

English Summaries

In Olaf's Office

By Lene Larsen

Impressions of four years (1977-1981) of secretarial work for the Chair of Medieval Archaeology under the guidance of Olaf Olsen. The difficult situation as to office and other facilities is described and so is the great number of activities inspired and arranged by Olaf Olsen during those years, e.g. the organization of the 8th Viking Congress, the excursion to the Soviet Union, the »Projekt Middelalderbyen« and the large excavations of Øm Kloster, not to mention the day-to-day chores of managing the department, lecturing etc.

The amiable qualities of Olaf Olsen and his expert and firm conduct of the current affairs of the department are emphasized.

Excavations at Viborg Søndersø

By Hans Krongaard Kristensen

During recent years various excavations at Viborg Søndersø have located a now lost part of the town of Viborg. Around the year 1000 a moist meadow was developed for settlement by laying out fascines or thick branches covered by a layer of sand. From around 1000 to 1300 it was a densely built-up artisan's quarter. Around 1300 the water level of the lake was raised by approx. 2 m – probably in connection with the construction of the castle of Viborg in 1313.

Due to the raised water level some parts of the settlement were flooded, while others were waterlogged. At the same time the road to Asmild – no doubt the actual reason for this settlement – was flooded and the area lost its importance.

Because of the raised water level and the lack of building activities in the area for the last 600 years the cultural layers are extremely well preserved.

Millstream or Moat

By Bi Skaarup

The great town topographer and amateur archaeologist major-general H. U. Ramsing functioning during the first four decades of this century, proposed a thesis about the earliest Copenhagen and its development in his books about the city's history and topography.

The thesis was based upon a long series of archaeological observations in the city. For the first time in European archaeology he employed stratigraphy as a historical source. In the area encircled by Rådhuspladsen, Vestergade, Gammeltorv and Farvergade he discovered a so-called "layer free of brick" on top of the original topsoil. He assigned this layer to the period before bishop Absalon, as he thought, the bishop had to be the introducer of tile to the town, and so tile could not appear in the layers before his take-over of Copenhagen.

A conclusion drawn on this basis – by lack of find – is indeed disputable, but one thing is certain; the tile-free layer does exist and it is located in this area. Here Ramsing thought the oldest settlement "Havn" was situated; the village Absalon was endowed with by king Valdemar the Great around 1167 A.D.

In connection with the settlement he found a ditch-system in the form of a horseshoe in the area between the original coast and Vestergade. The manmade ditch had a width of 7.5 m and was about 3 m deep. At Gammeltorv a bank along the inside of the ditch was found.

Ramsing did not believe the ditch could be a moat, as he thought

a moat should hold water, and water had to be supplied from far away, as no natural waterstream existed close by. Another reason he saw in the fact, that the bank only was found along a short stretch of the ditch, and there had been no traces of wooden constructions on its top. Some sort of wooden constructions had to exist on an embankment, he thought.

Ramsing concluded that the ditch-system was the work of Absalon. But in relation to Havn the bishop did put a moat and embankment around a very large area and at the same time led water into the moat. This time the ditch-system must be established as a mill-stream. The water was led from the western moat into a large mill-pond north of Vestergade and from here into the ditch-system, where two watermills were supposed to be placed.

In February-March 1987 Copenhagen Town Museum had an opportunity to make a section in the ditch at the southside of Vestergade No. 7. Here it was demonstrated, that Ramsing's observations had been quite precise. The ditch had been dug from one of the oldest (and tile-free) cultural layers in the area. The subsoil glacial clay apparently was placed in a bank on the inside of the ditch while digging, but later on, as the ditch was demolished, had been put back into it. The excavation did not reveal when the ditch was established, but a previous investigation has given a C¹⁴-dating of 12th century. The demolition must have taken place some time around 1200. The ditch has never held running water, but probably stagnant.

It is highly probable that this is a moat-system, a moat and an embankment round the earliest settlement of Havn.

Two Medieval House Sites in Odense

By Lars P. Pedersen

During the years 1980-83 an excavation was carried out in Odense with the purpose of finding the remains of the church of St. Alban's known from the assassination of St. Canute the King in 1086. The church was found, and in connection with this excavation two house sites south of the church, down by the river Odense Å were also excavated.

The older house was built from timber upon a layer of garbage and black earth, containing a lot of animal bones. It has a rectangu-

lar ground plan and consisted of two rooms, with a clay oven in the easternmost room.

By means of dendrochronological dating a wooden post from the house has been dated to the year 1292.

Upon these house remains a new and larger house, resting on red clay bricks, was later erected and now obviously constructed as a framed building filled in with wattle and daub. This new house also had two rooms.

After this house had been pulled down, the site was abandoned and gradually filled up with a 2 m thick layer of sand and black earth, containing a lot of fragmentary clay bricks and animal bones.

It is suggested that the houses were owned either by the diocese of Odense or rather by the cathedral of St. Canute since the fragments of clay bricks seem to indicate a connection to the rebuilding of the cathedral in brick during the years around 1300.

The Town Hall

Excavation of the medieval town hall in Aarhus

By Ole Schiørring

In 1982 part of the medieval town hall in Aarhus was excavated. The town hall was situated at Store Torv just west of the main entrance of the cathedral.

The house, which was erected c. 1450, was originally a rectangular brick building. Only the basement was preserved and from the very start served by three descents. The southernmost was a double descent and in the descent was a pillar which probably had carried an arrangement of stairs leading to the ground floor of the town hall with the main entrance. Some time in the 16th century this entrance was replaced by a square stair turret built against the western front of the house. In connection with this rebuilding the basement's arrangement plan was altered. The town hall was changed quite extensively during the 18th century and eventually pulled down in the middle of the 19th century.

The Wends in Roskilde

By Michael Andersen

Medieval Roskilde was a town with two suburbs. One was called "Vindebode". The parish church, Sct. Ib (St. James), still exists. Archaeological excavations below the floor were conducted by Olaf Olsen during the years from 1959 to 1961. A great amount of Slav inspired pottery was brought to light at this occasion. The name "Vindebode" points in the direction of a Slav connection, too, the meaning being "The Booths of the Wends".

Three Slav bronze mountings for leather knife sheaths were found during an excavation nearby in 1980. A total of ten similar mountings have been found in Roskilde and environs.

These bronze mountings are very common in the region along the Baltic coasts of Germany, which was occupied by the Wends. They are commonly found in graves, both male and female, and they date to the 11th and 12th centuries. In 1938 H. A. Knorr divided the Slav sheath-mountings into five types. Knorr's typology is still valid and has been applied on this material.

Trade in knife sheaths across the Baltic is not likely. The mountings from the Roskilde area must be evidence of visiting Wends, probably tradesmen. Consequently, "Vindebode" was a trading post to which the Wends came sailing.

The conflicts between Danes and Wends during the 12th century, and their culmination in 1168 with the Christianization of the Wends, are well known. The relations across the Baltic seem to have been more peaceful during the previous centuries, when commerce flourished.

Leather Footwear and its dating c. 1250-1500

By Hanne Dahlerup Koch

The article is based on an investigation of the major part of the Danish material (fig. 1), which is a small material, but with distinct trends. A relative chronology with suggestions for a more exact one is presented.

The chronology is based on the shape of the top edge ("fodåbning") (fig. 4) of shoes and ankle shoes. The shape of the top edge

does not depend on the type of footwear; however, it is a condition that top band or lining has been found. The footwear is divided into three main groups. Main group 1: Footwear with no fastening, only the elasticity of the leather keeps it in position (e.g. fig. 5). Main group 2: Fastening and top edge correspond (e.g. figs. 6-7). Main type 3: The fastening belongs to an opening in the uppers (e.g. figs. 8-14).

In all probability main group 1 is insufficiently represented. Several subtypes belong to each main group. Only the most important are mentioned below.

Where top edge ("fodåbning") 1 dominated (Table 1): Main group 2 is the largest and looks like figs. 6-7. Main group 1 may be represented by boots (fig. 5). Main group 3 is represented by the types: "vristsnøre-fodtøj m. skårne snørehuller" (instep-laced footwear with cut tie-holes) (fig. 8), "vristsnøre-fodtøj med stansede snørehuller" (instep-laced footwear with punched tie-holes) (fig. 9), "vristsnap-fodtøj" (instep button footwear) (fig. 11), "vristsrem-fodtøj" (instep strap footwear) (fig. 12), "sidesnøre-fodtøj" (side-laced footwear) (fig. 13). Top edge 1 is tentatively dated to c. 1250-1325.

Where top edge 2 dominates (table 1): main group 3 is the largest group. It is represented by the same types as above. The quantitatively largest type is "vristsnøre-fodtøj med skårne snørehuller" which usually has 2×2 tie-holes (fig. 8). Main group 2 is found as shoes (fig. 7) or as children's footwear. Main group 1 is found as boots (fig. 5). The date of top edge 2 is suggested to c. 1325-1375.

Where top edge 3 dominates (table 1): main group 3 is the largest. It is represented by the same type as mentioned above, except "vristsrem-fodtøj" (fig. 12), and by a new type: "vristspænde-fodtøj" (instep buckle footwear) (fig. 10). The types shown in figs. 9 and 11 are found in greater numbers. Main group 1 is not present and main group 2 only as children's footwear. Top edge 3 is tentatively dated to c. 1350 or rather c. 1375 (supersedes top edge 2) to ca. 1425 or later.

Where top edge 4 is found (table 1): only found twice, and here identical types are found as under top edge 3. Possibly "vristsnøre-fodtøj med stansede snørehuller" (fig. 9) becomes the largest group in the course of the 15th century. Top edge 4 is tentatively dated to the 15th century. It remains uncertain whether it supersedes top edge 3 or whether the two types are used simultaneously.

For the entire period from 1250-1500 almost only boots as the types shown on figs. 6 and 11 are used for children's footwear (table 4).

The occurrence of »sidesnøre-fodtøj" (fig. 13, table 3) and "vrists-

rem-fodtøj" (fig. 12, table 2) evidently is not decided by chronology but rather by social class.

Small Pitchers from Ribe

By Per Kristian Madsen

During the last 100 years 18 small lead-glazed pots have been found in Ribe. They are all made of pipe-clay and the more complete ones contain a little ball of burnt clay, which makes the pot resemble a rattle. Another possible function could be scent bottles, or maybe the small vessels were originally used as flutes? Their date is not certain but according to foreign parallels, i.a. in Bergen, Norway, it is suggested, that these small pots might be among the forerunners of lead-glazed ware in the North Sea area although their distribution pattern cannot point to their place of origin within this area. Along with the pots 4 small figurines of animals and human beings, which might be of the same origin, are presented.

Iron Slags and Smithing

By Tove Nyholm

The author has examined smithing-slugs (approx. 3700 items) from Danish museums. A morphologic classification of the material led to three basic types, I: calotte-shaped slugs, subdivided into the following groups, Ia: thick slugs, and Ib: thin slugs (cp. figs. 1 and 2), II: forge-stone fragments made of clay (cp. figs. 4 and 5), and III: irregular clay-slugs (cp. fig. 6) of which some seem to contain iron. The question rises whether the slugs of the groups Ia and Ib reflect different smithing processes, group Ia being residue from the refining of iron, to be understood as either cleansing or remelting of iron, a method which is described by Evenstad i.a. The slugs of group Ib then should be ascribed to smithing proper.

An alternative is that all calotte-shaped slugs represent the same process, viz. refining and that the group of irregular slugs (possibly only the ones containing iron) represents smithing proper.

An investigation of the slugs and their archaeological context led to the detection and interpretation of 28 smithing sites. In several instances these sites only consist of a hearth on the ground in the

open. Light buildings are found at some smithies, while others are solidly built houses, possibly including dwellings (cp. fig.7). In towns the topographical position of the smithies varies, too. Some lie on the outskirts of the town, but several examples of smithies placed in the centre of dense settlements do exist.

Stove-tiles, Pottery and Glass older than 1550

By Vivi Jensen

Danish archaeologists are very familiar with Renaissance pottery, stove-tiles and glass which appear in abundance whenever we dig in the old towns. However, when it comes to putting a specific date to it, we very often get into trouble, because it can be difficult to distinguish between material covering as wide a range as that of the last half of the 15th century and about 200 years ahead, if no other dating material is available. In this essay material found in the inner moat of the castle of Koldinghus is presented. The moat was filled in just before the south wing of the castle was built by King Christian III in 1549-1551.

The material consists of pottery from the 13th to the 14th century mixed with a certain amount of "Renaissance material". Not very much was of 16th century origin, but among it were fragments of locally produced cooking-pots – but unfortunately only uncharacteristic bits of "jydepotter" (Jutland black ware) – German stone ware, and fragments of imported drinking glasses and glass from window panes – as far as we know, glass was not produced in Denmark till a few years later. Finally, there were some glazed stove-tiles that must have been very new when they were thrown away. Everything is left out that could have been of a later date because of secondary activities in the basement, and the essay presents only what can be safely considered to be earlier than 1550, and possibly not more than a quarter of a century older.

To exhibit the medieval Period in Næstved

By Palle Birk Hansen

The problems you have to deal with at a local museum are a different kind than the issues, you are facing as a student of Medieval

Archaeology. At Næstved Museum it took 9 years of investigation, excavation and conservation before we were ready to exhibit our medieval material.

Centering round a map showing the medieval habitation in our area the display presents the remains of medieval life within the framework of a series of themes: the field, the meadow, the sea, the woodlands, the workshop, the marketplace and townlife focusing on the subjects 'locks' and 'light'.

News of the Randers Madonna

By Else Marstrand

In October 1828 one of the oldest figures of the Madonna to be found in Scandinavia – the small bronze-cast Madonna of Randers – was found in the fjord just off the town of Randers.

Since then she has attracted the interest of and been treated by several scholars. However, their attempts to place the Madonna among contemporary Danish or foreign works of art have not been quite successful. On the other hand, the dating to c. 1100-1150 has been unanimously supported.

The figure is on show in the National Museum, and in the Cultural Museum of Randers an excellent bronze copy made by the National Museum can be seen.

Chancel Arch, Rood Crucifix and Arched Retable

On early Rood crucifixes in west Jutland, their forms and positions

By Ebbe Nyborg

Jutland's numerous Romanesque parish churches have remained virtually unaltered, and they still contain a wealth of 12th- and 13th century church furniture that is unrivalled in Europe. The most remarkable examples are undoubtedly the 'golden altars' of gilt copper, in some cases with a retable representing Calvary framed by a splendid arch (fig. 2). These distinctive arched retables have given

rise to discussion, both as to their place in the development of reredos in the Middle Ages, and whether they represent a special Danish (Jutland) form of retable.

The article sheds fresh light on these questions by studying contemporary Rood crucifixes in the churches of west Jutland, with special reference to their dimensions, forms, and possible positions in the chancel arch. It is shown that the accepted view that Rood crucifixes rested on a beam, spanning the arch between the imposts, has first and foremost applied to the Late Middle Ages. Whereas in the 12th and 13th centuries it seems that many, perhaps most, Rood crucifixes were in fact in a lower position, standing as a symbol of victory in the middle of the chancel arch. A setting of this kind is either proven or feasible in the parish church of Ål (figs. 3a-b), where the crucifix has been conceived and juxtaposed with mural paintings (the Last Judgement and side altars); in the churches of Sønder Nisum and Henne (fig. 4 and 10), and in Sønder Borris (fig. 5e), where the crucifix has been shortened in the Late Middle Ages – evidently normal practice – to enable it to be placed higher up (fig. 5d).

These crucifixes may be assumed to have rested on a low plinth or, particularly if flanked by effigies of mourners as in Henne (fig. 10), on a low screen or on the back edge of the altar as a reredos.

Low positions of this nature seem to explain two rare forms of crucifix that are now almost only identifiable in the abundant Scandinavian material: so-called ringed crucifixes and arched crucifixes, where the cross is encompassed respectively by a ring (figs. 7 and 8) or an arch (figs. 11 and 12). Both these forms seem to have been devised for a position in the middle of and concentric with the architectural arch, thus accentuating its symbolic connotations of triumphal and cosmic arc, gateway to Paradise and the vault of heaven. The difference between the two types of crucifix appears slight: ringed crucifixes would have been difficult to combine with mourners, but well suited for standing on a plinth without any direct connection with an altar. Arched crucifixes, on the other hand, would have been the perfect solution where an arrangement with mourners was wanted in connection with an altar, viz. as an arched retable.

The two types seem to merge in the remarkable Rood crucifix in Hohenkirche, Soest in Westphalia (fig. 13, effigies of Christ and mourners missing), which is the only surviving western European parallel. Through its outer contour and incorporation of mourners it belongs more to the arched type of crucifix, and there can be little doubt that it once served as a large retable (arched retable) beneath

the chancel arch of the earlier Hohenkirche. The disinclination of German scholars to perceive the crucifix as a retable, by arguing that no 13th-century retables of this size are known, cannot be sustained. Thus the arched crucifix in Højer church, Jutland (fig. 12 upper part missing) is almost the same size (about 3 m × 4 m) and, like its smaller counterpart in Døstrup (fig. 11, mourners missing), it has undoubtedly once stood in the middle of the chancel arch. The arguments in favour of this are not only aesthetic ones. The original function of arched crucifixes as retables is supported by their striking parallel to the arched retables which adorned contemporary high altars in a number of Jutland churches (fig. 2). The similarities are not just those of form, but also of iconography, and they leave no doubt that arched crucifixes were in fact arched retables for placing on Rood altars.

We have no reason to believe that ringed crucifixes and arched retables were restricted to 12th/13th-century Denmark or Scandinavia. They were probably quite common in Europe at that time, and some of them would surely have been even more splendid than the magnificent Soest exemplar.

The Sæby-Madonna

By Bent Bang Larsen

On the west wall of the south transept of the church of Sæby in Northern Jutland hangs a late-medieval carved wooden figure of the Virgin Mary with the Holy Infant. It has previously been ascribed to the workshop of Claus Berg, the celebrated Odense woodcarver, who flourished around 1500. The present author more cautiously states that it shares the common features of Danish sculpture at that time.

The figure depicts the Virgin Mary "clothed with the sun and the moon under her feet" (Revelation, ch. 12, v. 1).

Christen Rhuus, a wealthy merchant and mayor of Sæby (1646-1709) wrote that he paid for the figure of the Virgin Mary in 1697. The present author argues that the figure was already in the church of Sæby at that time, and that Christen Rhuus did not purchase it for the church, but merely paid for its repair.

It is likely that the figure originally formed the centre of a since lost reredos which preceded the present reredos of the church of Sæby. The latter was commissioned between 1519 and 1533, and is a

beautiful late-Gothic work, ascribable to a Flemish workshop, also featuring the Virgin Mary with the holy Infant.

Around 1470, the church of Sæby was handed over to the newly founded Carmelite monastery in Sæby. The church underwent considerable alteration and extension in the hands of the friars, who had probably finished the task around 1500.

Since the Carmelite Order is dedicated to the worship of the Virgin Mary, as also appears from the frescoes of the vaults of the choir of the church of Sæby, it is very probable that the reredos, which must have been in the church prior to c. 1520, is at least partially preserved in the wooden figure of the Virgin Mary in the south transept.

The town seal from probably the same time has an identical feature.

The Odense Altarpiece and the Rosary-Motif

By Peter Pentz

The hitherto published literature on the famous artist Claus Berg, who was the owner of a late medieval workshop in Odense, seeks to identify and characterize the personality of Claus Berg (e.g. Thorlacius-Ussing 1922), especially by examining the reredos in the cathedral of Odense, Funen (fig. 1). This altarpiece, which was probably originally a donation to the franciscan church in Odense, represents the coronation of Mary, the crucified Christ and several rows of saints. It is believed that the motif is a personal and free copy from one of Cranach's woodcuts (fig. 2). – In introducing a new possible graphic model for the reredos, the rosary by Erhard Schön (fig. 3), a connection between the rosary and its ideas and the altarpiece seems likely.

The beginning and end of the written rosaries are the incarnation of Christ and the coronation of Mary; thus the links to the Eucharist are obvious. – Most rosaries deal more with the life and wonders of Christ than with Mary herself (Scherschel 1979), and the life and death of Christ are the main subjects of the altarpiece in Odense, where the Passion is represented on the wings, and paintings (now lost) on the back of the wings represented the childhood of Christ.

For the theology of the Lignum Vitae, which plays a major role on the reredos, the tree of life-vision of Bonaventura has been suggested (Thorlacius-Ussing 1967), but – when having established the con-

nection between the rosary and the altarpiece – it seems more likely that the visions of Mectildis of Hackeborn are the theological background for Erhard Schön's rosary and thus for the Odense altarpiece.

Erhard Schön's rosary and the life-of-Christ rosary were popular items of the late medieval religious life, exemplified by Ulrich Binder's book "Speculum passionis domini nostri Jesu Christi", published in 1519. In this book the rosary and the Man of Sorrows (Imago pietatis) are the only two illustrations, corresponding to the presentations of the reredos of Odense.

It must be concluded, that there is no possibility of chasing the personality of the medieval artist in his art. Since the representations of the reredos and Erhard Schön's rosary are so close, it seems that Berg has succeeded as a medieval craftsman: the already concealed ideas are exhibited in the most perfect and anonymous manner.

Medieval Sundials

By Jens Velle

As a continuation of the author's paper on the same subject in *hikuin* 6 (1980) – a small number of primitive sundials from Denmark (Jutland and Møn) and Sweden (Øland) is discussed. Since then another Danish sundial has been found, and the Swedish sundials have been measured to present reconstructive drawings of the total Dano-Swedish amount of sundials. In the years 1511, 1512, and 1513 Linköping cathedral (Sweden) has been given three so-called modern sundials on the west-, east- and south side of the building. The two first have been preserved. Their peculiar construction and history is discussed. The three sundials were replaced – so it seems – by new ones in the 1680s and the 1690s. Their stories are also dealt with.

"... Sewn in the Convent at Ring"

By Helle Reinholdt

The Benedictine Convent at Ring near Skanderborg Lake in eastern Jutland functioned from the second half of the 12th century until the

Reformation. Among the great number of finds from the excavations a number of needles were found in the part that constituted the northern wing of the convent.

Presumably this was the workroom of the sewing nuns during the period 1430-1530. Sewing is documented by written sources mentioning one among many functions of the convent at Ring: the education of noblemen's children, who were instructed in writing and reading, and as for the girls sewing, too. From the Reformation until 1571 the former convent became an entailed estate.

The Benedictine Convent of Ring

By Jens Ingvorsen

Ring, a Benedictine convent, was founded in the second half of the 12th century. A written source from 1430 mentions a fire. Based on the study of excavations carried out between 1933 and 1985 four major phases of activity dating from the time of the foundation and to c. 1530 are demonstrated. This paper deals with phases 2 and 3 only, i.e. c. 1250-c. 1300/25-c. 1430.

Phase 2 contains 18 post holes indicating a north and an east wing constructed of timber. Apparently, the east wing was destroyed by a fire hitherto unknown. Phase 3 consists of two brick-built houses as well as a wooden north and east wing supported by posts set on a small row of stones. The wooden buildings were destroyed by a violent fire in 1430. The two brick-built houses, however, were incorporated in the post-1430 convent built entirely of brick.

The author attempts a reconstruction of the northeastern part of the convent compound showing the approximate location of the wings and the brick-built houses.

The Main Building of Dueholm Monastery

By Per Bugge Vegger

Only one building of the monastery of the Order of St. John of Jerusalem at Dueholm remains today. The monastery was built about 1370.

Today the late-medieval building constitutes the western part of the main building of Morslands Historiske Museum (Museum of

local history and culture of Mors). Formerly, the building was the main building of the manor to which the monastery was converted.

In 1935 the windows of the medieval part of the building were reconstructed according to the remaining traces of the original windows.

An archaeological excavation has shown that the medieval house was built in two stages.

The early part was probably built around 1400, whereas the later part was probably built around 1500, judging from the windows. The present reconstruction of the windows is therefore very doubtful.

During the 17th century the rest of the main building and side-wing were added. After the breaking up of the estate around the turn of the century the main building became a museum.

Reflections on the Fortress of Camp de Péran (Brittany, France)

By Anne Nissen Jaubert

Camp de Péran is an almost 1 hectare large circular fortification with a ring wall and double ditches. It lies approx. 8 km from the northern coast of Brittany. Formerly Camp de Péran was assumed to be pre-historic but the excavations of Jean-Pierre Nicolardot (C.N.R.S.) have demonstrated that the buildings inside the fortification were medieval. In 1987 the excavations were continued in co-operation with the medieval archaeologists Willem H. Wimmers and the author. The results of the excavations are due to a joint effort and to the previous campaigns of J.-P. Nicolardot; however, only the author is to be held responsible for the conclusions of the present paper.

The paper is concentrated on the settlement phase which was destroyed by fire together with the circular wall. ¹⁴C datings of the ashlayer, an archeo-magnetic dating of vitrified stones and a coin prove that Camp de Péran was destroyed at the beginning of the 10th century. The coin was a St. Peter coin, struck by Vikings in York.

French Viking finds are extremely rare. The English origin of the coin, however, makes it inadvisable to interpret it as proof of the Vikings' connections with the fortification. On the other hand, the dating of the fire means that it is not unreasonable to interpret the

destruction of Camp de Péran as a possible result of the well-known disputes between the Brittons and the Vikings at that time.

Other fortifications from that period are known in Brittany: Vieux M'Na and Camp des Haies. However, it is impossible to establish whether any of these fortifications should be connected with the Brittons or with the Vikings. For all fortifications concerned the main arguments for connecting them with the Viking presence in Brittany are the written sources. The possible dating of Camp de Péran to the Carolingian period makes it one of the very few from that time to have been investigated.

Castles on Samsø

By Lis Nymark

On Samsø five earthworks from the Middle Ages are known. As none of them has been excavated and as few written sources on them are known to us, we know very little about them.

On Hjortholm, the largest of the islets in the Stavns Fjord, double earthworks are situated on a natural hill. Near the farm of Bisgaard a small almost levelled earthwork is found surrounded by a now filled-in ditch. The Gamle Brattingsborg earthwork is situated just SW of the church of Tranebjerg. Today the rectangular monument is severely disturbed by residential development and re-siting of roads. Blafferholm, a very small earthwork in a bog near the farm of Søllemark, the predecessor of the present Brattingsborg, was turned into gardens in the 19th century. Vesborg, mentioned in a written source from 1369 as Weseborgh, is a large, regular earthwork situated on a high cliff in the south-west corner of Samsø. Most of the ward has now fallen into the sea.

From written sources we know that Samsø was royal property in the early Middle Ages. Consequently, it is suggested that at least the three large ones are royal castles, while Bisgaard and Blafferholm, if anything, should be characterized as private strongholds.

Hjortholm, which to a certain extent resembles the early French motte, was probably the oldest castle. No traces of brick have been found, and the castle is not mentioned in the entries about the island in the 13th century 'Jordebog' of King Valdemar. Gamle Brattingsborg cannot be dated by either written or archaeological sources, but its position on a hill in a marshy area, and what remains of the disturbed fortification today, probably indicates that it is older than Vesborg. About Vesborg we have the concrete information that

it was in use in 1369, and that the commander of the castle, Henrik van der Osten, was a member of the King's council.

The written sources mention a *curia Samsø* as well as a *castrum Samsø*. It is impossible to locate curia Samsø or even to decide whether it is an unfortified royal manor or one of the earthworks mentioned. *Castrum Samsø* is mentioned in connection with an assault by Marsk Stig in the 13th century. Vesborg may be the castle in question here, but Gamle Brattingsborg is more likely.

For a clearer understanding of the castles on Samsø excavations are necessary.

Hedegård – a 14th Century Timber Castle

By Inger Marie Hyldegård

Hedegård (sometimes called Halkær) was excavated by the National Museum from 1939 to 1946. As the excavations were never properly published more knowledge about Hedegård has been obtained through recent studies of finds, photos, drawings, written sources etc.

Built on an artificial island, Hedegård measured 38 × 43 m and was surrounded by a palisade. In the palisade were two gates connected by a road across the castle. The road divided the castle in a northern and a southern part. The northern part was protected by a palisade. Remains of eight buildings were found. Seven of these were contemporary. The houses Nos. 1, 2 and 3 were dwelling houses, No. 4 guardhouse, Nos. 5 and 6 were stables and No. 7 a kitchen.

The finds and the written sources date the castle to approx. 1350 at the earliest and not later than 1406, when Hedegård was deeded to the Danish Crown. It is suggested that the castle of Hedegård may only have existed from around 1370 to 1406.

Engelborg on Slotø – Shipyard, Fortress and administrative Centre from the Time of King Hans

By Ingolf Ericsson

On the tiny Danish island of Slotø, at the fairway to Nakskov, the ruins of Engelborg still can be seen (figs. 1-3). Since the beginning of

the 19th century reports about the monument were sent to antiquarian authorities. Drawings from 1877 and 1904 exist, as well as a geodetic documentation with iso-lines from 1947 (figs. 4-6). A large-scale excavation in the 1940s was mainly done by volunteering pupils. In 1985 antiquarian work was carried out to preserve the monument.

Engelborg consists of a round tower of 11 m diameter, with a 3.5 m thick brick-wall with a core of mostly nature stone. From tower to sea run two brick flank-walls. Together they form an open V to the sea. Tower as well as flank-walls were armed with embrasures. The main part of the tower is surrounded by two moats and an earthen rampart (figs. 2-7).

In 1509 King Hans came into possession of the island of Slotø. Building activities must have started almost immediately. In 1511 and the next few years several royal letters were dated here. Building activities must be seen in connection to political conflicts and war. But several functions were combined on the tiny island. The Engelborg of King Hans was a naval shipyard, where already in 1510 two great warships – “Engelen” and “Maria” – are said to have been built. Shipbuilding activities are also clearly demonstrated by the archaeological sources. It is beyond doubt that Engelborg, with its tower, flank-walls, embrasures, moats and rampart, was a strong fortification – a fortress. The third main function was that of an administrative centre. From 1510 until 1523 Engelborg (also known as “Nyslot”, i.e. Newcastle) was a main fief. The king's first “commander” at Engelborg was Oluf Holgersen Ulfstand (1510-1514).

The new fortress was planned also to protect the town of Nakskov against attacks. But already in 1510 Nakskov was burnt down by a Hanseatic navy from Lübeck. In 1523 an inventory tells about military equipment, i.e. six breech loaders and twelve harquebusses. In this year Engelborg lost its function as an important administrative centre and became a minor fief. In 1549 Engelborg lost also its last administrative function. As a fortress the site became unimportant before the mid 16th century. As a naval shipyard Engelborg lost its importance in the 1530s – or even earlier.

The glorious plan, that can be presupposed behind the Engelborg of King Hans turned out to be a great mistake. Just 40 years after its foundation the site was neither an administrative centre, nor a naval shipyard, nor a fortress of any importance.

From 1588 till 1631 Slotø was part of the jointure of the Queen Mother Sofie. Engelborg was without importance and the queen just kept very few people on it. King Christian IV, however, tried to re-establish the shipyard-activities. About ten great ships were now

built on Slotø under the direction of Daniel Sinclair; the last of these ships was in 1633 "Norske Løve". An ivory-model from 1652-1654 with this name might depict this ship of Christian IV (fig. 8). During this second, very short period (ca. 1623-1633) as a shipyard Engelsingborg was neither fortificationally nor administratively of any importance. Besides the early 16th century tower, flank-walls, moats and rampart, some of the buildings, which can be seen on a picture (fig. 7) from the 1680s probably date to this period.

Berritsgaard

By Mogens Vedsø

The manorhouse at Berritsgaard on the island of Lolland, is one of the best preserved buildings from the Renaissance in Denmark. It was erected approximately 1587 by Elisabeth Friis, the widow of Jacob Huitfeldt. It is constructed as a two-storeyed single wing over a – partly vaulted – basement. The main entrance is on the south side through an octagonal tower with spiral stairs to the upper floor.

The interior has often been altered. Originally, the lower floor contained a kitchen in the east end and possibly a great hall in the opposite end of the house. Along the north side was a couple of small rooms. The upper floor contained the living quarters for the owner of the house. In the west end was a large room with a bay to the north, whereas the rest of the floor was divided into small rooms. A corridor ran along the southern side of both storeys.

Excavation of medieval Settlement Remains in the Village of Sandavágur, the Faroe Islands

By Símun V. Arge

During the excavation, which is not quite finished at the time of writing, three small buildings were found. They were built closely together – only separated by narrow cobbled passages. The settlement – a small farm site – is situated remotely infield 35 m above sea level. No local tradition points to a settlement here. After the settle-

ment was abandoned the site was farmed for several hundred years. This has disturbed the building remains and the cultural layers.

The houses I and III were rectangular, whereas house II is so poorly preserved that it is impossible to verify its plan (fig. 2). The houses have walls built of an inner and an outer layer of stones and a core with a filling up of earth and small stones. However, the north wall of house III was probably made of turf. The floors were partly paved and with floor layers of earth mixed with ashes. Along the walls were small simple fire-places. A fire-place in house II had, however, an unusual shape and was placed in the core of the north wall. It may have served as an oven (fig. 3). No traces of roof constructions were found.

Until now approx. 200 finds have been registered. The quantity of local pottery amounts to more than 60 % of the total number of finds (fig. 4). Furthermore, whetstones of imported light grey, fine-grained schist and of a local stone were found. A well-represented finds group is imported bakestones of a schistous soapstone.

The above-mentioned finds groups are especially important for the dating. But as the finds of local origin are very homogeneous, greater importance must be attached to the imported goods which in their native country – in this case Norway – have been found in well-dated sites. An archaeological dating to the high Middle Ages is supported by until now two 14C-datings (fig. 5). In the attempt to evaluate the settlement in question it is compared to other settlement finds (fig. 6). Finally, the importance of the archaeological sources for the understanding of Faroese settlement research is stressed (fig. 7).

The Norse in Greenland – a Contribution to the Discussion on the Part of the Thule Eskimos in the Decline of the Western Settlement

By Jette Arneborg

The paper discusses four written sources from the 14th century connected until now with the depopulation of the Norse Western Settlement.

This interpretation of the sources was based on the fact that the Norse community in Greenland was isolated from the rest of the

North Atlantic area especially Norway. The archeological evidence from the excavations of Norse farms and churches in Greenland suggests more vivid cultural contacts with Scandinavia than was hitherto realized. This is the reason why the four sources are tentatively evaluated in a broader North Atlantic/Scandinavian context.

The four written sources are:

1. Entry in Icelandic annals 1342 to the effect that the Norse have voluntarily given up their Christian faith.
2. Letter of command from King Magnus Smek to Powell Knutsson 1355. The latter is to sail for Greenland commissioned by the King.
3. Ivar Bardsson's description of Greenland c. 1360. It gives the information that the Western Settlement was found deserted and that Ivar was sent to the Western Settlement to drive out the skælings.
4. Entry in Icelandic annals 1379 to the effect that the Eskimos have assaulted the Norse.

It is suggested that the first three sources are to be viewed in the light of the dispute between the Norse in Greenland and the Roman Catholic Church. The reason for this dispute is probably the organization of the Greenlandic church which is assumed to have consisted of privately owned churches as was the case in Iceland.

Dating Problems in Icelandic Archaeology

By Vilhjálmur Örn Vilhjálmsson

For many decades tephrochronology has been used as a scientific method for dating archaeological as well as geological remains in Iceland. The method is partly based on the dating of volcanic ash-layers and pumice from various volcanoes, by way of written sources from different periods after the first settlement of Iceland.

The method has never been questioned previously and has been used by most Icelandic archaeologists and many other scientists, mostly as an absolute dating method. Very few C^{14} samples have been dated systematically in order to try to verify the various tephrochronological dates, and until now none of them has done so.

The difference between tephrochronological and C^{14} dating results has been explained insufficiently by isotopic disturbances due to volcanic activity, by the country's geographical position and by

possible C^{13}/C^{14} disturbances caused by the surrounding ocean (the island effect).

Recently, parts of the tephrochronology for the eruptions of the famous volcano Hekla have been questioned by the author. This is due to obvious differences arising from dating results of archaeological artifacts from the valley of Þjórsárdalur in southern Iceland and the current tephrochronological dating of its devastation.

While the devastation of the valley has been dated to A.D. 1104 and is thought to have been caused by a violent eruption of mount Hekla that year, the artifacts from excavations and stray finds, as well as new C^{14} results show somewhat later, 12th-13th century dates.

This paper deals with this obvious difference, which has been ignored, together with the results of archaeological excavations in 1983-86 at Stöng in Þjórsárdalur, and also offers a critical analysis of the historical methodology of the tephrochronologists.

The results of the excavations at Stöng have shown that a Hekla eruption did not destroy the settlement in Þjórsárdalur in the year of 1104, nor in the 12th century, and that the valley was abandoned in the first half of the 13th century, probably partly due to volcanic activity and soil erosion.

Applications of Computer Science in Museums and humanistic Research

By Lene Rold

In medieval times one scholar could have an overview over all learning – clearly impossible today due to the accumulated quantity of research. An overview of all Danish archaeology was shown possible in 1957-69 by Johannes Brøndsted's "Denmark's Prehistory". This could not be duplicated now. Even if a computer could compile such a monumental work it would be far too large to read except by another computer and practically impossible to keep updated.

We have thus been forced to split the world up into small expert areas. But we cannot possibly become "wise" by mastering a single expert area. The knowledge explosion seems only to lead to reducing individuals to "biological chips", each master of his/her miniscule knowledge area.

Computer science can organize large masses of data, but makes it even easier to develop specialized new expert areas. The solution

must be to form versions of the accumulated knowledge *with the aid of the machine itself* – versions tailor-made to specialized goals and research communities.

A *data intensive* area involves organization of large masses of data – for example the colossal information quantities involved in registering and providing easy access to all the objects in today's museums. These areas are well established (data bases etc.).

A *knowledge intensive* area involves the handling and interpretation beyond the quantitative or administrative aspects – for example language translation or realization of simple fact-based reasoning.

Humanistic data are in fact hard to register – due to their size, complexity and qualitative rather than quantitative nature. There is further a widespread myth that computer registration demands standardization, contrary to museums' fundamental goals with registration.

This *was* true only a few years ago but much experience in data bases have led to new systems with the flexibility of manual registers but without their well-known drawbacks. Much has been learned, for example concerning the use of the machine to do routine tasks and its use to deal directly with traditional media.

The impressive speed of searches through computerized data bases will certainly lead to new, quantitatively based humanistic research. It should not be feared that this will dominate or change the nature of our research; rather the ease of such studies will lead to more emphasis on content and interpretation, so work based on data accumulation alone will become even less acceptable than it is today.

Neither machines nor commercially developed software are the largest economical problem; more significant are education of museum personnel and researchers, consultant help and especially development of programs suited to museums' needs.

Active support to aid these problems is being provided by the National Counsel of Museums and the individual departments at the National Museum, especially the newly established Documentation Unit. These will significantly reduce the need for expensive external consultants.

Future development of knowledge intensive systems will create quite new demands for funds and organization. In the worst of cases the humanities will have to use software designed for business purposes – and this more than any other factor could be a threat to the humanistic research traditions.

Few humanists know much about computing technology, and all too many computer scientists are undereducated, using a whirlwind

of technical terms to cover over a lack of basic scientific background.

Fortunately computer systems have become *much* easier to use and can now be intelligently used without mastering programming and a mass of the technical details. This trend is very likely to continue for several years.

The essential is a theoretical understanding of computer sciences' possibilities in principle. This should not frighten humanists – who will be in good company with for example Wittgenstein, Gödel, Russell and Toffler.

The apparent saturation of today's society with computer science concerns almost exclusively *data intensive* areas. But the most promising uses for humanities are the *knowledge intensive* areas, and these lie on the near horizon. The humanities should not only be represented here but should even take a leading role.

The term "knowledge based" elicits the controversial area of Artificial Intelligence, which in turn provokes some now classical fears concerning conflicts between "pure thought" – the mathematical, logical world and "pure nature" – the humanistic, unpredictable world involving feelings and creativity, and thought not to be programmable. A consequence is that many hesitate at the thought of using knowledge based systems to form integrated versions of today's fragmented and specialized world.

None the less we *should* consider it – since currently political decisions are all too often taken on the bases of technical and economic factors alone. The lack of humanistic inputs in these decisions is not due to ill intent but rather lack of overview – and significant changes cannot be imagined unless the humanities themselves take the initiative for changes.

The humanities have therefore a large responsibility to ensure that the future's social development is not steered by mechanistic viewpoints without real humanistic participation – and one way to ensure this is participation and involvement in today's technological development.

Attending a Lecture on the Archaeology of the Middle Ages – 150 Years ago

By Thomas W. Lassen

For a short period in the mid 19th century from 1855 to 1866, J.J.A. Worsaae (1821-1885), who was later to become director of

the Museum of Antiquities, was a lecturer at the University of Copenhagen and lectured on nordic artefacts. Sixtyfour years passed before a separate chair of Nordic archaeology and European prehistory was created in Copenhagen and from 1949 a chair of prehistory was also established at Aarhus University.

Instruction in archaeology was also known before Worsaae, and a series of lectures on history in the 1830s are of special interest in relation to the Middle Ages. Professor E. C. Werlauff (1781-1871) (fig. 1) was giving lectures on nordic archaeology and also the archaeology of the Middle Ages.

The lectures took place in professor Werlauff's private study (fig. 2) and are presented in this paper based on his notes now in the Royal Library and furthermore on preserved notebooks belonging to two men among the audience in 1838, the historian C. F. Allen (1811-1871) and the librarian P. G. Thorsen (1811-1883).

It appears that Professor Werlauff used C. J. Thomsen's book "*Ledetraad til Nordisk Oldkyndighed*" (fig. 3) published in 1836 as an introduction to his lectures. Besides the ancient history this work also treats "things from Christian times" in a special chapter and also buildings, script and inscriptions, coins and heraldry from the Middle Ages.

Department of Medieval Archaeology, Aarhus University

By Else Roesdahl

In 1971 Olaf Olsen was appointed professor of Medieval Archaeology at Aarhus University, and Denmark got its first (it is still the

only) university department in this field. The department was placed at Moesgård, an 18th century manor 10 km south of Århus, to where the Prehistoric Museum and the Institute of Prehistoric Archaeology and Ethnography had recently moved. The latter is now the Institute of Prehistoric Archaeology, Medieval Archaeology, Ethnography and Social Anthropology, with three departments.

Ca. 15 students started reading medieval archaeology in 1971, and their number grew rapidly. In 1977 there were 69, in 1985 there were 84, and to-day there are 75. Some of them do, however, study for only a two-year-degree ("bifag").

The teaching staff has changed over the years. Else Roesdahl was attached to the department from the beginning, at first through a research grant, from 1975 as a part-time teacher and from 1981 as a lecturer. In 1981 Olaf Olsen was appointed Director of the Danish National Museum and left the department, which got a lecturer instead: Ole Schiørring followed by Erik Levin Nielsen and from 1987 Ingolf Ericsson. In 1985 Hans Krøngaard Kristensen was appointed to a new full-time position ("adjunkt"), while Helle Reinholdt was part-time teacher ("ekstern lektor") 1981-87. Jens Vellø, whose publishing firm, *hikuin*, publishes monographs and journals with an emphasis on medieval archaeology, is also attached to the department.

There was always much contact and co-operation with museums and other institutions, in Denmark as well as abroad. The department's research has concentrated on Viking fortresses and medieval castles, monasteries (including large excavations at Ring Kloster and Øm Kloster), towns (The Danish Research Council for the Humanities' Medieval Town Project), Viborg Cathedral and the topography and archaeology of Viborg, pottery, comprehensive Viking Studies.