Le Néolithique du nord de la France dans son contexte européen

Habitat et économie aux 4e et 3e millénaires avant notre ère

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SCHIPLUIDEN AND THE FINAL STAGE OF NEOLITHISATION IN THE LOWER RHINE BASIN

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THE NORTHWEST EXTENSION OF EARLY FARMING

The northern fringe of the loess zone has – as far as neolithisation is concerned - generally been described as a long lasting static frontier between the fully Neolithic farmers to the south of it and the Mesolithic hunter-gatherers in the vast plain to the north, also by the present author (Louwe Kooijmans 2007, et al. 2005). The LBK expansion apparently did not extend beyond their favoured soil type and the more boreal climate may have made this zone equally less attractive. The specific LBK farming practice may moreover not have been very attractive for the hunter-gatherers, while the extensive wetlands and wide brook valleys offered excellent conditions for their traditional way of life.

This view seems, however, too simple and open for a more differentiated approach. Firstly, still farther east LBK expanded into the Oder mouth area as far north as the Baltic, but more important for the intensity of interaction is the fact that the frontier was not continuous at all in geographical and temporal respect. We factually have to do with an expansion beyond and through corridors in the German Mittelgebirge. This resulted in successful Siedlungskammern in the Göttinger Basin and in the Rhineland, where the colonisation was permanent and where LBK was succeeded by Großgartach or Stichbandkeramik, Rössen and Michelsberg. In between the pattern of loess as well as the early farming settlements is scattered and restricted to a relatively narrow zone, implying an equally patchy interaction with consequently a more restricted impact.

To the west the situation is more dramatic. The LBK expansion was restricted to Dutch southern Limburg and the Belgian Hesbaye, with two late and modest outliers: the Wange-Overhespenmicoregion close by, and far to the west the Blicquy micoregion in Hainaut. These two northwesternmost LBK spearheads continued into the Blicquy stage but then came to an end pretty soon, say between 4900 and 4800 cal BC, to be reverted into Mesolithic territory again. So it is assumed that the Mesolithic lasted for at least five more centuries all over the Belgian loess zone to the north of the Ardennes, be it only documented by a thin spread of microliths (Vanmontfort 2007, 2008).

A renewed and more successful neolithisation took place at the end of the fifth millennium, by the Spiere group in the west and the Michelsberg culture in the east (Vanmontfort 2004). Only by then was the Belgian loess zone for the first time fully occupied by Neolithic communities and we believe that the Mesolithic substratum played a major role in this development, either adopting the new way of life, or being absorbed in the new communities. This development is in sharp contrast to the rapid expansion of the late Bandkeramik communities to the south of the Ardennes, along the river valleys of the Paris Basin almost up to the Channel coast and the definite establishment of a farming society all over northern France almost a millennium earlier.

The neolithisation of the Lower Rhine Basin should be viewed not only in widely different natural conditions, but also in this perspective of shifting culture patterns (fig. 1).

RESEARCH CONDITIONS

Our archaeological view on the northern communities contrasts to that on those of the loess zone as a result of vast differences in taphonomy. Settlements sites with soil traces and pits fills fail almost completely on the poor sandy substrate. Organics have not been preserved, only flint scatters remain there, often multi-period palimpsests, with now and then some pottery (Verhart 2000). By consequence neolithisation in the sand regions is mainly documented by the spread of characteristic Neolithic artefact types. These are in the fifth millennium the well-known LBK adzes and the various types of heavy perforated Rössen Keile, demonstrating the intensity of southern contacts of the northern communities (Verhart in prep.).
surprising that these highly valued and prestigious tools could be obtained by indigenous people in the north and one may wonder what would have been the counter value offered, and which the specific character of the contacts will have been. This interesting topic is however beyond the theme of this paper. Southern ‘import’ connections predominate all throughout the Neolithic (cf. Louwe Kooijmans et al. 2005).

The main evidence is derived from the sites located in the sedimentary wetlands of the combined delta of Rhine, Meuse and Scheldt, with their richness in zoological and botanical remains, artefactual and ecological, their dating opportunities and their preserved patterns below later sediments (fig. 2). The main research problem is, however, representativity: to what extent may we observe a typical wetland-bound way of life, contrasting to that on the ‘uplands’, which escapes our observation? For economic aspects this is certainly a factor to be seriously considered, but material aspects may not have been ecology related that much.

Large scale wetland excavations of the last twenty years, documenting Late Mesolithic and Early Neolithic settlement sites (fig. 3, tab. I), are the basis to distinguish a very gradual process of successively adopting Neolithic elements by the indigenous communities and as such gradually changing their lives from what we consider ‘Mesorlihic’ to ‘Neolithic’. Three main stages can be made out.
The second stage may be labelled «economic and ideological ». The economic aspect comprises the introduction of domestic animals and cereals, with as earliest document the presence of all four animal domesticates at De Bruin phase 3 : cattle, pig, goat and sheep. The phase is dated between 4800 and 4450 cal BC (2 sigma range) ; there are some arguments to date these bones rather late in this period. Domesticates are absent in the earlier phases and at other sites dating from the first half of the fifth millennium, implying the introduction in the delta environment around 4500. This is an intriguing fact, since it means an introduction well before the Michelberg culture / Spiere group and their expansion all over the Belgian loess zone. Consequently the source must be looked for not in south-western but in south-eastern direction, which fits well with the contact lines as documented in the southern Netherlands. The introduction of the Mesolithic/Neolithic interface at De Bruin phase 3 then combined with a few years later characteristic Blicquy and Grofigracht pottery became mixed up with more deeply developed Swifterbant ware at Hardinxveld-De Bruin, phase 2.

We may label this first stage «material neolithisation», comprising the relatively easy adoption of technical novelties in the own cultural complex: heavy wood working tools in a form of direct acquisition in the male domain, pottery technology most probably more on the basis of indirect knowledge transfer in the female domain (Louwe Kooijmans 2001a).

PHASE 2 : ECONOMIC AND IDEOLOGICAL NEOLITHISATION

Economic

The second stage reflecting changed attitudes is the burial of deceased members of society in cemeteries. Incidental burials have been attested for the Late Mesolithic phases of both Hardinxveld sites, but in the middle phase of the Swifterbant culture small cemeteries seem to have become general practice, with as earliest document the presence of all four animal domesticates at De Bruin phase 3 : cattle, pig, goat and sheep. The phase is dated between 4800 and 4450 cal BC (2 sigma range) ; there are even a few options for intentional deposition of flint in the Mesolithic and there is a single Boreal 13C date of an antler bog find. We should moreover realize that the use of pots would make a deposition practice more visible. So there may be Mesolithic roots, but in that case there is at any rate a distinct intensification in the fifth millennium. The second aspect reflecting changed attitudes is the burial of deceased members of society in cemeteries. 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wetland Swifterbant sites do not differ essentially from the earlier Mesolithic sites in extension and (lack of) internal patterning. They are still not more than simple single or multiple hut sites. A major change is for the first time demonstrated around 3600 cal BC in the coastal settlements of the Hazendonk group. This cultural unit, distinguished on the basis of its original pottery style, has a restricted extent in the western and southern Netherlands (Amkreutz & Verhart 2006; Louwe Kooijmans & Jonger 2006, p. 494). It may be considered as the southern facies of the final stage of the Swifterbant culture, developed under the influence of intensive contacts with the farmers of the final stages of the Michelsberg culture and the Spierie group, as shown by ‘imported’ flint tools on mined flint in Michelsberg style. It is especially a cluster of sites in the Midden Delfland district to the south of The Hague, which offers new information. At Wateringen and Ypenburg two-aisled, rectangular houses have been documented, measuring c. 4 to 9 m, indicative of a more permanent settlement layout. But most informative is the Schipluiden site, demonstrating long-term occupation over many generations and collective efforts of a small village community. The site will be discussed in some detail in the next paragraph. A remarkable aspect of this stage of neolithisation are the different trajectories chosen by local communities, even in a restricted microregion as that of Midden Delfland, which will subsequently be specified.

SCHIPLUIDEN, C. 3500 C. BC

INTRODUCTION

The site of Schipluiden was discovered in 2001 during an archaeological prospection in advance of the construction of an extensive water purification plant and fully excavated in 2003, with the exception of the northern end, which was disturbed by a motorway (fig. 4). It was situated in the coastal district near The Hague at 3-4 m below sea level and preserved in the subsoil below several metres of later Holocene sediments, deposited as a result of the later sea level rise. The site and the synchronous deposits were dated by means of a series of stratigraphically controlled 14C dates to c. 3600-3400 cal BC.

ENVIRONMENT

A good understanding of the natural conditions is a prerequisite before presenting the site and its inhabitants. It was possible to develop a detailed view on the environment and its dynamics during the occupation, and on the subsistence of the inhabitants, thanks to the exceptional wetland conservation conditions.

The sedimentary landscape developments have been unravelled by a detailed and intensive hand augering programme. The subsoil of the site consisted of beach deposits, representing the initial stage of coastal aggradation and the seaward extension of a increasingly wider coastal plain. Low dunes have been blown up in this plain when it became closed of the sea by a coastal barrier belt, and it is on one of these dunes, not more than 1.5 m above the surroundings, that people founded their settlement. From this coastal landscape people had access to the extensive peat marshes of the intracoastal plain to the east of it and to the estuary of the river Meuse to the south.

Diatom analysis shows us a change from estuarine to fresh sedimentary conditions, be it with regular salt incursions. Pollen analysis shows the initial stage of coastal aggradation and the seaward extension of a increasingly wider coastal plain. Low dunes have been blown up in this plain when it became closed of the sea by a coastal barrier belt, and it is on one of these dunes, not more than 1.5 m above the surroundings, that people founded their settlement. This coastal landscape people had access to the extensive peat marshes of the intracoastal plain to the east of it and to the estuary of the river Meuse to the south.

Diatom analysis shows us a change from estuarine to fresh sedimentary conditions, be it with regular salt incursions. Pollen analysis shows the shift from a salt marsh vegetation towards an open fresh water environment with rich natural grazing and only incidental shrubs, for which the low dunes are the most likely locations. The analysis of wood and botanical macroremains not only confirms this picture, but also gives us detail on species level. Most shrubs present in the inland zone of the present day dune vegetation are documented, with juniper

Fig. 4 - Schipluiden, overview of the excavation. Note the steel cofferdam in the rear and the pumping system in the foreground, necessary in view of the excavation level at 4-3 m below sea level and the groundwater table.

Fig. 5 - Schipluiden, site plan.
as an exceptional element, not anymore present nowadays. The landscape and its geography will have offered perfect conditions for the wide range of subsistence activities, as practised by the inhabitants, and - in contrast to our modern view - will have been considered as an ideal configuration.

SETTLEMENT AND ORGANISATION

The settlement occupied the full extent of the low dune, oval in layout and c. 5 500 m² in extent. The excavated area was densely filled in with features (fig. 5). Firstly, 4 120 postholes, predominantly measuring 5-15 cm in diameter, reflecting an intensive use. No house plans could however be identified, like at nearby Wateringen and Ypenburg. Four to five clusters could be made out in the distribution of the major postholes, interpreted as the reflection of yards where relatively modest structures had been considered as an ideal configuration.

Two groups of features show us that the households really formed a community and coordinated their efforts from the beginning. The first group comprises 148 short-lived pits, which must have been quickly filled up with blown in and washed in sand. They date from all phases and have been interpreted as temporary water wells, tapping the fresh water from the sand body of the dune in the case of incidental saltwater incursions. The remains of small saltwater fish (herring, smelt, stickleback) and the diatoms in their fills support this interpretation. These wells are for the greater part clustered at the north side of the settlement, just outside the dune elevation, as such to be considered as a collective special activity area. The other group are long stretches of wooden fences along the dune’s edges, which originally surrounded the entire settlement (fig. 7). The fences have been repaired and replaced two or three times, and were shifted slightly up slope at these occasions, as a reaction on the gradual rise of the water level. It is clear that the construction and maintenance of these fences were a collective activity of all 4-5 households.

SUBSISTENCE

Large quantities of bones of mammals, birds and fish reflect the combination of animal husbandry (cattle and pigs only, no ovicaprids) and the exploitation of the natural resources of all ecozones mentioned above. \(^{13}C\) and \(^{15}N\) data (fig. 8) tell us that the aquatic resources were of equal importance as the terrestrial animals and warn us once more not to interpret the faunal spectra in a simple one to one way into economic importance (SMITS & VAN DER PLICHT 2009). Part of the signal may however be the result of grazing of pure terrestrial mammals on salt grazing, but the values of red deer and elk are pure terrestrial, indicating that we may neglect this counter argument. So, the relative scarce fish bones represent a major food resource.

Fig. 6 - Schipluiden, spatial analysis. 7 x 7m moving averages of bone weight, calculated on the basis of 1 x 1 m collection units; added are the yards A-E, distinguished on the basis of a local density analysis of all postholes with diameters > 20 cm and deeper than 20 cm.

Fig. 7 - Schipluiden, sectioned postholes of fence and possible reconstruction, suggested by a traditional Norwegian fence in the Norsk Folkemuseum, Oslo 1978.

Fig. 8 - Stable isotope ratios \(^{15}N\) and \(^{13}C\) for human bones from Hardinxveld, Swifterbant and Schipluiden. The dashed line at the \(^{13}C\) value 21 is generally considered to separate the more marine (to the right) from fresh water conditions. The line at the \(^{15}N\) value 13 separates terrestrial (below) and aquatic diets. The aquatic contribution at all sites is apparent. Coastal Schipluiden scores more marine than the inland sites. After SMITS & VAN DER PLICHT 2009.
It is remarkable that there are only few indications for the exploitation of the coastal zone itself, the beaches. The focus seems to have been mainly on the former beach plain itself and the estuary. There has been much debate on the cultivation of cereals. The widespread occurrence of charred chaff and cereal grains all over the site, especially of naked barley, is a first, but not decisive argument. Charred remains of salt marsh plants may in addition be considered as weeds brought in from the fields. Decisive are, however, a series of non-botanical arguments: the permanent, year round character of the settlement, the presence of sickle blades, confirmed by microwear analysis, and the fully suited environmental conditions. There is no need to view the cereals as being brought in, as in most of the other ecozones of the Rhine/Maas delta. The fields will have been situated on other dunes in the surroundings or on the adjacent parts of the beach plain. We should, however, not overestimate the role of cereals: berries and fruits were gathered in the surroundings, and wild tubers, onions and roots have been collected. Remains of these are generally not preserved, but a few charred specimens had been recognised as such and positively identified with the aid of SEM micrographs of the parenchymatous tissue. They will factually have been an important food resource.

We may conclude that the subsistence of the local group had the character of an extended broad spectrum economy, in which the exploitation of a wide range of natural resources was supplemented by crop cultivation and animal husbandry. This balanced combination of ‘the old’ and ‘the new’ appears to be a distinct phase in the long neolithisation trajectory of the delta communities (fig. 9).

CONTACTS AND INNOVATION, OLD AND NEW

The material evidence for southern contacts has been repeatedly mentioned above. It is indeed a structural aspect of the period under consideration, showing the continuity of society. The Schaipluiden material demonstrates that these connections had been considerably intensified. In addition to a simple local flake industry on rolled flint pebbles, possibly collected at beaches farther to the south in the province of Zeeland, or perhaps even closer by, mined flint from several locations in the Cretaceous zone was brought in as raw material and as implements, related to the Michelsberg/Spiere repertoire. There are a small flint axe and fragments of others, pyrite nodules from Boulogne-sur-Mer (7) and jet in the form of raw material, pieces with perforations and other production waste, plus some finished and worn beads (fig. 10-11). The source of the jet has as yet not been identified. Is there any in Pas-de-Calais? Amber may have been collected locally at the beach, stone for querns and grinding stones most probably was derived from eastern sources. The southern source area reflects the origin of inspiration for all changes and innovations in this community (fig. 12).

It is curious in this respect that the 14C dates of the Spiere group and the Rhineland Michelsberg end exactly about the time the Hazendonk group came into existence. So factually the southern contact groups of Schipluiden cannot be better specified than the direct successors of the documented Spiere/Michelsberg and the first in the apparent gap in our knowledge after 3800 cal BC (cf. fig. 1).

Stable isotope analysis of human remains is a direct way to measure the mobility of people. A non-local origin of two out of seven individuals has been established on the basis of deviating 18O values. One person originated from an eastern (continental) direction, the other came from the (Atlantic) southwest, neatly corresponding with the material connections. Both foreigners were identified among the scattered remains, all four measured burials proved to be of locally grown up individuals (Sauv
d e et al. 2010).

The treatment of the dead shows a combination of old and new. A few people - only seven of the calculated over 200 people who will have died in the course of time - were formally buried, in a (in some cases tightly) flexed posture, a Neolithic custom marking a brake with the supine Swifterbant burials (fig. 13). It reflects the adoption of a new cosmology, related to the dead. An adult man was by exception accompanied by multiple flint strike-a-lights and a piece of pyrite, which has been used as an argument to view the man as one with exceptional position in society, who had the capacity to deal with magical powers (Van Ginneken 2010, p. 126). The human scattered remains in the refuse zone, resulting from a not specified ritual of body treatment, must represent the general practice, a continuation of a custom documented at Hardinxveld-Folderweg, more than a millennium earlier.

The slaughtering of dogs and the deposition of some of their body parts in the refuse zone reminds of the special treatment of dogs at the same site. A third, non-ideological but practical « old » element are the 56 « hearth pits », always considered to be « typical Mesolithic » and related to some form of food conservation, but at Schipluiden practised far into the Neolithic. How Neolithic the site may look, the Mesolithic roots of the inhabitants are still clearly visible.
INTRAREGIONAL DIVERSITY

Schippluiden is one of a series of contemporaneous settlements, excavated in the last years, as mentioned above (fig. 15). They all belong to the Hazendonk group, are situated in the same region with very similar environmental conditions, and had fully comparable contacts with southern communities. So one may expect that the sites, belonging to the same microregional community, were similar in many respects, but that is not the case. They demonstrate that the local groups of each site had made their own choices in the course of their neolithisation (Louwe Kooijmans 2009).

Wateringen is a relatively short-lived single house site on a small and low dune, lasting not more than two or three house generations. It may be viewed as one element of a group of cooperating households spread over other similar locations, but...
any sign of collective labour is missing at any rate. Ypenburg is situated on an extensive and higher dune on which several yards have been identified, comparable to Westerland, but much better buried. The partial excavation of the site of Rijswijk (14) did not offer any spatial information. We may however conclude that Schipluiden stands out as socially more advanced or « more neolithized ».

In subsistence it is in contrast the site of Rijswijk, which produced an exceptional fully agrarian faunal assemblage with 77 % cattle, 20 % pig, some sheep and 2 % game, as measured in number of identified bones. The faunal spectra of all three other sites and in all their phases are rather similar in their general composition, containing 58-65 % by bones of domestic animals (fig. 14). The inhabitants of Rijswijk had chosen a distinctly different trajectory than those of the other sites, and Schipluiden appears to be not advanced at all in economic respect. In detail some differences may moreover be observed. Ypenburg shows a contribution by marine mammals, almost lacking in the other sites, Schipluiden and Wateringen show some hunt of fur animals, especially beaver and otter. In birds ducks dominate, but at Ypenburg crane, swans and geese played a distinct role as compared to the other sites. One may argue that these differences may reflect a different environment or environmental orientation for hunting and fishing activities, but even in that case different choices are attested.

In fishing the ratio between mullet, sturgeon and flatfish show distinct differences, mullet almost lacking at Schipluiden, while being the most important at Wateringen. Differences in preservation, in excavation technique and in data representation may however be substantial factors in this case.

A third field to be considered - after organisation and subsistence - is ideology, as reflected in burial and deposition. The Wateringen standards out by its cemetery, already mentioned, with two grave clusters, comprising 31 burials with 42 individuals. The burial ritual is rather differentiated, but crouched inhumations prevail and grave gifts are restricted to some personal ornaments, especially beads. But next to this « new » Neolithic tradition there are some old fashionied « supine and multiple burials » which generally is associated with the practices of individuals. In this case it is extended to the small local group. We assume that at each locality a leading person had set the stage and it may be that each local group maintained its own contacts to the south.

CONCLUSION

The process of neolithisation as registered in the coastal wetlands of the Netherlands may be seen as a particular aspect of the neolithisation of the wide plain to the north of the loess zones. The favourable rich wetland resources and the restrictions wetlands provoke, especially on arable farming may have caused some delay in the introduction of domestic animals and cereals. There are however no indications that the process had been fundamentally different on the upland. It appears that the early contacts with LBK and Rösen had only a restricted impact on the daily life of the early Neolithic societies in the north, although material culture was enriched, some views on nature and ancestors adopted and at last domestic animals introduced. More prominent were the contacts from the fifth millennium onwards the first contacts in many respects differently organised Neolithic communities of the loess zones, the Rhineländ and especially its Belgian counterpart, the Spierie group. It resulted in the introduction of crops, permanent settlement, communal efforts in the domestic sphere and a new burial ritual.

The Delfland sites, and the site of Schipluiden in particular, represent the start of this final stage. It is the first truly permanent settlement documented, but still showing Mesolithic roots. It was founded on a strategic site location in between ecocenes with a widely different potential, well conceived as a permanent basis for an economy in which the traditional Mesolithic strategies were extended with the new crop farming and animal husbandry. This way of living together on a year round basis for many generations resulted in a social restructuring of the local communities towards a greater collectiveness and structural cooperation of the individual households.

Intra-regional differentiation in the final implementation of a « fully Neolithic » way of life reflects a society in which decisions were made on a very low, local level. It seems that the long distance contacts were maintained on this local basis. It still is not the final stage of neolithisation, which was even not yet completed in the subsequent Wateringen group.

The sequence of neolithisation in the Lower Rhine Basin shows marked differences in comparison to the western Baltic, where a similar north-south interaction triggered the Meso-Neo transition: developments are more gradual and earlier. Pottery and domestic animals start 4 and 5 centuries earlier respectively, intentional deposition of pots even 8 centuries, introduction of cereals is however almost synchronous. Everything happens in the west, moreover, within the Swifterbant transition context. The `Neolithic package` was introduced gradually and there is no marked culture change as in the Ertebølle-TRB succession (e.g. Hartz et al. 2007; Fischer 2002).

This sequence of adoptions and societal changes in the Lower Rhine Basin is just one piece of the much larger interaction process between the neolithisation of the European subcontinent was made up. This specific case stand however out by its graduality, its phasing and long time span. There is matter of the transfer of a « Neolithic package », the substitution phase is not short (contra Zvelebil 1986), economy precedes social change (Søren Thomas 1999) and Hedeby's (1990) idea of a modern mentality creating a modern domestic world may fit the LBK-Mesolithic contrast, but not the Swifterbant-Hazendonk case. It seems that mental change took a considerable time and was most probably the first of the fifth millennium changes in other societies of the region. So the typical Dutch data are food for further theoretical thought.

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La néolithisation aux Pays Bas

Notre compréhension du processus de la néolithisation dans la partie occidentale de la Plaine de l'Europe septentrionale - entre Flandres et l'Elbe - est fondée essentiellement sur la richesse de l'information des sites d'habitation préservés dans les sédiments à l'embouchure du delta du Rhin et de la Meuse. Ce wetland bias peut être considéré comme un handicap, mais c'est aussi une bénédiction, vu que dans les régions sableuses rarement plus que le matériel lithique est préservé.

Il est néanmoins clair sur base de ces données que la néolithisation est caractérisée par:

1. une frontière statique de longue durée exactement le long du bord septentrional du loess, avec les peuples agriculteurs néolithiques d'un côté et les chasseurs-cueilleurs de l'autre.
2. des contacts réguliers dès le début, mais sans effets observables chez les communautés néolithiques.
3. une troisième phase, la transition de nécropoles à partir de c. 4000 cal BC, avec l'acquisition des hertewenen et la production de poterie indigène de type Swifterbant.

4. une néolithisation idéologique et économique avec des dépôts intentionnels culturels et l'introduction des animaux domestiques à partir de c. 4200 cal BC, des nécropoles modestes et l'introduction des plantes cultivées à partir de c. 4200 cal BC.ो
5. une néolithisation sociale à partir de c. 3600 cal BC avec des maisons rectangulaires construites en bois, des réalisations collectives et l'agencement des espaces domestiques.

Ces deux populations (Rubane et leurs successeurs (Blicquy et Rössen) qui ont eu un impact déterminant sur les populations mésolithiques mais le Michaelsberg de la Rhénanie et le Groupe de Spiere, vers la fin du IVe millénaire)

Le site de Schipluiden est situé dans la région côtière de la Hollande, près de La Haye. L'occupation est attribuable au Groupe de Hazendonk, et est datée de 3600-3300 avant JC. Ce groupe trouve son origine dans le secteur méridional de la culture de Swifterbant et avait des contacts plus intensifs avec les agriculteurs. La communauté de Schipluiden se composait de 4-5 ménages qui étaient établis de manière permanente sur une dune peu élevée au milieu d'un riche pâturage naturel. Ils pratiquaient une vraie économie semi-agricole, en combinant la tradition ancienne de l'exploitation des écosystèmes avec l'élévation et la culture des céréales ou, proprement dite, une extension de la production. L'importance des ressources aquatiques est attestée par les grands foyers creusés dans le sol de la zone d'habitation préservée dans les sédiments à l'embouchure du delta du Rhin et de la Meuse. Ce site était aussi stratégique pour l'industrie de la métallerie et la production de bois, des réalisations collectives et l'agencement des espaces domestiques. Ce ne sont pas les populations Rubane et leurs successeurs qui ont eu un impact déterminant sur les populations mésolithiques mais le Michaelsberg de la Rhénanie et le Groupe de Spiere, vers la fin du IVe millénaire.

Le Néolithique du Nord de la France dans son contexte européen.

Le processus de néolithisation dans l’ouest de la Plaine boréale est extrêmement original dans la perspective européenne en raison de sa longue durée et de sa succession en phases distinctes. Le Néolithique dans cette région n’est pas initié par une motivation sociale : l’aspect matériel précède les aspects économiques et idéologiques. Le site de Schipluiden se situe au moment crucial où le « paquet néolithique » est complété par des aspects de l’organisation sociale, mais sans avoir totalement renoncé aux caractéristiques de la vie traditionnelle mésolithique. Les conditions de préservation parfaites des marais deltaïques nous permettent d’avoir une vue sur la différentiation à l’échelle microrégionale des processus d’interaction entre agriculteurs et chasseurs-pêcheurs-cueilleurs, qui apparemment entretenaient des contacts au niveau du groupe local.

**Mots-clefs**: Néolithisation, Bassin du Bas-Rhin, Schipluiden.

**Abstract**

The rich evidence derived from excavations in the wetlands of the Rhine/Meue delta has revealed that the neolithisation of the Lower Rhine Basin, to the north of the loess, was a long lasting and phased process. Between 5300 and 3400 cal BC three main phases can be identified, characterised here as a material, an economic/ideological and a social stage. Schipluiden represents the start of the last stage, in which a local community of several households settled permanently for many generations at one place, while fences and an extensive cluster of short lived wells demonstrate collective activities of the entire local group. In subsistence and mode of life the best of the « old » and the « new » were combined. Inspiration came from the south, from the Spiere and Michelsberg communities. Microregional divergent trajectories in neolithisation are seen as reflecting variation in agency on a local level.

**Keywords**: Neolithisation, Lower Rhine Basin, Schipluiden, agency.

**Zusammenfassung**

Der Neolithisierungsprozess im Westen der borealen Ebene ist aus europäischer Sicht aufgrund seiner langen Dauer und der Einteilung in deutlich unterschiedene Phasen überaus originell. Das Neolithikum beruht in dieser Region nicht auf einer sozialen Motivierung:

Der materielle Aspekt geht den ökonomischen und ideologischen Aspekten voraus. Der Fundplatz Schipluiden ist in diesem entscheidenden Moment besiedelt, als das „neolithische Paket“ durch die Aspekte der sozialen Organisation ergänzt wird, ohne dass die Eigenschaften des traditionellen mesolithischen Lebens deshalb vollkommen aufgegeben worden wären. Die perfekten Erhaltungsbedingungen im sumpfigen Flussdelta vermitteln auf mikroregionaler Ebene einen Einblick in die Differenzierung der interaktiven Prozesse zwischen Bauern und Jägern-Fischern-Sammlern, die auf lokaler Ebene anscheinend Kontakte zueinander unterhielten.

**Schlagwörter**: Neolithisierung, niederrheinisches Becken, Schipluiden.

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