### CONTINUITY AND CHANGE IN HOUSE CONSTRUCTION AND THE LAY-OUT OF RURAL SETTLEMENTS DURING THE EARLY MIDDLE AGES IN THE NETHERLANDS

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#### Introduction

It is impossible to elucidate all aspects of the archaeology of medieval rural settlements in the Netherlands within the framework of this article. Because of this reason I have chosen to present here four regional studies, which show the development in research and the differences in aproach in the study of early medieval rural settlements as they are represented in Dutch archaeology today.

I will start off with a brief outline of the main results of Waterbolk's work in the Dutch province of Drenthe (see Fig. 1). After Drenthe we will move to the south, the Veluwe region, and further south to the Kempen region. All of these three regions are situated on the high pleistocene sandy soils and the landscapes show great similarity. We will see, however, that there are significant differences between these regions in the development of settlement structure. Finally we will turn to the completely different landscape of the saltmarshes in the northern coastal region, where much new research has been carried out in recent years.

# Continuous development in house-type and settlement structure in Drenthe

The early medieval pagus Thrienthe, roughly coinciding with the actual borders of the Province of Drenthe, consisted mainly of pleistocene higher sandy soils surrounded by large peatbelts. The Province of Drenthe is one of the most thoroughly investigated regions in the Netherlands. Due to reclamation before the Second World War and village development and reallocation in the sixties and seventies the Biological-Archaeological Institute (BAI; now called Groningen Institute of Archaeology: GIA) executed many large-scale excavations in the area.

Mainly cultural-historical in approach, Waterbolk was a pioneer by taking houseplans as a subject for systematic typochronological analysis. After careful comparison of great numbers of houseplans Waterbolk became convinced of the continuous development in the construction of farmsteads from the Bronze Age until the farmstead typical for Lower Saxony in historical times (Waterbolk 1979; 1982). Settlements in the region were regularly abandoned after some centuries of occupation. The settlement of Wijster for example,

which can be dated in the Late Roman Period, was abandoned in the 5th century, suggesting that the political instability of the Roman Empire also affected the relatively isolated region (Van Es 1967). Waterbolk has been able to prove, however, that a continuous typological development took place from two aisled buildings, consisting of two parts in the Iron Age, towards the three aisled building, consisting of three parts during the Roman Period and the Migration Period (Waterbolk 1992, 68-73; see Fig. 2-4).

The byre can be recognized by the presence of boxes, where the cattle was standing (Waterbolk 1975). Waterbolk supposes that the other rooms functioned as living-quarter (sometimes the indication for the presence of a hearth was found) and as working-quarter. The most important development is that the roofsupporting posts are gradually moving outward, first in the living quarter, later in the whole building.

This development can be followed further with the houses of the types Odoorn B and C, where the outer ones of the double posts stand at the outer side of the wall and the inner post becomes part of the wall. Houses of type Odoorn C with rounded corners occur.

The houses of type Odoorn C<sup>1</sup> and Gasselte A develop the shape of an ellipse with straight ends, a type that occurs in a large part of Northwestern Europe. The Gasselte A-type house does not have the outer posts any more while the wall posts become heavier. The houses become wider and annexes occur (Waterbolk 1992, 69-73).

From the second century A.D. onward the principle of a rectangular, fenced in farmyard is fully developed. A nice example of an apparently very rich farmstead has been excavated at Peeloo (*Kooi et al. 1987*; *Kooi 1995*, 175-179). Three phases are distinguished. During the second phase the main building is a 36 m long and 5 to 6 m wide east-west orientated farmhouse. Forty-eight animals could be placed in the byre. A two-aisled barn measuring 13,5 to 4,5 m was standing in the yard. Next to the house a well was situated. Some smaller fenced in plots could have served as a garden for growing vegetables.

In spite of the fact that the building is very large and should be dated in the Roman Period, the following general lay-out of the yard is typical for the region during the next centuries: E-W orientated main building, outbuildings and a well in the centre, barns, haystacks or granaries and pithouses at the outer limits of the yard (Waterbolk 1992, 83).

Waterbolk (1992, 86) has suggested that the available space for cattle could be considered as an indication for the material welfare and social status of the inhabitants. Although Drenthe gives the impression that society was not very stratified, available space in the byre shows considerable variability (between eight and twenty animals). Because the widths of the boxes remain very constant, the total available space in the byre can be used to calculate the total number of cattle.

It is clear that in tribal societies, where cattle-breeding is the dominant means of living, cattle played a significant role, not only economically but and this is perhaps even more important, also ideologically and sociopolitically. In this respect, differences in the number of cattle and, as such, in the space available in the byre could be meaningful.

Single farmsteads in Drenthe are exceptional, while they are completely absent in the Early Middle Ages. Small unstructured villages at the time exist, like e.g. Peeloo. Odoorn, which was occupied from the 6th until the 9th century, is an example of a large settlement with a closed structure. This settlement is enclosed by north-south and east-west orientated roads. The number of contemporary farmsteads is about ten. When the settlement in Odoorn moved roughly a hundred meters to the north during the 8th century, the old settlement-area was used as an agricultural field, while the structure of the old settlement was maintained.

A settlement of the Odoorn-type has a kind of rectangular block shape, but a 9th century settlement like Gasselte has a different, more linear lay-out. Between nine and eleven farmsteads, situated in two parallel rows, can be distinguished here. The farmyards are initially surrounded by roads, later on by earthworks and ditches (*Waterbolk 1992*, 95-97).

After a general economic decline in the 7th and 8th centuries the region shows a remarkable revival after the Frankish Conquest during the 9th century. Settlements start to move. Instead of just rye, now barley, oats and rye are cultivated in crop rotation, while barns are constructed on or near the agricultural fields. Furthermore the ard is replaced by the plough (Waterbolk 1992, 98-102).

The isolated geographical situation, the relative infertility of the sandy soils and the continuous expansion of the raised bog made that Drenthe belonged to the more periferous regions, considering the main economical and political developments in the Early Middle Ages.

There are only a few indications for a development towards a more stratified society. Apart from the already mentioned settlement of Peeloo of the Roman period, we may think of the grave of the "Princess of Zweeloo" (Van Es - Ypey 1977), which should be dated in the 5th century. A general lack of imported pottery underlines the isolated position of the region. In early historical times the main part of the population consists of farmer owners. Waterbolk thinks that it is because of the region's periferous position that historically

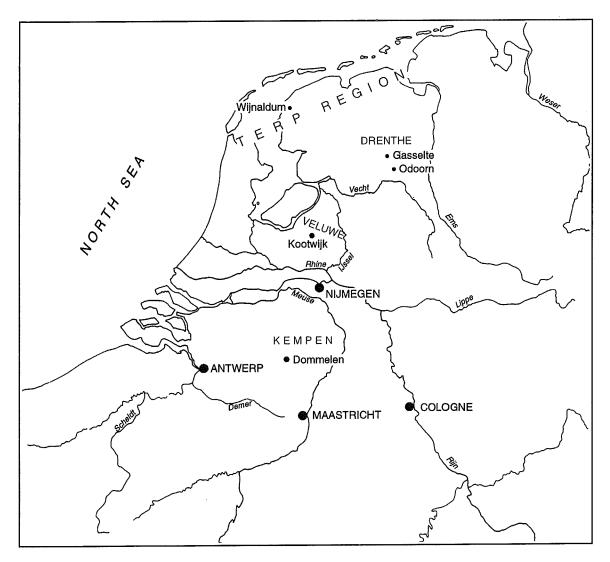


Fig. 1. Some locations mentioned in the text (drawing GIA).

known houseplans, settlement structure, locally and regional territorial borders which have their roots in prehistory, were preserved (Waterbolk 1992, 52).

# Different explanations for changes in the development of settlement structure at Kootwijk

Let us now move to Kootwijk on the Veluwe. Waterbolk's successful approach in Drenthe impressed many Dutch archaeologists and strongly influenced the study of rural settlements. Thus it was not surprising that, when the Institute for Pre- and Protohistoric Archaeology Albert Egges van Giffen of the University of Amsterdam (IPP) started the excavation of a site from the Roman Period and the Early Middle Ages at Kootwijk in 1970, the main aim was to study house typology and settlement structure. During the excavations, that lasted until 1981, changes in the settlement, however, were explained in terms of environmental factors, under influence of New Archaeology (*Heidinga 1987*).

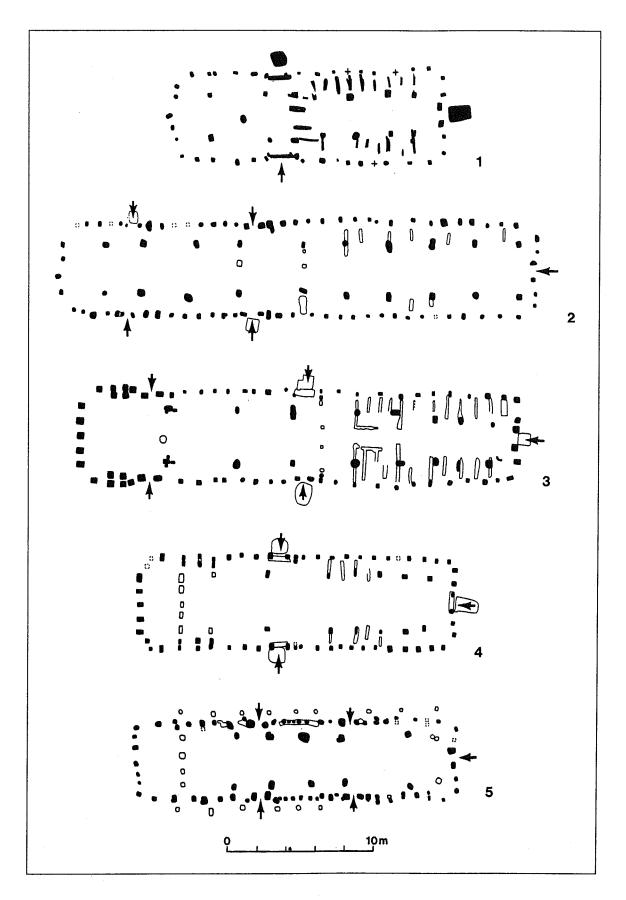


Fig. 2. The types of houses Wijster A (1), Peelo A (2), Wijster B (3), Wijster C (4), Peelo B (5). (After Waterbolk 1992).



Fig. 3. The types of houses Eursinge (6), Odoorn A (7), Odoorn B (8), Odoorn C (9). (After Waterbolk 1992).

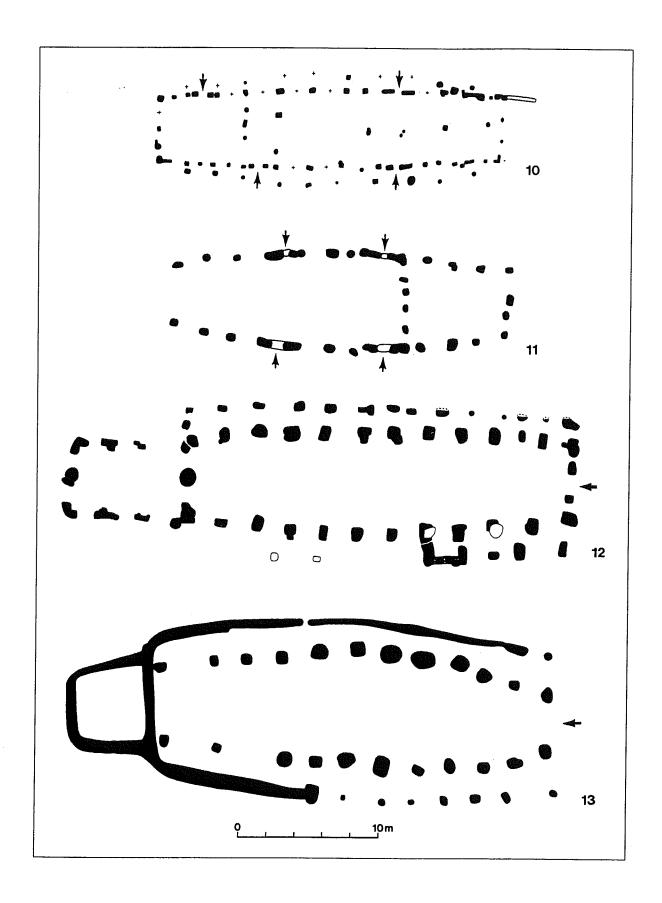


Fig. 4. The types of houses Odoorn C<sup>1</sup>(10), Gasselte A (11), Gasselte B (12) and Gasselte B<sup>1</sup>(13). (After Waterbolk 1992).

At Kootwijk a settlement of the Roman Period was excavated and there might have been continuous occupation, but no traces of human presence between the 3rd and 7th centuries A.D. were found. Evidence elsewhere from the region, however, shows that the Veluwe was continuously occupied. The habitation starts again with a small hamlet in the 6th/7th century A.D. consisting of at least two houses, pithouses, barns and some fenced-in plots (see Fig. 5). The yards were not fixed territories yet as is proved by the fact that the yard of a later phase is overlapping the earlier one. Apparently fences had rather a practical than a legal function. During the second half of the 7th century a second settlement was founded at a distance of more than 200 m from the other settlement.

The E-W orientated, single-aisled farmsteads of the 6th/7th century settlement were quite small, about 15-16 m and rectangular. One could shelter a maximum of six cows in the byre of one house, while the byre of the other house was even smaller. The slightly boat-shaped house of the second settlement was much bigger: more than 25 m long and 6 to 8 m wide. The byre was large enough for about twenty cows. This house is 10 m longer than the other ones. It even was the largest house known at Kootwijk (*Heidinga 1987*, 17-21). Heidinga now suggests that social differences increased during the 7th century and led eventually to the geographical separation of a local elite (*Heidinga 1987*, 44; 1990).

In the 8th century, the period of Frankish rule, the settlement at Kootwijk moved more to the south and was completely restructured. The general lay-out of the settlement shows many similarities with Odoorn with strictly E-W orientated houses in orderly rows at both sides of a small road. Some of the fences seem to have a legal function in this period. The growing number of farmsteads indicate that the population must have increased considerably during the 8th century. The village grew from eight to more than twenty families. There is no indication for any stratification in wealth and status in this carefully planned village. At the edges of the village agricultural fields were excavated, but the organization of the plots did not allow to ascribe plots to certain farms. The village and the field complex formed two adjacent though seperate units. Heidinga sees this as an indication that the inhabitants valued one another's proximity more highly than the accessibility of their own land (Heidinga 1987, 24-45). Probably already from the 7th century onwards rye, oats, barley, flax and horsebeans were cultivated. Pals has suggested, that there was a three-field system of crop-rotation: winter grain (rye)- summer grain (oats)- fallow. Barley and flax are crops that make greater demands on the chemical fertility of the soil than rye and oats, and consequently it would have been necessary to grow them on relatively rich deposits. There are indications that animal manure was applied, at least on some fields (Pals 1987), Cattle was the preferred domestic livestock, followed by pigs, sheep/goats and horses. Although the fallow must have been an important area of pasture, it were the surrounding forests, consisting of beech and oak, in particular that will have offered great possibilities for 'Wald-Vieh-Bauerntum' (Heidinga 1987, 87/88.).

In contrast with a site which had specialized in iron production such as Hoog-Buurlo, the agricultural village of Kootwijk is situated in territory comprising several landscape zones. According to Heidinga this suggests a mutual economic dependence between the two kinds of settlements (Heidinga 1990, 12). Compared with Drenthe the great amount of imported pottery from the 6th/7th century is remarkable: 50 percent imported ware for the older settlement and more than 80 percent for the late 7th century settlement. The large amount of imported pottery is explained by the significance of the region as iron production centre (Heidinga 1987, 199). On the basis of circumstantial evidence and few historical data Heidinga suggests that the village from the 8th century onwards, perhaps occupied by serfs, became part of the landed property of a mobile supra-regional elite, which benefited from the profits of the iron production in the area (Heidinga 1990; 1992). This elite probably left the surroundings of Kootwijk during the eighth century and moved to the southern limit of the Veluwe region, where they were living closer to the Lower Rhine and the important emporium of Dorestad. The restructuring of the settlement at Kootwijk coincides with the integration of the region into the Frankish Empire. Kootwijk was occupied until the 10th century when it, due to a dry climatic period, was threatened by enormous sanddrifts and had to be abandoned (Heidinga 1987, 102-145).

# Societal changes and their impact on settlement structure in the Kempen region

As we have seen, research interest in the Veluwe region moved from a processual approach in the direction of a more historical and social scientific approach. The same applies to the Kempen region, a region comparable with the Veluwe in the sense that it mainly consists of high pleistocene sandy soils. While the Veluwe forms one uniform landscape, surrounded by natural borders consisting of relatively high end-moraines, the Kempen region is a conglomerate of small sandy islands intersected by small streams. The Kempen are in the Early Middle Ages more suitable for cattle breeding than agriculture, compared with the Veluwe. Here archaeologists such as Frans Theuws and Nico Roymans are working. They are also in charge of the research project "Power and Elite" of the IPP. Their approach is generally indicated as a historical - anthropological one and their main aim is to study state formation, integration processes and their effect on the development of local communities. In his thesis *Theuws* (1988) describes how the colonists of the Kempen in the 7th/8th century form a part of the active policy of the Frankish elite to expand their sphere of influence in a northern direction. As an example of their approach we have chosen the excavation at Dommelen.

The excavated area at Dommelen is situated on a coversand plateau surrounded by wet brookland. The settlements in the Early Middle Ages are lying on the higher, more fertile parts of these coversand plateaus. In the Early Middle Ages these were covered by woodlands of mixed beech/oak or oak/birch forest alternated by open stretches. The settlements moved to the border zones in the 11th/12th century (*Theuws 1991*, 355-357).

The settlement was founded in the second half of the seventh century as a single 12,5 m long and 5,5 m wide farmstead. Theuws has the opinion, that the inhabitant and his family who were buried in chamber graves in the neighbourhood of the farmhouse with relatively rich gravegoods, belonged to a regional elite. This founding 'familias' buried his dead next door, probably to stress his ancestral rights here. This meant a break with former burial customs, where all members of the community were buried in a common graveyard. Apparently the traditional burial communities were falling apart (*Theuws 1994*, 196).

The three farmsteads having their own graveyard with poorly equipped coffin graves, which appeared around 700 meters north of the first mentioned farm, can be regarded then as the dependent farms. The size of these houses does not differ very much from the first mentioned farmhouse; outbuildings are scarce, while pithouses (this goes for the whole Kempen region during the Early Middle Ages), granaries and haystacks are completely absent. No fences were found. Storage and stabling capacity must have been very restricted. The two-aisled farmhouses have a floor area of about 60 m² and the one-aisled buildings which probably served as sheds or byres had a floor area of only 25 to 40 m². The development of housetype is completely different, compared with Kootwijk or Drenthe. Lightly built one- or two-aisled farmsteads from the Merovingian Period are replaced during the Carolingian Period by heavier constructed three-aisled buildings. The length varies between 10 and 15 m and the width between 7,5 and 9 m. There are no indications for the presence of yards, because fences or ditches are completely absent. During the 8th and 9th century the number of farmsteads remains fairly constant, although internal movement within the settlement occurs. Not until the 10th century the settlement is reduced to one or two farmhouses (*Theuws 1988*; 1991).

Theuws thinks that the changing burial customs, together with the foundation of local centres are part of a process towards a manorially organised system of agricultural production and that the newly founded settlements like Dommelen form centres of small 'villae' or secondary centres in larger 'villae' (*Theuws 1991*, 369, 392; 1994, 196). This should be regarded in a wider transition, which takes place in Northern Gaul at this time, from an instable society, where power is mainly based on mobile wealth, warfare and a martial ideology, to a society with more stable, detribalized relations and landed property. Theuws suggests, that during this transition landed property was at first still used in the same way as mobile wealth, in the sense of establishing social relations and political alliances (*Theuws 1994*, 198-199).

## Migrations and their impact on settlement structure in the coastal region of the northern Netherlands

The Netherlands are roughly divided in higher pleistocene sandy soils in the eastern and southern part, and low holocene marine sediments in the western and northern part of the country. The country is intersected by the large rivers Rhine and Meuse, that divide it in a northern and a southern part. Both geomorphological characteristics play an important role throughout our history and as such in archaeological research.

We will move now to the coastal region of the northern Netherlands. Here on the saltmarsh the settlements are situated on those characteristic dwelling mounds called 'terpen' or 'wierden'.

Ideas about house construction and settlement structure on the saltmarsh have been strongly influenced by the excavation of the predecessor of Waterbolk, A. E. van Giffen, in the terp at Ezinge (Van Giffen 1936). This large-scale and systematic excavation in the beginning 1930's was very modern in its approach. Due to splendid preservation circumstances an Early Iron Age village with very well preserved wooden structures

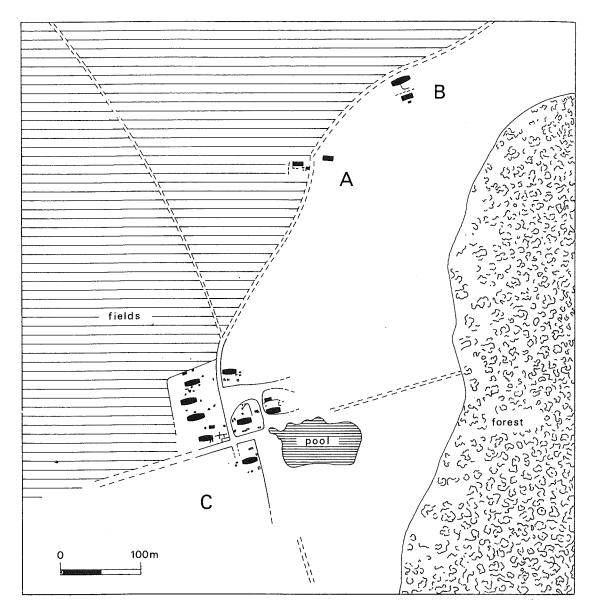


Fig. 5. Early-medieval settlements in Kootwijk. Not all settlements are contemporary. A and B probably coexisted in the second half of the 7th century. C came into being the first half of the 8th century (after Heidinga 1987 and 1990).

could be excavated. Typical for the site was the three-aisled farmstead such as as the one we have seen in Drenthe in the Roman Period. In the subsequent construction phases the three aisled farmhouse remained the most characteristic feature of the settlement. A second remarkable feature concerning the settlement lay-out was the long lasting radial structure of the village, which shows great similarity with the radial structure of the present village.

In the late 1930's Van Giffen also excavated three-aisled farmhouses and sheds on the terp of Leens. The only difference here is that this terp was inhabited during the Late Merovingian/Early Carolingian Period and that the walls of the houses were made of sods (Van Giffen 1940). As the same type of farmhouses was found in many other excavations of terps in the Netherlands (e.g. Van Es 1973; Boersma 1988; De Langen 1992, 173-186) and in neighbouring Northern Germany (Bantelmann 1975; Haarnagel 1979), it was generally believed to be the typical housetype for the coastal region from the Iron Age onwards. The closed village structure of the long-lasting radial settlement, completely dominated by the three-aisled farmhouse made archaeologists to regard society in the coastal region of the northern Netherlands as mainly agricultural. And although experiments showed that growing crops on the saltmarsh was possible (Van Zeist et al. 1976), cattle breeding was considered to be the main economical basis of society.

When we take the historical sources into consideration, however, the coastal region must have played an important role in the development of the Frisian Empire in the Early Middle Ages, but as such it never received the attention of the archaeologists as e.g. the rise of the Anglo-Saxon kingdoms in Great Britain. This is even more remarkable, because the terp-region is one of the richest 'Fundgruben' of the Early Middle Ages in the Netherlands.

In 1991 the Biological-Archaeological Institute (BAI) and the Institute for Pre- and Protohistoric Archaeology (IPP) started a large-scale excavation on the terp Tjitsma near the village of Wijnaldum in the Province of Friesland. In the Wijnaldum-project archaeologists from different research traditions are working together and we may say that the project is eclectical in approach.

The footplate of a disc-on-bow fibula made of gold and red garnet was found on the terp Tjitsma in the 1950s. A great number of additional metal finds from this terp during the last decade made us believe that this could have been one of the political centres, which played a role in the development of the Frisian Kingdom. During the analysis of the findmaterial we touched upon one of the most hotly debated issues of archaeology in the terp-region namely the question: has there been an Adventum Saxonum in Frisia or not? The possibility of an invasion of Anglo-Saxons was first put forward by in those days conservator of the Frisian Museum Boeles in 1906. It was the presence of Anglo-Saxon pottery and cruciform brooches, which brought him to this conviction. Boeles has repeated his opinion on many occasions (e.g. Boeles 1927; 1951). The historian Gosses opposed in 1929 that this appearance of Anglo-Saxon material culture could very well be explained by acculturation. Since this subject is very sensitive in the Province of Friesland, because of nationalistic sentiments, discussions among Dutch archaeologists, philologists and historians were sometimes rather emotional (e.g. Sipma 1953). However, since the 1950s there was a general consensus among archaeologists that no important immigration took place in Frisia during the Migration Period.

On the terp Tjitsma, nevertheless, we found clear evidence of the contrary. The settlement was founded during the second half of the second century with the construction of a number of platforms. On the highest main platforms lineaments of postholes indicated that buildings were standing here with a wooden roofsupporting framework, but no clear houseplan could be distinguished. The building was re-erected at least once. It is hard to say whether the building had an agricultural function or not. But on the adjacent platform traces of bronzecasting were found.

The introduction of "Chaucian" pottery of the Eddelak-type during the last quarter of the third century shows the growing influence from the Eastern North Sea-area. An almost complete bronzecaster's workshop in situ, dating from the first half of the fourth century A.D., could be excavated.

About 350 A.D. the occupation stops and it was not until the second half of the fifth century that new people settled down with a completely different kind of material culture. Careful stratigraphical analysis shows that stonegrid-tempered Anglo-Saxon wares are directly overlying the grass-tempered wares, typically for the Middle-Roman Period in the region. At the same time we may observe an important change in the general lay-out of the settlement. Structures with a wooden framework and a NE-SW orientation disappear and are replaced by sod-built constructions with a N-S orientation (even with a tendency to NW-SE) and pithouses with an E-W orientation, in which hardly any postholes could be discerned (Gerrets et al. in prep.).

Once we became aware of this, we studied the drawings of an other unpublished terp-excavation at Tritsum (Waterbolk 1961) and here we could observe the same shift in settlement structure. A NE-SW orientated platform on which a building with wooden roofsupporting framework was constructed, is replaced by pithouses with an E-W orientation, while ditches now show now a clear N-S orientation. Probably due to poor preservation circumstances no houseplans were discovered.

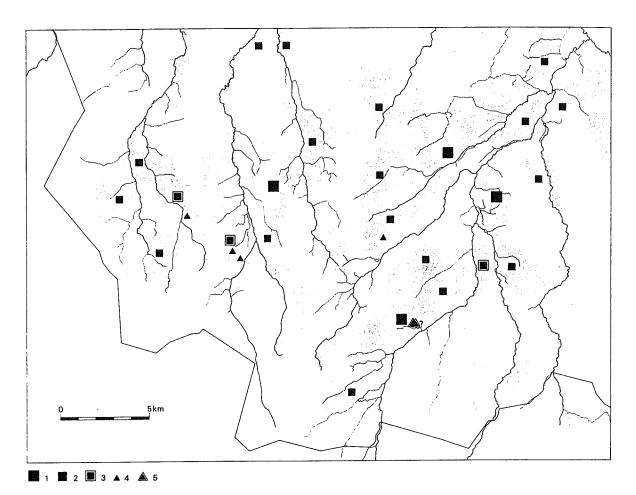


Fig. 6. The distribution of Carolingian settlements in the Kempen region. 1. supralocal centre; 2. local centres of the Dommelen type; 3. idem, excavated; 4. small colonisation settlements of the Geldrop-'Hagelven' type; 5. idem, excavated (after Theuws 1994).

Also when we look at Ezinge (De Langen - Waterbolk 1989; Waterbolk 1991) we can observe a structural change in settlement structure during the Migration Period. In the Migration Period a great number of E-W orientated pithouses appear, while the former radial structure of the settlement from the Middle-Roman Period is abandoned. Both at Tritsum and Ezinge the conservation of the Migration Period-levels were poor and we may assume, that people did not live in the pithouses, but also that on these terpen houses constructed with sods were standing. The experience on the terp Tjitsma told us that sodstructures under poor preservation circumstances are often hard to discern.

A regional study of handmade pottery from the Roman Period by Ernst Taayke (Taayke 1996) has provided us with important demographic information on the region. Pottery shows a continuous development, typical for the region, from the Iron Age onwards. This changes with the earlier mentioned introduction of "Chaucian" Eddelaker-type pottery somewhere during the last quarter of the third century. At the same time a quick decline in the number of settlements takes place. Tjitsma is, together with some terps in Oostergo (the eastern part of the Province of Friesland), one of the few terps that are still occupied during the first half of the fourth century. Previously it was thought that the terp-region was (partially) abandoned because of the Dunquerque II transgression phase and some terp excavations indeed yielded evidence for inundation by the sea (eg. Paddepoel: Van Es 1968). We now assume, however, that the occupation on the higher saltmarsh ridges like the one at Tjitsma continued until the beginning of the 4th century, when also the last settlements were abandoned.

During the first half of the fifth century A.D., when new immigrants arrived at Tjitsma, a new material culture is introduced, showing great similarities with the eastern North Sea region and Great Britain. We may assume that the immigrants were not unfamiliar with the Frisian coast. Already in Roman historical sources attacks on northern Gaul and eastern Britain of Chaucs, Frisians, Saxons, Franks, Herulii and Aviones are mentioned, showing that these tribes from the North were seafaring nations, which were raiding coasts far to the South.

There are indications that, already during the Late Roman Iron Age and the Migration Period, growing stratification is developing within societies in the Germanic hinterland, as reflected at sites like e.g. Himlinghøje, Gudme/Lundeborg and Dankirke in Denmark (Fabech - Ringtved 1991; Hedeager 1992; Nielsen et al. 1994) and Feddersen Wierde in Northern Germany (Haarnagel 1979). We may assume that the immigrants did not only bring a new material culture but also a new perception of the worldorder in which gold played an important role.

The relationship with the old motherland as well as the new colonies in England are maintained during the next centuries as is shown by close similarities of e.g. precious jewellery (*Mazzo Karras 1985*), fibulae, certain kinds of pottery and philological evidence such as the close relationship between Old Frisian and Old English.

The Westergo region especially will have played an important role in the development of more centralized political structures in the coastal region of the Netherlands. Here the saltmarsh had rapidly expanded in northern direction during the Roman Period. A vast area with fertile pasture land, a rapidly growing population density and a favourable geographical location of the region meant that the societal format was present for political centralization. Numerous hoards and stray finds of gold and silver (*Knol 1993*), which should be dated in the 6th/7th century, are evidence for the growing power of a regional elite. It shows that the important role gold plays in the epic poem Beowulf is not simply a product of the imagination of the author, but reflects the reality of 6th/7th century Westergo. Up to 80 percent of the total amount of pottery consists of imported pottery in this period, which is quite much when we take into consideration that Westergo did not form part of the Frankish Empire and when we remember that in Drenthe imported pottery was completely lacking in this period.

We did not find any ships or harbour installations, but we found some rivets. Also without rivets it will be clear that the dynamics of this mainly agricultural society cannot be understood without the relation of the region with the sea.

Recently the Groningen Institute of Archaeology (GIA), the Institute for Pre- and Protohistoric Archaeology (IPP) and the State Service for Archaeological Investigations (ROB) decided to start a project called "Between Scheldt and Weser. Frisia in North-West European Perspective" to join together research efforts in the Dutch coastal area and the central riverine area during the first millennium. The rise of the Frisian kingdom can not be understood on the level of the region alone. Elite and commoners functioned in international networks as is shown by the material culture found in our archaeological excavations. Therefore is it necessary that we seek international cooperation in our research. The first contacts with archaeologists from other North Sea countries are already made.

#### Conclusions

It will be clear that, in rural societies situated on actual Dutch territory, important changes took place during the Early Middle Ages, which also have their impact on house construction and settlement lay-out. The impact of these changes differ from region to region. For example, the Pagus Trienthe hardly seems to be affected by developments towards an early state, which takes place in the Frankish South as well as in the Frisian North. According to Waterbolk's study, Drenthe mirrors the traditional picture of closed peasant communities, inwardly orientated, submitted to the eternal cycle of agriculture. Technological innovations, such as the introduction of the ard, take place, but this does not seem to trigger off developments towards a more political centralization except for some isolated observations, like the "Chieftain's farmstead at Peeloo", the grave of the "Princess of Zweeloo" and the Beilen goldhoard. Even on such a geographically important location as the place of the actual city of Groningen, where the saltmarsh was immediately connected with the pleistocene hinterland, no indications for centralized power are found before the middle of the 11th century.

A somewhat different development can be observed just north of the border zone of the Frankish Empire. At Kootwijk a continuous development in house construction from rectangular houses towards boatshaped houses takes place, but the settlement structure undergoes some important changes. First a local elite seems to split away from a small agricultural community. At the same time a site in the close vicinity of

Kootwijk at Hoog Buurlo-Braamberg is situated in an area with marginal agricultural possibilities and with 90 percent of imported pottery, which can be related to the large-scale iron-production in the area. In the 8th century the hamlet at Kootwijk is restructured again into a larger, well-organized village of the Odoorn-type and the local elite has probably separated itself physically even more clearly by moving further away from the local community to the political heartland of the region in the central riverine area with the important pre-urban centres of Utrecht and Dorestad.

In the former peripheral zone of the Frankish empire at Dommelen we also see a growing influence of the elite in the region, which physically separates itself in the 7th century from the local farming community. At an other site in the region, Geldrop where excavations are still continuing, a more or less similar development can be observed, but slightly earlier (*Theuws, pers. comm.*). The Franks took over the remains of the cultural heritage of the Roman Empire, and changes in burial customs and in settlement lay-out can be explained here by the attempts of the Frankish elite to re-establish landed property in larger estates, within a manorial system.

The coastal area of the northern Netherlands has its own dynamics. Here settlements are abandoned from the second half 3rd/beginning 4th century onward until the first half of the fifth century A.D. The arrival of immigrants from the eastern North Sea region causes a restructuring of the settlement lay-out together with the introduction of new techniques in house-construction. Although cattle breeding was the main activity, save marginal agriculture, the numerous hoards and single goldfinds from the region are evidence for the development of more centralized structures. Crafts-production seems to have played an important role in this development as there are indications for e.g. bronzecasting on numerous terps in the region, Wijnaldum-Tjitsma seems to have been one of these crafts-production centres, which were closely related to the elite, but in contrast with pre-urban centres like Ribe, Birka, Haithabu or Dorestad, it only produced on a small scale. While jewellery from the region shows that this elite took example intellectually by the Anglo-Scandinavian world, the numerous imports from the Middle Rhine area show that ties with the Frankish Empire in the south were maintained. The source of power of the aristocracy, which develops in the Westergo region was in the first place the rich potential of the extensive saltmarsh as pasture land and there are indications that landed property already existed before the Frankish Conquest (Noomen, pers. comm.). But it cannot fully be understood without its geographical location between Scandinavia and England and thus without its close connection to the sea.

In the Netherlands, focus on the research of rural settlements shifted during the last decade from the settlement in its natural environment to the wider societal context in which they functioned. Much progress has been made, but many questions still remain to be answered. How should we deal with traditional concepts as hamlet or village in the northern coastal region where settlements are so closely spaced? We talk about elite but which strata can be discerned within the elite and what is the social distance between these strata? We can observe in our archaeological record that an elite is separating itself from the rural community physically. How is this accepted by the others? During the last decade, remains of craft-production are discovered in many places and this suggests that craft production was much more common, than was formerly believed.

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