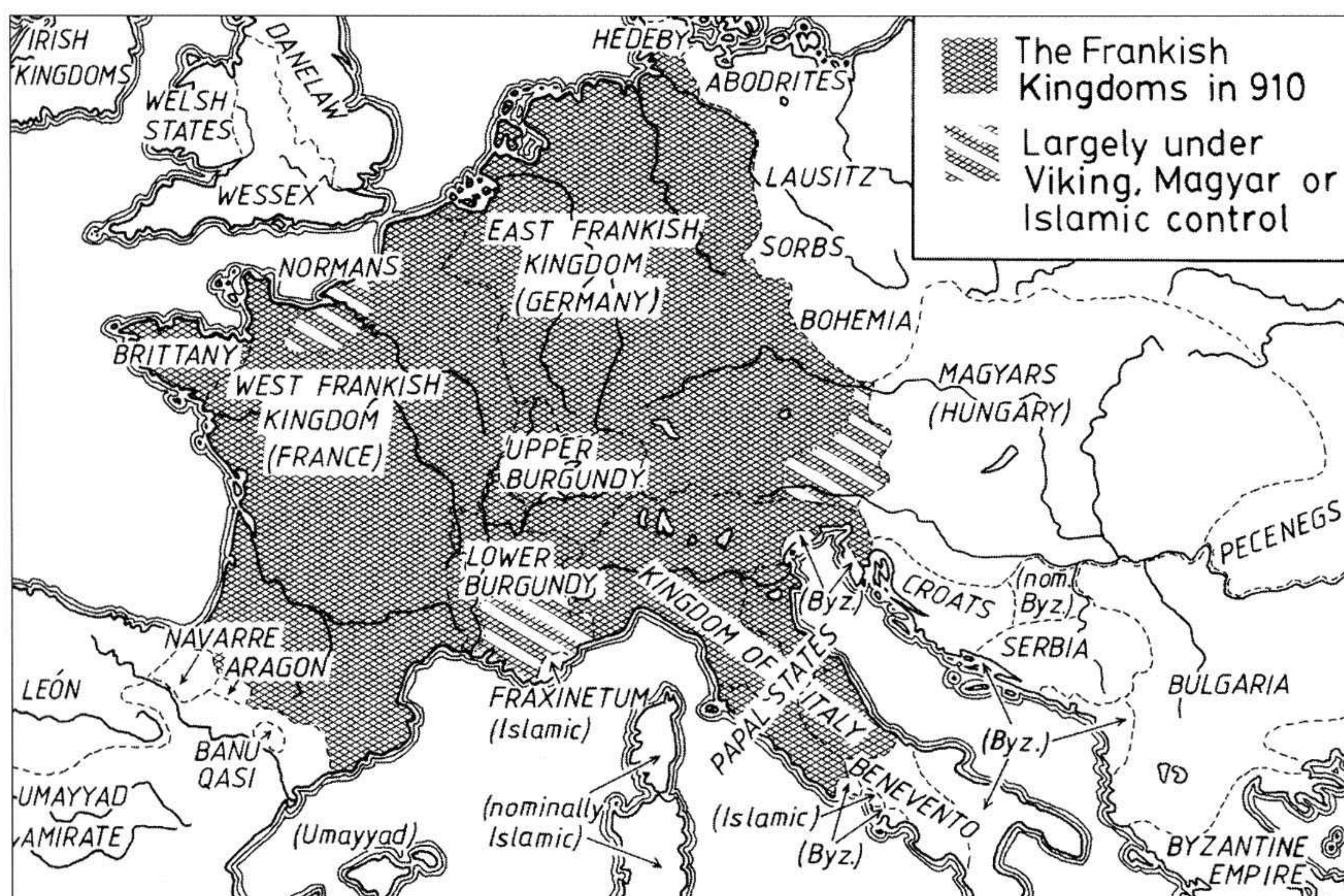
The Frankish kingdoms in 910.

919	Duke Henry of Saxony becomes emperor of Germany and parts of Italy (919–36).
924	Magyars raid Saxony and northern Italy, sack Italian capital Pavia.
928–29	Emperor Henry I attacks along eastern German frontier.
929	Deposition of Charles III; Raoul of Burgundy becomes king of France (929–936).
933	Emperor Henry defeats Magyars at Riade.
936	Louis IV becomes king of France (936–54); Otto I becomes king of Germany (836–73) and subsequently parts of Italy.
938–39	Magyar raiding into Germany and northern Italy; revolts against King Otto I in Bavaria and Saxony; Otto I defeats enemies at Birten and Andernach.
951	Otto I's first invasion of Italy.
954	Lothair becomes king of France (954–86); Magyar raids reach France.
955	Otto I defeats Magyars at Lechfeld and Slavs at Recknitz.
957–58	German armies campaign against Slavs in Elbe region.
961–65	Otto I's second invasion of Italy.
962	Otto I becomes emperor of Germany and parts of Italy (962–73).
966–72	Otto I's third invasion of Italy.
973	Otto II becomes emperor of Germany and parts of Italy (973–83); Muslims expelled from Fraxinetim.
981–82	Otto II's campaign in southern Italy defeated by Muslims at Capo Colonna.
982–83	Western Slavs and Danes throw off German overlordship.
983	Otto III becomes king and subsequently emperor of Germany and parts of Italy (983–1002).
986	Louis V becomes King of France (986–87).
987	End of Carolingian rule in France; Hugh Capet (Duke of France 956–87) becomes the first Capetian king of France (987–96).
996	Robert I becomes King of France (996–1031).

SOCIAL ORIGINS AND RECRUITMENT

A great many questions remain unanswered concerning Carolingian armies. The traditional idea that there was a sudden rise in the importance of armoured cavalry in western Europe during the later 8th and early 9th centuries is probably wrong. In fact, many horsemen in early Frankish Carolingian armies were probably mounted infantry rather than cavalry. Of course, even the archetypal 'knights' of later centuries were trained and willing to fight on foot when the need arose. The question of the adoption of stirrups, and how significant this was in military terms, is similarly contentious.

'Two confronted armies,' in the 9th-century *Trier Apocalypse*. The complete lack of armour might reflect the fact that it was made in a relatively poor north-western region of the Carolingian empire. (Stadtsbibliothek, Cod. 31, f. 63, Trier, Germany)

Very little is known about the military organisation of the early Carolingian state. There was a general but largely theoretical obligation upon all free men to defend the land, but in practical terms rulers increasingly preferred the bulk of the population to fulfil their obligations by paying taxes or by carrying out non-military services. The Franks remained the dominant 'ethnic' group. On the other hand they themselves were now dividing into Western Franks or Neustrians, who evolved into Frenchmen, and Eastern Franks or Austrasians who, with several other 'tribal' groups, became Germans.

A systematic military organisation of the Carolingian state probably emerged after the death of Charlemagne, during the political and military crises of the 9th century. By this time the Carolingian empire had ceased to expand and had largely gone on the defensive. While the Carolingian kingdom and empire was expanding, there may have been no shortage of military recruits – more or less willing – nor of military resources. Yet the Franks are unlikely to have reverted to a primitive system of plunder and war bands as they carved out the Carolingian empire. By now, agricultural income supported a social élite who probably preferred to keep the bulk of the people working the land while they themselves used their wealth to fight rivals and external foes. Furthermore, income from the land was already more reliable that booty or tribute.

It is also important to note that the Franks had always used mounted troops. It was not technological innovation or even political decision that brought greater numbers of horsemen into Frankish armies. It was largely a result of expanding wealth and improved organisation. Above all, more members of the dominant military class could afford horses and the expensive equipment that a man needed to serve in a mounted capacity. As yet the stirrup and other supposedly new fighting techniques played little part in such developments.

Charlemagne's own priority was to retain the support of the powerful aristocracy. Even so, Charlemagne sometimes conducted campaigns with little support, especially when fighting civil wars rather than external offensives. So who were Charlemagne's most reliable and immediately available troops? These men seem to have included a higher than usual proportion of well-equipped horsemen, whether they be cavalry or mounted infantry, and this may have been where the famous but still obscure *scaras* were important. These élite formations are likely to have been raised largely from the reliable Carolingian heartlands, and to have been dominated by Austrasians (East Franks) and Alamannians. Beyond this, Carolingian rulers could use tax revenues to recruit fighting men or military leaders who brought their followers with them. Nevertheless, it is misleading to regard such troops as 'regular forces'.

The simple fortifications of the village of Maubec in central France are believed to date from the 7th century, with later additions. (Author's photograph)
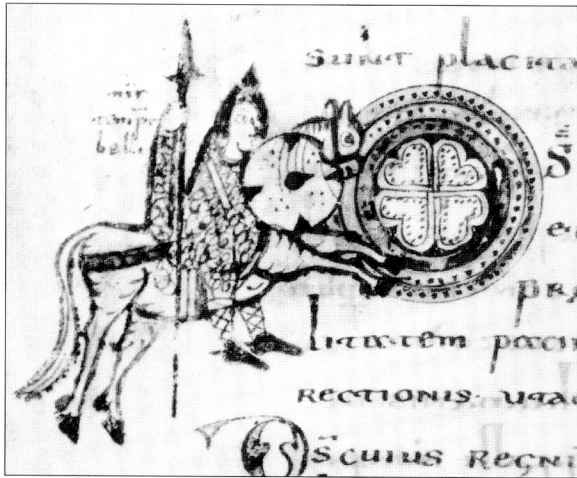
One of the earliest realistic illustrations of a fully armoured Carolingian cavalryman is found in this Sacramentary made in France *c.* 790–95. (*Gellone Sacramentary*, Bib. Nat., Ms. Lat. 12048, Paris, France)

Germanic social structures influenced both recruitment and military organisation during the early Carolingian period, especially in Germany and north-eastern France. However, in southern France and Italy, despite having been conquered, settled and ruled by Germanic tribal peoples, the early medieval Germanic social veneer was already wearing thin.

The basic elements of early Germanic society were the clan, household, retinue and tribe. The clan was primarily a law-maintaining and war-fighting structure, but tended to be weak and often had a collective leadership. The household was smaller, stronger and included elements of social stratification. The retinue included a less direct form of socio-political dependency and existed primarily to increase a lord's or aristocrat's power and prestige. It also only admitted free men. Outside observers often noted the importance of oaths to cement loyalty amongst the western European military élites in this period. For example, the Byzantine Emperor Leo VI (886–912) wrote, in his updating of earlier military information, that Frankish and Lombard units were not 'regiments' in the Byzantine sense, but consisted of kinship or mutual interest groups which were now often cemented 'by sworn agreement'. Within Carolingian society, the tribe was a variable and, in many respects, nominal social unit; at least outside the most recently conquered regions. A term which later came into use in France for such extended family and mutual interest relationships was *mesnie,* or in Latin *masnada.* The similarity between this new term and the Arabic word *masnad* or *masnadah* (from *sinad,* or assistance), meaning support or position of honour, is worth noting.

The obligation of military service by all free Franks in the early Carolingian state theoretically meant that a man should serve for up to three months, with no formal system of reliefs or reserves. But the reality behind this interpretation is debatable, and it has been suggested that, 'The conquerors of the Saxons and Avars need to be re-imagined as bands of noble youths in the followings of lords competing with each other (individually and as groups) for glory and loot.'[1] Other historians maintain that military levies of free men did not necessarily produce an unwieldy mass of ill-armed part-timers. Furthermore, many surviving Carolingian *capitularies* or legal declarations envisage such traditional recruits serving far from home. There is also strong evidence that many were well equipped, and that they followed their local counts if other local leaders were unavailable.

As mayors of the palace, the early Carolingians had their own military following, often called *pueri.* Whether these were the same as the *socii,* who are recorded as military followers of other magnates, is unclear. Other terms whose meanings remain unclear are *centenae,* who may have been the king's personal troops; *palatine* troops, who were under direct royal command; *exercitus,* which seems to have meant a readily available local force, and *exercitus generalis,* which was probably a

---

1 J.L. Nelson, 'Violence in the Carolingian world and the ritualisation of ninth-century warfare', in G. Halsall (ed.), *Violence and Society in the Early Medieval West* (Woodbridge 1998) 95.

Soldiers in a 9th-century French Apocalypse manuscript. Once again, there are no helmets in this illustration. (*Apocalypse of St Amand*, Bib. Munic., Ms. 386, Cambrai, France)
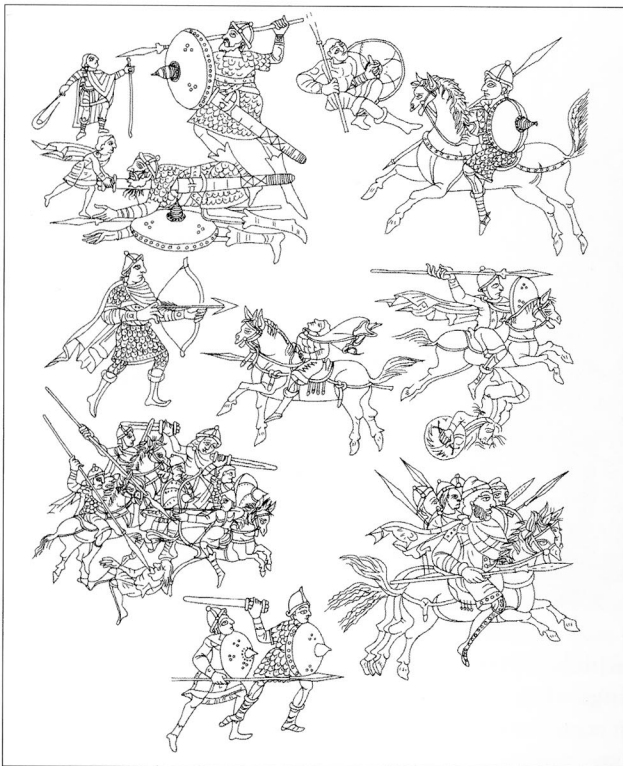
larger levy. A term which fell out of use was *trustis*, which had referred to the Merovingian kings' own military followers.

The Carolingian court was a remarkably cosmopolitan place, and this was also true of many palatine armies. The army which unsuccessfully attacked Islamic Saragossa in 778 included Burgundians, Neustrasians, Bavarians, Provençals, Septimanians and Lombards, each group seeming to form more or less autonomous units within the army. It is also worth noting that non-Frankish, non-Germanic troops, sometimes proved more effective than the supposed military elites, although these troops were usually placed under Frankish leadership. Nor was there just one Carolingian army.[2] Instead, different armies were summoned for different purposes, under different circumstances, and included different peoples.

By the end of the 10th century, recruitment had changed. Systems had been developed whereby poorer men clubbed together to equip and send just one of their number to serve. Paradoxically, this increased rather than decreased the availability of proper troops at a time when the Carolingian empire was on the defensive and under great pressure from Viking, Magyar-Hungarian and Saracenic-Islamic raiders.

Even where the rise of cavalry to military dominance can be identified, it was almost invariably a case of a 'decline of disciplined or useful infantry' rather than a significant change in the cavalry capabilities. Nor was this process uniform across what had been the Carolingian empire, and there were major differences in the cavalry–infantry balance when comparing a still almost tribal northern Germany with relatively urbanised Italy, or increasingly feudalised France. In Germany a rise in the importance of armoured horsemen during the second half of the 10th century largely resulted from government policy under the new Ottonian dynasty. While in France there was an increase in small-scale local warfare and everywhere, it seemed, the heavily armoured, lance-armed

2 J. France, 'The Composition and Raising of the Armies of Charlemagne', in B.S. Bachrach (et al. eds.), *The Journal of Medieval Military History I* (Woodbridge 2002) 61-82.

cavalryman or *miles* became socially, if not necessarily militarily, dominant. By the later 10th century the ancient term *miles* could be re-translated as a very early form of 'knight', though even this begs a great many questions about his social origins, status, and the different ways the term *miles* was applied in different countries. What cannot really be disputed is the fact that the *miles* would eventually become a new member of an existing aristocracy – though not until the 11th century in France, and even later elsewhere.

As France fragmented into competing local lordships, the only large armies were those of the king and certain powerful noblemen, the most notable being Foulque of Anjou who, in terms of military developments, dominated the history of late 10th–early 11th century France. His armoured cavalry can almost been seen as predecessors of those Normans who supposedly dominated western European warfare from the mid-11th to 12th centuries.

The *Stuttgart Psalter* provides the best-known illustrations of arms and armour from the Carolingian period. It was made around 825 and the abundance of armour, as well as certain aspects of style, hint that it was made in Italy. (*Stuttgart Psalter*, Landesbib., Cod. Bib. 2°. 23, Stuttgart, Germany)

TRAINING AND EDUCATION

The amount of training which Carolingian military élites received is difficult to determine, and the same is true of the actual training itself. On the other hand, the results are clear, though they tended to be presented in a negative manner; chroniclers sometimes highlighted a lack of military training among local militias, who were often described as 'lacking discipline' and being 'slaughtered like cattle'. Other literary sources indicate that it was the balance between passion and discipline which marked an experienced fighting man.

Where cavalry skills are concerned, the written evidence suggests an unexpected reduction in mounted combat between the mid-7th and mid-8th centuries. This might be misleading, however, as other sources show that military horsemanship now formed a major part of the upbringing of aristocratic young men. It started at an early age and probably reflected the increasing importance of such skills.

Another widespread military myth concerning this period maintains that an increase in the importance of armoured cavalry and the apparent adoption of stirrups resulted from an Islamic military threat. In reality early Islamic armies were dominated by infantry, and Arab-Islamic horsemanship was almost entirely within the same late Roman tradition as that inherited by the Franks and Carolingians. Furthermore, the Andalusian-Islamic cavalrymen were among the last Muslim horsemen to adopt the stirrup. Another probable myth maintained that Viking raiders learned cavalry skills from their Frankish victims in the 9th and 10th centuries. Yet riding was already widespread in Scandinavia and there is strong archaeological evidence to suggest that several

Scandinavian peoples learned about stirrups from the Magyars or even from the earlier Avars in central or eastern Europe.

Stirrups may have been gradually adopted within the Carolingian empire during the 9th century, but the biggest changes in cavalry techniques came during the later 9th and early 10th centuries. It was the challenge posed by the Magyars, a true horse-riding people, which stimulated change in cavalry warfare in Germany. In France the strategic (rather than tactical) threat posed by the Vikings encouraged the use of substantial numbers of well-equipped, well-trained, immediately available and highly mobile mounted troops.

The clearest reference to the importance of cavalry training is found in King Henry I of Germany's response to the Magyar menace. He raised an army trained to defend the frontiers, demanding speed of reaction and an ability to fight the Magyars on horseback. In his *History of the Saxons*, Widukind of Corvey detailed Henry's preparations, noting that the king refrained from attacking the Magyars until his troops had been 'trained in cavalry fighting'. This new cavalry élite was also designed to operate alongside the largely infantry *exercitus*.

Throughout this period sons of the upper or aristocratic classes were given a general education under their mothers' guidance, before being transferred to their fathers' care. Information about the education of Foulques Nerra's son, Geoffrey Martel, shows that he was considered an infant until the age of seven. From seven to about 14 he became his father's responsibility and his training was largely military. The youth often travelled with his father in peace and in war, and eventually Geoffrey Martel grew up to be a famous warrior in his own right.

Meanwhile, the general education of these élites could be surprisingly broad. For example, some monastic schools were open to laymen, while other boys (and girls) were taught to read and write by local priests in cathedral schools, in the courts of local counts, dukes or the king, and sometimes within their own parents' households. The role of such educated men was to serve in the royal administration, centrally or locally, because written orders expected written replies. Nor were educated and literate men absent from armies on the

'Huntsmen representing the months of November and December,' in a late 8th-or early 9th-century Carolingian manuscript. (Nationalbibliothek, Cod. 1, f. 90v, Vienna, Austria)
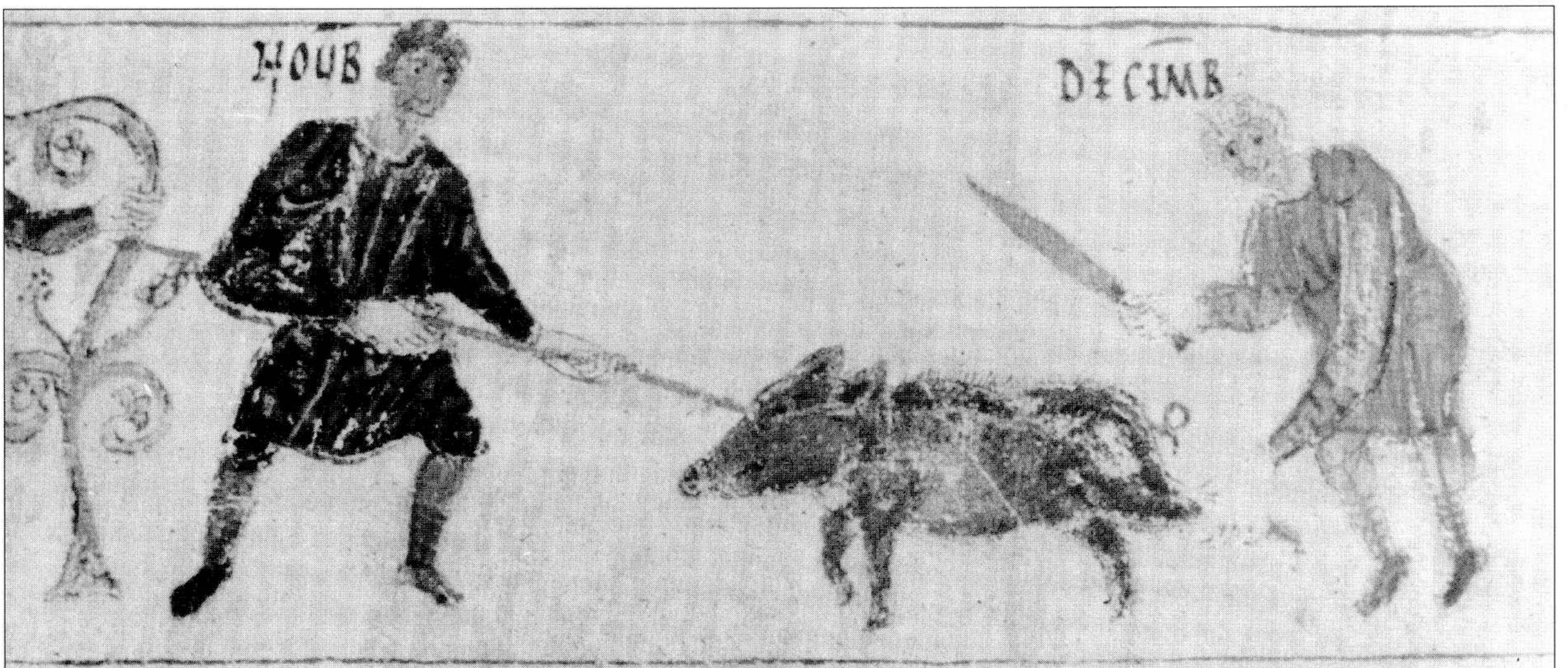
Hunting and falcony continued to provide subject matter for art in Italy after the fall of the Lombard kingdom. This simple 10th century relief carving clearly shows a deep saddle with a raised pommel and cantle. (Church of San Saba, Rome, Italy)

battlefield where many fought and died.

The importance of literacy amongst the military élite is reflected in their interest in military writing. This ranged from a section on war in the *Liber Glossarum*, an encyclopedia written during the reign of Charlemagne, to copies of the treatise written by the late Roman military theoretician Vegatius. Considerable interest was taken in Vegatius' opinions about training, which featured prominently in an abbreviated version written by Hrabanus Maurus for Emperor Louis II.

A touching poem by Ermoldus Nigellus[3] earlier in the 9th century shows that Carolingian boys found 'sports' more interesting than 'schoolwork'. Describing a hunting expedition by Louis the Pious, the poet recalled that the emperor's young son Charles wanted to join in when he saw a fleeing doe:

> Charles catches sight of her, he longs to chase the doe like his father,
>   Afire with excitement, he demands, he begs, for a horse.
> Earnestly he asks for arms, a quiver and swift arrows.
>   He longs to ride in the chase, as his father does.
> He pleads and pleads again, but his lovely mother
>   Forbids him to go, will not let him have his way.
> Had not his tutor and his mother held him back,
>   The boy would have raced off on foot, as boys will.

Once under the care of his father, however, a boy's life became one of hard riding, hard living and real training in the use of weapons. Coming of age was a significant moment in the life of an aristocatic youngster, and he might be given a sword at age 14 or 15, thus entering the society of adult men. Hrabanus Maurus, commenting on Vegatius, wrote, 'Today we see in the households of the great, that children and adolescents are raised to endure hardship and adversity, hunger, cold and the heat of the sun. They are familiar with the popular proverb, that he who cannot achieve cavalry skills in puberty will never do it, or only with great difficulty, at a more advanced age.' Elsewhere, he focused on cavalry warfare and training exercises such as using 'a club against a post'. Other subjects included training with light weapons that were easy to use, baggage, infantry warfare, camps and advancing in formation. Cavalry 'turning tactics' also featured prominently, as they did in Byzantine and Islamic military treatises from the early medieval period. In fact there are remarkable similarities between Carolingian military training, and the more abundantly documented training of the Byzantine and Islamic cavalrymen.

---

3 P. Godman, *Poetry of the Carolingian Renaissance* (London 1985).

Some scholars doubt whether Vegatius and Hrabanus Maurus had relevance to the realities of Carolingian warfare. But on the assumption that, like Byzantine and Arab-Islamic military texts, they did have practical application, it is clear that Carolingian élite troops were trained to fight both on horseback and on foot. The latter was used when confronting unbroken and disciplined enemy infantry whose line could not be broken by a cavalry charge. This was emphasised by Hrabanus Maurus in his abbreviation of Vegatius' *De Re Militari*, in which he claimed to have retained only those sections which were useful 'in modern times' and to have updated the original Roman text: 'Wooden horses are placed during the winter under a roof and in summer in a field. The recruits at first try to mount unarmed, then they mount carrying shields and swords, then finally with very large pole weapons. And this practice was so thorough that they were forced to learn how to jump on and off their horses not only from the right but from the left and from the rear. And in addition they learned to jump on and off their horses even with an unsheathed sword.' Maurus then concludes: 'Indeed the exercise of jumping (on and off horses) has flourished greatly among the Frankish people.' Comparable training is mentioned in less detail in other sources such as the *Life* of Gerald of Aurillac, who, 'become so agile that he could leap onto the back of his horse with an easy bound.' Other training involved archery, striking the quintain with a spear, and simulated combat.

Hunting was a popular pastime, a way of culling dangerous wild animals and an additional source of food. It was also a form of military training, especially in winter. Einhard's biography of Charlemagne provides details about the emperor's character and habits, much of which he shared with other members of the military élite. For example: 'He constantly took exercise, both by riding and hunting. This was a national habit for there is hardly any people in the earth that can be placed on equality with the Franks in this respect.'

Though there is some evidence for the use of bows on horseback by some Carolingian troops, this was not characteristic of the Franks, other

A carved relief of huntsmen, believed to date from the 8th or 9th century. It might include the earliest representation of stirrups in western Europe. (Cathedral, Civita Castellana, Italy)

Germanic peoples, Bretons or Latinised 'French'. Instead, javelins or light spears were thrown from horseback, though again largely by non-Frankish non-Germanic warriors. The *Chronicle of Regino* specifically stated that the Franks were unused to throwing spears, which was more typical of the Bretons, while the poet Ermoldus Nigellus contrasted the Franks' heavy spears with the Bretons' light throwing *hastae* or *missilia*.

Military 'games', mock battles or tournaments had already been recorded in Visigothic Spain. A Carolingian document known as *Wandalbert's Calendar* stated that, 'By ancient law, the chosen recruits should be put to the test of camp and battle in May. Then they should attack the proud enemy with horsemen and footmen.' The most famous such 'games' were held at Worms in 842, where contingents of Saxons, Austrasians, Gascons and Bretons displayed their prowess (see Plate C). A generation later the Council of Tribor discussed the so-called Pagan Games, which were a source of controversy as they often led to fatalities. However, they were not stopped and in the middle of the 10th century King Henry I of Germany used them to check the training of his Saxon and Thuringian cavalry.

EVERYDAY LIFE

The lives of the western European military élite reflected the power and social structures of the Carolingian empire and its successor states. Although authority was not as concentrated as Charlemagne might have wished, the imperial palace stood at the centre and, with the Papacy in Rome, remained the fountainhead of legitimacy. It was home to an enormous *familia* or household, many of whose members were fighting men. Other smaller *familias* mirrored the system elsewhere in the empire. These brought together aristocratic youngsters in a comradeship of service and completed their education as part of a *familia* that also fed them. Some young trainees might hope to become the ruler's *fideles*, friends or comrades bound to him by a special allegiance. This conferred on them special 'worth' which meant that their 'blood price', the fine or punishment for killing them, was much higher than that of ordinary people.

While some *fideles* lived in the palace, others were scattered around the realm on the ruler's business. They were also linked in a complex system of matrimonial alliances that created close bonds within the élite of a ruler's *familia*. Not all were Franks, as Charlemagne's *fideles* included the descendants of leaders of vanquished Germanic tribes and remnants of the old Roman senatorial class.

The provincial aristocracy of the Carolingian empire reflected a variety of local or ethnic traditions ranging from the Romano-Byzantine social structure of central Italy with its very thin Lombard and Frankish Germanic veneer, to the still tribal structures of recently conquered northern Germany. By the time the Carolingians annexed the Lombard

Fragments from the stone altar-screen of a late 10th-or early 11th-century church at Biskupija in Dalmatia include this little carving, which probably reflects the Croatian warrior élite. (Museum of Croatian Archaeology, Split, Croatia)

kingdom, there were virtually no remnants of the old Roman political structure left in northern Italy. In Ravenna and the Lombard deep south, however, the Byzantine heritage remained strong, while Papal Rome tried to maintain a facade of Roman social, political and even military traditions.

North of the Alps the ancient Germanic concept of the *gau*, or relatively small administrative district, often merged with the old Roman *civitas* structure where the two overlapped. Subsequently the *gau* and the Carolingian *county* became very similar if not identical. The *burg* or lord's house had long been central to Germanic territorial lordship and remained the centre of local military and aristocratic control in Carolingian Germany. In fact, a *burg* and a 'people' or *retinue* together formed a lord's 'realm', since power was based upon the control of both place and people. Generally speaking, however, aristocratic control over the countryside and the peasantry was probably not as complete as aristocratic documentary sources suggest. The territorial power bases of the military élite were also constantly changing as a result of inheritance, donation, punishment or marriages. Yet despite variations and limitations, the strong hand of a local landed aristocracy remained essential because the king or emperor was usually too far away to maintain law, order and local defence. Furthermore, the military strength of the state depended upon its fighting men, especially its mounted élite, being adequately fed, housed and equipped. This was only possible if leaders controlled the grain supplies upon which everybody depended.

During the 830s and 840s the strategically vital south-eastern marches of the Carolingian empire were

17
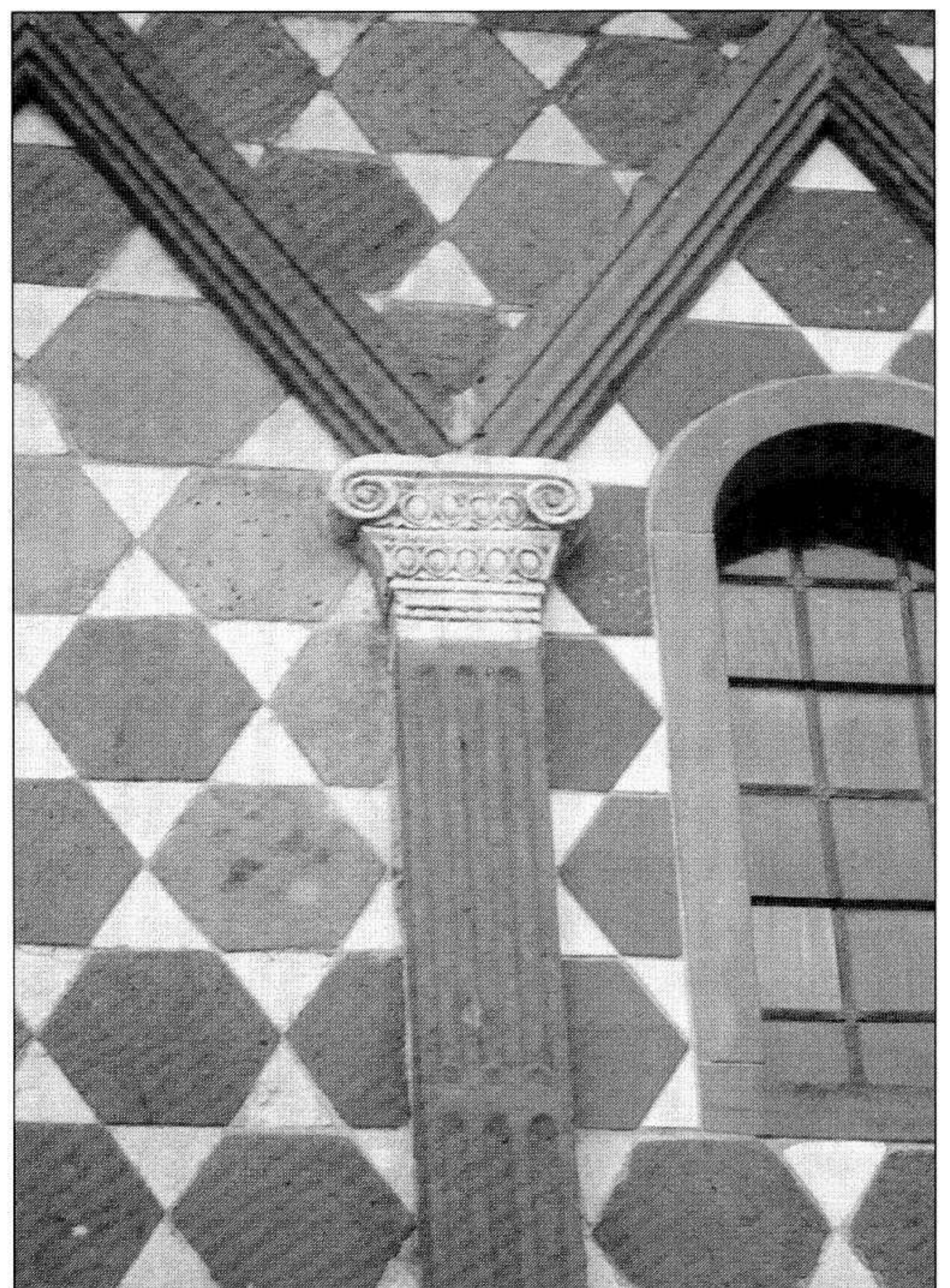
restructured. Here, where Germanic, Slav and Latin-Italian-speaking peoples met, Charlemagne had utterly destroyed the wealthy, powerful and supposedly 'Asiatic' Avar kingdom at the end of the 8th century. Not being powerful enough to take over all of what had been the vast Avar state, the Carolingians occupied its western parts, while the Turkic Bulgars seized the east, leaving a partially Slav, partially uninhabited power vacuum elsewhere. Continuing Carolingian ambitions created a sophisticated, though not entirely successful, military structure in this part of Europe. Then, late in the 9th century, a new foe appeared: the Magyars or Hungarians as they came to be known, whose style of warfare initially baffled Carolingian armies.

The fragmentation which typified the later 9th and 10th centuries had its impact on the lives of Carolingian and post-Carolingian military élites. Leadership became increasingly localised and by the end of the period under consideration, especially after Viking, Magyar and Saracenic raiding had been contained, the professional fighting men of France, Germany and Italy would be involved in bitter internal warfare. This ranged from the petty rivalries of neighbouring castle-holders, to major campaigns by royal armies and their vassals.

This almost anarchic state of affairs offered opportunities as well as dangers. In 10th-century France, which faced fewer external threats than Germany, localised small-scale warfare involved relatively few people other than professional fighting men. Most of these owed their allegiance to the increasingly powerful *pagi* or provincial aristocracy. In late 10th-century Anjou, for example, a loyal cavalryman might hope to be given authority over part of Count Foulque's widespread territory. Elsewhere in France, humble *vasseaux chasés* (vassals with their own fiefs) could be virtually autonomous within their own small *casamentum* or territorial fief. Most of these men no longer lived in their lord's households and middle–ranking vassals became increasingly attached to their own local territory as it became normal for such fiefs to pass from father to son.

Germany was different and remained economically less developed than the rest of what had been the Carolingian empire, although the existing Carolingian military and social systems remained in place with fewer changes than elsewhere. Nor was the *miles* or knight seen in Germany until much later. One ex-Carolingian kingdom, which sometimes gets ignored, was Burgundy, which soon split between Upper and Lower Burgundy, the latter sometimes being called Provence or the Kingdom of Arles. Much of Provence had been dominated by Islamic 'raiders' who were based at Fraxinetum on the Mediterranean coast, and by the time they had been expelled there had been significant social changes. Part of the free and prosperous peasantry rose in status to become a minor military élite – almost a military middle class.

Less is known about internal family structures. The *Laws of the Bavarians* (probably dating from the mid-8th century) stated that within the military élite, heirs were not allowed to take their father's status and property while a father was still able to 'exercise jurisdiction, march with the army, judge the people, leap upon his horse and carry arms effectively'. In fact, it seems that, during the 8th to 10th centuries most social mobility was seen at the lower end of the economic scale. Here a supposed decline could be a conscious choice as a man tried to avoid

military obligations by becoming a tenant rather than a landowner, placing his family in servitude and, in return, receiving protection from a richer and more powerful family.

Warfare opened up opportunities for wealth and advancement for those already within the social and military élite. On the other hand, the lure of loot was more important for leaders than for the rank-and-file, since it was the king or commander who distributed the profits of war to his senior men who may have then passed some of it further down the ranks. The chronicler Einhard certainly claimed that Charlemagne and his Franks gained huge wealth from their destruction of the Avars.

The reconstructed peasant village at Melrand in eastern Brittany is built next to the remains of the original settlement upon which it is based. (Author's photograph)

Armoured cavalry needed expensive horses and costly equipment, so Charlemagne's main concern was to secure an adequate flow of money from whatever source. Traditionally it had been thought that his grandfather, Charles Martel, took over much Church land to pay his cavalry leaders, although the holders of Carolingian *benefices* and later fiefs normally had to pay taxes, so any exchange of wealth was a two-way process. The *capitulary* or legal declaration drawn up at Thionville in 805 stated that items of military equipment, such as coats of mail, formed part of a man's property for tax purposes.

Despite the booty from successful campaigns, the Carolingian economy could not support the constant wars and preparations for war that characterised Charlemagne's reign. To pay or maintain his military leaders, the emperor therefore encouraged a system of vassalage whereby the powerful and rich maintained or supported poorer members of the aristocracy in return for military service. Carolingian rulers sent members of the Frankish aristocracy to settle conquered or rebel territory. Those lower down the scale could also benefit as, for example, when Carolingian expansion into Saxony, and Ottonian expansion into Slav territory provided large numbers of *benefices* for professional cavalrymen. A *benefice* could be a piece of land with its agricultural revenues, or another source of local income. As such it had more in common with the Islamic *iqta* or the later Byzantine *pronoia* than with the later medieval European system of knightly fiefs.

The idea that an increasing number of *benefices* ruined the older 'great domains' in the 10th century is probably another oversimplification. Indeed, the fragmentation which characterised the later 9th and 10th centuries often went hand in hand with a repopulation of abandoned lands. In some areas this was accompanied by an increasing number of small local fortifications, either in the form of castles or fortified villages. Only rarely is the identity of a new local élite known. One 10th-century example was the Garoux family, who held

the castle of Brancion in eastern France and who may have been descended from a Burgundian warrior who in turn held lands in the same region in return for military services during the reign of Charles the Bald. Around 910 Guillaume d'Aquitaine gave the Garoux a large territory which included three villages, four churches and other scattered estates. At the end of the 10th century a vassal of the French king named Ermenfroi received the village of Lisses as a fief from Count Bouchard because he took part in the little-known but victorious battle of Orsay. Another *chevalier* or knight, named Ansoud de Riche of Paris, who served in King Hugh Capet's entourage at this time, may have been given the village of Orsay itself.

During the previous Carolingian period it is clear that *benefices* varied considerably in size, though there may have been an effort to keep them similar in value and to relate this to the cost of maintaining cavalrymen. The term *mansus* was widely used to denote a piece of land as an economic unit and it is clear that some *mansi* were larger or better organised than others. However, the light which surviving documents shed on individual *mansi* produces only an incomplete picture. For example, a study of prices in the Carolingian archives of the German Abbey of Lorsch mentions that half of an ordinary *mansum* was worth the same as one good horse. A similarly dated but more detailed list of *benefices* in the lands of the Abbey of St Germain-des-Prés near Paris indicates huge variations in the sizes of the *manses*. They range from tiny Villa supra Mare covering 57 hectares, to Nogent-l'Artaud, which was the largest with 4,713 hectares. However, the latter consisted almost entirely of forest with smaller than normal areas of tilled land, vines or meadows.

Other examples of *benefices* at the time of Charlemagne are found in lists of those belonging to the Monastery of Wissembourg. Here a certain Humbertus held a *desmesne* house (the main house) in the village of Wanesheim, plus six servile *mansi* all occupied, two unoccupied free *mansi* and four vacant, plus meadow for 20 loads of hay, vineyards and common woodland. Baldrich held a *desmesne* house in the same village, five servile *mansi* which were occupied and four vacant, plus meadows for 30 loads of hay, vineyards, one mill and common woodland. Nothing else seems to be known of Humbertus and Baldrich, but such men would have been prosperous enough to serve as cavalry.

Although so little is known about the internal organisation of Carolingian and Ottonian aristocratic estates, some clearly covered large homogenous areas with several thousand hectares of productive land. The majority, however, were smaller and many consisted of scattered fragments, sometimes shared with others. It is interesting to note that the holders of such land not only provided military service, but were expected to improve their lands. As article four of a capitulary drawn up at Aachen in 802–03 stated, 'That those who hold a benefice of us should strive in all things to improve it, and that our *missi* [government messengers and inspectors] should take note of this.'

Some areas manufactured military equipment for local use or export. The *Capitulary De Villis*, drawn up for Charlemagne or his son Louis as ruler of Aquitaine, was intended to guarantee such manufacture: 'Let every intendent ensure that he has good workers in his district; workers in iron, gold and silver, shoemakers, turners,

carpenters, shield makers, fishermen, bird catchers, soap makers ...' and so on. Other documents record other craftsmen. At St Riquier there were blacksmiths for the monastery. Saddlers were mentioned here and at Bobbio, while at St Gall there were harness makers as well as saddlers. Furthermore, polishers and refurbishers of swords (*emundatores*) were settled around the house or office of the chamberlain, while further down the same row of dwellings were smiths and other craftsmen. Important craftsmen could be given land in return for a proportion of their work. One example was at Boissy-en-Drouais where the *colonus* Antoine was to provide six javelins and the *colonus* Ermenulf, a smith, should provide six spears.

Houses and home life

As the centuries passed, all but the privileged few fighting men who served in a ruler's own household would live in or next to a village. This, and their own dependence on what the local peasants produced, meant that they and the peasants were both involved in agriculture. In fact the daily lives and preoccupations of most soldiers, at least when they were not on campaign or involved in military training, would have focused on the agricultural seasons, since the local *miles* or lord was little more than the dominant figure within an overwhelmingly agricultural community.

In some respects the centuries between 500 and 1500 were a favoured period. The climate was warmer than before or since (at least until today's threat of global warming). This not only enabled Viking adventurers to settle in Greenland, but also permitted vines to be grown in northern Germany. In fact, the Carolingian agricultural calendar designated May as the month when vines should be tied to their props and fodder should be collected for cavalry horses.

A remarkable ongoing archaeological experiment at Melrand in Brittany has recreated the abandoned Breton village of Lann Gouh as it would have been at the end of the 10th century (see Plate F). Although rural life varied hugely across the vast Carolingian realm, and its successor, the simple wood, thatch and stone houses at Melrand, the fenced gardens attached to each house, the animal enclosures, as well as the open fields and forest beyond, reflect life as it would have been known by both peasants and lower-ranking members of the military aristocracy in many regions.

Another interesting archaeological investigation from this period was undertaken on the other side of France, at Charavines on the border of the great fiefs of Dauphiné and Savoy. Here a small promontary, jutting into a sub-Alpine lake, had been fortified with timber and simple earthworks. At the end of a causeway, inside the wooden defences, there were several large wooden buildings where a community lived by fishing, hunting and metalworking. French archaeologists found weapons, horse harness, the

Amongst fragmentary wall paintings in a church high in the Italian Alps, is this 9th-century illustration of a man holding a sheathed sword with a sword-belt or baldric wrapped around the scabbard. He is thought to represent a 'donor figure'. (Oratory of San Benedetto, Malles Venosta, Italy)

The remarkable life-sized carved figures in the Tempietto in Cividale date from shortly before the Lombard kingdom in Italy was conquered by Charlemagne. Like so much Lombardic art, they show strong links with the Byzantine empire, which still ruled neighbouring Istria and Venice. (Author's photograph)

earliest medieval European crossbow, and the remains of iron scale or lamellar armour. Whether or not the men who dominated this lakeside community should be classed as prosperous peasants or a new military élite of local knights is still a matter of debate.

The houses at Colletière were finer than those at Melrand, having timber frames filled with wattle and daub. Across the mountains in Italy there must have been similar dwellings. Here, however, in contrast to almost every other part of the Carolingian world, the élite clung to Roman traditions for many centuries and preferred to lived in towns. Only with the *incastallamento* of the 10th century did a substantial part of the Italian aristocracy moved into rural castles or the fortified villages that finally broke the Roman pattern of settlement.

Beyond the Romanised regions of the Rhineland and deep south of Germany, most of the country had never been urbanised. Yet this formed an important part of the Carolingian empire and would become the heartland of the Ottonian empire. German homesteads, including those of the military aristocracy, reflected two traditions of timber architecture. One relied on a simple form of blockhouse built of horizontal logs laid directly on top of each other, and was typical of northern regions where builders used tall straight conifers. A second tradition, seen in areas of deciduous forest where trees were rarely straight, was similar to that seen in France and parts of Italy. Here, timber-framed buildings relied on vertical posts to take the structural load, while gaps in the frame were filled with wattle and daub, turf, vertical or horizontal planking, brick or stone.

Houses varied in comfort and quality. The ruling class, upper aristocracy and senior churchmen apparently lived in comfort. Although there are no records of how humbler members of the military classes felt about their homes, some would probably have echoed the words of Sedulius Scottus,[4] an Irish poet living close to the centre of the Carolingian empire at the time of Charlemagne. Comparing the palace of the Bishop of Liège with his own less comfortable home, he wrote,

> My house is black with unending night.
>   Inside there is no gleam of light or good cheer.
> It lacks beautiful and elegant tapestries,
>   No door-key or bar keeps it in order,
> Nor does the ceiling gleam, adorned with pictures,
>   Soot sticks to the highest part of my ceiling,

4 Godman, *op. cit.*, 289-91.

If Neptune ever teems down in black showers
   It would just increase the thick coating over my home.
When the east wind blows wildly,
   It strikes this old hall and makes it tremble.

[The poet then mentions his hope for redecoration.]

Let there be a panelled ceiling, finely painted,
   A new door-key and a strong lock.
Let there be blue and green windows,
   Into which Phoebus can shine his welcome rays.

Wives and families

While the Irish poet was pondering home improvements, other Carolingian writers focused on the problems of sex and matrimony as it affected the aristocratic and military élites. All sources make it clear that men's sexual habits were less regulated than those of women. Furthermore, the ancient Frankish tradition that there was no such thing as monogamy still influenced sexual attitudes. A woman may no longer have automatically become a man's 'wife' when he slept with her, and children of such a union were now considered illegitimate, but strong traditions of concubinage continued at all levels of society. Pre-Carolingian legal codes remained in force in many parts of the Carolingian empire, sometimes in parallel with Frankish laws. Many of these listed penalties for men who molested woman. Under the traditional Laws of the Alamanni, fines started at 60 *sous* (a low-value coin) if a man pulled the headdress from a young woman out walking, with the fine increasing according to the amount of clothing removed. The traditional Lombard legal code imposed death upon a man who stole the dress of a woman while she was bathing, especially if she had to walk home naked.

Fragments of Carolingian and Ottonian architectural decoration are found across much of western Europe. This 9th-century carved marble slab is part of a screen in front of the altar of the basilica at Aquilaia. (Author's photograph)

The best-known surviving Carolingian building is the central octagon of Aachen Cathedral, which was built as Charlemagne's palace church around 800. (Author's photograph)

Other Lombard laws set 12 as the marriageable age for girls, but also indicated that marital ties were not strong. Nevertheless, marriage remained politically important among the aristocracy of Italy where the Lombard legal code remained influential. In fact, heiresses played a major role during this period and Lombard laws gave wives strong claims to their husbands' lands. This in turn encouraged the institution of *mundium*, the system which placed legal control over women in the hands of a ruler or a male of superior rank.

The Carolingian conquest of Italy did not change things very much, but differences did emerge between those relying on Lombard Law and those using the Roman Code of Theodosius. Lombardic and Frankish Customary law merged and imposed greater restrictions on women's ability to make decisions about property. Roman law, however, left women more exposed to the political consequences of their own and their husbands' actions, whereas Lombardic law provided a legal cover which could be exploited. Certainly, women played an increasingly visible role in the power politics of 10th-century Italy, particularly among the aristocracy where women served as 'transmitters of legitimacy through blood'. So it is perhaps not surprising to read in the 10th-century *Chronicon Salernitanum* that husbands should be chosen for strength, family background, physical appearance and wisdom, whereas wives should be chosen for beauty, family background, wealth and dowry – though to chose beauty over wealth was considered a big mistake.

On a more basic level, the Church tried to impose the most extraordinary rules upon sexual relations between man and wife. Sex was theoretically prohibited for 40 days before Christmas, 40 days before and eight days after Easter, eight days after Pentecost, on the eve of great religious festivals, on Sundays, Wednesdays and Fridays, during pregnancy, for 30 days after a birth if the child was a boy, 40 if the child was a girl, during the woman's menstrual period and for five days before taking Communion. Not many days were left. If these rules were broken during Lent a man was supposed to do a year's penance, although this was reduced to 40 days' penance if he had been drunk. It is clear that these restrictions were widely ignored and, in addition, men found outlets for their energies in the arms of concubines – slave or free.

DRESS AND MILITARY EQUIPMENT

The bearing of arms was the main distinction between high and low in Carolingian secular society. The richness of a person's clothes or the way they were cared for was another sign of status, since a man could dress poorly but cleanly and thus maintain his prestige within the military élite. Conduct, manners and gestures were similarly indications of social status.

This did not mean that the highest in the land necessarily dressed richly. Charlemagne preferred simple clothes and perhaps this lay behind a later medieval Italian tradition which regarded slap-dash dressing or poor table manners as behaviour 'alla Carlona' – in Charlemagne's style. Einhard wrote of the emperor that 'He wore the national, that is to say the Frankish, dress. His shirts and drawers were of linen, then came a tunic with a silken fringe, and hose. His legs were cross-gartered and his feet enclosed in shoes. In winter he defended his shoulders and chest with a jerkin made of otter and ermine skins. He was clad in a blue cloak and always wore a sword, with the hilt and belt of gold or silver. Occasionally, he used a jewelled sword, but this was only on great festivals or when he received foreign ambassadors. He disliked foreign garments, however beautiful, and would never consent to wear them, except once in Rome on the request of the Pope Hadrian and again upon the entreaty of Pope Leo, when he wore a long tunic and cloak, and put on shoes made after the Roman fashion.'

Other sources shed further light on the dress of the Carolingian military aristocracy. For example, Ermoldus Nigellus described how Emperor Louis the Pious gave Harold the Dane a tight-sleeved tunic decorated with jewels, with a fine belt, a slit mantle secured by a pin, white gloves and a baldric to hold his sword scabbard. The anonymous Monk of St Gall, in his *Life of Charlemagne* written in the late 9th or early 10th century, described the costume of the Carolingian Franks in detail:

Their boots were gilt on the outside and decorated with laces three cubits long. The thongs round the legs were red, and under them they wore upon their legs and thighs linen of the same colour, artistically embroidered. The laces stretched above these linen garments and above the crossed thongs, sometimes under them and sometimes over them, now in front of the leg and now behind. Then came a rich linen shirt and then a buckled sword-belt. The great sword was surrounded first with a sheath then with a covering of leather, and lastly with a linen wrap hardened with shining wax. The last part of their dress was a white or blue cloak in the shape of a double square, so that when it was placed upon the shoulders it touched the feet in front and behind, but at the side hardly came down to the knee. On the right side was carried a stick of apple-wood with regular knots, strong and terrible. A handle of gold or silver decorated with figures was fastened to it .... But the habits of men change, and when the Franks, in their wars with the Gauls [perhaps meaning the Celtic Bretons], saw the latter proudly wearing little striped cloaks, they dropped their national costume and began to imitate the Gauls. At first the strictest of Emperors did not forbid the new habit, because it seemed more suitable for

war. But when he found that the Frisians were abusing his permission, and were selling these little cloaks at the same price as the old large ones, he gave orders that no one should buy from them at the usual price, anything but the old cloaks, broad, wide and long, and he added, 'What is the good of these little napkins. I cannot cover myself with them in bed, and when I am on horseback I cannot shield myself with them against the wind and rain'.

Winter clothing included leather boots, shoes and galoshes with wooden soles, sleeveless jerkins made from sheepskin, marten, mole, otter and beaver fur, though the wealthy might have used more expensive imported furs.[5] At the same time regional variations in dress existed, and their adoption could symbolise political or military allegiance. In northern Germany the wearing of gold neck-rings was a badge of rank amongst the Saxon nobility. In Aquitaine the aristocracy wore tunics, baggy trousers and boots, while the Italians similarly favoured loose-fitting clothes which probably reflected lingering Roman, Byzantine or Islamic influence rather than the climate. In Rome itself, a supposedly 'ancient', though more probably Byzantine, style of costume was reportedly worn by the élite on state occasions.

Charlemagne's simple tastes were not copied by all his followers, and Carolingian magnates who could afford it sometimes decked themselves in material threaded with gold, gold cloak-clasps and belts encrusted with gems, an increasingly popular habit among the military élite from the late 8th century onwards. On at least one occasion Charlemagne punished his hunting companions who appeared in unsuitably fine garments by leading them through dense undergrowth that tore their fine fabrics.

Ordinary soldiers and men of middle social rank generally wore simple linen or woollen clothing. However, the idea that a white tunic served as a uniform at the battle of Andernach in 876 is surely a

misunderstanding.[6] Other simpler garments included hooded head-dresses (although these may have been more typical among peasants), *camisia* shirts, *mantella* or *cotta* mantles without hoods, *cuculla* simple cloaks, *capa* capes (which sometimes included hoods), *pedules* stockings, *femoralia* drawers, a *roccum* belt, and sheepskin mittens for winter.

Fashions did not change very fast during this period and at the end of the 10th century many the same items were still worn by the military élite, though often with new French names. They included a linen shirt and long breeches or *braies*, often worn to the ankle, tied at the waist by a drawstring and may have been fitted more closely below the knees. Wool or linen *chausses* worn over these breeches become fashionable in the 11th and 12th centuries when leg gartering began to go out of fashion. A tunic, usually knee length, was worn over the shirt. Long sleeves seem to have become longer and were pulled back to the wrists, perhaps as an indication of wealth because the wearer could afford 'excessive' fabric. The élite often added embroidered or a different- coloured panel to their tunics and the positioning of such panels varied over time; this positioning perhaps reflecting influences from outside western Europe.

A serious error among arms and armour historians has been a tendency to see western Europe in isolation, when there was actually significant technological contact between Carolingian Europe, the Byzantine empire, the Islamic world and the 'steppe' cultures of Hungary, Romania, the Ukraine and southern Russia. Furthermore, the militarily sophisticated steppe peoples were themselves in close contact with Byzantium, Islamic central Asia and even China. They played a major role in the development of military technology, as well as influencing developments within Carolingian and Ottonian Europe.

Some anomalies in the documentary evidence for Carolingian equipment might indicate that examples of 'steppe' or Byzantine armour reached Carolingian armies as booty or through trade. For example, several sources refer to protections for arms and legs. Plated or splinted limb defences were certainly used by the Carolingians' Khazar, Byzantine and perhaps Islamic neighbours. Here, archaeological, pictorial and written evidence all show that such military
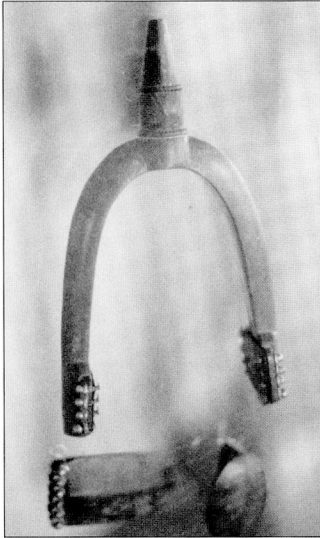
A decorated bronze spur from Koljane in Dalmatia, 9th century. (Museum of Croatian Archaeology, Split, Croatia)

technology did not die out with the fall of Rome, as once thought, but was developed further during the early medieval period.

Other questions concern Carolingian and post-Carolingian helmets of apparent one-piece construction. Even more extraordinary are illustrations of fluted one-piece helmets, which appear long before western European armourers were believed capable of making such things. Such fluted helmets are, however, almost invariably worn by 'wicked' warriors such as Goliath, so it is possible that, in the eyes of monkish illuminators, such exotic protections were associated with 'enemy cultures' such as the Islamic world, where fluted helmets clearly existed by the 11th century if not earlier.

The most common form of armour in Carolingian and post-Carolingian Europe was mail. Nor was mail armour as rare as is sometimes thought, although the south was wealthier in arms and armour than the north, with ex-Visigothic Septimania and the Spanish March, and ex-Lombardic Italy being most favoured. The Byzantine Emperor Leo may have been out of date when he wrote that, 'They are armed with shields and spears and *spathion kontoteron* [short sword, or *seax*]'. Other evidence suggests that the single-edged *seax* had fallen from favour by this date.

The most famous account of a fully equipped Carolingian cavalryman is the Monk of St Gall's description of Charlemagne himself during his siege of Pavia. However, it was written a century after the event and must be used with caution: 'The appearance of the iron king, crowned with his iron helm, with sleeves of iron on his arms [*ferreis manicis armillatus*], his broad breast protected by iron armour [*ferrea torace tutatis*], an iron lance in his left hand, his right free to grasp his unconquered sword. His thighs were guarded with iron, though other men were wont to leave them unprotected that they may spring the more lightly upon their steeds. And his legs, like those of all his host, were protected by iron greaves [*ocreis*].' The iron sleeves seem to be separate from the mail armour, and the leg defences could be interpreted as including rigid or splinted elements (*coxarum exteriora, in eo ferreis ambiebantur bracteolis*).

Several sources mention the costs of such equipment, and it is clear that only the rich could afford all of it. The Laws of the Ripuarian Franks which probably date from the mid-8th century, list the following: a helmet, six *solidi*; a *brunia*, 12 *solidi*; a sword and scabbard, seven *solidi*; a sword alone, three *solidi* (which suggests that the previously mentioned scabbard was quite elaborate); leg protections, six *solidi*; a lance and shield, two *solidi*; and a horse, 12 *solidi*. However, prices alone mean little unless they can be compared to everyday items, an ordinary riding horse being valued at three *solidi* and a cow from one to three *solidi*.

Other sources list the equipment expected of men of differing status. The mid-8th-century Lombard Laws of Aistulf, dating from shortly before Charlemagne's conquest of northern Italy, hoped that even merchants would muster with the following equipment: the richest to have armour, shield, spear and horses; men of middling wealth should carry a shield, a spear and a horse; while those of the poorest grade came on foot with a bow, quiver and arrows. The Domesticus Dodo, one of Mayor Pepin's supporters, was rich enough to give his followers mail hauberks, helmets, shields, lances, swords, bows and arrows (*lurices et cassidis, clipeis et lanceis, gladiis que precinti et sagittis cum pharetris*). Several Carolingian capitularies or legal declarations concern what was required of the military élite, though

A: The death of Roland, 778

A

B. Arms and armour of a Carolingian horseman, 8th–9th centuries

1

2

3

4

5

6 7 8 9

B

C. Military games at Worms, 842

c

D. Carolingian cavalry attack on Viking raiders, late 9th century

D

E. 'The lost horse'

E

F: The *Miles* at home, 10th century

G. King Henry's cavalry defeats Magyar raiders at Riade, 933

G

this did not prove what was really brought to a muster. The Capitularies of Herstal, for example, mention *brognes* (mail hauberks) in 779, and *brognes* and *jambieres* (arm defences) in 803. That of Salz in the same year lists *brognes* and weapons, that of Thionville in 805 the same, that of Boulogne in 811 *brognes* and swords. Cavalry equipment is rarely specified as such, though the *Capitulare Missorum* of 792–93 did mention benefice and office holders who were prosperous enough to possess horses, armour, shield, spear, *spatha* (longsword) and *semispatum* (long dagger or *seax*). Another capitulary of 803 either expected counts to keep a reserve of helmets and *brognes* so that they could equip armoured cavalry, or they were expected to keep such equipment for their own use. The letter sent by Charlemagne to Abbot Fulrad in 806 poses more of a problem, since it demanded that each horseman must have a bow and several quivers of arrows in addition to a shield, spear, sword and axe, which sounds more like equipment for mounted infantry.

That donations of military equipment were a normal method of preparing an army on the frontiers of the Carolingian empire is seen in the *Chronicle of Salerno*, in which the mid-9th-century Prince Siconolf of Salerno offered Rofrit, one of his *fideles*, '*lorica, spata, calea, lancea et clippeum*' (hauberk, sword, helmet, spear and shield). Epic poetry like the anonymous *Waltharius*, which probably dates from the late 9th or early 10th century, adds further details. Based on a Visigothic-Aquitainian legend, it recounts the deeds of Waltharius of Aquitaine at the time of Attila the Hun. At one point the Hun king's armour included a three-layered mail hauberk (*trilicen assero loricam*) 'bearing the mark of the smiths'. Another full set of equipment was described during Waltharius' escape from the Hun palace:

> Donning a hauberk [*lorica*] like a giant,
> In his hand he placed a plumed helmet [*casside cristas*],
> Fastened to his huge calves greaves [*ocreis*] of gold,
> Girding to his left thigh a double-edged sword,

And another to his right thigh as the Pannonians are wont to do,
  Its blade dealing wounds on one side only (single-edged).
Then took a spear [*hastam*] in his right hand and a shield
  [*clipeumque*] in his left.

A different military influence was seen in south-western France, the Spanish March and Catalonia, especially in the 10th century. This stemmed from Islamic al-Andalus where Arab-Andalusian arms and armour of the 970s included *afranji* (Frankish or western European) swords, mail and occasionally lamellar armour. It also seems likely that the unknown forms of 'soft armour' worn beneath mail hauberks by Carolingian and post-Carolingian cavalry was comparable to the soft armours of al-Andalus, which were made of felt or quilted material (*tijfaf*).

Felt or quilted material was used as horse armour in the Iberian peninsula, along with the *tashtina* (from the Latin *testinia*) to protect a horse's head. However, evidence for horse armour within the Carolingian world is unreliable and difficult to interpret. The silk caparisons used in 8th-century Rome for prestige and during parades, recalled late Roman and Byzantine fashions, but were solely for show. One description of Charlemagne's army outside Pavia refers to their 'iron horses', but means 'iron-coloured' greys, not 'iron-covered' animals. The most tantalising reference to horse armour is in the poetry of Ermoldus Nigellus, writing in the first half of the 9th century, who stated that the javelin-armed Celtic Bretons included armoured cavalry riding armoured horses.[7] This may be mere poetic exaggeration, but might contain a grain of truth. Certainly the Avars, whose kingdom was overthrown by Charlemagne, made such considerable use of horse armour that the Byzantines copied their version.

MOTIVATION AND MORALE

Some of the Carolingians' neighbours had a low opinion of westerners' military capabilities. Byzantine commentators, for example, considered Germanic peoples to be less resilient than the Turks and Slavs, while Emperor Leo maintained that Frankish leaders were easy to bribe because they were greedy. Leo also regarded the westerners' concern with individual freedom as a source of weakness: 'They are disobedient towards their leaders, and, especially the Franks, contending with them as if their freedom were at stake .... If one urges them to stay, they do so with ill grace then dissolve the military contract and return to their homes.' On the other hand he admitted that, The Franks and the Lombards value freedom highly, but the Lombards have now mostly lost that virtue except that even they, and the Franks especially, are bold and undaunted. In battles the leaders are daring and rash, considering any timidity and even a small retreat to be a disgrace ... They calmly disdain death, fighting violently hand to hand both as cavalry and as infantry.'

At this time warfare focused on the destruction of economic resources rather than the killing of people, and the prospect of pillage was a strong motivation. Soldiers were rarely paid, though some members of a senior leader's *comitatus* or companions received *stipendia* or direct payments. The favoured booty seems to have been high value objects or furnishings, and the loot could include exotic items like the 'sword from India' captured during one of Charlemagne's invasions of al-Andalus. Plunder from non-Christian places of worship could be huge, though these major hauls were reserved for the ruler. Prisoners were a useful form of loot for men lower down the social scale. Sometimes they were distributed amongst the troops, or were handed over to senior leaders who then distributed them as gifts amongst their followers. It was also easy to convert this 'living booty' into cash through ransoms or by selling captives as slaves. Most were pagans, but sometimes fellow Christians were enslaved, though the Church frowned upon this.

A clear distinction was made between obedience and loyalty. Unlike the Roman *clientela* system, which was a lifelong bond, the traditional Germanic *comitatus* could be dissolved. This left legal grounds for dissolving the feudal relationships, which, to a large degree, evolved from the *comitatus*. As a result, early medieval leaders often found that traditional 'loyalty' was militarily reliable, and many tried to strengthen it by extracting oaths from their supporters. Nevertheless, the oaths of
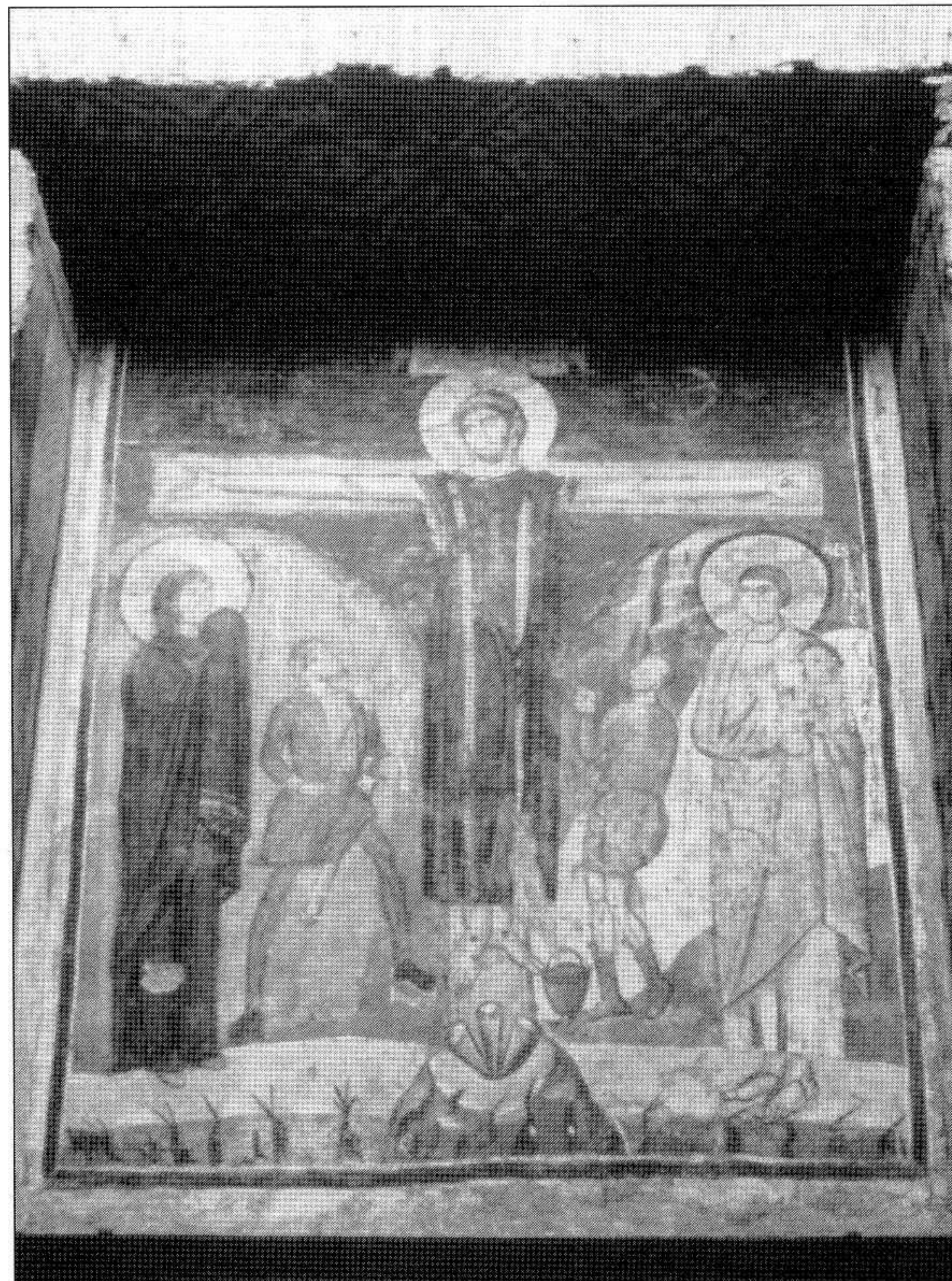
Wall painting of the Crucifixion dating from the mid-7th to mid-8th century. Here Longinus, the Roman centurion at Christ's crucifixion, reflects the military élite of Papal Rome. (Church of Santa Maria Antiqua, Rome, Italy)

---

7 *Armat equum semet, fidos armatque sodales,*
Ambas missilibus armat et ipse manus,
Scandit equum velox, stimulis praefigit acutis
Frena tenens; giros dat quadrupes varius.
Ermold le Noir (ed. and tr. E. Faral), *Poème sur Louis le Pieux, III* (Paris 1932 and 1964) 124, ll. 1628-1631; also in B.S. Bachrach, 'Origins of Armorican Chivalry,' *Technology and Culture* X (1969) 168 n.9.

'Charlemagne with Pepin of Italy,' in a book of Lombardic and Frankish laws made in southern Italy in the 10th or early 11th century. (*Codex Legum Longobardorum et Francorum*, Biblioteca Capitolare, Cod. 01.2, f. 154v, Modena, Italy)

allegiance found in Carolingian charters often included a conditional clause as a legal loophole for the individual who swore the oath. Mutual oath-giving was also used by people lower down the social scale, perhaps as a form of protection against more powerful lords. A capitulary drawn up at Thionville in 805 reflected the ruler's concern about such unofficial oath-taking: 'Concerning the swearing of oaths, that fealty should not be sworn to anyone except us [the ruler], and by each man to his lord with a view to our interest and that of the lord himself. Except from this are those oaths which are rightly owed by one man to another in accordance with the law.'

This was an over whelmingly agricultural society, and military service kept a man away from productive farm work or the supervision of such work. Horses and military equipment were also very expensive, which made many men unwilling to serve, especially in defensive operations where there was little prospect of booty. In response the government imposed a system of fines and punishments for those who neglected their military obligations. These ranged from a theoretical death penalty for failure to attend a general call to arms or *lantweri*, to another of Charlemagne's capitularies which threatened that, 'Any man called to the army who does not arrive on time at the designated place will be deprived of meat and wine for as many days as he is delayed.'

Another law of 802–03 tried to ensure that men supported each other in a military emergency: 'If any of our faithful subjects wish to engage in battle or in any other contest with the enemy, and should call one of his peers to give him assistance, and if this man should refuse and should persist in neglecting his duty in this matter, then the benefice that he had is to be taken from him and is to be given to him who remained steadfast and loyal.' Men who brought superfluous luxuries while on campaign were another problem. On one occasion the emperor was furious when a nobleman arrived at the muster wearing jewellery, because he not only risked life by being too conspicuous, but risked his family wealth as well. Then there was the damage caused by feuds, as reflected in the Capitulary of Thionville: 'Concerning arms, and the prohibition of carrying them within the country – that is, shields and lances and coats of mail. And if there is a private feud, an enquiry is to be made as to which of the two parties is in the wrong, with a view

to pacifying them, even if it means doing so against their will.'

Religion played a role in military morale, but was not as significant as it became later. In fact the Franks themselves were not fully converted to Christianity until the 8th century. During the 9th century, wars between Carolingian Christians and Muslim Andalusians were political rather than religious, and even as late as the 10th century the Pope in Rome complained of a lack of support from north of the Alps in his local struggle against Islamic raiders.

Religious uniformity within Carolingian and post-Carolingian states was very important, however. Unlike Islam, medieval Christianity had no philosophical basis for ruling over or tolerating people of a different faith, so the early Carolingians felt they had to convert newly conquered peoples by force. This urge for religious uniformity also affected unorthodox Christians. For example, much of the population on both sides of the Pyrenees clung to elements of the Arian heresy which had flourished under previous Visigothic rule, as did the Mozarab Christians who now lived under Umayyad Islamic rule in the Iberian peninsula. The Adoptionist heresy, which developed from Arian ideas in these same regions – maintaining that Jesus was born human but became Son of God through adoption – was an idea which spread into southern France to the alarm of Carolingian rulers.

The Catholic Church played an increasingly important role in maintaining military morale, with every bishop supposedly chanting three masses and three psalms – 'One for the king, one for the army of the Franks, and one for the present situation.' Priests and bishops accompanied Carolingian armies, while monks chanted martial psalms as invocations to victory in their monasteries. The Carolingian period also saw intellectual efforts to justify Christian warfare and to reassure soldiers that bloodshed did not exclude them from heaven. During the early 9th century a moral distinction was made between killing in ordinary warfare, which remained a sin and needed penance, and killing in battle to defend oneself or one's closest kin, which was not a sin, though a voluntary fast was considered a good idea.

By the mid-9th century, Carolingian poetry glorified war against Vikings and Muslims in Christian terms, while priests encouraged troops to tolerate previously unacceptable levels of military discipline and the Pope promised salvation to those who died defending the Church. Religious relics and banners became increasingly prominent on the battlefield. In 939, King Otto I of Germany's victory at the battle of Birten was partially attributed to prayers before a relic of the Holy Lance, which apparently incorporated a nail from the Crucifixion. By the late 10th century senior churchmen accompanied many armies and
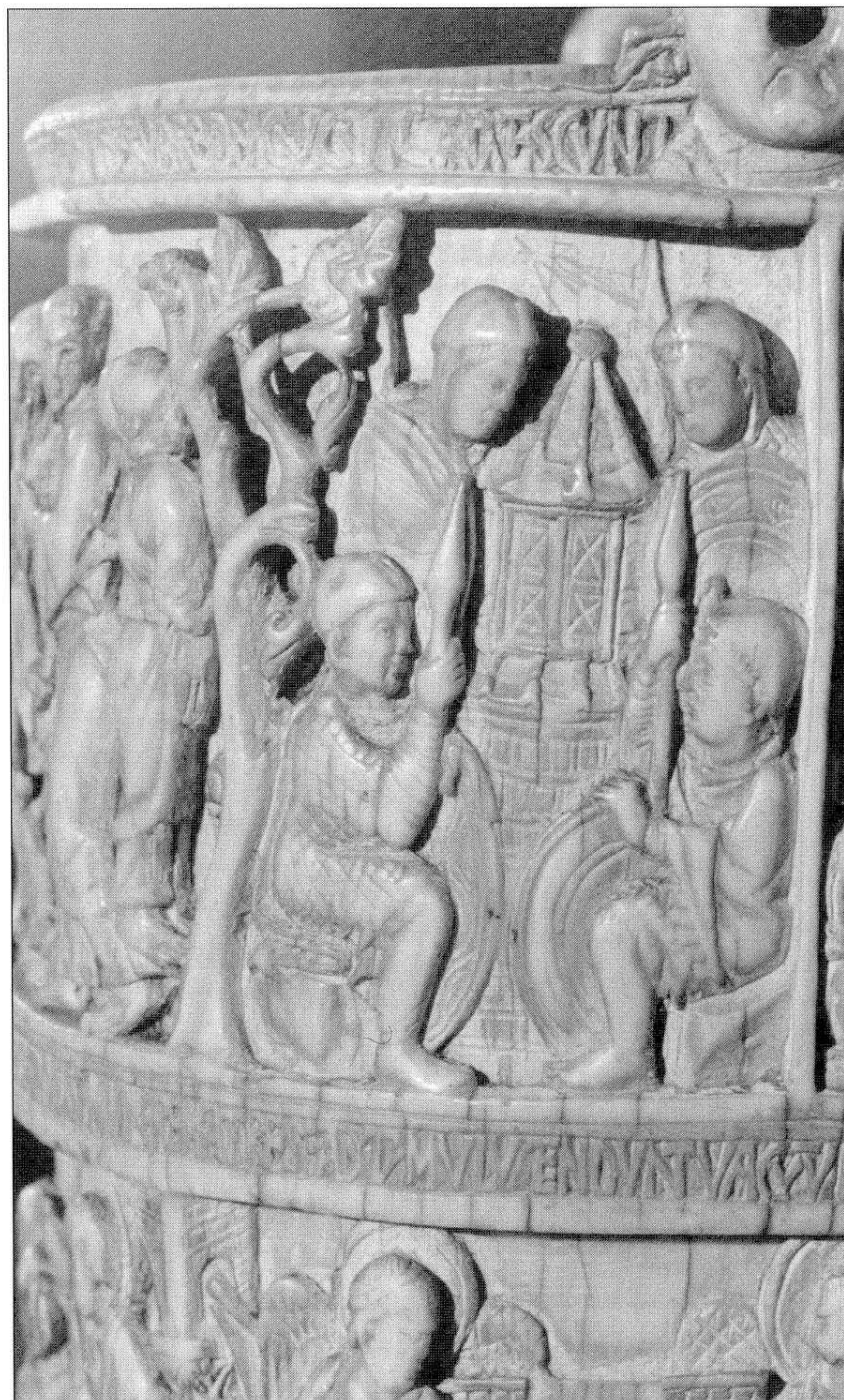
This carved ivory holy water bucket was probably made in Milan around 980. Its portrayal of four guards outside the Holy Sepulchre shows men in short-sleeved mail hauberks and helmets with either plume-holders or two-piece construction. (Victoria and Albert Museum, inv. A.18-1933, London, England)

encouraged the use of religious banners. At the battle of Lechfeld in 955, where Otto of Germany defeated the Magyars, the main banner used by the emperor's élite armoured cavalry was called 'The Angel' because it bore an image of St Michael.

One problem of relying on religious motivation was how to explain defeat. In wars between Christians, God favoured whichever side won, but what if pagans or Muslims defeated a Christian army? A common explanation attributed such failures to excessive pride among Christian leaders. Personal pride was, however, seen as natural amongst the Carolingian military élite, but was inappropriate amongst men of the Church. Part of a fascinating letter by Archbishop Hincmar of Reims to his nephew, Bishop Hincmar of Laon, urged him to reform his ways because, 'Many say that you show pride in the strength and agility of your body and that you converse frequently and freely about fighting and, as we say in our language, *de vassaticus* [on being a vassal] and that you talk irreverently about how you would act if you were a layman and about other things which are neither proper for you to say or to do, nor for me to mention.'

A poem by the Lombard Italian scholar Paul the Deacon, shows how important status was to members of the military élite. It was addressed to Charlemagne, asking mercy for Paul's brother who had been imprisoned following his involvement in an uprising by Arichis of Benevento.

Our noble situation has perished, want dogs our miserable steps.
We should have suffered a harsher fate, I admit,
But take pity, powerful ruler, take pity we pray,
And of your kindness, at last put an end to our sufferings.
Return the captive to his homeland, to the lands that are his by right,
And restore his house and modest property as well,
So that our spirits may sing for ever in praise of Christ,
Who alone can bestow just rewards.[8]

ON CAMPAIGN

Most historians still consider armoured cavalry to have been the decisive arm in France, Germany and Italy during the 9th and 10th centuries, and believe that infantry was consequently neglected. Military scholars have also focused too closely on battles, whereas raiding, the destruction of economic resources and sieges were actually more important. The role of fortifications was similarly vital, especially when late Carolingian and post-Carolingian states were reeling from assaults by Viking, Magyar and Saracen raiders. Furthermore, siege technology was more developed than is generally believed. In fact western European military élites were operating in a complex tactical and strategic environment, and probably had to fight on foot as often as on horseback.

The way in which Carolingian armies mustered had a profound impact on subsequent campaigning. In military terms the early Carolingian state seems to have been organised for expansion rather than defence, and there were campaigns almost every year during the mid-8th century. However, the idea that Carolingian rulers used large armies to conquer new territory or crush major rebellions, and smaller units based in fortifications to control conquered territory, seems an oversimplification.

Charlemagne undoubtedly enjoyed a superiority in men and material over most of his foes. The early Carolingian state also used widespread massacre to terrorise its foes, especially against the non-Christian Saxons and Avars. The latter were virtually exterminated in what can only be described as wars of genocide. In strategic terms, the so-called Vegatian strategy of 'battle avoidance' and victory by other means may have been overstated, despite the fact that the Carolingian ruling class knew of Vegatius' military writings.[9]

Threatening battle, as distinct from actually fighting one, seems to have been an important method of battle avoidance, and the role of mounted troops in this is not always clear. They were used in large numbers but this did not mean that they usually fought on horseback. A substantial number of *scara, excarricati* or *scariti homines* may, in fact, have been mounted infantry, who fought alongside a larger number of less well-equipped foot soldiers. Similarly, the role of élite soldiers as garrisons does not mean they were mainly intended to defend these places on foot, since a major function of garrisons was to control a surrounding territory.

The respected Belgian military historian, J.F. Verbruggen, suggested that Charlemagne often sent more than one army against a significant

8 Godman, *op. cit.*, 83.

9 S. Morillo, 'Battle Seeking: The Contexts and Limits of Vegatian Strategy,' in B.S. Bachrach (et al. eds.), *The Journal of Medieval Military History I* (Woodbridge 2002) 21-42.

Iron helmets from St Vid in Austria. Some armour historians believe they are 5th century, but others consider they date from the 9th or 10th centuries. (Kunsthistorisches Museum, inv. nr. HJRK A 1998, Vienna, Austria)

foe and that these converged on an enemy's heartland to deliver a mortal blow.[10] However, this has been criticised by John France, who points out that such elaborate strategy was quite unusual. On the other hand, the Carolingian armies were closely concerned with logistical support, communications, and reliable fortifications during this, their greatest era. Members of the mounted élite had to defend convoys, ensure that messengers got through, cover the construction of defences, and ensure that lower status troops were not interrupted in their task of ravaging enemy territory. Nor did they always form part of a huge army and more often found themselves part of a relatively small force. Here the Franks would be just as likely to serve with, as they were to fight against, Goths, Aquitainians, Gascons, renegade Muslims in the Spanish March, Lombards, Italians, Greeks and even Arabs in Italy.

On the negative side were the short length of most campaigns, which usually lasted two or three months, the problem of sickness, especially among the animals, and the extreme difficulty of conducting campaigns in winter. Operations outside the normal summer campaigning season did occur, but were rare.

After the death of Charlemagne, tensions within the Carolingian empire led to civil wars and the eventual dismemberment of the state. In 876 his grandson, Charles the Bald, attempted to reunite the Carolingian empire, and as part of his campaign, carried out a daring night march through perilous passes in eastern France. However, the element of surprise failed and Charles's exhausted and rain-soaked army was defeated at Andernach. Fear of the night was more typical, and even armed men were reluctant to travel in the dark, which was regarded as a time for thieves, bandits, demons and dangerous wild animals.

The Carolingians were no exception when it came to justifying setbacks. Failure against the Celtic Bretons was usually ascribed to difficult terrain, the enemy's use of light cavalry and their guerrilla tactics. However, it is unclear why Carolingian armies succeeded against the politically fragmented pagan Saxons but achieved limited success against the similarly divided but Christian Bretons.

Carolingian mounted troops were involved in several ambitious campaigns on the far side of massive mountain ranges. The powerful Lombard kingdom in Italy was overthrown by troops who had to cross the Alps, while the destruction of the Avars was largely achieved by

---

10 J.F. Verbruggen, 'L'armée et la stratégie de Charlemagne,' in (ed. anon.) *Karl der Grosse. Band I, Persönlichkeit und Geschichte* (Düsseldorf 1965) 420-436.

armies which crossed the Alps from Carolingian Italy into what is now Hungary. Campaigns across the Pyrenees were far less successful, and here Carolingian armies failed to achieve much against Umayyad garrisons along the Ebro river. Campaigns across the Alps remained a feature of German-Italian relations during the medieval period and Ottonian kings and emperors undertook many such expeditions, some reaching the southernmost tip of Italy. German armies usually assembled at Augsburg or Ratisbon and crossed the Alps via the Brenner Pass, though the Gothard and Mont Cenis were sometimes used. After crossing the Brenner troops normally assembled on the plain of Roncaglia where, according to the *Chronicle of Otton de Freising,* a shield would be raised on a wooden pole to mark the place where the emperor's Italian military vassals were expected to muster.

Efforts to understand the Frankish muster system have usually focused on the so-called *Champs de Mars* or *Marzfeld,* which was recorded during the Merovingian period and was sometimes understood to mean that Frankish troops mustered in March at a specific 'field'. However, this probably reflected a misunderstanding of an original Latin reference to Mars, the Roman god of war. Frankish and Carolingian armies actually mustered at various times, usually between March and May, and the location depended upon the direction of the forthcoming campaign. Other factors influencing the date were the availability of fodder for horses or the seasonal opening of mountain passes after the winter snows.

Musters

Mustering an army took time, planning and a great deal of money. Various capitularies indicate that major vassals needed some three months to prepare foodstuffs and six months to prepare arms and clothing. The responsibilities of the counts are listed in a capitulary of 802–03 which stated, 'Concerning the host, that each count in his county should be responsible for commanding every man to join the host in answer to the summons on pain of a fine of sixty shillings, and that they should come at the time announced to the place to which they were ordered. And that the count is to see that they are properly equipped ... The bishops, counts and abbots are to have men specially appointed to take good care of this, to come on the day announced to the gathering, and to see to it that they are properly equipped. They are to have armour and helmets, and are to have their army ready at the proper time, that is, for the summer.'

Counts and other senior men passed these orders to subordinates and listed the *partants* (troops actually taking part) and the *aidants* (those remaining at home but providing support for the *partants*). Under Louis the Pious a force thus prepared should, theoretically, have been able to set out within 12

Iron helmet from Hradsko in Bohemia. Now considerably squashed, it is a very early example of a helmet forged from a single piece of iron. (Historical Museum, Prague, Czech Republic)
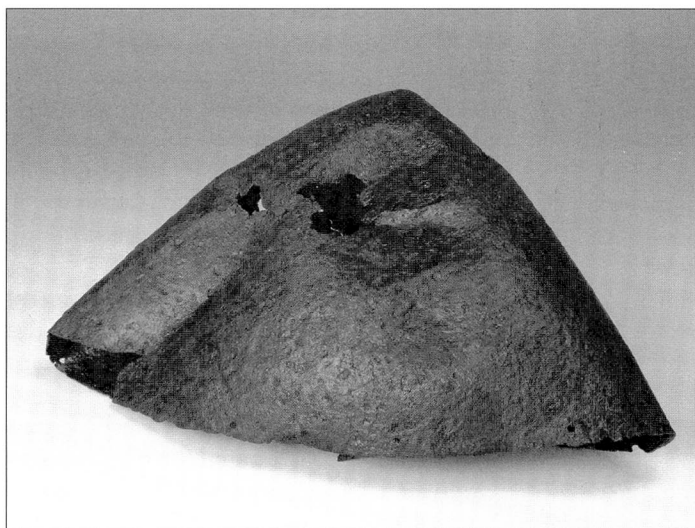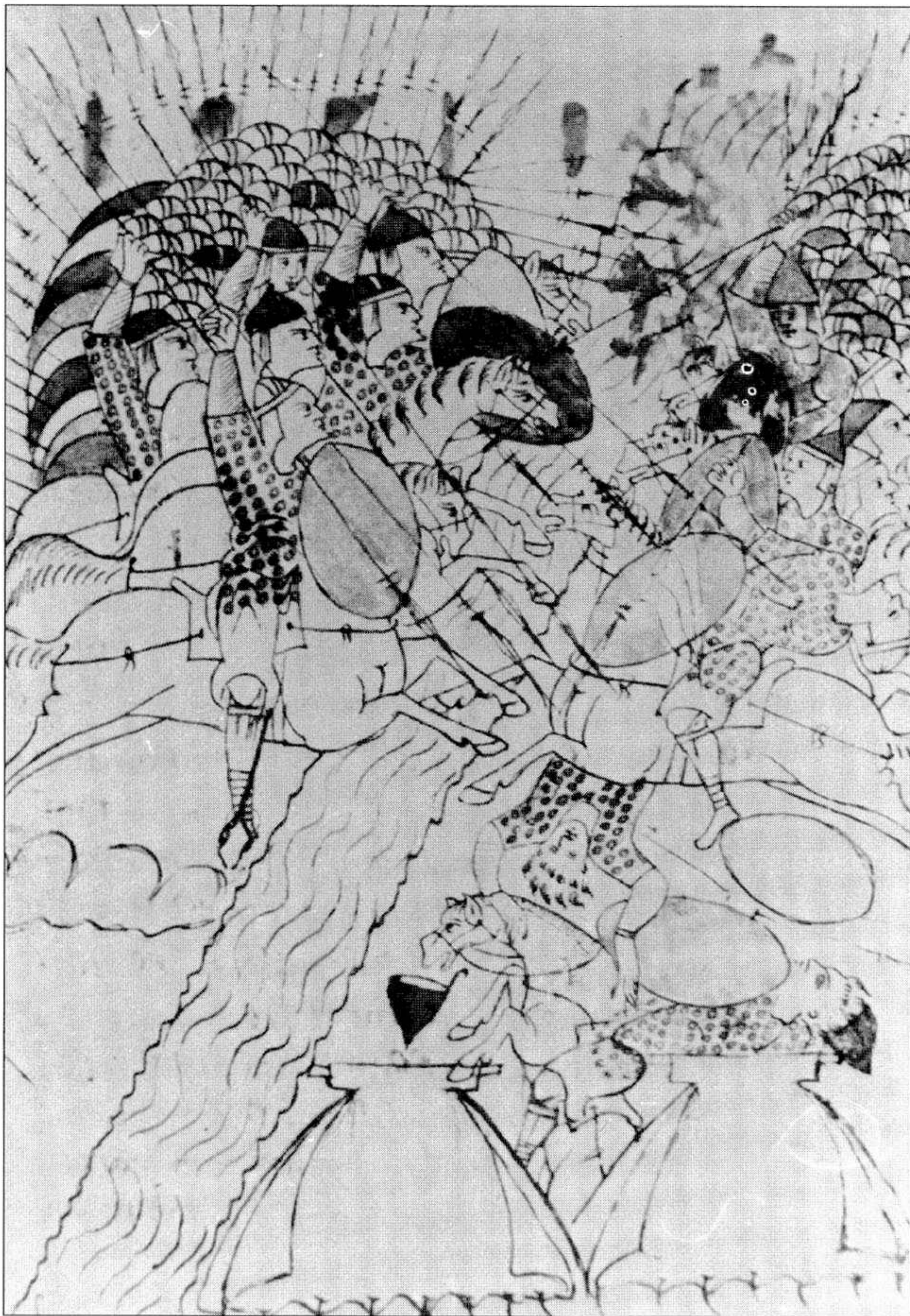
The attacking side in this illustration from St Gall, made around 924, use stirrups but otherwise both armies are equipped in the same manner. The two tents have rigid ridge poles. (*Book of Maccabees*, Universiteitsbibliotheek, Ms. Periz. F.17, Leiden, Netherlands)

hours. The second stage in the mustering system was the written order, the *iussio* or *adnuntiato*, to assemble at a designated place, which was carried by *missi*, authorised royal or imperial messengers. The text of an order sent to Abbé Fulrad of St Quentin shortly after 12 April 806 during preparations for a campaign against the Sorbes, still survives, and implies that such contingents formed virtually autonomous units with their own carts, support equipment and weaponry.

This two-stage system could produce a large force but was slow and laborious. Troops based around the Carolingian palace, who were probably mounted, were more immediately available. A provincial muster could deal with local emergencies, especially in a frontier march where the ruler had authority to muster local troops without distinguishing between *aidants* and *partants*. Louis the Pious attempted to speed up the muster system and his *missi dominici*, officials or messengers, were organised on a semi-permanent basis. The new emperor also made greater use of the Church to pass orders more quickly, the Church being the best organised and most literate structure in the empire.

Information from the year 819 listed the following acceptable excuses for not attending a muster under Louis the Pious: maintaining the count's peace at home; guarding the count's wife at home; maintaining peace for bishops, abbots or abbeys; disciplining the dependants of these authorities; gathering tax revenues and protecting the emperor's *missi*. But following the Treaty of Verdun in 843 which first partitioned the Carolingian empire, the mustering of armies became more complicated and a capitulary drawn up at Meersen authorised vassals living in one kingdom to follow their lord if he lived in another kingdom. The only exception was in case of foreign invasion, in which case all free men had to defend the kingdom in which they lived. How far these muster systems continued under the Ottonian rulers of 10th-century Germany is less clear, and some aspects of Ottonian muster reflect ancient German tribal traditions via the duchies or *Herzogtümer*, as well as recent bureaucratic influence from the Byzantine empire.

Marching and foraging

Little is known about the Carolingian army in camp, but pictorial evidence suggests that tents were of the Roman type, including ridge tents with multiple poles; the bell tents used by Turkish-influenced Islamic forces were not yet seen in western Europe. Once mustered, Carolingian armies could cover huge distances. In the early Carolingian period considerable use was made of river transport, which left little scope for cavalry, but rivers apparently played a less important role in

'Agitator' in a French *Book of Constellations* made around 1000 has been given full armour with a segmented helmet, a substantial mail hauberk, a winged spear and a round shield. (Bib. Munic., Ms. 488, f. 68v, Dijon, France)

the 9th century. The lines of ancient Roman roads would still have been visible, but were now unlikely to have been suitable for riding, as centuries of rain and frost would have dislodged their stone surfaces. Instead, armies are likely to have walked beside these ancient roads.

Clear efforts were made to maintain discipline on the march. According to these rules, an army travelling through friendly territory was allowed to take water, firewood, fodder and straw, but nothing else. However, the army which Louis the Pious sent against the Bretons in 824 pillaged Carolingian territory on its way, and was far from alone in such behaviour. Other disciplinary problems included men selling their weapons to the merchants who always followed armies, then getting drunk on the proceeds. Men caught drunk were forced to admit their fault in public and, worse still, were condemned to drink water.

It has been estimated that a Carolingian cavalryman with one packhorse could carry food and fodder for ten days. This gave such troops a non-combat range of around 225 km, but if they had to fight, this was reduced to 135 kilometres. Other evidence indicates that small two-wheeled carts pulled by two oxen and carrying a 500 kg load were preferred over larger, but slower four-wheeled carts with a 650 kg capacity. A supply of 500 kg of wheat could feed 500 men for one day, but if an army had to carry its own water, then wagons were of little use. Consequently, they were probably little used by southern European armies. The importance of wheat and wine for a Carolingian army is clear in the famous *Capitulare de Villis vel Curtis Imperialibus*, which was probably drawn up for the future emperor Louis the Pious early in the 9th century, and stated, 'It is also our wish that flour, 12 *modii* of it, should be placed in each cart for our use; and that in those carts which carry wine they are to place 12 *modii* according to our measurement, and they are also to provide for each cart a shield, a lance, a quiver and a bow.'

It is hard to calculate the speed and endurance of Carolingian armies, but it is clear that the horses suffered badly during prolonged

47

'Saul's Soldiers Arrest David,' Saul's servants are clean-shaven and unarmoured, but wear decorated tunics. (*Golden Psalter*, Cod. 22, Stiftsbibliothek, St Gallen, Switzerland)

campaigns. A large mounted force which was not involved in combat could cover about 30 or even 40 km a day, while smaller units could ride up to 50 km. Nithard's description of Charles the Bald's pursuit of Count Gerard in 841 states that at one point Charles covered 60 km during a 13-hour night march. Next day, his men rode another 40 km, making an astonishing total of around 100 km within 24 hours.[11] These were the best horses, but even these animals were now exhausted and were certainly not ready for immediate combat.

Pillaging enemy territory was vital to feed an army, and Ermoldus Nigellus described Frankish looters during one expedition against the Bretons, 'Like the serried ranks of thrushes and other birds who fly over the autumn vineyards pecking at the grapes ... did the Franks ... flood over the province, despoiling it of its treasures. They ferreted out everyone alive hiding in the woods and marshes or concealed in ditches. Men, sheep and cattle were led away. The Frank carried his ravages everywhere. The churches, as the Emperor had commanded, were respected, but everything else was put to the torch.'

Once a campaign ended, the army was disbanded and efforts were made to control this all too often disorganised process. The Edict of Pîtres in 864, for example, mentioned that *pagenses* remained under the authority of their counts for 40 days after demobilisation, presumably to retain some control on their journey home. 'Let that command be re-imposed, which is called in the Germanic tongue *scaftlegi*, meaning the laying down of arms.' Although it is unlikely that *pagenses* handed their weapons back to a central armoury, there is evidence that some contingents beneficed on Church land stored some of their weapons in churches.

THE WARRIOR IN BATTLE

By the late 8th century the Franks had been influenced by late Roman and more recent Byzantine forms of cavalry warfare. They had also absorbed Visigothic and Lombardic military influences, which gave higher prominence to the mounted warrior. Tactically, most of these traditions relied upon a small but close-packed and disciplined cavalry formation known in Latin as a *cuneus*. Later Roman and some early

---

11 C.M. Gillmor, 'Aimon's *Miracula Sancti Germani* and the Viking Raids on St Denis and St Germain-des-Prés', in R.P. Abels and B.S. Bachrach (eds,), *The Normans and their Adversaries in War. Essays in Memory of C. Warren Hollister* (Rochester 2002) 119-20.

The miniatures in the *Corbie Psalter* are generally believed to have been made in 9th century northern France. However, several aspects of the arms, armour, costume and artistic style seem to reflect influence from western Islamic miniature painting. (Ms. 18, Bib. Municipale, Amiens, France)
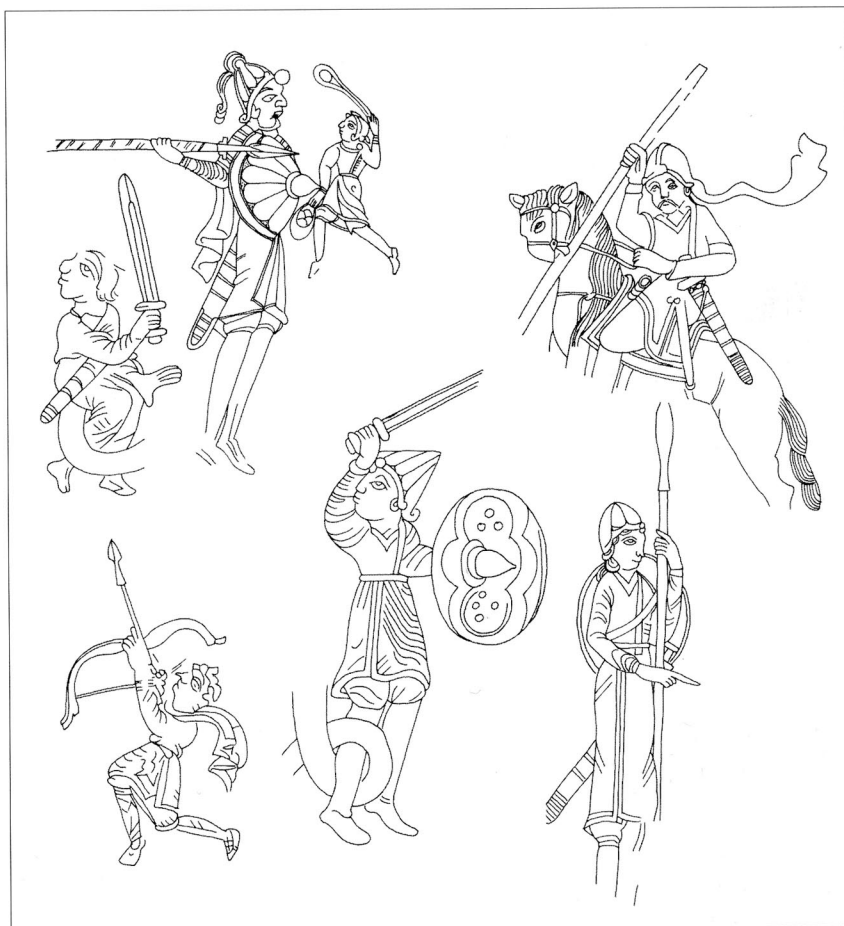
Germanic horsemen had also adopted heavy spears for close combat, and by the 7th century Lombardic, Visigothic and Frankish cavalry relied on the spear, though the Visigoths and their early medieval Spanish and Andalusian successors still made considerable use of javelins, as did Breton cavalry, who seemingly clung to an earlier Roman tactical tradition.

The biggest external influence upon Carolingian horsemen were the Lombards. Unlike the conquered Avars, who were obliterated, the conquered Lombards were absorbed into the Carolingian military system as an élite. The Visigoths influenced Carolingian cavalry in Septimania, the Spanish March and perhaps Aquitaine, but the brief Islamic occupation of southern France is unlikely to have had much impact on cavalry tactics. It is also clear that a lack of stirrups did not limit the effectiveness of early Carolingian mounted troops, despite the fact that stirrups were already used by Avars, and were being adopted by Byzantine and eastern (though not western) Islamic armies. Here it is important to realise that stirrups were originally a device used to reduce tiredness over long distances, not to improve a cavalryman's combat effectiveness.

Horsemen may have increased in number but they did not dominate Carolingian warfare in any real sense. Nor were major efforts yet invested in raising large numbers of cavalry horses. On the other hand

it would seem true that, as F.L. Ganshof wrote many years ago, 'Although few in number, the units of armoured cavalry had an extremely important role, tactical and perhaps strategic,' giving Carolingian armies an advantage over Saxons, Slavs and probably Danes, though not over the Avars. Nor did any supposed superiority always show itself on the battlefield. In the Süntel Mountains, during the summer of 782, Carolingian cavalry charged a Saxon shield wall – the archetypal defensive infantry formation of the early medieval period. Einhard, who probably based his account on that of an eyewitness, wrote, 'The Saxons stood in their battle line in front of their camp, while each and every Frank rode at them as fast as possible. The charge was as bad as the battle. Indeed, once the fighting began the attackers were surrounded by Saxons and almost all of the Franks were killed.'

A century later, when Count Eudes defeated the Vikings at Montpensier, the Carolingian French reportedly had 10,000 mounted troops and only 6,000 infantry. The horsemen were stationed behind the men on foot and it is not even clear that most actually fought on horseback. Instead, archers in the front rank shot first, then the French foot soldiers attacked, after which some cavalry charged the broken enemy, suggesting that only a proportion of the Carolingian horsemen remained mounted, ready to deliver a final blow.

Discipline and tactics

The *Taktika*, which is attributed to the Byzantine Emperor Leo VI writing in the late 9th or early 10th century, updated earlier Byzantine military treatises, but stated that Frankish cavalry still lacked good order and disciplined formation: 'They are uninterested in any artifice and external security and attention to one's own advantage. For this reason they even despise good order and especially for the cavalryman.'

Evidence suggests that Carolingian cavalry believed a sudden charge was the best way to deal with horse archers, including those of the Avars, Byzantines and later the Magyars. But such tactics required suitable terrain, and Carolingian cavalry's weakness in broken country was already clear in the late 9th century. To quote Emperor Leo again: 'In case of cavalry combat, uneven and wooden terrain hinders them because they are practised in rapid charges in straight lines with their spears. They easily suffer losses on account of ambushes against the flanks and rear of their battle formation for they do not concern themselves at all with outriders ... Whenever some [of their opponents] simulate flight, they break ranks easily, and if [these opponents] rally suddenly against them, they [the opponents] destroy them easily.' Leo emphasised the western cavalryman's dislike of rough terrain: 'Delay and other causes can operate against them whenever the army hostile to them camps in difficult and uneven terrain, where, since they are wielding spears, they are not able to attack advantageously on account of the ground.'

This apparent reliance on sudden charges with large spears does not sound like the repeated attack and withdrawal tactics practiced at the 'cavalry games' at Worms (see Plate C). Perhaps only the élite *scara* were trained in varied cavalry tactics based upon small, closely packed *cuneus* formations of around 50 horsemen, although by the early 10th century the best Carolingian cavalry were clearly capable of making coordinated
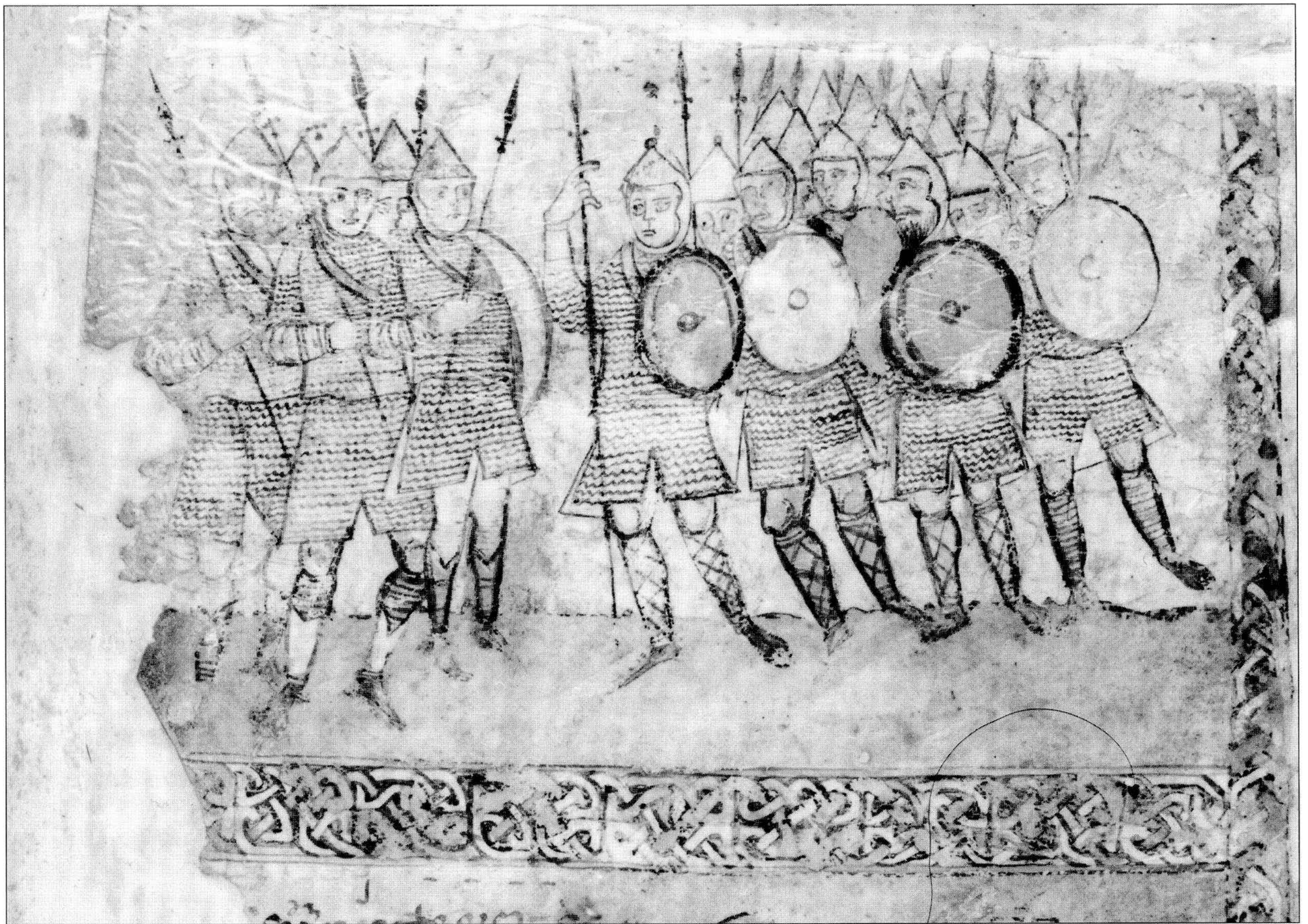
flank and rear attacks. Whether these flexible tactics were learned from Byzantines, Avars, Muslims, Bretons or others is unknown. Certainly Breton horsemen included a cavalry élite who clung to late Roman traditions of rapid attack and withdrawal, relying on javelins rather bows, operating in close formations and even using some horse armour.

Ottonian and 10th-century Italian cavalry tactics probably reflected a need to tackle various militarily sophisticated foes. The Magyars posed a particularly serious challenge, though the terror these newcomers inspired was as much a result of their different culture as their seemingly alien tactics. The Magyars were not from the steppes of central Asia, but were a semi-nomadic people of the open forests, related to the Finns, with an advanced culture influenced by that of the Judaeo-Turkish Khazars. Their numbers were also hugely exaggerated by western chroniclers. In military terms, the Magyars were characterised by iron discipline and they certainly relied on mounted archers. Magyar horse-archery may, however, have been closer to that of the Byzantines, Iranians and other peoples of the Middle East than the dispersal–harassment tactics of Turco-Mongol central Asia.

What European sources do make clear is that Magyar cavalry was better at manoeuvring in formation than were late Carolingian and Ottonian horsemen. It was said that King Henry of Germany studied Magyar tactics and trained his own cavalry to fight collectively rather than as individuals. Although this was an oversimplification, military commentators of the period certainly argued that the best way to deal

Another illustration in the early 10th-century *Book of Maccabees* from St Gall includes armoured and unarmoured troops, though most have two-piece rounded helmets. (*Book of Maccabees*, Universiteitsbibliotheek, Ms. Periz. F.17, Leiden, Netherlands)

with Magyar horse archery was with a greater emphasis on teamwork by European cavalry. Even though the bulk of the German army still fought on foot, it soon included a cavalry *legion*. This included a heavily armoured élite, who operated in smaller formations called *acies* or 'lines of battle', which were widely credited with overcoming the Magyar threat. The defeat of Magyar raiders in Italy did not involve major battles as in Germany. In fact, Italian cavalry countered Magyar tactics more quickly by ambushing returning raiders and luring Magyar light cavalry into close combat.

The tactic of feigned flight was also used by Carolingian cavalry. For example, Louis the Younger won at Andernach in 876 because of a 'refused centre', after which his cavalry attacked the flanks of the advancing enemy. Ottonian commanders also made use of reserves, although at Capo Colonna in the toe of Italy, the Saracen commander Abu'l Qasim lured the German emperor forward by his own feigned retreat, then hit the flanks of the advancing Ottonian cavalry with a mounted reserve.

Another widespread ruse was the digging of hidden pits to disrupt enemy cavalry. The Saracens used this tactic to defeat a 9th-century Lombard cavalry force in southern Italy, and in 991 Conan of Brittany almost defeated Foulque of Anjou by the same means at Conquereuil. Here, the Bretons, who were defending Nantes, reached the battlefield first, then dug pits and ditches disguised with turf. Conan's men also built an earthwork across the field, with marshes to the right and left, then channelled water into some of the new ditches. When the Breton horsemen pretended to retreat, part of Foulque's leading squadron charged without orders. Foulque followed with the rest of the squadron while his reserve remained in position. The Angevin formation lost cohesion when many horses fell into the pits or ditches, and many men were killed by a Breton counter-attack. Count Foulque was unhorsed but was saved by his mail hauberk. Though the Angevin attackers withdrew, the Bretons did not pursue because the Angevin reserve was still in position. Foulque now re-imposed order, despite the loss of his standard-bearer, and showed effective leadership by leading his own counter-attack. This caught the Bretons by surprise as they believed the battle to have been won.

Although the *Annales Fuldenses*, describing a battle in 891, maintained that the Franks were unaccustomed to fighting on foot, there is plenty of evidence that Carolingian cavalry were fully prepared to do so when necessary. In fact, the Byzantine Emperor Leo VI wrote of the Franks and Lombards, 'Whenever they are hard pressed in cavalry actions, they dismount at a single prearranged sign, form up on foot, just a few men unafraid against many horsemen, nor do they shrink from the fight.' The same was often seen in the 10th century when Carolingian and Ottonian forces had to attack Viking fortified camps.

Weapons

The most important Carolingian cavalry weapon was the spear, but even after stirrups were adopted in the 9th century, spears were not used in what came to be called the couched style, despite the fact that the couched lance was already known amongst Islamic and Byzantine horsemen. Instead, the spear was swung or wielded, thrust or even slashed using one or both hands. The idea that the lateral wings or flanges on the iron sockets of spear blades were an 'anti-penetration' device is almost certainly wrong. They were likely to have served as guards, almost like the quillons of a sword-hilt, when using a spear in what was almost a fencing technique. Furthermore, the considerable length of such spearheads and the emphasis on sharp cutting edges suggest that such weapons were being used for cutting as well as thrusting.

The adoption of stirrups in western Europe has to be seen in conjunction with changes in saddle design and later with the couched cavalry lance. However, a technological argument that proposes a firm link between these developments misunderstands the basic mechanics of cavalry combat, especially against infantry.[12] In most terrain, cavalry enjoyed superior mobility and were the natural arm of attack or pursuit. Infantry was the natural arm of defence but could also attack. The classic cavalry offensive was to charge in line, and the impact of cavalry upon infantry was largely psychological; horses are rarely willing to crash into a solid line of men, which they can neither jump over nor go around. Stirrups had no relevance to this psychological impact: broken, scattered or undisciplined infantry with low morale were always at a disadvantage when facing cavalry, both before and after the invention of stirrups. Although it does seem to have been easier to wield a sword on horseback when using stirrups, the sword remained a secondary weapon of personal defence in deference to coordinated unit offensive manoeuvres. What did make a difference to the impact of a cavalryman's spear was his saddle. It was this that enabled him to thrust hard without sliding backwards and forwards, and to remain on his horse if struck in return. Here stirrups played only a secondary role – and sometimes no role at all.

While mounted troops had a better chance of escape after a defeat than foot soldiers, Louis the German's army faced an unexpected problem after its defeat at Andernach in 876, where the great number of pack animals belonging to the merchants and shield-sellers who

This illustrated Gospel from Corbie is normally believed to date from the 9th century, but the military equipment used by this marginal figure looks more typical of the 10th century. (Bib. Munic., Ms. 172, Amiens, France)

---

12 S. Morillo, 'The 'Age of Cavalry' Revisited', in D.J. Kagay and L.J.A. Villalon (eds.), *The Circle of War in the Middle Ages* (Woodbridge 1999) 49.
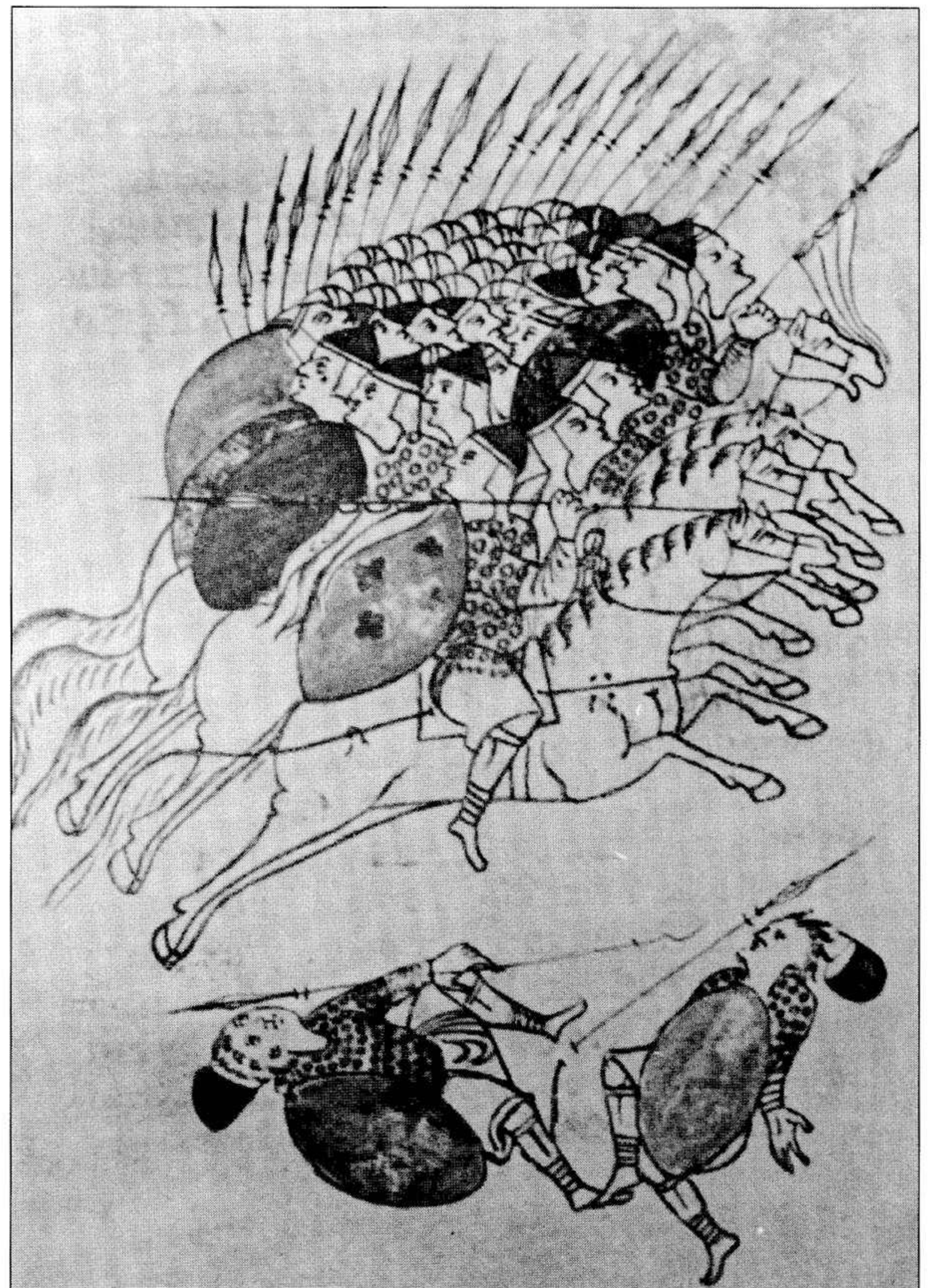
These early 10th-century pictures shows cavalry in pursuit and retreat, including a realistic portrayal of an empty saddle with stirrups. (*Book of Maccabees*, Universiteitsbibliotheek, Ms. Periz. F.17, Leiden, Netherlands)

followed the army caused fatal traffic jams. Incidentally, it was so shameful for a man to throw away his shield in flight that the Laws of the Salian Franks imposed a severe fine on anyone falsely accusing another of doing so.

Night was the time for collecting the bodies of the dead and dying after a battle, and a warrior-poet named Angelbert, who took part in the battle at Fontenoy in 841, recalled the aftermath in all its horror.[13]

I, Angelbert, witnessed this crime which I have described
In rythmical verse, as I fought with the others.
I alone survived among the many in the front line.
From the height of the hill I looked down into the valley's depths
Where the brave king Louis was vanquishing his enemies
Who fled to the other side of the brook.
On Charles' side and on that of Louis too,
The fields became white with the linen garments of the dead,
As they often grow white with birds in the autumn...
...The night was especially terrible,
A night mingled with lamentations and suffering
When some died and others groaned in dire straits.
O grief and lamentation! The dead are stripped naked,
Vultures, crows and wolved greedily devour their flesh,
They grow stiff, and their corpses lie there, unburied, helpless.

13 Godman, *op. cit.*, 263.

COLLECTIONS AND SIGNIFICANT HISTORICAL LOCATIONS

Although the Carolingian period laid the foundations of modern Europe, it has left remarkably few artefacts or even buildings. This lack of concrete evidence is even more apparent in the military field, and what does survive is scattered across half a continent. In many cases the dating of objects, manuscripts and even buildings remains a matter of scholarly argument, so the following lists are incomplete and rather arbitrary.

Arms and armour

Bern: Historical Museum, spearheads.

Bratislava: Slovak National Museum, weapons and horse-furniture from the Great Moravian period.

Budapest: Military Museum, weapons from the pre-Magyar, Carolingian and Great Moravian periods; Hungarian National Museum: weapons from the pre-Magyar, Carolingian and Great Moravian periods.

Essen: Minster Treasury Museum, decorated sword and scabbard.

Kosice: East Slovakian Museum, weapons, including swords probably made in Germany, and horse furniture.

Munich: Bavarian National Museum, weapons.

Paris: Musée du Louvre, 'La Joyeuse, Sword of Charlemagne'.

Prague: Cathedral Museum, 'Helmet of St Wenseslas'; National Historical Museum, helmets from Hradsko and Prag-Stromovka, weapons and horse-furniture from the Great Moravian period.

Vienna: Kunsthistorisches Museum, framed iron helmet from St Vid, and other weapons, 'Sabre of Charlemagne', so-called 'Holy Lance'.

Zurich: Schweizerische Nationalmuseum, swords, one-piece iron helmet from Chamosen.

Pictorial Evidence

Aachen: Cathedral Museum, carved ivory situla.

Amiens: Bibliothèque Municipale, northern French Psalter (Ms. 18), 'The Corbie Gospel', (Ms. 172).

Augsburg: Cathedral Library, 'Pericopen Buch' (Ms. 15A).

Aversa: Cathedral, 'St George and the Dragon', carved relief.

The Boosenburg tower in Rüdesheim probably dates from the 10th century. (Author's photograph)
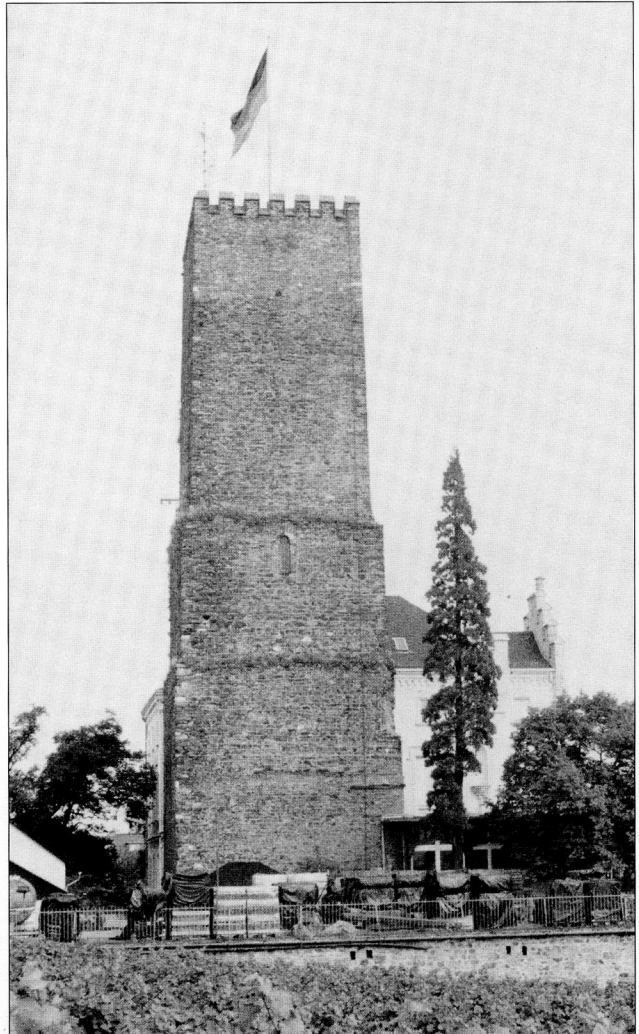
Bern: Stadtbibliothek, 'Psychomachia' (Ms. 264).

Boulogne: Bibliothèque Municipale, 'Psalter of St Bertin' (Ms. 20).

Cambrai: Bibliothèque Municipale, 'The Cambrai Apocalypse' (Ms. 386).

Civita Castellana: Cathedral, carved relief showing mounted huntsmen.

Dijon: Bibliothèque Municipale, 'Apocalypse' (Ms. 448).

Florence: Bargello Museum, 'Guards at the Holy Sepulchre', Carolingian.

Göttingen: Niedersächsische Staats- und Universitätsbibliothek, 'Fulda Sacramentary' (Cod. Theol. F. 231).

Leiden: University Library, 'Book of Maccabees' from St Gallen (Cod. Periz. F.17).

London: British Museum, 'Guards at the Holy Sepulchre', carved ivory box, German; Victoria and Albert Museum, carved ivory book-covers,

Apart from ruins and a few fragmentary buildings embedded beneath later structures, no palaces or major fortifications from the Carolingian period survive in France. However, the soaring but simple style of some early 9th-century churches probably reflects the architecture of these lost secular buildings. (Oratory at Germigny-des-Pres; Author's photograph)

German (inv. A. 18-1933, and 1-1872), carved ivory beaker, Italian (inv. n.A.18-1933).

Manchester: John Rylands Library, 'Exultet Roll', south-eastern Italy (Ms. 2).

Malles: Church of San Benedetto, 'Donor Figures', wall-paintings.

Modena: Biblioteca Capitolare, 'Codex Legum', southern Italian (Cod. 01.2).

Monte Cassino: Monastery Library, 'Avatea', southern Italy (Ms. 3).

Munich: Stadtsbibliothek, 'Codex Aureus from S. Emmeran' (Clm. 14000); 'Wessobrunner Prayerbook' (Ms. 810); 'Gospels of Otto III' (Cod. Lat. 4453).

Nancy: Cathedral Treasury, 'Guards at the Holy Sepulchre'.

Paris: Bibliothèque Nationale, 'The Gellone Sacramentary' (Ms. Lat. 12048); 'Vivian's Bible' (Cod. Lat. 1).

Pavia: Basilica of San Michele, reused Lombard relief carvings on the west front.

Rome: Church of San Giovanni in Laterano, 'The Pope with Charlemagne', mosaic; Church of San Saba, carved relief showing mounted falconer; Church of Santa Maria Antiqua, 'Crucifixion' and 'Martyrdom', wall-paintings; Library of San Paolo fuori de Mura, 'Bible of Charles the Bald'; Vatican Library, 'Exultet Roll from S. Vincenzo al Volturno' (Ms. Lat. 9820).

St Gallen: Stiftsbibliothek, 'Psalterium Aureum' (Cod. 22).

Stuttgart: Würtembergische Landesbibliothek, 'The Stuttgart Psalter'.

Trier: Stadtbibliotek, 'The Trier Apocalypse' (Cod. 31), 'Codex Egberti' (Ms. 24).

Udine: Archivio Capitolare, 'Liber Sacramentorum' (Ms. 1).

Valenciennes: Bibliothèque Municipale, 'Prudentius'; 'Apocalypse' (Ms. 99).

Vercelli: Biblioteca Capitolare, 'Book of Canonical Laws'.

Wolfenbüttel: Herzog August Bibliothek, 'Works of St Augustine' (Ms. 496).

Zurich: Schweizersches Landesmusum, 'David entering the House of the Lord', carved ivory book cover.

FURTHER READING

Arnold, B., *Medieval Germany, 500–1300: A Political Interpretation*, (London 1997).

Bachrach, B.S., *Armies and Politics in the Early Medieval West,* (collected articles) (Aldershot 1993).

Bachrach, B.S., *Fulk Nerra, the Neo-Roman Consul, 978–1040: A Political Biography of the Angevin Count,* (Berkeley 1993).

Bachrach, B.S., *Warfare and Military Organization in pre-Crusade Europe,* (collected articles) (Aldershot 2002).

Beeler, J., *Warfare in Medieval Europe, 730-1200,* (Ithaca 1971).

Bennet, M., 'The Medieval Warhorse Reconsidered', in S. Church and R. Harvey (eds.), *Medieval Knighthood vol. V* (Woodbridge 1994).

Bennett, M., 'The Myth of the Military Supremacy of Knightly Cavalry,' in M. Strickland (ed.), *Armies, Chivalry and Warfare of Medieval Britain and France.* Harlaxton Medieval Studies VII (London 1998).

Bowlus, C.R., *Franks, Moravians and Magyars: The Struggle for the Middle Danube, 788-907*, (Philadelphia 1995).

Coupland, S., 'Carolingian Arms and Armor in the Ninth Century', *Viator* 21 (1990).

Davies, W., *Small Worlds: The Village Community in Early Medieval Brittany*, (London 1988).

Drew, K.F., 'The Carolingian Military Frontier in Italy', *Traditio* 20 (1964).

Duby, G., (tr. H.B. Clarke), *The Early Growth of the European Economy: Warriors and Peasants from the seventh to the twelfth century*, (London 1974).

Fehring, G.P. (tr. R. Samson), *The Archaeology of Medieval Germany: an introduction*, (London 1991).

Fichtenau, H. (tr. P.J. Geary), *Living in the Tenth Century: Mentalities and Social Orders*, (Chicago 1991).

Fleckenstein, J., *Early Medieval Germany*, (Amsterdam 1978).

Fouracre, P., *The Age of Charles Martel*, (London 2000).

France, J., 'The Composition and Raising of the Armies of Charlemagne', *The Journal of Military History* 1 (2002) 61-82.

Ganshof, F.L., *Frankish Institutions under Charlemagne*, (Providence 1968).

Gillmor, C.M., 'Aimon's *Miracula Sancti Germani* and the Viking Raids on St Denis and St Germain-des-Pres', in R.P. Abels and B.S. Bachrach (eds.), *The Normans and their Adversaries in War*. Essays in Memory of C. Warren Hollister (Rochester 2001) 103-127.

Godman, P, and R. Collins (eds.), *Charlemagne's Heir: New Perspectives on the Reign of Louis the Pious (814–840)*, (Oxford 1990).

Godman, P., *Poetry of the Carolingian Renaissance*, (London 1985).

Grant, A.J. (ed. and tr.), *Early Lives of Charlemagne*, (London 1926).

Green, D.H., *The Carolingian Lord*, (Cambridge 1965).

Kreutz, B.M., *Before the Normans, Southern Italy in the Ninth and Tenth centuries*, (Philadelphia 1991).

Lewis, A.R., *The Development of Southern French and Catalan Society, 718–1050* (Austin 1965).

Leyser, K., 'Henry I and the beginnings of the Saxon Empire,' *The English Historical Review* 83, (1968).

Leyser, K., 'The Battle of the Lech, 955. A Study in Tenth Century Warfare', *History* 50 (1965) 1-25.

Lotter, F., 'The Crusading Idea and the Conquest of the Region East of the Elbe', in R. Bartlett and A. MacKay (eds.), *Medieval Frontier Societies*, (Oxford 1989).

Part of a carved stone slab, believed to show St George slaying the Dragon, dating from no later than the 9th century, provides one of the earliest three-dimensional illustrations of a stirrup in western European art. (*In situ* Cathedral, Aversa, Italy)

Loyn, H.R., and J. Percival, *The Reign of Charlemagne: Documents on Carolingian Government and Administration*, (London 1975).

Martindale, J., *Status, Authority and Regional Power: Aquitaine and France, 9th to 12th centuries* (collected articles) (Aldershot 1997).

McKitterick, R., 'Latin and Romance: an historian's perspective,' in R. Wright (ed.), *Latin and Romance Languages in the Early Middle Ages* (London 1991) 130-145.

McKitterick, R., 'The Written Word and Oral Communication: Rome's Legacy to the Franks,' in R. North and T. Hofstra (eds.), *Latin Culture and Medieval Germanic Europe*, Germania Latina I (Groningen 1992) 89-112.

Munz, P., *Life in the Age of Charlemagne*, (London 1969).

Nelson, J.L., 'Violence in the Carolingian world and the ritualization of of ninth-century warfare', in G. Halsall (ed.), *Violence and Society in the Early Medieval West*, (Woodbridge 1998) 90-107.

Nelson, J.L., *The Frankish World 750–900*, (London 1996).

Odegaard, C.E., *Vassi and Fideles in the Carolingian Empire* ,(Cambridge Mass. 1945).

Peirce, I., *Swords of the Viking Age*, (Woodbridge 2002).

Reuter, T., 'Plunder and Tribute in the Carolingian Empire,' *Transactions of the Royal Historical Society* 5 ser. 35 (1985).

Riché, P. (tr. J.O. McNamara), *Daily Life in the World of Charlemagne*. (Pennsylvania 1978).

Schlesinger, W., 'Lord and Follower in Germanic Institutional History,' in F.L. Cheyette (ed.), *Lordship and Community in Medieval Europe*, (New York 1968) 64-99.

GLOSSARY

acies: cavalry formation in lines.

adnuntiato: order for an army to muster.

aidants: men remaining at home but providing support to those mustering with the army (see *partants*).

benefice: source of income given to the Carolingian aristocracy or military élite.

burg: German lord's house.

capitulary: written legal declaration.

casamentum: territorial fief.

centenae: probably the Merovingian king's rather than the mayor's personal troops.

county: basic territorial unit of the Carolingian state, headed by a count.

cuneus: close-packed cavalry formation.

exercitus: generally meaning a readily available local force.

exercitus generalis: probably a large military levy.

familia: household of a ruler or member of the aristocracy.

fideles: member of the aristocratic élite who were 'faithful supporters' of one of the superior houses and were bound to them by special allegiance.

gau: small and very ancient Germanic administrative and legal territory.

generositas: bravery and ability.

iussio: order for an army to muster.

majordome: steward of a royal household.

mansus, mansi: rural settlement, also an ecclesiastical residence.

march: frontier or military zone under a militarised administration.

markgraf, margrave, marquis: governor of a *march*.

Mayor of the Palace: dominant political and military functionary in the Merovingian court.

miles: soldier during the Carolingian period, and more specifically a cavalryman in the late 10th century.

missi: government messengers or inspectors.

mundium: system of legal control over women.

pages: men of free status, usually mentioned in the context of local conflicts.

palatine: 'associated with the palace'.

palatium: palace complex, centre of government administration.

partants: troops taking part in a campaign.

placitum: designated place of muster.

pueri: early Carolingian military following.

scara: élite Carolingian military formation; became *scharen, eschielles* and *schieri*.

socii: military followers of a ruler or major magnate.

trustis: Merovingian kings' personal military followers.

vasseaux chasés: vassal with his own territorial fief.

vicedominus: deputy of a secular or ecclesiastical official.

villa: territorial unit, more like a village than a manor.

COLOUR PLATE COMMENTARY

A: THE DEATH OF ROLAND, 778

The reality of the battle of Roncevalles during the summer of 778, which was the most famous setback suffered by a Carolingian army, is found in Einhard's *Life of Charlemagne* rather than in the later Norman-French *Song of Roland*. Charlemagne was returning from an unsuccessful expedition around Saragossa in northern Spain. His army had withdrawn through Pamplona and was crossing a mountain pass, traditionally identified as that of Roncevalles. As the exhausted army reached the summit, Basque tribesmen attacked the rear of the extended Carolingian column. In the words of Einhard: 'In this feat the Basques were helped by the lightness of their arms (figure 2) and by the nature of the terrain . . . On the other hand, the heavy nature of our equipment and the unevenness of the ground hampered the Franks in their resistance to the Basques.' In fact, the rear of the column was massacred, its booty was lost and Count Roland of the Breton March (figure 1) was killed. The rest of the army then fell into disorder and suffered further casualties. Charlemagne's army, which had attacked Islamic territory in northern Spain, included Lombards from Italy, elite troops from the Carolingian heartlands of western Germany, Belgium, Luxembourg and north-eastern France (figure 1), as well as men from the Breton March. Whether the latter included many Bretons is unknown but a javelin-armed Breton light cavalryman on an armoured
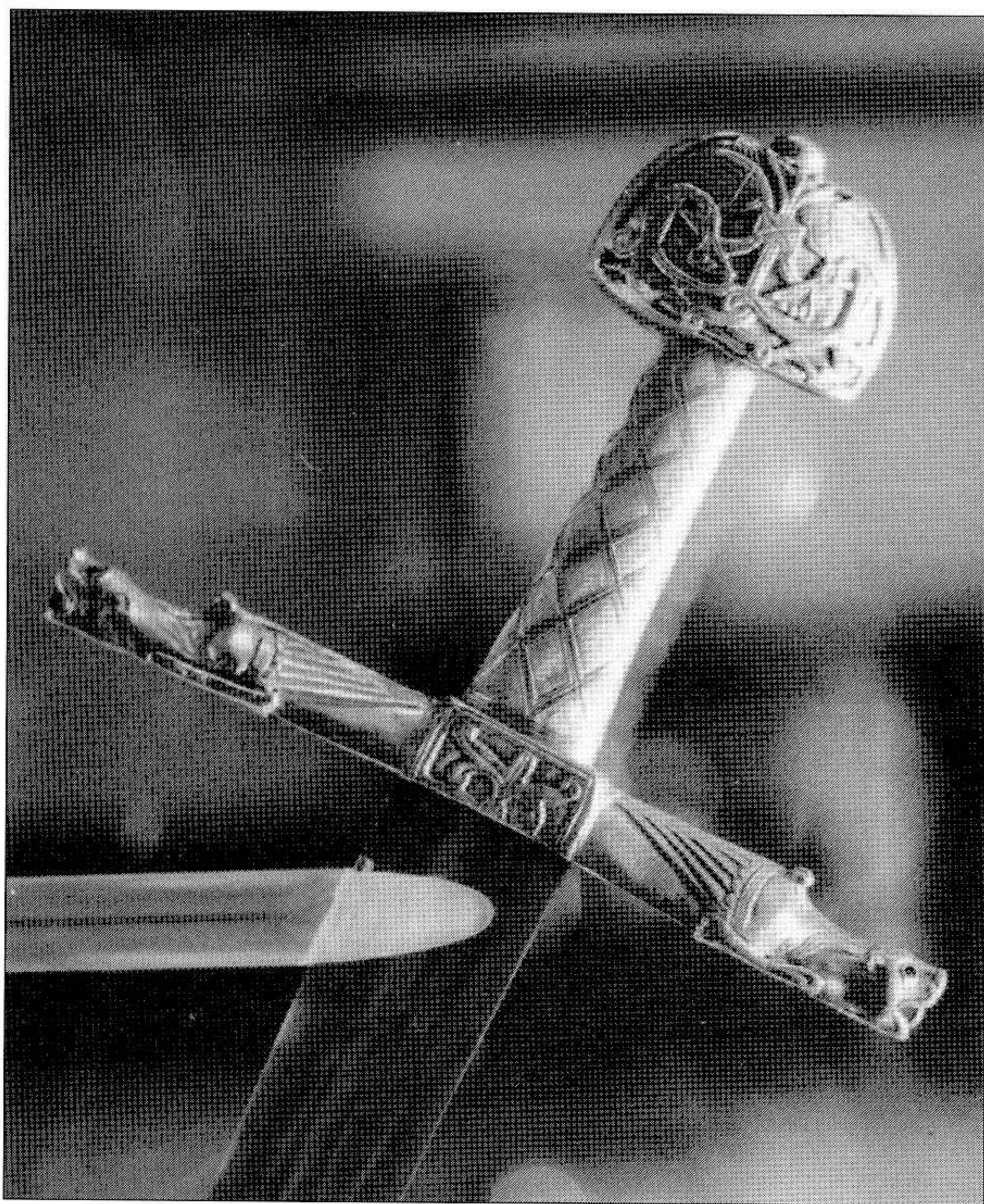
horse, as described by Ermoldus Nigellus, features in this picture (figure 4), along with sword-armed Lombard cavalry from northern Italy and spear-armed Franks from the Carolingian heartland. The Basques appear as lightly equipped tribesmen, mostly armed with javelins, which remained their typical armament for several centuries.

B: ARMS AND ARMOUR OF A CAROLINGIAN HORSEMAN, 8TH–9TH CENTURIES

The main figure wears the sort of iron helmet often illustrated in Carolingian art. He also has a short-sleeved mail hauberk and a large leather-covered wooden shield. The only other armours are a rudimentary form of mail chausses protecting the fronts of his knees and thighs. The bronze prick spurs are of a type used from Roman times until the 14th century. The warrior has a broad-bladed, single-edged dagger with a wooden grip and an open-sided bronze pommel. Its leather sheath, on a leather loop around the belt, has bronze strengthening bands around the top and an openwork bronze chape. The sword-scabbard is carried on three narrow straps to the belt. The spearhead has a small blade on a long socket with two small lugs.

The subsidiary illustrations show:

(1) The helmet with an extended rear which appears in many Carolingian manuscripts has never been adequately explained. Nothing survives in the archaeological record, but similar helmets were shown with greater accuracy in Italian art before and after the Carolingian period. It was also in Italy that the similar *salet* helmet appeared in the 14th century, so it is possible that the problematical Carolingian helmet was descended from a late Roman form, which survived in Italy, and in the Byzantine empire, before spreading more widely across Europe as the 14th century salet.

(2) Wooden shield covered with leather panels secured by small nails inside and outside, plus a long iron grip and reinforcement-bar riveted to the interior.

(3) Another form of helmet, which appears in both art and the archaeological record.

(4) Some Carolingian written sources refer to separate protections for the limbs, but these do not appear in the artistic or archaeological record. Such armour was, however, known to the contemporary Khazars of south-eastern Europe, and probably to the Byzantines. One such eastern form of vambrace is shown here, since it is possible that this style of armour was used by the best-equipped Carolingian horsemen.

(5) Separate leg defences were also mentioned in Carolingian sources, and a *khazar* or Byzantine-style greave is shown here.

(6) Leather-covered wooden scabbard with a carved wooden scabbard-slide, birch-bark binding and bronze chape.

(7) Typical sword with a broad fuller down the blade, leather-covered wooden grip, gold-inlaid pommel and quillons.

(8) A sword, probably of early Islamic origin, found near to the site of the battle of Poitiers (732).

(9) This sword has a very broad fuller, plain iron quillons and pommel, and a leather-covered grip.

Two existing swords are said to have belonged to Charlemagne, including this typical medieval European straight sword in Paris. Its golden pommel dates from the 9th century and its golden quillons from the 12th century. (Musée du Louvre, Paris, France)

C: MILITARY GAMES AT WORMS, 842

The best-known Carolingian cavalry exercises were held near Worms in Germany in 842, where contingents led by the kings Louis of Germany and Charles the Bald of France displayed their prowess. The chronicler Nithard described the event: 'Everyone participating in a particular spectacle assembled in one place with the rest of the crowd ranged on each side . . . Soon Saxons, Gascons, Austrasians and Bretons in equal numbers swung themselves into a swift gallop, one against the other as though straining to come to grips. Then one group made an about-face and, protected by their shields, feigned a desire to flee from their pursuing comrades. Next, reversing their roles, they took up the pursuit of those from whom they had fled. Finally, the two kings with all their young men on horseback, threw themselves into the midst of the clamour and, brandishing their spears, charged among the fugitives, striking first one and then another.'

D: CAROLINGIAN CAVALRY ATTACK ON VIKING RAIDERS, LATE 9TH CENTURY

On several occasions Viking ships were forced into single file by the narrowness of a river channel, making them vulnerable to attack from the shore. At other times Viking

The earliest parts of the large but simple castle at Eckartsberga near Naumburg date from the 10th century, plus later additions. (Author's photograph)

ships ran aground while attempting to navigate the Seine, Loire or Garonne rivers, and this sometimes enabled Carolingian forces to wade out and capture them. If the river fell further, then the invaders' bases on river islands also became vulnerable to attack. Under such conditions, the defenders' mounted troops would have been particularly useful.

E: 'THE LOST HORSE' BY THEODULF OF ORLÉANS AND THE DEVELOPMENT OF HORSE HARNESS

Theodulf of Orléans came from Spain but became the leading satirist in Charlemagne's court. His poem about a lost horse provides an insight into attitudes amongst Carolingian cavalrymen. These seem refreshingly self-critical, compared with the pompous heroics that dominated warlike Germanic, Anglo-Saxon and Scandinavian verses during this period.

Brains achieve what brawn could not attain,
By cleverness you succeed when with force you fail.
Listen to how cleverly a soldier (*miles*) got back a horse,
Stolen from him in the uproar of the camp (*castrensi*).
When he had lost his mount he went shouting high
   and low,
'Let whoever has my horse hurry to give it back!
Otherwise, forced as I am by such urgent necessity,
I will do what my father did in the city of Rome!'
This upset everyone, and the thief allowed the horse to
   go free

The subterranean Chapelle St Nicolas at St-Émillion was excavated between the 8th to 12th centuries. (Author's photograph)

Because he feared that he or his people would suffer terribly.

When the owner found the horse, he rejoiced and took it.

Those who had been afraid were now reassured.

They asked what he would have done if the horse had remained lost,

And what his father had done before in the Great City.

He replied; 'He tied the bridle to the saddle and put it on his neck,

Carried it along, burdened with bits of baggage, down at heel,

Having nothing to spur, he left his spurs on his boots.

Once a horseman, he therefore returned home on foot.

I would sadly have followed this example, believe you me,

Had not my horse been found.'[14]

Behind the unfortunate cavalryman brandishing all that was left of his mount – his leather bridle with iron buckles and bit – is a cavalryman from northern Italy practising 'leaping on his horse' in full armour, while a servant stands ready to hand him his shield. The ability to mount a warhorse without stirrups and without help, was a vital skill for a cavalryman.

The subsidiary illustrations show the development of saddles before and after the adoption of stirrups, which themselves differed in style and manufacture:

(1) Early version with wooden saddle-boards and a tall pommel but a low cantle, used in Byzantine-influenced regions.

(2) Saddle with a wooden frame, introduced to Europe by Avars from the steppes and Arabs from the Middle East.

(3) More highly developed central European version of the fully wood-framed saddle, perhaps introduced by the Magyars.

(4) An early form of the wood-framed 'knight's saddle', which would be used throughout most of Europe for the rest of the medieval period.

(5) Cast bronze stirrups from Hungary, 8th–10th centuries.

(6) Wrought iron stirrups from Hungary, 9th-10th centuries.

(7) Bronze stirrups from Hungary, 8th–10th centuries.

F: THE *MILES* AT HOME, 10TH CENTURY

Written sources rarely describe the everyday life of ordinary people, even of members of the *miles* or cavalry class. However, an archaeological experiment at Melrand in Brittany shows how peasants and their immediate lords lived. Here French archaeologists recreated the abandoned Breton village of Lann Gouh, as it would have been at the end of the 10th century. The simple wood, thatch and stone houses, the fenced gardens attached to each house, the animal encloses and the open fields and forest beyond, illustrate life as it would have been known by peasants and lower-ranking members of the military aristocracy.

Furthermore, the crops, animals and herbs raised at Melrand suggest that life was not as grim as some history books suggest. Within the enclosed village were separate gardens for growing medicinal plants and condiments, edible plants, and plants for dyes. Evidence from pollen indicates that no less that 73 different plants or varieties of usable plants were grown, along with several sorts of cereals. Ropes, wooden tools and other items were made within the village, and although no evidence of metal or leather working was found at Melrand, such local industries existed in many places. The main animals were cattle, sheep, goats, pigs, and possibly chickens and ducks.

Whereas peasants and their animals lived together under one roof, even the lowest ranks of the military elite were probably spared this feature of village life. However, the more comfortable 'lordly house' (the wooden-roofed structure in the background) is based upon one at La Haie Joulain in Anjou, rather that at Melrand.

The figures represent a young *miles* (1), a village girl from a prosperous family (2) and two peasants who are tending the crops. (3 and 4).

14 Godman, *op. cit.*, 167-9.

G: KING HENRY I'S CAVALRY DEFEATS MAGYAR RAIDERS AT RIADE IN 933

The battle of Riade, near Erfurt in eastern Germany, in 933 was one of the first occasions in which German armoured cavalry used their new training to defeat a Magyar raiding army. King Henry had kept his main force of Saxons, Franconians and Bavarians in reserve, and the Magyars, believing that they faced only a local Thuringian levy, had attacked – only to suffer a counter-attack by Henry's main force. The chronicler Liudprand of Cremona described the result: 'Before the beginning of the engagement Henry had given his men this sagacious and practical advice; "When you are hastening forward to the first battle, let no one try to get ahead of his comrades just because he has a swifter horse. Cover yourself on one side with your shields, and catch the first flight of arrows on your shields, then rush at them at full speed as furiously as you can, so that before they have time to shoot a second volley they may feel the blows of your swords upon their heads." The Saxons, remembering this practical advice, advanced in level line. No one used his horse's speed to get in front of his slower neighbour, but covering themselves on one side with their shields, as the king bade them, they caught their enemies' arrows on them and rendered them harmless. Then, according to their wise leader's command, they rushed at full speed upon the foe, who groaned and gave up the ghost before they could shoot again.'
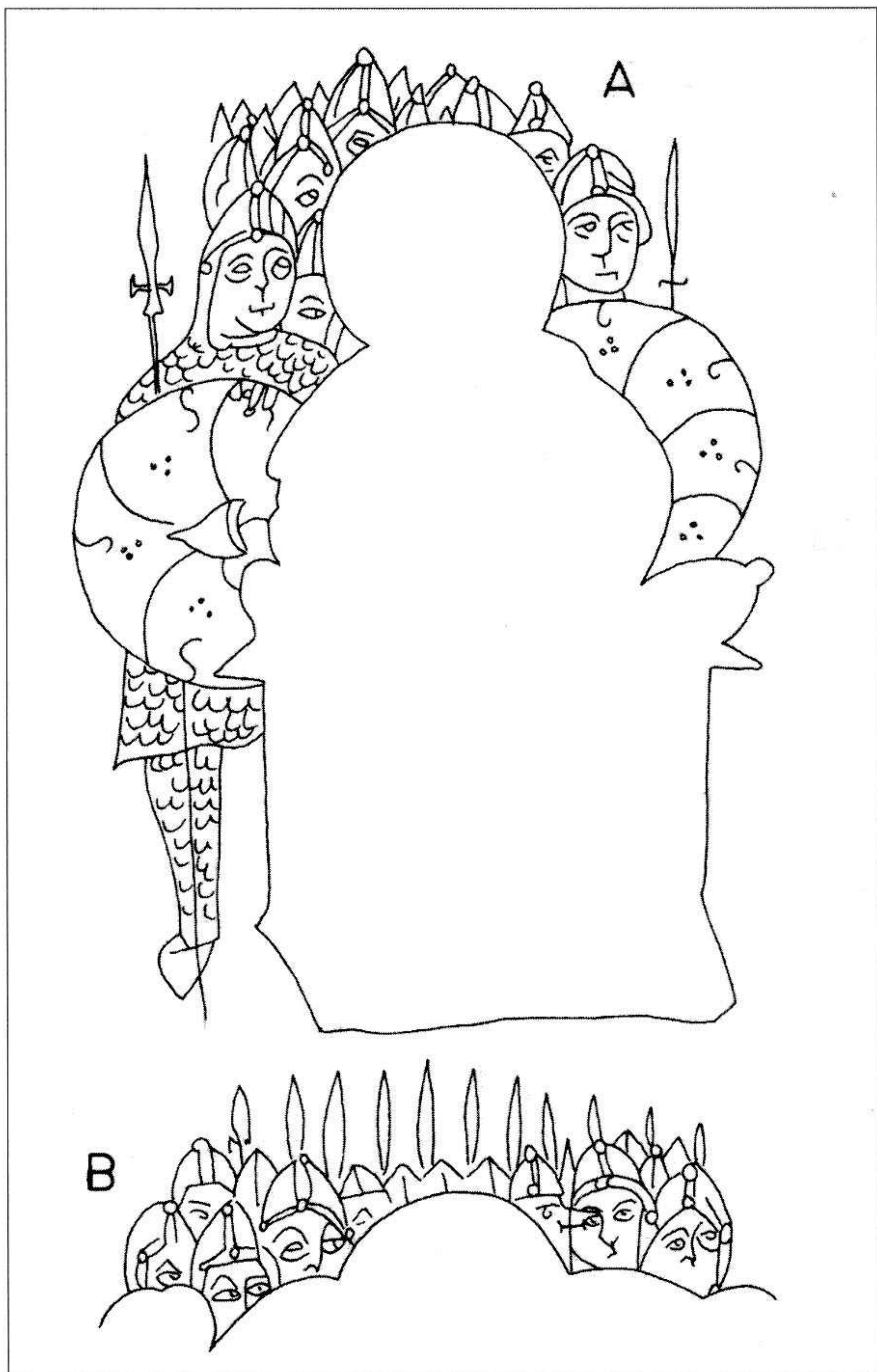
The main figures illustrate: **(1)** Magyar commander; **(2)** German cavalryman; **(3)** Lotharingian cavalryman; **(4)** Provençal cavalryman; **(5)** Bavarian cavalryman.

H: ARMS AND ARMOUR OF A POST-CAROLINGIAN CAVALRYMAN, 10TH CENTURY

The main figure has the simple arms and armour seen in most illustrated sources from Germany, France, Italy and neighbouring regions during the 10th century. In many respects it had more in common with the military styles of the 11th and 12th centuries than the sometimes more elaborate gear used by Carolingian military elites in the 8th and 9th centuries. One feature that would not be seen a century later, was the two-piece helmet with a pendent aventail. This style reflected lingering late Roman, Byzantine, Eurasian steppe and perhaps Islamic influence. The man is otherwise protected by a short-hemmed mail hauberk and a large oval, leather-covered wooden shield with an iron boss. His weapons consist of a winged or flanged spear, a broad-bladed sword, and a knife or dagger that would also soon drop out of fashion.

Archaeological and illustrated records indicate that several other forms of helmet were also used. Some reflected outside influence:

(1) Two-piece helmet with pendent aventail.

(2) One-piece domed iron helmet, probably imported from the Islamic world.

(3) Conical directly riveted segmented helmet with a mail aventail popular in east-central Europe and reflecting Eurasian steppe fashions.

(4) Conical helmet forged from one piece but lacking a nasal.

(5) Frameless segmented iron helmet. Others were representative of newer technologies, which would become more common in the 11th century.

(6–7) Whether or not scale armour was used in western Europe during this period has long been debated. Some stylised illustrations seem to show scale coats with sleeves, though in reality these were crude illustrations of mail hauberks. However, recent French archaeological research at Charavines in Provence discovered clear evidence of iron scale or lamellar armour being used around the year 1000. Previous efforts to interpret these very corroded scales have not been satisfactory, but they may have been part of what has been called a 'riveted lamellar cuirass'

This form of armour construction was developed in the eastern Mediterranean, probably by the Byzantines. In it the individual lamellae were not only laced to each other by cords in the normal manner, but were also riveted to horizontal strips of leather.

(8–9) Cast bronze spurs from Croatia, 10th century.

(10) Shield with iron boss from Germany, 10th century.

(11–15) Swords from France, Germany and central Europe, late 9th and 10th centuries.

'Guards of the Emperors' in an Italian legal manuscript from the first half of the 9th century. One of these miniatures (A) provides a very early illustration of full-length mail chausses worn with a full mail hauberk. (*Book of Canonical Laws*, Bib. Capitolare, Vercelli, Italy)

INDEX

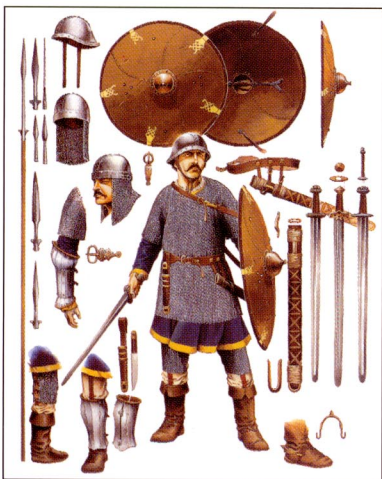Figures in **bold** refer to illustrations.

Insights into the daily lives of history's fighting men and women, past and present, detailing their motivation, training, tactics, weaponry and experiences

Full colour artwork

Illustrations

Unrivalled detail

Full colour battlescenes

Carolingian Cavalryman AD 768–987

The army of Charlemagne and his successors enabled the western Franks to recreate what contemporaries regarded as a 'reborn' western Roman Empire. Frankish society was well prepared for war, with outstanding communications drawing together the disparate regions of a large empire. The role of mounted troops – the essential striking force of the Frankish army – is explored here, alongside the impact that new technology, such as stirrups, had on warfare in this period. Illuminating a much-neglected area of history, this title shows how the role of cavalry grew in prestige as the Carolingian armoured horseman gave way to the knight of the early 10th century.