

Trade and Communication Networks of the First Millennium AD in the northern part of Central Europe



Trade and Communication Networks of the
First Millennium AD in the northern part of Central Europe:

Central Places, Beach Markets,
Landing Places and Trading Centres

Neue Studien zur Sachsenforschung Band 1

herausgegeben vom
Niedersächsischen Landesmuseum Hannover

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Internationalen Sachsensymposium

durch
Babette Ludowici

Trade and Communication Networks of the
First Millennium AD in the northern part of Central Europe:

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herausgegeben von

Babette Ludowici, Hauke Jöns,
Sunhild Kleingärtner, Jonathan Scheschke
und Matthias Hardt

Umschlaggestaltung: Karl-Heinz Perschall
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Vorwort zur Reihe

Mit dem vorliegenden Band beginnt das Niedersächsische Landesmuseum Hannover unter dem Titel „Neue Studien zur Sachsenforschung“ eine neue Reihe von Veröffentlichungen aus dem Bereich seiner Forschungstätigkeit. Dazu gehört die wissenschaftliche Erschließung der umfangreichen archäologischen Sammlungsbestände zur Geschichte des ersten Jahrtausends im Gebiet des heutigen Bundeslandes Niedersachsen, die am Haus unter der mittlerweile traditionellen Bezeichnung „Sachsenforschung“ betrieben wird. Sie bildet einen der wichtigsten Schwerpunkte der am Landesmuseum Hannover geleisteten Forschungsarbeit. Vieles von dem, was wir heute über die Lebenswirklichkeit und die kulturhistorische Entwicklung in den Landschaften Niedersachsens im ersten Jahrtausend wissen, basiert auf hierbei gewonnenen Erkenntnissen. Die „Sachsenforschung“ am Landesmuseum Hannover zielt aber auch auf die wissenschaftliche Durchdringung der Ethnogenese und Geschichte des frühmittelalterlichen Stammesverbandes der Sachsen, die seit dem 6. und 7. Jahrhundert als Bewohner weiter Gebiete zwischen Rhein, Elbe, den Mittelgebirgen und der Nordseeküste überliefert sind. Wie andere germanische gentes, etwa die Franken, die Bajuwaren oder die Alamanen, haben die Sachsen die politischen und historischen Abläufe in Europa entscheidend mitgeprägt. Bis heute stiftet ihr Name territoriale Identitäten.

Initiator und Doyen der genuin landesgeschichtlich orientierten „Sachsenforschung“ am Landesmuseum Hannover war Albert Genrich (1912-1996), der hier von 1954 bis 1977 zunächst als Kustos und später als Leiter der vormaligen Abteilung Urgeschichte tätig war. Mit der „Sachsenforschung“ von Beginn an und bis heute aufs engste verknüpft ist das 1949 von Karl Waller ins Leben gerufene „Internationale Sachsensymposium“ mit heutigem Sitz in Belgien, zu dessen Gründungsmitgliedern Albert Genrich gehörte. Die damals noch „Arbeitsgemeinschaft für Sachsenforschung“ genannte Vereinigung fungiert seit vielen Jahrzehnten als international maßgebliches wissenschaftliches Forum für die Archäologie der frühen Geschichte Nordwesteuropas. Derzeit gehören ihr rund 130 Archäologen und Historiker aus Belgien, Dänemark, Deutschland, Finnland, Frankreich, Großbritannien, den Niederlanden, Norwegen, Schweden und den USA an. Albert Genrich war von 1968 bis 1986 Vorsitzender des Symposiums, das einmal jährlich tagt.

In der Nachfolge Genrichs wurde die „Sachsenforschung“ am Landesmuseum Hannover von 1977 bis 2004 von Hans-Jürgen Häßler fortgeführt. Seine Untersuchungen zu frühgeschichtlichen Bestattungsplätzen und Grabfunden aus Niedersachsen haben der Forschung wesentliche Impulse verliehen. Mit der von ihm am Landesmuseum Hannover begründeten und dort bis zu seinem Ausscheiden aus dem Dienst lektorierten und redigierten Reihe „Studien zur Sachsenforschung“ etablierte Häßler, der von 1996 bis 2002 auch Vorsitzender des „Internationalen Sachsensymposiums“ war, ein international anerkanntes Fachorgan zur Frühgeschichtsforschung.

Dem Forschungsverständnis und dem Wirken Albert Genrichs und Hans-Jürgen Häßlers verpflichtet, deren zentrale Konstante der rege fachliche Austausch mit zahlreichen Wissenschaftlern und Forschungseinrichtungen im In- und Ausland war, werden die „Neuen Studien zur Sachsenforschung“ vom Landesmuseum Hannover nunmehr in direkter Verbindung mit dem „Internationalen Sachsensymposium“ herausgegeben. In diesem Sinne programmatisch veröffentlichen wir als ersten Band der Reihe die Ergebnisse des internationalen Workshops zum Thema "Trade and Communication Networks of the First Millennium AD in the northern part of Central Europe: Central Places, Beach Markets, Landing Places and Trading Centres" am 4. und 5. September 2008 in Bad Bederkesa, den der Arbeitsbereich „Sachsenforschung“ am Landesmuseum Hannover mit veranstaltet hat.

Jaap Brakke
Direktor des Niedersächsischen Landesmuseums Hannover

Claus von Carnap-Bornheim
Leitender Direktor der Stiftung Schleswig-Holsteinische Landesmuseen,
Vorsitzender des Internationalen Sachsensymposiums

Babette Ludowici
Niedersächsisches Landesmuseum Hannover,
Arbeitsbereich „Sachsenforschung“

Foreword

This publication presents the results of an international workshop entitled "Trade and Communication Networks of the First Millennium AD in the northern part of Central Europe: Central Places, Beach Markets, Landing Places and Trading Centres", which was held on September 4th and 5th, 2008, in Burg Bad Bederkesa, near Cuxhaven in Germany. Thirty-six participants from six countries discussed questions relating to structural relationships and points of contact in the first millennium AD between settlements and other localities that were dependent on agriculture and those that functioned as central places, which can be identified as such by evidence of religious activity, trade and exchange as well as traces of craft production.

For several decades now, research in northern Germany and southern Scandinavia has concentrated on coastal Viking Age trading posts and their hinterland. At present, more than eighty sites are known in the area of the North and Baltic Seas that were part of a supra-regional trade and communication network in the early and high Middle Ages. In the written sources, they are usually described as trading posts, market places or early towns. It has been established that these places also played an important role in the life of the inhabitants of other settlements, in both the immediate vicinity and the further hinterland. The discovery of numerous landing places for boats, seasonal markets and craft workshops shows that an infrastructure had developed in the surrounding area for the specific purpose of supplying the central place. The model used in modern town planning for centres or central settlements and their peripheries can also be applied, at least partially, to settlement structures at the end of the first millennium AD.

In southern Scandinavia, in particular, research has also been increasingly preoccupied since the early 1980s with the economic and social conditions before the Viking Age, i.e. in imperial Roman times and the Migration period. Focal points of this research are settlement areas and agglomerations in which settlement continuity can be traced over several centuries and where the archaeological finds and features indicate that they were centres of political, economic and religious power. A centre should not be understood as a clearly circumscribed area but rather as consisting of several contemporaneous settlements with different functions, including beaches or man-made landing places for boats in protected bays, where goods could be loaded and unloaded and where

there are signs of considerable trade and craft activity. Such places gave the central settlements direct access to supra-regional transportation and communication routes.

Scholars generally agree that these Iron Age central places, like the trading emporia of the Viking Age, were under the control of the social elite. On the other hand, the question of who organised the exchange or trading of goods, whether the ruler himself or several more or less independent traders, is the subject of much controversy. Nevertheless, there is no doubt that decisive social changes took place in the central places, which finally led to the transformation from the Iron Age tribal system to the Germanic kingdoms and states of the early and high Middle Ages.

The discovery and preliminary investigation of most Iron Age central places began with a systematic survey using metal detectors, whereby large quantities of high-quality objects made of bronze, silver or gold were recovered. A more detailed examination reveals that the finds consist mainly of jewellery and costume elements of various origins, which when dated often indicate settlement continuity over several centuries. The characteristic find spectrum includes not only the remains of non-ferrous metal-working but also figurative images made of thin gold foil, commonly called "gubber". Gold objects, either as single finds or in hoards, e.g. containing gold bracteates, are also found in low-lying areas around the central places. The purpose of these gold objects was to honour the gods; the gold "gubber" can probably be interpreted as temple money. Concentrations of theophoric place names in the proximity of several central places in imperial Roman times also underline the religious function of the central places.

Research over the past few decades has found increasing evidence of central places in the southwestern part of the North Sea region as well. However, their structure is still largely unknown. In inland areas, too, growing numbers of sites with similar ranges of finds have been found in remarkably convenient topographical locations from the point of view of transportation. A structural comparison of these sites and their functions has not yet been undertaken.

To sum up, it can be said that the research situation regarding central places, their various functions, their surrounding areas and the relationships between them is very different from region to region. While well-substantiated models can already be presented for parts of southern Scandinavia, research has

only just begun in the southern Baltic and southwestern North Sea areas. Against this background, the main objective of the workshop was not only to present and collate the latest scientific approaches and the most recent research projects on the subject but also to discuss them thoroughly. Consequently, when preparing the workshop, the organisers did not send out the usual call for papers but, instead, defined specific topics to be discussed. The focal points thus defined, which not only covered the chronologically and geographically related cultures but also took into consideration the research done by other historical disciplines, provided the basic framework for both the programme of the workshop and the contents of this publication. Experts on each subject were selected and asked to collate the latest research, make a constructive critical appraisal, and produce a manuscript that included the most important points to be considered at the workshop. At the same time, for each subject, a second expert was selected to review the manuscript and write a commentary to be presented in a short statement as the starting point for the round-table discussion.

In order to create the right atmosphere for an animated debate, it was decided to limit the number of participants in the workshop to those colleagues who had agreed to take an active part as either first or second expert. To encourage the participants to prepare themselves thoroughly for the event, copies of all the manuscripts and all the commentaries were placed at their disposal about four weeks before the workshop. English was chosen as the official language. After the workshop, all the authors had an opportunity to revise and up-date their texts and comments to include issues raised during the discussions and take into account new points of view.

We would like to thank all the participants of the workshop for having accepted this unusual procedure without complaint and for having handed in their papers on time. We also wish to thank the Burg Bederkesa Museum for having placed such an impressive room at our disposal, which was a perfect location for our workshop. We also thank Beverley Hirschel (Cologne) for going over all the English texts and Holger Dieterich (Institut für Ur- und Frühgeschichte at the University of Kiel) who prepared the layout of the papers handed out for the workshop and took charge of the graphics for the illustrations in this volume. And, last but not least, our special thanks go to the Fritz Thyssen Foundation (Cologne), which not only financed the cost of accommodation, meals and travel but also provided the necessary funds for the subsequent editorial preparation of the manuscripts for publication.

The editors

Babette Ludowici
Niedersächsisches Landesmuseum Hannover

Hauke Jöns
Niedersächsisches Institut für historische Küstenforschung, Wilhelmshaven

Sunhild Kleingärtner
Institut für Ur- und Frühgeschichte der Universität Kiel

Jonathan Scheschkewitz
Landesamt für Denkmalpflege im Regierungspräsidium Stuttgart, Esslingen

Matthias Hardt
Geisteswissenschaftliches Zentrum
Geschichte und Kultur Ostmitteleuropas e.V. an der Universität Leipzig

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Gudme and Tissø.

Two magnates' complexes in Denmark from the 3rd to the 11th century AD

Lars Jørgensen

Gudme and Tissø are two very different sites as far as their structure and internal organization are concerned. However, they both have important positions as key sites in our understanding of economic and social development in the northern lowlands and Scandinavia. The two sites are not unique and today we know of several other sites in both Scandinavia and northwestern Germany that can be compared with Gudme and Tissø. We may not have detailed knowledge of all the possible sites and their structures but we do have elements, finds and excavated structures that are similar to those at Gudme and Tissø. For example, the recent excavations at Lejre on Zealand have revealed a complex that, in structure and development, resembles the picture we have formed of the Tissø complex. In this paper I will try to give an impression of Gudme and Tissø and their hinterlands as well as the similarities and differences in their internal structure. The differences will be used to sketch a possible model for the economic development of Iron Age and Viking Age societies from the 3rd to the 11th century.

1. Gudme

The Gudme complex on the southeastern coast of Funen is well known, in particular due to the marked concentration of gold hoards from the Migration Period (Figure 1). Several hoards within an area of 10 km² contain no less than 10 kilos of gold: that is approximately 25% of the total amount of gold from the Migration Period found in Denmark. A number of excavations and trial trenches since 1980 have revealed that the settlement at Gudme covers an area of one square kilometre and that in the period AD 200-600 it comprised up to 50 farms (Figure 2). Figure 2 shows the central area of Gudme and the present-day wetlands: in the centre of the map, Palle Østergård Sørensen has reconstructed the extent of the Iron Age wetlands in a lighter colour. As a result, it can be seen that the Iron Age settlement consisted of a complicated patchwork of several smaller settlement areas separated by numerous wetlands.

In the central settlement area, a number of large excavations have revealed its structure (Figure 3). In the northern part, a presumed magnate's residence with two buildings of quite unusual dimensions has been investigated. To the west, a large excavated area contained several smaller farms, and

additional farms can also be documented in the areas only covered by trial trenches. Unlike the "wandering farms" known from Jutland, the farms at Gudme remained on the same spot for several centuries due to the topographical conditions. Several farms can be followed through 10 phases, i.e. for a period of up to 500 years. Because of this extremely stable settlement pattern, Palle Østergård Sørensen has been able to calculate the possible number of contemporary farms in Gudme as shown in the example in Figure 4. In late Roman times and the Migration Period Gudme seems to have consisted of up to 50 farms – with a total population of around 500 persons.

The workshop farms

The excavations and metal-detector surveys have resulted in a large amount of find material consisting of the remains of up to 50 farms and more than 6000 metal objects from the top soil. The artefacts include brooches, pendants, beads, strap mounts, weapons, tools, weights, ingots, coins, fragments of Roman objects and waste metal from craft production.

The distribution of the metal finds seems to confirm that many farms were specialized, especially in metalworking. Gold and silver smiths as well as bronze casters worked on farms in the southern part of the settlement. Crucibles, gold, silver and bronze hoards, some containing Roman bronze statuettes, have been found. A small but very special group consists of semi-finished gold rivets for costly almandine-inlaid gold sword pommels from the 6th century. Gold sword pommels of this type have not yet been found in Denmark but these were clearly manufactured on the site by craftsmen at one or two of the farms.

The magnate's residence

A large residence has been excavated in the central area of Gudme (Figure 5). The main house is a hall of almost 500 m² and thus the largest so far from this period in Denmark, when the longhouses normally had an area of 150-250 m². Close to the great hall was a smaller hall with a floor area of about 200-250 m² that had been rebuilt several times. At a later stage, the large hall was perhaps replaced by a smaller hall built 30 meters to the east. In terms of both location and con-

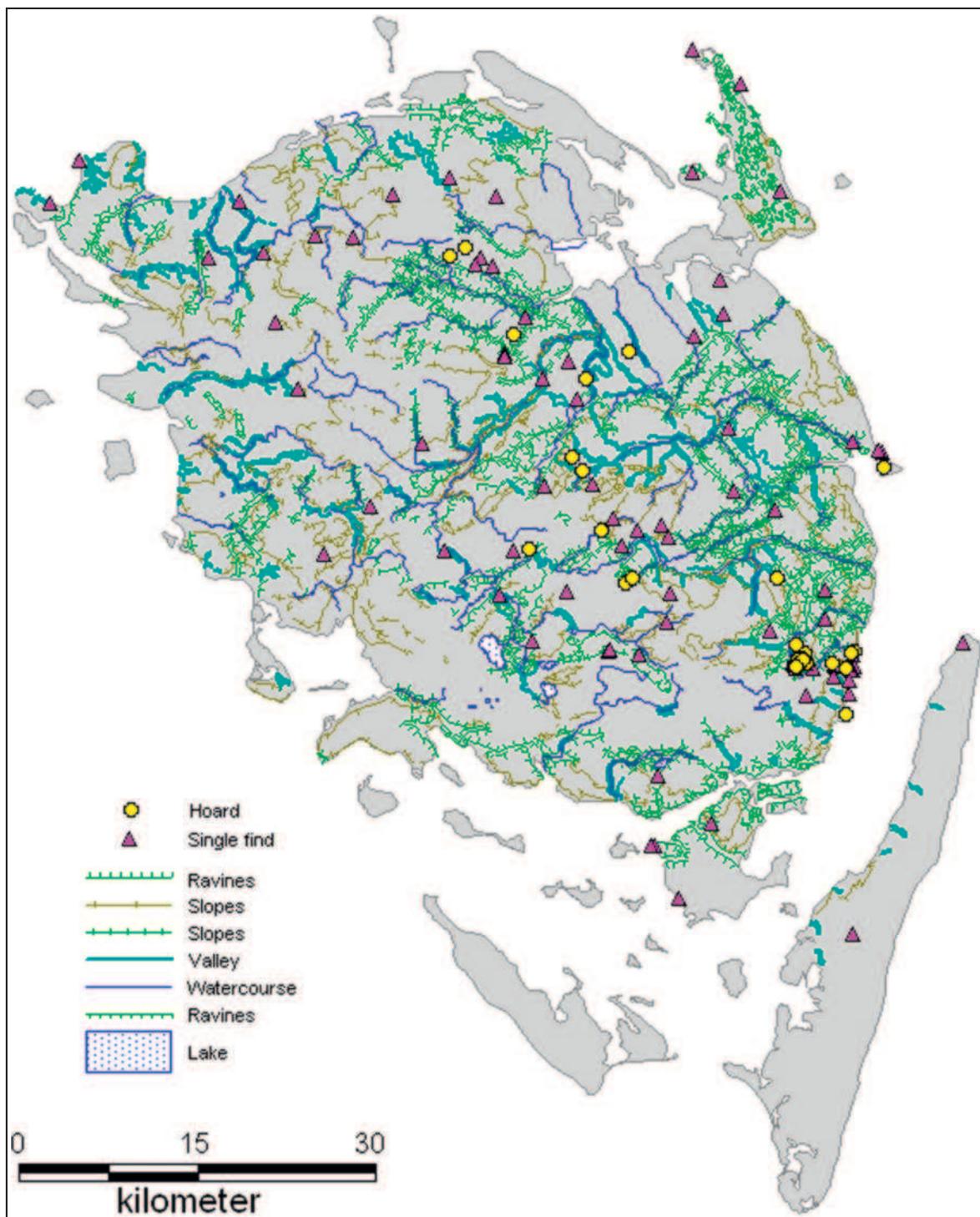


Figure 1. Funen. Distribution of gold finds. Map and data by Mogens Bo Henriksen.

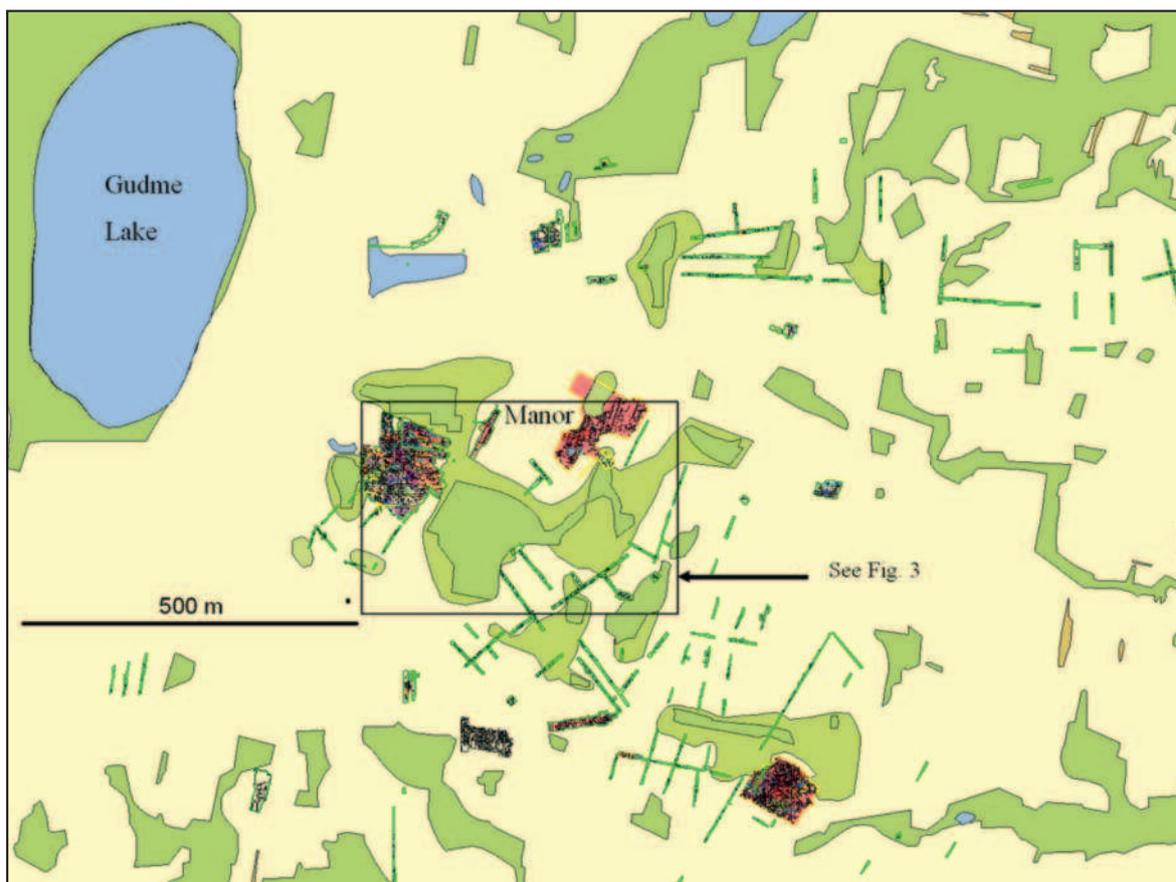


Figure 2. The central settlement area of Gudme. Excavation areas and wetland areas. The extent of the wetland areas in the Iron Age has been reconstructed in the central area (lighter shade). Map and data Palle Østergård Sørensen.

struction, the large residence would have appeared monumental and differed clearly from the far smaller craft farms. The find material from the residence indicates wealth: a gold hoard, Roman silver, bronze and glass objects, many denarii, silver figurines, gold-ornamented silver neck rings and south-east European gold jewellery. There are almost *no* finds indicating craft activities, unlike the situation on the contemporary workshop sites. In the 4th and 5th centuries Gudme was clearly divided into a craft area and an elite area. The residence was probably closed down in the 5th century, when it was perhaps moved to another location in Gudme. Given the hoard finds from the late 5th and early 6th century it is probable that a large residence in the northern part of the settlement will be found, where there is no contemporary craft material.

The picture we have of Gudme in the 3rd to 6th centuries indicates that we perhaps have the residence of a magnate whose wealth was based on the levying of tribute. The large complex of the 4th and 5th centuries appears to consist only of the two large hall buildings; there is no trace of contemporary purely utilitarian buildings, smaller dwellings or workshops. I would therefore suggest that the tribute consisted not only of payment in kind from the dependent settlements but also, to

a great extent, of craft activities, precious metals, etc., from the numerous artisan sites that the large farm controlled, as well as duties related to the nearby trading place on the coast near Lundeberg.

The hinterland of Gudme

The Gudme project started around 1980, as the result of a number of new metal-detector finds. Investigations have since been conducted by the regional museums in Odense and Svendborg. Today, the hinterland is quite well known due to the archaeological focus adopted by the museums. The large coastal trading place at Lundeberg was excavated by Per Orla Thomsen from the museum in Svendborg and is today near final publication. Both Gudme and Lundeberg reached a maximum of activity in the period from the 3rd to 6th century. The two sites were two aspects of one and the same system: Gudme as the centre of power and production; Lundeberg as the gateway for external contacts and communication.

The Gudme-Lundeberg complex is located in quite an isolated area of southeastern Funen (Figure 6). Mogens Bo Hen-

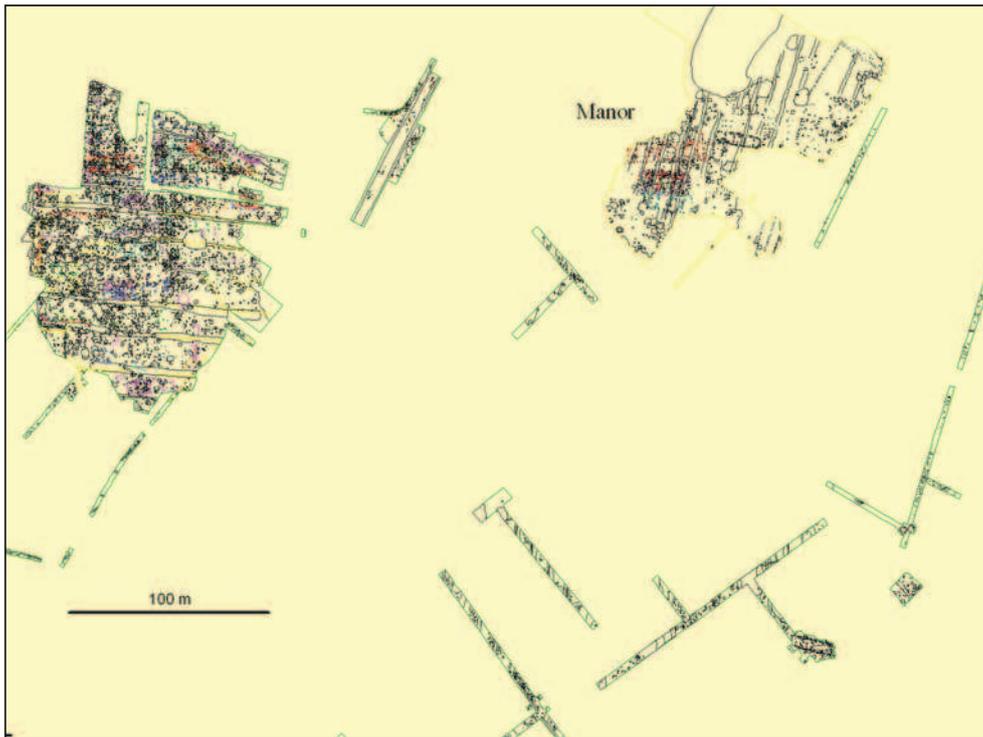


Figure 3. Excavated areas in the centre of Gudme.

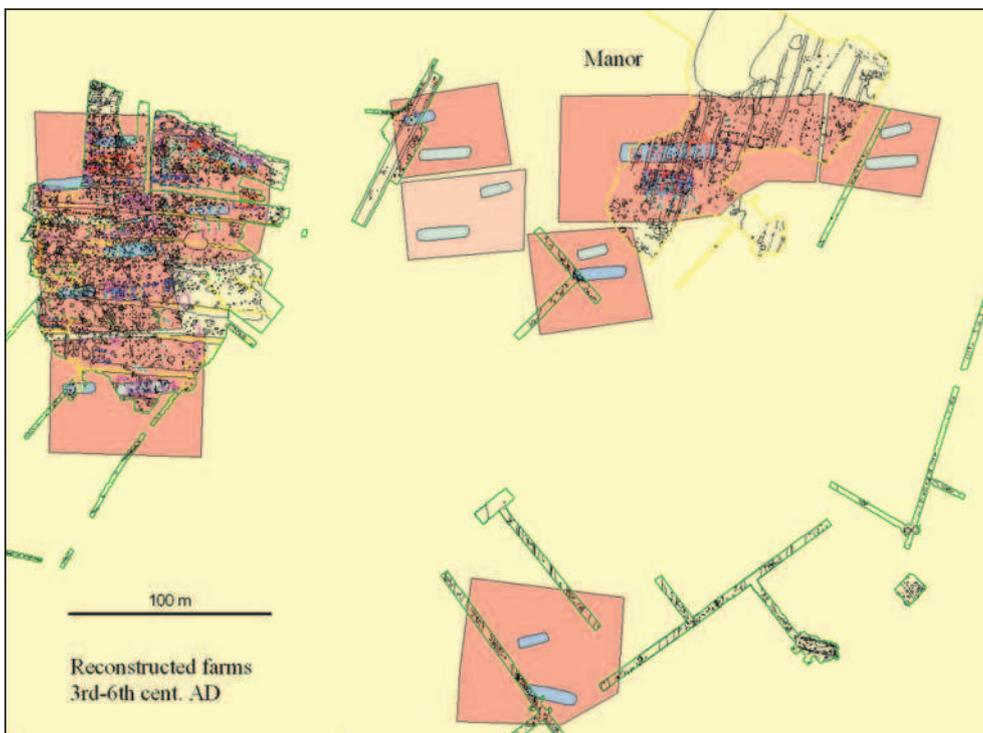


Figure 4. Reconstruction of 10 farms in the central area of Gudme. Not all possible farms are indicated. Reconstruction Palle Østergård Sørensen.

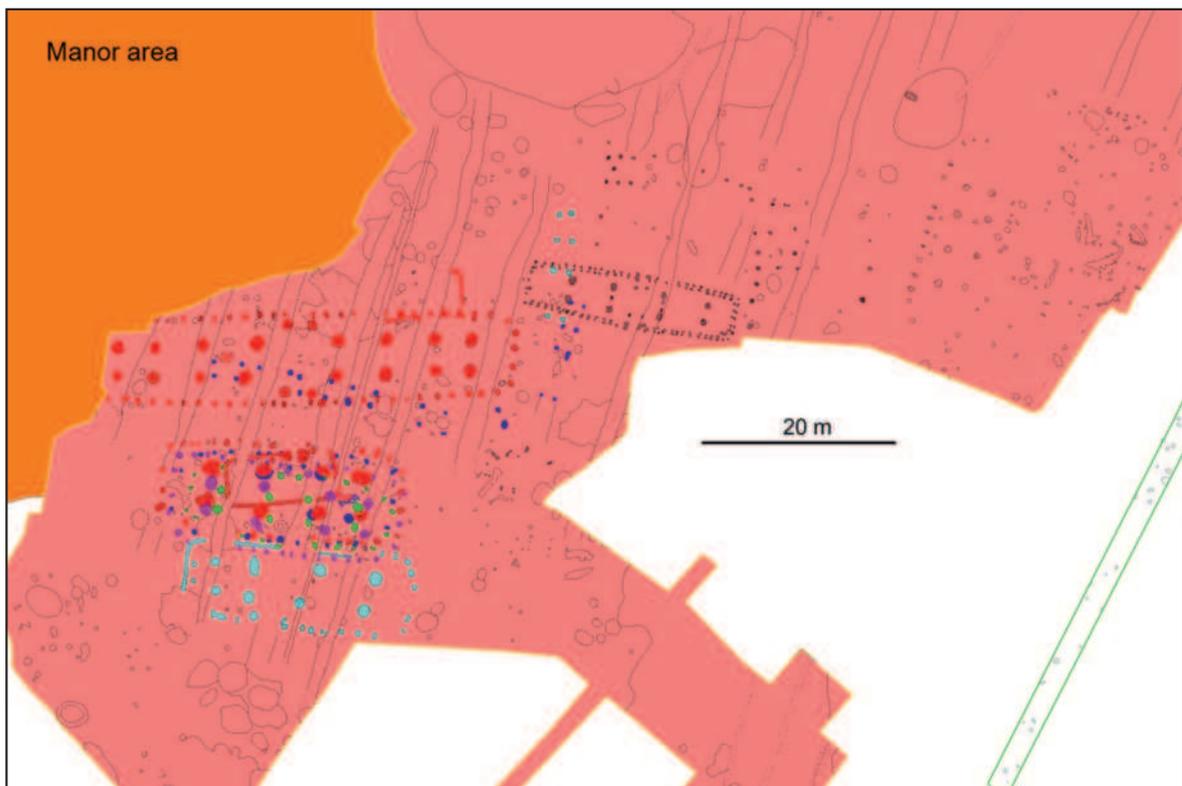


Figure 5. The main residence in Gudme. The great building and the series of minor buildings to the south are the only contemporary buildings in the complex. The large building was followed by the N-S building to the east. The ordinary longhouse in between pre-dates the manor.

riksen from the museum in Odense has collected all the available data from Funen in connection with a large research project. His maps demonstrate that a group of cemeteries from the late Roman period clearly defines the Gudme area under investigation. Moreover, the famous gold hoards were also found within this area. Henriksen has mapped the other archaeological finds from the 2nd to 6th century and their distribution confirms the picture indicated by the graves (Figure 7). So far, the excavations seem to show that the settlements and cemeteries surrounding Gudme reflect various types of economy and different social groups. The settlements are of an ordinary agrarian type even though there was metalworking on some sites. The other cemeteries do not have the quantities of Roman imports found in the large cemetery of Møllergårdsmarken at Gudme. Based on the present picture of the Gudme area, we seem to be dealing with a society consisting of a magnate surrounded by producers of agrarian products and different types of craftsmen.

The Gudme area is clearly separated from the rest of Funen by an area of high ground rising above 80 meters – an area that was probably forested in the Iron Age. The same picture can be observed in the central part of western Funen where there are no archaeological finds from that period on the high ground. The work done by Mogens Bo Henriksen demonstrates that the present distribution of the archaeological finds

seems to mirror the actual settlement situation from the 3rd to 7th century. How far the interest and control of the Gudme complex reached is another question. However, important grave finds such as those from Årslev and the gold hoards at Brangstrup and Boltinggård in the central area of Funen prove that prominent powers also resided there, alongside the centre at Gudme.

2. Tissø

Our other complex is situated on the west bank of Lake Tissø in western Zealand (Figure 8). The settlement is located at a distance of six kilometres from the coast and extends over 1.6 kilometres along the west bank. The complex was active from the mid 6th century into the 11th century. The river Halleby Å provided access to the sea and could probably be navigated by smaller vessels in the Viking Period. Other rivers such as Bøstrup Å and Åmose Å made it possible to go by boat from a large part of West Zealand to Lake Tissø and thus enter the settlement area. The total settlement area covers 50 hectares, of which about 85,000 m² have been excavated so far (Figure 9). Two manors and parts of extensive market and craft areas have been investigated.

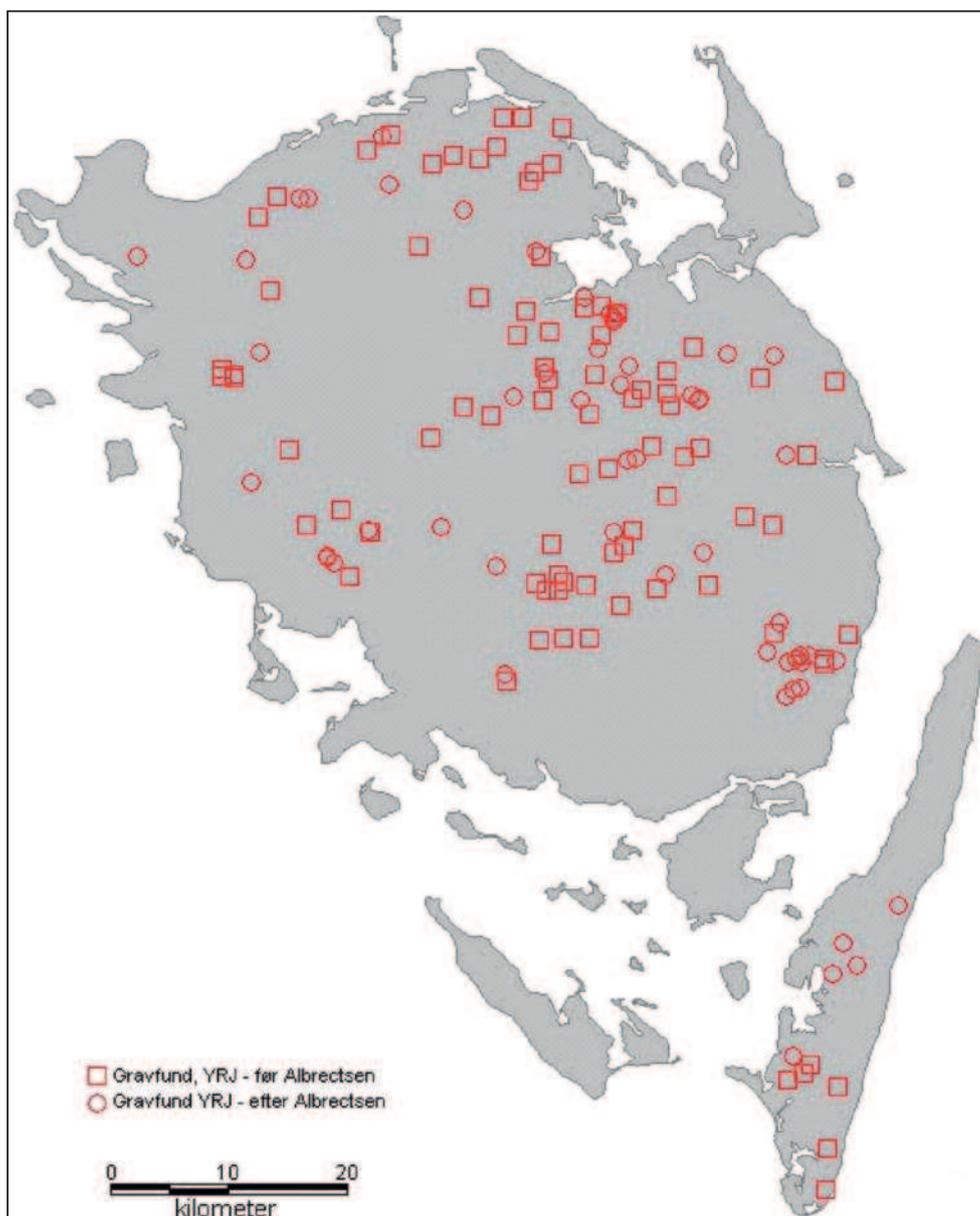


Figure 6. Funen. Distribution of the graves from the late Roman period. Map and data Mogens Bo Henriksen.

The manors

The first manor, from the mid 6th century to the late 7th century, covers an area of about 10,000 m², which is three to four times the size of ordinary Danish farms of that period. The largest building has a length of 40 meters and was unusually well constructed of large timbers with white-plastered walls. The whole complex probably burnt down in the second half of the 7th century. Among the rather sparse finds are brooches, a sword pommel, a spiral bead made of gold and a pair of gold pendants with inlaid garnets in cloisonné.

The first manor was superseded by a second manor some

600 meters farther to the south. The C-14 dates seem to indicate that construction began around AD 700, followed by several further building phases (Figure 10). The manor area in Phases 1 and 2 was 10,000-15,000 m². The hall building stood in the centre. A special fenced area was built together with the walls of the hall, and within this was a small building. Near the fence at the northern end of the manor was a forge. This is highly atypical of a Danish farm complex, and there is nothing in the available material to suggest agricultural production or permanent livestock husbandry within the manor complex.

In Phase 3, from the 9th and 10th centuries, there were

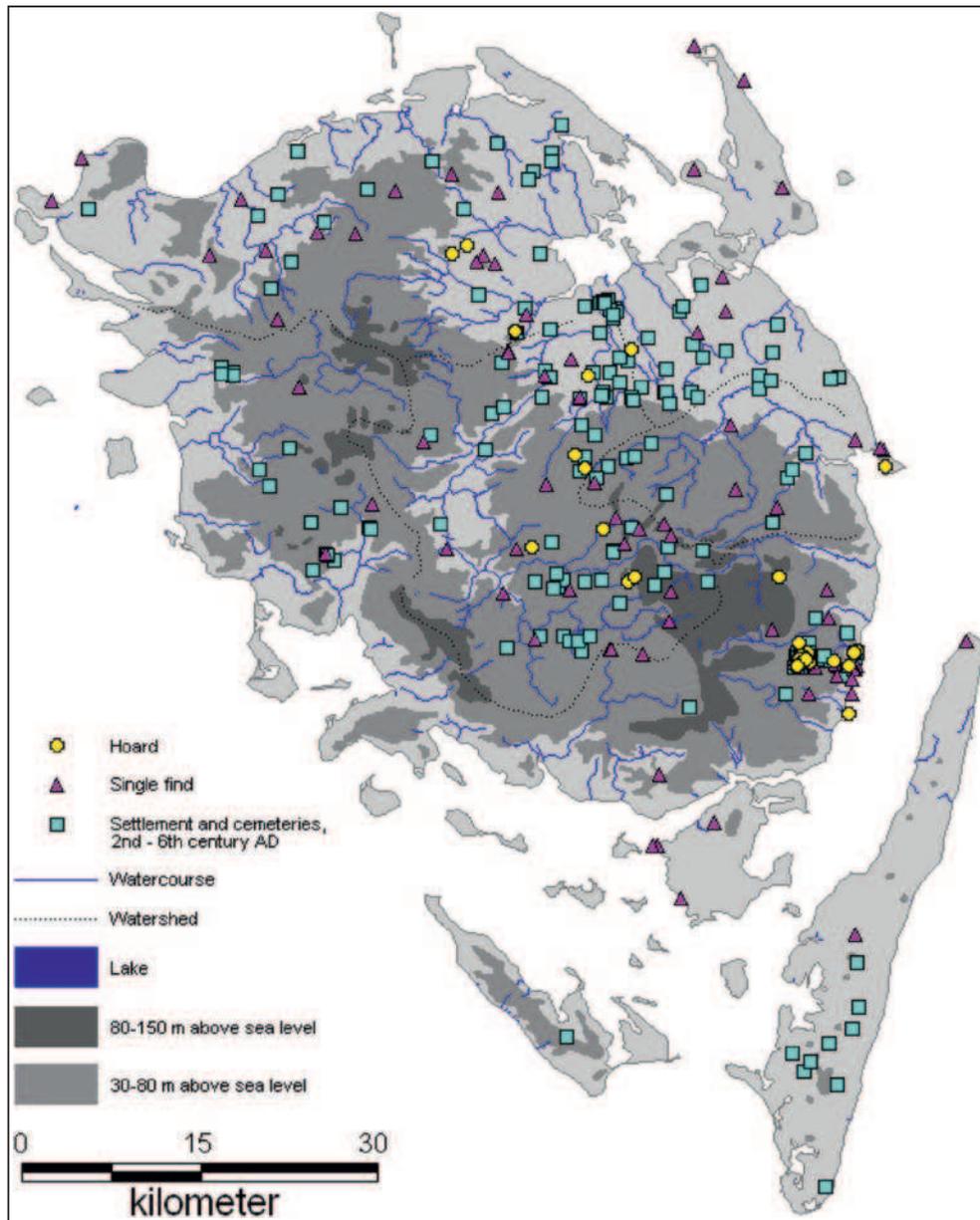


Figure 7. Funen. Distribution of gold finds, settlements and graves from the 2nd to 6th century AD in relation to the terrain. Map and data Mogens Bo Henriksen.

changes in the structure of the complex. The area of the manor was extended to about 18,000 m², while its core structure was retained. New buildings were erected along the western fence. The most striking aspect of the development from Phase 1 to Phase 3 is unequivocal conservatism as far as the halls and the related separate fenced area with its single building are concerned. The combination of hall, separate area and smaller building is maintained over a period of almost 250 years.

We can interpret the hall as the prestigious main building where receptions and feasts took place – the old Norse “*hov*”. The find material confirms this assumption, but the separate

area and the small building are clearly something special. Here it is worth noting that, within the manor area, there is an unusually high frequency of finds of pagan amulets and jewellery with motifs taken from Norse mythology. The many pagan amulets and the weapon offerings from the lake might indicate that cult activities were associated with the manor, as have been recorded at other sites in Scandinavia in recent years. The small building in the special fenced area of the manor could be a cult building – the so-called “*horgr*” of the sagas.

The concluding Phase 4 embraces the second half of the

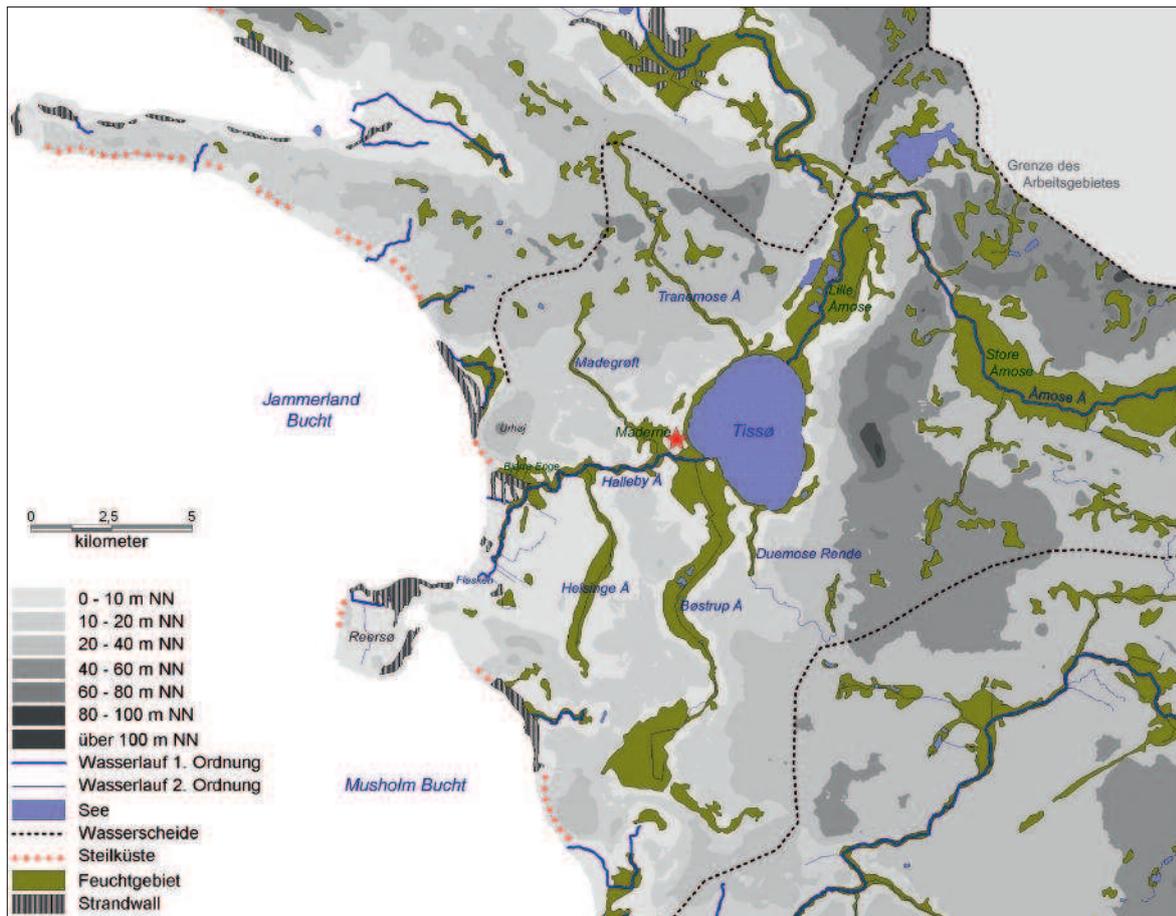


Figure 8. The topography of the Tissø area (after SCHÜLKE 2007).

10th century and the beginning of the 11th century. The most spectacular building is a very large hall with a 550 m² roofed area. The total area is at least 25,000 m². The structure of the complex changes radically in Phase 4. The hall building is of a new type; the fenced special area disappears and the other house types are replaced, mainly by houses with slanting supporting posts (see also JØRGENSEN 2003).

The Tissø area as a whole leaves us with a number of loose ends and questions. However, large-scale excavations indicate that Tissø represents a magnate's residence with an associated cult area in a special fenced-off space. About 20 small amulets in the form of Thor's hammers, fire-steels and lances from the central area, as well as contemporary weapon offerings in the lake itself, seem to confirm this assumption. In this connection, however, it is the structure of the actual farm that is interesting and the striking change that can be observed between Phase 2 and Phase 3 (Figure 10). Farm Phases 1 and 2 in many ways recall the situation at Gudme – a large hall, a smaller secondary house and possibly a smithy, but no other buildings. The situation in Phases 3 and 4 is quite different, with numerous utility buildings and, thus, more like the con-

temporary Lejre. Here it is tempting to suggest that the change from Phase 2 to Phase 3 represents a shift from a magnate's residence based on tribute in Phases 1 and 2 to the direct operation of an estate in Phases 3 and 4, which would naturally require the building of large storage facilities and, possibly, workers' houses. I shall return to these questions later.

The market and workshop area

To both the south and the north of the large house there are extensive workshop and market areas. However, it is extremely difficult to find any system among the thousands of post-holes, mainly due to the ploughing to which the site has been exposed. Nevertheless, one recognisable building type in the market area is the pit-house, of which 85 have been excavated. In the southern workshop area, iron forging and bronze casting seem to have been the main activities. Semi-finished material for fire-steels, shears, knives and arrowheads are among the finds. Bronze casters worked in the same area and among the finds are casting-moulds for tortoise brooches, pa-

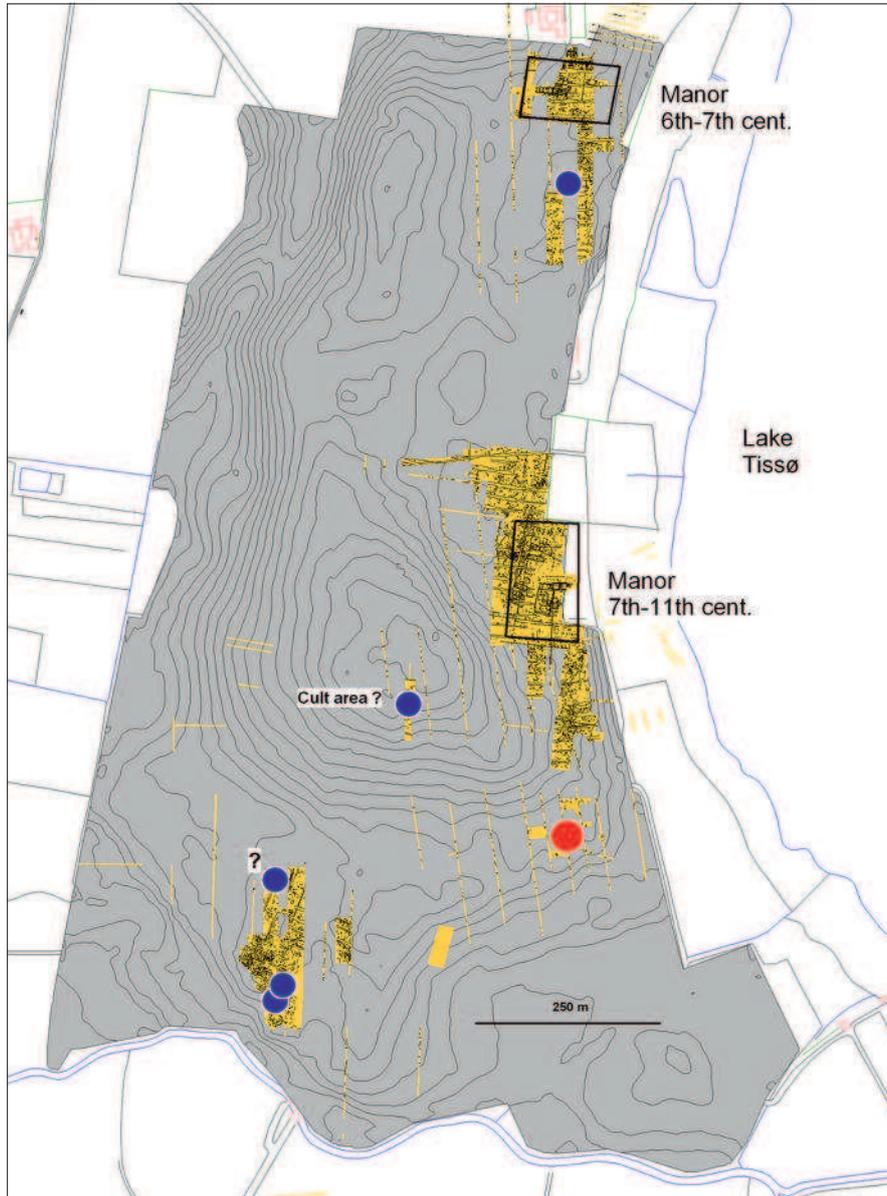


Figure 9. The Tissø complex with the excavated areas, gold hoard (blue) and silver hoards (red).

trix dies and models as well as miscast keys, brooches and Thor's hammers. The distribution of molten bronze and lead shows that jewellery was produced almost everywhere on the site.

The presence of trading activities is evident from the approximately 350 weights, fragments of hack-silver and more than 130 Arab coins that have been found all over the area. The distribution of the dateable finds shows that a very large part of the total market area was functioning at one and the same time. By contrast, there are indications that this was only for a short period at any one time. Compared with the find frequency at emporia such as Ribe, Haithabu, Kaupang and

Birka, the quantity of finds is smaller at Tissø. This does not suggest a long-term occupation of the market and production areas.

The hinterland of Tissø

Almut Schülke has recently conducted an analysis of the site and its position in the Tissø area (SCHÜLKE 2007). The geographical setting and the communication potential of the site have been mapped and analysed (Figure 11). In connection with this study, Schülke also predicted possible landing places



Figure 10. The Tissø manor in Phase 2 and Phase 3 (after JØRGENSEN 2003).

on the coast. In 2005, a typical landing site yielding finds contemporary with the settlement at Lake Tissø was located by metal detector in one of the predicted areas. The situation of the site is ideal as it is sheltered from the west wind and there is easy access to the river Halleby Å.

However, compared to the Gudme area our knowledge of the Tissø hinterland is limited (Figure 12). Only a few systematic surveys have been conducted and the majority of the finds came from the vicinity of the main site. We are in serious need of further research in order to be able to compare the site with Gudme. Without doubt, important sites are still to be found in the area: a Viking cavalry grave and a gold ring are known from the east bank of Lake Tissø, another gold ring from the coast, and – last but not least – two fine rune stones in Gørlev church just to the southwest of Tissø. We can see the shadow of an interesting picture, but more detailed surveying is needed. Between the Tissø complex and the Trelleborg area about 25 kilometres to the south there is a marked gap on the find-distribution map (Figure 12). Is this gap real? And what was the relationship between the various sites in these two important areas during the Viking period?

3. Gudme and Tissø: from tribute to estate system

The use of concepts like 'magnate's residence' and 'estate' in connection with Gudme and Tissø involves the assumption that there were estates with resources that exceeded those of ordinary farms. It is thus necessary to define how a supposed prehistoric estate can be identified archaeologically. One point of departure might be to set up a working hypothesis of how such an estate complex might appear archaeologically. Initially, we can assume that in the case of a magnate's estate, in both prehistoric and historical times, there would be an accumulation and circulation of greater quantities of resources than in ordinary settlements, and that there would also have been a more extensive use of prestige objects. We can further assume that this could be manifested by different archaeological find patterns – depending on the way the resources were procured. For the later Iron Age and the Middle Ages, i.e. from the 3rd to 15th century, we can identify three main systems for the procurement of major resource wealth:

- Tribute from dependants: food/stock, craft products, prestige goods, valuables, gold/silver, etc.
- Direct operation of a large estate with its own staff.
- Manorial system with tenants: taxation in commodities and labour on the manorial land, etc. (14th century à).

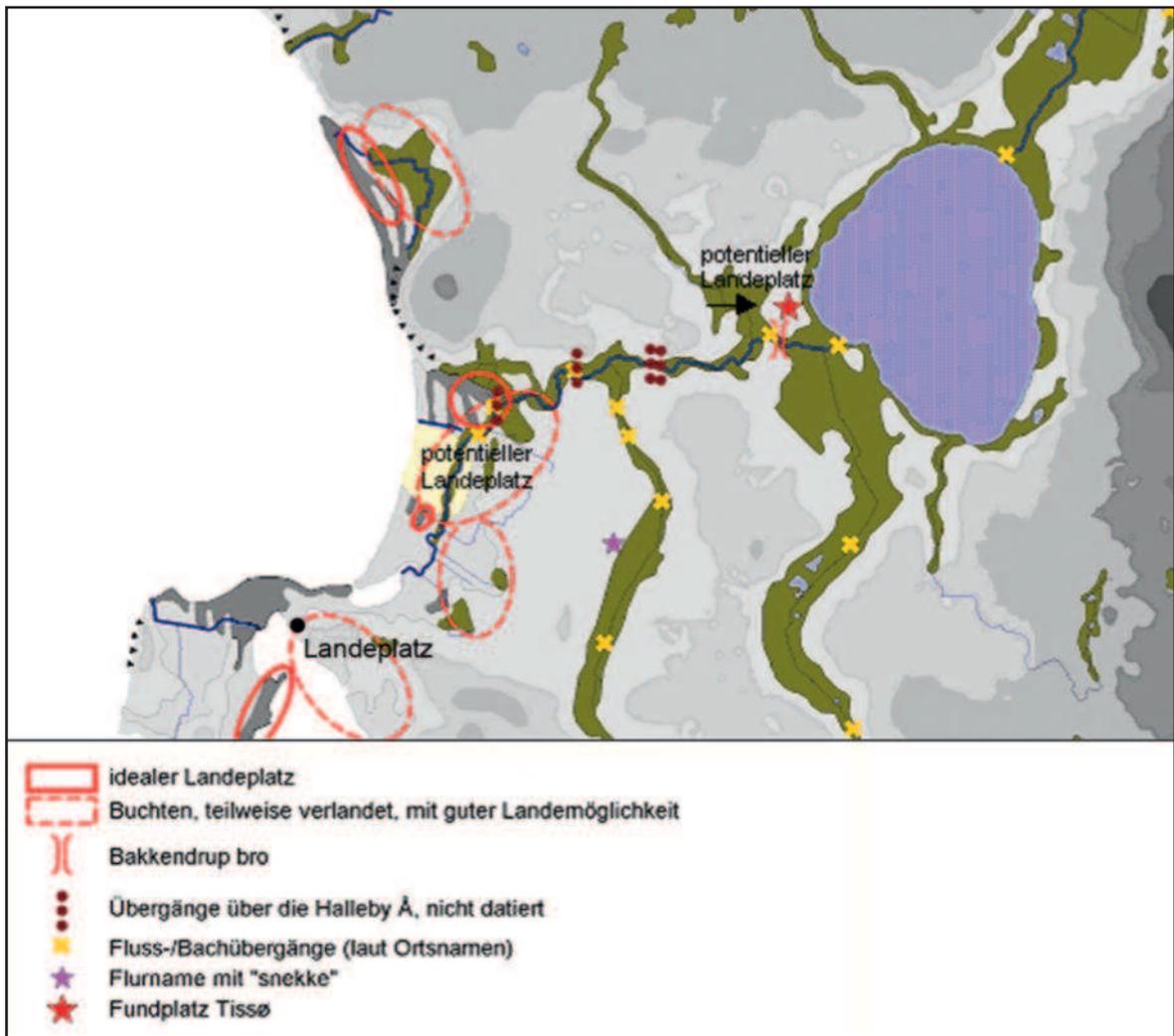


Figure 11. Analysis of the Tissø area with regard to communications and the position of a landing place (after SCHÜLKE 2007).

I stress the fact that the three systems are not necessarily mutually exclusive, and that the tribute system could also include direct farming of large land areas. The same applies to direct farming and the manorial system where, for example, corvée labour might also be part of everyday operations.

One could, of course, discuss whether a magnate's residence dependent on a tribute system can be called a true estate. The groups of tribute-paying and independent inhabitants are unlikely to have remained unchanged either over time or geographically – depending on the balance of political power the groups might vary in size. However, it would seem logical to assume that the tribute system must have been a precondition for the establishment of estates based on direct operations or tenant farms. An existing tribute system would have been an obvious way of forcing a population to pay estate dues and render labour services.

The three main operating systems for magnates' estates could

conceivably be differentiated by different archaeological evidence:

- A manor based on tribute could be represented by just a few prestigious buildings, without storage or utility buildings.
- A manor based on the direct operation of large units would have prestigious buildings, livestock and storage buildings, workshops and smaller houses for employees.
- The manorial system based on tenancy would have prestigious buildings and storage buildings (possibly isolated, or surrounded by smaller tenant farms).

The last of these operating systems could, of course, be difficult to demonstrate archaeologically and it is quite conceivable that farmyards and tenant farms might be located far from the home farm. In that case, the picture presented by the actual residential area would perhaps be similar to an estate

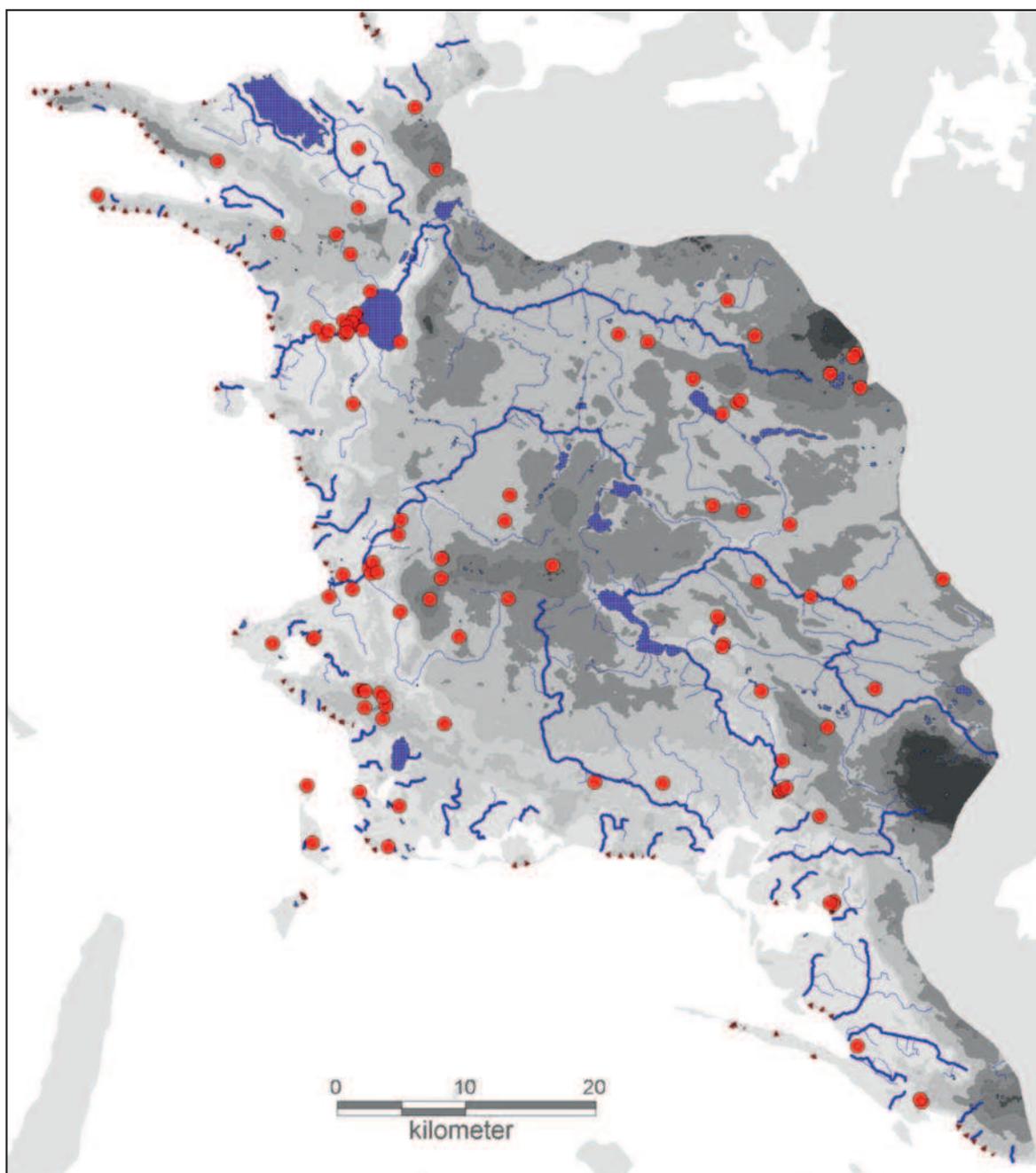


Figure 12. Distribution of finds from the Viking Age in Western Zealand (after SCHÜLKE 2007).

complex based on tribute as outlined above.

There have been very few excavations of the magnates' farms mentioned in the written sources from the early Middle Ages. For the 11th century, we have a small group of sites that are only known archaeologically and the number only increases with the early fortified complexes of the 12th century. The modest find material shows that the status of the medieval elites was first and foremost based on land ownership. Perhaps this model also holds true for sites without the activities

that demand material resources and the known rich finds of our period, but which nevertheless clearly display the main structural elements such as the "hov" and "horgr" as illustrated, for example, by Lunda in Sweden (cf. ANDERSSON and SKYLLBERG 2008).

Gudme and Tissø offer us two complexes representing the highest level of the Iron Age and Viking Age elites. I propose that the two sites possibly indicate that a shift from a tribute system to an estate system with direct operation took place in

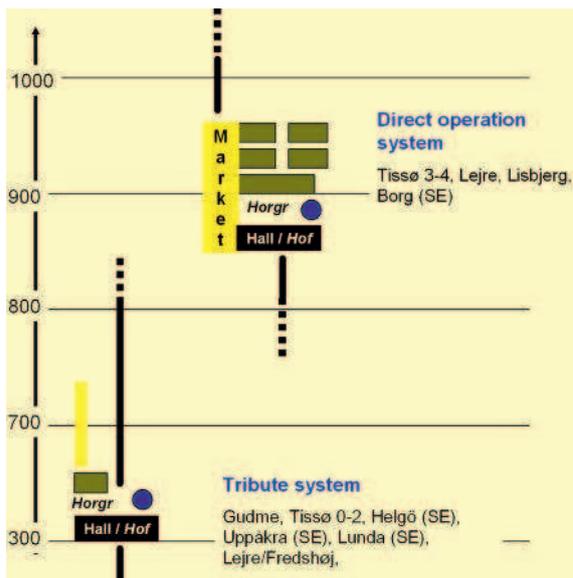


Figure 13. Model illustrating the structural and economic development of magnates' residences from the 3rd to 11th century AD. In Scandinavia the steadily growing number of sites seems to fall within the picture outlined.

the course of the 8th and 9th centuries (Figure 13). Tissø demonstrates this by the marked change in structure from Phase 2 to Phase 3. This development probably reflects contemporary changes in the political power structure and, not least, in the economic base (cf. also JØRGENSEN 2001). We know that the 9th century was a period of military innovations in Scandinavia, which the ruling powers used to expand their dominions. The military organization and capacity was extremely dependent on a stable access to resources, including supplies of food and raw materials such as timber for ship building. In order to secure a steady flow of these resources it became necessary for the military and ruling elite to turn from the tribute system to the direct operation of the large estates supplying these resources. From the older tribute system the elite had even inherited an instrument of power that could now be used in connection with the operation of their growing land possessions as well as their military obligations in connection with the increasing territorial interests of the royal power.

Today, the large complexes from the Late Iron Age and the Viking Age constitute a steadily growing body of material in Scandinavia. It is my impression that the new sites of this type seem to fit well in the model I have tried to outline above.

Bibliography

ANDERSSON and SKYLLBERG 2008

G. Andersson and E. Skyllberg (eds), *Gestalter och gestaltningar – om tid, rum och händelser på Lunda*. Riksanantikvarieämbetet Arkeologiska Undersökningar Skrifter 72 (Stockholm 2008).

CALLMER 1997

J. Callmer, Aristokratisk präglade residens från yngre järnåldern i forskningshistorien och deras problematik. In: J. Callmer and E. Rosengren (eds), "...Gick Grendel att söka det höga huset..." Arkeologiska källor till aristokratiska miljöer i Skandinavien under yngre järnålder (Halmstad 1997) 11-18.

CHRISTENSEN 1997

T. Christensen, Hallen i Lejre. In: J. Callmer and E. Rosengren (eds), "...Gick Grendel att söka det höga huset..." Arkeologiska källor till aristokratiska miljöer i Skandinavien under yngre järnålder (Halmstad 1997) 47-54.

HÄRDH 1998

B. Hårdh, Preliminära notiserkring detektorfynden från Uppåkra. In: L. Larsson and B. Hårdh (eds), *Centrala Platser. Centrala Frågor. Samhällsstrukturen under Järnåldern*. En vänbok till Berta Stjernquist. Uppåkrastudier I. Acta Archaeologica Lundensia 8^o/28 (Lund 1998) 113-127.

JEPPESSEN and MADSEN 1997

J. Jeppesen and H.-J. Madsen, *Trækirke og stormandshal i Lisbjerg*. KUML 1995-96, 1997, 149-171.

JØRGENSEN 2001

L. Jørgensen, From tribute to the estate system, 3rd - 12th century. A proposal for the economic development of the magnates' residences in Scandinavia based on settlement structure from Gudme, Tissø and Lejre. In: B. Arrhenius (ed.), *Kingdoms and Regionality*. Transactions from the 49th Sachsensymposium 1998 in Uppsala. Theses and Papers in Archaeology B:6, Stockholm University (Stockholm 2001) 73-82.

JØRGENSEN 2003

L. Jørgensen, Manor and Market at Lake Tissø in the Sixth to Eleventh centuries: The Danish 'Productive' Sites. In: T. Pestell and K. Ulmschneider (eds), *Markets in Early Medieval Europe*. Trading and 'Productive' Sites, 650-850 (Bollington 2003) 175-207.

JØRGENSEN et al. 2004

L. Jørgensen, J. F. Bican, L. G. Thomsen and X. P. Jensen, Stormænd, købmænd og håndværkere ved Tissø i det 6.-11. årh. In *Tissø og Åmoserne - kulturhistorie og natur*. Fra Holbæk amt 2003, 2004, 50-65.

LARSSON 1998

L. Larsson, Gjort och ogjort i Uppåkra. In: L. Larsson and B. Hårdh (eds), *Centrala Platser. Centrala Frågor. Samhällsstrukturen under Järnåldern*. En vänbok till Berta Stjernquist. Uppåkrastudier I. Acta Archaeologica Lundensia 8^o/28 (Lund 1998) 95-112.

LARSSON 2005

L. Larsson, Kulthuset i Uppåkra. In: T. Capelle and C. Fischer (eds), *Ragnarok. Odins verden* (Silkeborg 2005) 107-118.

LINDEBLAD and NIELSEN 1997

K. Lindeblad and A.-L. Nielsen, Centralplatser i Norrköpingsbygden - förändringar i tid och rum 200-1200 e.Kr. In: J. Callmer and E. Rosengren (eds), "...Gick Grendel att söka det höga huset..." Arkeologiska källor till aristokratiska miljöer i Skandinavien under yngre järnålder (Halmstad 1997) 99-118.

SCHÜLKE 2007

A. Schülke, Kommunikationslandschaft – Wasserwege versus Landwege im Umfeld des wikingerzeitlichen Zentralplatzes Tissø, Westseeland. In: F. Biermann and Th. Kersting (eds), Siedlung, Kommunikation und Wirtschaft im westslawischen Raum. Beiträge der Sektion zur slawischen Frühgeschichte des 5. Deutschen Archäologenkongresses in Frankfurt an der Oder, 4.-7. April 2005. Beiträge zur Ur- und Frühgeschichte Mitteleuropas 46 (Langenweißbach 2007) 37-55.

SØRENSEN 1995

P. Ø. Sørensen, Gudmehallerne. Kongeligt byggeri fra jernalderen. Nationalmuseets Arbejdsmark 1994, 1995, 25-39.

Dr. Lars Jørgensen
National Museum
Frederiksholms Kanal 12
DK 1220 Copenhagen K.
ljo@natmus.dk