

Annemarieke Willemsen

Vikings!

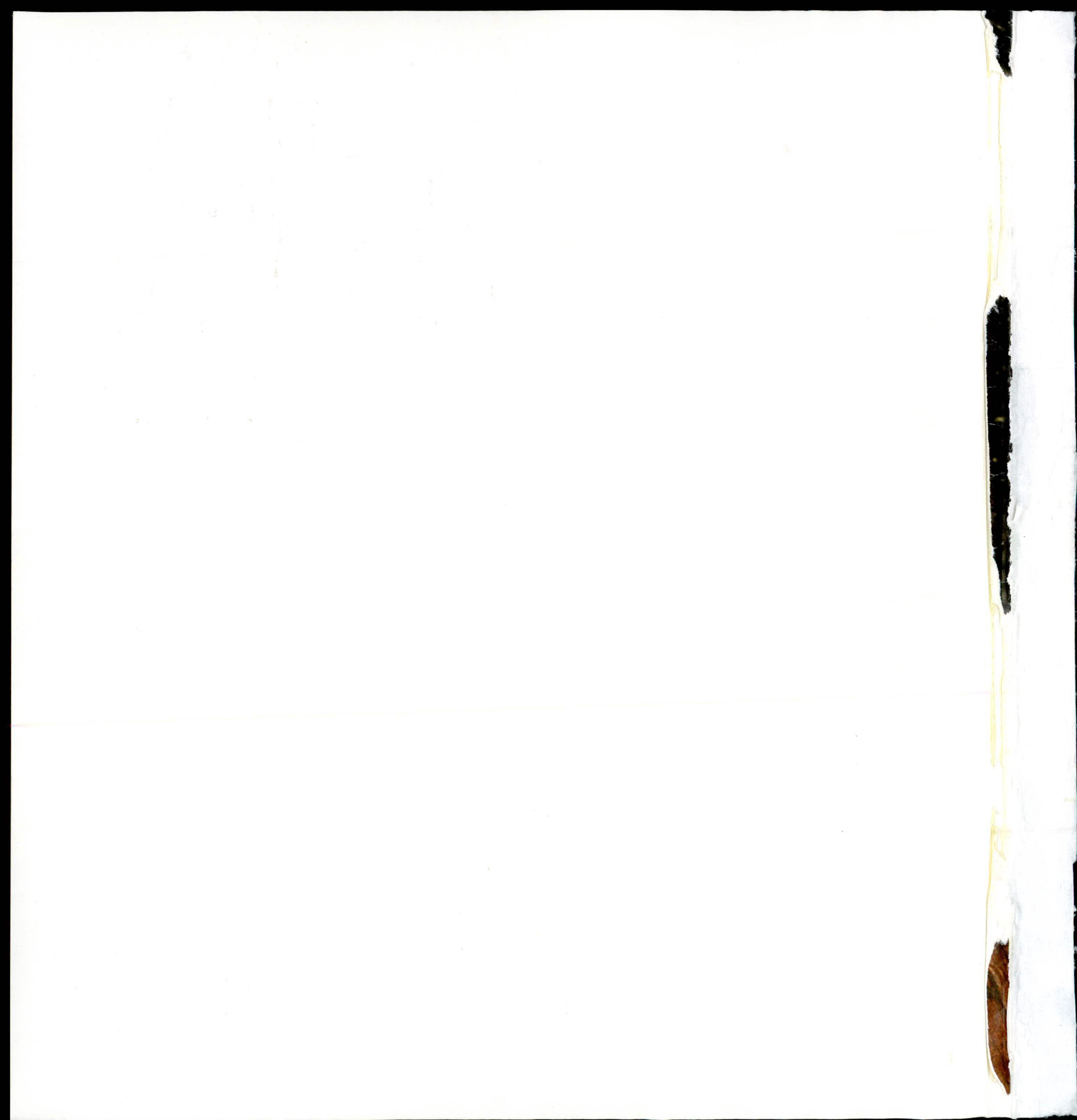
Raids in the Rhine/Meuse
region 800-1000

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VIKING SHIP
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Annemarieke Willemsen

with contributions by

Rudolf Simek and Renger de Bruin

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 VIKING SHIP
MUSEUM

LANDSCHAFTS
VERBAND
RHEINLAND  **LVR**
Qualität für Menschen

COLOPHON

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Graphic design

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Production

Hans Schopping

Lithography

Image degree zero, Amsterdam

Printing

Drukkerij Onkenhout, Hilversum

Publisher

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www.centraal.museum.nl

ISBN 90-5983-010-5

© 2004 The authors, the translator and the Centraal Museum, Utrecht

This catalogue has been published in German as *Wikinger am Rhein* (ISBN 90-5983-009-1) and in Dutch as *Vikingen! – Overvallen in het stroomgebied van Rijn en Maas, 800-1000* (ISBN 90-5983-008-3)

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Foreword

Victims of violence are speaking out more and more. However, their vivid memories are not always found to be entirely accurate when examined by experts. With crimes against humanity such as war crimes and genocide it could not be otherwise. The lawyers at the war-crimes tribunals of Rwanda and the former Yugoslavia in the 1990s struggled with the difficult matter of proving guilt and the reliability of witnesses' statements.

Victims of earlier oppression are also making themselves heard: Soviet dissidents, survivors of the Nazi terror and descendants of slaves. The causes and consequences have a long history. The oppressors are often the children of earlier victims. Croats, Serbians and Bosnian Muslims have fought each other for decades, although without the collaboration of foreign occupying forces: Germans, Austrians, Turks. The collective memory stretches back as far as the Battle of Kossowopolje in 1389, the six-hundredth anniversary of which in 1989 signalled the start of Yugoslavia's disintegration. Many victims or their descendants simply want an apology from the culprits or their successors; sometimes they are successful. So, Pope John Paul II has publicly apologised for two thousand years of anti-Semitism on the part of the Catholic Church.

An unresolved history has not become a sticking point in relations between Northern and Western Europe. Some four centuries before the Battle of Kossowopolje, Scandinavians wreaked appalling havoc along the North Sea coast and along the rivers that issue into it. But that has not soured subsequent relations between the Danes, Swedes and Norwegians and the populations of Western Europe. Not that the events of 800-1000 have been forgotten. The deeds of the Vikings or Norsemen, as the Scandinavians of the period are known, remain in the collective consciousness. However, this is a romanticised image of sturdy blond men returning home glorious after battles in far-off lands in fast dragon ships filled with plunder. Whether this was robbery or heroic conflict remains a matter of perspective, but even in the countries invaded by the Vikings they are often seen as highly courageous men. Since 1800 Romanticism has contributed further to the heroic image of the Vikings.

Excavations throughout the nineteenth and twentieth centuries have greatly enhanced our knowledge of Viking culture. Through the discovery of graves, shipwrecks and uncovered settlements we know far more of the lives, refinements and struggles of the Norsemen of

more than a thousand years ago. We now understand fully the basis for their maritime superiority. Recent research has also laid bare the other side of the story: the victims of Viking raids. Following earlier discoveries in England, in 1997 the clear traces of an extremely violent raid were found during excavations in the centre of Zutphen. The dating and surrounding circumstances of these finds correspond closely with the written legends of a Viking raid in 882.

These findings are central to this exhibition about the activities of Northern Europeans in the Rhine-Meuse region between 800 and 1000. Three museums, in regions where the Vikings originated and the lands they visited, have worked together on this project: the Rheinisches LandesMuseum in Bonn (Germany), the Centraal Museum in Utrecht (the Netherlands) and the Viking Ship Museum in Roskilde (Denmark) will each host the exhibition in turn. The exhibition contains a great number of objects from museums and archaeological institutions in Denmark, Sweden, Germany, the Netherlands and Belgium. The exhibition was initiated by Professor Rudolf Simek of the University of Bonn and he is also the editor of the collection of academic essays that accompanies the exhibition. The exhibition is also accompanied by this book, written by Dr Annemarieke Willemsen of the National Museum of Antiquities in Leiden. This book and exhibition will give a broad audience in Germany, the Netherlands and Denmark an insight into the lives of the Vikings who visited the Rhine-Meuse region, the consequences of their actions for the native populations and the impressions they left on future generations.

Prof. Dr. Frank-Günther Zehnder, Director of the Rheinisches LandesMuseum, Bonn

Drs. Ida van Zijl, Interim Director of the Centraal Museum, Utrecht

Dr. Tinna Damgård-Sørensen, Director of the Viking Ship Museum, Roskilde, Denmark

Introduction

The Vikings in the Rhinelands

If you do not immediately associate the Scandinavian pirates of the early Middle Ages, whom we usually call the Vikings, with the raids on cities along the Rhine, the Meuse and the Moselle as well as the Frankish Kingdom of Charlemagne and his sons, you are not alone. In the public imagination the Vikings are more frequently associated with the exploration of the North Atlantic including North America, the creation of the Russian Empire and with the invasions of England, Ireland and the French Atlantic coast than with forays into the heart of the Holy Roman Empire.

There are two important reasons for this. Firstly, the Vikings left virtually no legacy along the German sections of the Rhine and the Moselle. There have been few archaeological finds and no excavations that point to Scandinavia; the remains of the fire on the Neumarkt in Cologne have until now shown no link with the Viking raids. On the other side of the boarder, in the Netherlands, the case is quite different. Various treasures have been dated to the Viking period including Viking swords in the Lower Rhine and the hair-raising remains of a Viking

raid at Zutphen on the IJssel point in a spectacular fashion to the early presence here of the pirates of the north.

It may be partly only coincidence that comparable finds have been absent on German soil. On the other hand this also shows the extent to which Friesland must have served as a buffer against the onrushing Viking fleet.

As a result Dorestad, then situated on the mouth of the Rhine, suffered considerably more than those cities further upstream such as Xanten, Cologne or Bonn. The Frankish annals tell of both the almost annual raids on Dorestad as well as the devastation that the Vikings wrought on Xanten, Cologne, Bonn, Trier and Aachen.

[881] During their first raid they devastated the surrounding area and burned Liège, Maastricht and Tongeren; during their second raid they streamed out over the area of the Ripuarians and destroyed everything through murder, looting and fire; they sent the cities of Cologne and Bonn and the nearby forts at Zülpich, Jülich and Neuss up in flames and then reduced the palace at Aachen and the monasteries of Kornelimünster, Malmédy and Stavelot to ashes. (Regino von Prüm *Chronicon*)

Full-scale replica of a Viking ship sailing on the Roskilde fjord in Denmark.





[882] But the Danes destroyed the extremely famous palace at Achen through fire and burned monasteries and cities, the very famous Trier and Cologne as well as palaces and villages, whereby they killed the inhabitants of the land. (*Annales Vedastini*)

[883] The Norsemen travelled up the Rhine and set fire to many of the recently rebuilt towns, from which they stole no little booty. [...] Cologne was rebuilt without churches and monasteries and its walls were restored with gates, bolts and moats. (*Annales Fuldenses*)

The second reason for the modern lack of awareness of the presence of the Vikings in the Rhineland could be that the sources – and that is made very clear by the quoted examples – never mention Vikings, but always Danes, Norsemen or simply pirates, because the word Viking simply did not exist in the eighth and ninth centuries.

In fact the first mention of this term, which was used by the Scandinavian pirates themselves, was made only in 1070 by the Hamburg-based ecclesiastical historian Adam von Bremen, who also stated that the Scandinavian nomenclature was not used in German or Latin. This purely

terminological peculiarity led to the Viking raids being mentioned in German historiography since the Middle Ages as 'invasion by Normans' or even 'Norman storms' even though this does not fit the current English meaning of Norman. Only the Vikings who settled in Normandy (which was named after them) can strictly be called Normans. In Anglo-Saxon historiography the term Norman is usually restricted to the people who invaded England in 1066 with William the Conqueror. All other references in the chronicles and annals to 'Nort(h)manni' should be translated as Norsemen and not Normans. Indeed, according to current academic terminology the only admissible term for these Scandinavians is 'Viking'.

It is for this reason that this introduction bears the title 'The Vikings in the Rhinelands', but this terminological confusion is also the reason that Germany is rarely associated with the Vikings. The activities of the Vikings in Germany, Belgium and the Netherlands were certainly not restricted exclusively to the frequent raids along the Rhine, which following the sporadic attacks in the eighth century became more intensive around the middle of the ninth century.

One should not forget that the Scandinavians were almost always concurrently active in trade and diplomacy within the Frankish kingdom. In any case the Carolingians showed an interest in engaging with their Scandinavian

The Viking raids in the area of the Rhine, Meuse and Scheldt.





Fragments of reticella glass and copy of a reticella dish

Ekerö on Helgö, Uppsala and copy of the find 'Valsgårde 6', Uppsala

Museum of National Antiquities, Stockholm

inv.nos. 25075:708, 25925:3856, 30711:12616, 27448:7783, 25075:718 and 25075:1077; copy of inv.no. 33474

Reticella glass, light-coloured glass with ribs of coloured glass thread, was amongst the most luxurious products traded in the Viking period. Complete objects are rarely found. This makes the shallow green dish with a flat base so special; the fragile original is therefore seldom lent to exhibitions. The copy gives us an idea of how we should imagine a complete object that is decorated in the manner of the fragments found in Ekerö, Dorestad and Heidelberg. These have yellowish-green or blue ribs or black zigzags of glass thread on colourless or light green glass.

rulers, and attempted to convert them to Christianity. But their zeal in this respect did not extend to giving military support to pretenders to the throne in Denmark who often could not prevail without it.

As for trade relations, the contacts between Western and Central Europe and Scandinavia at the beginning of the Viking period were already long and firmly established. Indeed, there is archaeological evidence of trade contacts dating back to the Merovingian period – the fifth to seventh centuries. This is to be found in large quantities of expensive imported glass in all Scandinavian centres of trade and power and in extraordinary numbers of Frankish brooches and other jewellery. The Scandinavian traders were familiar with all the valuable products from the Rhineland, which they acquired either directly or via other traders on the coast of the North Sea: glass, costly ceramics such as the Tatinger jugs decorated with tin foil, as well as textiles, swords, jewellery and not least of all wine, which was not produced in Scandinavia. All these products were transported to trading centres within the Frankish kingdom by river or by the old Roman network of roads, which was still partly intact.

It is therefore not surprising that the Scandinavians were familiar not only with the products with which they made their profits, but also with their places of origin. Alongside the trading centres, it was mainly the rich cities – many former Roman settlements – and monasteries that must have attracted the attention and probably also the admiration of the Scandinavian travellers. That which made such a large impression on the Scandinavian delegations and attracted Viking traders must have also awakened greed in some of the travellers. The exaggerated domestic accounts of the wealth of the Frankish kingdom probably formed the motivation for those pirates who were already long active on the coast of the North Sea and in the Baltic region to spread into the far more lucrative areas at the heart of the kingdom by way of rivers such as the Rhine. The waterways made it possible for the Vikings to apply their coastal strategies of surprise attacks and quick getaways inland as well. One should bear in mind that that we are not dealing with chronologically distinct periods of raids and robbery followed by trade and diplomacy. The trade relations of the Merovingian period certainly continued into the Viking period. We do not know to what extent trade

Glass tumblers

Adelsö on Björkö

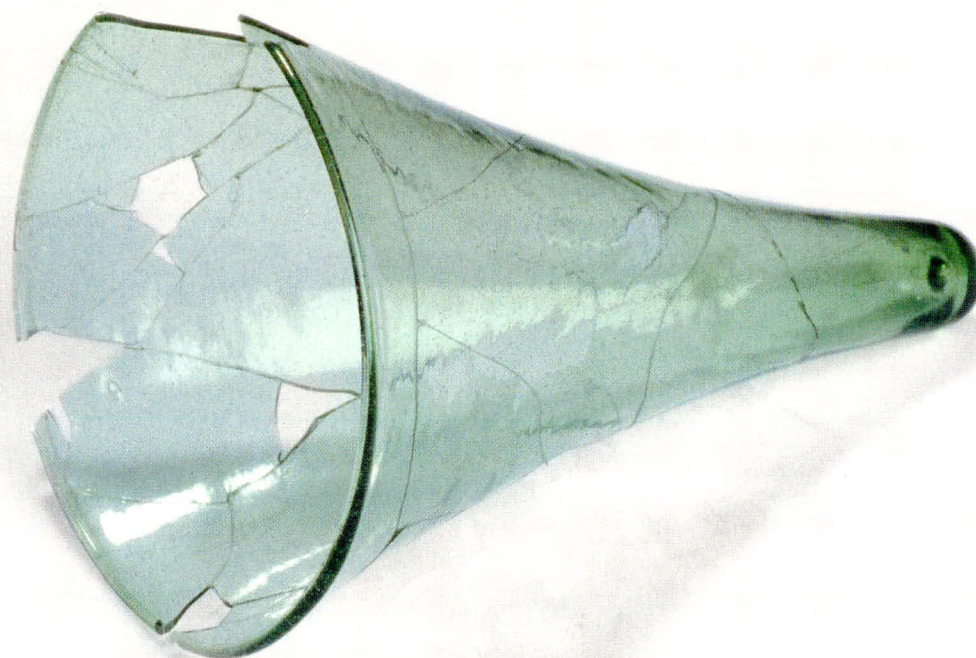
Museum of National Antiquities, Stockholm

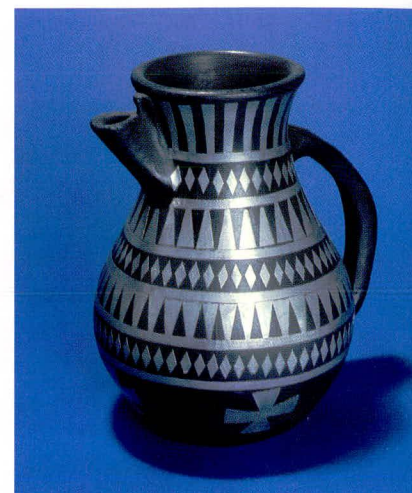
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The term 'tumbler' was originally applied to these glasses with pointed or rounded

bases that could not be put down when full; the glass had to be emptied before it could be set down – upside down. They were common in Merovingian, Frankish and Viking societies. They were placed as offerings in the graves of both men and women. Fragments of these glasses are

often found, suggesting that they were used regularly and dropped or thrown. The glasses from Birka were made from very light green glass. Compared with the Frankish tumblers found in the Netherlands and Germany they have thinner walls, are more pointed and have a broader mouth.





was interrupted at the height of the raids, but we can say with certainty that the war-mongering in the Viking period brought about only a temporary and partial interruption of the intensive cultural and trade relations between the Franks and the Scandinavians. Indeed, the archaeological evidence in Scandinavia indicates a de-intensification of trade relations in the Merovingian period as early as the early ninth century, thus before the Viking raids reached their zenith at the end of the century. During the course of the tenth century, half a century before the end of the Viking period, the trade relations between Scandinavia and the Lower Rhine had returned to full health.

It is the intention of the exhibition to show these chronological developments to a certain extent but to subordinate them to thematic groupings. Thus the cultural, economic and political situation in the Rhineland at the beginning of the Middle Ages is given a central place at the beginning of the exhibition. This complex starting point is typified by Charlemagne's travelling court and the lack of a single centre to the Empire in the form of a capital. There were certainly the diverse ecclesiastical and monastic structures and many

small and large cities. These were linked by a network of roads, many of which had been built by the Romans, and the natural waterways that served as the major transport network within the immense Empire, and which gave the Vikings relatively quick access to the heart of the Empire.

The ecclesiastical treasures from a (fictional) ninth-century treasure trove at the beginning of the exhibition represent not only the wealth of the Holy Roman Empire but also the flowering of the applied arts during this period. Both the artistic quality and the pure material value of such objects would have awakened the interest of the subjects of the Holy Roman Empire. It is unimportant whether the Scandinavians had become familiar with such liturgical objects during diplomatic or trade missions, or had received them as politically motivated gifts from Christian missionaries. The point of this display of Frankish wealth is not the objects themselves but rather to stress the wealth of the monasteries and cities where such treasures – and other less spectacular but interesting goods – could be found and the infrastructural network, which must explain the acquisition and commercialisation of the wealth of a shrewd

Tatinger jug and reconstruction

Adelsö on Björkö

Museum of National Antiquities, Stockholm

inv.no. 5208:2237

Tatinger jugs – large black jugs with a handle and a short spout are often found in market towns of the period. They were originally decorated with a horizontal pattern of tin-foil triangles, which can be seen in the reconstruction. The black, watertight earthenware jugs were used for carrying and serving wine. They were produced in the Rhineland and have been found throughout the trade network of the period; this example comes from Birka.

ruling class as well as the influx of traders and plunderers.

If at this exhibition, cities, monasteries and trading centres of central importance feature highly, it is not only because they were prime targets for Viking raids: they also embody the structure of the Rhineland before the arrival of the Vikings. Most cities were based on Roman settlements: often, as was the case in Cologne, the population had been so depleted by migration since the collapse of the Roman Empire that it lacked sufficient civic funds for the upkeep of the Roman city walls, which were its major defence against attacks. The recently established monasteries, like the Benedictine monastery established at Prüm in 721, very quickly turned out to be economically important. Their estates were extended by donations and inheritance and the monks themselves used more efficient methods of cultivation.

Many trading centres lacked fortifications because of seasonally dependent trading activities and the necessarily mobile nature of the merchants. Even those settlements that had existed for a considerable time consisted of little more than tents alongside simple

houses and sheds. All these centres had made more of a mark on the Carolingian Empire than the imperial palaces, between which the nomadic rulers travelled but which some of them very seldom visited.



The old Roman roads in the Carolingian Empire.

It has already been mentioned, that the Scandinavians were not called Vikings but mostly 'Nort(h)manni' or 'Dani' by the Franks. Even more often, however, they called them 'pyratae', (sea)robbers, or 'pagani', heathens, or if even more negative abusive expressions were called for, they branded them as 'robber bands', 'snake's spawn' or 'Satan's children'. The Vikings would not have been bothered by these contemptuous names; they were far more interested in Frankish fashion, in particular court fashion which was quickly imitated at home, many of the garments and materials reaching Scandinavia in the form of plunder. We know from the Late Middle Age Icelandic sagas that the Vikings liked to dress flamboyantly, colourfully and exotically.

There was yet another item of equipment from the Rhinelands that impressed Scandinavians: the sword. Sword blades were manufactured in the countries of the Carolingian Empire in a quality which people in the north with their poor iron deposits, could only dream of. Even in the Middle Ages it was said that, after especially heavy blows during a duel, the Scandinavians needed to straighten out their sword blades with their feet. Along the Rhine, however, expensive

high-grade blades were produced which the Vikings bought or stole and then had fitted with a cheaper haft at home. In doing so, they could design it to the own taste and or have their name worked into it.

In one area the Scandinavians were by far the masters of the Franks: shipbuilding.

For centuries, or even millennia, shipbuilding on the northern coasts gave people the skills to make extremely fast, manoeuvrable shallow sailing ships. These could reach all the European coasts from Scandinavia within a few days as well as many places along navigable rivers, in Northern, Western and Eastern Europe. Up until this time less elegant barges were the fastest means of transport because they could navigate the quiet courses of winding rivers, whilst most of the country roads had to follow the contours of the land-



Sword with the inscription 'Ulfberht' on the blade, found in Mannheim. National Museum of German Art and Culture, Nuremberg

scape. More importantly these fast Viking ships were superior to all operations using overland roads. The contrast between the Viking ships and those of the Frankish Empire were obvious. Shallow-bottomed vessels, like those found in Krefeld-Gellep on the Lower Rhine, or even the somewhat more seaworthy ship from Utrecht – which had a large cargo capacity, but was very sluggish and difficult to sail – were no match for the Viking ships in any way.

As early as the tenth century the narrow ships were available in a range of types, all with a long keel that made them suitable for sailing and, if necessary, rowing too. Because of their fairly flat bottom they were extremely suitable for mooring on shallow beaches and their high prows could deal with even the large-waves on the open Atlantic.

The Scandinavians had in the Early Middle Ages already found a way to build their ships enabling them to tack against the wind. Although we don't know what type of ship the Vikings most often actually used on the Rhine, they may well have been the smaller (and hence also easier to finance) type of war ship. This meant that the 12–15 metre long *ferjur* with around 30 crewmembers could be deployed as part of a plunder fleet or, when necessary – with a small-

er ship's crew – also be used for merchant shipping.

This multi-functionality in the choice of transport is a typical phenomenon of the Viking Age in the Rhinelands. It is therefore also an explicit aim of the exhibition to show the continuity of trade relationships and the more notorious but atypical eruption of violence in the ninth and tenth centuries as two sides of the same coin. The raids on the one hand and the peaceful market places on the other might not suggest absolute chronological simultaneity, but 'a side by side' approach for the two forms of communication between the Scandinavians and the Franks of the Rhine. In this section of the exhibition we can show traded goods from both sides. In exchange for glass, ceramics, millstones, wine, jewellery and weapons from the Rhinelands, the Scandinavians offered skins, fur, walrus ivory, whetstone, honey, amber and probably slaves. So trade relations, despite differences in the cultural level between the north and south, by no means give an impression of a one-way traffic. The Viking raid on the palace at Zutphen in 882, in spite of the brutal remnants shows a mutual dependency. The robbers needed to feed themselves and did so with the help



Swords inscribed 'Ulfberht' and 'Atalbald'

8th-10th century

*from the River Meuse at Lith and the River Lek at
Wijk bij Duurstede*

National Museum of Antiquities, Leiden

inv.nos. k 1983/8.1 and f 1940/8.1

Both the Franks and the Vikings considered swords important objects imbued with their own strength and 'personality'. Upon the owner's death a sword was sometimes transferred to the heir or successor, but it was often buried with its owner. Likewise one could not simply use an enemy's sword captured as booty. These two spathas (two-sided swords) are inlaid with silver and brass. The blades of both swords bear names: Ulfberht on one, Atalbald on the other. These are unlikely to be the names of the owners. Ulfberht was a famous smith, as swords with his name have also been found in Scandinavia and the Balkans. His swords were obviously traded throughout Europe, but we do not know exactly where he worked.

of common cattle rustling. This is referred to in historical Scandinavian literature by the term of *strandhögg* (beach raid), where cattle, grazing on the coast, were slaughtered during short surprise attacks and only essential parts that could easily be cut off and eaten were taken. Equality of weaponry between the two sides is shown here by replicas of Viking and Frankish armour: swords, lances, daggers and arrows from both sides are of fairly equal workmanship. The Frankish throwing axe, the *francisca*, clearly differs from the broad Viking axe in style and quality, but generally there were hardly any differences worth mentioning, especially when the Scandinavians made use of the higher-grade Frankish sword blades.

An important difference between the Scandinavians and Franks, especially in the first period of the Viking age, was religion. The Vikings were soon well known for their lack of respect for monasteries, relics and holy books. This is partly because the chroniclers of the time belonged to clerical orders. They tried successfully and not without good reason, to attribute the excesses of the Vikings to their paganism. They explained their indisputable successes by saying that they had obviously made a pact with the devil. How

else could one explain these barbarians' lack of respect for consecrated relics? Understandably the chroniclers' tirades became very pictorial, where the narrator himself was victimised: in 882 and 892, Regino von Prüm had to endure Viking raids on his monastery and many of his confratres murdered. A hundred years later, Thietmar von Merseburg witnessed how Danish Vikings mutilated and murdered his uncles and nephews at Stade on the Elbe. It is therefore not surprising that these monks sketched a dark picture of the pirates in annals and chronicles, which led to a negative but by no means unjust image of the Vikings. But even the immediate victims could not avoid a fascination with the Vikings, which still holds today: After a victorious battle, Thietmar writes: 'Never before has one seen men of such size and strength lying on a battlefield'. Thus courage and power were just as much a part of the successful formula of the Vikings as flexibility and mobility – talents that even today have not lost their effectiveness.

The history of these men has also remained preserved in the Rhinelands, but not in the form of the weapons and other consumer goods that one usually associates with settlement discoveries, because the Vikings, with the

Two Carolingian spear tips, damaged skull and axe-head

9th century

Kultur- und Stadthistorisches Museum, Duisburg

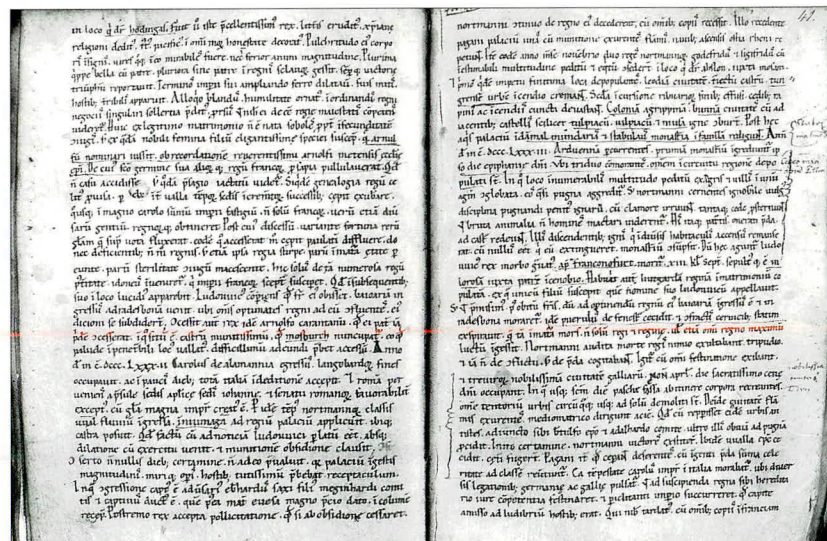
Duisburg is one of the cities on the Rhine that was attacked by the Vikings in 881/882. The city put up considerable resistance resulting in heavy fighting between the Franks and the Norsemen. It is not known whether these exact objects relate to this battle, but evidence has been found in Duisburg of warfare in the ninth century, such as these spear tips and axe head. The wooden shafts and handle from these weapons have not survived. The human skull from the same period shows obvious signs of a fatal wound caused by a sword.



exception of a few temporary forts, simply did not settle there on a permanent basis. The lack of Viking artefacts found along the Rhine was summarised by a colleague in connection with the preparation for this exhibition: 'They came to take not to give'.

usq; ad horā sextā intrepidū expectant. cū nemine aduſe paratū uenire cerneret. cū ſuiſ ad ppa reſuſ e. Nec illi unū min' imortē iunct. q. i hoſte ſunt. Deniq; p' pactā uictoriā morbo ſunt. ad extremū deducti. Cui' inuictudine cū pſenſiſſet palſtam. reſuſcit uirib; ſuſcitore' ei' bello aggredit'. Qui p'rim timore adducē ſugiuſ. i cū lacrimis ei' minū palſtam apuſ. pe tentet' of imminet' piculū oſiliū. At ille hortat' Iaduſū hoſte pcedat' ſuiū uerillū ferentē. pollicet'q; uictoriā. Qui cū reſpondiſſet ſine ei' pſentia n' audere cū aduſari' oſredi. ſp'm q'una cū uirib; corporiſ iā pene effugiat' reſumen'. q. nec pedib; neq; eq' potat' ire. iubet ſe i lecto portari. i ante acie inimicq; deponi. i ſic ſubire certam. Qd cū ſatellit' feciſſet. ei' mox ho ſteſ i ſuga iſi ſt. patata uictoria Cū cū reportare uellen' domū. it' man' militū. ſp'm q' tantum i pectore palpatat'. exhalauit. pauci aut' it' poſitiſ dieb; palſtam i ipſe deſunct' eſt. Poſt h'c dux mortē. uuidicheil ex filia heriſpor regis nat'. i alai' ſt memorat' palſtam britanniā it' ſe pariti ſt. Int' q' etiā multa nurgia i bella fuerit. S. uuidecheilo i p'lio q' ot normanno magis audact' q. puidē geſſerat iſepto i ditione alai omiſ britanniā ceſſit. q' hanc ſtrenue hacten' gubernat. Eodē anno caroluſ roma p'exit. i daniſ aplico iohanni i romani magni munerib; imp'r cret'. Anno d' m. c. dccc. lxx. vii. Ludouic' rex ap' franconafurt palatiū diem clauſit extremū. v. kl' ſept. ſepult' q' ē i monaſtio ſci nazari q' lorſſa nuncupat'. ſunt aut' iſte pncep' xpianiffim'. fide catholice. n' ſolū ſetib; uerū etiā eccliaſtic' diſciplin' ſufficient' iſtruct'. q' religioniſ ſt q' paciſ. q' iſtice ardentiffim'. idand' ſine ſubſtendiſ publiciſ dignitatib; diſſer tioniſ moderamine tepat'. i p'lio uictoriſſim'. armaz q' uirūq; appuribul ſtudioſior. Cui maxime opes erat. iſtrumta bellica. pluſ diligen' ferri rigore. q' aur' fulgore. Ap' q' nemo i uitaſ ualuit. i cui' oculi p' raro uitaſ diſpli cuit. q' nemo munerib; corrūpe potuit. ap' q' nullū p'pecuniā eccliaſtica ſue mundanā dignitate obtinuit. ſ' magi eccliaſtica p'biſ morib; i ſci uſatione mun danā deuoto ſeruiſio i ſincera fidelitate. Habuit aut' hic gloriſſim' rex. cui memoria i benedictione ē. regniſ nōc hēma ſibi imatrimoniu iuncta. q' nobi li ſiue ſunt. ſ' q' magi laudandū nobilitate nūi multo pſtariot. Ex q' m. fili oſ ſuſcept. excellenſſime idoli. uidelicet carlonumū. ludouicu. i carolu. q' ſilici ſorte p' diſceſſū patris ungu moderatiſt ſubiacula. Carolū audat' q' ſt a ſcto receſſiſſet. nimia ſuauſ exultatione pſuſiſ ē. arbit' portione regni lothariū q' iſtē ſt tenuerit. i ſuoiſ libitoſ ceſſiſſet. Exerentiſ q' ſima potuit cele ritate adunauit. i cū omib; uirib; regnū iſreſſi. ad aſſi palatiū uenit. Vbi

The chronicle of Regino van Prüm, in which the Viking raids and the attack on the monastery in 882 are mentioned.



Vikings at home and abroad

The Vikings

The name 'Viking' is probably derived from the Germanic word *vik* for bay or inlet. In Old Norse it acquired the broader meaning of 'a seagoing expedition' and by extension to mean the people who took part in it. The word 'Vikings' therefore did not indicate a people, but the men who crossed the seas. This also means that there was not just one type of Viking. They could be Danes, Swedes or Norwegians, or inhabitants of the areas colonised by them in Greenland, Iceland, Scotland, Ireland, England and even Normandy. Moreover, they were not a single group, but many different tribes and kingdoms that also fought and competed among themselves. Western Europe did not have a monopoly on Viking raids; there was a great deal of plundering between the Viking kingdoms: the Danish town of Roskilde, for example, near modern Copenhagen, was attacked by Norwegian Vikings; and the original

half-Scandinavian rulers of England were dethroned in the eleventh century by the army of William the Conqueror from Normandy, another territory inhabited by colonists of Scandinavian origin.

Lastly, in speaking of the Vikings we are referring not only to a large territory, but also to a long period. The term 'Vikings' is now generally used for the inhabitants of Scandinavia from c. 800 to 1100. There were Vikings in the Low Countries not only in 834, but also in 1007. The attack on Lindisfarne off the northeast coast of England in 793 is regarded as the start of the Viking period, while the year 1066, when Haithabu was destroyed and William the Conqueror won the battle for the English throne, is often regarded as the end. This latter episode is well known from the contemporary Bayeux Tapestry, a lengthy 'comic strip'. While Vikings in 793 undertook the surprise attack on the monastery of Lindisfarne

The Battle of Hastings in 1066, depicted in the eleventh-century Bayeux Tapestry.





Lysefjord near Stavanger, the landscape of the Viking homelands.

from their own country, two centuries later the same Lindisfarne fell under their authority, which they exercised from large, prosperous cities in Britain such as Jorvik and Dublin. It would therefore be wrong to think that 'the Vikings' remained the same all that time. Their society and motivation changed just as much in the eighth, ninth and tenth centuries as the territories which they attacked. It was precisely the changes within Viking society which caused them eventually to disappear from the scene; they were able to be absorbed seamlessly in the tenth and eleventh centuries as organised, feudal, Christian kingdoms (Norway, Denmark and Sweden) into the changed society in which they had initially landed as foreigners. That

there was no longer any mention of Vikings after the eleventh century is not because there were no longer any people in Europe with a Scandinavian background, but because they were no longer sea-rovers.

Daily life in Scandinavia

The inhabitants of the Low Countries and the Rhineland became acquainted mainly with the warriors – the Vikings who set out on expeditions. At home in Scandinavia, however, they were farmers, whose lives were mainly deter-

Excavations in Birka on the Swedish island of Björkö.





Glass iron

Adelsö on Björkö

Museum of National Antiquities, Stockholm

inv.no. 5208:2232

That Vikings were very concerned with their appearance is clear from the fact that all Vikings had a comb, that they were

fond of baths and saunas and that in nearly every excavation site glass irons and walrus-ivory ironing boards have been found. Glass irons are spherical, completely smooth lumps of glass with a dent on the top, into which a rolled-up piece of cloth or a piece of wood could be inserted to grip the iron. They were made by casting

liquid glass in a fabric-lined mould. The glass iron was heated to a very high temperature above the fire and then used for ironing woollen and linen garments. They are usually made from very dark, almost black glass and have been found in nearly every city in Birka's trade network.



Female figure in Viking clothing

reconstruction

Viking Ship Museum, Roskilde

There are very few depictions of Vikings from the Viking period itself. Reconstructions of how Vikings looked is therefore largely based on the fragments of clothing and shoes that have been found. Some of the most important sources are the clothes of a chieftain from a grave in Mammen in Denmark and those of a king buried in a ship in Oseberg in Norway. Usually only small fragments of clothes have been found, but they are usually sufficient to determine the weave and colour so that the items can be copied. A fragment of an embroidered or woven border is often enough to reconstruct the entire outfit. This woman wears a long tunic under a shift dress secured at the shoulders.





Male figure in Viking clothing

reconstruction

Viking Ship Museum, Roskilde

Clothes maketh the man; this was also true in the Viking period. Naturally, there were differences between the clothing of the rich and the poor. We know more about the clothing of wealthy people because most examples have been found in the graves of the elite. The wealth is expressed not so much in the form of the clothes as in their workmanship. It was common to wear a half-length tunic over woollen trousers, a cloak and a hat to keep out the cold, but not everyone could afford a tunic offset with coloured borders, a fur-edged cloak or a fur hat. This reconstruction shows clearly those accoutrements that usually survive: in most cases only the brooches used to secure the cloak and the belt buckle. If the belt was more elaborately decorated more of it tends to survive.





Reconstruction of a long house at Trelleborg.

mined by the work on the land. Their society was made up of three classes: leaders, free men (*bondis*) and slaves (*traells*). The slaves had closely-cropped hair; the children of slaves were also slaves. Free men worked their own land and were allowed to bear arms; they formed the basis of Scandinavian society, both economically and politically. Women enjoyed fewer rights than men, but they were responsible for the household and during the – frequent – absences of their husbands also for the farm. Specialised craftsmen such as smiths, merchants and carpenters were also numbered among the *bondis*, as well as warriors who had made fighting their profession. The leaders or kings were elected by the popular assembly of free men and exercised both political and religious power. They had to guarantee the safety, prosperity and honour of their people and answer to the assembly. Laws

were not enacted by the leaders, but by the *Thing*, an assembly that consisted of delegates and could meet both at the local and the provincial level. It also functioned as a court, at which the accused had to defend himself. The *Thing* was led by elders and scholars; the latter had to be aware of all the (unwritten) rules and laws.

Living and working

The houses and villages of the Viking period naturally differed in each region, particularly in regard to the building materials used. The typical Viking house was a long, more or less rectangular building, also known as a 'long house'. It consisted of a single room, approximately 12 metres long. The walls often leaned inwards so that in plan the house resembled a ship. The houses were half buried, so that the pitched roof almost touched the ground. The walls were made of branches

Sheep grazing on the site of long houses, indicated by stones, around the fort of Trelleborg.





Belt terminal with tendrils

Adelsö op Björkö

Museum of National Antiquities, Stockholm

inv.no. Bj825

The end of a belt is usually reinforced with a metal plate – usually semicircular – so that the belt does not fray and is easier to feed through the buckle. This plate is known as the terminal. Usually the terminal is fixed to the outside of the belt with small nails. Viking belt terminals were often beautifully decorated and because the terminal hung vertically over the clothing the decoration was easy to see. This belt terminal from Birka is decorated with floral motifs and has a small nails on the reverse, with which the terminal was held in place.



Model of the Viking town Birka
with a skater in the foreground.
Birka Visitors' Centre on Björkö.

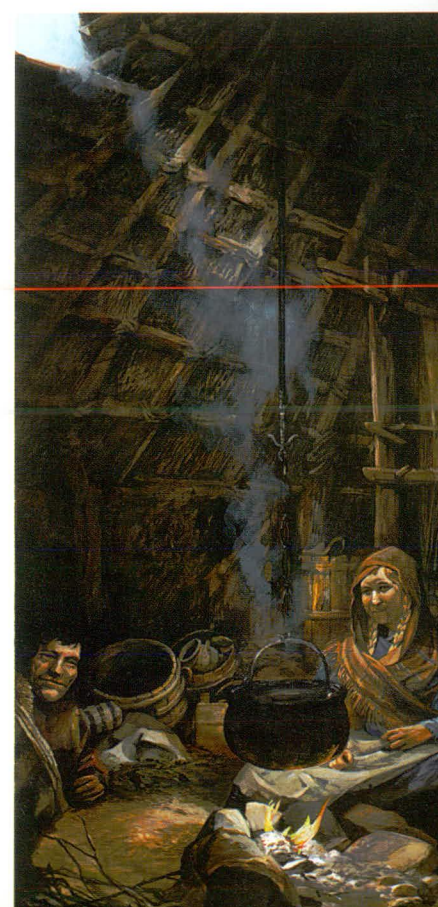
stopped with mud and the roofs were covered with reed thatch or turf. The houses were generally arranged in small groups. Sometimes, as in Norway and Iceland, such a cluster of farms formed a community. In Denmark and Sweden there were larger villages, in which a number of long houses were arranged within a grid. The houses sometimes lay within a circle and on an elevation that was protected by a round rampart. Forts such as these probably derive from the arrangement which Vikings were accustomed to make when they pitched their tents in foreign places. This kind of round fort is still recognisable in the landscape at Aggersborg, Fyrkat, Nonnebakken and Trelleborg in Denmark.

A long house was inhabited by an extended household consisting of a family, slaves and animals. Large families often extended their houses with annexes and outbuildings: barns, storage spaces, kitchen, lavatory and even a steam bath, the forerunner of the current Scandinavian sauna. The living room was warm and dark due to the thick walls. Not until the late Viking period were small windows inserted into the walls. Two holes were left in the roof to allow the smoke from the



The interior of the
reconstructed long
house at Trelleborg.

Impression of
life in a long
house.





Bone comb

Adelsö on Björkö

Museum of National Antiquities, Stockholm

inv.no. 5208:675

Products made from bone were very successful in the market towns of the period. Bone was used to make toys and games and tools such as needles, but the most common bone items were combs. All the components were carved from bone; the maximum width was governed by the thickness of the bone. The handgrip is in two parts, usually decorated with geometric patterns; between them were small plates into which the teeth are carved. The small rivets in the handgrip show how the plates were fixed. In this comb the handgrip is broader in the middle to make it easier to hold. Some of the teeth are missing.



open fire to escape. The fire was used to heat and light the house as well as to do all the cooking. The hearth consisted of a hollow in a strip of compacted earth in the middle of the house, surrounded by a circle of stones. Raised earthen platforms, approximately 1.5 wide, ran along the walls and were used as benches for sitting and sleeping. Beds could be set out for the night and stored along the walls during the day. Most farming families were self-sufficient and produced bread, butter, cheese and meat. Thanks to the cold many provisions could be preserved for some time; eggs were buried in the cold ground, fish were dried and barrels were filled with ice were used to 'refrigerate' milk.

Entertainment and toys

On festive occasions the meal was followed by a drinking bout, at which much beer and some wine was drunk. The Vikings drank from horns or glasses that could not be put down; they had to be emptied from the hand. Viking musical instruments such as flutes have been recovered, which indicate that Vikings made music and they would also have sung. They entertained themselves mainly with stories, satires and poems about gods and heroes. There were also travelling poets known as *Skalden*.

Very little literature was written down in the Viking period, but the rich oral tradition of poems and stories was later set down on parchment. In *Egils saga*, one such collection of Viking legends, there are many descriptions of games and sport: "Skallagrímsson loved physical exercise. And it was his favourite topic of conversation. Ball games were then common. There were many young men in the neighbourhood at that time, but none could compare with Skallagrímsson." Children's games are described in the saga about King Olaf: "And the next day the king was walking in the vicinity of his farm and his mother Asta was with him. They came to a pond, where Asta's young sons were playing, and they had built large farms and corn barns there, stocked with many cattle and sheep. That was their game. Harald was playing a short distance away by a muddy inlet of the pond. There he had wood chips, a large number of which he was floating on the water. The king asked him what they represented. He replied that they were his warships."

Toys and games have been found in the excavations of Viking settlements and in Viking graves. Similar objects have been found in the Scandinavian countries and in

Playing board and pieces for *hnefatafl*. Jorvik Centre, York.



Buckle and belt plate

Birka

Museum of National Antiquities, Stockholm, grave 750 Birka

This buckle and plate are decorated in the animal style. They were found in the grave of a man in Birka, which contained various weapons. This must have been the grave of a relatively wealthy warrior. The inside of the buckle is rectangular, the clasp is somewhat round with a point with the head of a 'gripping beast', typical of the Viking style.



Brooch

Adelsö on Björkö

Museum of National Antiquities, Stockholm

inv.no. Bj466

This cloak brooch has a decorative pattern with three semi-circular arms around a triangle. This style of decoration is known as 'Kerbschnitt'. The angular style in which the decoration is carved in the metal is highly recognisable.



the areas colonised by the Vikings, such as Ireland and northern England, suggesting that the Vikings took their games with them. The objects most commonly found are playing pieces for the board game known as *hnefatafl*. The elongated board itself has also sometimes been found in excavations, for example in York. The rules are roughly known and resemble those of nine-man's morris. Each of the opponents has pieces of one colour (black versus white, or plain ivory versus painted ivory), with which to make three-in-a-row. When one player has made three-in-a-row, the other loses a piece. The aim is to capture all of the opponent's pieces, but there must have been many variants of the game. Sets of pieces were interred in the grave, so that the dead could continue playing peacefully in the next world. Children's toys including spinning tops, wooden swords, toy horses and boats have also been found. Because

children's toys in every period reflect the every-day living environment, it is not surprising that the Viking children fought for fun and that they played with small wooden dragon ships.

Toy wooden Viking ship. National Museum of Ireland, Dublin.

Colonisation

The lands in the delta of the Rhine, Meuse and Scheldt did not become a second home for the Vikings. There was certainly temporary settlement, at least during the winter, but no Vikings groups settled there permanently. We do not

Colonisation of the Viking realm

- 800-850: Swedish Vikings (Varjäger) rule areas of Northern Russia from permanent citadels (Gardariki)
- c. 860: Norwegian seafarers discover Iceland
- from 874: Norwegian immigrants colonise Iceland
- from 876: Danish Vikings colonise England (Danelaw)
- 882: the northern and southern Varjäger kingdoms (Novgorod and Kiev) are united into the Great Russian Empire ruled from Kiev
- 911: Viking king Rollo obtains Normandy as fief from the king of the West Franks
- 930: The Republic of Iceland is established
- 985/986: Erik the Red colonises Greenland from Iceland
- c. 1000: Leifur Erikson sails to the coast of America (Vinland)
- 1013: King Sveinn of Denmark conquers England
- 1066: William the Conqueror becomes king of England
- 1061-1091: Normans conquer Sicily

know for certain whether they planned to settle but found the land unsuitable or if they never intended any colonisation to be permanent. Vikings did settle permanently in Iceland and Greenland, on the islands between Scandinavia and Great Britain and in Scotland, England, Wales and Ireland. The northern peoples made an essential contribution to the composition of the British population. Viking houses and settlements have been found at many places in Great Britain and Viking history lives on in the current population, in place names, local dialects and traditions. In the 'Blood of the Vikings' archaeological-medical project a Viking ancestry has been demonstrated, for example, in the DNA

structure of the inhabitants of the Shetland and Orkney Islands. Of all the Viking 'colonies' in Great Britain, most is known about Jorvik, the York of the Viking period. Here a large part of a Viking city has been excavated – and can be visited. Because this city was populated by Vikings of Danish origin, the life of the inhabitants of Jorvik perhaps gives the best idea of the character of the Norsemen who visited the Rhineland.

Viking city of Jorvik (York)

In the tenth century Jorvik was one of the largest, richest and most renowned cities of England. The city was described by a monk of that time as densely populated with a large population, rich

Excavation of part of Jorvik during the construction of a shopping centre at Coppergate in York.





Tweezers

Adelsö on Björkö

Museum of National Antiquities, Stockholm

inv.no. Bj464

Many objects used for personal hygiene have been found in Birka: combs, ear spoons and tweezers. Broad tweezers have often been found amongst men's personal effects suggesting that they were used for grooming beards and moustaches. It is not known whether women also used them for depilation. Tweezers were also used to remove splinters or thorns. They were an essential part of a Viking's accoutrements and were worn on the belt together with a knife, scissors and other small tools.



Visitors at the Jorvik Centre in York, where the Viking settlement is recreated.

goods and traders, "from everywhere, especially Danes". Jorvik was destroyed in 1069 when a fire, started by the Norman troops (after the invasion of 1066) to make space for a new castle, spread to the rest of the city and reduced it almost entirely to ashes within two days. The Viking city had been lost for good. It had originated in 866, when the settlement in York was captured by Vikings from Scandinavia. They continued to live there and almost completely rebuilt the city. They made it the capital of Northern England (the Danelaw) and an important trading port. After the fire of 1069 the city was completely overbuilt in the following centuries by mediaeval and modern habitation layers. From 1976 to 1981, however, the York Archaeological Trust excavated a piece of Jorvik during the construction of a

large shopping centre in Coppergate. The site consists of four rows of buildings, preserved to shoulder height, with a thick layer of refuse left by the inhabitants. In order to make the city's Viking past accessible to the public, the excavation was preserved under the shopping centre as the Jorvik Viking Centre and is now one of the city's most popular attractions. Two rows of houses have been reconstructed on the original site, complete with models of people, sounds and smells. Visitors can travel through the site in a time car and witness life on a late October day in the year 975. The other two rows of buildings have been conserved as they were found by the archaeologists. There it is possible to walk through the dig and study the finds. Enough has been found to be able to reconstruct the life of the colonists in detail.

The majority of the inhabitants of this part of Jorvik were craftsmen who made articles that they sold on their market stalls. They bought most of their food at the same market, but they also had a garden for vegetables and a couple of animals. Their diet consisted of grains, beans and peas, apples, plums and cherries, bilberries and hazel nuts. The most common meat was beef, but they also kept pigs and chickens on their

Copy of a glass beaker

Björkö

Museum of National Antiquities, Stockholm

inv.no. 22750:499 (copy of Bi539)

Much of the glass found in Birka originated in the Rhinelands. This dark green beaker with a cylindrical neck and a spherical belly has rows of studs that give the impression of a bunch of grapes. It is very similar to Roman bottles in the form of bunches of grapes. It is possible that glassblowers of the period were inspired by the Roman glass, which could still be found in the Rhinelands.





Pair of 'tortoise-shell' brooches

Adelsö on Björkö

Museum of National Antiquities, Stockholm

inv.no. Bj637

In a reconstruction of a woman's outfit assembled from finds in Birka, one could not leave out these 'tortoise-shell' brooches. These large oval brooches, some as large

as 10cm in length, are named after their similarity to the shell of a tortoise. They were always worn in pairs, level with the collarbone, to secure a dress at its decorated shoulder straps. Tortoise-shell brooches are typical of Scandinavian fashion and were unknown in the rest of Europe until the arrival of the Vikings. A small number of them were bought by Frankish women,

who were attracted by their large size in comparison to other brooches. As exotic objects they were ideal for displaying a woman's wealth and status or that of her husband. However, the brooches were not enormously sought after outside Scandinavia because Frankish women wore different clothes.

plots and ate freshwater fish and herring from the sea. They drank light beer with their meals and sometimes imported wine from the Rhine. Many of the houses, which consisted of one room, were used both for living and working, but there were also specialised workshops. The most commonly used material was wood. It was precisely in this street that woodworkers seem to have lived; 'Coppergate' is probably derived from the Old Norse (Viking period) words 'kop-pari' for someone who makes barrels and 'gata' meaning street. In other workshops animal bones and antlers were worked into small utensils. Bone was used to make loom weights, spindles and skates. Antlers are stronger than bone and more suitable for making combs, needles and toys. Other workshops worked with cattle hides, which first had to be tanned. Leather was used

to make shoes, belts, purses and knife sheaths, sometimes with beautiful ornamentation.

Jorvik was a city of wooden houses, built close together along roads of trampled earth. These roads ran parallel with the main road, which ran north from the bridge over the River Ouse. The road and streets were based on the Roman city of Eboracum that was situated here. The houses along the streets were long and narrow, measuring approximately 7.5 x 4 m. Parents, grandparents and children lived in one room, sometimes with servants. There was often a small yard behind the houses and sometimes small workshops. Closer to the river there were more workshops and warehouses. The houses were built of wooden planks or wattle and daub. The floor was made of trampled earth, with a central hearth surrounded

Daily street life in the reconstructed Viking settlement at the Jorvik Centre in York





by stones or tiles. Along the walls were earthen benches, on which were placed straw, hides or blankets, on which one could sit or sleep. There was little other furniture, perhaps an occasional table or a stool and a couple of shelves on which to store household goods beyond the reach of animals and children. The yards were crowded with stables, wells, rubbish pits and the open latrine. The city must have been rather smelly by modern standards.

The inhabitants of Jorvik

In Jorvik both men and women wore jewellery. The men used round brooches to fasten their cloaks. They also wore pendants, bracelets and rings, while belts and sword sheaths were ornamented with metal mounts. There was jewellery for every purse: made of copper, lead, silver and gold and of glass, amber and jet. All these materials were processed in Jorvik and it was even possible to have a tattoo. Women put their hair up with the hairpins, and combs, ear scoops and toothpicks were also widely used. The Vikings were fond of brightly coloured striped fabrics, against which their ornaments shone. The men wore long-sleeved tunics and breeches over a thin linen shirt. A warm cloak of wool or fur formed the top layer. Women wore long dresses under a



cylindrical overdress with shoulder straps, which were fastened with large, often tortoise-shaped brooches. A warm shawl and, sometimes, a small silk cap completed their costume. Many of the textiles were woven from flax or wool by the women in their own homes. The people of Jorvik were not rich and had to work hard, but there was also time for relaxation. The long winter evenings were filled with song, dance, music, dice and gambling and an occasional game of *hnefatafl*. In cold winter weather they could travel over snow and ice on skates and skis.

The many exotic and luxurious objects found in Jorvik point to an international trade. The term craft can be misleading for many of the products

Reconstruction of a leather shoe with a bone skate (glis).

Wooden ski, found in Finland.

Sets of 6 and 8 glass playing pieces
Adelsö on Björkö
Museum of National Antiquities,
Stockholm, inv.nos. Bj644 and Bj710

After a day at work the Vikings amused themselves with games, the most popular of which was the board game 'hnefatafl'. It was played on a board with incised

squares with several playing pieces. The boards are rarely found; they could also be scored into the ground or on a table. Playing pieces are more frequently excavated, mostly from the graves of male Vikings. Glass and amber playing pieces have been found in Birka. These sets comprise six and eight pieces respectively. One is made of blue glass

with black stripes and consists of five spherical pieces with flat bases and one conical piece surmounted by a small ball – possibly the 'king'. The other set comprises eight spherical pieces with flat bases; these are black with white glass threads.





then available in Jorvik; the colourful woven fabrics, silvers and ivory can often be more accurately described as works of art. The Vikings brought these applied arts techniques with them from Scandinavia and developed them further in England. English art of the Viking period differed from that in Scandinavian and was the result of the merging of the Scandinavian tradition with the local Anglo-Saxon culture. The magnificent eighth-century Anglo-Saxon helmet found in Coppergate is a fine example of the latter. It originated perhaps from the struggle between the local Anglo-Saxons and the Vikings for York in 866. In Germany, the Netherlands and France a mixture of the Viking arts with the local style can also be found.

Art and culture of the Vikings

Whereas in the Netherlands and Germany the Vikings were regarded only as unwelcome visitors, in Scandinavia and Great Britain the Vikings give their name to a distinct historical period. In the Rhinelands few objects are associated with the Vikings, and even then with some reservation. In Scandinavia and Great Britain one can talk of a characteristic Viking style in utensils and art works. This is characterised by



Unfinished relief of an animal on a stone, found in York.

its highly-developed glass and metal-working techniques, with glass pearls, an advanced use of metal alloys and refined filigree work. The latter produces patterns that appear to float on top of the object. Typical Viking motifs include dragon's heads, Thor's hammers and figures from heroic

Sets of 11 amber (above) and 12 ivory playing pieces (below)

Adelsö on Björkö

Museum of National Antiquities, Stockholm
inv.nos. Bj524 and Bj986

Amber, a fossil resin, is found in Scandinavia and the Baltic states. It is highly prized for its colour, ranging from yellow and orange to red,

its lustre and its hardness, which allows it to be cut into small robust objects. Amber, whether cut or in its natural state, was an important commodity during the Viking period. It was mostly used to make beads but was also fashioned into small figures and playing pieces. Walrus ivory, from the teeth of the walrus commonly found in Scandinavia, was also highly suited to making playing pieces.

The twelve amber playing pieces are spherical with flat bases; a cross has been etched into one of them – possibly the king. The twelve ivory pieces are pointed and have vertical grooves. One is slightly taller than the rest, stands on a base and has a spherical head; this would also have had a special value.

String of beads

Adelsö on Björkö

*Museum of National Antiquities,
Stockholm inv.no. Bj554*

Colourful strings of beads were an essential item for women in the Middle Ages. They are not exclusive to the Vikings; they were worn throughout Europe both before and after the Viking period. However, Viking women did wear their beads in a special way – over the bust suspended from two ‘tortoise-shell’ brooches. In this way several strings of beads could be worn together so that the multi-coloured beads contrasted beautifully with the plain material of her dress. Beads were also worn on the neck and arms. This necklace comprises 28 amber and transparent glass beads; two red beads separated repeatedly by a single transparent one. Suspended from the string are a large white glass bead between a green and a red bead.



Disc brooches

Adelsö on Björkö

Museum of National Antiquities, Stockholm

inv.nos. Bj644 (2x), Bj800, Bj731 and Bj791

Decorated flat circular brooches known as 'disc brooches' were commonly worn as jewellery. These five examples have been selected for their varying decoration, which becomes increasingly more complex. Viking silversmiths employed various techniques including openwork, inlays and filigree. The craftsmen often combined these techniques and experimented with variants and new techniques. We do not know how the prices compared, but it is likely that the more elaborate examples were more expensive. The least complex of these brooches has a simple spiral pattern around a central point. A slightly more complicated version has a pattern in the flat surface. Another has an openwork cross around the central point. The two most complex examples have two superimposed openwork crosses each with four knobs along the edges.



legend. Viking art is roughly subdivided into three periods: the early Viking period from the late eighth to the late ninth century, the middle Viking period from the late ninth to the second half of the tenth century, and the late Viking period from the second half of the tenth to the beginning of the twelfth century. In this periodisation, the Viking period is preceded by the Merovingian period (seventh/eighth century) and followed by the mediaeval period from the late eleventh century.



Brooch with a 'gripping beast' in the Borre style. National Museum of Denmark, Copenhagen.



Styles of Viking art

Broa (Oseberg), ninth century, named after Norwegian royal grave in Oseberg on Oslo Fjord
characteristics: first gripping beast style, ribbon-shaped animals, highly abstracted

Berdal, c. 830, named after Berdal find site in Norway
characteristics: gripping beasts depicted complete, semi-sculptural, large head, usually seen from the front

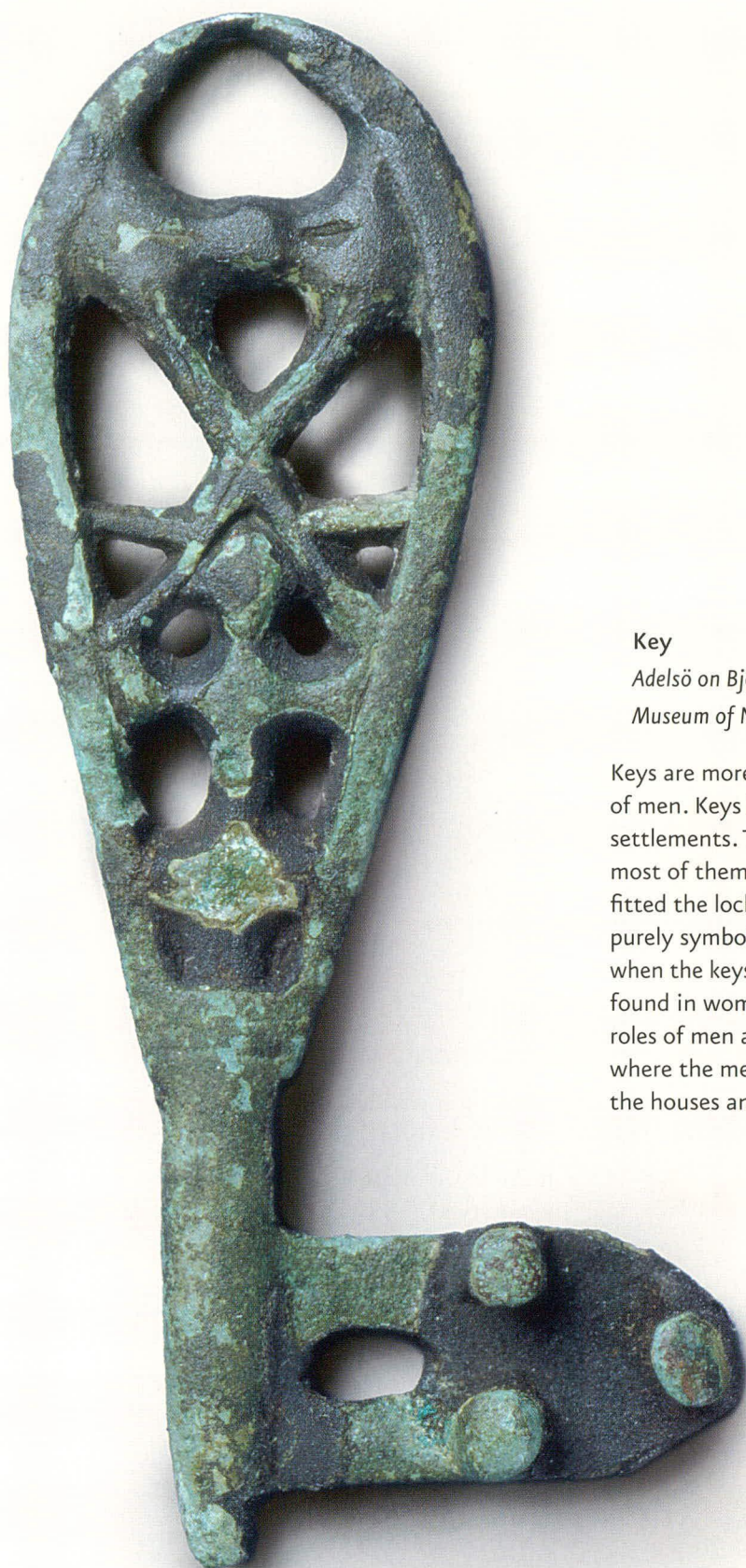
Borre, late ninth/tenth century, named after grave find in Borre on Gotland (developed from Borre style)
characteristics: gripping beasts in closed circle, head seen from the front and triangular, 'Mickey Mouse ears'; typically in fine metal work

Jelling, tenth century, named after silver beaker from royal tumulus in Jelling in Jutland
characteristics: not gripping, but elongated, serpent-like animals, shown in profile; typically mainly in gold filigree, also on weapons

Mammen, late tenth/early eleventh century, named after find site in North Jutland (later Jelling style)
characteristics: animal body further developed, more in proportion, head seen from the side, quadrupeds, plant motifs combined with animal motifs, many details; typically frequently on stone memorials (Rune stones), also in fine carving

Ringerike, first half of eleventh century, named after region north of Oslo (also known as early Urnes style or Runic stone style)
characteristics: further development of the leaves in the Mammen style
typically: only on Runic stones in Sweden and Norway

Urnes, mid-eleventh century, named after Norwegian stave church of Urnes (refinement of Ringerike style)
characteristics: final Viking animal style, thin, elegant, serpentine quadrupeds with pointed heads, depicted half-plastically, with flowing lines that become thicker and thinner.



Key

Adelsö on Björkö

Museum of National Antiquities, Stockholm inv.no. Bj462

Keys are more often found in women's graves than in those of men. Keys have also been found amongst the remains of settlements. There are various models, but like this example most of them have a broad bit usually in openwork. The keys fitted the locks of doors or possibly caskets; they were not purely symbolic. It is not known what happened to the locks when the keys were buried with the dead. That they are mostly found in women's graves can be explained by the different roles of men and women in this period. In these communities, where the men were often away from home for long periods, the houses and supplies were looked after by the women.



In addition to this subdivision into periods, which can be applied within all the territories where Viking objects have been found, a number of specific styles have been designated in Scandinavian Viking art. All the surviving Viking art falls under what we would call arts and crafts or decorative art, i.e. the decoration of useful objects. It is characterised by its power, vitality and rich animal ornament. Viking art is based on the Norse animal style, which was developed from around 600. The ornaments derive from three basic forms: figures (people and animals), plants (stems, leaves, flowers) and geometrical patterns (triangles, circles, spirals). The various Viking styles are all combinations of these three elements. The most typical form of animal ornament is the 'gripping beast', a two or four-legged animal that grasps its own neck with one of its legs. These are some of the points by which the styles are distinguished from each other.

Wood carving

The final phase of the Viking sees the ultimate artistry in the wood carving of eleventh-century churches in Norway, known as stave churches. The last Viking style, that of Urnes, is named after the animal ornament of the stave church

Sigurd killing the dragon by stabbing him from underneath; wooden carving from the eleventh-century stave church in Hylestad. University Museum of National Antiquities, Oslo.

in Urnes, where slender beasts form a balanced decoration between thin lines. The Oslo University Museum possesses fragments of the wooden sculpture that formed the porch of the stave church of Hylestad. The porch includes narrative scenes from the story of Sigurd and the dragon in a frame of plant stems. We see the hero depicted in Viking style, wearing a pointed helmet with nose guard, testing his sword at the blacksmith's forge, and the dragon's heart roasting over a fire. Very few people are depicted in Viking art; the lively scene of Sigurd with his sword raised is one of the most impressive surviving portraits of a Viking.

The Runic script

Among the best-known Viking works of art are two stones decorated with reliefs and inscriptions, which stand near the church in the Danish village of Jelling and are therefore called the 'Jelling stones'. They date from around the middle of the tenth century. One is 1.5 metres high and the other is 2.5 metres high. The small stone is decorated with Christ on the cross in a pattern of intertwined plant stems – a typical Christian representation in a typical Scandinavian style. A full-size copy of this stone stands at the foot of the Dom tower in Utrecht; it



was given to the city by the Danish government in 1936. Both stones bear a horizontal runic inscription using the younger runic script – also called Younger Futhark after the first six

Full-scale copy of the Jelling stone in front of Utrecht Cathedral.



Signs of the runic script ('futhork') with explanatory letters underneath.

signs (fig.). The inscription on the small stone has been translated as: 'King Gorm made this monument in memory of Thyre his wife, Denmark's pride'. The large stone was erected by Harald Blåtand, the first Christian king of Denmark and son of Gorm, shortly after 965. The inscription reads: 'King Harald erected these monuments in memory of Gorm, his father and Thyre, his mother. The Harald who won the whole of Denmark and Norway and turned the Danes to Christianity.' The runic script consists of straight lines with cross strokes and originated as a script that could be incised with a knife – an epigraphic script, suitable for chiselling in stone. Stones with inscriptions on the flat side are very common in Denmark and were – and sometimes still are – erected along the military roads. The oldest inscribed stones date from around 400 A.D. From the eighth century, decorations were added to the text usually in the form of carved monsters, which were intended to frighten off demons and robbers. Stones with

depictions of people, such as those in Jelling, are rare. They combine a 'heathen' Scandinavian form (the stones) with a new Christian content and are transitional pieces.

Large rune stone at Jelling

end of the 10th century

National Museum of Denmark, Copenhagen

Jelling is considered the birthplace of Danish Christianity. Here in the middle of the tenth century two large rune stones were erected at royal graves. In the inscriptions Gorm the Old and Harald Bluetooth declared that they were kings of Denmark, Harald explains that he converted the country to Christianity. The larger stone is inscribed with decorations on one of its three sides and shows Christ amidst knotted tendrils. It is the first explicitly Christian representation in Denmark and may be seen as propaganda for the new faith.



Ships and navigation

Viking ships

'Gold glistened on the prows, silver shone on the heads of figures of various kinds. The fleet was so magnificently equipped that, when the fleet commander wished to conquer a country, the ships themselves had already put fear into the enemy, even before the warriors had begun to fight on board. For which enemy dared to look into the eyes of those images carved into the prows, those terrifying golden lions, those metal figures with threatening gilded muzzles, those dragons of pure glistening gold, those threatening bulls whose golden horns proclaimed death and destruction...'. That is how a monk from Northern France described a Viking fleet, perhaps the one with which King Knútur (Canute) planned to conquer England in 1015. The longships assembled in the port had been designed for long voyages and warfare, and were equipped with shields and war totems.

Up to the ninth century the Vikings had developed the clinker built warship in Scandinavia. The sides of the ship were low enough for it to be rowed, it was broad enough to be able to sail stable and light enough to be pulled up onto the beach by the crew, or transported for some dis-



Viking ships depicted in the Utrecht Psalter c.830. University Library, Utrecht.

tance over land (on rollers). By using a keel, ribs and a clinker construction, the Scandinavians were able to build warships of more than 30 metres in length. Because of their shallow draught (often less than a metre) and oars, these ships could easily enter estuaries and bays. Moreover, they could moor almost anywhere. Viking ship could reach speeds of approximately 6 knots when rowed; 3 to 7 knots under sail, and up to 15 knots under favourable conditions. These fast, manoeuvrable ships facilitated the Vikings' favoured tactic – the surprise attack. The ships appeared suddenly on the horizon and departed again at lightning speed. The very first Viking attack, on the English monastery of Lindisfarne in 793, was made possible – and succeeded – precisely because of their nautical technique. The inhabitants of the undefended island were shocked not only by the brutal violence of the heathens, but even more by their very arrival.

The development of seaworthy ships in Scandinavia made contacts with the outside world easier and more frequent. They navigated along the coast with the aid of landmarks. The Vikings had, however, also mastered the basics of open sea navigation. Although they did not yet have a magnetic compass, they succeeded in crossing

the seas using the position of the sun and stars, their knowledge of ocean currents and analysis of the behaviour of marine faunal. They sailed west to Iceland and Greenland, south to the British Isles, the Frankish and Spanish coasts and east to the Baltic countries and the Russian rivers along which they reached Constantinople. The Viking ships' range covered the whole of the then known world, from the Arctic Ocean to far into the Mediterranean Sea. The crossings made possible both the plundering and the colonisation of those regions. Leifur Eriksen's voyage of c. 1000 shows that Viking navigation of the open seas was not always successful. He was driven off course in a storm and landed on the coast of North America. In retrospect, Leifur Eriksen's discovery of America – a small Viking settlement has been found at L'Anse-aux-Meadows in Newfoundland – was an extraordinary achievement, but he was undoubtedly heading somewhere else.

The building of any kind of ship and ship type was based on long planning, experience and expertise. First the timber had to be selected, for which a dense forest of trees with tall, straight trunks was needed. A number of very specific pieces of timber were required, including large, curved timbers for stems and framing timber. For the

planking massive trees of up to more than 1 m. thickness were required. The trees were selected in the forest by the master shipbuilder. The chosen oak was used when it was still wet. The wood for the planking was split, hewn and bent into the correct shape. It took about half a year to build a warship. Viking ships were characterised by their clinker construction, the cross-beams, which served as rowing benches in the warships, and the construction of the mast. The ingenious shape of the boat and the sail was a significant contribution to their success, enabling Viking ships to beat towards the wind and to navigate from 60° off the wind and to 180° off the wind.

Long voyages required lengthy preparation. For the Vikings, inland and coastal navigation were more frequent than offshore navigation. For a high sea voyage everything had to be taken along, including dried fish and meat and drinking water in barrels. We know that navigation was limited and the most important thing was to leave the coast at the right spot, with the right wind, in the right direction. They often had to wait weeks for the right moment. Even William the Conqueror waited in Normandy for 46 days before he ventured to cross the English Channel with his fleet.

Rhine ships

Rhine barge in Bonn

In 1993 the Rheinisches Landesmuseum in Bonn acquired a river barge dating from the Carolingian period. It was found in a gravel pit at Kalkar-Niedermörmter, some 500 metres south of the present course of the Rhine. It is a typical barge of the eighth and ninth centuries – a rectangular, flat-bottomed boat with a curved prow and stern. The boat is approximately 14 metres long and 2.45 metres wide at its broadest point. A few Roman and Carolingian sherds were recovered in and around the ship, while parts of the skulls of a man in his twenties and a 70-year-old woman were retrieved from under the ship. The ship must have foundered, because part of the cargo of tufa stone from the Eifel was still in the ship. Tufa was used as a building material and was traded extensively in this period. It has been calculated that the ship could carry a 4.5 ton load. It is known that the sand and gravel of the pit at Kalkar formed part of an old riverbed that was still navigable in the Carolingian period. Because stone was scarce in the immediate vicinity, many buildings were constructed of timber, but churches and castles, in particular, were built of stone, which was often shipped

Model of a Viking ship – scale 1:10

made by Vibeke Bischoff

Kerteminde Museum, Kerteminde

A Viking leader was found buried in his 20m-long ship in a mound in Ladby, near the Kerteminde fjord on Funen. Eleven horses and a pack of dogs had been sacrificed along with the boat, probably to equip the chief-

tain for hunting in Valhalla. The body was found in the middle of the ship amongst luxurious gifts, weapons and riding tackle. The ship had sixteen pairs of oars. The planks are painted alternately blue and yellow and the mast in the centre carries a blue and yellow striped sail. At the end of the stern, which looks like a tail, is a rudder. To the right is the dragon's head on the prow.



over long distances for this purpose. It is possible that at least some of the stones in the river barge were of Roman origin, because many fortifications and bridges from that period were still standing and were used as stone quarries.

The ship has been accurately dated using dendrochronology. This method (dating of 'dendro' = wood) consists of the analysis of the annual rings in timber. In a warm or wet year a tree grows quickly and a broad annual ring is formed,

while a narrow ring is formed in a cold or dry year. Each tree has a unique ring pattern, a kind of 'fingerprint'. Over the last few decades the patterns of thousands of timbers from different periods and regions have been logged in computer databases so that a timber sample can be compared with known patterns. This usually makes it possible to date the timber and to determine where it grew. At least 25 rings are needed to determine an exact felling year, and these must include the most recent rings found in the outer layer – the sapwood. If this layer has not been preserved – it was usually removed from commercial timber – an additional 20-30 years are added to the date in order to be on the safe side. The Kalkar ship was built of oak that was felled in 802 (give or take 5 years). Similar Carolingian ships have been found in Bremen and Krefeld.

Utrecht ship

The 'Utrecht ship', built shortly after the year 1000, is one of the attractions of the Centraal Museum in Utrecht, where it has been exhibited since 1936. The ship was discovered on 3 December 1930 during excavations at Van Hoornekade, on the borders of Utrecht and Zuilen. It lay in an old bed of the River Vecht. The ship is well known

The Utrecht Ship during the excavation in 1930.





Rhine barge

Shortly after 800

from a gravel pit near Kalkar-Niedermörmter

Rheinisches Landesmuseum, Bonn

Unlike the Utrecht Ship and the Viking ships, this barge has a flat bottom. This is the most common type of boat construction for the period. It was found half a kilometre from the old channel of the Rhine with the remnants of its cargo of tufa stone. This boat obviously carried building materials along the Rhine. The ship may have only been able to sail downstream. In the Rhine region there were several Roman ruins from which building materials such as stone and roofing tiles were salvaged and quarries where new stone could be cut.





in the field of ship archaeology because of its special construction – a hollowed-out tree trunk heightened with heavy planks. Because fragments of several other example of this type of vessel have been found since the raising of the Utrecht ship, reference is made to the 'Utrecht type'. The raising of the ship in 1930 was not easy. It took 40 men to raise the 14m-long hull in one piece. Once it had been brought to the Centraal Museum, the ship's timber was treated with creosote – a brown oily substance – and linseed oil, giving the gallery its characteristic odour. Creosote and oil are no longer used in the preservation of wet timbers, which are now treated with an artificial wax known as polyethylene glycol (PEG). However, this was the best available method at the time. The treatment was successful and the ship has been preserved. During the treatment deformed parts of the ship were bent back into shape and minimal amounts of new wood were added. A metal support structure was created for the boat, which precisely follows its shape. From 1998 to 2000 the Utrecht ship was fully investigated and documented. The timbers were cleaned, sampled and coated with a 'mantle' of PEG; the support structure was also replaced. The detailed study of the ship has cleared up many of the mysteries surrounding it.

Since the discovery of the Utrecht ship different theories have been advanced about its age. It was initially believed to be a Roman ship and then a Carolingian one. It was also thought that the ship had been built in Germany and had travelled down the Rhine on its only voyage. Dendrochronological examination of the timber in 1997 brought clarity on both points. The investigation dated the timber to 997. Allowing a 20-30 year margin of inaccuracy, plus the period between felling and construction, dates the ship to the early eleventh century. The pattern of the annual rings greatly resembles that of mediaeval timber from Tiel and not that from West Germany, leading to the conclusion that the ship was built in the Rhine delta and probably even in the region of Utrecht itself.

The bottom of the Utrecht ship was made from a single piece hollowed-out tree trunk that was expanded to produce a stable, beautifully curved bottom. The sides of the hull were built up with planks. Most of the ship may have been open, but it would have had decks fore and aft to make it easier to sail. There may have been a reinforced cargo space amidships, but cargo could also be placed in the rest of the ship. The ship had a pointed prow and stern. It had a relatively small

Utrecht ship

shortly after 1000

Centraal Museum, Utrecht

This large ship, found before the war in a silted-up old arm of the River Vecht on the edge of Utrecht, is displayed in the cellar of the Centraal Museum. Recent dendrochronological

dating of the oak has shown that the ship was built at the beginning of the eleventh century, probably in (or the vicinity of) Utrecht itself. It is constructed by attaching planks to a dugout tree trunk. This construction produced an extremely stable boat. This sturdy ship was especially suited for transporting building materials

along the Rhine. At the beginning of the eleventh century many stone buildings were built in Utrecht, especially around the Domplein, on the remains of a Roman complex. It is possible that stone and wood were transported from further up the Rhine on this type of boat.

mast, which was probably used mainly for towing the ship from the shore – it is known from written sources (Alcuin) that ships were towed from the mouth of the Rhine up to Utrecht. A small sail may have been hoisted when the wind was favourable. The ship may have been punted in shallow water, while two pairs of oars made rowing possible on a slowly flowing, peaceful river like the Vecht. The oars were also useful for manoeuvring the ship, for example, in a harbour. The ship probably had a side rudder or a steering oar at the stern, but no such steering mechanism was found. Perhaps the valuable steering gear, like the cargo, was removed from the ship before or after it was deliberately sunk.

There was a large amount of river traffic from Utrecht to and from the Rhineland and there was a good route to the Frisian coast and the North Sea via the Vecht and the Almere (the smaller forerunner of the Zuyder Zee). The Utrecht ship's solid substructure made it very suitable for transporting goods over inland waterways, although it might have been capable of the occasional sea voyage under favourable conditions. The ship's large capacity and rather broad hull categorise it as a freighter for bulk cargo. It may have been used, for example, to carry

building materials such as tufa and timber, for which there was great demand during the enormous building boom in Utrecht in the eleventh century. Many of these materials came from the Rhineland. The Utrecht ship may have been specifically built with such a solid foundation in order to withstand the dangerous rapids on the Rhine between Mainz and Coblenz. Ships of the 'Utrecht type', with their substructure of a hollowed-out tree trunk, were very functional ships. They disappeared, therefore, not because they were unsatisfactory, but because of the increasing shortage of large, thick branchless trees needed for the substructure. In the twelfth century people were forced to start building ships with a hull constructed wholly of planks.

Other ships of this type have been found elsewhere in Utrecht (two in old branches of the River Vecht) and also in Velsen, possibly in Zeewolde – on the bed of the former Zuyder Zee – and lastly in Queenhithe in the London. They vary in size and the ship found in London is the only one built to be truly seaworthy; the type is therefore versatile. The 'Utrecht type' is regarded as the forerunner of the 'hulk', the round cargo ship that was to become very important in Western Europe in the late Middle Ages. Both

Relief band amphora

Svarta Jorden

Museum of National Antiquities, Stockholm

inv.no. 5208:2236

These large spherical storage jars without a neck and with a small opening are typical of the market towns of the Viking period. Known as 'relief band amphoras', they are made of light beige earthenware with strips bearing geometric patterns of blocks and triangles. They have relatively thin walls for such large jars; mostly only fragments of a part of the amphora have been found. The fragments can be recognised because of the typical decoration. Fragments have been found in Birka, Kaupang and Dorestad. This medium-sized example from Svarta is relatively intact and shows how an entire jar would have looked.



types of ship have very full lines of the hull. The location where the London ship was found is significant, because it was excavated in the part of the port that was known as 'Aethelred's hythe' or 'Aethelred's landing place'. The oldest texts mentioning the term 'hulk' are toll lists from around the year 1000, which state that hulks were moored in Aethelred's Hythe. The name 'hulk' is derived from the dugout trunk that served as a bottom for these ships; it is derived from the Germanic word 'holh' for 'hollowed-out'.

Differences between the Rhine and Viking ships

The ships of the 'Utrecht type' are much heavier and bulkier than the Viking ships. The method of construction, which introduced mass to strengthen the hull, is diametrically opposed to the Scandinavian tradition. In Scandinavia ships were generally built light which allowed them to sail and land everywhere. The Scandinavian warships

had many more oars, were light enough to be moved overland if necessary, and could, moreover, tack against the wind. The specialised cargo vessels were the widest of the Viking ships but the largest Viking ships were still far more manoeuvrable than the Rhine ships and also able to cross the high seas as well as navigate on the rivers.

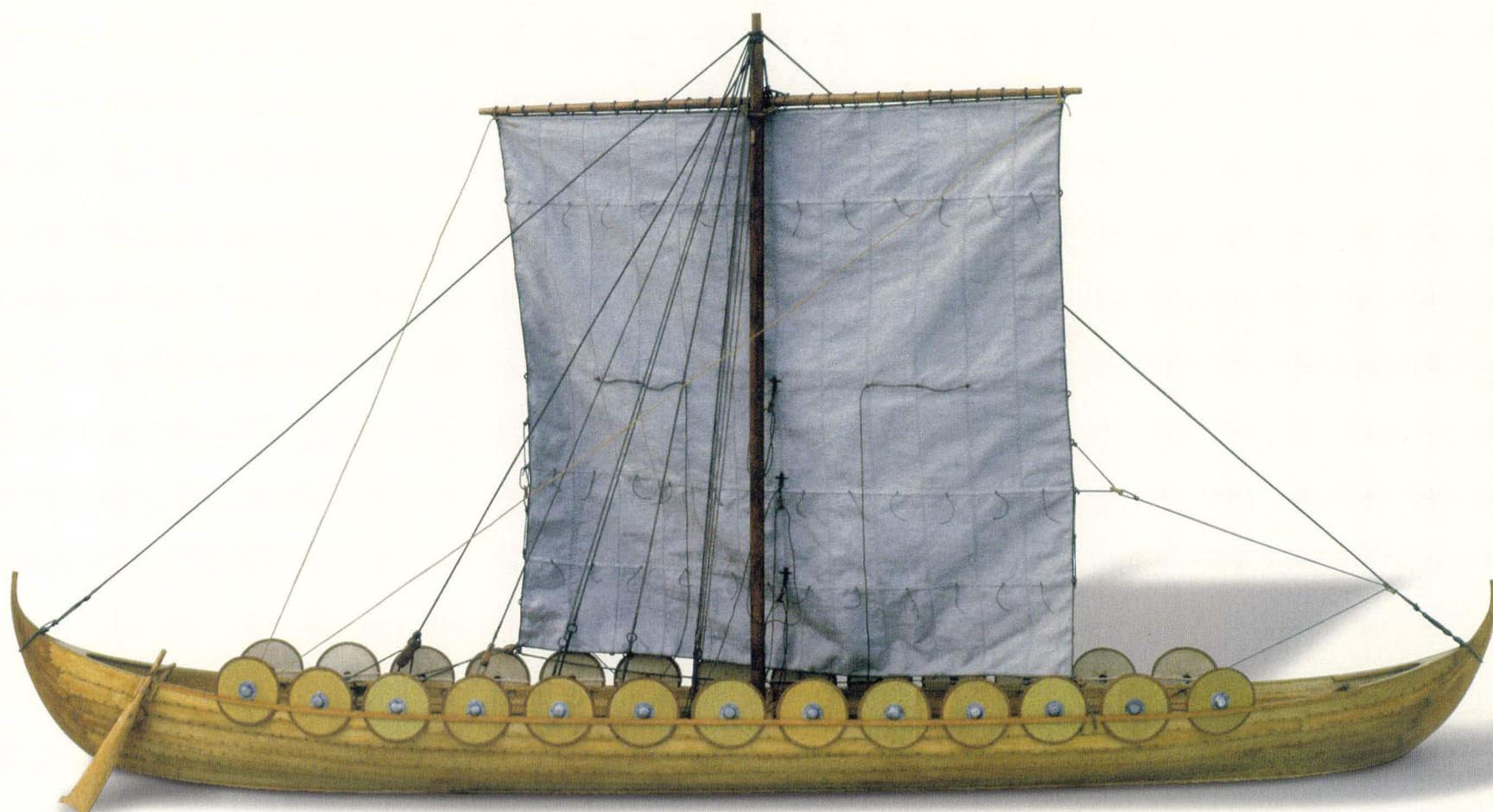
Recovered Viking ships

Ships from Roskilde Fjord

No fewer than five Viking ships were uncovered in 1962 in the narrow, north-south running Roskilde fjord, in the Northern part of Zealand. They were lying partly on top of and across each other and, filled with stones, they formed a barrier in the fjord. This made it impossible for ships to enter the bay at which the town of Roskilde lies. In the early Middle Ages Roskilde was the capital of Denmark and the seat of a bishop. The Danish kings have been buried in the cathedral since that time. Roskilde was therefore a rich town in the Middle Ages. The blockage in the fjord off the small village of Skuldelev, about 20 kilometres north of Roskilde, was therefore intended to keep pirates and warships at a distance and to control the access to Roskilde. The barrier of stones was, of course, well known in

The reconstruction of a Viking ship in Roskilde.





Scale model of Skuldelev 5

c.1000

Viking Ship Museum, Roskilde

During the re-assembly of the wrecked Viking ships found in Roskilde, accurate 1:10 scale models were also made. These

models are used to build the seaworthy full-scale replicas. This model is of the Skuldelev 5, a small warship 17.5m in length – the largest ‘drakkars’ were more than 35m long. The Skuldelev 5 had thirteen pairs of oars. With a helmsman and a lookout, some thirty men were required to sail the

ship. Identification of the wood from the wreck suggests that the ship may have been built in Roskilde. No traces of the paint, the sail or the ropes have been found; they have been reconstructed largely on the basis of depictions of Viking ships.



later centuries and it was also known from tradition that a ship lay under it. However, the fishermen's tales had it that it was a ship that Queen Margrethe I (died 1412) had ordered to be sunk. Not until the first underwater archaeological investigation, carried out by the National Museum of Denmark from 1957 to 1959, it was discovered that there were not one but several ships, which were, moreover, four centuries older. The ships were sunk in the last half of the eleventh century.

In 1962 a cofferdam was erected around and pumped dry, after which all five ships were recovered within four months, in thousands of pieces. The fragments were conserved and carefully put together. Since 1969 the five Viking ships have been exhibited in the Viking Ship Museum at Roskilde in a special gallery with a view of the fjord. The ships are far from complete but their shape is clearly visible, as are many details of their construction. There was no cargo on board. They were empty, probably old ships and were intentionally sunk. None of the ships, however, showed signs of having timbers removed for reuse. It appears that the ships were still in use shortly before being sunk. They had, however, been badly damaged in the course of nine cen-



Replica of a Viking boat (Skuldelev 1)

10th century

Viking Ship Museum, Roskilde

The Viking Ship Museum in Roskilde was built to house five Viking ships found in the Roskilde fjord at Skuldelev. Full-scale replicas of the historical boats are built at the museum and visitors can observe the construction process. They are built using authentic techniques and are put to sail on the fjord as a form of experimental archaeology. The smallest replica is the Skuldelev 6, a boat used for local trips and fishing. It measures 12 x 2.5 metres.

Reconstructed Vikings
ships of various types by
the quay at Roskilde.



Cargo ship 'Skuldelev 1', excavated in the Roskilde fjord. Viking Ship Museum, Roskilde.

tures under water, particularly because they lay on their sides, so that the projecting upper half was much more poorly preserved than the lower half, which was buried in the sand.

Each of the five ships is of a different type, with its own function. Two are quite long, narrow warships (known as longships, *langskip*) of the kind that may have carried out the attacks on the Dutch and German coasts and estuaries; there is a large warship (identified as Skuldelev 2) and a small one (Skuldelev 5). The largest longship was originally about 30 metres long and had a beam of 3.8 metres, with a draught of only one metre. It had a sail area of c. 112 m² and required a crew of 80 to 100 men. The reconstruction of this ship most resembles the common image of a Viking ship: long, narrow, with a square sail and



Long warship 'Skuldelev 2', excavated in the Roskilde fjord. Viking Ship Museum, Roskilde.

with high stems. Two of the other ships, one large and one small, are cargo ships. Both are much broader than the warships and therefore have quite a different appearance. The largest (Skuldelev 1) is an ocean-going cargo ship, 16.5 metres long and 4.8 metres in the beam, representing the type of the *knörr*. The smaller one (Skuldelev 3) would have mainly sailed the local seas. The fifth ship (Skuldelev 6) was originally



Replica of small warship 'Skuldelev 5'.

a fishing boat, measuring 12 x 2.5 metres. Later on it was converted to a small cargo boat (*ferja*). Examination of the ships' timbers has shown that not only were the ships of different types, but also that they were built in different parts of the Viking world. The large cargo ship and the ferry boat were made from timber that grew on the Sognefjord in Norway. The small warship and the small cargo ship were made from Danish timber. The fifth ship, the large warship, presented problems in determining its origin, because its timber did not come from Scandinavia at all. It was eventually found, after much comparison of annual rings that this ship must have been built in Ireland in the area of Dublin.

In 1996, when an artificial museum harbour was constructed at the Viking Ship Museum, a further nine ships were found. Only two of them were

from the Viking period; the others were later, but still mediaeval ships. Like the first five, the two Viking ships date from the first half of the eleventh century. One was a small (non-ocean-going) cargo ship, the other a warship of 36-37 metres in length, the longest Viking ship ever found. The Viking Ship Museum's staff and visitors had literally been walking over this enormous longship for decades. It was decided to make a virtue of necessity and, since then, the museum area has been a kind of archaeological workshop, where visitors can follow the cleaning, documentation, conservation and reconstruction of the newly discovered ships.

The Oseberg ship grave

A century ago, in 1904, a Viking ship was found at Oseberg in Norway. It had been drawn up out of the fjord onto the land in 834 A.D., placed in



The Oseberg Ship during the excavation in 1904.

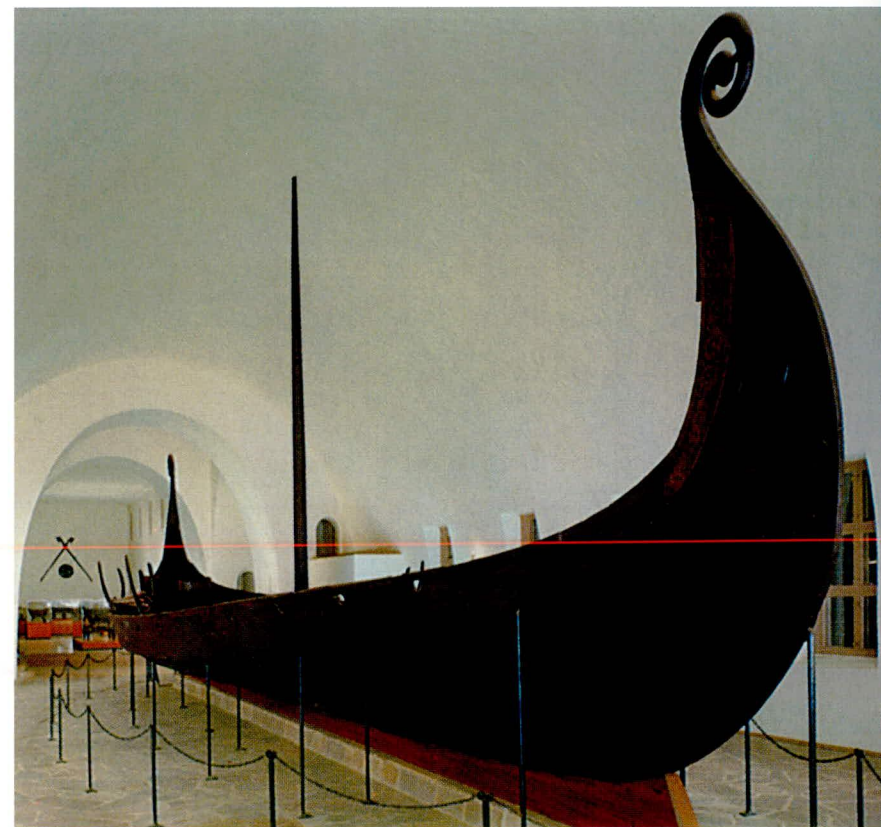


Transportation of the Oseberg Ship in 1932.

a pit and buried under a mound of clay and turf. A burial chamber had been built in the ship. Here were found the skeletal remains of two women, one aged between twenty and thirty when she died, the other aged around sixty. They had been placed on wooden beds in a tent-shaped chamber. A variety of objects had been laid both inside and outside the chamber: food and clothing, chests and cooking utensils, sleighs and a cart. Most of the wooden objects were embellished with splendid decorative carving. They were intended for use in the after world, but also emphasised the status and wealth of the women when they were alive. Jewellery and other gold and silver objects had certainly also been left in the grave, but had fallen prey to grave robbers who had cut their way through the mound and into the burial chamber. Fortunately they were uninterested in the iron and wooden objects or the ship in which everything lay.

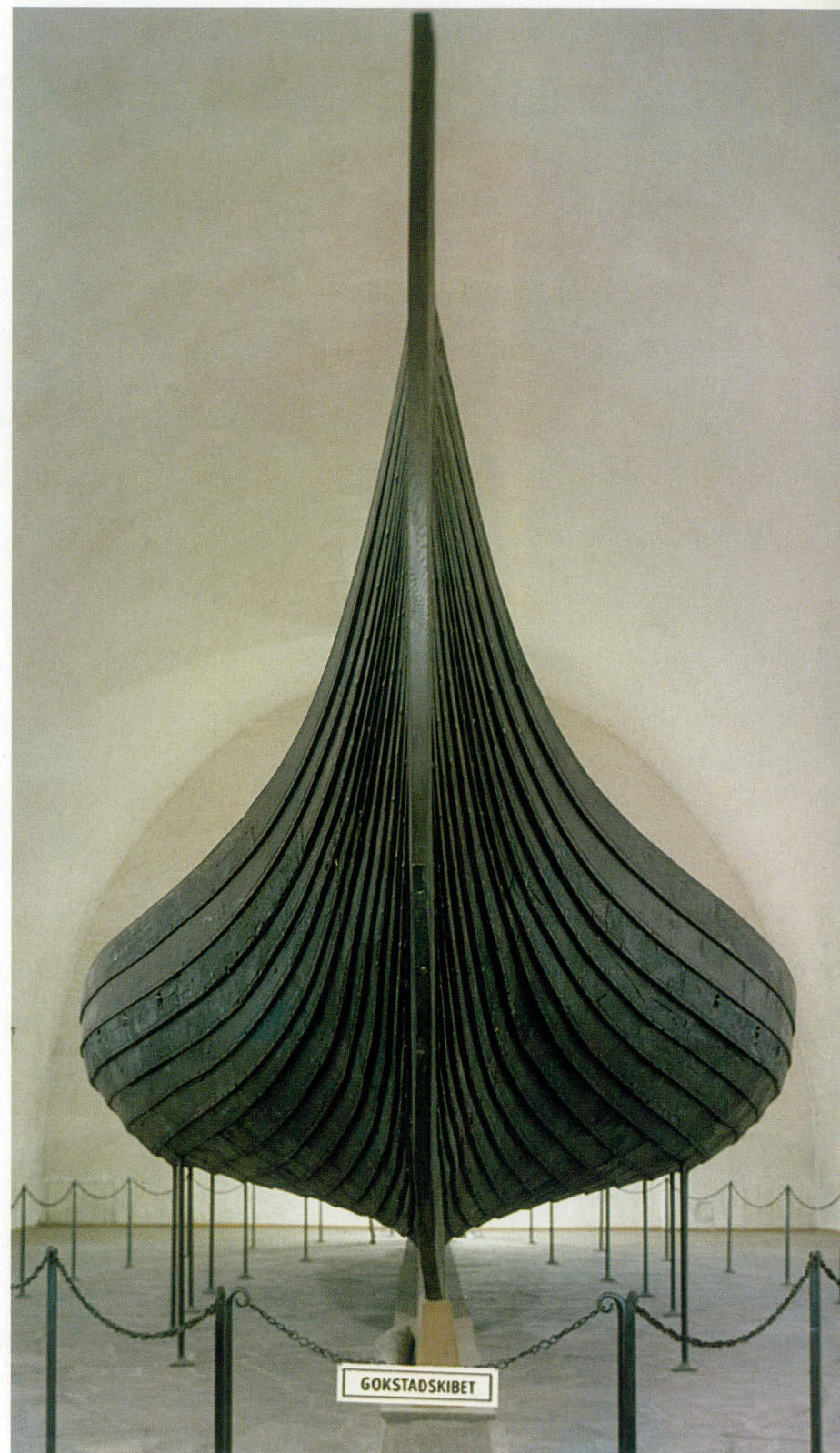
In 1904 the entire burial mound was excavated in the course of four months and the ship was recovered with its contents. This was certainly no easy task, because the weight of the mound and the pile of stones on top of it had pressed the ship deep into the ground. The planks (strakes) from the ship and most of the objects

had been broken into thousands of pieces. The soft, fragile timber had to be picked out from between the sharp stones of the mound, after which all the timber was treated and then reassembled like a jigsaw puzzle. The biggest puzzle was the ship itself. All the pieces of ship's timber were bent back into their original shape using steam and the whole of the oak ship was then reconstructed. Ninety per cent of the rebuilt ship is original; certain parts, such as the upper part of the prow with its volute, were too fragile and had to be replaced with copies. Since 1926 the ship and everything found in it has been on view in the purpose-built Viking Ship Hall at Bygdøy in Oslo.



The Oseberg Ship, displayed in the specially built gallery in Oslo.

The Oseberg ship is 22 metres long and 5 metres in the beam; the prow projected several metres above the water. The Oseberg ship is wider than a longship, and it was used as a travelling ship for high ranking persons. There were fifteen oar holes on each side. Because each rower handled one oar, at least thirty-two men were needed to sail the ship: thirty rowers, a man to operate the rudder at the stern and a lookout on the prow. It was probably even more crowded on board. The gangplank has been preserved, but there were no benches for the rowers. The Vikings probably sat on their own ship's chests, in which they kept their personal belongings. The ship had a single tall mast, amidships, which was lowered when the ship was rowed and could be set upright in a block in the middle of the ship for sailing. The block contained a mast hole and an inclined groove. The mast was slid along the groove until it stood upright and then anchored with a heavy wooden block – the mast shoe. The top of the Oseberg ship mast had been broken off, so that the precise height of the mast is not known. The Oseberg ship was already old when it was used as a burial ship. Although it was in good condition, there were clear signs of use; the ship was certainly not specially built for the burial.



The Gokstad Ship,
displayed in the specially
built gallery in Oslo.

Wooden cart from the Oseberg Ship. University Museum of National Antiquities, Oslo.

Three sleighs had been placed in the ship. They were made of wood and beautifully decorated with carving. One has been reassembled from 1061 fragments! The sleighs had a box-shaped structure attached to a separate undercarriage with ropes. Each of the sleighs was drawn by two horses. Additional, undecorated runners were placed under the carved runners, so that the beautiful carving would not be subject to too much wear. One of these additional runners was worn and another runner had been fitted over it. An equally impressive four-wheeled cart was also found in the ship. It is the only cart from the Viking period in Norway. Parts of several carts



One of the sleighs from the Oseberg Ship decorated with woodcarving. University Museum of National Antiquities, Oslo.

have been found in Danish and north German graves of high-ranking women; it appears that noble women travelled by cart in those countries. The Oseberg cart is also indicative of high status, but the makers were clearly unaccustomed to making carts. For example, they fixed the front axle to the chassis in such a way that the cart would have been unable to turn. The upper part of the cart is made of nailed-together, semi-overlapping planks, in the same fashion as a ship's hull (clinker construction) suggesting that it was made by the royal carpenters, who normally made ships. The cart may have been used in processions and ceremonies, but not for actual travel. The sleighs and the cart display high-quality wood carving, mostly the usual patterns of animal-shaped figures, but the carving also includes narrative scenes, which probably depict legends. At the corners of the cart

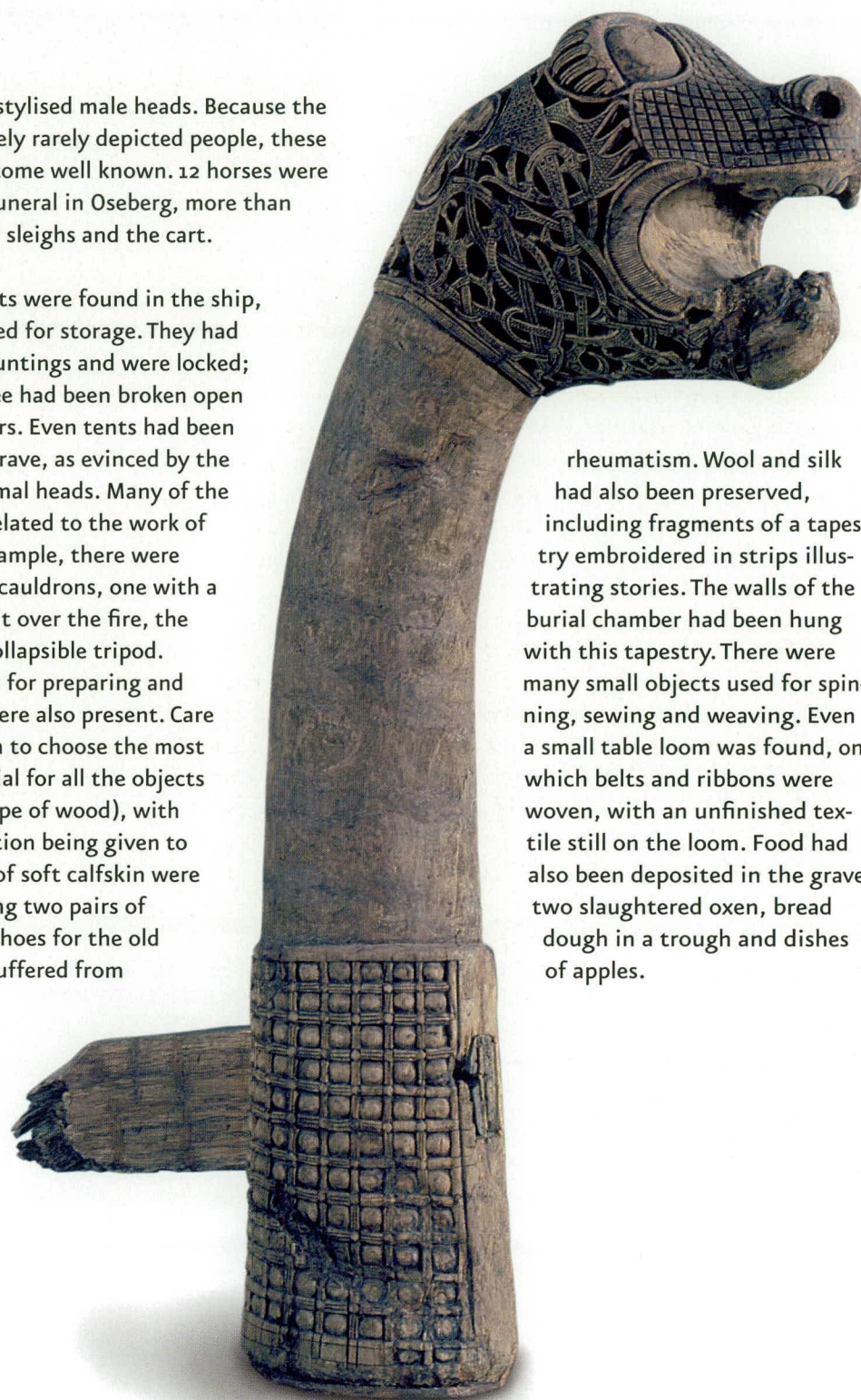


there are four stylised male heads. Because the Vikings relatively rarely depicted people, these heads have become well known. 12 horses were killed for the funeral in Oseberg, more than enough for the sleighs and the cart.

Three oak chests were found in the ship, which were used for storage. They had heavy iron mountings and were locked; one of the three had been broken open by grave robbers. Even tents had been placed in the grave, as evinced by the poles with animal heads. Many of the objects were related to the work of women. For example, there were two large iron cauldrons, one with a chain to hang it over the fire, the other with a collapsible tripod. Wooden dishes for preparing and serving food were also present. Care had been taken to choose the most suitable material for all the objects (such as the type of wood), with first consideration being given to quality. Shoes of soft calfskin were found, including two pairs of custom-made shoes for the old woman, who suffered from

rheumatism. Wool and silk had also been preserved, including fragments of a tapestry embroidered in strips illustrating stories. The walls of the burial chamber had been hung with this tapestry. There were many small objects used for spinning, sewing and weaving. Even a small table loom was found, on which belts and ribbons were woven, with an unfinished textile still on the loom. Food had also been deposited in the grave: two slaughtered oxen, bread dough in a trough and dishes of apples.

Wooden 'animal head post' from the Oseberg Ship. University Museum of National Antiquities, Oslo.



Most of the objects from the Oseberg ship are identifiable and their function is clear, but this does not apply to the objects which speak most to the imagination, the five 'animal-head posts'. These are large pieces of wood terminating in animal heads with wide-open mouths; they are decorated from top to bottom with complex carved animal patterns. They are among the most beautiful Viking works of art ever found. The staves or posts have a handle at the bottom, so that they can be held aloft. They may have been carried in processions, as symbols of rank. That may also be why they were placed in this exceptionally rich female grave. It is not certain for which of the two women the ship grave was originally intended, although it is certain that they must have been members of the royal family of the Norwegian Vikings, the Yngling dynasty. Many of the kings of that dynasty are known by name, but only one queen: Åsa. She may be the one buried here; the place name Oseberg could be derived from her name. An interesting detail of daily life in the Viking period is revealed by the combs from the Oseberg ship in combination with the male heads on the corners of the cart. The three combs are luxury examples of an article that is commonly found in graves from the Viking period; it appears that



Wooden man's head with moustache and goatee, on one of the corners of the cart from the Oseberg Ship. University Museum of National Antiquities, Oslo.

everyone had a comb. Although the carved male heads are stylised, they clearly show neatly combed hair and well-trimmed beards. This shows that the Vikings did comb their hair and beards – at least at home. The ‘rough beards and wild hair’ of the Norsemen were perhaps mainly the consequence of long, uncomfortable voyages and wartime sojourns abroad and not a characteristic Viking feature.

The ship as a symbol in Viking society

In Viking society, burial in a real ship was reserved for people of aristocratic blood. Kings and queens were buried in the ship graves of Oseberg, Gokstad and Tune, furnished with all manner of luxury goods and often with a male

or female slave, who was killed to accompany his or her master. The boat chamber grave found at Haithabu (Hedeby) in 1908 contained the remains of three adult men. With the men were deposited three expensive swords, four shields, a quiver for arrows, a wooden bucket with iron mountings, a bronze dish, a glass beaker and expensive horse harness. In a pit beside the wooden burial chamber lay the skeletons of three horses. An 18 m-long seagoing warship was buried in a long mound above the burial chamber. This was probably the grave of a person of high social rank with two other individuals who followed him into death; all three warriors were provided with horses and suits of armour. In this manner they could make the crossing to Valhalla by ship and then ride on horseback to



Ship grave with atypical gravechamber underneath the ship excavated in Haithabu.



Ship-settings around graves in the Viking burial ground at Lindholm Høje.

Odin's banqueting hall, where they could join the eternal drinking bouts and games.

The ship was perhaps regarded in this context as a symbol of 'journeying' – as a transition from life to death. In cemeteries from the Viking period one often finds graves surrounded with boulders laid out in an oval shape, like the outline of a ship. These burials must also have been of warriors and women from the upper strata of society, but they are not royal graves, because there are far too many of them. 682 graves were found at

the Lindholm Høje Viking cemetery in Jutland, dating from the period 800-1000, 200 of which were in the shape of a ship.

The 'dragon ship' is a characteristic image of the Vikings in the Rhineland's, whose people were unacquainted with the Norsemen in their home situation and hardly knew them as colonists; every Viking they saw belonged to a ship. The Vikings loved their ships; both real ships and images of ships were related to the prestige attached to being a Viking and returning home laden with plunder. The ship was one of the most highly valued symbols and it is therefore not surprising that various objects were decorated with images of ships. Ships, with the characteristic elongated shape, the high pointed prow, a long line of oars and often a square sail, have been found scratched into many pieces of wood, slate and bone. Ships often also feature in the sagas, while Viking children obviously played with miniature longships. Ships were omnipresent in the world and the minds of the Vikings, and the images and texts fill also gaps in our knowledge of the ships.

Ships with striped sails, illustrated in the Bayeux Tapestry.





Belt fittings showing wild boar

Carolingian

Loon (Drenthe)

National Museum of Antiquities, Leiden

inv.no. c 1931/2.3

The styles and motifs of the Frankish and Viking silversmiths differed greatly. Inlays and imagery in relief were typical of the Franks.

This Carolingian belt buckle and plate are made from silver-plated iron and decorated with wild boar. The highly realistic depiction of the animals is very different to the 'gripping beast' style of the Vikings. Hunting – represented by the wild boar – was one of the Franks favourite activities and was a popular theme for decorations, especially amongst the elite.

Power and wealth

The Frankish empire

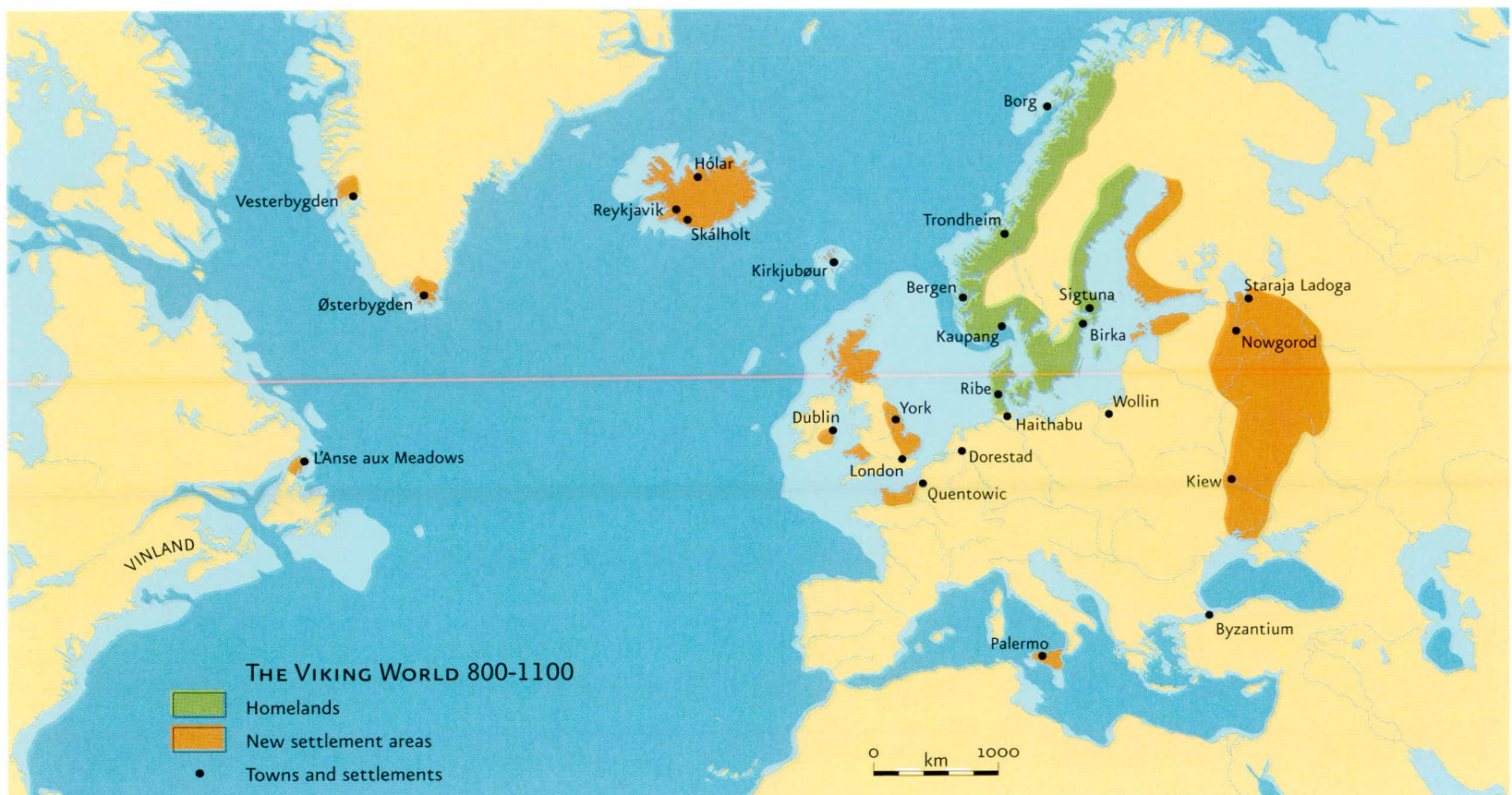
The areas of continental Europe raided and occasionally settled by the Vikings belonged largely to the Frankish Empire. This empire had reached its greatest extent under Charlemagne (768-814) and comprised large parts of Western Europe, roughly the area of the European Community in the 1960s. Charlemagne may be regarded as the earliest historical champion of the European ideal, and an annual prize is awarded in his name for contributions to this ideal.

The origins of the Frankish Empire

The Frankish Empire was the only survivor of the Germanic kingdoms that arose from the ruins of the Roman Empire. From the third century the Romans had found it increasingly difficult to keep out the Germanic peoples living on the far side of the Rhine and Danube. These tribes

originally came from Northern Europe and were therefore related to the ancestors of the Vikings, but they had spread out over Central and Eastern Europe from the eighth century B.C. Some of them were subjugated by the Romans around the beginning of the Christian era, but the rest were protected by the Rhine-Danube line, the northern frontier of the empire. From the late third century the Romans had to leave the defence of the Rhine to a Germanic tribe, the Franks, who settled in the Rhineland and in parts of what are now Belgium and the Netherlands. That provided relief for a time, but in c.375 the Germanic peoples in the east were forced on the move by the invasions of Asiatic peoples such as the Huns, in what is known as the Migration Age. In the same period the Roman Empire was weakened internally by quarrels and divisions. In 395 the empire finally fell apart into an eastern and a western half. The Western Roman Empire

The Viking domains in the ninth century.



Nineteenth-century sculpture of Charlemagne in the market place in Aachen.



would soon yield to the Germanic pressure. The victors established their own kingdoms in the conquered areas, those of the Vandals, Burgundians, East Goths and West Goths. The Franks ruled over the territory that they had once defended for the Romans, and east of the Rhine. The Western Roman emperor became a prisoner of the Germans who ruled in Italy. In 476 the last emperor was deposed. The Germanic rulers worshipped their old pagan gods or adhered to a deviant form of Christianity known as Arianism. That made their rule all the more repugnant to the conquered population,

who professed the official Catholic faith and were loyal to the Bishop of Rome – the Pope. When the Frankish king Chlodowech (Clovis) had himself baptised a Catholic in 496, he was very popular with the original Roman population and the Church, which represented an element of continuity in this confusing period of crumbling political structures. With this support, Clovis succeeded in taking the greater part of Gaul (France) from the Arian rulers. After his death in 511 his empire was divided between his four sons because a kingdom was regarded as a personal possession that must be divided among one's heirs. There were constant alliances and divisions among Clovis' descendants – the Merovingians. Brothers and cousins regularly fought each other, ruling over different parts of



Seventh-century gravestone of a Frankish warrior with a sword, found in Niederdollendorf. Rheinisches Landesmuseum, Bonn.



the Frankish Empire. These conflicts did not help in governing an already unstable region. There was no centre of government; the Roman infrastructure, such as the road network, was slowly decaying, the monetary economy had largely disappeared and the local administration was weak. The royal authority was exercised locally by 'comes' (counts), but the Merovingian kings had little control over them. The only reliable institution was the Church and the kings therefore richly endowed the churches and monasteries with goods.

The rise of the Carolingians

King Dagobert I (623-639) restored the unity of the empire in 632. He also tried to extend the empire northwards at the expense of the still heathen Frisians. This expansion was accompanied by the extension of Christianity. After Dagobert's death unity was lost again. Not a single member of the dynasty managed to achieve anything of permanent significance. Real power was exercised by a senior court official – the Major Domo (Mayor of the Palace). The descendants of Dagobert's Major Domo – Pepin of Landen (or the Elder) – managed to hold this position in different parts of the empire. Pepin of Heristal (or the Second), a grandson, succeeded in gaining

great authority at the end of the seventh century and resumed the expansionist policy to the north, which was again accompanied by missionary work. The English missionary Willibrord established himself in Utrecht under Pepin's protection. This post developed into a base of operations for missionary activities in an extensive region north and east of the Rhine. Here another English monk, Boniface, preached to Germanic tribes such as the Saxons, who still worshipped their old gods, not dissimilar to those of the Scandinavian peoples. As Archbishop of Mainz, Boniface provided the newly converted regions with an ecclesiastical structure and reorganised the existing Frankish Church in close consultation with the Major Domo Charles Martel.

This son of Pepin the Younger continued the latter's policy of a more powerful authority. He consolidated his father's conquests in the north and beat off an Arab attack in the south. At Poitiers the Arab advance, which had begun a century earlier after the death of Mohammed and which had taken the Arabs through North Africa and the Iberian peninsula, came to a halt in 732. The Islamic armies were pushed back over the Pyrenees. Charles Martel was succeeded as Major Domo after his death in 741 by his son Pepin the Short. The latter formally assumed

Dorestad Brooch

c.800

National Museum of Antiquities, Leiden inv.no. f 1978/1.1

This large brooch is one of the most famous archaeological finds of the Netherlands. It was found in 1969 in a well at Dorestad. The brooch is made of gold with an inlay of glass in different colours, almandine (a red semi-precious stone) and pearls along the rim. The inlay in cloisonné shows Christian motifs, such as two interwoven crosses. The style is typical of the work of ecclesiastical smiths from Burgundian workshops at the time of Charlemagne. This brooch was made around 800 A.D. and probably worn by a person of high status. This precious jewel was most likely hidden in the well to protect it from theft during the Viking attacks on Dorestad in the early ninth century.

Frankish and Carolingian royal family tree.



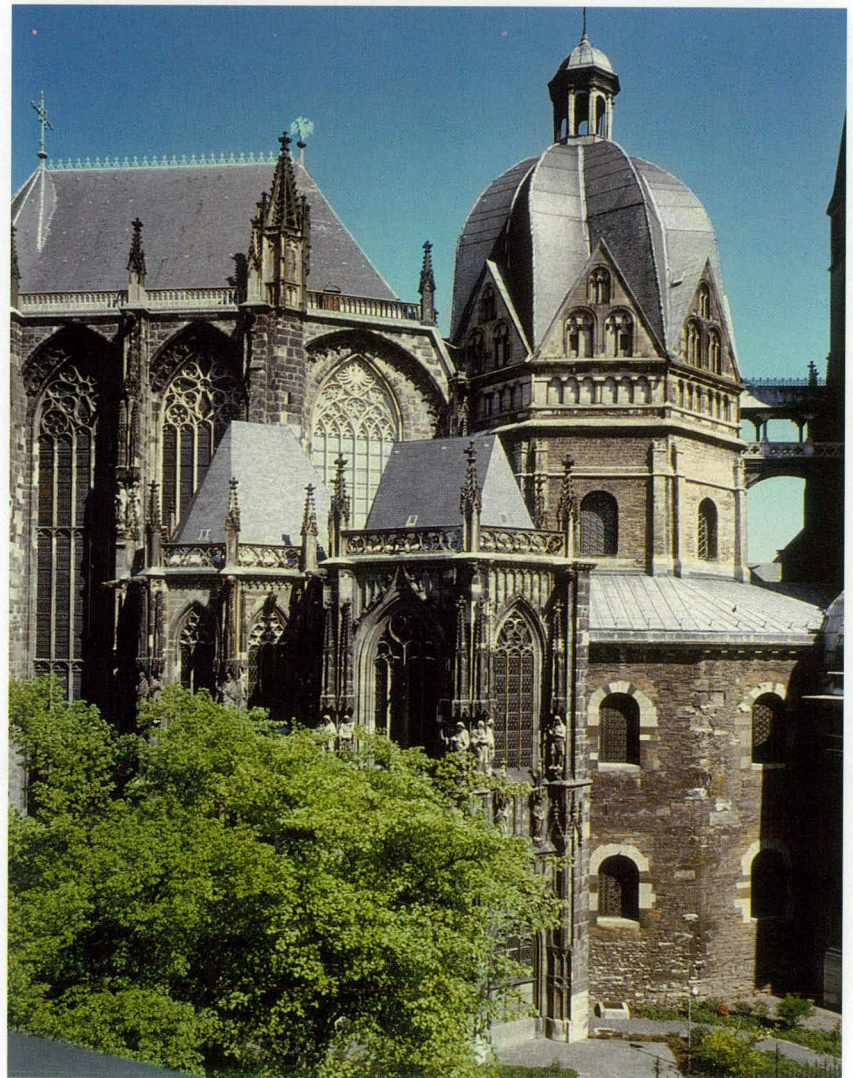
power ten years later. With the permission of the Pope he deposed the last Merovingian king, sent him to a monastery and ascended the throne. When Pepin died in 768, he followed the same policy of succession that had upset the Frankish empire under the Merovingians: his sons Charles and Carloman both succeeded him in a part of the empire. When Carloman died after only three years, Charles became sole ruler. The success that this brought him earned him the name Charlemagne or 'Charles the Great'.

The success of Charlemagne

Charlemagne energetically continued the expansion policy of his immediate predecessors. He conquered Brittany, Northern Spain, the northern half of Italy, the Alps and the territories of the Saxons (roughly what are now the German provinces of Lower Saxony, Bremen, Hamburg and Schleswig-Holstein). He pressed on to the southern margin of the Scandinavian territory, where he established the Danish March. Such marches were well-defended border areas. Where the territories had not yet been converted to Christianity, the conquest was accompanied by forced conversion. Charlemagne was consequently called the apostle with the sword. Cooperation with the Church, greatly improved by Charlemagne,

was essential in the organisation of the empire. Ecclesiastical authorities such as bishops and abbots performed key roles in the administration of the empire. They were more reliable than the counts, who increasingly ruled by inheritance over the counties into which the empire was divided. Moreover, they were bound by celibacy, and could thus not be succeeded by sons and were dependent for their appointment on the emperor. The administration of the empire rested on a personal network of power and trust between the emperor and those who exercised authority in his name. The bond was confirmed

Eighth-century Palace Chapel, now part of Aachen Cathedral.



Interior of the octagonal
Palace Chapel in Aachen.



by an oath of fealty to the emperor. Both the senior clergy and the counts came from prominent families, who were beginning to form a real hereditary aristocracy, which was characterised, *inter alia*, by extensive landownership.

The empire did not have a true centre of government in the sense of a modern capital. The king had various palaces (*Pfalzen*) dispersed over his empire and he moved from palace to palace with his court in order to be visibly present in

the whole of his empire. The core territory of the Frankish Empire under Charlemagne was the region between the Meuse and Rhine, with palaces such as Nijmegen, Ingelheim, Mainz and Aachen. The latter was Charlemagne's favourite winter quarter. The principal churchman in this core territory was the Archbishop of Cologne, who had authority over the bishops of Utrecht, Münster and Liège. Important abbeys in this region were those at Prüm in the Eifel and Kornelimünster near Aachen. The bond between king and church was literally crowned in the year 800. When Charlemagne visited Rome at Christmas, Pope Leo III crowned him Holy Roman Emperor. The title of Emperor had disappeared in the west after the deposition of the last West Roman emperor in 476. The intention of the coronation was to revive this role, much to the fury of the Byzantine court in Constantinople. The Byzantine (or East Roman) emperors regarded themselves as the only legitimate successors of the Roman Empire. Charlemagne regarded himself as a counterpart on equal standing and even made the Byzantine empress Irene an offer of marriage, which was contemptuously refused. Charlemagne increasingly improved the organisation of his empire on the Roman model. Charlemagne's administration and that of his

Limestone sarcophagus with linear decorations

700-750

excavation in St Salvator Church, Utrecht
Centraal Museum, Utrecht inv.no. 1680

This sarcophagus is made from limestone
from the Jura, probably in northern France.

Both the coffin and the lid are decorated
with linear motifs inscribed free hand.
Several similar coffins have survived in
Picardy. Limestone sarcophagi were used
for important burials and were transported
in their finished state to the Rhinelands
via the River Meuse; they have also been
found in Dorestad. This sarcophagus was

found during excavations in the St Salvator
Church on the Damplein and contains the
remains of two bodies. Considering the
beautiful coffin and the prominent burial
site, the people must have been of high
standing.



predecessors was beneficial for the economy. Successful expansion and the disappearance of internecine wars ensured that trade could flourish. Frisian merchants played a leading role in the navigation over the North Sea and the English Channel. Quentovic on the Channel coast and Dorestad on the Rhine were the principal seaports. The Rhine and the Meuse with their tributaries were the arteries for inland transport. Trading cities such as Dorestad, Cologne and Mainz flourished. Merchants could still utilise the existing Roman roads for land transport, although these had seriously decayed. The reintroduction of a monetary system was of great importance for the economy. The king had a monopoly on the minting of coins and the Carolingian denarius (penny) was a generally accepted currency even outside the Frankish empire. Even in England a penny was used that was equal in weight and size to the *denarius* and was used as a counterpart of the continental common currency. This Carolingian monetary policy contributed substantially to economic prosperity, which reached its height at the beginning of the ninth century. The Carolingian kings maintained diplomatic contacts via trade routes with rulers outside their empire, such as the Byzantine emperor and

the caliph of Baghdad. Jewish merchants, in particular, played an important role in this network. Charlemagne, for example, sent a delegation to Baghdad in 797 with the Jewish merchant Isaac as a guide and interpreter. Caliph Haroun-al-Rashid received the delegation in a friendly manner and sent them back to Aachen with the gift of a white elephant. This kind of exotic gift made a great impression. Charlemagne's father Pepin had received an organ as a gift from the Byzantine emperor Constantine V several decades earlier.

Decline of the empire

Upon Charlemagne's death his only surviving son Louis succeeded him. Louis was so effective in cultivating the traditional bond with the church that he has gone down in history as Louis the Pious. As a secular ruler he was clearly inferior to his father. The weak point of Frankish politics – the hereditary succession – had already resulted in serious problems during his lifetime. It was precisely this that he had wished to avoid by making his oldest son Lothaire joint emperor in 817 and his younger sons Pepin and Louis (the German) subordinate kings over smaller parts of the empire. It all went wrong a few years later when Louis the Pious married Judith of Bavaria four months after the death of his first wife.

Carolingian belt decorations

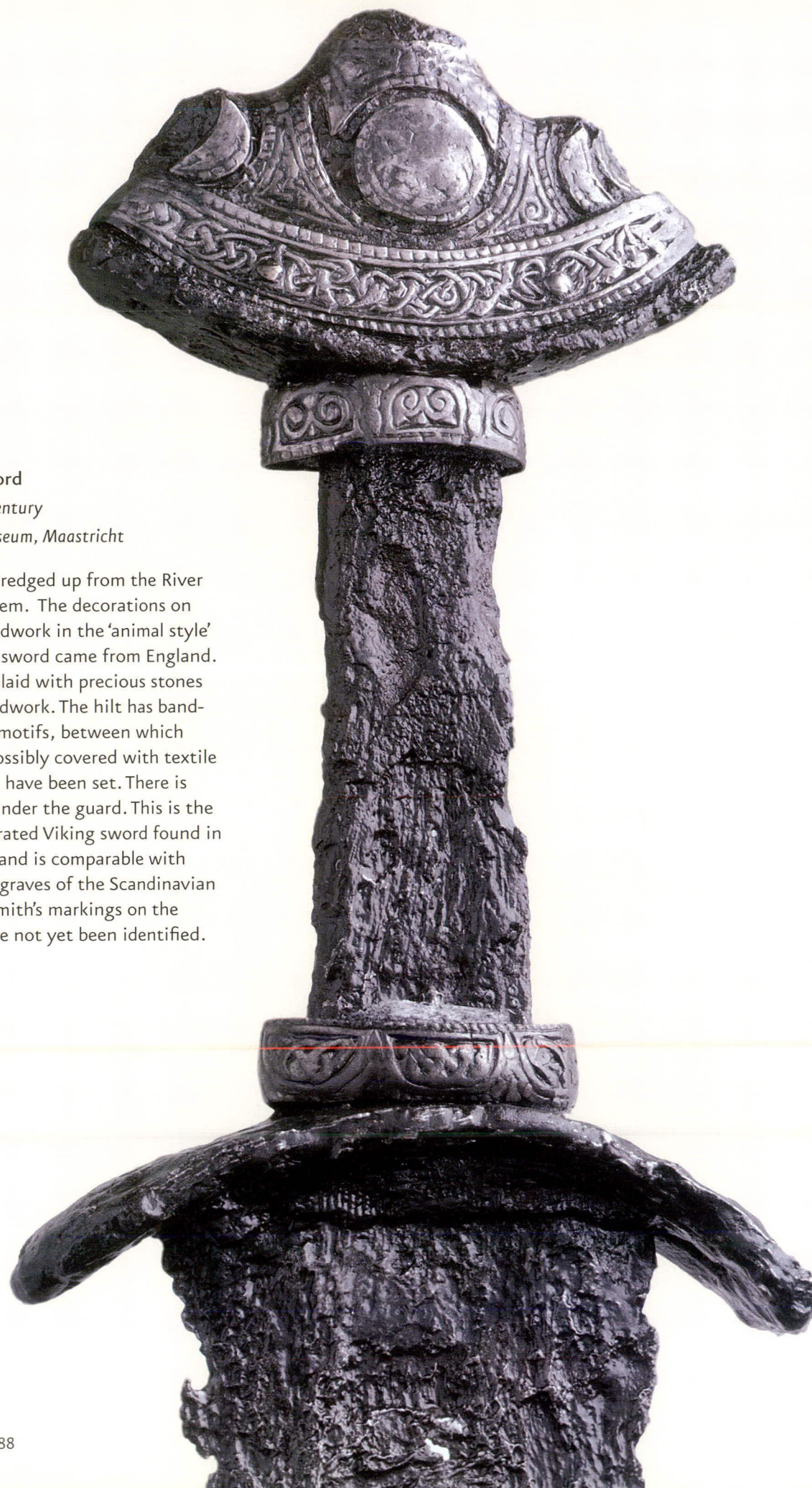
Bonnefantenmuseum, Maastricht

In this period wealth had to be portable, so money was often invested in order to decorate clothing. This was not only done by jewellery, but also by decorating components themselves. Belts were fitted with decorative buckles. Because people at the time were buried in their finest clothes, many belt decorations have been found. We can estimate the wealth of the owner from these objects. In the Netherlands these items have mainly been found around Maastricht, a wealthy area in the early Middle Ages.



Decorated sword
end of the 9th century
Bonnefantenmuseum, Maastricht

This sword was dredged up from the River Meuse near Wessem. The decorations on the hilt with bandwork in the 'animal style' suggest that the sword came from England. The pommel is inlaid with precious stones between the bandwork. The hilt has bandwork with floral motifs, between which wood or bone, possibly covered with textile or leather, would have been set. There is also decoration under the guard. This is the most richly decorated Viking sword found in the Netherlands and is comparable with swords from the graves of the Scandinavian elite. There are smith's markings on the blade, which have not yet been identified.



She wanted their baby son Charles (the Bald) to receive his share. The other sons, who hated their stepmother, revolted. For ten years, between 830 and 840, father and sons fought each other in a bitter struggle for power. Louis the Pious was taken prisoner several times and even deposed as emperor, but later restored. After the death of their father in 840 the brothers divided the empire under the Treaty of Verdun

(843). Charles the Bald received the west, Louis the German the east, while Lothaire received the expanded central strip, including the basin of the Rhine and Meuse, plus the title of emperor. But this did not put an end to the conflicts; the brothers and their children continued to wage war against each other, resulting in new divisions. Charles III the Fat, a son of Louis the German, succeeded in reuniting the empire again for a



Carolingian ivory plate showing Gregorius and three scribes. Kunsthistorisches Museum, Vienna.



short time in 885. The various kings' nicknames indicative their lack of significance: Louis the Stammerer, Charles the Simple, Louis the Child and Louis the Idler. Louis the Child (900-911) was

the last Carolingian in the eastern part of the empire, Louis the Idler (986-987) the last in the west. In both parts of the empire the leading nobles chose a new king, thus marking the final division of the Frankish empire into two realms, France in the west, the German empire in the east. The kings of the eastern empire, officially known as the Holy Roman Empire of the German Nation, could be crowned emperor by the pope. This did not always happen, however, nor was their kingship hereditary. The French kings, on the other hand, did succeed in becoming hereditary. The quarrels that had torn apart the Frankish Empire had catastrophic results for the defence of the empire against external enemies. They left the door wide open for the Vikings, who began to plunder the North Sea coasts from in the late eighth century onwards. Charlemagne and Louis the Pious had established an effective coastal defence system with fortifications, but following the outbreak of the conflicts between Louis and his sons in 830, this was undermined. Year after year the Scandinavian ships arrived, bringing death and destruction. Instead of putting up an effective resistance to the Vikings, the Carolingian kings bought them off and even used them in their power struggles. Charles the Fat was a champion in striking deals with the

Golden coin brooch

Centraal Museum, Utrecht

A golden coin is set in a rim and used as a brooch. Various jewels made from coins in the early Middle Ages have been found, often pendants or brooches containing late Roman coins. It seems that their value as jewellery was higher than their monetary value. They were costly items and belonged to the rich.





Frankish
brooch with re-used
Roman stone. Museo
Nazionale dell'Alto
Medioevo, Rome

Vikings and this led eventually to the failure of his attempt to restore the unity of the empire. After his death it were mainly the local counts who started to organise the resistance. From 911 the German kings managed to gain possession of the whole basin of the Rhine and Meuse and to establish their authority effectively there. The Vikings no longer saw any opportunities there and concentrated their raids on France and England. The variation in targets, the various parts of the Frankish Empire or the British Isles, had been the pattern since the first attack in 793. The raids were directed primarily at those areas where the political chaos was greatest and the defences therefore the least effective.

Carolingian culture

In the Carolingian empire, which was based firmly on faith, the monasteries and palaces were not only centres of power, but also of art and culture. Great abbeys such as Fulda, Reichenau, Tours, Reims, Auxerre, St. Denis, Sankt-Gallen, Corbie

and Laon were famous in the ninth century for their schools and libraries. The scriptoria of these monasteries systematically produced manuscripts which were essential for the ecclesiastical reforms and the promotion of education championed by the Carolingians. Book production was the most prominent of the Carolingian monasteries' achievements in the fields of education, learning and the organisation of knowledge. The texts, many of which were profane, such as legal texts, were corrected and copied in the scriptoria in order to obtain as reliable a version as possible.

Ninth-century bronze
equestrian sculpture
of an emperor.
Musée Carnavalet, Paris.





Cross-shaped brooch

Carolingian period

Viking Museum, Ribe

The Danish city of Ribe belonged to an extensive trade network, to which Frankish cities also belonged. Jewellery inlaid with glass or semi-precious stones from the Frankish empire reached Ribe even before the Viking raids. This small cross-shaped brooch may have reached the North as a commodity, a gift or as plunder; this cannot often be deduced from the object itself.



The books were used and circulated both within libraries and privately. Education became an important resource under Carolingian rule and a school system was introduced. Writings from antiquity were studied and new compendia were produced by scholars such as Alcuin, Theodulf and Einhard. Through libraries, education (based on the Seven Liberal Arts) and the production of texts as a framework there arose for the first time a definition of knowledge, centred on the Bible. There was a consolidation of disparate sources of knowledge and culture in this period. In this way the inheritance from antiquity was preserved and transformed, so that we now speak of the 'Carolingian Renaissance'. The flourishing of the monasteries with their schools and scriptoria was possible only with the protection of the Carolingian court and the privileges the rulers granted to the abbots. Their achievements in the fields of education, art and culture were made possible because the rulers saw the network of monasteries as a means of spreading both the faith and their own laws and ideas over the empire. The level of literacy achieved made it possible to distribute all kinds of agreements, rules and laws in writing. In this manner a society developed in which power, wealth and faith supported each other.

Sixth-century Buddha from India, found on Helgö (8000 kilometres from the place of origin). Museum of National Antiquities, Stockholm.

Permanent buildings were erected at many places in the Carolingian empire, often for the first time, including defence works, monastic complexes and stone palaces. These were decorated with murals and mosaics; illustrations for the decoration of churches and palaces have been preserved in the *Libri Carolingi*, a rare eighth-century theoretical art treatise. The Palace Chapel at Aachen, which now forms part of Aachen Cathedral, gives an idea of the impressive palace complexes that were in use at the end of the eighth century. The palace at Aachen comprised of many buildings and was very much inspired



by the groups of Roman buildings which still existed in many places at this time. Einhard, Charlemagne's biographer, reports, for example, that baths fed by hot springs formed part of the palace at Aachen; the largest bath could hold 100 men. Very little has been preserved of the decoration of the palaces, but written sources do give an idea, such as the description of the paintings in the palace at Ingelheim, which were executed under Louis the Pious. In the church, scenes from the Old Testament were illustrated, particularly the stories of David and Solomon and from the New Testament, including the Passion of Christ.

Profane subjects were also depicted, such as good kings from antiquity and contemporary history in the form of pictures of members of the Carolingian dynasty and their triumphs. Only one freestanding sculpture from the Carolingian period has been preserved, a bronze depiction of an emperor on horseback. It almost certainly dates from the ninth century, was inspired by Roman examples and possibly represents Charles Martel. The vast majority of Carolingian art consists of book illumination and applied art such as ivory carvings and gold and silver work. Carolingian art was highly portable, an attribute that, unintentionally, would prove useful to the Vikings.

Trade in the Rhineland

The wealth of the Carolingian region was both a consequence of, and a stimulus for, an intensive trading network that extended over the whole of Europe. Because these European trading contacts in their turn often led to more distant contacts, goods also reached Western and Northern Europe from North Africa and the East. This was true both of the Rhineland and of Scandinavia. Arab coins have been found in both regions, pointing to a chain of contact with the Orient. Reports of exotic curiosities highlight the extent of the



Elephant
illustrated in a
tenth-century
manuscript.
National Library
of France, Paris.

networks of both the Franks and the Vikings. The above mentioned gift of Abul Abbas, the white elephant, from Haroun el-Rashid, the caliph of Baghdad to Charlemagne in 802 is the best known of these. A bronze image of a Buddha from North India dating from the sixth or seventh century has been excavated at Helgö in Sweden. This does not mean that Swedish Vikings travelled to India, but rather that they had contacts that far. Once in Scandinavian hands, the Buddha was used as a 'pocket god', as evinced by the leather straps around its neck and arm. In this way, not only were the objects themselves displaced, but their meaning was also transformed. The elephant Charlemagne received probably underwent a

similar change of meaning. It seems to have been received in Aachen as a curiosity, whereas Haroun el-Rashid had clearly intended it as a symbol of Charlemagne's subordinate position.

Within the Frankish empire, the Rhineland was the centre of trade, partly because it was the centre of power. The largest trading city in the region was Dorestad, not far from Utrecht in the Netherlands. Haithabu in Southern Denmark, now situated near Schleswig in North Germany, had a similar role. From the eighth to the tenth centuries these cities operated as part of a network of trading centres, which included Kaupang in Norway, Birka in Sweden, Ribe and Haithabu in Denmark, Quentovic in France and York and London in England. This trade network therefore covered both the Viking world and the Frankish empire. Despite their location in different spheres of influence, Haithabu and Dorestad displayed similarities. This applies not only to their pattern of trade and settlement, but also to their subsequent history. Both cities were amongst the largest in the Carolingian period, and both later disappeared (Dorestad after the end of the ninth century, Haithabu after the fire in 1066). Neither city experienced any later settlements so that, when they were excavated in the nineteenth and

The trade network in the Viking period.





Roman gem

3rd century, re-used in the 9th century

Viking Museum, Ribe

Gems, semi-precious stones with incised decoration from the Roman period were re-used in the ninth century in signet rings

and in the bindings of books. Often little or no attention was paid to the decoration. In Ribe various gems from the third century have been found, which must have been traded at the market. They are decorated with Roman gods; the red cornelian (quartz) shows a naked Apollo leaning against a pillar

with a sprig of laurel in his left hand. The stones must have been brought to Ribe, because this never was Roman territory. They, along with the Roman coins and fragment of a bronze sculpture, probably originated from ransacked Roman graves in the Rhineland.



twentieth centuries only early mediaeval remains were found. This is also true of Quentovic and Birka and it is possible that our picture of the urban network has been distorted by the discovery of these complete cities. Ribe, York and Dublin, for example, have only much later been recognised as fitting into this network, because the early mediaeval settlements there were completely buried under later buildings. It is only in recent decades that we have been able to examine small fragments of the trading centres of the Viking period during archaeological investigations in these city centres.

The trading city of Haithabu

The trading centres of the period were inland ports with an open connection to the sea. Such ports generally arose at the crossing of trade routes – roads and waterways. Haithabu is a good example. This town was situated in what is now North Germany, but then belonged to the Danish kingdom. The settlement was situated at a very strategic point: some 40 km from the Baltic traffic, 16 km from the navigable Treene and Eider and only a couple of kilometres west of the military highway from Jutland to the south. Haithabu lay within the protection of the Danewerk, a defence line of earthen ramparts on

the southern frontier of the Danish kingdom, but it was also connected with the surrounding territories. The city was accessible to ships and lay on the trading route, but was also defensible. This combination is evident in the shape of the settlement and the port. The built-up area extended over 24 ha within a semicircular rampart with towers, was protected on the side of the hinterland, but open to the water. The port was provided with a protecting palisade in the port basin, but also with a series of pontoon bridges to facilitate loading and discharging. Even the character of the port shows this duality: Haithabu was not only the most important trading port of the period and the region, but also the primary naval port of the Danish king.

The extensive excavations in Haithabu gave a good impression of the commodities traded in the Rhineland. There was walrus ivory from the North Sea, iron bars from Sweden, soapstone and whetstones from Norway, glasswork and pottery from along the Rhine, millstones from the Eifel, pinewood barrels from the Upper Rhine, rock crystal and cornelian beads from the Black Sea coast, mercury from Spain, pitch and amber from the Baltic region and jewellery and ornamental mountings from Ireland, Gotland and the Baltic countries. Other goods sold included

Brooches

8th-10th century

Haithabu

Viking Museum, Haithabu, Stiftung Schleswig-Holsteinische Landesmuseen

Objects from one culture often take on a new meaning in another culture. Carolingian metal and glass objects were often melted down or re-used by the Vikings to make new objects that fitted local tastes. The Vikings also copied expensive foreign items using their own techniques. These finds from Haithabu show that jewellery was also employed in this pragmatic fashion: a Carolingian brooch has been transformed into a Scandinavian cloverleaf brooch. These brooches were themselves Viking imitations of Carolingian brooches. Moulds suggest that they were made in Haithabu.





Mosaic stones

8th century

Italy

Viking Museum, Ribe

These coloured square stones found in Ribe were probably produced in Italy, possibly near Venice where much glass and mosaic was produced. The stones were intended for floor or wall mosaics in churches. In Ribe large amounts of them ended up in the workshops where glass beads were made.

Glass beads

8th century

Viking Museum, Ribe

In Ribe, mosaic stones were used as single-coloured bases for beads. The bead makers were specialised in multi-coloured beads made by winding glass threads around each other, sometimes in very complex patterns as in the so-called 'mosaic beads'. Large amounts of glass remnants have been found in Ribe, which show that luxurious beads were produced here on a massive scale; the beads, like amber, were an important export product.

hides and skins, linen, salt, honey, wax and wine, as well as salt fish and other conserved provisions. There was also a lucrative trade in slaves.

Haithabu served as a transit port for products from Southern and Central Europe and the trade radiated mainly to the north and east. Haithabu was as a point of contact for both trade and warfare between the Franks and the Vikings. Dorestad served a similar function as a trading intersection between the Carolingian empire and the northern and eastern Viking territories. Haithabu and Dorestad were important for each other and the range of goods neatly corresponds. Both were particularly oriented towards long-distance trade, but were also regional market centres. This kind of market could exist because a large part of the population had a need for new, different or luxury goods that were not produced locally. The trading system usually operated as follows: a merchant bought (or built up) a stock, after which he moved and sold part of his stock at the next place and bought local goods. He repeated this a couple of times, until all the original stock had been sold at the final destination and the merchant retained only the things he had bought. Many merchants were itinerant, which meant that craftsmen could specialise at

various places and build up a stock. In this way market places arose at the junctions of trade routes and later became settlements.

It was customary at the time for a merchant to travel with his goods; freight transport was not yet in the hands of specialists. To facilitate trade, merchants used agreed units such as standard barrels and chests, which were often reused after being emptied; in Haithabu transport chests were found which had been used as coffins. Payment was usually in cash. At many levels of society in Western and Central Europe the coins issued by the king were regarded as a guaranteed unit of payment, so that it was sufficient to count out the coins. In areas where other coins were in circulation and within regions or social classes where coins were rarely used, all the coins were weighed like other silver. The weight of the silver then determined the price. In order to obtain small sums, coins and silver objects such as jewellery were cut into pieces (*hacksilver*). Scales and weights were therefore an important part of a merchant's equipment. Parts of scales have been found in Dorestad and coins and weights have been found under the quays in the port at Haithabu, which suggests that payment was made as soon as the goods were discharged. The king also benefited from a successful trade. As

Weighing scales

Sandby on Öl

Museum of National Antiquities, Stockholm

inv.no. 6818:1859:563

During the Viking period payment was made with weighed amounts of precious metals, especially silver in the form of jewellery or ingots. Coins were also literally 'worth their weight' in silver or gold. Payments in silver therefore had to be weighed against fixed weights and traders often had a special case with scales and a set of weights. Fragments of scales and weights of various sizes have been found in all trade centres. This balance with two shallow dishes was excavated in Sweden and is almost complete. Fragments of scales and weights have also been found in the vicinity of the harbours of Haithabu and Dorestad.



ruler, he was also market lord and levied a toll on all the goods sold or passing through his domain. The toll was usually paid in coins. It appears that weighed silver was most practical for traders because it could be used everywhere, whereas minted money was predominantly used by the king and the nobility.

Towns and monasteries

The trading city of Dorestad

Dorestad, on the site of what is now Wijk bij Duurstede, near Utrecht, became an important port and market place in the seventh and eighth

centuries because of its favourable location on the waterways. Nearly fifty hectares of Dorestad were excavated in the course of the nineteenth and twentieth centuries, one of the largest archaeological investigations ever undertaken. This yielded an almost complete plan of the town and port; the population of Dorestad is estimated at 2500 around the year 800. The thousands of finds provide a picture of the city's wealth and area of influence: jewellery, belt mountings, buckles, keys, tweezers, combs, spurs, horseshoes, spoons, knives, axes, tools, styluses, glassware, beads, amulets, spindle whorls, needles, whetstones, coin punches, crucibles, whistles and playing

J.H. Isings, School plate from 1927 showing the Vikings approaching Dorestad.





Three Dorestad coins

8th century

Geld- en Bankmuseum, Utrecht

Dorestad had its own mint. That is evinced by the lead discs with coin imprints, weights and, of course, coins that have been found in the city. The inscription on the reverse shows where they were made: 'Dorestat[us]'. The Dorestad coins ended up all over Europe through trade. They had a set value, which made counterfeit worthwhile.



A great diversity of goods was traded in Dorestad: from the Frankish territories originated costly jewellery and weapons, luxury glassware, high-quality pottery, manuscripts, spices imported via the Mediterranean Sea, gold brocade, Chinese silk, Frisian cloth and exotic shells. Rhine wine was one of the most luxurious items which the Frankish empire had to offer; the longish wine barrels were often later used as wells and, in this way, have been recovered. The contacts between Dorestad and the Rhineland can be clearly deduced from archaeology, although more at the level of objects of daily use, such as millstones from the Eifel and pottery from the Vorgebirge near Cologne. Unusual imported goods such as limestone sarcophagi indicate relations with the central Meuse region. What England and Scandinavia had to offer is less

A collection of 20 numbered archaeological artifacts, likely from a prehistoric site, arranged in a grid-like fashion. The items include: 1. A circular pendant with a central triangular motif. 2. A small, dark, conical object. 3. A long, cylindrical object with a textured surface. 4. A small, dark, irregular object. 5. A small, dark, irregular object. 6. A small, dark, irregular object. 7. A small, dark, irregular object. 8. A small, dark, irregular object. 9. A small, dark, irregular object. 10. A small, dark, irregular object. 11. A small, dark, irregular object. 12. A small, dark, irregular object. 13. A small, dark, irregular object. 14. A small, dark, irregular object. 15. A small, dark, irregular object. 16. A small, dark, irregular object. 17. A small, dark, irregular object. 18. A small, dark, irregular object. 19. A small, dark, irregular object. 20. A small, dark, irregular object.

Thousands of everyday objects have been found during the excavations over many years on the site of Dorestad, near the

been found. A remarkable number of objects can be connected with Dorestad's function as a harbour, market and trading centre: a boathook with which boats would be manoeuvre, weights for weighing gold, fragments of luxuriously decorated glass and products from abroad such as the large amphora, shipped from the Rhinelands.



Impression of the market town of Dorestad on the eve of the Viking raids.
Ill. Kelvin Wilson.

clear, but it certainly included slaves, fur, walrus ivory and amber.

Dorestad had progressed beyond the stage of inter-regional fair in two respects. The trading season lasted a particularly long time there, i.e., the whole of the sailing season – from April to October. Moreover there were traders in Dorestad continuously, which was typical of a maritime market, where trade continued for as long as the trading place was accessible and traders remained for as long as they had goods to sell. Because the season in Dorestad was so long, traders settled in the city and local crafts-

men were able to specialise. The winter season was used to build up stocks and obviously also to carry out works on the port and the quays where the market was held.

This Dorestad, a permanent international fair, is also what the Vikings knew. Scandinavians were permanent visitors to the fair at Dorestad, so that Danish and Swedish ships knew the route along the North Sea coasts and along the broad rivers as far as this wealthy city, where all kinds of luxury goods were available in plenty. Some Scandinavian goods were known to the inhabitants of Dorestad long before the attacks. In



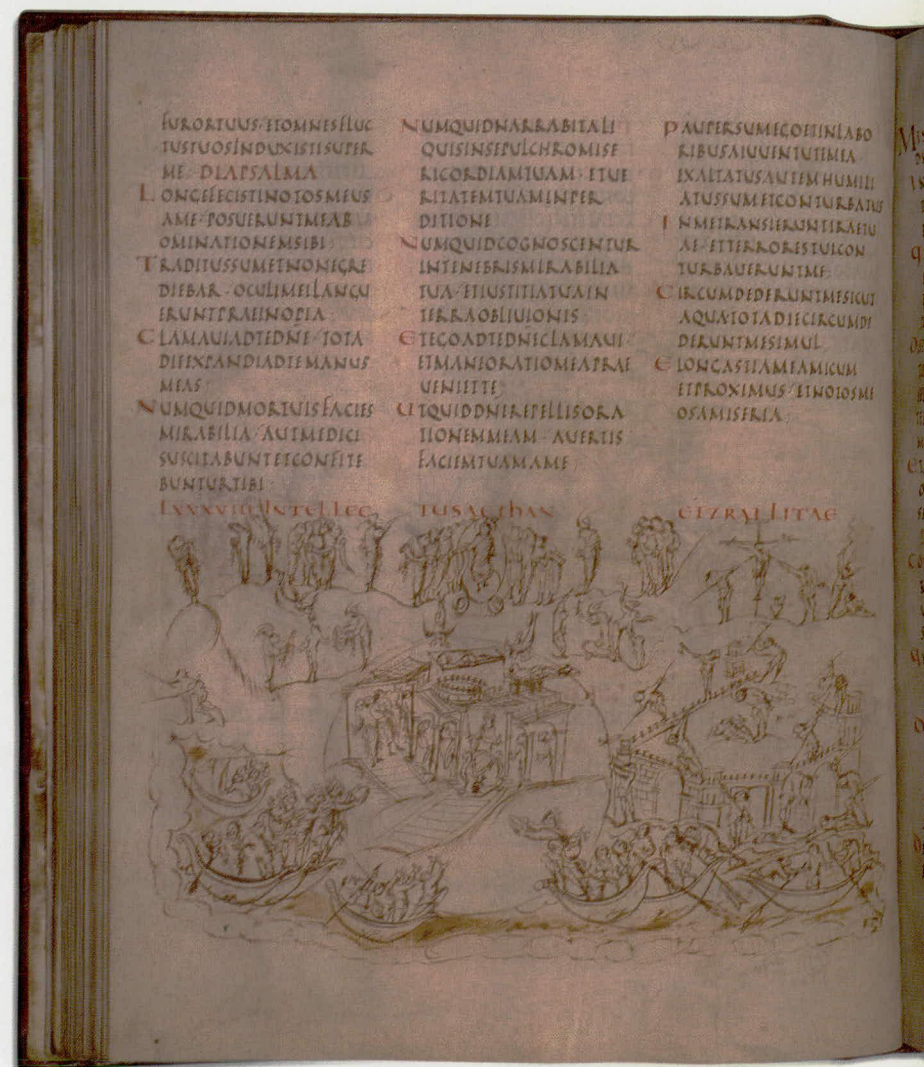
their turn, some Vikings may have bought their sword blades and other objects in Dorestad. Scandinavian traders had seen the wealth of Dorestad with their own eyes, which may have set the Vikings on the trail. They knew where they had to go and how they could get there: they knew when the rivers were navigable, the best places to moor, where the fortifications were and when the booty was piled highest. It is therefore hardly surprising that Dorestad was attacked by Vikings, for the first time in 834. What is surprising is that the attackers returned nearly every year from 834 to 863. Evidently,

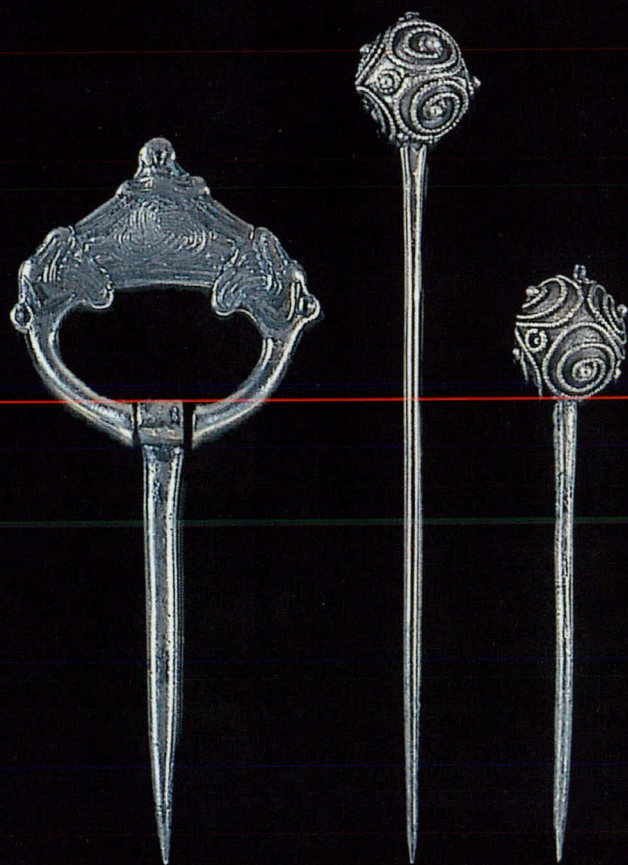
there was something to be taken each time. Dorestad was destroyed and rebuilt four times between 834 and 837 alone.

The Monastery of Prüm

During the Viking raids of 881/882, which were the most destructive for the Rhineland, not only were the royal seats of Cologne and Aachen hit, but also the greatest abbey of the empire, the St. Salvator abbey of Prüm in the Eifel. This had been founded in 721 by a Frankish noblewoman, who was related to the then king. The history of the abbey is therefore closely tied to that of the Frankish royal house. In 767 King Pepin donated

Viking ships besieging a walled city, illustrated in the Utrecht Psalter, c.830. University Library, Utrecht.





a valuable relic to the monastery, namely one of Christ's sandals, which is still preserved there. In 799, in the presence of Emperor Charlemagne, Pope Leo III dedicated the rebuilt abbey church, known as the 'golden church'. Lothaire I withdrew into the monastery in 855 to die there; he is buried in the choir of the church. His son, Lothaire II, granted the abbey minting and market rights. Partly because of these royal benefits, the monastery of Prüm developed into a flourishing centre in the eighth and ninth centuries. The abbey possessed a large area of cultivable land, a monastic school with a high reputation and was noteworthy in the ecclesiastical sphere for its missionary work and founding of churches. For the Carolingians, this 'imperial abbey' lay at the centre of their territory and they used it as a power base and as a religious, social and cultural centre.

Two important monks from this monastic community are known from their writings. Wandalbert (who died in 870) left behind a biography of the 'Rhine saint' St. Goar and a calendar with notes on hunting and agriculture. The historian Regino (abbot of Prüm from 892 to 899), who died in 915, wrote a chronicle covering the period up to 906. This *Chronicon* is an exceptional piece

of historiography for the time. Regino of Prüm's chronicle is known not least for its eyewitness report of the Viking attacks in the Rhineland, including the destructive attacks on the rich monastery itself in 882 and 892. Together with the annals of St. Bertin of St. Omer this is one of the few contemporary descriptions of the raids. In 893, after the second destruction of the monastery, the extensive possessions of the abbey were recorded under the direction of Regino in the *Prümer Urbar*, which has survived in a later copy. All the claims of the abbey to lost land and churches were recorded in this document and the *Urbar* ('land register') is also a reflection of the destruction wrought by the Vikings.

The enormous possessions of the abbey of Prüm, as recorded in the *Urbar*, extended in the ninth century, in the Meuse and Rhineland, from the IJssel to the Neckar, and it also had properties in the county of Laon and in Brittany. From its very foundation the monastery owned extensive forests in the vicinity of Bitburg and Trier and in the Moselle valley. The forest of the abbey, which extended as far as the Our, was not economically used until after 893. Further properties were situated in the northern Eifel and on the Rhine at St. Goar, Duisburg, Arnhem and Deventer. Some

Gold and silver Viking jewellery

9th-10th century

Dorestad

National Museum of Antiquities, Leiden,

inv.nos. f 1928/12.1, WD 680a/680b, WD 677/678, f 1940/12.1 and f 1940/12.2

Viking finds in the Netherlands are rare. Most of the jewellery that originated in Scandinavia, but was used in the Netherlands, has been found in excavations at Dorestad. They probably ended up there as merchandise or gifts. The most beautiful

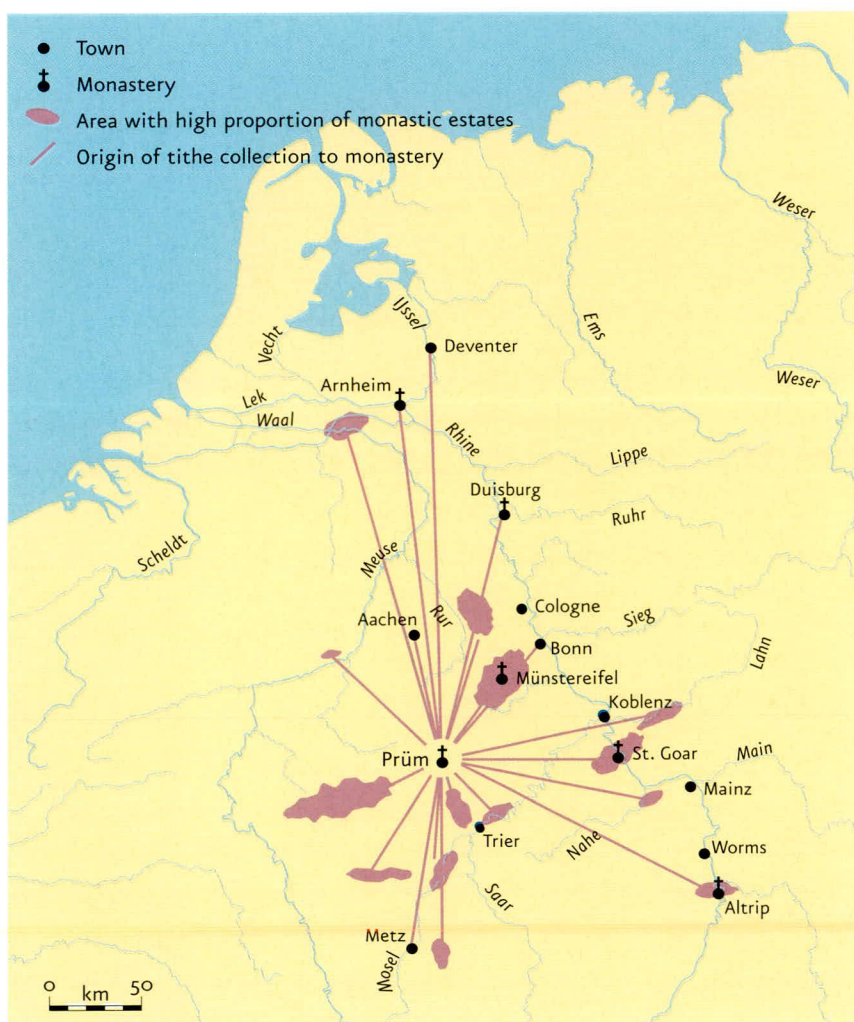
example is this golden braided bracelet; the technique of braiding the gold or silver thread is characteristic for Viking goldsmiths of the ninth and tenth centuries.

It is not always certain that jewellery in the Viking style was made in Scandinavia. The goldsmiths at Dorestad could have imitated the Danish bracelets, hairpins and clasps. This is suggested by the pin brooch, which cannot be used as intended: Danish pin brooches have a loose pin, which articulates at the rim. The brooch was

fitted by pushing the pin through the opening and then turning the ring slightly so that the ring was fastened behind the pin. This cannot be done with the Dorestad brooch and it is actually not wearable. The two heavy silver bracelets decorated with geometric patterns and the clasp with animal motifs are also possibly imitations. The two hairpins with spherical heads were almost certainly imported from the North – they are decorated with thin overlapping strings of pearls, a very specialised technique that was not practiced in the Netherlands.

The possessions of the
abbey of Prüm.

of these were donated to the monastery through aristocratic family ties. These monastic domains in the Rhineland played a important role in the governing of this region by the Carolingians. The various 'villae' in the Ardennes, Luxembourg



and in the land of the Meuse must have been added to the monastery's properties for the same reason. Good organisation was vital for the abbey's vast estates. The land was divided into more than 120 portions, each of which had a centre (often a religious one), where goods could be brought together. The management of each portion of estate was entrusted to a liege lord or family, which was dependent on the abbey. Prüm had at least 400 confidants distributed over its domains.

Towards the end of the ninth century some 100 churches fell under the control of the abbey of Prüm. These village and monastic churches were scattered over the bishoprics of Trier, Cologne, Liège, Utrecht, Mainz, Worms, Spier and Laon. From these religious institutions Prüm controlled the spiritual and social life of its estates. The schools and scriptoria had extensive contacts; manuscripts were copied and illuminated and ideas adopted. Thanks to this extensive network, the abbey of Prüm was a storehouse of art and culture and its collection of manuscripts was famous in the ninth century; unfortunately nothing remains of this. The writings of Wandalbert and Regino of Prüm were preserved because they were loaned to other centres, where they were copied. After the Viking raids, only a tenth



Dorestad coins showing ships

*Museum of National Antiquities and Royal Coin Cabinet
Museum, Stockholm*

Coins were minted under the auspices of a ruler usually for a short period. They could travel enormous distances through trade. They were therefore an ideal form of propaganda: the quickest way of distributing a portrait of a new king or emperor to the farthest corners of his domain was on a coin. The city where the coin was minted also promoted itself through the medium, often with its coat of arms or other symbol. Some of the coins minted in Dorestad bear the image of a trading ship as a symbol of the function and prosperity of the harbour town. Dorestad coins of the 'ship type' have been found as far afield as Sweden.

of the monastic library of the imperial abbey in the Eifel survived and that was lost during transportation from Prüm to Malmédy in 1511.

Splendid manuscripts

Amongst the Vikings' loot were many fragments of manuscripts, particularly parts of decorated bindings. The Vikings timing was just right. After 700, book illumination and the production of bindings had slowly developed to a high level in Western Europe. From about 800 this development received an unprecedented impulse from Charlemagne, who greatly encouraged the copying and illumination of texts. As a result, in the ninth century there were many magnificently illuminated books in the monasteries and churches, from where the Vikings stole them. Although manuscripts were also illuminated in late antiquity, this art did not develop on a serious scale until after the stabilisation of Europe, when people were again living in permanent settlements and the monastic culture had assumed a permanent form. The books were produced in a Christian context and therefore not until areas had undergone conversion. The earliest Mediaeval manuscripts originate from monastic centres such as Lindisfarne in England. The

Lindisfarne Gospels from c. 698, now in the British Library in London, is one of the oldest surviving Western manuscripts. Only four pages of this manuscript are illuminated, namely, the opening pages of the four gospels. On these pages the initial letter is always enlarged and decorated with various coloured patterns. This style of interlaced lines and interwoven figures can also be seen in wood carving and gold and silverwork, e.g., on buckles, belt mounts and sword hilts. Despite their high degree of abstraction, because animal heads, legs and tails are discernible this style is usually referred to as 'zoomorphic decoration'.

Centres of art

A century later, book illumination reached its heyday in the circles around the imperial seat of Charlemagne. The emperor expressly encouraged the copying of texts as part of his conversion offensive and his imperial ambitions. Besides the important liturgical texts such as gospels, texts were copied from classical antiquity. These are very important for our knowledge of these classical texts because most of the original texts, still readily available at the time of Charlemagne, have not been preserved. We know these Latin texts only because they were transcribed in the

Decorated capital from
the Lindisfarne Gospels.
British Library, London.

on ginnad godspall epe matheus

Incipit euangelii um secundum mattheum

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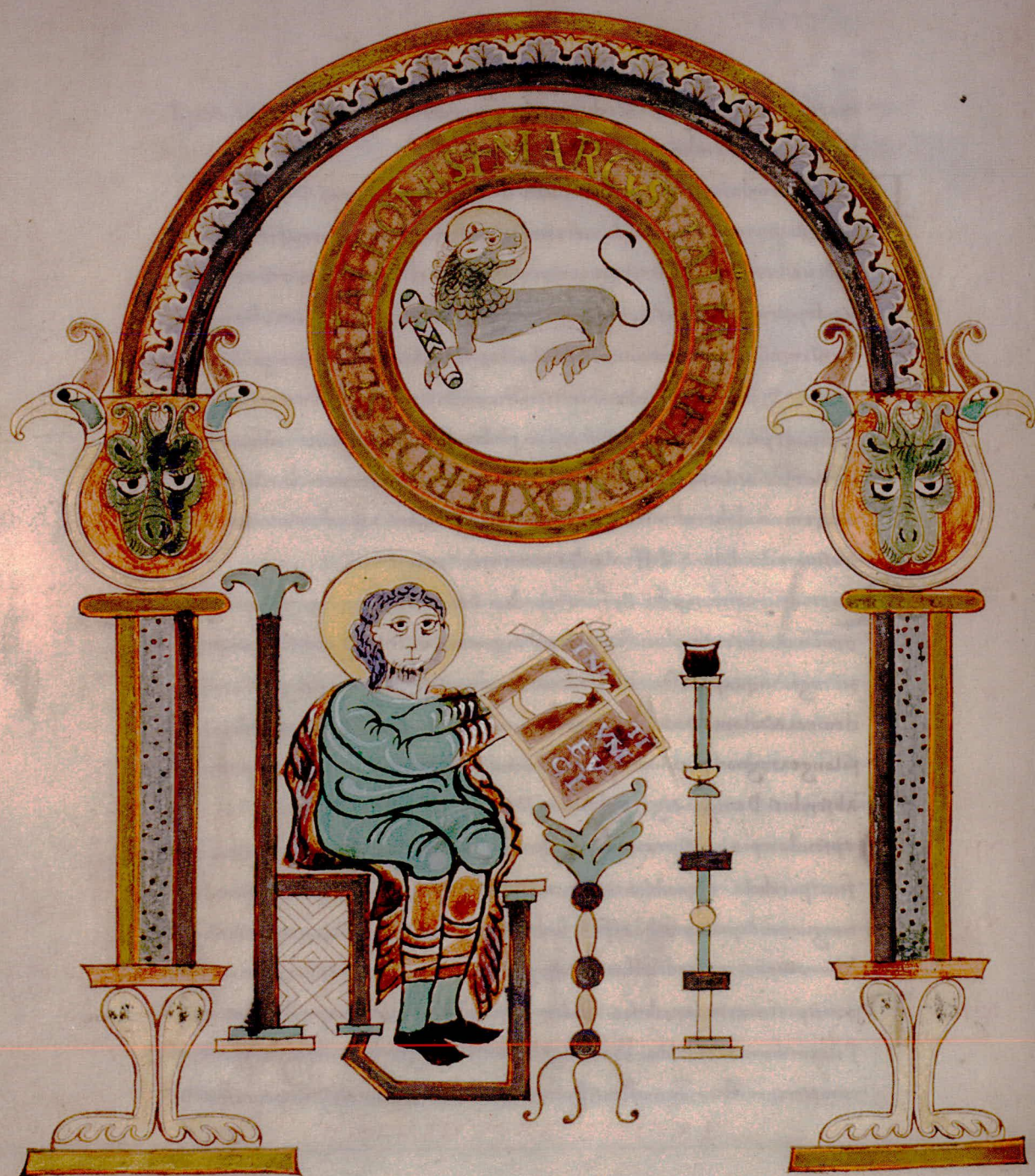
EXXFOXBONATA

moden luy

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Carolingian period. This means that our knowledge of Latin literature has been partly determined by the selection that was made from what was available in the period around 800. Only what was then considered important enough to transcribe passed through this "Carolingian bottleneck" and continued to be known in later times. Not only the content, but also our impression of the appearance of classical, Christian and Jewish texts from antiquity has been largely determined by the copies made of them by Carolingian monastic scribes. Because the Renaissance humanists based their script on the Carolingian script and the first printers took as their model these humanist manuscripts, the Carolingian creations have even largely determined the appearance of our books today.

There were a number of centres of book illumination at this time, for example, Ireland, Northern France, Aachen and the region around Trier and Echternach. Only a handful of manuscripts or fragments has survived from each of these centres, but the different styles are easily recognisable, so that the origin of most of the surviving books can be determined. Nearly all the books known from the eighth and ninth centuries were gospels, where only the beginning of a gospel

was illuminated. This decoration was therefore intended in the first place to enable the reader to find the beginning of the text. They are characterised by rather stiff depictions of people frontally in sparse surroundings. Animal ornament is worked into the frames and borders. The most frequent decoration at the beginning of a gospel is a depiction of the relevant evangelist writing his text. He is often accompanied by his symbol: St. Mark by a lion, St. Luke by a cow, St. John by an eagle and St. Matthew by a human figure. The finest examples of book illumination from this period are probably the manuscripts with full-page illustrations that were made in around 800 in the palace school of Charlemagne in Aachen. Here, too, mainly gospels were produced, usually with a small number of illustrations of, for example, the evangelists or the figure of Christ. In a frame of zoomorphic ornament, dignified figures look out at the reader. In the Aachen manuscripts they are often seated on a throne in an architectural setting, the perspective of which is unrealistic. The background has been filled in, often with many series of ornaments into which letters have been worked. A striking feature is the frequent and rich use of gold leaf. The books from the Aachen Palace School were ordered and bought by great churches and

Mark the Evangelist
from a book of gospels,
northern France,
c.860-880. Cathedral
University, Cologne.

monasteries in the Carolingian empire. They are still among the world's most costly manuscripts.

Everything of value...

It is all the more distressing that many of these books were lost through the action of the Vikings.

As we have said, they were especially attracted to these books, but not for their content or the illuminated plates. They were interested in the valuable bindings. Usually gold and silver mounts and jewels were ripped from the covers, after which the manuscripts were thrown away. This was an unforgivable barbarian deed, according to the monks who reported it, but understandable from the Vikings' point of view. They came from a society that had not been converted to Christianity and was therefore scarcely literate. Texts were of little value to them; they could not read them because they did not speak Latin. In their society power and status were closely tied to the display of personal, and thus portable, wealth. Status could be read mainly from decorated weapons, belt mounts, precious stones, and from 'money': purses filled with gold and silver, the weight of which determined the value. Gold, silver and precious stones were the most valuable things that the Vikings knew and those were precisely the items they stole. They would probably have ignored manuscripts in a simple leather binding and then text and illumination would have been spared. One could say that the magnificence of the Carolingian books was their undoing.



Illustration of Christ on the throne, the 'Maiestas Domini' in the Godescalc Gospel from 783. National Library of France, Paris.

Wine and weapons

Viking raids

The first Viking raid occurred in 793 on the island of Lindisfarne off the northeast coast of England. The booty must have whetted the Vikings' appetite because this journey became the first of many annual crossings from Scandinavia to the wealthy coasts of Western Europe. Here the Vikings began by raiding easily accessible, undefended settlements on islands and along the coast. However, it was not long before they ventured along the rivers into the surrounding countryside, undoubtedly because there was more to be had there. The Vikings enjoyed free play in places where defences were non-existent. Towns were often protected by ramparts and palaces had guards, but it was very unusual to find any defences at all round churches and monasteries. Commercial ports were also easy targets, as they needed to be open to admit ships for trading. It is important to realise that up until the arrival

of the Vikings there had never been any fear of attacks from the sea. A town such as Haithabu had ramparts towards the hinterland, which was traditionally the direction from which to expect danger, so the port proved to be easy prey.

In the first half of the ninth century the raids were mostly a seasonal activity and the Viking ships would return home before winter set in. By the second half of the ninth century groups of Vikings started to spend the winter months in



List of Viking raids/attacks:

- 793 Lindisfarne
- 795 Dublin
- 820 Flanders and Seine estuary
- 834 Dorestad (first time), then nearly annually
- 834 Start of annual raids in Western Europe
- 835 Isle of Sheppey in the Thames
- 835 Start of annual raids in England
- 837 Domburg
- 842 Quentovic
- 843 Nantes
- 844 Seville
- 845 Paris and Hamburg
- 857 Utrecht and Paris
- 859-862 Towns along the Mediterranean coast
- 860 Raid on Constantinople
- 861 Paris
- 862 Cologne
- 863 Xanten
- 866 York
- 878-888 The 'great army' destroys parts of the Frankish kingdom
- 881 Deventer, Zutphen, Aachen, Cologne, Prüm, Bonn, Mainz, Metz (among other places)
- 882 Trier
- 886 Paris
- 917 Dublin
- 992-1017 Annual raids on England by Danish and Norse Vikings

areas where they gained a foothold on, mainly river islands. They would build winter camps (using the tents from on board) or temporary settlements, and in spring they would move on from there. These bases on the continent enabled the Vikings to undertake longer expeditions and move even further inland as cities such as Paris and Rheims discovered to their cost. By the second half of the ninth century there was always at least one Viking army wintering within the borders of the Frankish realm, particularly in Frisia, Flanders and the Seine and Loire valleys. Because of their (temporary) residence and their expeditions further afield the Vikings became more organised. Towards the end of the



Decorated spur, found in Sweden.

ninth century the names of their leaders started to appear in annals and chronicles.

For the first time in 865 people in England paid the Vikings money (silver) to leave. That was the start of 150 years of Danegeld, which would see large amounts of gold and silver carried back to Scandinavia. From the end of the tenth century an increasing amounts of silver streamed from

Viking treasure found in Rebild, Denmark. National Museum of Denmark, Copenhagen.





Viking sword and Frankish sword

950-1050

*Centraal Museum, Utrecht/Provinciaal Utrechts
Genootschap*

The Viking sword, left in the illustration, was found in 1955 near the Absterderdijk in an old, now dry, riverbed in Utrecht. The sword is amongst the few finds in Utrecht that can be linked to the Viking raids on the city. The dating of c.1000 may link it to the last Viking raid in the Netherlands in 1007. The sword bears the name INGELERNI on the blade, possibly the name of the sword smith. The most obvious difference between the two swords is the hilt. Vikings often used Frankish blades and fitted them with hilts that suited their tastes.



the Netherlands towards Scandinavia. Large hoards of this silver have been found in Norway, Sweden and Denmark. This was treasure that was hidden and, for some reason, never retrieved; or left as a sacrifice to the gods. The large numbers of hoards – the National Museums in Copenhagen and Oslo have each filled an entire room with this type of treasure – illustrates just how considerable the flow of money must have been from the afflicted areas to the north. The composition of the hoards illustrates the Viking economy and the extent of their power.

Weaponry

In the early Middle Ages there was very little organised fighting. The strike power of the Viking or Frankish army depended largely upon individual strength, courage and a warrior's skills

in single combat. Armies did attack in groups, but as soon as they had approached each other the fight would break up into a series of duels. These were usually fought close-up with an axe and sword until one party had lost so many duels that its army was too weak to continue. During the Viking era this changed. This period begins with the surprise attack on Lindisfarne by a group of unknown individuals, and concludes with the Battles of Stamford Bridge and Hastings in 1066.

Weaponry and armour

During the Viking period each warrior took care of his own equipment. Consequently rich men were better equipped than poor men. Most weapons were expensive and often warriors possessed only an axe, which they also had to use for other purposes. Of course, those Vikings embarking upon long, and dangerous, journeys would have made sure that they were armed and protected as well as possible. The amount and kind of armour worn also depended on the wealth of the warrior and his role. Rich horsemen usually wore chain mail and a helmet and always carried a round shield. They fought at a distance with spears or lances and if necessary close-up with a sword or dagger. Foot soldiers wore

Sigurd and Regin in the smithy. Eleventh-century woodcarving from the stave church in Hylestad. University Museum, Oslo





Pair of stirrups

Adelsö on Björkö

Museum of National Antiquities, Stockholm

inv.no. Bj736

A horse was a hefty investment in this period and horses only belonged to the elite. The cavalry was small and consisted only of men who could afford a horse and the accompanying tackle. Riders were held in high regard and, more importantly, were at less risk than footmen who were usually the first to be killed in battle.

The Vikings did not usually take horses with them on their long sea journeys. However, they did take them across the Channel. The Bayeux Tapestry, depicting the Norman invasion of England, shows the heads of horses sticking out above the boats. Riding tackle is usually found on homesteads. These circular and more pointed stirrups were found in Birka with parallel and diagonally placed loops to take the leather straps.



Pair of spurs

Adelsö on Björkö

Museum of National Antiquities, Stockholm

inv.no. Bj708

Spurs have also been found alongside stirrups. These have a point urging on the horse. The design of the riding tackle from Birka does not differ greatly from that found in Dorestad

leather protection and usually fought with an axe. Archers carried light arms and did not wear a suit of armour, as they needed to be agile. During battle relatively more archers and axe-fighters than horsemen were killed.

Sword (*spatha*)

Conventional swords with two sharp edges, also known as *spatha*, backswords or broadswords, were available in different qualities, from the utilitarian to showpieces. Swords were also symbols of power and only noblemen were allowed to carry them. Swords in those days had a blade of approximately 80 centimetres in length and a hilt of 8-10 cm. Between the hilt and the blade was a cross-guard and the hilt terminated in a pommel. Swords were greatly improved during this period. The grip was made of solid iron. Blades were often strengthened by a complicated

technique of melting bars of iron and high-carbon steel together. This composite produced blades that were both hard and flexible. The best smiths were capable of producing exquisite patterns and even letters using this technique, elevating the blades to works of art.

From the eighth century Frankish smiths were able to make a type of steel equal in strength to modern stainless steel by cooling phosphate-rich iron. They also improved the design of the blades. The stronger Frankish blades were in great demand in the Scandinavia countries, where they were fitted with hilts of a local design. In order to safeguard his advantage in weapons' technology, the West Frankish ruler Charles the Bald (843-877) banned the export of blades. This was obviously to no avail because Frankish blades have been found in all the Scandinavian and

Swords of fallen warriors were collected on the battlefield. Illustrated in the margin of the Bayeux Tapestry.



Baltic countries and even in England and Ireland.

Because many Viking swords have Frankish blades, it is usually the hilt that distinguishes them as Scandinavian swords. Of the ten swords from the period of c. 800-1100 found in the Rhine-Meuse-Scheldt region of the Netherlands, nine have a Viking connection. Two of them are from Dorestad. Seven were found in (former) rivers: two were excavated from old beds of the River Vecht in Utrecht, four were dredged out of the River Meuse near Lith, Wijk & Aalburg, Neer and Wessem and the last one was probably dredged from the river Waal near Nijmegen. Each of them is complete and in good condition. They may have ended up in the water as sacrifices to the gods, made either by Vikings after a successful attack or by the local population after capturing them from the Vikings. A sword was a valuable possession with a very high symbolic value, which made it especially suitable as a sacrifice. However, they may also simply have fallen overboard during a fight. This type of sword has also been found in the northernmost regions of the Netherlands – Groningen and Frisia – but these areas fall outside the scope of our story. Approximately forty Viking swords have been retrieved from rivers and Viking graves

Iron sword before and after restoration

9th century

River Meuse

Limburgs Museum, Venlo (on loan from Firma Kuypers BV, Kessel) inv.no. L9788

In 2002, a 'Viking' type sword was found in the river Meuse, near the village of Neer, in the south of the Netherlands. In mud brought to the surface by a dredger, a heavy piece of rusty metal was discovered that, after it had been cleaned, turned out to be a sword 87 cm long. It has a flattened pommel with two vertically placed holes (for attaching leather straps) and a flat sword guard. The pattern-welded blade is decorated over its full length with inlaid silver, while on the grip traces of inlaid metal can be seen as well. The pommel has been re-fastened to the hilt in an earlier repair.



Iron sword

850-900

dredged from the River Waal

near Nijmegen

Museum Het Valkhof, Nijmegen

inv.no. XXXI.b.22

Most Viking swords in the Netherlands have been found in large rivers. They may have ended up there during fights or may have fallen from ships.

A sword was an important object with its own character. One could not use a sword captured from an enemy, but it could be sacrificed to the gods. This sword comes from an old collection, which comprised mainly of swords dredged from the River Waal. It is possible that this sword is a remnant of the Vikings' stay at the Valkhof in Nijmegen during the raids in the Rhinelands in 881/882.



in Haithabu in Germany. It is clear that swords were desirable commodities from the inscription 'Ulfberth' on a sword found in the river Meuse. It was long assumed that Ulfberth must be the name of the sword or its owner, but the discovery of forty such swords all over the Viking world confirms that Ulfberth must have been a world-famous sword-smith whose blades seem to have been the 'Rolex' of weaponry.

Short sword (*sax*)

A short sword known as a 'sax' was used for stabbing at close range. The shortest of them were also thrown. Saxes were usually single-edged and had fewer decorations than *spathas*, consisting of wavy or parallel lines incised along the blunt edge of the blade.

Spear (*ango*)

The spear was mainly a weapon for throwing. On horseback it could be used for stabbing and on the ground it was useful for fending off a sword. The thin point of the spear could easily pierce chain mail.

Lance

A lance was heavier than a spear, with a broader point. It was sometimes used as a weapon in



Assembled set of weaponry from Birka
9th century

Adelsö on Björkö

Museum of National Antiquities, Stockholm,
inv.nos. Bj1098 and Bj834 (spear tips), Bj581
(shield boss and axe)

This complete set of weapons of a wealthy warrior has been assembled from various weapons found in Birka. It comprises of a long double-edged sword (spatha), a short sword (sax), a spear or lance and a broad extended battle-axe. Only the metal parts of these weapons have survived. The leather scabbard, the wooden shafts of the spears and axe-grip have decomposed. The Viking defended himself with a wooden shield, of which only the metal boss has remained. This example is circular with a thin border and is undecorated. The nails used to secure the boss to the shield are visible around its edge. Of course, not every warrior had all these weapons; most were adequately armed with only a shield and an axe. Lances were the preserve of the elite.

combat, but mostly for hunting. A particular form of lance was the so-called 'winged lance' with projections or hooks on both sides to lock the point into the flesh. In Frankish society the lance was reserved for warriors from the nobility and sometimes even exclusively for the king.

Axe (francisca)

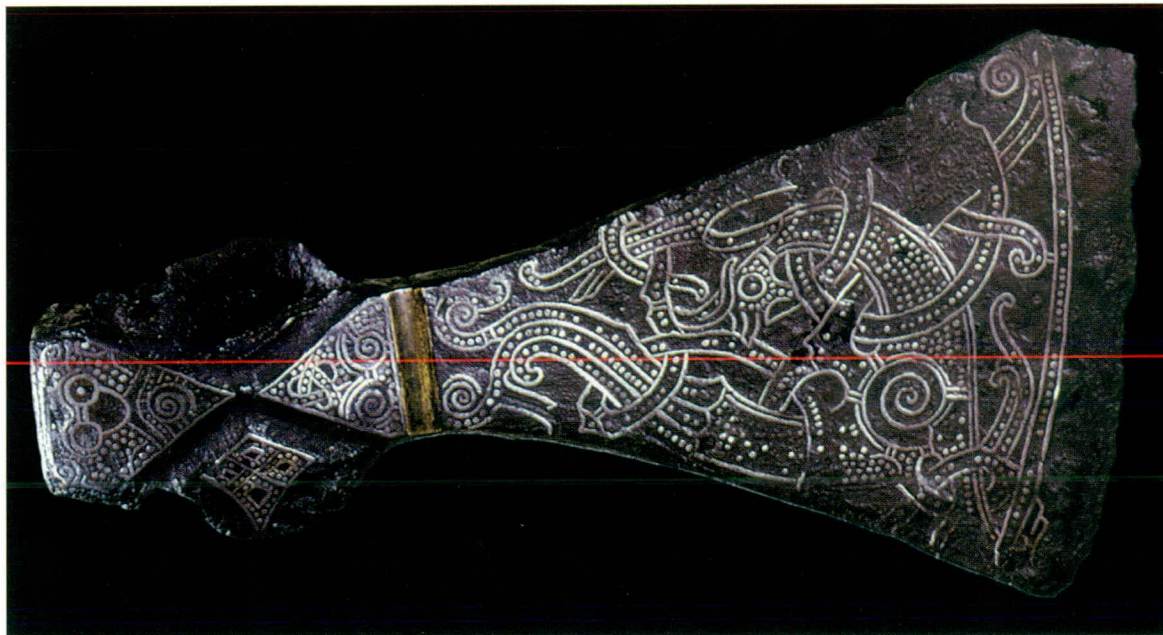
The axe was the most commonly used weapon during the Viking period. It was carried by ordinary foot soldiers and used against horsemen and other footmen. Practically every man of the period knew how to use an axe. Axes were used to chop wood in the forest and cleave wood in and around the house. When necessary ordinary axes were also used in combat. There were special battle-axes, which were heavier. These could also be thrown or the blunt top end could be used for striking an opponent. We know that those axes were used as weapon by all social classes. Battle-axes have been found in the graves of kings and

there is written evidence that King Olav named his axe 'Hell', after the ruler of the underworld.

Bow and arrow

The bow and arrow was the most common weapon for long-distance targets. It was also used for hunting, so that basic archery skills were widespread. A lot of practice was needed to unleash a quick succession of arrows; the best archers could shoot up to 20 arrows a minute! Bows were often made of yew, a strong and flexible type of wood. A bow has been found in Haithabu with a length of 191 cm. Its range must have been almost 200 metres. Arrows were usually approximately 70-80 cm long with a diameter of less than a centimetre. Some arrows were bearded, so they could not be pulled out of the body (they had to be cut out). The wooden bows and the arrow shafts have rarely survived; only the iron arrow tips are evidence of the use of the bow and arrow as a weapon.

Iron Viking axe with strap-work decoration in gold and silver, found in the grave of a chieftain at Mammen near Viborg on Jutland.



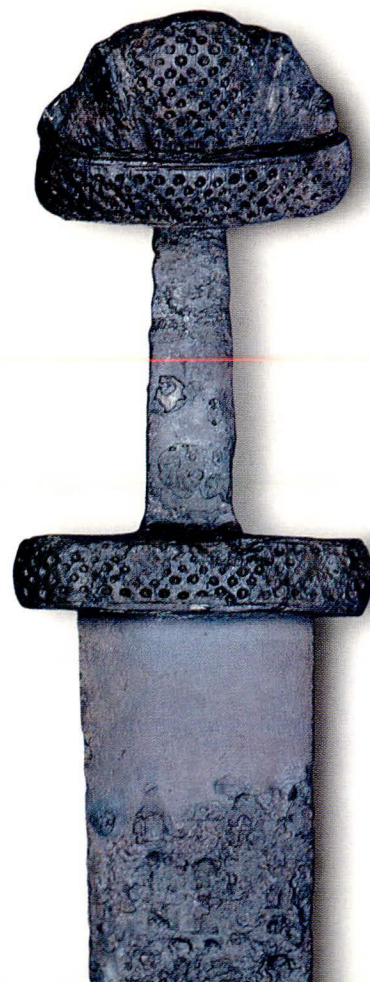
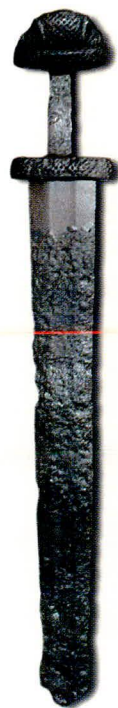
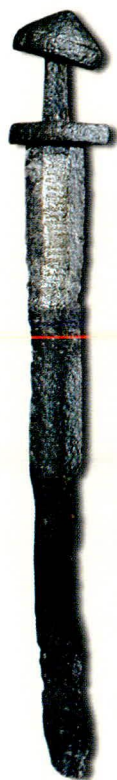
Four arrow tips

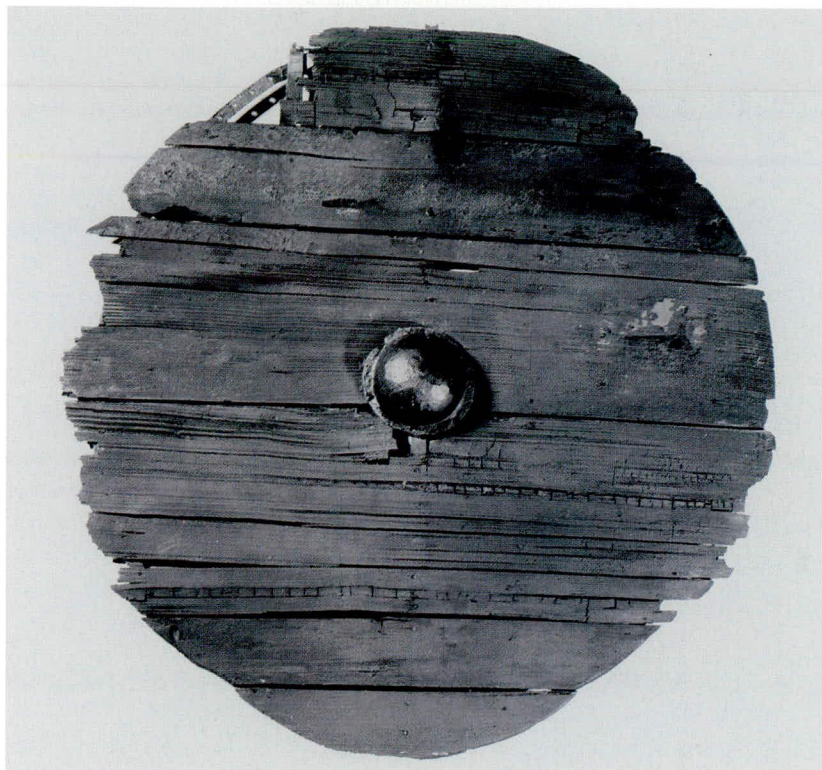
*Museum of National Antiquities,
Stockholm*

inv.no. 5208: 294-297

Archers were the advance guard of the Viking armies. Many men were able to use a bow and arrow because they were also used for hunting in peacetime. Warriors who specialized in archery developed great speed; the best could load and shoot an arrow within five seconds. They wore light, flexible armour and aimed at the enemy's chest. Arrows had wooden shafts and iron tips; due to the influence of the metal tip, bits of the wooden shaft have sometimes survived within the tip.







Shield, found in the Gokstad Ship. University Museum, Oslo.

Shields

Viking shields were usually circular. They may occasionally have been attached to the upper part of Viking ships, forming a protective barrier. Most wooden shields have decayed and all that remains is the iron grip and boss (*umbo*) that protected the hand. Sometimes the nails or staples, which were attached along the edge of the shield, are found lying in a neat circle; the actual shield shows up only as a darker patch of

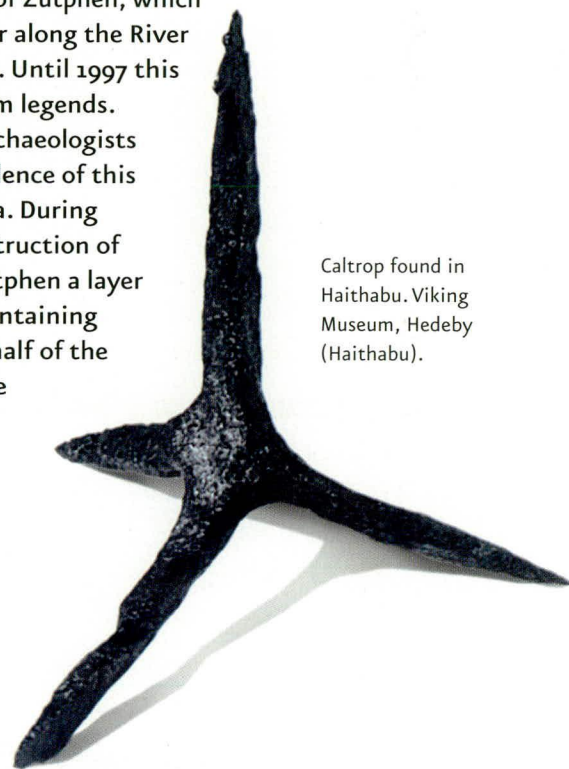
ground. We know that some shields were brightly decorated; a yellow and black striped shield with a diameter of one meter was found in the Gokstad ship.

Caltrop

Caltrops were the 'landmines' of the Middle Ages. They were metal balls with three or four sharp spikes that were placed in ditches to prevent horses from crossing.

A raided city: Zutphen

In 882 the Vikings raided the market and church at Deventer and the city of Zutphen, which lie 16 km from each other along the River IJssel in the Netherlands. Until 1997 this raid was known only from legends. However, in that year archaeologists discovered shocking evidence of this late ninth-century drama. During excavations for the construction of the new Town Hall in Zutphen a layer of charcoal was found containing shards from the second half of the ninth century. Under the charcoal they found traces of a destroyed

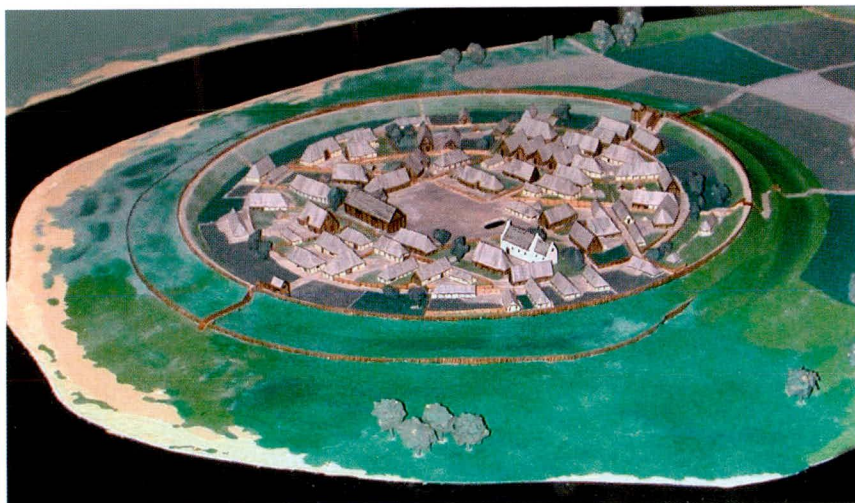


Caltrop found in Haithabu. Viking Museum, Hedeby (Haithabu).

Four swords

Stenåsa on Öl, Funbo, Hille on Gä and Skuttunge
Museum of National Antiquities, Stockholm
inv.nos. 16646, 7915, 18780 and 19380

These four swords have diverse pommels and are decorated with different kinds of inlays. One bears an inscription in silver.



Model of the ringwall at Zutphen c.900, showing the castle and the position of the most important buildings. C.J. Willems.

settlement. Between the remnants of buildings, huts, pits and gullies the archaeologists found remains of charred grain and wood, burned loam and scattered and broken household goods. The dig also recovered many leg bones and skulls from slaughtered cattle together with a several human skeletons. The bones probably came from various people. In only two cases were the remains more or less complete, one from a 13-year-old child and the other from a woman aged 30-40. They were lying on the floor of one of the hut basins scattered



Aerial photograph of Zutphen showing the ringwall visible in the street plan.

amongst debris. They may have been a mother and child.

Other objects found near the skeletons suggest that this was no ordinary fire, but was most probably a raid. A remarkable silver coin was found in one of the huts, minted in York between 800 and 844, together with a gold-plated coat badge decorated with three Carolingian crosses, which seems to suggest the wearer was a Christian. Tufa stone was found amongst the charred remains, which could have originated from a destroyed

Skeletons of a woman and a child shortly after 880

*Zutphen, City Hall construction excavation
Archaeological Department, Zutphen
inv.nos. Zu-St 1195/1282 and 957*

Shocking evidence has been found in Zutphen of the plundering of the city in 882, which is also mentioned in written records. During the excavations for the

construction of the new City Hall traces of a burned settlement from the end of the ninth century were found. These two more or less intact skeletons were found on the site of small huts around a devastated house. They appear to have been hastily deposited there before the huts collapsed. The skeletons belonged to a woman between the ages of thirty and forty and a child of roughly thirteen years. Judging

from the age difference and the position of the bodies it is possible that they were a mother and child. They probably lived in the adjacent house and were either murdered there or sought refuge in the huts and died there. It is possible that the skeletons were exposed for some time because that of the child has suffered considerable damage.





Impression of the Viking
raid on Zutphen in 882.
Ill. Kelvin Wilson.

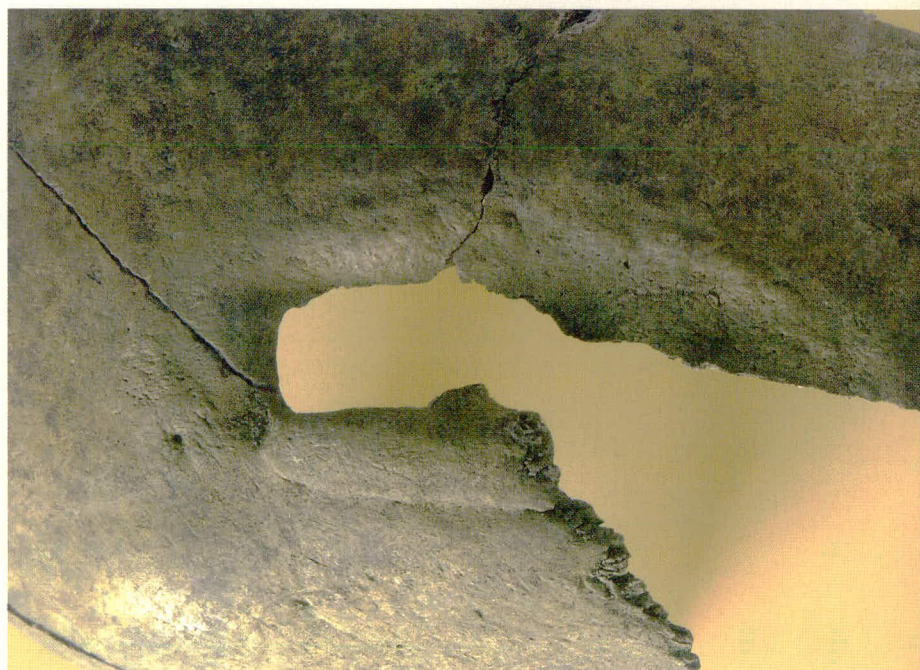
church. The cattle remains are especially interesting, as these comprised only the skulls and parts of the lower legs of both mature animals and calves, suggesting that the attackers stole the edible parts – a substantial amount of meat. This would explain their interest in this particular region. Zutphen was not a commercial centre, but a royal centre where there must have been enormous amounts of corn and cattle for the taking. It appears that by the end of the ninth century the Vikings required vast amounts of food.

Excavations in other parts of Zutphen's city centre have revealed similar burnt layers from the ninth century containing skeletons, some with cranial damage. The shards, the coin and the carbon-14 dates of the corn place the raid around 880-900. It seems likely that this is concrete archaeological evidence for the legendary Viking raid of 882.

The findings in Zutphen are the first in continental Europe that



Silver coin from York,
found in Zutphen.



Pieces of skeletons
shortly after 880
Zutphen, City Hall construction excavation
Archaeological Department, Zutphen
inv.nos. Zu-St 1195-1282

Many pieces of skeletons, showing obvious signs of wounds have been excavated between the traces of devastation and fire at Zutphen. Also the skulls and bones from the lower legs of adult cows and calves have been found. The rest of the skeletons are

missing, suggesting that the Vikings took the edible parts of the animals leaving behind those parts with little meat. It would seem that the attackers were primarily in search of food for the troops who raided the Rhinelands in around 881/882.

clearly indicate a Viking raid. There are parallels in England, for example in York, where similar human remains of people have been found buried unceremoniously in a burnt layer of earth. This may have been connected to the battle of 866-867 between the Vikings and Anglo-Saxons documented in written sources. Coincidentally the coin found in Zutphen came from York, but need not necessarily have travelled directly to Zutphen. It is more likely that the coin changed hands several times as coins could be in circulation for decades. It is, however, likely that the coin travelled from York with Vikings from Denmark. It is known that some of the Vikings in the Rhine-Meuse-Scheldt region did not come directly from Scandinavia, but from England.

Treasure, loot and merchandise

Among the most impressive remains from the Viking period are the large hoards of gold, silver and money found both in Scandinavia and in Great Britain. Until recently there had been no such finds in the Rhineland's. This is not surprising as these treasure troves were buried in the ground, as a sort of 'piggybank'; the gold and silver, just like the coins, was a form of currency. The piggybank would be hidden in a safe place,



Treasure of Viking armbands, found in Ireland. National Museum of Ireland, Dublin.

ready for collection whenever funds were needed. You would expect to find this type of treasure only in places where Vikings lived, not in places they looted.

Viking hoards in the Netherlands

In the winter of 1995-1996 a man with a metal detector made an amazing discovery on the former island of Wieringen in the north of Noord-Holland. In meadows near the hamlet of Westerkliëf he found a silver hoard comprising jewellery, silver ingots and coins – 1662 grams of silver in total. The larger pieces of jewellery, such as a turned necklace, had been hacked into pieces to fit into a small round jar, together

Treasure with bracelets and chain with Thor hammer

Ödeshög on Ög (Erikstorp)

Museum of National Antiquities, Stockholm
inv.no. 5671

These pieces of jewellery form a complete set of accessories for a woman, but it is not known if they would all have been worn together. They may have been assembled as capital and buried. The treasure is remarkable for a pendant with a Thor's hammer inlaid with gold inlay, which hung on a

four-part chain over the breasts. This is a typical piece of jewellery to be worn with Viking dresses. The chains may have been fixed with the two rectangular brooches with filigree decoration. A beautiful gilded disc brooch and seven golden bracelets complete the set.







Impression of the enforcement of taxes by the Vikings. The Viking treasure of Wieringen would have been assembled in this way. Ill. Kelvin Wilson.

with the ingots and coins. The jar, a piece of Badorf ware, typical earthenware pottery dating from the ninth century came from the Cologne-Bonn area in Germany. The jar contained six broad silver bracelets, a turned silver necklace, a turned silver bracelet, a piece of silverwork from a belt, three silver coin pendants with Arabian coins, sixteen silver ingots, 78 silver Carolingian coins (*denarii*) and fragments of the clasp of a silver brooch. The silver in the jar was covered with tufts of grass to protect the contents. The most recent coins dated from c. 850,

so the treasure must have been buried shortly after this date.

The style of the jewellery and the type of coins indicate the treasure was from the Danish mainland. The Westerklijf silver hoard must have been the capital of a Danish Viking who buried it at Wieringen. This was the first time a hoard of this kind was found in the Netherlands. Scientific analysis of the remains of the grass and the pollen in the jar showed that the grass had not yet seeded, which meant that it must have been cut in early spring. The presence and

Viking treasure 'Westerklief I'

shortly after 850

found in 1996 in Westerklijf (on Wieringen)

National Museum of Antiquities, Leiden

inv.no. g 1996/11.1-11.6

This treasure comprises 1662 grams of silver that was packed in a small Badorf pot.

The silver comprises of six bracelets with symmetrical decoration, a twisted neck ring, a twisted arm ring (unfinished: the fastening unforged) and a belt mount with a box-form end. The hoard also contains a coin pendant with a dirhem of Abu al Abbas Safah in a dotted rim; two coin pendants with dirhems of Xusro II in a dotted rim;

sixteen silver bars, twelve of which weigh approx. 50 grams; 78 Carolingian coins or 'denarii': 27 denarii of Louis the Pious, 47 of Lothar I and 2 of Charles the Bald. Finally there are fragments of the fastening of a brooch, and vegetable material identified as grass.



Bronze sphinx

Roman, re-used in the 9th century
Zutphen, City Hall construction excavation
Archaeological Department, Zutphen
inv.no. Zu-St 1281

This heavily worn Roman sculpture shows a

sitting sphinx-like figure with a female face; the wings are missing. It was probably originally part of a piece of furniture such as a daybed or a chair. It must have been re-used, or was still in use, in the ninth century. More recycled Roman items have been found in the ninth-century settlement at

Zutphen including roofing tiles and stones used to construct a stone building, possibly a church. These building materials may have been salvaged from the nearby ruins of Roman Nijmegen or Xanten, a common practice in the period judging from the Roman material found in other settlements.



Fragments of a relief band amphora

9th century

Zutphen, City Hall construction excavation

Archaeological Department, Zutphen, inv.no. Zu-St 770

This large Badorf ware storage jar has been burned, which can be seen from the blackened edges of the fragments.



absence of other seeds indicate that the jar was hidden on an open peat moor. The Dane must have hidden his jar of silver in the early spring in a more or less open field on the high grounds of Wieringen, perhaps shortly before leaving for the summer. He must have planned to collect his treasure at a later date, perhaps after the sailing season, but never returned. Why he did not come back we will never know. But the fact that he buried his silver at Wieringen shows that he used the high grounds, then an island, as his base.

In 1999 and 2001 two further large hoards of silver were found at Wieringen, close to the spot where the first hoard, now called Westerklijf I, was excavated. Both finds comprise silver coins and small silver ingots, most of them in pieces – hence the name ‘hack silver’. Both hoards contained shards of Badorf ware from the same small jar, a little smaller than the one from Westerklijf I. Because the shards fit together they prove that these two finds formed a single treasure of 449 grams, which is now called Westerklijf II. Apart from a simple coin pin and a small piece of a bracelet, this treasure does not contain any jewellery. However, the assortment of coins is far more varied than that from the first treasure, with as many as 95 Arabian

dirhems. For the rest this hoard contains 39 silver Carolingian coins (*denarii*), a small silver ingot and 23 fragments of ingots. The coins date from c. 880 – 30 years later than the first hoard, so the second treasure must have belonged to a different Viking. These finds clearly indicate that in the second half of the ninth century Vikings settled at Wieringen in the Netherlands, if only for the winter months.

Loot or merchandise?

Because many of the objects, such as weapons and jewellery that we associate with Vikings have been excavated in Scandinavia and the rest of Europe, it is often difficult to determine why those objects came to be in a particular place. It is seldom possible to determine without any doubt whether an excavated object was or was not loot. It is assumed that most ‘Viking’ objects found in the Netherlands and Germany arrived there as merchandise and thus had actually belonged to Franks, who had bought them from traders. This is one of the reasons why it is so difficult to identify ‘Viking’ finds there, even if the objects were almost certainly made in Scandinavia. This applies to almost all Viking jewellery found along the North Sea coast, on the isle of Texel, on Walcheren and in Dorestad and also the

Viking treasure ‘Westerklief II’

c.880

Wieringen Council

This treasure was found in two parts in displaced earth in Westerklijf on Wieringen; the treasure was probably originally buried in the area where the Westerland church now stands. 447 grams of silver were placed in a very small Badorf pot (rim 7 cm dia.), matching shards of which were found at both sites. The treasure comprises of a piece of silver with decoration, probably from a bracelet; a coin brooch with dotted rim; a silver bar; 23 fragments of ingots; 39 silver Carolingian coins (*denarii*): 5 from the era of Louis the Pious, 10 of Lothary, 1 of Charles the Bald; and 95 silver Arabic *dirhems*, 48 of which were cut into pieces.



'toilet accessories' found on the beach near the town of Domburg. All these objects, even if they were traded, give the impression of contact between the Vikings and the local population.

It is equally difficult to distinguish between Frankish objects taken to Scandinavia by the Vikings as loot and objects that ended up there via trade, diplomatic negotiations or missionaries. Much of the jewellery and weapons was

probably merchandise. Raw materials would certainly have been merchandise. Those items that can be positively identified as loot include the fragments of Frankish book covers that have been found in some hoards. There are often items of Frankish craftsmanship amongst the Viking hoards found in Scandinavia. Those decorations that are broken or were obviously removed from larger objects would probably have been looted. Whole items of jewellery and other monies would certainly have been payments imposed by the Vikings or 'protection money'. This may be seen as either loot or merchandise.

Price Level in Europe during the Viking Period:

For ... gram(s) of silver	one could buy
1 gram of silver	10 chickens
3	1 kilo of corn or a knife
5	buckle
10	reigns
12	coat
15	sheep
20	pair of spurs
30	pig
51	lance
100-137	cow (100 in Eastern Europe, 137 in Central Europe)
125 to 137	ox
126	stirrups or a sword
137	shield and lance
204	female slave
306	male slave
410	helmet
300-478	horse (300 in Central Europe, 306 in Northern Europe, 478 in Western Europe)
478	sword and sheath
820	suit of chain mail

Reaction to the Attacks

With so much emphasis placed on the Viking raids and their victims, it is important not to forget that the population of the Rhine-Meuse-Scheldt region did not exactly sit back and wait for the 'barbarians' to return. They attempted to defend themselves against the attacks and if that was not successful, they tried to come to an agreement with the Norsemen. According to Einhard's biography, in c. 800 Charlemagne had defences built along the coast and the estuaries of the large rivers and installed guards after a series of raids by the Vikings along the Frisian



Gilded mounting

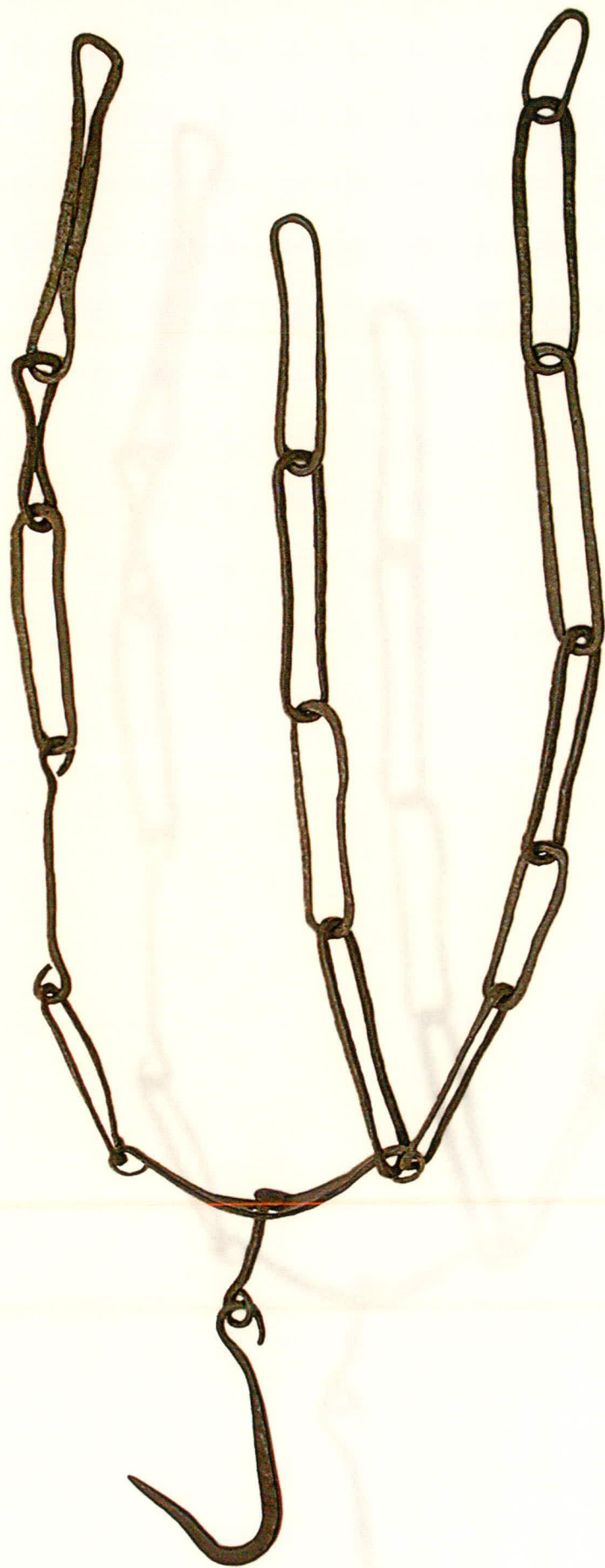
10th century

Zutphen

Archaeological Department, Zutphen

inv.no. HvdK 51

This gilded item suggests the presence of aristocracy in the area.



Cooking chain and hook

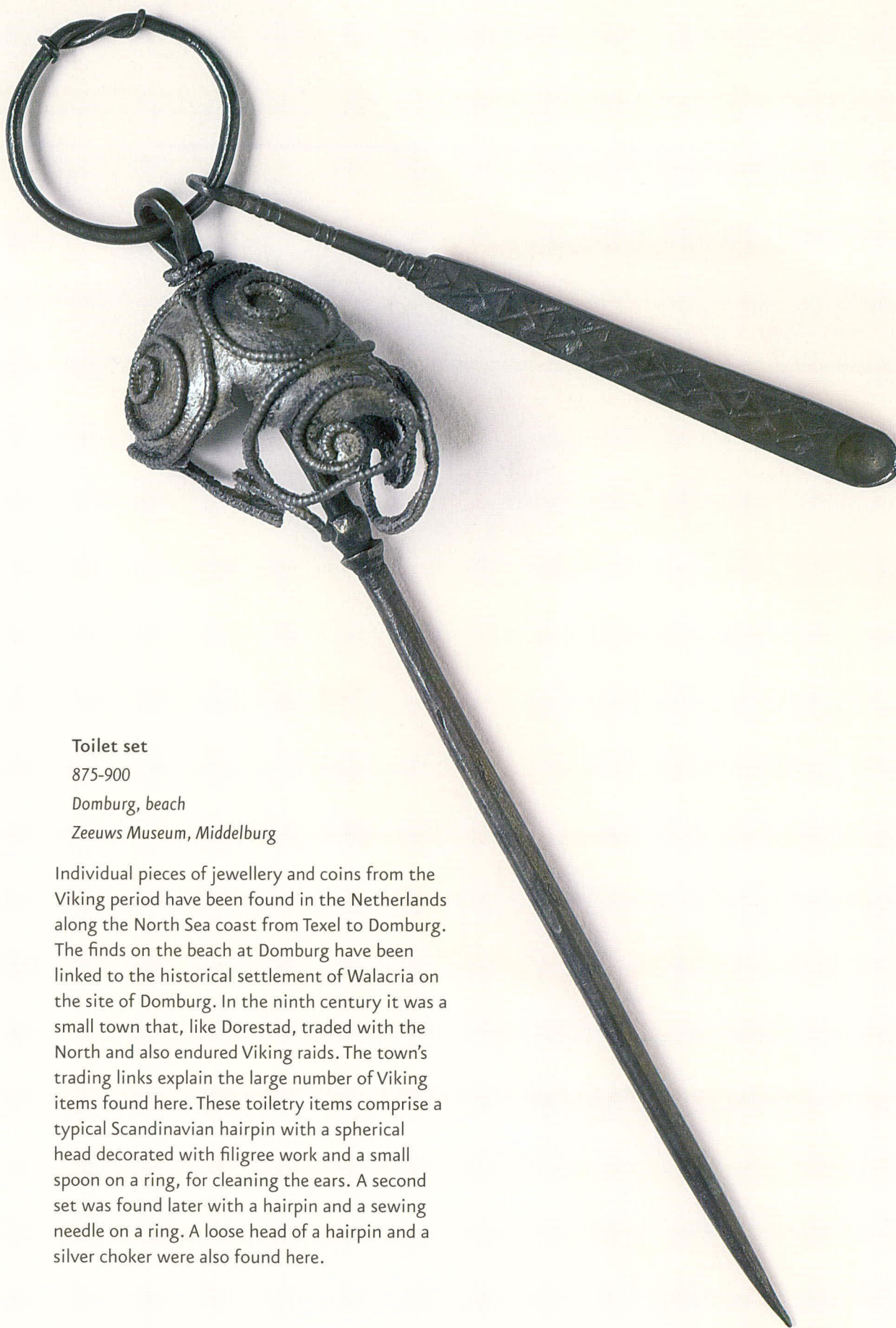
end of 9th century

Zutphen, City Hall construction excavation

Archaeological Department, Zutphen

inv.no. Zu-St 750A

In the ninth century cooking was done on an open fire surrounded by stones in the middle of the house, mostly in an iron kettle. This long iron chain with elongated, flat links to which a hook is attached, was used to hang the kettle above the fire. The links made it possible to adjust the hanging height of the kettle.



Toilet set

875-900

Domburg, beach

Zeeuws Museum, Middelburg

Individual pieces of jewellery and coins from the Viking period have been found in the Netherlands along the North Sea coast from Texel to Domburg. The finds on the beach at Domburg have been linked to the historical settlement of Walacria on the site of Domburg. In the ninth century it was a small town that, like Dorestad, traded with the North and also endured Viking raids. The town's trading links explain the large number of Viking items found here. These toiletry items comprise a typical Scandinavian hairpin with a spherical head decorated with filigree work and a small spoon on a ring, for cleaning the ears. A second set was found later with a hairpin and a sewing needle on a ring. A loose head of a hairpin and a silver choker were also found here.



coast. It seems to have worked for a while, because for at least a few decades peace was restored to the area. But when the Vikings returned the defences could not withstand the attacks.

Circular Fortresses

The exact nature of Charlemagne's reinforcements is not known. However, the series of circular fortresses on hills along the Dutch coast and estuaries, the so-called 'ringwalls', was almost certainly built as a defence against the Vikings. These fortresses can still be seen in Oost-Souburg, now a neighbourhood in the Dutch town of Flushing and in Leiden, and others have been excavated or identified in the street plans of cities such as Middelburg, Burgh-Haamstede, Den Burg (on the isle of Texel), Zutphen, Deventer and possibly in Ghent. All these fortresses originate from the second half of the ninth century. Because of their similarity to the circular Viking fortresses in Denmark it was initially thought that these ringwalls had been built by the Vikings as base camps from which to mount their raids. Both the Dutch and the Danish fortresses have a clearly recognisable defensive structure, and together with the rampart and moat, protect the houses lying within the fortress. The evidence



does not suggest a temporary gathering of soldiers, but rather a permanent habitation by families, with workshops and warehouses. The fortresses had obviously been lived in. The ringwalls in the Netherlands were constructed in response to the Viking raids and were intended as refuges. It appears that the fortresses in Denmark are all of a later date, probably the tenth century. It is thus unclear who inspired whom to construct hilltop circular fortresses.

Reconstruction of the Souburg ringwall in Oost-Souburg, built in the ninth century.

The coastal defences and the battles against the Vikings, as repeatedly mentioned in the sources, did not have the desired effect. Neither the local population nor the king could make a

Treasure with brooches, bracelets and silver dish

Lackalänga

Museum of National Antiquities, Stockholm

inv.no. 431

Few Viking treasure troves contain large items as the Vikings preferred portable capital. The treasure from Lackalänga is extraordinary due to the presence of a silver dish with vertical ribs, also known as a 'melon dish'. The large silver-plated brooch with filigree decoration and inlaid with gold is also a special find. The treasure also contains a circular gilded brooch with filigree decoration, two open-worked golden pendants and three simple silver bracelets, two of which have a large number of small rings attached, which was probably a form of 'small change'.



stand against the Vikings. In some areas the Vikings were bought off with large amounts of gold, silver and coins. In 845 Charles the Bald paid the Viking leader Ragnar the substantial sum of 7000 pounds in silver to leave the Seine region following the first raid on Paris. This was the first recorded case of protection money paid to the Vikings, known in England as Danegeld. It seems the Vikings honoured these payments, however, and in the end the most successful solution was to reach an agreement with the Vikings. This usually meant that groups of Vikings would be given pieces of land in loan on which they could live, enabling them to obtain food and money (in the form of taxes). In return

they were to leave other regions in peace and fend off any further attacks from other Vikings. The land given on loan to the Vikings was usually in regions that were politically unstable anyway. For example Frisia, the northern region of the Netherlands, and the area around Dorestad, where the Franks had already fought the Frisians, was given on loan to the Viking leader Rorik and later Harold in the mid-ninth century. This did not always guarantee defence against further attacks, but, as vassals, the Viking leaders had now become part of the Carolingian Empire, allowing them to be more easily controlled. By taking part in the political, social and economic relations, the Vikings were eventually no longer regarded as enemies.



Aerial photograph of the Viking fort Trelleborg in Denmark, built c.980.

Silver treasure ('hack' silver)

Dingtuna

Museum of National Antiquities and Royal Coin Cabinet Museum, Stockholm, inv.no. 16217

The 'Viking treasures' comprise for the most

part coins and gold or silver jewellery. This is capital, buried for later use and for some reason never collected. The largest find, the Cuerdale Hoard, consisted of 40 kilos of silver. The silver treasure from Dingtuna contains mostly coins. Some are whole,

but many have been cut up or folded.

This 'hack' silver was used for payment in weighed amounts. This is also true of the bits of silver jewellery such as fragments of bracelets.



Golden disc brooch
Carolingian period
Sigtuna Museum, Sigtuna,
inv.no. Kv. Professorn 1, F 12200

This large cloak brooch was found in Sigtuna, not far from Uppsala in Sweden. Within the circular rim the entire gilded brooch is open worked. It bears a winged figure, possibly an angel or a bird, inlaid on the head, body and wings with coloured glass. The brooch is Carolingian and was probably made in France and taken to Sweden as a commodity or plunder.



Pair of rectilinear brooches

Adelsö on Björkö

Museum of National Antiquities, Stockholm

inv.no. 34000:854

This pair of brooches is gilded and enamelled in a technique known as cloisonné. This

involved making small cells from gold thread, which were then heated and inlaid with liquid glass or semi-precious stones. These brooches are inlaid with blue and green glass, red amaldine and gold in patterns possibly based on fruits. The cloisonné technique is characteristic of workshops in

northern France and Switzerland in the time of Charlemagne. These brooches were highly prized by the Vikings and these two, found in Birka, certainly came from the Frankish empire. The fact that the pair is complete would suggest that they were bought rather than stolen.



Silver bracelet with five rings

c.950-1000

Callantsoog

National Museum of Antiquities, Leiden

inv.no. g 1991/3.1

This bracelet is one of the most important Viking finds in the Netherlands, comparable pieces have only been found in Scandinavia.

It was found in 1991 on the beach in Callantsoog, most probably in sand that was sucked up at Texel by the Schulpengat ferry and deposited at Callantsoog. It is a simple band to which are attached five smaller rings; all six are wound closed. In comparison with other Viking bracelets, the decorative value of this example is limited; the way the small rings are

attached is less than ideal. During the Viking period one could pay with silver, and this bracelet can best be seen as portable money; the smaller rings were used as 'change'. In Denmark and Sweden many such bracelets have been found, both of gold or silver and with varying numbers of smaller rings – from three to fifteen.

Pagan Tribes and Christian Churches

The Religion of the Vikings and Franks

No aspect distinguished the Vikings from the Franks more so than religion. The Franks were Christian, loyal to the Pope and considered their emperor to be anointed by God. The Vikings, with their polytheistic beliefs, were considered pagans. The Norsemen's lack of respect for all holy matters during their attacks on monasteries, churches and their contents as well as monks and priests horrified them. 'Lord, protect us from the fury of the Norsemen...' they are said to have prayed. The Vikings had little understanding of the spiritual value of these buildings and objects. They saw it all as loot: the more precious, the better. The Christian concept of 'holy' objects was totally unknown to them. The chronicles tell us that the only objects the monks were able to salvage were the relics of their saints which is not so surprising, as the bones would have had no obvious value for the Vikings.

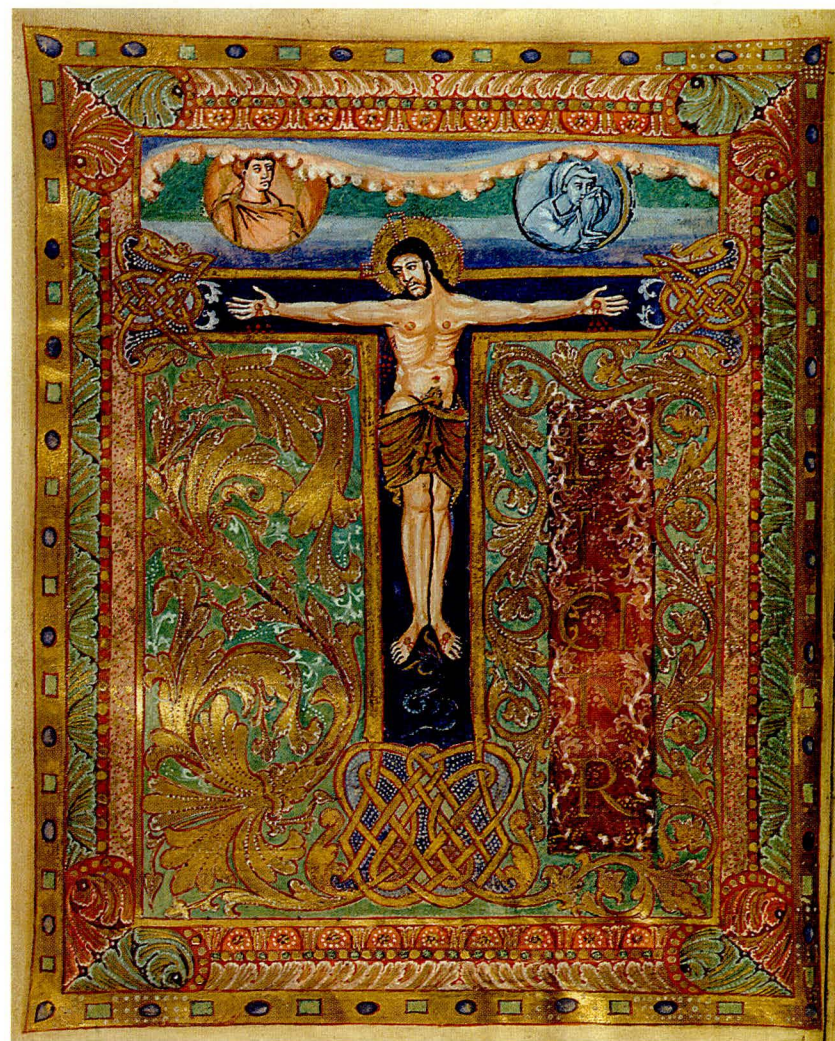
God and Heaven

The Franks were Catholics, as opposed to other Germanic tribes adhering to Arianism, a form of Christianity which denied that Christ was fully God. They believed in a single God and his son Jesus Christ, who suffered and died for mankind

and was resurrected. The Easter feast, celebrating his resurrection, was the most important day of the year. They also believed that those who lived a good life: had cared for their fellow men, kept to the commandments (and 'Thou shalt not kill' was one of them), gone to mass on time and confessed their sins would go to Heaven when they died. All who lived a wicked life would be condemned to Hell.

The clergy were held in high regard because they were the link between humans and God. The Pope in Rome was seen as the highest spiritual power on Earth. The church was 'the house of God' and a place for communal worship, but was also adorned

Christ in Majesty in the Metz Sacramentary. National Library of France, Paris.



in all possible ways. Religion was a personal experience, affecting man in all ways. God was almighty, infallible and accessible to man.

The Christian monks believed the world was created by God and would exist for a finite period. It would end with 'Judgement Day', when the dead would rise from their graves to be judged. Consequently, it was important to Christians that their bodies were buried. It was not necessary for any objects to be placed in the grave, as was customary with 'pagans', because in the next world there were no physical needs, and on Judgement Day all people would be equal. The body was merely the mortal shell of the immortal soul. Christians believed that all humans would have an afterlife. The Catholic faith had a huge number of saints who had given an example of piety during their lives; miracles were believed to occur near their graves. They were already in Heaven and were able to put in a good word for people on earth. These saints were held in great esteem and many churches and monasteries were dedicated to one or more saints. Each saint was a patron of a particular aspect of life and could be invoked, for example, during illness, when accused of a crime or for protection during a journey. The church was the hub of the Christian

faith and people were eager to be buried within it or as close as possible to it. To increase their chances of going to Heaven people could leave their money or belongings to the church in payment for continuous prayers for their souls.

Odin, Thor and Valhalla

Few written sources about the religion of the Vikings have survived. Most of our information comes from descriptions from Snorri Sturluson in the first half of the thirteenth century and were about the religion of his ancestors; the *Snorra Edda* was thus written from a Christian perspective. According to Snorri and the poems of the so-called Poetic Edda, the world was created from the limbs of the giant Ymir. At the

Playing piece, possibly image of a god, found in Akureyri. National Museum of Iceland, Reykjavik.





Silver dish

shortly before 800

Frankish empire

National Museum of Denmark, Copenhagen

A silver cup together with six small dishes was found in Terslev to the north of Ribe. This shallow dish has broad ribs and is similar to Roman ceramics and glass, whilst the decorations on the cup have a Christian character. The forms of the dish is very different to those made by the Vikings; the treasure must be Frankish. The dishes were used both during the mass and at official dinners as drinking dishes. It is possible that the Vikings took these silver objects as plunder.

centre of the world was an evergreen tree (Yggdrassil) with roots that reached into hell and branches that reached the dome of heaven. This tree connected the realm of the humans (Midgard) with the realm of the giants (Utgard) below and that of the gods (Asgard) above. Near the axis of the world lived Urd, Skuld and Verdandi, The heathens believed that wise, venerated woman, probably the souls of their

ancestors, could influence the fates of both men and gods. The habitat of man, Midgard, was the known world surrounded by a sea, in which lived the Midgard Snake.

The Vikings were polytheists and believed in many gods, called the *Aesir*. These lived in Asgard, which is where Valhalla was, the location of the great hall of Odin. This is where, according to the late heathen concept of a warrior paradise, the valkyries took warriors who had died in battle. From his throne Odin oversaw all of creation as far as the realm of the dead, which was governed by Hel. The social hierarchy of the world of the gods was similar to that on earth. The three most important gods in Asgard were Odin, Thor and Freyr. Odin was the chief god, the god of knowledge and of victory. He was capable of winning through power or deception. He travelled on an eight-legged horse, Sleipnir, and was accompanied by the ravens Hugin (thought) and Munin (memory). One of his eyes he sacrificed to his search for wisdom and he hanged himself for nine nights to learn the secrets of runes. He felt no compassion and even his worshippers feared him. Under his direction the heroes in Valhalla prepared themselves during an eternal battle for the last fight at the end of the world, *Ragnarök*



Odin on his horse Sleipnir (?), depicted on the Ardre Stone. National Museum, Stockholm.

("Judgement of the Gods"). Odin's main attribute was a spear as well as his two ravens. He was considered to be an aristocratic god, and kings, chieftains and court poets lived under his protection, which could, however, be very deceptive.

The second most important god was Thor. He created lightning when he drove his chariot through the heavens. His symbol was a short-

handled hammer (Mjöllnir), which would automatically return to his hand when thrown. Thor, like Hercules of ancient Roman mythology, was the god's main protector against giants and monsters. Because of his strength and general good nature, people empathised with Thor and he was the most popular god amongst the common people. He protected agriculture and was often held in higher regard than Odin in the countryside. Freyr, son of Njord, may have been a god of fertility and sensuality, but by the Viking Age had certainly become the powerful ancestral god of the Swedish kings of Uppsala, the Ynglings. His sister Freya was the goddess of beauty and ruled over rain and sunshine. In most Germanic languages four days of the week are named after Viking gods: Tuesday is called after the ancient Germanic god Týr, Wednesday is named after Odin (Wodan), Thursday after Thor (Donar) and Friday after Freya.

The Vikings admired in their gods what they admired in themselves, courage, valour and ingenuity. The stories they told about gods and heroes were often tales of courage and adventure, which was the example the gods had set man. Valhalla, where there was eternal food and drink, was only for the most courageous warriors.

Odin, with raven on his shoulder, devoured at the end of time by the Fenris wolf, depicted on a ninth-century relief from the Isle of Man.





Reliquary

c.700

region of Nijmegen

Museum Het Catharijneconvent, Utrecht, inv.no. ABM m.904

This rectangular case with a pitched top has the form of an altar shrine. The sides bear traces of attachments from which it could have been hung. The small format suggests that it was worn around the neck as a portable container for relics. The case is inlaid with red amaldin and green glass. It has a frieze of palm-shaped ornamentation, two Greek crosses on the front and chalices on the lid. The reliquary was bought from a farmer in the nineteenth century, who claimed to have fished it out of the River Waal.

Consequently, to die in battle, especially far from home, was not a frightening prospect for a Viking as it would guarantee a place in Valhalla. It was better to die rather than to surrender and be refused the after world as a coward. Courage could be demonstrated not only by the amount of loot that was captured but also by the bravery of their conduct. In the light of this, it is actually surprising how efficient Vikings fought, minimizing their losses by avoiding unnecessary risks.

The Viking gods were certainly not almighty. They had both good and bad sides and people had obligations towards them but also rights. If a god did not provide sufficient help, a Viking could turn away from him. The gods were mostly invoked during collective rituals sometimes in the open air; the Vikings recognised their gods mostly in springs, trees, large stones and open waters, where sacrifices of fruit and animals were made; the greatest sacrifice was a human one. The sacrifices symbolised the bond between god and man. The pretexts for invocations varied, but there were also fixed rituals linked to the seasons; the Germanic mid-winter ritual is the origin of Christmas. In some major supra-regional cult centers (such as Uppsala in Sweden and perhaps Lejre on Seeland), it seems that every

nine years there were great feasts with both human and animal sacrifices. Blood sacrifices, whether human or animal, were called *blót*. Rituals such as these were usually followed by a banquet.

Gods provided help in daily life and the Vikings wore amulets of Thor's hammer or miniature weapons. They took the assistance of the gods very literally. An Arabian writer, Ibn Fadlan, related in his travel report how the (originally Swedish) Vikings worshipped their gods in 922

Thor's hammer used as a pendant. Museum of National Antiquities, Stockholm.





somewhere along the river Volga in Russia: 'The 'Rus' left their ships which were stowed full of fur and beautiful female slaves. They had bread, onions, milk, meat and beer. They approached a large, wooden, erect, human figure with wooden idols planted around it on stakes in the ground. They would kneel before the image and recite the following prayer: 'O Lord! I come from a distant land and have so and so many girls with me, and such and such an amount of sable' and then they would list all their other acquisitions. Next they would say: 'I have brought with me all these offerings' and would lay down all they had with them. The prayer would continue with very precisely formulated wishes about the success of their transactions: 'I would like you to send me a merchant, who has sufficient dirhams and dinars to buy all my merchandise and who will not complain about the price.'

Sources on the Viking Raids

The first recorded Viking raid was documented in the so-called *Anglo-Saxon Chronicle*: '793: This year bad omens appeared over Northumbria, inspiring great fear in the people. They consisted of strong storms and lightning and people saw fire-breathing dragons flying through the air.

These signs were followed by a great famine and a little later in the same year, on 8 June, the heathens destroyed the church of God in Lindisfarne with plunder and murder. 794: in this year Pope Adrian and King Offa died.' The Viking raids were interpreted by the writers of the chronicle as bad omens, divine punishment and a force of nature. Even Alcuin, writer at the court of Charlemagne, emphasised that the 'heathen' should be seen as a divine punishment for the sins of mankind.

One of the few eyewitness accounts of a Viking raid can be found in the chronicle of Regino of Prüm. The later abbot describes the Viking activities in the Rhine and Meuse region, which led to the destruction of his own monastery, the imperial abbey of Prüm, in the catastrophic years of 881/882. 'Around this time a fleet of Norsemen sailed up the River Waal and landed at the royal castle of Nijmegen, where they set up camp. When king Lothaire was told about this, he immediately summoned an army and besieged them in their encampment. After several days of fighting he was unable to defeat them completely because the palace, with its great size and amazingly strong construction, offered the enemy a very safe refuge. During the battle one of the

Drinking horn

Scandinavia, tenth century

Basilica of Onze Lieve Vrouw Sterre der Zee, Maastricht

inv.no. 194

This Viking drinking horn was re-used in the Middle Ages as a relic holder, and so has survived in excellent condition. The

smooth horn of the now extinct aurochs (wild ox) is covered with silver-plated lead strips. The lid, the rim and the pointed cap at the horn's point have been added in the last two centuries. However, the majority of the fittings are original. The silver-plated lead strips are decorated with stamped patterns, masks and animals. These decorations,

in the so-called Jelling style, can be dated to the tenth century. The strips are secured with rows of tacks, which themselves form a decorative pattern and are bent back on the inside of the horn. The drinking horn is the only Scandinavian object from the Viking period that has survived in the Netherlands above ground.

opponents, Everhard the Saxon, son of count Meginhard, was taken prisoner; he was later returned safely to his mother Evesa after the payment of a huge ransom. Finally the king and his troops retreated, after he had been promised that if he ended the siege the Norsemen would leave the Rhine immediately. Following his departure the heathens set fire to the palace and its enforcements, went aboard their ships and returned to the Rhine estuary.

In November of the same year two Norse kings, Godefried and Sigifried, settled with a large group of men on foot and on horseback in Elsloo along the Meuse. During their first raid they destroyed the surrounding towns and burned down Liège, Maastricht and Tongeren, during their second raid they spread out over the territory of the Ripuarian Franks and destroyed, murdered, looted and set fire to everything; the cities of Cologne and Bonn with the neighbouring fortresses of Zülpich, Jülich and Neuss were burnt down; next they set fire to the palace of Aachen and the monasteries of Cornelimünster, Malmédy and Stavelot.

In the year of the incarnation of the Son of God in 882 they set out on a raid through the Ardennes and exactly on the day of the apparition of the Lord they forced their way into the

monastery of Prüm, where they stayed for three days and looted the surrounding area. In this district a countless number of footmen assembled at a farmhouse from surrounding farms and estates and marched into battle. But when the Norsemen saw the peasant folk, who were armed but not hungry for war, they attacked with loud shouts and slew them in such a blood-bath that it seemed as though lowly cattle had been slaughtered, not men. After this was done, they returned to their camp with their loot. When they departed, the fire that had been left to burn in several buildings consumed the monastery because there was no one left to save it.'

Viking raid on the coast of England in 866, illustrated in a twelfth-century chronicle. Pierpont Morgan Library, New York.



Bell

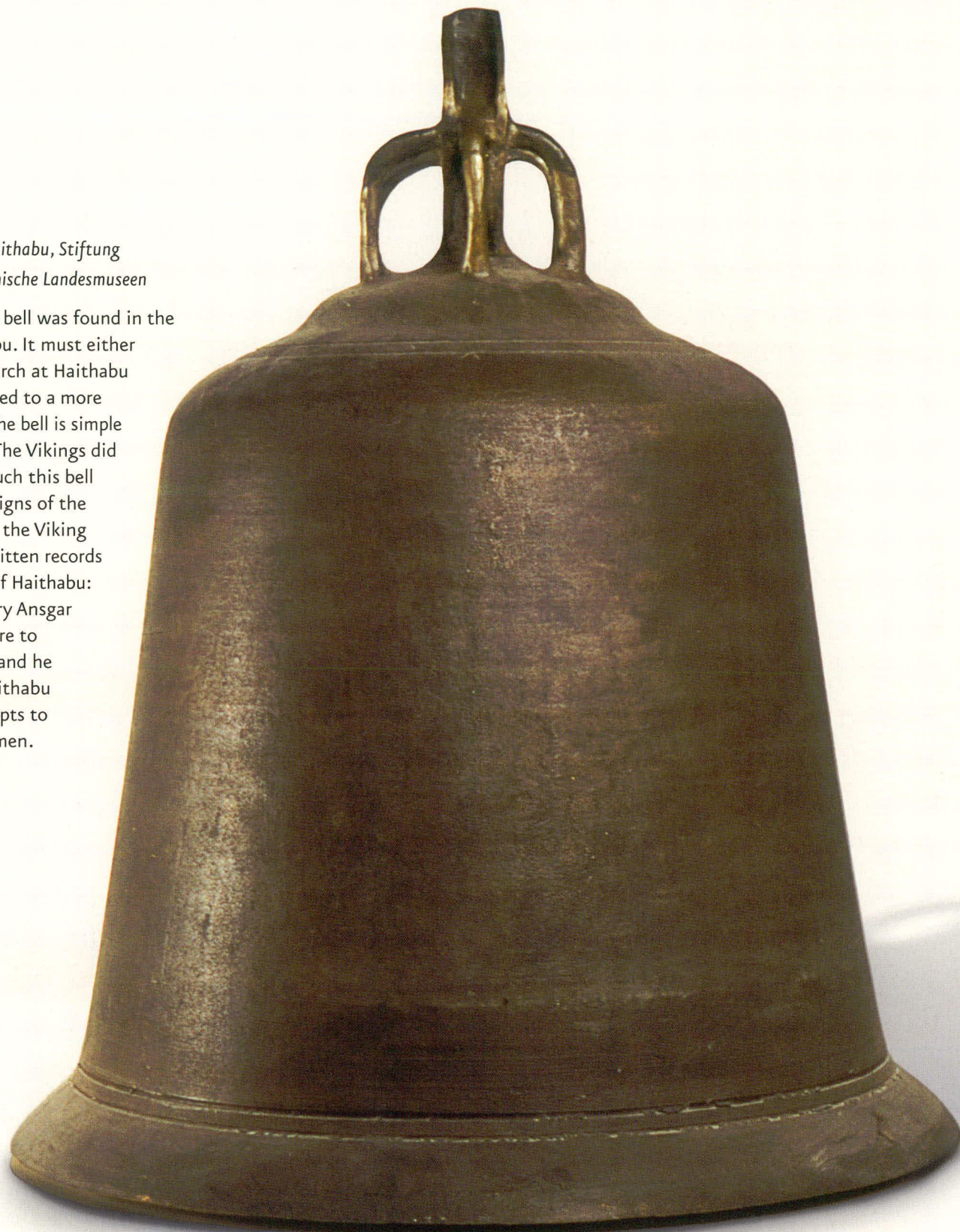
9th century

Haithabu

Viking Museum Haithabu, Stiftung

Schleswig-Holsteinische Landesmuseen

This ninth century bell was found in the harbour of Haithabu. It must either have hung in a church at Haithabu or have been shipped to a more northerly church. The bell is simple and undecorated. The Vikings did not ring bells, as such this bell is one of the first signs of the Christianisation of the Viking world. There are written records of the conversion of Haithabu: in the ninth century Ansgar was given land there to establish a church and he would later use Haithabu as a base for attempts to convert the Norsemen.



Despite such eye-witness reports, the sources we have on the Viking raids were entrusted to parchment only after the events occurred and almost without exception by Christian chroniclers. Thus the texts are coloured to a certain extent. One of the most exhaustive chronicles is that of Adam van Bremen about the diocese of Hamburg, written in c. 1072. In this *Gesta Hammaburgensis ecclesiae pontificum* Adam describes the Viking raids in the Rhineland during the ninth and tenth centuries. There are also accounts of Viking raids in the biographies (*vitae*) of important churchmen of the period. The accounts are very similar and stereotype, but the details are very accurate. Rimbert relates of the destruction of Hamburg in 845 in the *vita* of Ansgar. 'But while the diocese and the mission developed laudably and in accordance with God's will, suddenly the Viking pirates appeared with their ships before Hamburg and besieged it. The suddenness and surprise of these events left the men from the county no time at all to gather [...] The heathens attacked; and soon the fortress was besieged; as he [Ansgar] understood that it was impossible to resist, he tried to save the holy relics that had been left in his care; his clergymen fled in all directions; and he himself barely managed to escape, but without his habit.

Those that were able to escape the fortress fled; most managed to get away, some were taken prisoner and very many were killed. After the capture the enemy thoroughly looted the fortress and the neighbouring settlement; they had arrived at night, and for that night, the next day and one more night they stayed there. After thorough looting and pillaging they then disappeared. The church that had been built under supervision of the bishop, and had been abundant with art and the beautiful monastery were burned down to the ground. Together with many other books, the finest of the Bibles, bestowed on our father by the illustrious Emperor, was consumed by the flames. All that Ansgar had possessed in religious objects and other riches was destroyed by looting or fire during the enemy attack; all that was left him was his bare life.'

Conversion of the Vikings

Bishop Ansgar was the first missionary to leave Germany in 826 and travel to the North to convert the Danes. In 829-831 he travelled through Sweden by order of Emperor Louis the Pious, because delegates there had heard the population was prepared to convert to the new (Christian) faith. In the long run, however the mission was



Mould for Thor hammer and crucifix

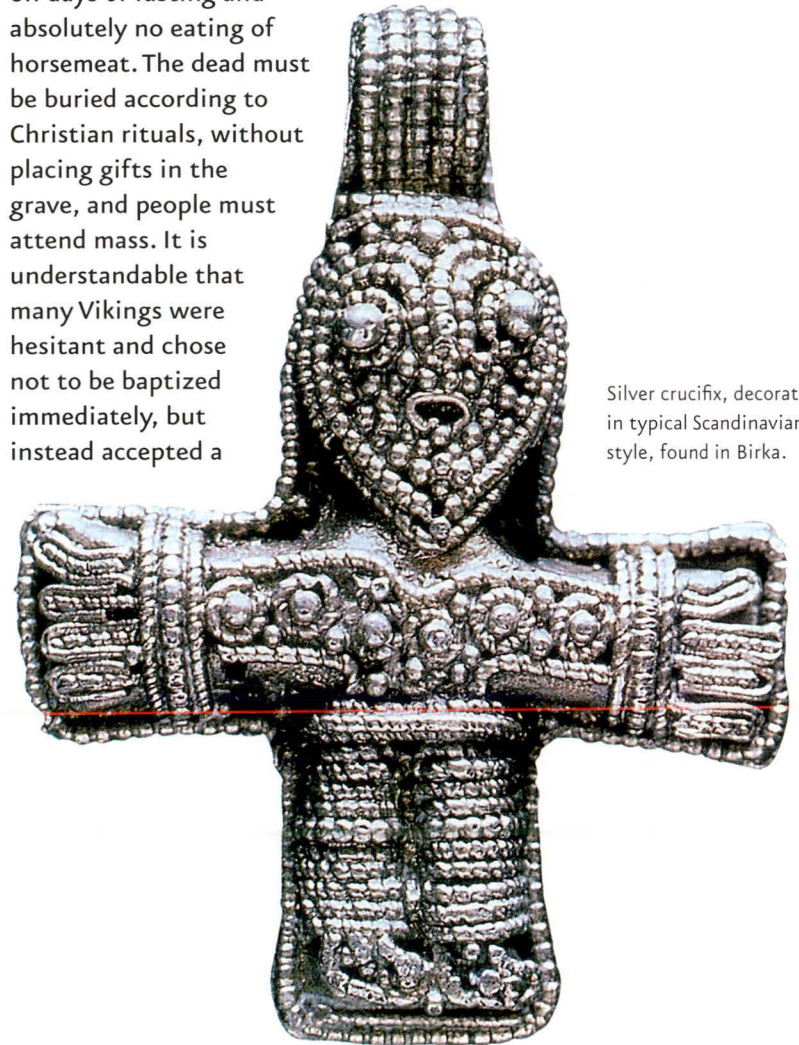
11th century [?]

Stiftung Schleswig-Holsteinische Landesmuseen – Schloß
Gottorf, Schleswig

In the Scandinavian region Christianity and the 'pagan' religion continued to function alongside each other even after the official baptism of the kings. Many of the new nominal Christians continued to worship the old gods. Christian crucifixes and Thor hammers could be cast together in this soapstone mould. Both were worn as amulets and to decorate other objects.

a failure because there was a lack of missionaries to follow up what he had begun. In his biography there are descriptions of the repeated attacks on Ansgar's ship, whereby he and his men narrowly escaped alive. 'Even the royal gifts, which they would present, and all their possessions were lost, bar a few small items they had with them when they jumped into the water. Among other things they lost about forty books, which had been collected for religious purposes, to robbers.' The situation deteriorated further when the intended converts destroyed Paris and Hamburg in 845, including Ansgar's own episcopal church. However, this did not deter him and his second mission to Sweden from 852 to 855 was more successful, but when he died in 865, the Christian conversion of Scandinavia came to a halt. Ansgar is nevertheless called the 'Apostle of the North'. Ansgar and other missionaries had been given land to build a church, especially at Haithabu and Birka. In the port of Haithabu one of the oldest church bells in Western Europe dating from 950 has been found. The local rulers probably agreed to have the church built because they realised the advantages of having Christian merchants arriving with their merchandise; they were familiar with the riches of the Christian Carolingian Empire.

The conversion of a 'heathen' to the Christian faith required more than the simple denunciation of the pagan gods. The elements of Christianity also had to be embraced: belief in the immortality of the soul, life after death, the Trinity of God the Father, the Son and the Holy Spirit, and Judgment Day. Each individual was responsible for the morality of his actions in the Christian sense. The missionaries required a great many changes from their converts: no keeping of slaves, no disowning of children, no eating meat on days of fasting and absolutely no eating of horsemeat. The dead must be buried according to Christian rituals, without placing gifts in the grave, and people must attend mass. It is understandable that many Vikings were hesitant and chose not to be baptized immediately, but instead accepted a



Silver crucifix, decorated in typical Scandinavian style, found in Birka.



sort of declaration of intent (*primsigniering*). This meant they could go to mass and associate with Christians – including Christian merchants – but did not have to agree to all the other changes. This ‘intermediate stage’ benefited both parties. For the greater part of the ninth and tenth centuries pagans and Christians lived side by side

in Scandinavia. To a certain extent both religions co-existed, which is typical of any transition. This co-existence can be traced through items such as moulds for casting charms of both Thor hammers and Christian crucifixes and even a silver amulet of a Thor hammer fused with a crucifix. The official political Christianisation of the entire

Adel Church, typical Viking Age church, (mostly ninth century) near Leeds, England.

Transition from pagan world to Christian world in Scandinavia

until c. 850: Scandinavia ‘heathen’, but contact with Christians

from c. 850 - 950: missions and syncretism, but no real foothold

missionaries: Ansgar, Willibrord, Ebo, Rimbert

965 (baptism Harald) - 1050: conversion

from 1066 (end of Viking Age): Scandinavia predominantly Christian



population followed King Harald of Denmark's baptism in 965. He was very impressed by the power of the Christian Emperor and hoped to be able to create his own powerful kingdom with Christianity as the state religion. With this decision Denmark formally became part of the Christian world – but Christianity had not yet permeated the population. But eventually, all of Scandinavia converted to Christianity: Denmark with Harald Blue-Tooth's decision in 965, Norway not before 1015-30 under King Olaf the Saint, and Sweden only during the course of the whole 11th century.

Society in the Tenth and Eleventh Century

The difference in faith was an obstacle in the contact between the Frankish population of Western Europe and the Vikings, despite of the continuous contacts in trading places. When the Vikings were finally converted to the Christian faith during the tenth and eleventh centuries the differences between the populations began to fade totally. In the course of three centuries of contact, trade and warfare they had already influenced each other to a great extent, but their faith probably proved the final obstacle. Following



the Vikings' conversion they slowly became assimilated and became part of the early mediaeval roots of current European society. They were never actually defeated. The defences erected against the Vikings were only partly effective. The idea that the Vikings lost their technological

Twelfth-century wooden stave church in Borgund, Norway.

Panel from gilded reliquary

c.1200

National Museum of Denmark, Copenhagen

inv.no. D801

Of the 29 panels originating from the church of Tamdrup at Horsens on Jutland, seven were probably made for a reliquary.

The others come from an altar front. Four of the seven reliquary panels depict the story of the missionary Poppo who, in 965, converted Haraldur (Bluetooth) Gormsson, King of Denmark to Christianity. He demonstrated the power of his faith to the king by putting his hand in an iron glove into the fire until the glove glowed

red. The final panel shows the king being baptised in a barrel. Harald Bluetooth's baptism signalled the beginning of a Christian, united Danish kingdom. The Tamdrup panels thus show the origins of the Danish church. The reliquary may have held a relic of Poppo.



Coin with cross

c.975-980

Danish

National Museum of Denmark, Copenhagen

inv.no. FP 15

Harald Bluetooth was the first Christian king of Denmark. His conversion to the new faith initiated a wave of missions and baptisms that reached the farthest corners of the country. The Danish population was converted slowly but surely. King Harald propagated Christianity in a variety of ways; he had churches built, altars decorated and relics were distributed, which strengthened the faith. Danish coinage also showed that the country was now Christian. This coin, minted during his reign, shows the Christian cross, which in the early Middle Ages usually had four equal members – the so-called 'Greek' cross.



Scandinavian chess pieces from the eleventh century, found on the Scottish island of Lewis: king, bishop and pawns. National Museum of Scotland, Edinburgh.

advantage because their ships became outdated is not correct, because Viking ships played an important part in the development of new types of ships that were very successful in the late Middle Ages. But even then, continental sailing vessels had only very limited capacities of tacking against the wind.

Until their contact with the Franks and the Anglo-Saxons, the Scandinavian people north of Denmark had been relatively isolated. Through these contacts, whether friendly or hostile, the Vikings and Franks influenced each other to a great degree. By the tenth century agreements, voluntary or otherwise, had been made in most places between the Scandinavians and the local

rulers. The Frankish rulers, where it suited them, even appointed Viking chiefs as liege lords over smaller areas. Because of these agreements the Vikings became part of the power structure of the Empire. Both parties learned a great deal from each other, especially through their attempts to outwit each other. So the Vikings slowly but surely became part of a pan-European network that would ultimately become entirely Christian. Not because the Vikings were convinced that Christianity was better or more correct, but because the Christian world was so much more powerful. In the end it was just more advantageous for both parties to become part of the European Christian world.

Representations of the Vikings

Elements of the Popular Image¹

We do not have a single unequivocal image of the Vikings. On the one hand there are the representations in comic strips and feature films of the Vikings as ill-mannered, yet affable, beer-swilling pirates with large beards, horned helmets, broad axes and broad smiles. On the other there is the image from recent popular sociological books and large exhibitions of the Vikings as intrepid discoverers, founders of nations and a cultural vanguard. Both images are part of a modern myth. The ninth-century Scandinavians

who invaded England were not consciously colonising the British Isles, neither were their sword smiths aware that one day their products would be used as evidence of the Vikings' extraordinary craftsmanship. Some elements

of this modern myth, such as the horned helmets and the idea that they drank from skulls, are complete fictions.

The dominant and erroneous image of the Vikings has been created by comic strips such as *Hågar the Horrible* and popular films such as *'Erik the Viking'* by Terry Jones, which portray the Vikings as bloodthirsty and savage yet heroic and courageous warriors. In contrast, a number of recent books and exhibitions have emphasised how advanced the Vikings were by early Medieval standards, technically (ship-building), culturally (jewellery), geographically (America), organisationally (England) and even morally (religious tolerance). In any case we have a relatively positive concept of the Vikings.

This modern, 'positive' image of the Vikings is based on the eighteenth-century idealisation of the Viking Age in Scandinavia, Great Britain, Germany and the Netherlands. This mythology is itself based on the sagas of the medieval Icelandic authors who produced an idealised, largely positive image of their own past. From their perspective the Vikings' wrongdoing could be portrayed as heroic, partly because they had been dead for so long and partly because they were the ancestors of respectable Icelandic families. Even in the annals of the earliest historians in Great Britain there is a certain

Icelandic postage stamp from 2000 showing a Viking ship, to celebrate the millennium of the discovery of America by Leif Eriksson around the year 1000.



¹ Based on research by Rudolf Simek.



Group of Viking re-enactors during a Viking weekend at the archaeological theme park 'Archeon' in Alphen aan den Rijn, The Netherlands.

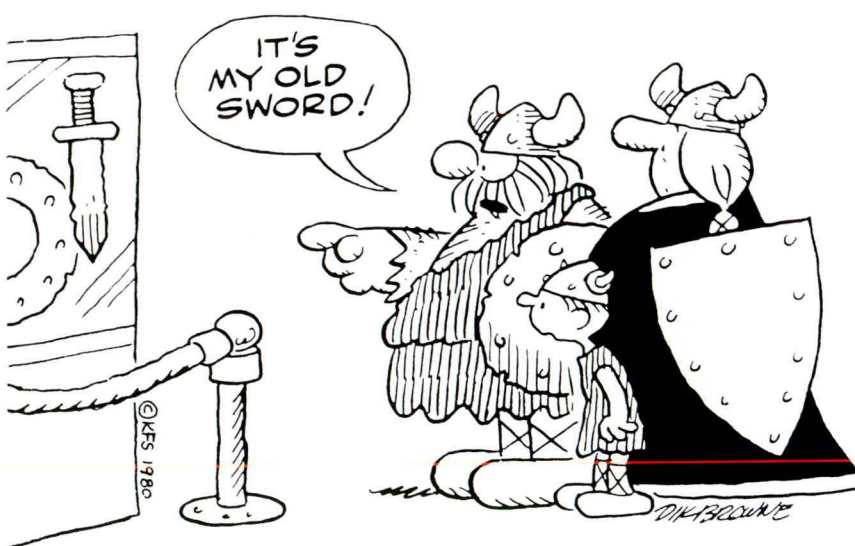
idolising of the Viking past. For these people the Vikings were above all illustrious ancestors.

In the Frankish annals this positive view is replaced with a deep hatred of the Vikings – but these are entries made by victims. It is interesting though that none of the enemies, victims or chroniclers during the 'Viking Age' thought of the pirates as 'Vikings'. This was a term the Scandinavians gave themselves. In the sources the chroniclers speak of Danish pirates or

Norsemen. Later, after 1070, the chronicler Adam van Bremen explains: 'The Danes and all other populations beyond Denmark are called Norsemen by the Frankish historians' and 'those pirates, whom they [the Danes] call Vikings (Wichingos), we call Ash-men.' It is striking that the descriptions of the Norsemen in the Rhine region are fairly subdued: mostly they are spoken of as pagans and pirates. Further to the West in Europe the language used became stronger, with Abbo from Saint-Germain-des-Prés

as the ultimate, and who in 897 describes the looting of Paris in 888 in verse. He speaks of 'Satan's scum', 'people of bad omens' and 'the terrible army, murderous battle array and blood-thirsty monster.' The reason for this difference lies partly in the difference in the style of writing, but also partly in the horrors that occurred in the Seine/Loire and Rhineland regions. It seems the attacks were far more horrific in France than in Germany. This could explain why the writer of the *Annals of Xanten* merely gives a rather straightforward account for the year 846: 'According to their custom the Norsemen plundered'. All the same even in the Rhinelands the Danish heathens, pirates and robbers were always associated with violence and destruction.

Hagar the Horrible cartoon: 'Hey, that is my old sword!'



Elements of the Viking Image

There are several recurring elements in the modern image of the Vikings. They are primarily portrayed as men with red hair and wild beards wearing horned helmets. They wield axes, have strange nicknames such as Bluetooth, the Far-Travelled, or the Boneless, and sail ships with dragon's heads at the prow. Their anger makes them 'go berserk' and they drink beer from their victim's skulls. These elements reappear in both old films and historical novels, reinforcing the concept that this is a historically correct image of the Vikings, as they do in modern cartoons, films and animated films. Modern illustrators probably do not intend to conceptualise history, but they use the fixed 'Viking elements' both consciously and unconsciously thus reinforcing certain myths such as the horned helmets and the drinking from skulls.

All these elements can be found in the cartoon *Asterix and the Normans*. The Vikings have ships with dragon's heads and red and white striped sails; they wear horned helmets and fight with axes. Central theme in the story is the fact that Vikings feel no fear and that 'is an intolerable situation! The whole world knows what fear is,



Animal head from a ship's prow
5th – 6th century

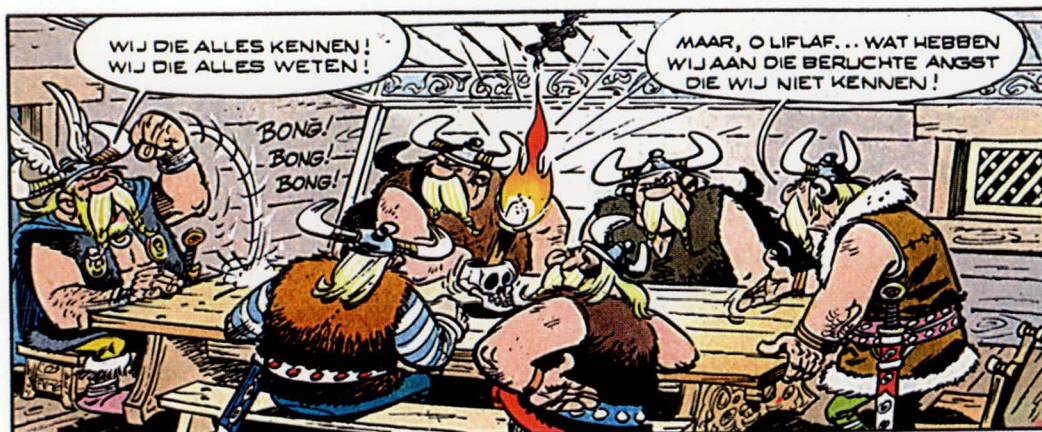
from the Scheldt near Zele

National Maritime Museum, Antwerp

Several wooden animal heads have been found in the River Scheldt in

Belgium. This one, measuring some 0.7 m in length, is the largest. When they were found they were all associated with the Vikings and were assumed to be dragons from dragon ships. However, that has proved to be mistaken. Scientific research has shown

that all the heads date from between the fourth and seventh centuries, long before the arrival of the Vikings. The idea of decorating a ship's prow with an animal head is not typical for the Vikings, indeed none of the surviving Viking ships have this feature.



'Fear gives you wings' from
Asterix and the Norsemen.

even the weakest tribes' and 'apparently fear has wings, by Odin! We should be able to fly... like birds!' In the film 'Erik the Viking', apart from the standard elements, humour has been included by playing with the idea that Vikings had to die in battle to reach Valhalla. When the dragon ship starts to sink in a terrible storm and the Viking crew are threatened with drowning, they resort to fighting each other so they will be killed in battle. This strange battle on the ship makes them forget everything around them. And just in time one of them hears the ship run aground. When they turn around in surprise they realise they are only a few yards away from land. The theme of 'going berserk' runs through the whole story. The journey of Erik the Viking is the first sea journey of a pale, fearful young Viking, whose father was renowned for his fits of anger. The noisy father hopes that the journey will teach the boy some courage. After his

initial seasickness and other undignified ailments not befitting a Viking, towards the end of the story the moment finally arrives when the boy gets so angry his eyes roll in his head, he foams at the mouth and in a blind rage he murders the inhabitants of an entire village. Great applause, of course, because he has learned how to 'go berserk'.

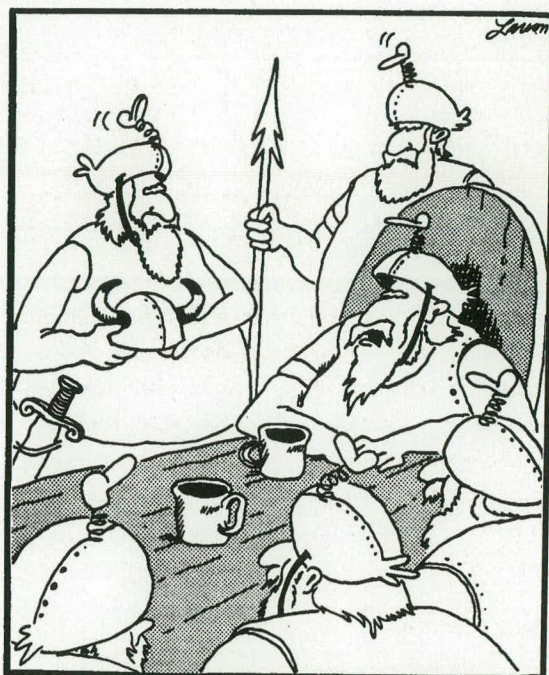
Misconceptions

The greatest misconception in representing Vikings is the horned helmets. They are without

'Let's kill each other, so that we get to Valhalla'. Still from the film 'Erik the Viking' directed by Terry Jones.



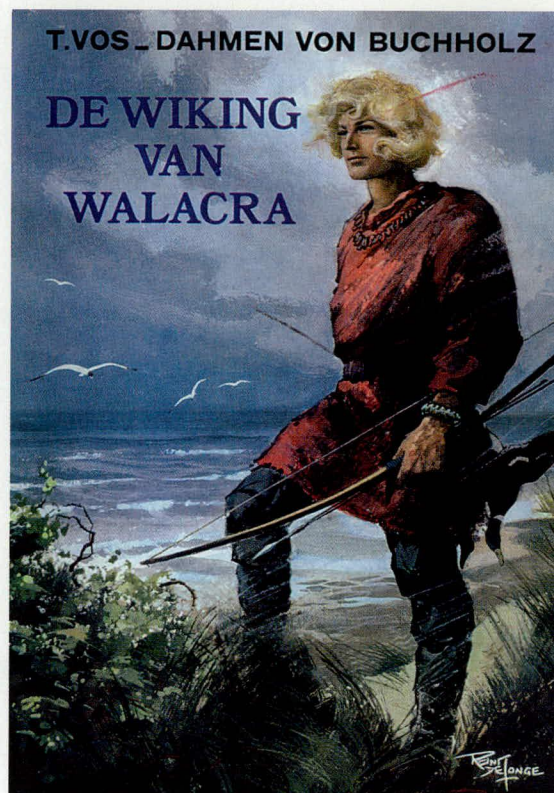
Cartoon by Gary Larson:
'And now other business...
Ole Johnsson wants to
show us a new helmet
design!'



"Now on to other business . . . Ole Johnson here
has a new helmet design to show us!"

exception a fixed element in all illustrations of Vikings. Helmets like these dating from the Viking Age have never been found and it has been established without a doubt that Vikings never wore horns on their helmets. They were straight, close-fitting helmets with a nose plate.

The horned helmet first appearing in eighteenth-century, but where does the image originate? It appears that spectacular finds in a Danish peat bog greatly influenced the concept of the 'ancestors' in the eighteenth and nineteenth century. In this period in Veksø on Sjaelland bronze helmets were found with curled horns and bulging eyes, resembling the head of an animal. At the same time large bronze wind instruments were found in the peat bogs, so-called 'lurs', so it is no coincidence that the Vikings were depicted with horned helmets and playing on lurs. In reality these findings originated from the Bronze Age; the helmets date back to 800-400 BC. The horns we see depicted on Viking helmets differ greatly from those from



Cover of the children's
book 'De Wiking van
Walacra' by Tonny
Vos-Dahmen von
Buchholz from 1971.

Bronze-age helmets with
curled horns, found in
peat. National Museum of
Denmark, Copenhagen.



the Bronze Age; they are real horns, fairly short, sharp and white. It has been suggested that the horned helmets could be a misinterpretation of a grave treasure, where a much damaged helmet was found together with drinking horns for drinking out of. Even if civilisations around the world have worn headgear to make themselves look like wild animals, the horned helmets are the greatest historical blunder with regard to the Vikings.

Conceptions about the Vikings have influenced the interpretation of the archaeological finds. In the period from 1934-1953 six wooden animal heads were found in the Scheldt, most with a long neck. All six were thought to be the infamous 'dragonheads' from the Viking ships. The first and largest head, measuring some 0.7 metres in length was found in 1934 in the Scheldt near Appels and since 1938 kept in the British Museum in London.

Another head was found in 1951 in the Scheldt near Zele and is part of the collection of the Scheepvaartmuseum in Antwerp. This snake-head has a length of 71 centimetres. The other four are smaller fragments varying from 10 to 40 centimetres in length. After research on the wood it appeared that they were too old to be

linked to the Vikings; they are from the fourth to the sixth centuries AD. This is additional proof that not only the Vikings had figureheads with animal forms. The Romans and Germans had them, as did ships from beyond Europe. In fact a dragon-headed Viking prow has never been found and illustrations from that time show human heads, animal heads, wind vanes and such gilded royal standards as have survived in Norway as weather vanes on churches, modified to fit their new purpose.

However, wind vanes from the prows of ships, made of metal and crowned with a three dimensional animal, have survived. These even

Serpent's head from the prow of a ship, c.400, found in the Scheldt near Appels. British Museum, London.



Bronze horse on a pennant
from the prow of a Viking
ship. National Museum,
Copenhagen.



match the description from c. 1000 of the ships from the fleet of the legendary king Canute.

In 1946 a young skipper went to the Fries Museum in Leeuwarden with a 'Viking hoard' – a number of extraordinary objects, including pieces of bone with runic inscriptions, coins and silver jewellery, allegedly found by his grandfather and never shown to anyone. In 1962 the Fries Museum managed to buy the most important pieces, including the almost complete 'Viking hoard of Winsum'.

The hoard consisted of fifteen small silver objects: Thor hammers, rings, pendants, an ingot and a small sculpture of a warrior; all found at Bruggeburen near Winsum. The museum assumed it had acquired an extraordinary treasure and concrete evidence of the Viking presence in the Netherlands. However, doubts were soon voiced as to the authenticity of the objects. They exhibited few similarities with Viking hoards found in Scandinavia and were too uniform despite their different materials. Extensive research revealed that the silver was of a completely different composition to Viking silver and also showed traces of modern tooling. The 'Viking hoard of Winsum' turned out to be a complete forgery. The objects may have had a

Nazi background. The Third Reich was actively working on ethnographic evidence to construct a Germanic genealogy and the tough, blond Vikings were eagerly seen in this context as pure 'Germans'. In special workshops, the original German objects were imitated, and used mostly in schools. The Thor hammer and the images of warriors were very popular symbols.

The young skipper had probably bought such objects, made some alterations to them, and sold them for a very good price. The Dutch archaeologists, who dearly wanted tangible proof of the presence of Vikings on their territory, had been fooled.

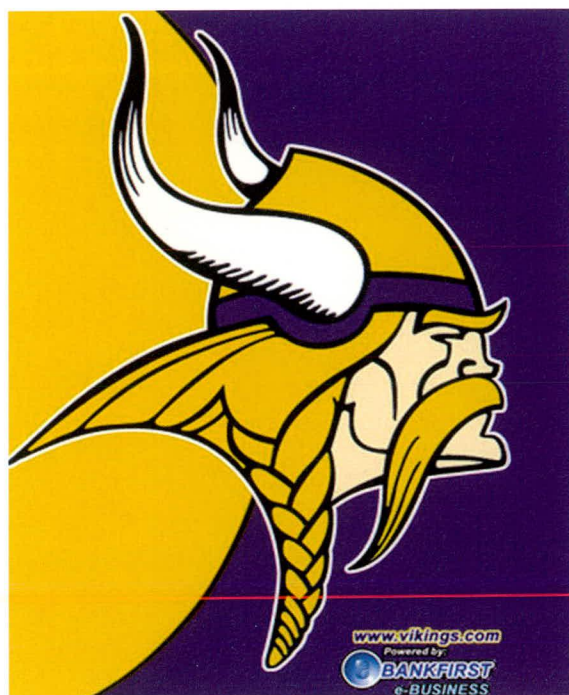
The Vikings as Trademark

Horned helmets and dragon ships with striped sails are important components of the logos used by companies, clubs and products named after the Vikings. An association with the Vikings is chosen to demonstrate a tough and courageous image, but without the elements of cruelty and violence. Naturally Viking trademarks are most prominent in the Scandinavian countries, where they represent a historical national identity. Supporters of the Scandinavian football teams wear horned helmets in the national colours – with or without blond or red plaits –



Norwegian football fans with horned 'Viking' helmets.

Logo of the Minnesota Vikings, an American Football team.



and with inflatable axes. Fans of the British darts player Andy Fordham, nicknamed 'The Viking' also did this during the World Darts Championship in 2003. In Scandinavia there is also a lively 'Viking Metal' music scene with bands such as Enslaved, Thyrfing and Fortid who employ the bloody history of the North in their lyrics and on their T-shirts. There is a Norwegian football team called the Viking Stavanger; the Olympic ice stadium in Hamar is called the Viking Ship and was built in the form

'Viking treasure of Winsum' (10 objects)
mid-20th century
Fries Museum, Leeuwarden

The 'Viking treasure of Winsum' was bought in the 1960s by the Fries Museum as an

extremely important find. The treasure is not authentic. This is clear from the style and composition of the objects, which differs from all known Viking treasure. Traces of a file show that modern tools were used to make the objects. Neither

does the colour of the patina match that of real Viking object; the silver content of the 'treasure' ranges from 25 to 65 per cent, whereas it is much higher in real Viking objects, usually around 90 per cent.





Viking ship from Playmobil.

of an upturned ship; and the 'Vikinger' is a Danish carnival band. Even in England they have not forgotten their origins: the local Yorkshire radio station is called Viking FM. The Vikings' impressive history of exploration may have inspired NASA to call its Mars explorer Viking I.

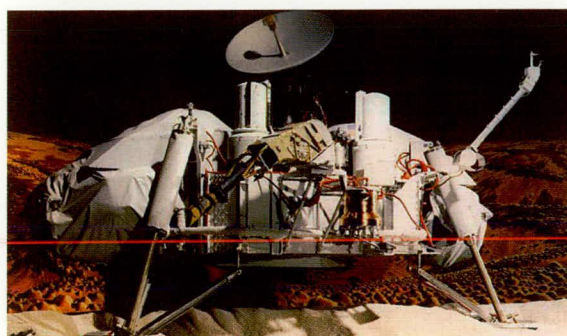
The tough Vikings have traditionally been used as a trademark by sporting teams from cold climates, such as the American Footballers of

the Minnesota Vikings, who have a Viking with horned helmet, red plaits and a red drooping moustache as their logo. Even a Frisian football team – F.C. Heerenveen – call themselves the 'Blue White Vikings'. The Frisians were never Vikings which shows how little history has to do with such iconography. There is a well-known brand of skates with the name Viking, used by world champions such as Falko Zandstra and Rintje Ritsma. Vikings can be found in the most unlikely places. Rover cars has used the dragon ship with striped sails; perhaps the association with travelling rovers lies at the basis of this? Hotels, yachts, maritime rescue equipment, kitchen equipment and sewing machines all carry the name 'Viking' whether applicable or not. When I started work on this book in the Centraal Museum Utrecht, I was given two files to keep my notes in; the manufacturer was 'Viking' – a supplier of office equipment.



Rover cars logo with a Viking ship with striped sail.

Viking I, NASA's Mars exploration craft.



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Transport, Building and Housing



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Rheinische Friedrich-Wilhelms-Universität Bonn:

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Rudolf Simek
Ana Suhr

The project has been made possible with the support of:

Netherlands Culture Fund
Museum of National Antiquities, Stockholm
Archaeological Department, Zutphen Council
National Museum of Antiquities/Annemarieke Willemsen, Leiden

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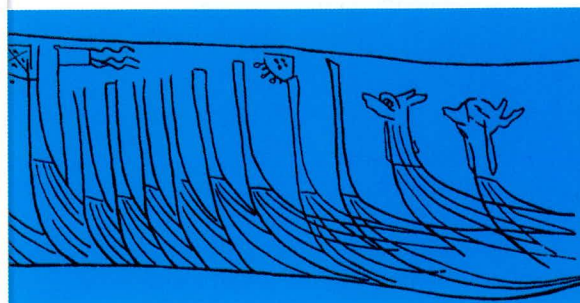
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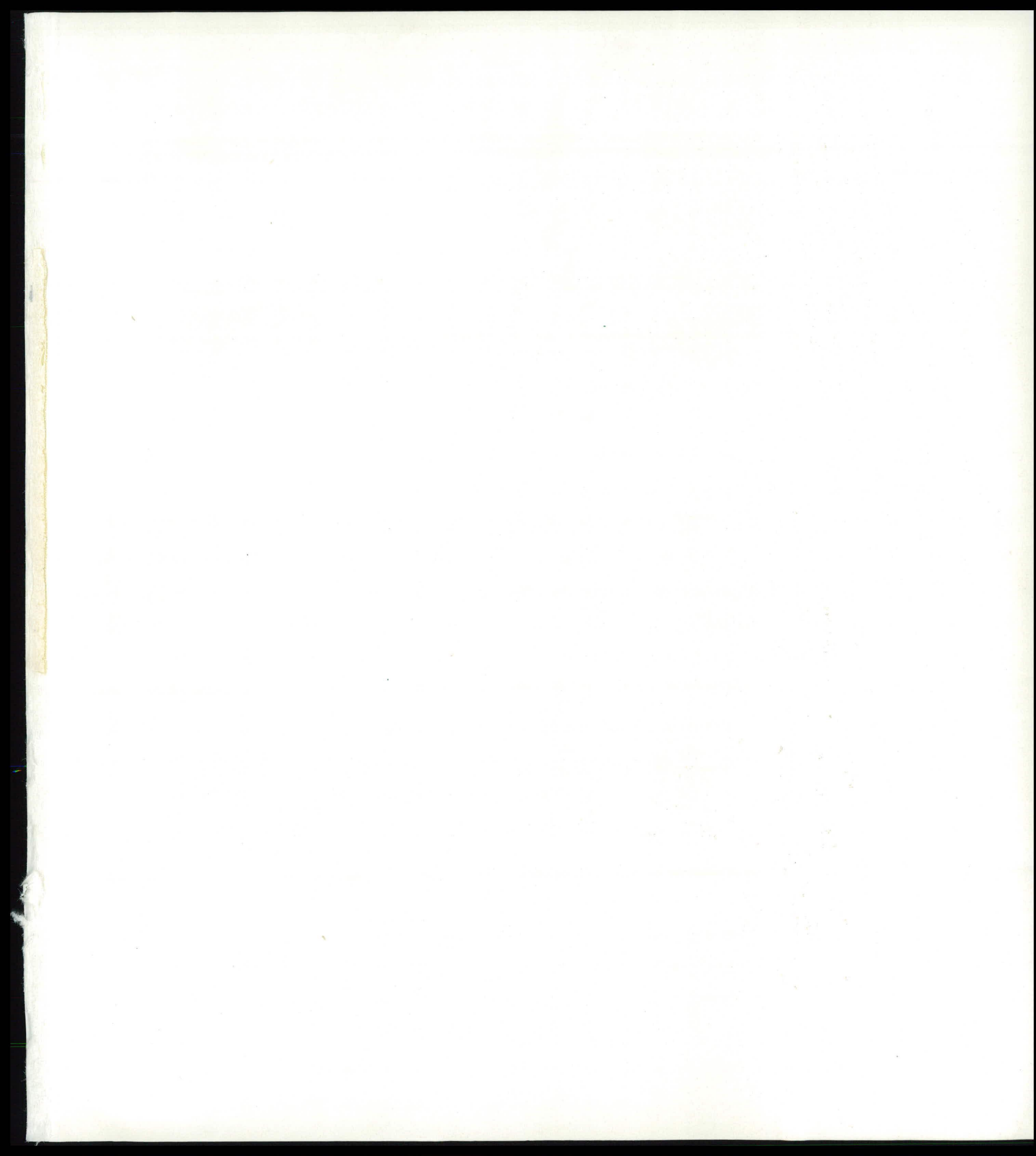
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Vikings!

Raids in the Rhine/Meuse region 800-1000

The Vikings: on the one hand they are known as merciless, beer-swilling raiders from the North, and on the other they are admired as intrepid discoverers and determined colonisers. But what were the Vikings really like and what do these seafarers from the North have to do with the Rhine-Meuse region?

This book covers the turbulent period between 800 and 1000 AD in this area, which suffered greatly under the Viking raids. Via the Rhine, the Norsemen penetrated deep into the Frankish empire, where they attacked Cologne, Bonn, Aachen, Dorestad, Utrecht, Zutphen, Liège and even the remote abbey of Prüm in the Eifel. However, the Vikings were interested not only in wealth and glory. They adopted Carolingian trends in clothing and jewellery and also took Christianity back home from the Rhinelands to Scandinavia.

Subjects discussed in this book include:

Vikings at home and abroad
Ships and navigation
Power and wealth
Wine and weapons
Pagan tribes and Christian churches
Representations of the Vikings

