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## Settlement and Social Structure in Norway in the Migration Period (AD 400-550)

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### Introduction

The introduction of cruciform brooches around 400 AD marks the beginning of the Migration period in Norway (Bakka 1973a; Slomann 1977, 1986). The end of the period is related to the transition of Salins Style I to Style II which occurred shortly after 550 (Bakka 1973a).

In the early Migration period, the influence from the Roman empire had been felt for four hundred years. During this period the Germanic peoples had gotten their own alphabet, the *futhork*. They had also adopted the Roman weight system (Brøgger 1921). A more aristocratic life style among the elite also reflects the Roman influence. In most respects, however, the Germanic society stood on its own.

The artefact material derives from settlements, graves, hoards and votive offerings. In addition to these find categories also iron extraction sites, systems for large scale hunting, hillforts and boat houses prevail. Pottery is the most prevalent artefact category. The pottery includes crude ware, finer black burnished ware and bucket shaped pots. Cruciform brooches, silver sheet brooches, relief brooches, S-shaped, equal-armed and 'small' brooches are also typical for the period. Bracteates, finger- and arm-rings of gold represent more rare items. The composition and types of weapons represent a continuation of those from the late Roman period. Thus the Migration period material represents a solid base for the interpretation of settlement, resource utilisation and social structure of the Germanic populations.

### Settlement finds

Due to the stone outer walls in farmhouses from Southwestern and Northern Norway, numerous farms have been recorded in these regions. When many of these farms were deserted in the latter part of the Migration period, the stone walls made them easily detectable.

The farm-houses are so-called long-houses. They were separated into two or more parts by inner wooden walls. The dwelling area was in one part of the house and the stall in the other end. The average length of the houses was 20-30 meters, but houses up to 90 meters are known. Some farms have more than one



Fig. 1. The reconstructed Migration period farm at Ullandhaug, Stavanger, Rogaland. All three houses had stone built outer walls

house. At Ullandhaug, Stavanger, three houses were placed around a courtyard (Myhre 1980) (Fig. 1). The living area at Ullandhaug was approximately 250 square meters. The longest house consisted of four rooms, three representing living areas. The largest room had a stone paved floor. Pottery and querns indicate that this was also the kitchen area. Carbonised cereal remains demonstrate that oat and barley were used for making bread and porridge. In another room numerous spinning whorls and stone weights for the loom were found. Farm remains similar to those at Ullandhaug have been recorded on almost every hill in the Jæren district, on the Lista plain and also in the valleys of Rogaland and Agder.

On these farms numerous small clearance cairns and burial mounds were scattered in the infield, the burial mounds seldom being far from the house (Fig. 2). On most farms the infield was surrounded by stone fences. A cattle-track with fences of stone led from the stall to the outfields. Lynchets reflect plowing of the infield. The size of the infield varied from ca. 40 to 350 da., the average being 125 da. In Southwestern Norway, therefore, the infield of the average Migration period farm was considerably larger than that of a farm from the historical period. Whether this was because the family group was larger or because the farming methods differed, is disputed.

The traditional Migration period farm depended upon plant cultivation and animal husbandry. Analyses of soil from infields have demonstrated fertilisation of the ground (Provan 1971), indicating the presence of permanent fields.

In addition to the large and medium-large farms, also smaller habitation sites are known. At Kollsnes, Øygarden in Hordaland, Western Norway, the remains of a small house with stone outer walls on three sides, was located next to a small bay (Randers 1995). The living area of the house was only ca. 20 square meters. Three small burial cairns, barely visible before excavation, were located near the house. In the bay a small boat-house with stone walls and a slip

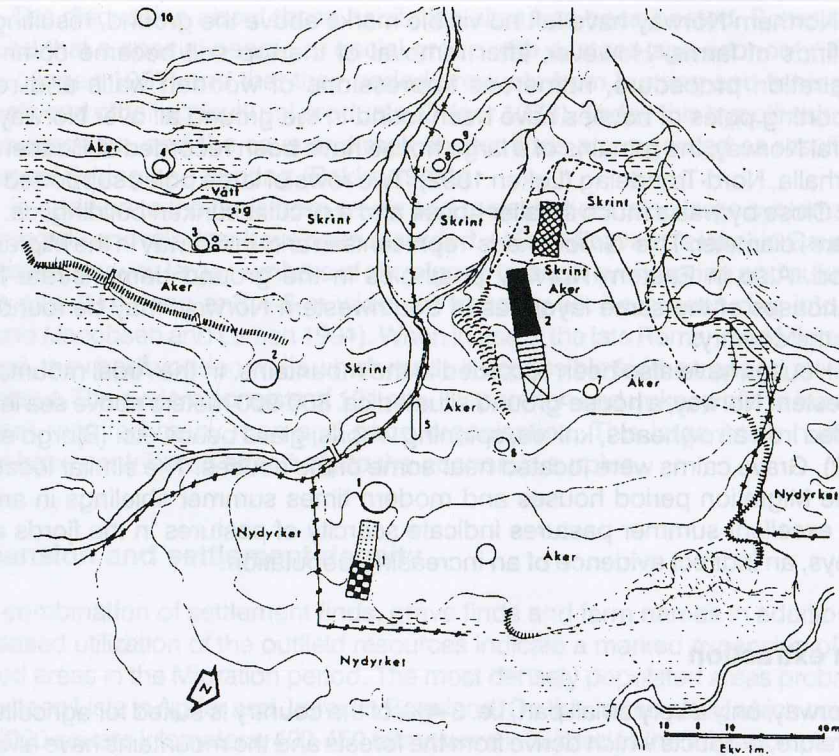


Fig. 2. Map of the Migration period farm Sostelid, Vest-Agder, with houses and burial mounds. There were three houses (1-3) and 9 burial mounds. One of the mounds was located close to house number 1. The mound may have served both as a property marker and as a place for ancestor veneration after Magnus and Myhre 1986

have been excavated. The burial cairns and boat-house indicate that the site has been permanently inhabited even though no trace of cereal cultivation has been demonstrated. Most likely, the subsistence mainly depended upon resources from the sea, supported by animal husbandry.

In Northern Norway, both traditional farms with stone-built outer walls and settlement-mounds have been recorded. The latter are due to accumulation of stone and turf from demolished buildings and debris from various activities during several centuries. The habitation on these mounds started around the birth of Christ. About 2000 farm-mounds are known in Northern Norway, the majority being inhabited in the Late Iron Age and in the Medieval period (Bertelsen and Lamb 1995). Since none has been totally excavated, the organisation and layout of buildings are unknown. Even though cereal cultivation has played a lesser part in the economy in Northern Norway than in the rest of the country, the opportunity for cereal cultivation seems to have been a decisive factor for the localisation of farms also in Northern Norway. This is seen from the distribution of finds of a South-Scandinavian character which coincides with the northern limit of cereal cultivation (Sjøvold 1962). Due to wood being the main building material in the Migration period in most of Norway, farms outside Southwestern

and Northern Norway have left no visible marks above the ground, resulting in few finds of farms. However, after removal of the top soil became common registration procedure, numerous impressions of wooden walls and roof-supporting poles of houses have been found in the ground all over Norway. In central Norway, the remains of a large house have been recorded at Bertnem in Overhalla, Nord-Trøndelag (Løken 1992). Two rows of large poles supported the roof. Close by was a much smaller house and a circular sunken building, ca. 3.5 meters in diameter. This 'Grubehaus' represents a rarity in Norway in the Migration period. Also in Eastern Norway postholes in the ground demonstrate that longhouses of the same layout as in Southwestern Norway, may be found all over the country.

Houses have also been recorded in the mountains. In the Årdal mountains in Western Norway, a house-ground situated ca. 800-900 meters above sea level, yielded iron arrowheads, knives, spinning whorls, glass beads etc. (Bjørge et al. 1992). Grave cairns were located near some of the houses. The similar location of the Migration period houses and modern times summer shielings in areas with excellent summer pastures indicate scarcity of pastures in the fjords and valleys, an indirect evidence of an increasing population.

### **Iron extraction**

In Norway, only a very small part, i.e. 3-4%, of the country is suited for agriculture. Therefore, products which derive from the forests and the mountains have always been economically important. Based upon bog iron, large scale smelting of iron took place in Trøndelag in the Roman and Migration periods (Stenvik 1991). The production was well organised. The ovens which were partly dug into the ground, were shaft furnaces. Houses where the men who operated the furnaces lived, were located close to the ovens. Between 3-8 ovens have been in use at the same time. Probably it took 10-15 men to take care of the smelting.

Large slag heaps show that the production has been large. In just one small community, Meråker, the production has been estimated to several thousand tons of iron. Only one ton is needed for the manufacture of 2000 axes. This clearly demonstrates that the production in Trøndelag by far exceeded local demand (Stenvik 1994).

### **Hunting and fishing**

When Norway's very long coastline with good access to fishing and hunting of sea mammals and ample opportunities for hunting in the valleys and mountains is considered, it is of no great surprise that fishing and hunting were part of the resource utilisation in the Migration period. This is clearly demonstrated by finds from caves and rock shelters. Since caves and rock shelters are not exposed to the rain, bone material is well preserved, a rarity in most of Norway due to acidity in the ground. Therefore, the rock shelter material gives valuable information about resource utilisation and diet. In the mountains, bones from reindeer usually dominate. Along the coast, bones from sheep or goat, deer, seals and fish are the more common.

The discussion about these habitation sites has been heated. Some have argued that a special people or social group with a 'stone age economy' lived here (Hagen 1967) and that they traded products from hunting and fishing for cereals and other agricultural products (Odner 1973). Today this hypothesis has few supporters, and the cave and rock shelter finds are regarded as results of seasonal fishing and hunting (Bakka 1973b).

In addition to the finds from caves and rock shelters, also large systems for trapping elk and reindeer have been recorded. At Dokkfløyvatn (a lake) in Gausdal in Eastern Norway large numbers of elk migrate through every spring and autumn. Here pits, 2 m deep and 4-5 m wide, for trapping elk have been dug into the ground (Jacobsen and Larsen 1991). When in use in the late Roman and Migration period, they had wooden walls which made it impossible for the trapped animals to get out. The system consists of 121 pits. Preparation and upkeep of this hunting system required many men and good organisation. This large scale hunting must have contributed effectively to the economic surplus.

### **Expansion and settlement density**

The combination of settlement finds, grave finds and farm names in addition to increased utilization of the outfield resources indicate a marked expansion of the settled areas in the Migration period. The most densely populated areas probably have been Lista in Agder and Jæren in Rogaland. On the Jæren plain, which covers ca. 5000 square kilometers, 400-450 farms were inhabited in the Migration period. Of these 180 farms were deserted by the end of the period (Myhre 1983, 1987). If about 10 persons as an average lived on each farm, the population has been about 4000-4500. However, the large living areas on the farms being considered, 10 persons seem a low estimate. If instead 15 persons were the average, the population has been ca. 6600. In that case, Jæren in the Migration period has been far more densely populated than in the years 1665 and 1758 when the population amounted to 3480 and 4420 persons, respectively (Myhre 1983). May be the population in the Jæren district in the Migration period reached a critical limit?

### **Graves, property rights and social groups**

Numerous grave finds from the Migration period have been recorded, the majority from the coastal districts. Two burial customs coexisted, the cremation rite was the more common in the inland in the eastern and central parts of Norway, while inhumation burials in stone cists prevailed along the coast. However, cremations and inhumations may appear on the same farm, even in the same grave cist.

The graves are usually found close to the farm settlements. Total excavation of farms has demonstrated that only 1-2 persons per generation were buried in mounds or cairns (Hagen 1953). These graves include both men and women. Most likely, they were the heads of the large families and their spouses.

The reason for the location of one of the mounds only a couple of meters from the main house, seems more of a puzzle. It has also been suggested that it may reflect ancestor veneration, stressing the intimate connection between the living and their ancestors (Baudou 1989). Another possibility, which does not

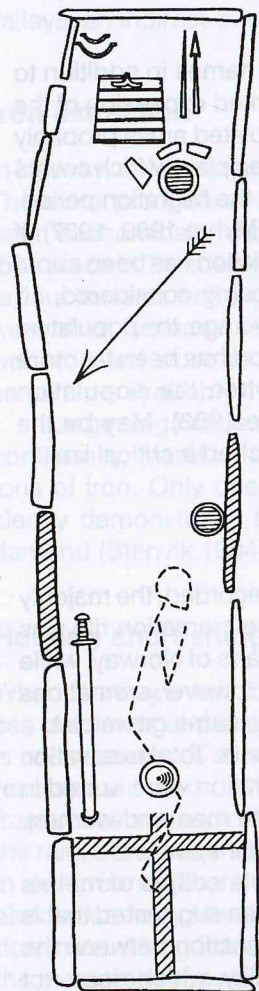
contradict the theory of ancestor veneration, is that increased population and lack of land in the Migration period created a demand for demarcation of property rights. What could be a better mark of the family's claim on the land than the visible grave mound where the ancestor was placed?

However, the graves may also have served another purpose, that of signaling the social position of the deceased and his or her family. In a society with strong traditions, rules probably existed for what kind of burial the various social groups were allowed. It is unlikely that the grave of a person of minor position in the family or society at large has been richly furnished and signified by a mound. Therefore, when the grave goods in the Roman and Migration period burials vary markedly, this may indicate differences in the social positions of the deceased. Based upon qualitative and quantitative criteria (see below), the Norwegian graves fall into four different groups (Solberg 1995 and forthcoming). These grave groups, however, do not necessarily correspond to social groups. Rather, the presence of several groups indicates a hierarchical social structure. In some instances the

difference between two groups, based upon the presence or absence of diagnostic criteria, may be minor. There are also examples that the same grave mound may include graves from two different groups. This may be seen from a grave cist from Borgund in Sunnmøre, Western Norway, which contained two burials, one with weapons, the other with only a ceramic pot. The man buried with weapons belongs to our group III, the other burial to our group IV. This indicates that in addition to status differences between farms and families, there may also have been status differences within the family. In spite of this problem, the different groups may be regarded as a reflection of real social differences.

The grouping is based upon material from Western Norway (*ibid.*). Only a small part of the graves, less than 7%, contain artefacts of gold (group I), about 29% contain a glass beaker and/or artefacts of silver and bronze (group II), 19% did not contain artefacts of silver or bronze, but included a combination of three or more artefacts or of two weapons (group III). Group IV which contained 1-2 artefacts, mainly pottery, made up 45% of the total.

The grave from Enebø, Gloppen in Western Norway (Gustafson 1889, Shetelig 1912, Magnus 1978) belongs to our group I. Here a man has been buried in a 4.2 m long stone cist and covered by a 24-25 m wide og 4 m



**Fig. 3.** A stone cist at Enebø, Gloppen, in Sogn og Fjordane, contained the remains of a richly furnished man's grave. The weapons consisted of a sword with gilded mount, two spears, a shield and arrows. Besides were several vessels of pottery, glass and wood, a bronze balance and weights. Around the neck the man had worn a Roman gold coin from Theodosius II (408-450) reign



**Fig. 4.** Fragments of textiles in the Enebø grave have permitted a reconstruction of the man's clothing (above). The man was dressed in reddish brown trousers, an inner and an outer tunic. The tunics had bands decorated by animal figures. Above, detail of the band with animals. After Magnus 1978

high mound (Fig. 3). The man's belongings included a sword, two spears, a shield and arrows. The sword had a gilded mount. He also had a balance and weights of bronze which have been kept in a leather purse, a wooden bucket with bronze decoration, two ceramic pots, a glass, a Roman gold coin from Theodosius II reign (408-450) and several wooden vessels. The Enebø find is special also due to the preservation of the man's clothing. He was dressed in reddish brown trousers with checks made by narrow green (or blue) stripes. The inner tunic was crimson red decorated with black bands with brocated animal figures in red and yellow. The cuffs were held together by heavy bronze clasps with 6 gilded bronze buttons. Over this he wore a tunic of a lighter colour, possibly a yellowish brown bordered by dark bands with with brown, woven animal figures (Fig. 4). The cuffs were held together by small silver clasps with buttons (Magnus 1978 and 1983). Analysis of the garments from the Högom grave in Medelpad, Sweden (Nockert 1991, Ramqvist 1992) has demonstrated that the tunic and the trousers on the deceased were red, the same as in the Enebø and other rich male graves in the Migration period. Probably red coloured garments were a prerogative for the highest social stratum. The Enebø find in itself represents a strong argument in favour of a hierarchical structure of the Migration society in Norway.

Some of the women's graves render a similar impression. At Kvåle, Sogndal in Western Norway, a stone cist held the remains of a woman (Shetelig 1912). According to our definition, the grave belongs to group II. The woman was equipped with several brooches, the largest being a relief brooch (Fig. 5). Most likely, the lady was the mistress of the farm. The Kvåle farm has rich grave finds also from the Viking period (Solberg 1986), and in the Medieval period it belonged to a prominent



**Fig. 5.** Relief brooch of gilded silver from Kvåle, Sogndal. It probably belonged to the mistress of a wealthy farm. Photo Bergen Museum



**Fig. 6.** Handled vessel from Kvasseim in Rogaland. The production of finer handled vessels started in the 4th and ended in the 6th century. Photo Bergen Museum



**Fig. 7.** Bucket-shaped pot from Stauri, Stryn in Sogn og Fjordane. Photo Bergen Museum

family (Øye 1986). Therefore, at this farm the continuity of social prominence can be demonstrated for more than 800 years.

The four grave groups do not represent the whole population, maximum 1/10 to 1/15, of which groups I and II make up ca. one third. This clearly demonstrates the hierarchical social structure.

### Specialists

The artefacts in the graves, even though their quality may vary, to a very large degree reflect specialist manufacture. The weapons are of identical types to those found in Danish war offerings. Due to the close similarity it has been impossible to define regional types or production in North-Europe (Ilkjær 1994). Most likely, weapons have been manufactured in specialist workshops, probably in all the Scandinavia countries.

The production of the silver smithing and bronzesmiths, however, is less homogeneous. The various specialists or workshops which made relief brooches have had their preferences, and due to stylistic variation some smiths or workshops may be singled out (Nissen Meyer 1934). In the 6th century specific smiths/workshops mainly seem to have produced for a defined region, maybe a political territory. For instance the products of the so-called "Hauge master" (from Hauge, Klepp i Rogaland) have been found not only in Rogaland, but in the neighbouring county, Vest-Agder.

Pottery is the most commonly found artefact in the Migration period, consisting of both finer handled black burnished pots (Fig. 6) and bucket-shaped pots. At Auglend not far from Kristiansand in Southern Norway a site for pottery production has been excavated. A circular and four rectangular houses and a Grubenhaus have been excavated. About 55,000 potsherds from ca. 900 pots were found. The clay was local, and nail impressions on pots showed that the potters were women.

Bucket-shaped pots, however, were not manufactured at Auglend. These pots seem to be a Norwegian creation, as they are very rare in the neighbouring countries. In Medelpad, Sweden, they appear in some graves, but this district in many ways demonstrate a close contact with the Norwegian coast-land. The

bucket-shaped pots which were tempered with either crushed soapstone or asbestos fibres are decorated (Fig. 7). Based upon variation in the decoration it has been possible to single out pots which has a distinct regional distribution (Bøe 1931). Pots were probably traded within specific regions. Large numbers of potsherds have been found during excavation of boat-houses, indicating that pots may have been an important trading commodity.

Both weapon smiths, gold-, silver- and bronze-smiths and potters have been working in or close to central habitation sites. This was probably not always so for the comb-makers. The composition of tools in some graves found in the valleys and in the mountains indicate that the trappers of elk and reindeer also may have been comb-makers (Christensen 1986).

In the Migration period specialist production characterize the majority of the artefacts in graves, hoards and votive offerings. They attest that society by no means was based upon subsistence only.

### The basis for wealth

We have seen that the farm Kvåle held prominence for many hundred years. Kvåle is situated on some of the best farm land in the district. All over the country there is a marked correlation between the size and quality of farm land and the relative ranking of the social groups.

However, farm land was not the only factor which contributed to economic surplus. Also the iron production and large scale hunting contributed to the accumulation of wealth. In certain areas, such as Meråker in North Trøndelag, the local population was too small to man all the production sites during the summer season. The iron production, therefore, involved personnel from a much



**Fig. 8.** Reconstruction of a courtyard site at Steigen, Engeløy in Nordland county. The courtyard sites are located close to chieftains' farms

larger region (Stenvik 1991). Most likely, the many rich graves with import from the Roman and Migration periods in North Trøndelag reflect the local chiefs' organising ability and power.

Products from organized hunting contributed in a similar way to the wealth of chiefs both in eastern and in Northern Norway, as we see from Ohthere's tale (from the Viking period) about whaling and extraction of valuable furs from the Saami's (Lund 1984).

The courtyard sites in Rogaland and Northern Norway (Johansen & Søbstad 1977) may reflect similar expeditions also in the late Roman and Migration period. These sites include several small buildings centrally situated around an open courtyard (Fig. 8). About 100 men may have stayed on each site. The houses were not permanently inhabited, at least there has been no keeping of domesticated animals. At many sites food has been prepared in large pits by means of heated stones, a method especially suited for preparing large quantities of food. The courtyard sites are located close to chieftains' farms. Most likely, the chieftains men were assembled on these sites for participation in hunting or trading expeditions, or even for warfare. The similar courtyard sites in Northern Norway and Rogaland indicate strong connections between the two regions, probably based upon mutual trade connections.

### Administered trade?

In Denmark, Lundeborg on Funen represents a center for administered trade (Thomsen et al. 1993). The proximity to Gudme demonstrates that the trade has been administered by the powerful family at Gudme. So far no similar trading place has been found in Norway. However, around 300 AD the import to Norway changed from single luxury items to more standardised products, the Vestland cauldrons being the most prevalent. This tendency towards more mass produced items is especially strong in Western Norway, where they make up 70% of the import goods (Mydland 1990). This indicates that trade contacts with the Rhine area has become



Fig. 9. Excavated boat-house for a longship at Stend, Bergen. Photo Bergen Museum

intensified. In addition, there has been continuous and probably direct contact between Norway and England (Hines 1984). The new composition of import goods and marked concentrations of glass and bronzes in the coastal districts of Vestfold, Lista and Jæren indicate that sites of administered trade existed also in Norway.

The closest Norwegian parallel to the Gudme/Lundeborg complex may be Hauge at Jæren. Two very richly furnished women's

graves have been found at Hauge. The name Tinghaug (i.e mound related to the 'ting' = judicial assembly) demonstrates that the *ting* was held here. The close connection between judicial and chiefly authority in Germanic society is attested from written sources on the Continent. When also a courtyard site, Dysjane, is located at Hauge, we get a very strong impression of concentration of power. Hauge was perhaps the farm of a petty king who occasionally gathered his men at the courtyard site for either participation in trade or even warfare.

Ships were a basic requirement for these undertakings. Few boats or parts of boats survive from this period. Boat-houses, however, are known. Along the Norwegian coast altogether ca. 250 boat-houses have been recorded (Rolfsen 1974). The largest number (49) are from Jæren. Several have housed large ships. At Stend, Bergen in Western Norway, the boat-house was 32 meters long and 8.5 meters wide (Myhre 1985). The inner walls were made of wood (Fig. 9). Since two rows of posts supported the roof, the boat must have been narrow, probably not unlike the Nydam ship which needed 30 oarsmen. Probably, as many men manned the ship from Stend. Somewhat younger is another Norwegian ship, found at Kvalsund at Sunnmøre. The Kvalsund ship is technologically more advanced than the Nydam ship. This ship could well make the journey to the Rhine area or to England.

### Petty kingdoms and a warrior society

Peaceful trade, however, was hardly the only activity for chieftains and their crew. War seems another characteristic of this period. In most of Europe, the Migration period was a time of unrest and warfare. These migrations are historical facts. In Scandinavia, however, written information is lacking. Therefore, theories about migrations rest upon the archaeological material, place names and analogies with known migrations. Based upon the appearance of cruciform brooches, inhumation graves and analogies with migrations of the Angles, Saxons and Jutes into England in the 5th century, Norwegian archaeologists earlier in this century took it for granted that migrations had taken place also in Norway. Shetelig (1925) interpreted the inhumations in stone cists as a new warrior aristocracy which had invaded the coastal districts of Norway. Jordans' information in his history of the Goths (Svennung 1965) about some of the Scandinavian tribes, and the similarity between these tribal names and names of regions in Denmark and Norway was also brought into the discussion. Among these are the *arochi* or *harudi*. The *harudi* can be traced also in place names in Jutland and in Western Norway, where Hordaland today is the name of a county. Also the name *rugi* can be related to a Norwegian county (see below). While this theory of large scale immigration has been doubted (Myhre & Myhre 1972), the idea of tribal territories has been followed up. Regional variation in the decorative style of the Norwegian relief brooches from the 6th century, led Bjørn Hougen (1936, 1967) to suggest: "it is the face of the tribes we glimpse in the transition from one province to another. There are faces which are frequently just as difficult to recognise as it is to interpret Jordanes, whereas other may show clear features. Among the people he mentions, Rugi is easily recognised in the later Ryger – the inhabitants of Ryfylke, Rogaland – and in Augandzi we have Agder of the present day. And, in the decorative art of the Migration Period in Norway, no face presents a more furrowed profile than these" (Hougen 1967:33f).

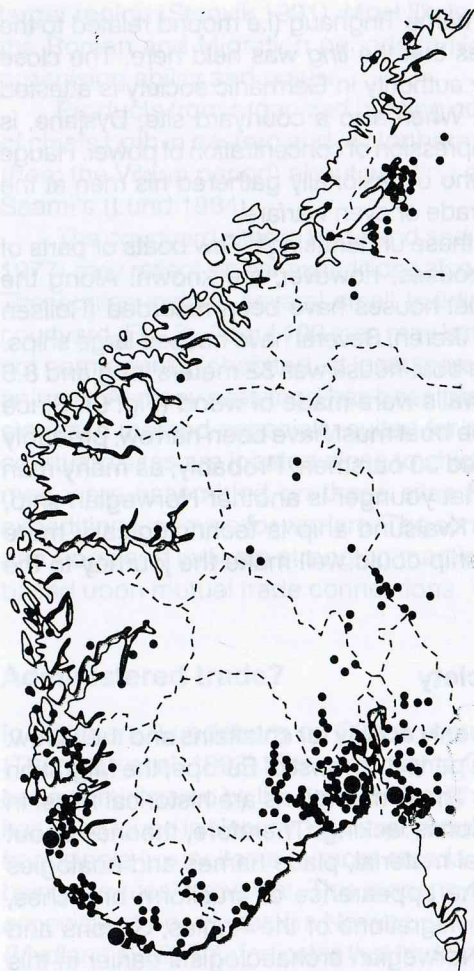


Fig. 10. The distribution of hillforts in southern and central Norwæay. The hillforts are mainly concentrated in eastern, southwestern and central Norway. After Lillenammer 1994

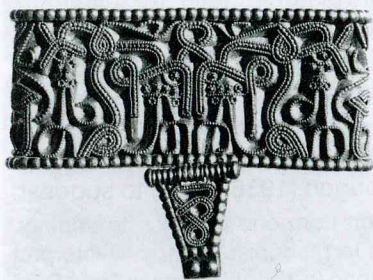


Fig. 11. Scabbard mount of gold from Grindheim, Etne in Hordaland. Photo Bergen Museum

We also know that Norway before the Viking period was separated into several small kingdoms or chiefdoms. Therefore, when the archaeological material in the coastal area differs markedly from the material in the inland in Eastern Norway, this supports the hypothesis that these areas represented different political entities. This is not to not say that the coastland represented one political unit, nor that the people represented different ethnic groups. Most likely, ethnicity in the Migration period was created. Edward James (1989:47) who has studied the origin of kingdoms on the Continent, assumes that an early medieval people like for instance the Franks "is not an ethnic or genetic, let alone racial, entity; it is a grouping brought about by political means". Probably many petty kingdoms existed within what later became Norway, they competed with each other, sometimes formed alliances and at other times fought each other.

Numerous weapon graves and hillforts located on hill tops or promontories indicate that the period was unstable. The hillforts with their stone walls, sometimes with wooden palisades on top, represented a protection against enemy attacks.

Often the hillforts are located in the outskirts of the settlements and close to natural roads. The blocking of the roads to the settled areas seems to have been of prime importance. The hillforts appear in clusters, the majority are situated in the central districts of Southeastern Norway, in Rogaland and the inner part of Trøndelag, i.e. the most densely populated parts of the country (Fig. 10). The political organization in these areas probably

was that of petty kingdoms. The kings combined political and religious leadership. According to Germanic law codes a large part of the fines were payable to the king for violations of the law (Rivers 1986). Maybe, therefore, weights in the grave of some of the men in our group I, signal the judicial authority of petty kings?

Conducting ceremonies in connection with offerings probably was part of their religious role. Some of the Migration period gold deposits represent offerings. The items offered include gold bracteates, various kinds of rings and scabbard mountings for swords. These mountings which are among the most impressive objects from this period, have never been used (Fig. 11). Probably they were manufactured to be offered. In Denmark, Charlotte Fabech (1991) has suggested that from ca. 400 there was a radical change in the choice of sacral sites for offerings. Now religious manifestations took place at the domain of the nobility, perhaps at places or in buildings made especially for that purpose. She regards the finds of gold bracteates and miniature gold foil figures as representing a change in social organization from tribal chieftains to petty kinglets. Probably the development towards centralisation of power was similar in Denmark and Norway.

### The system's collapse

This society, with dense settlements in some parts of the country, its hierarchical social structure and wide-reaching trade networks reached a peak in the 6th century. Then the system collapsed. Numerous farms were deserted, and rich grave finds became very rare. The grave finds became fewer, and the pottery production came to a complete stop. The iron extraction diminished markedly, and the large scale hunting systems in Eastern Norway came into disuse. In Norway, these changes represent a dividing line between what we call the Early and the Late Iron Age.

What caused these changes has been heavily disputed. Some have suggested a change in the direction of trade with the Continent (Åberg 1953). Instead of direct connections between Western Scandinavia and the Rhine region, the trade now took an eastern route establishing trading links between Uppland, Gotland and the Baltic via the Gepids to Italy and Byzantium. This may have reduced the economic basis for the elite along the Norwegian coast. Massive warfare has also been suggested as the cause for the many deserted farms and gold deposits. On the other hand it has been difficult to accept that warfare should affect almost all parts of the country and even affect iron extraction and hunting. Therefore, the Justinian plague, which started in 541 in Egypt and after only a couple of years reached as far as Trier, has been suggested as cause for the marked decline in Norway. This is not unlikely on the background of the well established contacts between the Continent and Western Norway in this period.

However, changes in settlement and farming practices have also been suggested. Analogous to a similar decline in Denmark in the Roman period, it has been suggested that the decline in grave finds indicates that the social elite was well established and no longer needed to 'show off' their wealth.

The various and different theories demonstrate that the transition between the Migration and Merovingian period represents a puzzle in the 1st millennium archaeology of Norway.

## References

- Bakka, E. 1973a. Goldbrakteaten in norwegischen Grabfunden: Datierungsfragen. *Frühmittelalterliche Studien. Jahrbuch des Instituts für Frühmittelalterforschung der Universität Münster*. Walter de Gruyter.
- Bakka, E. 1973b. Omkring problemet om kulturdualisme i Sør-Noreg. In: P. Simonsen & G. Stamsø Munch (Eds.) *Bonde - Veidemann, Bofast - Ikke bofast i nordisk forhistorie. Foredrag og diskusjoner fra XIII Nordiske Arkeologmøte i Tromsø 1970. Tromsø Museums Skrifter* 14.
- Baudou, E. 1989. Hög – gård – helgedom i Mellannorrland under den äldre järnåldern. *Arkeologi i norr* 2. Umeå.
- Bertelsen, R. and Lamb, R.G. 1995. Settlement mounds in the North Atlantic. In: *The Viking Age in Caithness. Orkney and the North Atlantic*. Eds. C.E. Batey, J. Jesch and C.D. Morris. Edinburgh University Press.
- Bjørge, T. et al. 1992. Arkeologiske undersøkelser i Nyset-Steggjevassdragene 1981-87: *Arkeologiske rapporter* 16. Historisk Museum, Universitetet i Bergen.
- Brøgger, A.W. 1921. *Ertog og øre. Den gamle norske vekt*. Videnskabselskabets Skrifter II, No. 3. Kristiania.
- Brøndsted, J. 1960. *Danmarks Oldtid III. Jernalderen*. København.
- Bøe, J. 1921. Norske guldfund fra folkevandringstiden. *Bergens Museums Aarbok* 1920-21. Hist.-Antikv. Række Nr. 2, Bergen.
- Bøe, J. 1931. *Jernalderens keramikk i Norge*. Bergens Museums Skrifter. Nr. 14. Bergen.
- Christensen, A.E. 1986. Reinjeger og kammaker, en forhistorisk yrkeskombinasjon? *Viking* 49.
- Fabech, C. 1991. Samfundsorganisation, religiøse ceremonier og regional variation. In: *Samfundsorganisation og Regional Variation. Norden i Romersk Jernalder og Folkevandringstid*. Eds. C. Fabech & J. Ringtved. Jysk Arkæologisk Selskabs Skrifter XXVII.
- Gustafson, G. 1889. Ebebøfundet og nogle andre nye gravfund fra Gloppen. *Bergens Museums Årbog* 1889.
- Hagen, A. 1953. *Studier i jernalderens gårdssamfunn*. Universitetets Oldsaksamlings Skrifter. Oslo.
- Hagen, A. 1967. *Norges Oldtid*. J.W. Cappelens Forlag. Oslo.
- Hines, J. 1984. *The Scandinavian Character of Anglian England in the pre-Viking Period*, BAR British Series 124.
- Hougen, B. 1967. *The Migration Style in Norway*. Universitetets Oldsaksamling, Oslo. Second edition.
- Ilkjær, J. 1994. Illerup Ådal. Mosefundenes kronologi og proveniens. Et resumé. *Små skrifter* 2. Jysk Arkæologisk Selskab.
- Jacobsen, H. & Larsen, J.H. 1991. *På reise i din egen historie eller Gausdal og Nordre Lands kulturhistorie gjennom 10 000 år*. Skolekontorene i Gausdal og Nordre Land kommuner.
- James, Edward 1989. The origins of barbarian kingdoms: the continental evidence. In: S. Bassett (ed.) *The Origins of Anglo-Saxon Kingdoms*. Leicester University Press.
- Johansen, O.S. & Søbstad, T. 1977. De nordnorske tunanleggene fra jernalderen. *Viking* 1977.
- Lillehammer, A. 1994. Fra jeger til bonde - inntil 800 e.Kr. *Aschehougs Norges historie* bind 1.
- Lund, N. (ed.) 1984. *Two voyagers at the court of king Alfred. The ventures of Ohthere and Wulfstan together with the Description of Northern Europe from the Old English Orosius*. William Sessions Limited, York.
- Løken, T. 1992. En folkevandringstidsgård på Bertnem i Overhalla. *Spor – fortidsnytt fra Midt-Norge* Nr. 2 1992.
- Magnus, B. 1978. *De eldste tider i Gloppen og Breim*. Særtrykk av "Soga om Gloppen og Breim". Sandane.
- Magnus, B. 1983. How was he dressed? New light on the garment from the grave at Ebebø/Eide in Gloppen, Norway. *Studien zur Sachsenforschung* 4. Hildesheim.
- Magnus, B. & Myhre, B. 1986. *Norges historie. Bind 1 Forhistorien. Fra jegergrupper til høvdingssamfunn*. Bokklubben nye bøker.
- Mydland, L. 1990. Vare eller gave? Utvekslingsformer mellom kontinentet og Sørvest- og Vestnorge i romertid. Unpublished MA thesis, University of Bergen.
- Myhre, B. & Myhre, B. 1972. The Concept Immigration in Archaeological Contexts illustrated by Examples from East Norwegian and North Norwegian Early Iron Age. *Norwegian Archaeological Review* 1972, No 1.
- Myhre, B. 1980. *Gårdsanlegget på Ullandhaug I. Gårdshus i jernalder og tidlig middelalder i Sørvest-Norge*. AMS Skrifter vol. 4. Stavanger.
- Myhre, B. 1983. Beregning av folketall på Jæren i yngre romertid og folkevandringstid. In: *Hus, gård och bebyggelse. Foredrag från det XVI nordiska arkeologmötet, Island 1982*. Ed. G. Gudmundur Ólafsson. Reykjavik.
- Myhre, B. 1985. Boathouses as indicators of political organization. *Norwegian Archaeological Review* 1985 No. 2.
- Myhre, B. 1987. Chieftains' graves and chiefdom territories. *Studien zur Sachsenforschung* 6. Hildesheim.
- Nissen Meyer, E. 1934. Reliffspenner i Norden. *Bergens Museums Årbok* 1934. Historisk-antikvarisk rekke Nr. 4.
- Nockert, M. 1991. *The Högom find and other Migration Period textiles and costumes in Scandinavia. Högom Part II*. Archaeology and Environment 9. Umeå.
- Odner, K. 1973. *Økonomiske strukturer på Vestlandet i eldre jernalder*. Historisk Museum, Universitetet i Bergen.
- Olsen, M. 1926. *Ættegård og helligdom*. Institutt for sammenlignende kulturforskning, Oslo.
- Provan, D. 1971. Soil Phosphate Analysis as a Tool in Archaeology. *Norwegian Archaeological Review* Vol. 4 1971.
- Ramqvist P. 1992. *Högom. The excavations 1949-1984*. Archaeology and Environment 13. Neumünster.
- Randers, K. 1995. Troll-prosjektet. Arkeologiske undersøkelser fra jernalder og middelalder. Kollsnes, Øygarden i Hordaland. Med bidrag fra M. Mortensen, M. Kvamme og E. Schølberg. Rapport Bergen Museum, Arkeologisk institutt, Bergen.
- Rivers, T.J. 1986. *Laws of the Salian and Ripuarian Franks. Translated with an Introduction by Theodore John Rivers*. AMS Press. New York.
- Rølsen, P. 1974. *Båtnaust på Jærkysten*. Stavanger Museums Skrifter 8.
- Shetelig, H. 1912. *Vestlandske graver fra jernalderen*. Bergens Museums Skrifter. Ny Række Bd II. No. 1.
- Shetelig, H. 1925. *Norges forhistorie*. H. Aschehoug & Co., Oslo.
- Sjøvold, Th. 1962. *The Iron Age Settlement of Arctic Norway I*. Oslo.
- Slomann, W. 1986 (1956). Folkevandringstiden i Norge. *Universitetets Oldsaksamlings Skrifter Ny rekke* Nr. 6. Oslo.
- Slomann, W. 1986 (1977). Der Übergang zwischen der späten Kaiserzeit und der frühen Völkerwanderungszeit in Norwegen. *Universitetets Oldsaksamlings Skrifter Ny rekke* Nr. 6.
- Solberg, B. 1986. Førhistorisk tid i Sogndal. In: *Sogndal bygdebok. Band I*. Ed. P. Sandal. Sogndal Sogelag.
- Solberg, B. 1995. Gravfunn og sosial struktur i romertid og folkevandringstid i Vest-Norge. *Arkeo. Nytt fra Arkeologisk institutt, Universitetet i Bergen* Nr. 2 1995.
- Solberg, B. in prep. Development of a hierarchical society in Western Norway. Population density, property rights and social structure. In: *Gedenkschrift für Albert Genrich*.
- Stenvik, L. 1991. Iron Production and Economic "Booms" during 2000 Years. In: *Bloomery iron making during 2000 years. Seminar in Budalen 1991. Volume 1*. Ed. A. Espelund. Trondheim.



- Stenvik, L. 1994. Jern og samfunn - verkstedplasser for jernframstilling i Trøndelag. *Spor – fortidsnytt fra Midt-Norge*. 9. årgang 17. hefte.
- Svennung, J. 1965. Jordanes' Scandia-Kapitel. *Fornvännen* 60.
- Thomsen, P.O., Blæsild, B. Hardt, N. Michaelsen, K.K. 1993. *Lundeborg – en handelsplads fra jernalderen*. Skrifter fra Svendborg & Omegns Museum. Bind 32.
- Øye, I. 1986. Sogndal i mellomalderen ca. 1050-1536. In: *Sogndal bygdebok Band I*. Ed. P. Sandal. Sogndal Sogelag.
- Åberg, N. 1953: *Den historiska relationen mellan folkvandringstid och vendeltid*. Stockholm.

## Didžiojo tautų kraustymosi laikotarpio gyvenviečių ir socialinė struktūra Norvegijoje (400-550 m.e. metai)

**BERGLJOT SOLBERG**

### Santrauka

Gyvenviečių, kapinynų bei vietų radiniai pasitarnavo kaip turtinga archeologinė medžiaga iš Didžiojo tautų kraustymosi laikotarpio. Papildomų duomenų suteikė geležies gavybos vietos, medžiojimo sistema, piliakalniai ir pastogės valtimis. Gyvenviečių radiniams priklauso pajūryje bei kalnuose esančios sodybos, pastogės uolose. Jos byloja apie sezoninę žvejybą ir medžioklę. Medžioklės, žvejybos produktai tapdavo vertingomis prekėmis, mainų objektais.

Kapaviečių radinių kokybė bei kiekis labai skiriasi. Tai atspindi hierarchinę socialinę struktūrą. „Turtingų“ radinių sankaupos tikriausiai reikštų ten buvus mažųjų karalysčių ekonominius ir politinius centrus. Tos karalystės buvo nepastovios, o daugybė gynybinių įrengimų ir didelės pastogės valtimis šalia centrų liudija, kad minėtasis periodas buvo labai neramus. Apie 550 m. ši sistema žlugo. Žlugimo priežastys yra karštų diskusijų objektas.

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## Kalniškiai Burial Ground: Investigation, Results, Prospects

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Cemeteries stand out as an important source of information about the prehistoric cultures of the Baltic. They reflect the way of life of the prehistoric community, its customs, beliefs, aspects of the material culture and, potentially, ethnic distinctions. Therefore, each cemetery that is investigated adds to our knowledge, which is far from exhaustive enough to appease our curiosity about the past.

The object of my research over the last 9 years has been the burial ground of Kalniškiai. This paper presents a preliminary review of the burial customs and some aspects of the material culture of the Kalniškiai population.

### Geographical Setting

The burial ground of Kalniškiai, Raseiniai district, Ariogala parish is situated on the second terrace on the *west side* bank of the Dubysa river. It is small hillock, framed by unnamed streams on the north, south and east (Fig. 1). On the western side, the hillock slopes down gradually and disappears completely. The present terrain gives no clue whether the hillock was isolated somehow during prehistoric times. The nearest archeological monument, a hillfort, is situated about 200 meters to the north of the cemetery, on the other side of the stream (Fig. 2).

### Background

The Kalniškiai burial ground has been known to archaeologists since 1935-1937, when a farmstead was built on the southern part of its territory. Human bones, as well as bronze and iron artefacts were uncovered when potato pits were dug. The finds were taken to the Kaunas Cultural Museum of Vytautas the Great (KVDKM, 686:1-8, 730:1-3, 1010, 1104, 1105:1-8) and Kėdainiai Local Museum (KKM, 129:1-16, 150, 151, 162, 163, 165-172, 178, 179, 292, 301). These isolated finds from the Kalniškiai burial ground were presented in archaeological papers written before and during the war (Puzinas 1938:255, pav. 58:4, 59:1, 62:1, 6; Alseikaitė-Gimbutienė 1946: 179, 187), and in post-war period publications (LLM 1958: pav. 278, 448; 1966:85; Kulikauskas, Kulikauskienė, Tautavičius 1961: 540).