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PHILIPPE CROMBÉ · JORIS SERGANT · YVES PERDAEN · ERWIN MEYLEMANS
KOEN DEFORCE

NEOLITHIC POTTERY FINDS AT THE WETLAND SITE OF BAZEL-KRUIBEKE (PROV. OOST-VLAANDEREN/B)

EVIDENCE OF LONG-DISTANCE FORAGER-FARMER CONTACT DURING THE LATE 6TH AND 5TH MILLENNIUM CAL BC IN THE RHINE-MEUSE-SCHELDT AREA

It is well-established now that within the Rhine-Meuse-Scheldt (RMS) area, covering Belgium and the southern Netherlands, the hunter-gatherer »lifestyle« persisted much longer in the north(western) sandy lowlands than in the south(eastern) loess area (Raemaekers 1999; Verhart 2000; Louwe Kooijmans 2007; Crombé/Vanmontfort 2007; Robinson 2007; Crombé/Sergant/Perdaen 2009). In the lowlands this is attested by means of the Swifterbant culture (SFB) until the late 5th millennium cal BC south of the Rhine and Meuse and probably even longer north of these. This contrasts sharply with certain parts of the loess area (western Hainaut, Hesbaye, Graetheide region in Dutch Limburg) occupied by farmer communities from the Linear Pottery culture (LBK) already from 5300 cal BC (Constantin/Burnez-Lanotte 2008; Jadin 2003; Bosquet/Golitko/Salavert 2008).

Although the evidence is still rather meagre and difficult to interpret mainly due to taphonomy, it is generally accepted that during the late 6th and 5th millennium cal BC contact existed between both communities, leading to exchange and transmission of valuable commodities and knowledge, which ultimately resulted in an acculturation of the last hunter-gatherers of the lowlands (Crombé 2008; 2010a; Louwe Kooijmans 2007). The evidence for contact during the initial stage, i. e. the late 6th millennium cal BC (LBK) mainly suggests short-distance exchange as most Early Neolithic artefacts, e. g. LBK adzes (Verhart 2000, fig. 15; 2012, fig. 3), LBK pottery (Verhart 2000, fig. 14) and LBK points (Jadin 2003; Robinson/Sergant/Crombé 2013), come to light in a c. 30 km zone just north of the agricultural (loess) border. These finds probably relate to transhumance by LBK herders and are generally interpreted as belonging to special activity sites, such as temporary cattle herding and hunting camps (Bakels 1982; Amkreutz 2010). During these activities LBK members may have been in contact with indigenous hunter-gatherers, although this is difficult to prove. In connection with this, the frequent occurrence of non-LBK pottery, such as Limburg, La Hoguette and *Begleitkeramik* pottery, in the Meuse valley as far as Ede »Frankeneng« (prov. Gelderland/NL) should be mentioned (Brounen/Hauzeur 2010; Brounen/Drenth/Schut 2010). Remarkably, until the excavation of the site which is the subject of this paper these presumed indigenous potteries (for a recent overview see Crombé 2010c) have never been discovered in the Scheldt valley.

Isolated pottery finds of the *Groupe de Blicquy* (BQY), successor of the LBK during the first quarter of the 5th millennium cal BC, are occasionally reported further away into the sandy lowlands as far as 100-150 km from BQY settlements, downstream both the Scheldt, e. g. at Kerkhove (prov. West-Vlaanderen/B; Crombé 1986) and Melsele (prov. Oost-Vlaanderen/B; van Berg et al. 1992), and the Rhine/Meuse valleys, e. g. at Hardinxveld (prov. Zuid-Holland/NL; Louwe Kooijmans 2007). It is rather unlikely that these isolated finds are also the remains of BQY cattle camps, but rather indicate long-distance contact, either direct or indirect (e. g. via long-distance exchange networks) at the transition from the 6th to the 5th millennium cal BC. It seems that river valleys were important corridors within this early communication system, as there are so far

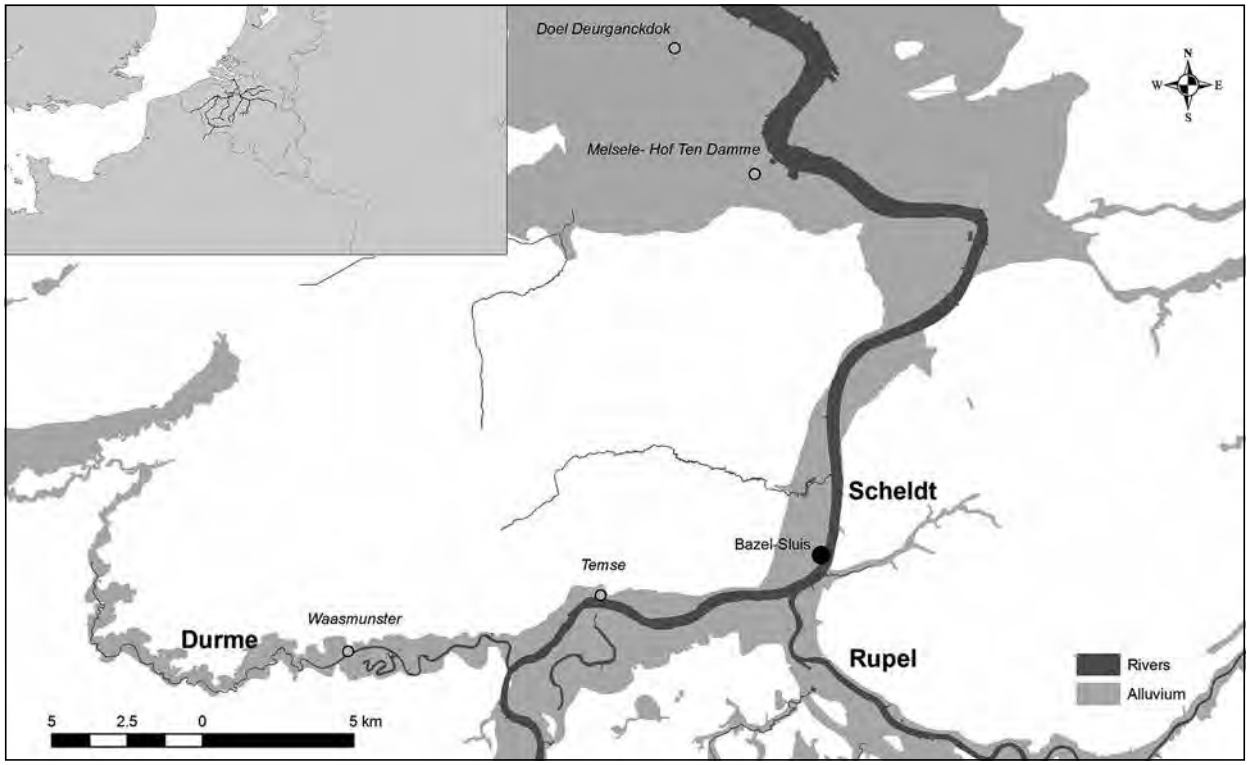

Fig. 1 The Lower Scheldt valley indicating the position of the wetland site of Bazel (prov. Oost-Vlaanderen/B) and other places mentioned in this paper. – (Map J. Verhegge).

only few contact finds known from the dry coversand region away from the main river valleys (Amkreutz et al. 2010).

For the post-LBK/BQY phase numerous discoveries of Rössen *Breitkeile* and pottery (Verhart 2000, figs 16-17; 2012, fig. 5) evidence increasing long-distance contact along the Rhine/Meuse valley and even further north into the coversand region of the Netherlands, northern Germany (Hartz/Heinrich/Lübke 2002) and even southern Scandinavia (Fischer 2002). In the Scheldt basin, on the other hand, no Rössen finds are reported except for two isolated *Breitkeile* (fig. 1) at Temse and Waasmunster (both prov. Oost-Vlaanderen/B; De Laet 1982, 232). This discrepancy between the western and the eastern part of the RMS region remains currently difficult to explain, but definitely cannot be explained by differences in research intensity or site taphonomy. Maybe the indigenous population of the lowlands of the Scheldt basin, contrary to their neighbours in the Rhine/Meuse valley, deliberately avoided contact with post-LBK Neolithic groups of the loess? Or, were there simply no Neolithic groups succeeding the LBK/BQY in the western loess region of Hainault and Brabant? The absence of sites belonging to the Rössen or Cerny cultures in the Upper Scheldt basin advocates for the latter assumption (Constantin/Burnez-Lanotte 2008; Vanmontfort 2007). The earliest evidence of post-LBK/BQY occupation in the loess area dates to c. 4400/4300 cal BC, with the appearance of a few Epi-Rössen and Early Michelsberg sites (e. g. Givry, prov. Hainaut/B; Ittre, prov. Brabant wallon/B; Spiere, prov. West-Vlaanderen/B; etc.) (Crombé/Vanmontfort 2007; Vanmontfort 2007), pointing to a possible occupational hiatus between c. 4700/4650 and 4400 cal BC.

In conclusion, there seems to be a contrast between the Meuse and the Scheldt valley as to the presence of farmer-forager contact finds during the Early Neolithic (LBK) and first stages of the Middle Neolithic (Rössen/Cerny). However, we should be cautious in interpreting this lack of evidence in the Scheldt valley as proof of absence of occupation and/or contact. Indeed, recent excavations at the wetland site of Bazel-Kruibeke

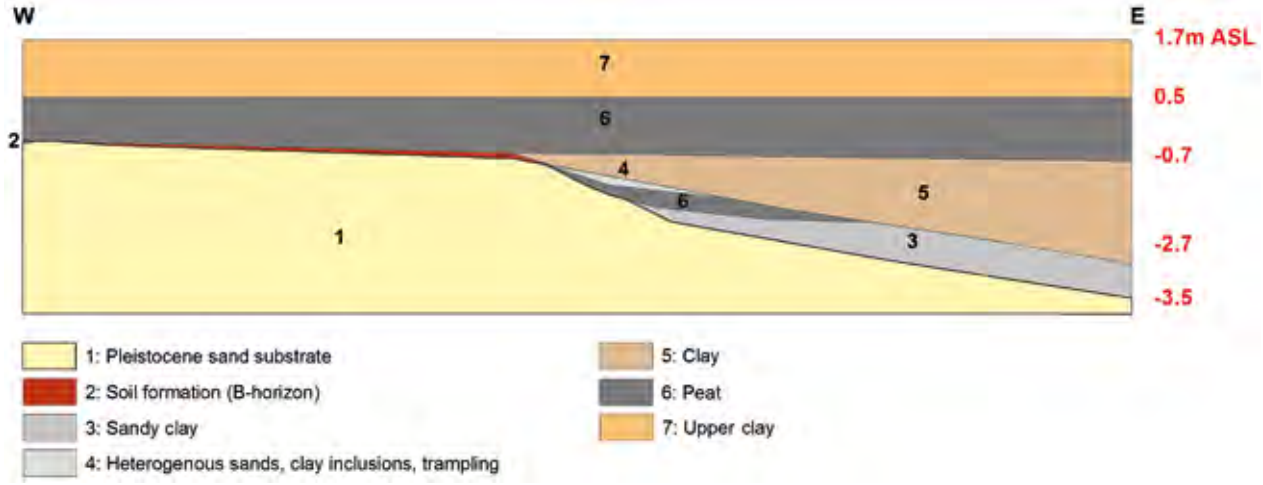

Fig. 2 Simplified section of the stratigraphy at Bazel (prov. Oost-Vlaanderen/B). – (Illustration E. Meylemans).

(prov. Oost-Vlaanderen/B) have revealed the first discoveries of Early and Middle Neolithic pottery in the Lower Scheldt basin, shedding a totally new light on this debate. The present paper aims at presenting these finds and discusses their meaning in the framework of forager-farmer contact in the late 6th and 5th millennium cal BC.

THE SITE OF BAZEL

Excavations

The site of Bazel was discovered by members of the Archeologische Dienst Waasland in the summer of 2010 during a control of deep pits dug for the construction of a lock. From the profile walls they could collect prehistoric finds, which after study by Universiteit Gent, were attributed to different prehistoric phases, including the Late and Final (ceramic) Mesolithic and Middle Neolithic (Michelsberg culture). However, it was the presence of well-preserved animal bones which led to the decision to unearth the adjacent areas of the site, which in the near future would be destroyed by the construction of a large dyke. As a matter of fact, to date only few prehistoric sites with unburnt organic remains have been excavated in Flanders (e. g. Oudenaarde »Donk«, prov. Oost-Vlaanderen/B), hence this was a unique opportunity to investigate the subsistence of societies situated at the transition from the Mesolithic to the Neolithic.
Salvage excavations were conducted from March to August 2011, covering c. 800 m^2 divided over two trenches, one south and one north of the lock construction pit. Excavations were organised by wet sieving (2 mm meshes) of the archaeological levels according to a grid of 0.25 m^2 in layers of 0.05 m.

Site location and stratigraphy

The prehistoric site of Bazel is situated in northwestern Belgium in the floodplain of the Lower Scheldt river, more precisely on its left bank (**fig. 1**; 51°08'09"N; 4°19'23"E). It is located on the top and gentle slope of a former sand ridge, most likely a levee, covered by thick packets of Holocene sediments. **Figure 2** gives a schematic representation of the site stratigraphy, which consists from bottom to top of:

– Pleistocene (clayey) sandy sediments (**fig. 2, 1**), in top of which a humiferous A-horizon layer with many bioturbations (**fig. 2, 2**), has developed to a maximum depth of c. 40 cm. The top is situated at 0.2/0.5 m below TAW (mean low water tide level in Oostende), sloping down to the east, with the lowest excavated area at the foot of the levee at c. 2.9 m below TAW;
– the top of the levee is immediately covered by a peat layer of c. 100 cm maximum thickness (**fig. 2, 6** upper), followed by a packet of alluvial clay (**fig. 2, 7**). The basis of the peat has been dated at only one location on the dune slope (–0.7 m TAW) yielding a result of c. 3300 cal BC (Deforce et al. 2014);
– on the lower part of the levee additional sediments are interstratified between the Pleistocene sands and the covering peat, probably related to a palaeo-channel of the Scheldt river, which unfortunately falls beyond the limits of the excavations. These sediments consist from bottom to top of:
– silty clay (**fig. 2, 3**), deposited in a fluvial environment;
– very organic-rich clay which towards the foot of the levee changes into peat (**fig. 2, 6** lower), indicating decreased fluvial influence. The basis of this layer is dated around 5100 cal BC (Deforce et al. 2014);
– coarse sands intermixed with clay (**fig. 2, 4**) which point to renewed fluvial activity. The sharp lower boundary probably indicates partial erosion of the underlying sediments. The lower part of this sandy deposit has been dated around c. 3950 cal BC; its top around c. 3725 cal BC (Deforce et al. 2014). Towards the foot of the levee these sands show traces of intense animal trampling;
– silty clay with high organic matter content and many leaf and wood fragments and molluscs (**fig. 2, 5**), corresponding most likely to the Formation of Wormer (former »Calais« Formation). The base was dated around 3450 cal BC (Deforce et al. 2014).

The prehistoric remains are situated both in the top of the Pleistocene sediments (levee top) and in the lower peat layer along the former channel bank. However, there is a major difference in the preservation and density of these remains depending on their position. On the levee the Pleistocene sediments yielded very dense concentrations of lithic artefacts and pottery sherds, indicating this was the main occupation area of the site. Intermixed large quantities of carbonised plant (charcoal, nuts, seeds, cereal grains) and animal remains (calcined bone fragments) were found, while unburnt organic remains, except for some weathered animal teeth, are missing. In contrast the lower peat along the levee foot yielded numerous well-preserved animal bones, some modified into tools (antler mattocks, chisel, etc.), and one human clavicle fragment. Intermixed small quantities of cultural remains, such as potsherds and lithics, were collected, indicating that this zone probably corresponds to a refuse area of the site.

The vertical distribution of the majority of finds in the Pleistocene sediments covers c. 50 cm, starting from the top of the humiferous A-horizon; locally some artefacts were also recovered from the peat basis. No internal stratification was visible in the field, probably as a result of extreme bioturbation, having led to a complete homogenisation of the soil. Yet, spatial analysis of diagnostic finds has demonstrated the preservation of a latent stratigraphy (*stratigraphie phantôme*). In the lower parts of the levee, archaeological finds are spread over the entire depth of the lower peat deposits, though here too some mixing occurred as a result of trampling.

Site chronology

At present 30 radiocarbon dates on cultural remains are available – bone (16 dates), antler (10 dates), cereal grains (3 dates) and wood (1 date) – all coming from the dump zone in the lower peat and alluvial deposits at the foot of the levee. Further dates on teeth and carbonised remains from the top of the levee are in progress. As a result it is not yet clear whether the chronology so far reconstructed is not biased by the sampling strategy.

The calibrated dates (**fig. 3**) range between c. 5100 and c. 3500 cal BC (2σ), with one outlier around 6200-6000 cal BC[1]. A limited number of finds of microliths, such as mistletoe points, small backed bladelets and trapezes refer to earlier occupations dating to the Middle and Late Mesolithic, respectively during the 8th and 7th millennium cal BC (Robinson et al. 2011; 2013). On the other hand, the end of the occupation as indicated by the radiocarbon dates coincides perfectly with the onset of the peat growth (see below) which initiated the gradual drowning of the levee. The sum probability curve clearly shows two clusters of dates separated by a gap between 4500 and 4000 cal BC (1σ) or between 4400 and 4300 cal BC (2σ). In the current state of analysis it is not entirely clear whether this represents a hiatus in the occupation of the site or a bias due to sampling and/or erosion. As mentioned above, erosion must have occurred along the foot of the levee before c. 3950 cal BC.

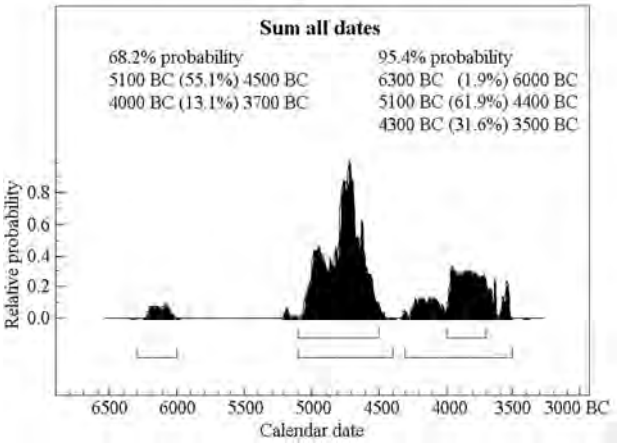

Fig. 3 Bazel (prov. Oost-Vlaanderen/B). Sum probability of all radiocarbon dates. – (Calibration according to Reimer et al. 2013; illustration Ph. Crombé).

Pottery

General aspects

To date only part of the site has been analysed due to limited financing. In both trenches finds from a transect of 5 m wide running from the top to the lower part of the levee were examined. In total 22,086 lithic artefacts and 3366 pottery fragments (16,105 g) have been recorded. However, this paper will only focus on the results of the pottery analysis, with special emphasis on the decorated potsherds.

In general the preservation state of the ceramics is bad; most potsherds are small, hindering a detailed typological and technological characterisation. Around 6867 g of potsherds could not be analysed at all due to too small dimensions (<1 cm²). This extreme fragmentation, which mainly affects the pottery found on the levee top, most likely results from intense trampling caused by prolonged occupation. Possibly intense bioturbation also played an important role. In contrast the pottery from the dump area seems much less fragmented.

Technical groups

During the analysis a broad range of tempers and combination of tempers was observed. For the sake of clarity in the present study the pottery will be divided into three main technical groups defined on the basis of the dominant temper.

A first, small group (111 sherds = c. 3 %) includes pottery presenting crushed and calcined bone as the main temper (**fig. 5a**). Only in 43 fragments bone is the only temper. In all other potsherds bone is combined with plant material (22 ex.), grog (21 ex.), or grog and plant material (26 ex.). The mean thickness amounts to 6.95 mm, with a majority situated between c. 6 and 8 mm (**fig. 4**). The outer and inner walls are generally

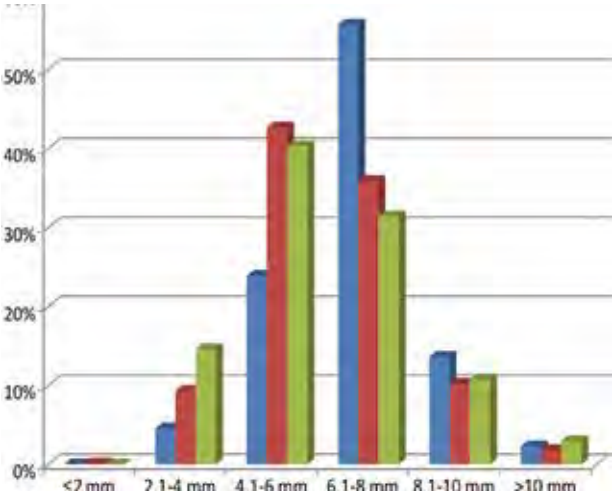

Fig. 4 Bazel (prov. Oost-Vlaanderen/B). Distribution of the wall thickness for the three technical groups. – ■ bone; ■ grog and vegetal; ■ flint and quartz. – (Illustration J. Sergant).

light brown and smoothed; decoration is found on just 10 % of these sherds. The sherd core is generally dark brown.

The second technical group combines pottery tempered with grog and/or plant material (**fig. 5b**). This group is much better represented with altogether 2131 sherds (c. 61 %). The temper consists either of grog (1007 ex.; c. 27%), plant material (322 ex.; c. 10 %) or a combination of both (802 ex.; c. 26 %). In nearly all cases this pottery presents a light brownish outer wall, either combined with a light brown or dark brown inner wall. Entirely dark brown potsherds frequently (c. 17 %) occur within the group of grog tempered pottery, while entirely light brownish sherds are often (c. 14 %) found among the pottery tem-

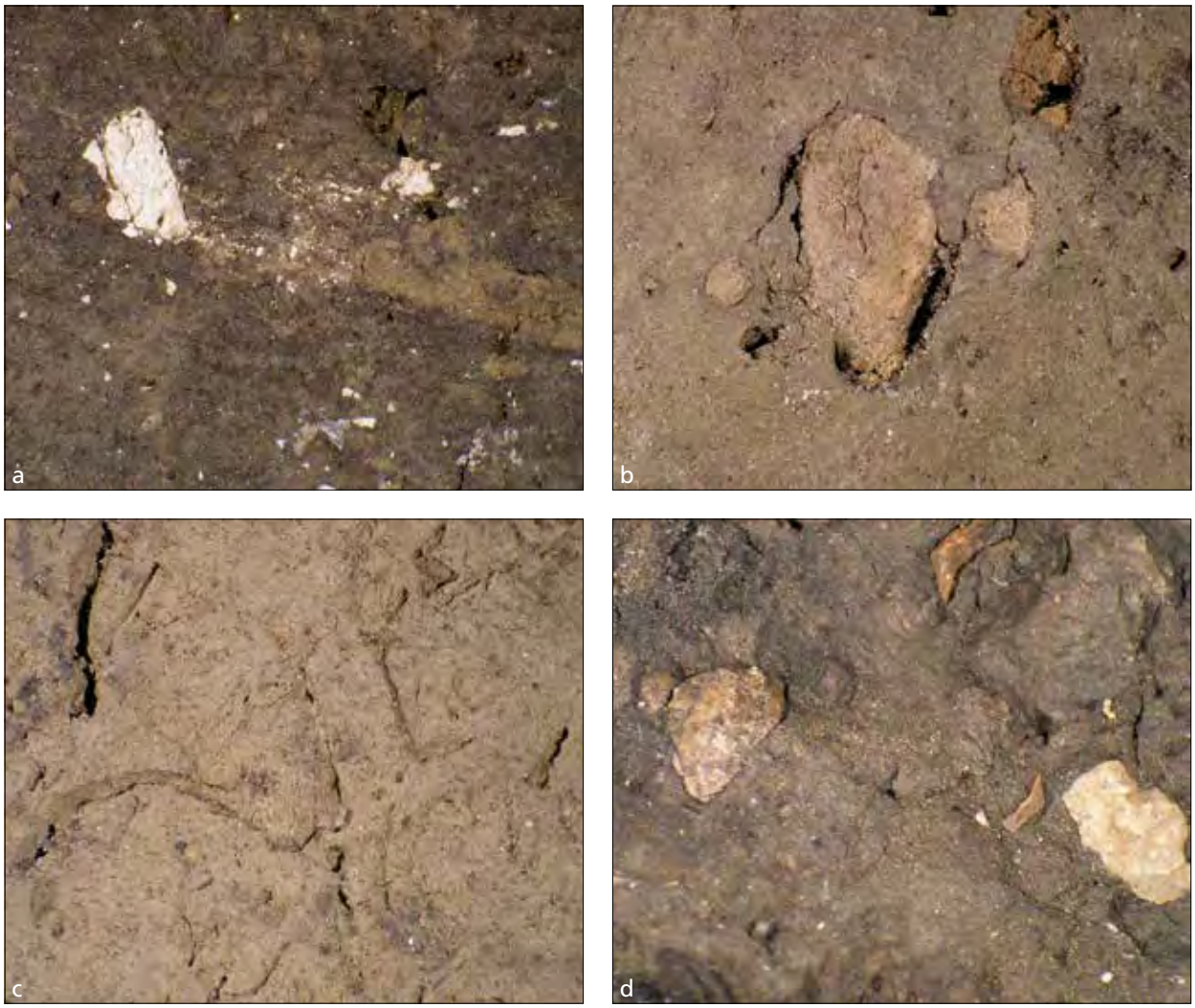

Fig. 5 Bazel (prov. Oost-Vlaanderen/B). Microscopic views of the tempers used within the three technical groups (**a-d**). – (Photos J. Sergant).

pered with plant material. Generally (c. 70 %) the walls are smooth; additional decoration can be observed on hardly 131 fragments (c. 7 %). The wall thickness mainly situates between c. 4 and 8 mm (**fig. 4**).
The last pottery category contains sherds tempered mainly with burnt and crushed flint and/or quartz (**fig. 5d**). Some 958 fragments, representing c. 32 %, belong to this group. Almost one quarter of them (223 ex.) are tempered exclusively with flint and/or quartz. In the remaining sherds an additional temper is noted, consisting either of grog (159 ex.), plant material (114 ex.), or a combination of both (165 ex.). In some potsherds the plant material could be identified as moss most likely belonging to the *Neckera crispa Hedw.* species (Constantin/Kuijper 2002; Constantin 2010; **fig. 5c**). In addition, for 297 potsherds no temper could be determined due to their very small sizes, but based on other technological features (colour, thickness, firing) it is assumed that they belong to the same technical group as the flint/quartz tempered pottery. Based on the wall thickness a rough distinction between thin-walled and thick-walled sherds can be made, the limit between both situated around c. 7 mm (**fig. 4**). In general the former seems of a higher quality and fired in a reduced way (black core combined with light brownish walls). The thick-walled pottery is much coarser with inner and outer walls turning to orange brown or red colour. Only three sherds are decorated.

Forms and decoration

Bone tempered pottery

Due to the advanced fragmentation pot profiles can hardly be reconstructed. One sherd (**fig. 6, 1**) clearly belongs to a bowl-shaped vessel with a rather straight but thickened rim. Another rim fragment (**fig. 6, 2**) is provided with fingertip impression on its top. Overall most bone tempered sherds show a rather limited curvature indicating that they belong to relatively large vessels.
Decoration mainly consists of relatively broad bands (3-5 cm) filled alternatingly with impressed shallow grooves and oblique impressions made with a rounded object (**fig. 6, 3-4**). On one wall fragment (**fig. 6, 5**) a series of 5 mm long rectangular impressions is arranged in an arched shape. Another decorated sherd has a clear carinated profile. Finally, two perforated wall fragments and a fragment with small knob right below the rim (**fig. 6, 6**) have been found.

Grog and plant tempered pottery

Within this technical group a much greater variety of decoration has been attested. A first series of sherds (77 ex.) belongs to very fine-walled (4-5 mm), high quality pottery made from micaceous clay. Besides fine *Randkerbung* the main decoration consists of strokes filled with parallel grooves (1-2 mm wide) and/or spatula impressions, both placed either vertically or obliquely. Some grooves are very regular as they have been incised in one move (stab-and-drag lines) (**fig. 7, 1-4**), while others are more irregular and discontinuous, being produced by a series of lined partial impressions, called *pointillé silloné fin* (**fig. 7, 5-8**). The use of a comb/spatula could be observed on a few sherds (**fig. 7, 9**), one of which displays a tremolo-like pattern (Molitor 1984). Rectangular impressions organised in a horizontal band bordered by a groove have been applied on at least two fragments (**fig. 7, 10-11**).
A small series of thin-walled potsherds (7 ex.) presents a clear zonal decoration, consisting of a band filled with irregularly lined fine spatula impressions and delineated by shallow grooves. On one of these sherds the band is running zigzag (**fig. 7, 13**), while on another small fragment (**fig. 7, 14**) an undulating band is preserved. A comparable decoration is visible on a thickened rim fragment (**fig. 7, 15**), and a few small wall sherds (**fig. 7, 16-18**). In most cases the internal impressions are set obliquely with respect to the grooves.

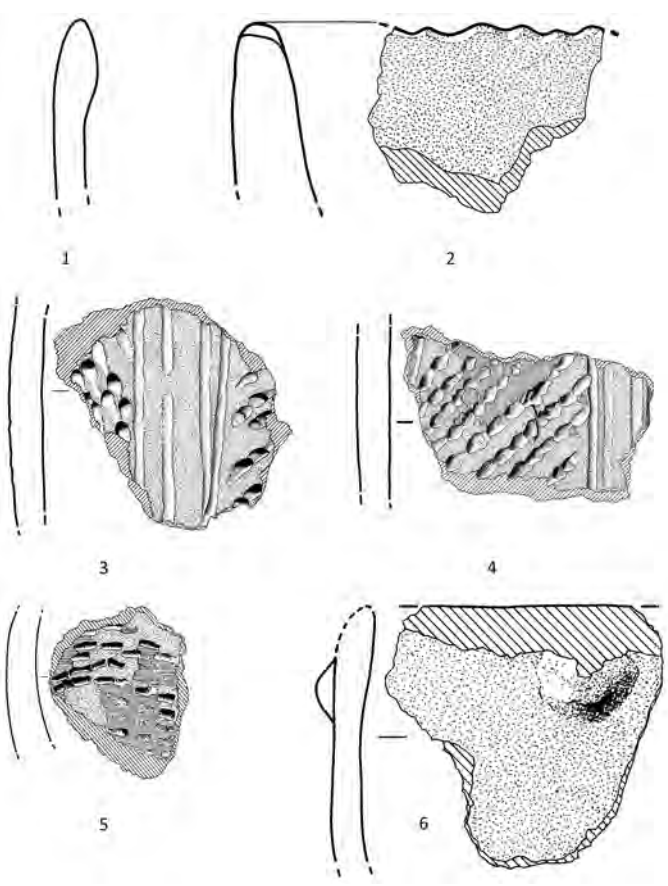

Fig. 6 Bazel (prov. Oost-Vlaanderen/B). Bone tempered pottery. – (Drawings M. Van Menen). – Scale 1:4.

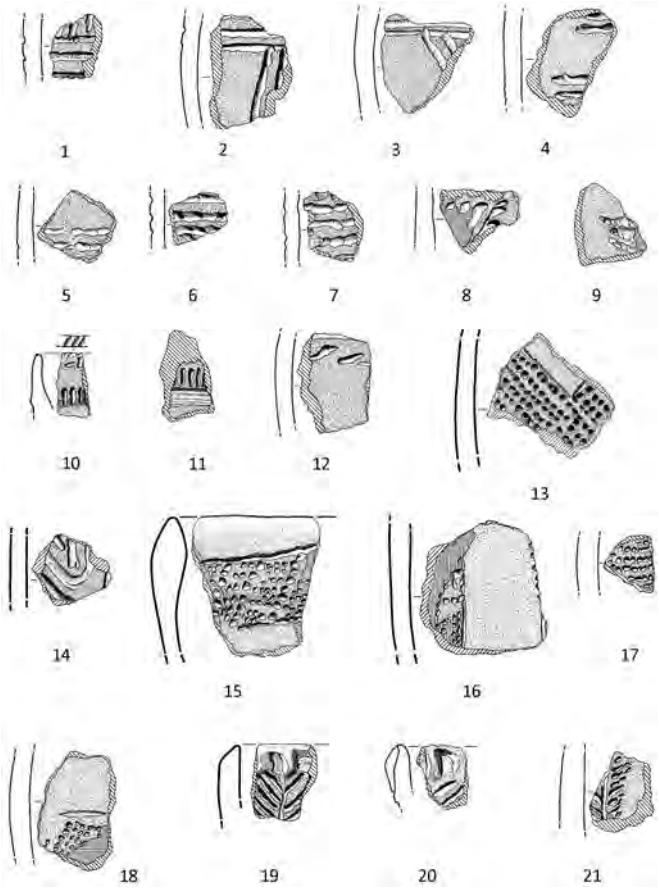

Fig. 7 Bazel (prov. Oost-Vlaanderen/B). Grog and plant tempered pottery. – (Drawings M. Van Menen). – Scale 1:4.

Still under the category of thin-walled pottery, three sherds (**fig. 7, 19-21**) are worth mentioning as they possess a decoration of small impressions made by a spatula set in a herringbone pattern. On two rim fragments this is combined with a row of small nips immediately underneath the rim.

Another type of decoration consists of round to oval impressions of c. 3-4 mm clearly applied with a ravelled small stick which was pushed obliquely into the weak clay. These rather rough impressions are usually organised into one to two, exceptionally more parallel rows (**fig. 8, 1-3**). On three sherds (**fig. 8, 4-5**) similar rows of rough impressions have been placed right below and above an elongated grip; in addition a few impressions and/or incisions have been placed on the grip itself.

Similar rows of round to oval impressions are attested on another 20 potsherds, but in these cases the impressions are much finer and smaller. On three sherds (**fig. 8, 6**) this was clearly obtained by using a hollow stick or bone. On the remaining fragments (**fig. 8, 7-10**) the impressions are less regular, indicating the use of another instrument.

A complex set of impressions forming an undetermined motif has been attested on three sherds (**fig. 8, 11**). Interesting is that this motif is reproduced at least twice in the same way, demonstrating the use of a specific kind of instrument.

Besides the already mentioned knobs, the assemblage includes another 24 specimens mostly oval in outline (**figs 8, 12-13; 9, 1**). As far as can be reconstructed some were positioned vertically, others horizontally. Just one of these knobs was perforated horizontally and vertically oriented (**fig. 9, 2**).

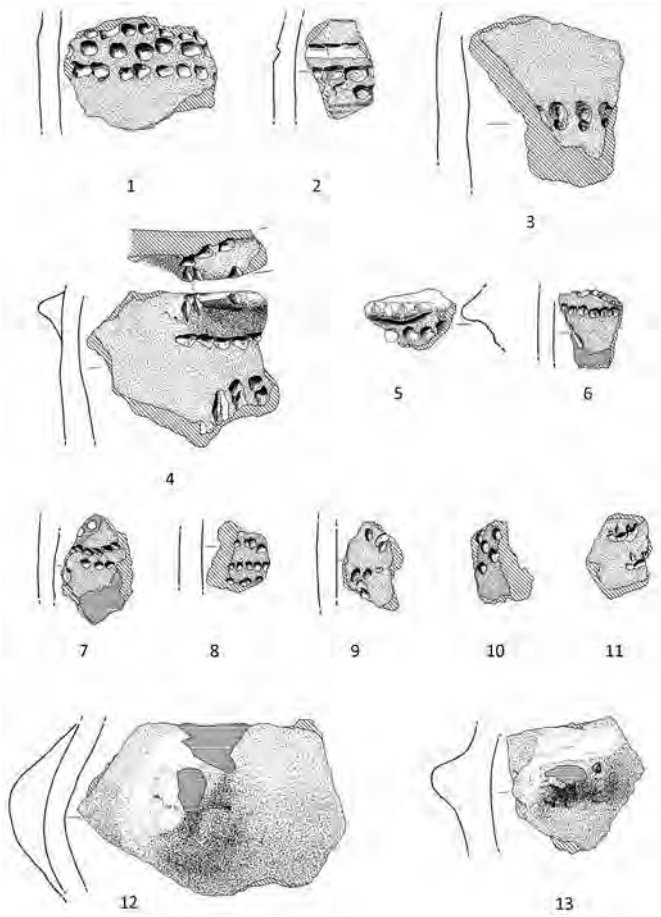

Fig. 8 Bazel (prov. Oost-Vlaanderen/B). Grog and plant tempered pottery. – (Drawings M. Van Menen). – Scale 1:4.

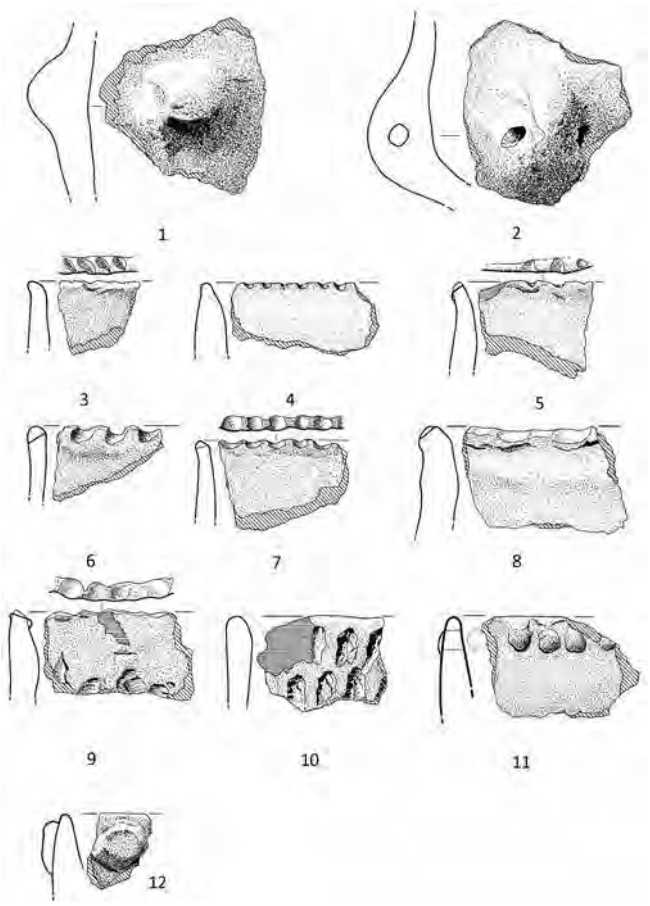

Fig. 9 Bazel (prov. Oost-Vlaanderen/B). Grog and plant tempered pottery. – (Drawings M. Van Menen). – Scale 1:4.

Among the decorated rims at least 20, besides the already mentioned ones, possess *Randkerbung* (**fig. 9, 3-7**), which was impressed into the weak clay. In three cases (**fig. 9, 6-7**), however, the decoration was rather cut into the rim with an instrument (knife?). Another eight rims are provided with fingertip impressions on the top (**fig. 9, 8-9**).

Impressions immediately under the rim are also observed. On eight sherds it includes row(s) of fingertip- and/or fingernail impressions. One fragment (**fig. 9, 10**) possesses two rows of irregular but perfectly identical impressions set in a staggered position. A sherd from a shoulder fragment displays a row of fingernail impressions. Finally, two rim sherds (**fig. 9, 11-12**) display a plastic decoration. The first one (**fig. 9, 11**) has a row of pastilles (max. diameter 6 mm) applied right below the rim as well as a pre-firing perforation which clearly was made from the inner towards the outer side of the vessel (*repoussée* technique). The other rim (**fig. 9, 12**) displays only one big pastille with a diameter of 13 mm.

Flint and quartz tempered pottery

The rims from this pottery group usually have a straight or outwards bending profile (**fig. 10, 1-4**). A small fragment (**fig. 10, 1**) possesses an outwards thickened rim, resulting in a banded profile. So far only one large vessel could be reconstructed from sherds found together in a small cluster. The reconstructed vessel (**fig. 10, 5**) has a slender profile with outwards bending rim and weakly rounded bottom. Typologically it can

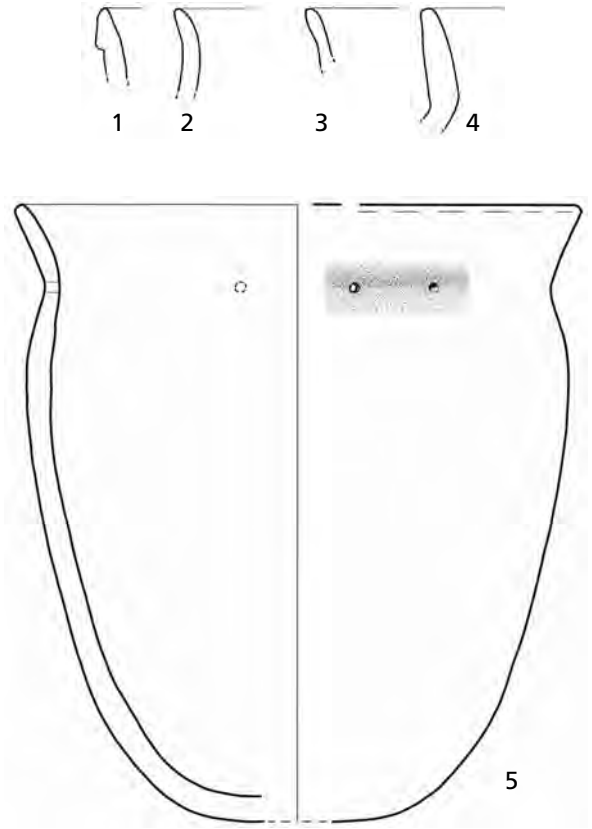

Fig. 10 Bazel (prov. Oost-Vlaanderen/B). Flint and quartz tempered pottery. – (Drawings M. Van Menen). – 1-4 scale 1:4; 5 scale 1:3.

be classified as a large jar. Several perforations, some of which incomplete, are situated at the transition from the belly to the rim.

Decoration is almost completely lacking on this pottery group. We mention two fragments of knobs, one of which was situated right under the rim. Impressed decoration was found on just one sherd and consists of an undetermined motif. Last but not least a fragment with polished outer wall needs to be mentioned.

Dating and cultural attribution

The extreme fragmentation hinders considerably the dating and cultural attribution of the Bazel pottery. However, by combining technological (temper) and decorative characteristics some sherds can be linked to specific periods and/or cultures.

It is very tempting to associate the bone tempered sherds with Early Neolithic pottery traditions such as the BQY, Limburg and La Hoguette pottery. All these ceramics have in common the use of bone as principal temper, often combined with plant material and/or grog (van Berg 1990; Lüning/Kloos/Albert 1989; Constantin 1975). This attribution is further strengthened by the stratigraphical position of this Bazel pottery within the deepest levels of the Pleistocene deposits; indeed, bone tempered sherds are mainly found at depths of –10 to –20 cm, while the two other technical groups are situated slightly higher (**fig. 11**). However, the presence of La Hoguette and probably also of BQY pottery at Bazel can most likely be ruled out since no typical motifs have been recorded. The two decorated sherds with bone temper (**fig. 6, 3-4**) clearly present affinities with decoration observed on Limburg pottery, characterised mainly by strokes filled with parallel, crossed or oblique grooves, eventually bordered by impressions (van Berg 1990; Modderman 1981; Constantin/Demarez 1981). The closest parallels are found on a Limburg vessel excavated at Remerschen »Schengerwis« (Kt. Remich/L; Hauzeur 2006, pl. 119, 4). Also the thickened rim belonging to a bowl-shaped vessel (**fig. 6, 1**), and both perforated fragments refer to Limburg pottery. Yet, it may be assumed that some Limburg sherds are also present among the grog and/or plant tempered pottery. Two small rim fragments (**fig. 7, 19-20**) with vertically oriented fishbone motif bordered at the top with small nips find their perfect parallels within the Limburg inventory as discovered e. g. at Aubechies (prov. Hainaut/B; Constantin/Allard/Demarez 2010, fig. 121), Elsoo (prov. Limburg/NL) and Berloz (prov. Liège/B; van Berg 1990, fig. 13, 1. 4).

The category of grog/plant tempered pottery is even more difficult to date. Most likely this technical group is less homogeneous, including ceramics of different periods and cultural traditions. This is also supported by its relatively large vertical distribution compared to flint/quartz tempered pottery (**fig. 11**). Within the Scheldt basin grog and plants have been used as the main tempers during a very long time span, from the earliest LBK (Constantin 1975) till the SFB (Crombé 2010b; Crombé/Boudin/Van Strydonck 2008), covering nearly 1.5 millennia. In addition, most decorative motifs found on this pottery are not really diagnostic

for a specific culture or chronological stage. Unperforated knobs and *Randkerbung*, two types of decoration frequently attested within the Bazel assemblage, can be observed on pottery belonging to the LBK (Constantin 1975), BQY (Constantin 1975), Rössen (Spatz 1996), Epi-Rössen (Jeunesse/Lefranc/Denaire 2004; Michel/Tabary-Picavet 1979) and SFB cultures (Crombé 2010b). The same holds for fingertip and fingernail impressions. However, there are a few potsherds displaying a more specific decoration which might allow a cultural attribution. The small series of seven potsherds with impressions organised in a horizontal band (**fig. 7, 13-18**) presents undeniable affinities with late LBK pottery. Although the latter impressions are generally positioned parallel to the bands, transversal and oblique impressions also occur incidentally (e. g. Jadin 2003, fig. 119). Possibly the perforated knob (**fig. 9, 2**) as well as the rim fragment provided with a small knob right under the rim (**fig. 6, 6**) found at Bazel can also be ascribed to the LBK. The bone tempering of the latter does not contradict this attribution since it has recently been attested that 12-19 % of the undecorated pottery excavated at the LBK sites of Aubechies and Ormeignies in Hainaut are tempered with bone (Constantin/Ilett/Burnez-Lanotte 2010).

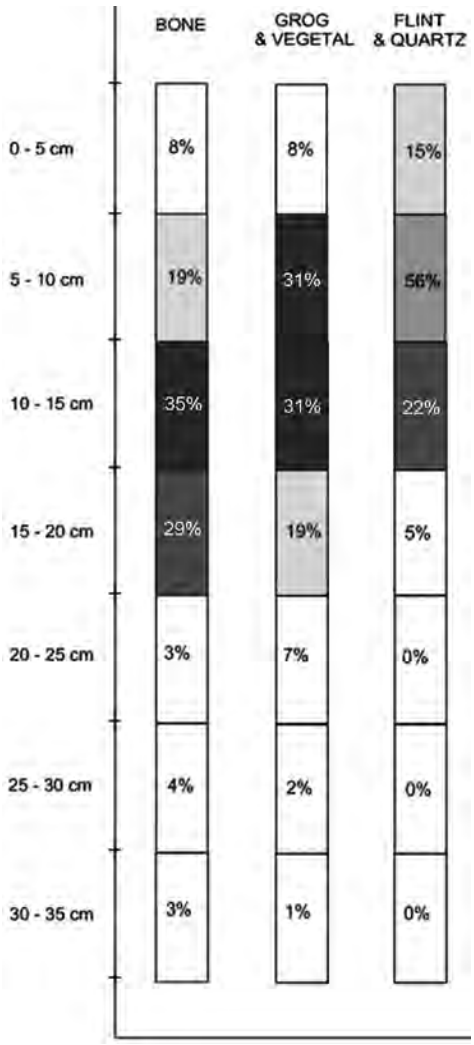

Fig. 11 Bazel (prov. Oost-Vlaanderen/B). Latent stratigraphy based on the vertical distribution of the different pottery groups. – (Illustration J. Sergant).

However, most of the grog and plant tempered material very likely is of a slightly younger age, post-dating the LBK. Among the thin-walled, high-quality sherds made of a micaceous clay some decorative elements refer to the Final Rössen and/or Epi-Rössen, more specifically the western Bischheim tradition (Jeunesse/Lefranc/Denaire 2004, 136-158). First of all, there are the *boutons repoussés* (**fig. 9, 11**) and applied pastilles (**fig. 9, 12**), features characteristic of the Bischheim and Early Michelsberg (Jeunesse/Lefranc/Denaire 2004; Seidel/Jeunesse 2000). Also the application of the *pointillé sillonné* technique, as observed on several potsherds (**fig. 7, 5-9**), is typical for the Bischheim (Dammers 2007; Dubouloz/Lasserre/Lebolloch 1982). Banded rims (**fig. 10, 1**) are also well attested within the Bischheim (Dubouloz/Lasserre/Lebolloch 1982; Jeunesse/Lefranc/Denaire 2004). However, from a technical point of view these decorated sherds differ to a certain level from the pottery found at other Epi-Rössen sites in the Scheldt basin, e. g. Givry »Bosse de l'Tombe« (Michel/Tabary-Picavet 1979) and Ittre »Mont-à-Henry« (Fourny et al. 1987), as well as in northern France, e. g. Berry-au-Bac »La croix-Maigret« (dép. Aisne; Dubouloz/Lasserre/Lebolloch 1982) and Amigny-Rouy »La Bretagne« (dép. Aisne; Naze 1989). On all these places crushed flint and/or quartz is the main temper albeit often mixed with plant material. The latter mainly consists of fine plants, more specifically moss of the *Neckera crispa Hedw*. species (Constantin/Kuijper 2002; Constantin 2010). This type of moss has also been identified in several undecorated flint/quartzite tempered sherds from Bazel, but not within any Epi-Rössen like sherds. However, this might be due to their small size making the identification of this specific temper very difficult. Furthermore, within the group of grog and plant tempered material two incised grips (**fig. 8, 4-5**) might refer to an even older stage of the Rössen tradition. As a matter of fact incised grips are characteristic

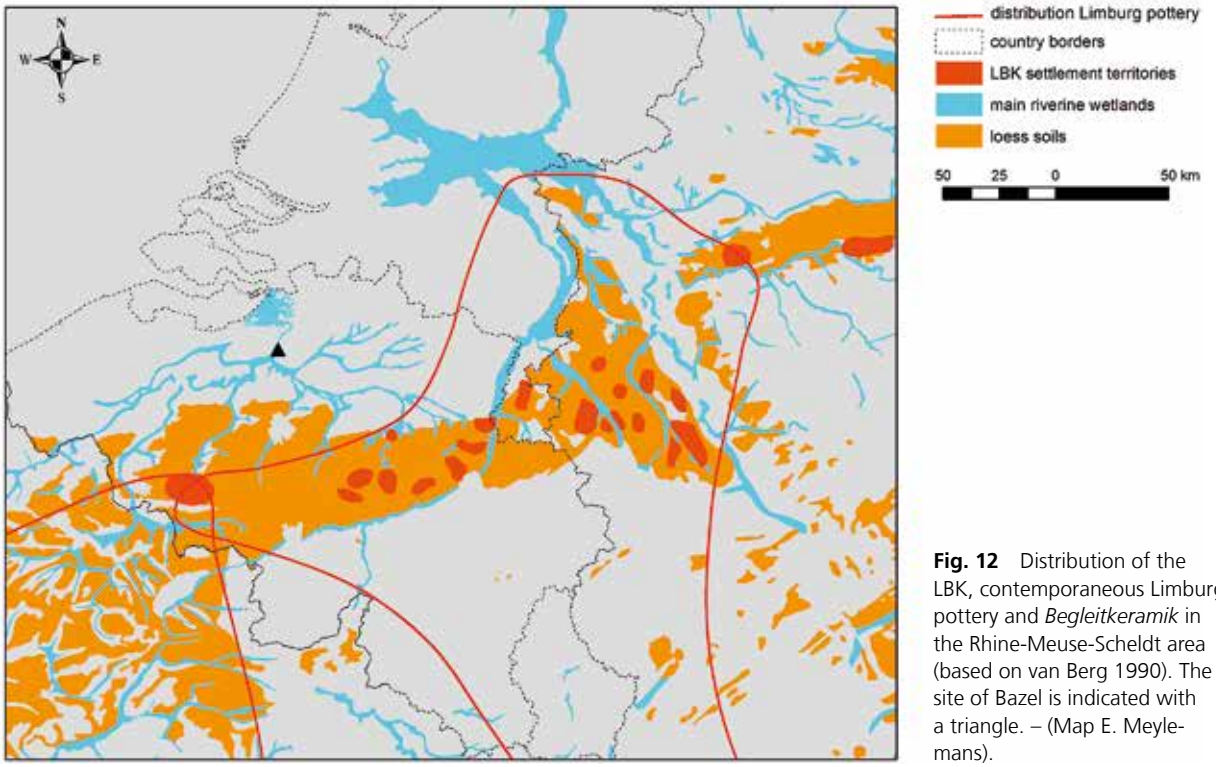

Fig. 12 Distribution of the LBK, contemporaneous Limburg pottery and *Begleitkeramik* in the Rhine-Meuse-Scheldt area (based on van Berg 1990). The site of Bazel is indicated with a triangle. – (Map E. Meylemans).

of Rössen pottery, albeit they are generally perforated (Spatz 1996; Le Brun-Ricalens/Valotteau 2007). They also appear incidentally within the Grossgartach culture. Finally, it may be assumed that most of the thick-walled pottery tempered with grog and/or plants belongs to the SFB, as known from several nearby sites in the Lower Scheldt floodplain (Crombé 2010b). Although decoration is almost completely lacking on Swifterbant pottery, some of the sherds with simple impressions such as rows of fingertip or fingertop impressions underneath the rim or on the top of the rim as well as rims with *Randkerbung* and unperforated knobs can certainly be assigned to this tradition.

The concentration in the upper 10 cm of the stratigraphy (**fig. 11**) indicates that the flint/quartz tempered pottery mainly belongs to the youngest occupation phase of the site. Technologically and morphologically this pottery fits perfectly with the Michelsberg/Spiere group tradition of the Scheldt basin (Vanmontfort 2004). The large jar (**fig. 10, 5**) closely resembles the bottle-shaped vessel type 4a (*Vorratsgefäße*) from the Spiere group tradition within the Scheldt basin (Vanmontfort 2004).

DISCUSSION

The small number of pottery finds belonging to the late LBK and Limburg tradition makes Bazel the so far most north(west)ern find-spot in the Scheldt basin and even within the larger area of the RMS of these earliest Neolithic pottery traditions (**fig. 12**). An important question relates to how this decorated »foreign« pottery arrived at this site. One possible explanation is that it reflects the passage of LBK/Limburg individuals, coming from either the western Hainaut LBK territory some c. 75 km further southwest (Constantin/Burnez-Lanotte 2008) or from the small LBK territory in the area of Tienen (prov. Vlaams-Brabant/B; Lode-

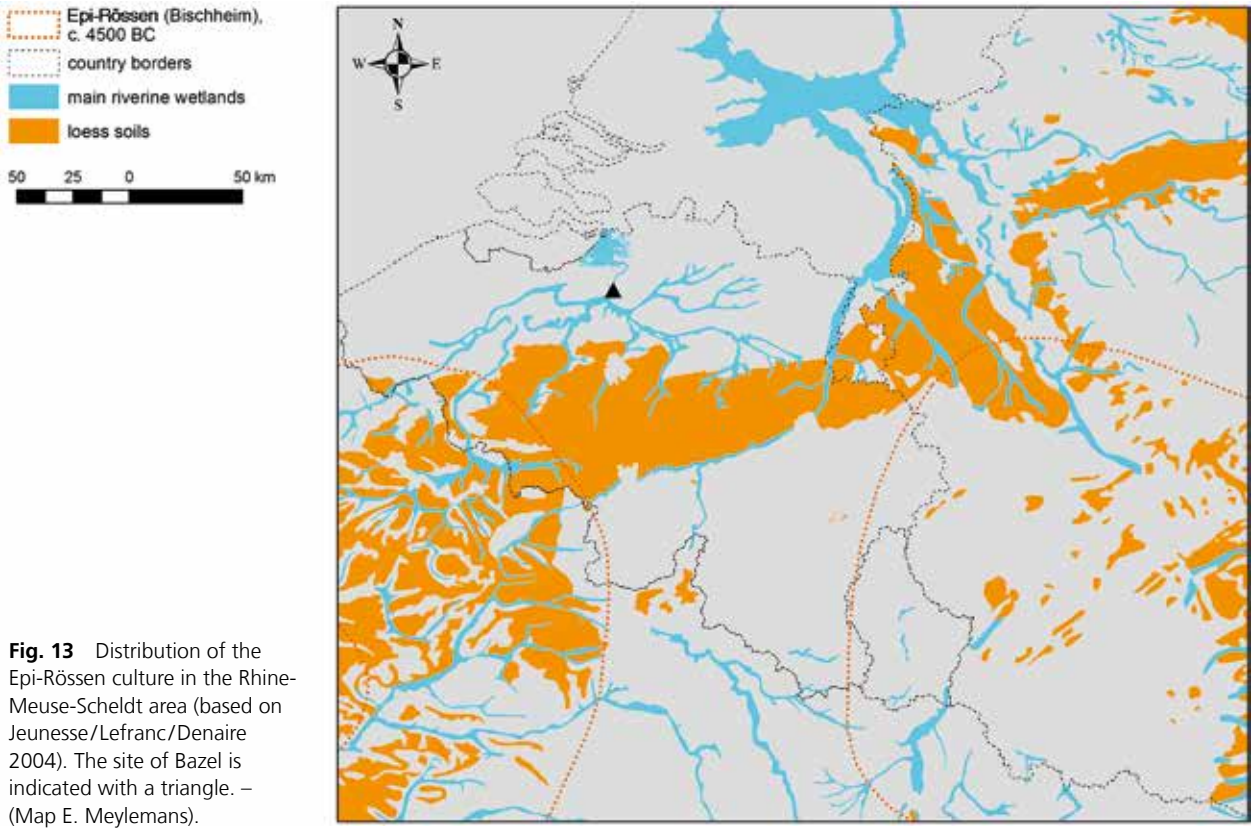

Fig. 13 Distribution of the Epi-Rössen culture in the Rhine-Meuse-Scheldt area (based on Jeunesse/Lefranc/Denaire 2004). The site of Bazel is indicated with a triangle. – (Map E. Meylemans).

wyckx 1990) situated c. 60 km in southeastern direction from Bazel. The reason(s) for these remote travels are difficult to grasp, but could range from exploring foreign areas for resources, natural meadows for cattle herding, marriage partners to raids. Judging by the scant finds, these visits were very ephemeral and really bound to the banks of the river system of the Lower Scheldt basin. Indeed, besides one single LBK scraper at the nearby site of Doel »Deurganckdok« sector B (prov. Oost-Vlaanderen/B; Crombé/Sergant/Perdaen 2009) and an adze fragment in Evergem (prov. Oost-Vlaanderen/B; Perdaen et al. 2006) no further LBK/Limburg finds are currently known more inland. Following this hypothesis the question remains whether there was really any contact between these LBK/Limburg travellers and the local hunter-gatherers of the Lower Scheldt. The presence of numerous trapezes at Bazel indicates important occupation(s) during the Late Mesolithic, some of which might be contemporaneous with the late LBK based on the available radiocarbon dates. Although it cannot be fully ruled out that the dated bones and antlers are related to the LBK/Limburg »occupation«, it seems more likely that they belong to activities of indigenous hunter-gatherers settling down at the site presumably on a seasonal basis from c. 5200 cal BC onwards. But even then direct contact still needs to be proven, as both population groups might have occupied the place in a different season or at a different time within the same season.

Another way these exotic pottery fragments could have ended at Bazel is through activities of local hunter-gatherers rather than migrating LBK/Limburg individuals. Based on the presence of Wommersom quartzite at Bazel (and other adjacent but undated Late Mesolithic sites; Robinson et al. 2011) it is known that the annual territory of these local groups encompassed the area of Tienen, close to a small cluster of LBK settlements (Lodewijckx 1990). Hence, it is perfectly possible that contact and exchange between both communities took place in the outcrop area of Tienen, the exchanged ceramics were taken on their further migration, part of which was left at Bazel. This hypothesis is hindered by the so far complete absence of

LBK/Limburg pottery finds in between Tienen and Bazel, but this can be due to the current state of research. As a matter of fact hardly any archaeological research has so far been conducted in the floodplains of the Gete, Demer and Dijle, tributaries of the Scheldt.

A third hypothesis implies that Limburg pottery at Bazel is a local indigenous pottery, made and used by Late Mesolithic hunter-gatherers from the Scheldt basin. As a matter of fact, there is still no certainty about the origin of Limburg ceramics within the RMS area (for a recent overview see Crombé 2010c). However, most scholars assume that it belongs to hunter-gatherer groups who achieved the pottery knowledge from their neighbours-farmers through contact or after assimilation within the LBK societies (versus Constantin/Ilett/Burnez-Lanotte 2010). Unfortunately, the lack of secure contexts yielding exclusively Limburg ceramics, eventually associated with a Late Mesolithic trapeze dominated lithic industry, does not allow a test of this hypothesis. Even the site of Bazel, due to its problematic taphonomy, cannot contribute to this long-standing debate. Nevertheless, it should be noted that during the last decade an increasing number of find-spots yielding bone tempered, albeit mostly small undiagnostic pottery finds in the Scheldt floodplain has been reported (e. g. at Kerkhove, Kalken, Wichelen, Melsele [all prov. Oost-Vlaanderen/B], etc.), lending more support to the hypothesis of a local indigenous production. Future sourcing studies, using LA-ICP-MS chemical analysis, will allow us to verify this in more depth. In addition, transmission of knowledge from one group to another has previously also been attested within the lithic technology, in particular of armature production. Detailed interregional studies (Löhr 1994; Robinson/Sergant/Crombé 2013) have demonstrated that LBK asymmetrical triangular armatures are partially rooted in Late Mesolithic trapezes, testifying contact and exchange from the indigenous hunter-gatherers towards the first farmers. The publication of Robinson et al. (2013) also highlighted that the Scheldt valley probably had a much stronger (privileged?) connection with LBK farmer communities compared to other regions within the coversand lowlands, such as the Campine.

Independent of which of the three above hypotheses (or a combination of two of them) is right, the presence of Early Neolithic pottery at Bazel makes it most likely that some kind of early farmer-forager contact took place. However, the impact of it on the daily life of the indigenous people of the Lower Scheldt area must have been limited, since even long after the LBK/BQY local groups continued to live according to a broad spectrum economy similar to that of their ancestors. In accordance with the bone dates from Bazel and other palaeoecological evidence (Deforce et al. 2013), economic changes probably did not occur before the mid of the 5th millennium cal BC (see below).

The pottery fragments of possible Rössen and Epi-Rössen tradition discovered at Bazel are important as they constitute the very first evidence of these cultures in the Lower Scheldt basin and are by far the most northwestern finds of these traditions in the RMS area (**fig. 13**). More importantly, they demonstrate that long-distance contact with contemporaneous hunter-gatherer groups continued after the LBK/BQY but clearly did not involve the massive exchange of *Breitkeile* as was the case in the Rhine/Meuse valley. However, it is obvious that the impact of these contacts, which must have taken place at least from c. 4500 cal BC, must have been much more far-reaching than before, as it is precisely in this stage that pottery technology emerged within the indigenous communities of the Lower Scheldt basin. The appearance of Swifterbant point bottomed pottery is now well dated to c. 4550 cal BC (Crombé 2010b; Crombé/Boudin/Van Strydonck 2008; Boudin/Van Strydonck/Crombé 2009). Based on similarities in pot profiles (S-shaped) and particular decoration elements, such as the frequent occurrence of *Randkerbung* and unperforated knobs, it has been claimed that the technology was adopted from the contemporaneous Rössen traditions of the loess region (Crombé 2010c). Some elements even possess a certain reminiscence to pottery from the Blicquy and Grossgartach cultures. Contact with Epi-Rössen groups of the loess was also responsible for the introduction of the first domesticated animals in the lowlands of the Scheldt basin. The bone dates from

Bazel prove the uptake of domesticated cattle, pig and goat/sheep at least from c. 4300 cal BC (Crombé et al. 2015) although an earlier introduction is most likely[2]. In a recent paper (Deforce et al. 2013) it is suggested that the frequent occurrence of carbonised remains of evergreen plants, such as of ivy seeds (*Hedera* helix) and mistletoe charcoal (*Viscum* album), on the nearby Swifterbant sites of Doel most likely indicates the use of winter leaf fodder for cattle already from the mid of the 5th millennium cal BC.

Once again it is striking to observe that »foreign« Neolithic potsherds are confined to places situated on the dry banks of the Scheldt river. No (Epi-)Rössen pottery has been found on the extensively excavated Swifterbant sites of Doel »Deurganckdok« located slightly further away from the Scheldt in a former flooded environment. This indicates that forager-farmer contact was still restricted to a small stretch along the river, and did not reach further inland. Alternatively, places like Bazel can be interpreted as some kind of base camps while those situated more inland represent special activity sites occupied by task groups, e. g. cattle camps combined with subsistence activities hunting, fishing and gathering (Crombé et al. 2015). Palaeoecological data (Deforce et al. 2013; Deforce/Bastiaens/Crombé 2014; Van Neer et al. 2013) indeed strongly points to (late) winter and (early) spring occupations at the latter.

Despite the complete absence of decoration, the presence of Michelsberg/Spiere group pottery at Bazel is firmly attested by the occurrence of flint/quartz tempered pottery and a few pot profiles. Comparable ceramics have been excavated at the nearby sites of Doel »Deurganckdok« sector C (Crombé/Sergant/Perdaen 2009) in close association with a lithic industry of clearly Neolithic signature, including leaf-shaped and transversal arrowheads, fragments of polished axes and long blades in mined flint. Similar lithics have also been collected at Bazel. Based on a few radiocarbon dates from different sites the appearance of this completely new material culture can be situated around or shortly after c. 4000 cal BC (Crombé/Sergant 2008). Either it is linked to an expansion of Michelberg farmers from the southern loess region along the Upper Scheldt river or it indicates a further acculturation of indigenous people through increased interaction and exchange with southern farmers. Despite the scant evidence, the latter hypothesis seems the most likely one, given the clear continuity within some artefact categories e. g. the T-shaped antler mattocks and to a certain degree also the armatures (Crombé/Sergant 2008; Crombé 2010a). Simultaneously with this cultural change the first cereals appeared within the Lower Scheldt basin. At Bazel a grain from wheat (*Triticum* cf. *aestivum*) and one from emmer (*Triticum* cf. *dicoccum*) were radiocarbon dated to respectively 4900 ± 40 BP or 3768-3638 cal BC (Bèta 27611) and 5070 ± 40 BP or 3943-3695 cal BC (Bèta 276210) (Perdaen et al. 2011). Whether this points to local agriculture or import of cereals from the loess region or the coversand interior remains at present difficult to assess. However, from the distribution of Michelsberg sites it can be deduced that exploitation expanded from the floodplain areas towards the dry interior, making the hypothesis of local/regional agriculture likely.

CONCLUSIONS

The salvage excavation of the wetland site of Bazel-Kruibeke yielded the first firm evidence of farmer-forager contact in the Scheldt valley already from the late LBK. From then on contact most likely gradually increased leading to a piecemeal introduction of Neolithic commodities and knowledge. Around the middle of the 5th millennium cal BC the technique of pottery production and very likely also stock-breeding were adopted from contemporaneous farmer communities in the loess belonging to the (Epi-)Rössen tradition. At the transition from the 5th to the 4th millennium cal BC exchange with the Michelberg/Spiere group culture led to an almost complete acculturation of these local groups probably also involving the introduction of agriculture in the Lower Scheldt basin.

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Notes

1) This outlier date, however, is not consistent with the stratigraphic position of the dated bone fragment. In order to check this out, a second sample has recently been submitted for radiocarbon dating.

2) One bone fragment of a possible domesticated pig (determination A. Ervynck) was dated to c. 4700 cal BC. However, further analyses are in progress in order to confirm the domesticated character of this find.

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Zusammenfassung / Summary / Résumé

Neolithische Keramikfunde von der Feuchtbodenfundstelle Bazel-Kruibeke (prov. Oost-Vlaanderen/B). Zum Nachweis von Fernkontakten zwischen Jägern/Sammlern und Ackerbauern im späten 6. und 5. Jahrtausend v. Chr. im Rhein-Maas-Delta

Rettungsgrabungen auf der Feuchtbodenfundstelle Bazel-Kruibeke erbrachten den ersten sicheren Nachweis von Kontakten zwischen Jägern/Sammlern und Ackerbauern bereits für die späte Bandkeramik. Von diesem Zeitpunkt an verstärkten sich wohl die Kontakte schrittweise und führten zu einer graduellen Einführung neolithischer Waren und Fertigkeiten. Um die Mitte des 5. Jahrtausends cal BC wurden von zeitgleichen Ackerbau betreibenden Gemeinschaften (Epi-)Rössener Tradition aus den Lößgebieten die Technik der Keramikherstellung und die Viehzucht adaptiert. An der Wende vom 5. zum 4. Jahrtausend cal BC hatte der Austausch mit der Michelsberg-/Spiere-Gruppe die fast komplette Akkulturation dieser lokalen Gemeinschaften zur Folge, die wohl gleichbedeutend mit der Einführung der Landwirtschaft im Unteren Schelde-Gebiet war.

Neolithic Pottery Finds at the Wetland Site of Bazel-Kruibeke (prov. Oost-Vlaanderen/B). Evidence of Long-Distance Forager-Farmer Contact during the Late 6th and 5th Millennium Cal BC in the Rhine-Meuse-Scheldt Area

The salvage excavation of the wetland site of Bazel-Kruibeke yielded the first firm evidence of forager-farmer contact in the Scheldt valley already from the late LBK onwards. From then on contact most likely gradually increased leading to a piecemeal introduction of Neolithic commodities and knowledge. Around the middle of the 5th millennium cal BC the technique of pottery production and very likely also stock-breeding were adopted from contemporaneous farmer communities in the loess belonging to the (Epi-)Rössen tradition. At the transition from the 5th to the 4th millennium cal BC exchange with the Michelsberg/Spiere group culture led to an almost complete acculturation of these local communities probably also involving the introduction of agriculture in the Lower Scheldt basin.

Découvertes de céramiques néolithiques en provenance du site humide de Bazel-Kruibeke (prov. Oost-Vlaanderen/B). De la demonstration de contacts entre chasseurs/cueilleurs et agriculteurs à la fin du 6e et au 5e millénaire dans le delta du Rhin et de la Meuse

Les fouilles préventives menées sur le site humide de Bazel-Kruibeke ont permis de mettre en évidence les premiers contacts attestés entre chasseurs/cueilleurs et agriculteurs dès la fin du rubané. A partir de ce moment, les contacts se développent, amenant à une introduction progressive d'objets et de savoirs-faire néolithiques. Vers le milieu du 5e millénaire av. J.-C., des sociétés contemporaines d'agriculteurs de tradition (épi-)Rössiennes travaillant les loess utilisent les techniques de la céramique et de l'élevage. Lors de la transition entre le 5e et le 4e millénaire av. J.-C., les échanges avec le groupe du Michelsberg/Spiere conduisent à une acculturation quasiment complète de ces sociétés locales, qui sous-entend probablement aussi l'introduction de l'agriculture dans le bassin de la basse Escaut. Traduction: L. Bernard

Schlüsselwörter / Keywords / Mots clés

Belgien / Neolithikum / Neolithisierung / Rhein-Maas-Delta / Keramiktraditionen
Belgium / Neolithic / neolithisation / Rhine-Meuse-Scheldt area / pottery traditions
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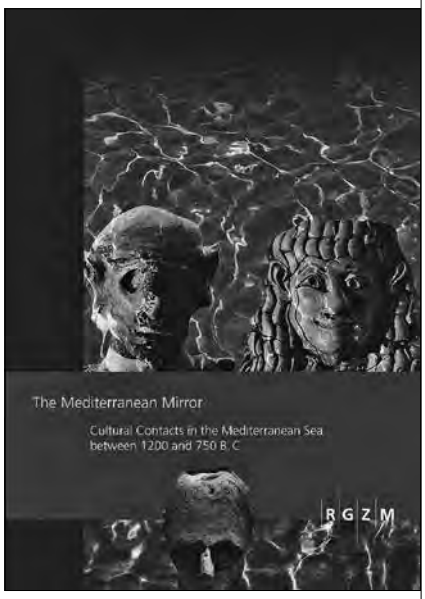

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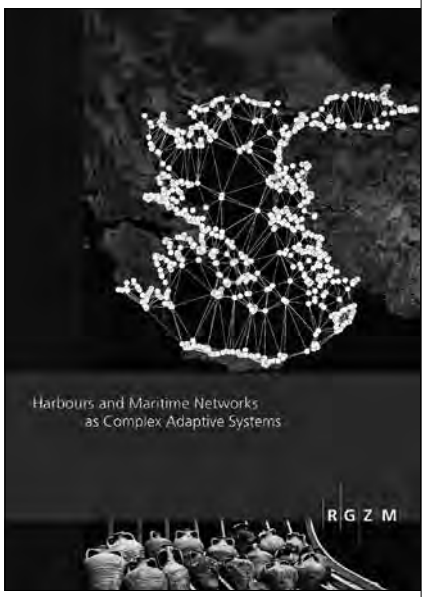

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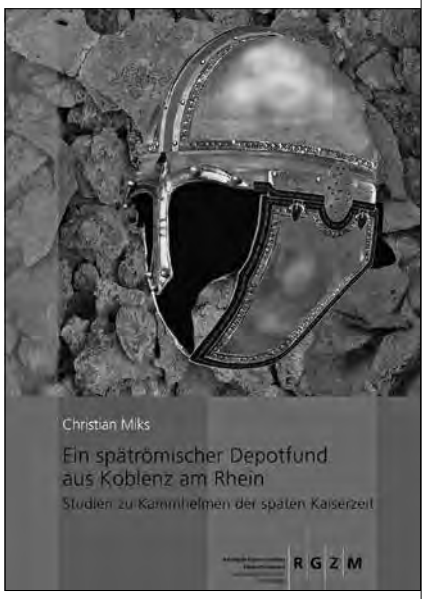

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Das römerzeitliche Gräberfeld Halbturn I gehörte damals zum westlichen Teil Pannoniens; die antike Großstadt Carnuntum befand sich etwa 30 km entfernt. Das Gräberfeld wurde vollständig untersucht, was für diese Region eine Besonderheit darstellt. Das Fundmaterial belegt eine Variabilität des Grabbrauchs, erkennbar an der Positionierung der Bestattungen und der Bestatteten sowie dem unterschiedlichen Aufwand, der in die Gräber investiert wurde. Diese Merkmale hängen einerseits von der jeweiligen zeitlichen Epoche (2.-5. Jh.) ab, andererseits von der persönlichen Stellung der Verstorbenen. Außergewöhnlich sind vor allem die zahlreichen Säuglings- und Kindergräber. Neben der archäologisch-typologischen Auswertung bietet die Monographie wichtige Einblicke in das damalige Leben: So ist beispielsweise ein Kindesamulett das bislang älteste Zeugnis jüdischen Glaubens in Österreich. Ernährungsweise, Krankheiten und Verletzungen werden ebenfalls ausführlich dargestellt, daneben stehen Überlegungen zu Tierzucht und -haltung, Kultur- und Wildpflanzen, Steinmonumenten usw. Auch bietet die Fundstelle, die im Vorfeld durch Luftbildarchäologie, geophysikalische Prospektion und systematische Feldbegehungen erfasst wurde, zahlreiche weitere Erkenntnisse über die zugehörigen landwirtschaftlichen Betriebe.

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NEUERSCHEINUNGEN

RGZM – Tagungen, Band 19
335 S., 98 meist farb. Abb., 2 Tab.
ISBN 978-3-88467-228-0
€ 50,–

Stefan Albrecht · Christine A. Kleinjung (Hrsg.)

Das lange 10. Jahrhundert – struktureller Wandel zwischen Zentralisierung und Fragmentierung, äußerem Druck und innerer Krise

Die Beiträge aus Archäologie und Geschichtswissenschaft beschäftigen sich mit der Frage, welche Wirkung äußerer Druck in dezentralen politischen Gebilden mit personalisierter Herrschaft, wie wir sie in den europäischen Reichen des 10. Jahrhunderts finden, entfalten konnte. Zu den wichtigsten Ergebnissen zählt, dass konkrete Auswirkungen der äußeren Bedrohungen kaum zu fassen sind, insbesondere die archäologischen Befunde ergeben kein eindeutiges Bild. Die traditionell angenommenen Kausalzusammenhänge zwischen äußeren Einfällen und Krisenphänomenen lassen sich offensichtlich ebenso wenig halten, wie die Annahme, dass die Ungarneinfälle nachhaltig in die bestehenden Strukturen eingegriffen hätten.

Mosaiksteine – Forschungen am RGZM, Band 11
140 S., 133 meist farb. Abb.
2. Aufl. **ISBN 978-3-88467-241-9**
€ 18,–

Peter Ettel · Falko Daim · Stefanie Berg-Hobohm · Lukas Werther
Christoph Zielhofer (Hrsg.)

Großbaustelle 793

Das Kanalprojekt Karls des Großen zwischen Rhein und Donau

Bereits mehr als 1000 Jahre vor der Erbauung des Ludwig-Donau-Main-Kanals ließ Karl der Große einen Kanal errichten, um die Flusssysteme von Rhein und Donau miteinander zu verbinden. Seine Vision, die Europäische Hauptwasserscheide zu überwinden, zeigt sich noch heute an den weithin sichtbaren Überresten. Das Bauvorhaben zählt zu den bedeutendsten wasserbaulichen Großprojekten des frühen Mittelalters. Bis heute ist umstritten, ob das Großbauprojekt tatsächlich vollendet wurde. Zeitgenössischen Schriftquellen zufolge veranlasste Karl der Große im Jahr 793 zwischen Altmühl und Rezat den Bau des Kanals, der einen durchgehenden Schifffahrtsweg ermöglichen sollte. Das Baudatum konnte nun durch dendrochronologische Untersuchungen bestätigt werden. Über 10 Meter hoch erhaltene Aushubwälle beiderseits des Grabens zeugen noch heute von dem großen Vorhaben. Die Wahl des Bauplatzes zeigt, wie vorausschauend die frühmittelalterlichen Ingenieure planten. Seit 2012 untersucht eine Forschergruppe das außergewöhnliche Bauwerk. Der Begleitband zur gleichnamigen Ausstellung bietet nach eineinhalb Jahren intensiver Forschung einen Überblick über laufende Arbeiten und neueste Ergebnisse. Über 25 Einzelbeiträge präsentieren verschiedene Facetten des Bauwerkes und beleuchten zugleich unterschiedliche Perspektiven, Fragestellungen und Methoden der Forschenden.

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NEUERSCHEINUNGEN

Byzanz zwischen Orient
und Okzident, Band 1
179 S., 118 meist farb. Abb
ISBN 978-3-88467-235-8
€ 45,–

Neslihan Asutay-Effenberger · Falko Daim (Hrsg.)

Der Doppeladler

Byzanz und die Seldschuken in Anatolien vom späten 11. bis zum 13. Jahrhundert

Nach der für die Byzantiner vernichtenden Schlacht bei Manzikert 1071 entstand in Anatolien das Reich der Rum-Seldschuken. Bis zu seiner Auflösung Anfang des 14. Jahrhunderts war es der wichtigste Nachbar der Byzantiner an deren Ostgrenze.
Das Reich vereinte Seldschuken und griechisch-orthodoxe Einwohner. Es stand schon daher in einem intensiven Kontakt mit Byzanz, der sich vor allem im Handel manifestierte, aber auch im Austausch von Kunstschaffenden und in Eheschließungen. Diese sozialen und politischen Beziehungen sowie die durch ethnische und religiöse Toleranz geprägte Koexistenz der verschiedenen Völkerschaften innerhalb des Seldschukenreiches waren Grundlage für große Kunst. Gleichwohl wissen wir heute nur wenig über die Rum-Seldschuken und ihr Interagieren mit den Byzantinern, sodass bisweilen der Eindruck vorherrscht, es habe kaum einen kulturellen Austausch gegeben.
Um diese Vorstellung zu revidieren und eine Diskussion über die Probleme der byzantinisch-seldschukischen Beziehungen zu eröffnen, fand eine interdisziplinäre Tagung statt, deren Ergebnisse dieser Band vorlegt.

Monographien des RGZM, Band 106
318 S., 168 meist farb. Abb.
ISBN 978-3-88467-202-0
€ 75,–

Neslihan Asutay-Effenberger · Falko Daim (Hrsg.)

ΦΙΛΟΠΑΤΙΟΝ

Spaziergang im kaiserlichen Garten

Beiträge zu Byzanz und seinen Nachbarn
Festschrift für Arne Effenberger zum 70. Geburtstag

Das Philopation war eine zum Vergnügen der Kaiser bestimmte Garten- und Jagdanlage außerhalb Konstantinopels. Ihm entsprach vor den Mauern von Konya ein ähnlicher Ort mit Namen »Filubad«, an dem die Sultane Zerstreuung suchten.
Unter dem Namen Philopation wurde Arne Effenberger, dem ehemaligen Direktor des Museums für Byzantinische Kunst (Bode-Museum), zu seinem 70. Geburtstag eine Festschrift gewidmet. Die hierin enthaltenen Beiträge erzählen von der großen Strahlkraft des oströmischen Imperiums und spiegeln zugleich wenigstens einen Teil der lange gehegten und weitläufigen Forschungsfelder des Jubilars wider, die sich von Byzanz bis Ägypten, von der Spätantike bis zur Neuzeit, von Venedig bis Konya erstrecken, wobei ihm Konstantinopel/İstanbul stets besonders am Herzen liegt.

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Neuerscheinungen

Monographien des RGZM

S. Greiff, R. Schiavone, Z. Jianlin, H. Gailing u. Y. Junchang (eds)
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Band 117 (2014); 404 S., 412 meist farb. Abb., 25 Taf.
(Englischsprachige Fassung des 2013 erschienenen Bandes 111 der Monographien des RGZM, Das Grab der Li Chui. Interdisziplinäre Detailstudien zu einem Tang-zeitlichen Fundkomplex)
ISBN 978-3-88467-221-1 **75,– €**

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Band 122, 1-4 (2014); 4 Bde. mit zus. 1586 S., 317 meist farb. Abb., 19 Taf. im Text, 810 Taf.
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RGZM – Tagungen

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Band 11 (2014); 140 S., 133 meist farb. Abb.
ISBN 978-3-88467-241-9 **18,– €**

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S. Filip u. A. Hilgner (Hrsg.)
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