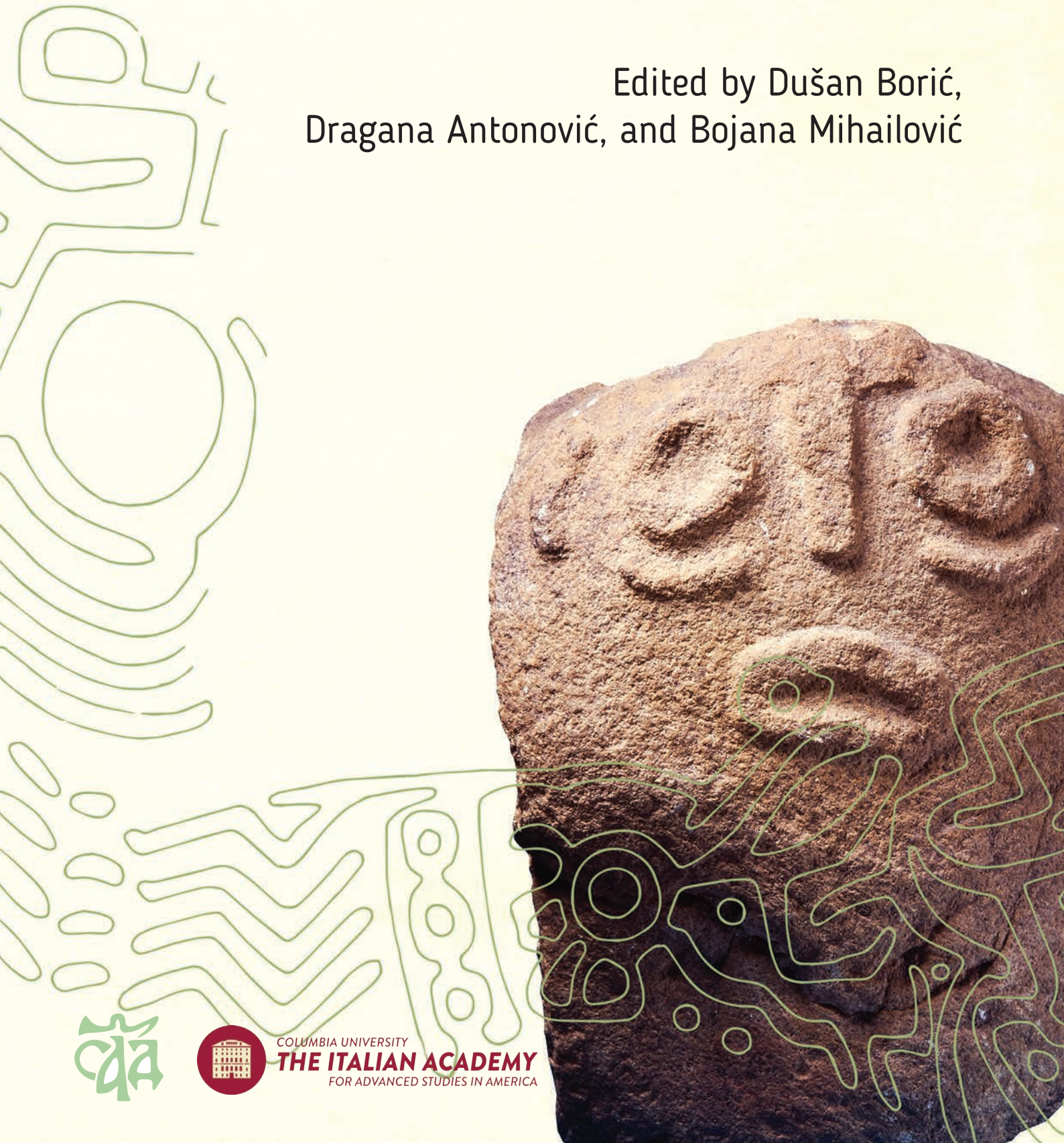


Foraging Assemblages

Volume **2**

Edited by Dušan Borić,
Dragana Antonović, and Bojana Mihailović



COLUMBIA UNIVERSITY
THE ITALIAN ACADEMY
FOR ADVANCED STUDIES IN AMERICA

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Serbian Archaeological Society
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113. Forager-farmer contacts in the Scheldt Basin (Flanders, Belgium) in the late sixth-early fifth millennia BC: Evidence from the site of Bazel-Sluis

Erwin Meylemans, Yves Perdaen, Joris Sergant, Jan Bastiaens, Koen Deforce, Anton Ervynck, and Philippe Crombé

Excavations in the riverine wetlands of the Scheldt Valley near the city of Antwerp (Flanders, Belgium) revealed a site with occupation phases ranging from the Middle Mesolithic to the Middle Neolithic periods. An important occupation phase, indicated by both cultural remains and radiocarbon measurements, is dated to the Late/Final Mesolithic. During this phase the site displayed foremost a clear Mesolithic hunter-gatherer 'package', associated with faunal remains of hunted game. However, several elements, including pottery and a number of cereal grains, indicate contacts with farmer communities from the loess region.

Introduction

The site of 'Bazel-Sluis' is situated in a broad part of the alluvial plain of the Lower Scheldt River, c. 16 km south of the city of Antwerp (Fig. 113.1). The site was discovered during the construction of a lock, which destroyed part of the site. Subsequently, in 2011, excavations were carried out in two areas to the south and north of the lock (Meylemans *et al.* 2016; Perdaen *et al.* 2011b).

The excavation areas were situated on the top of a sandy levee (point bar ridge), flanking a fossil channel of the Late Glacial/Early Holocene Scheldt River system (Bogemans *et al.* 2012). Because of the cover of peat and alluvial sediments preservation conditions were very good. Palaeo-ecological analyses indicate the presence of a rich mixed deciduous forest on the top of the levee, and marshy conditions with an extended alder carr forest in the lower parts of the landscape (Deforce *et al.* 2014).

A programme of radiocarbon dating (on bone, antler, and charred plant macrofossils) and the characteristics of the cultural remains indicate several occupation phases at the site, ranging from the Middle Mesolithic to the Middle Neolithic periods (according to the radiocarbon data from c. 7500 to 3600 cal BC). Within this timeframe, several peaks in the radiocarbon dating results, as well as the occurrence of certain lithics and ceramics, demonstrate several occupation events during the Late and Final Mesolithic (Meylemans *et al.* 2016).

The Late/Final Mesolithic occupation phases

The lithics pointing towards the Late and Final Mesolithic include a large number of trapeze-shaped armatures, as well as regular blade(let)s, and the use of Wommersom

quartzite. Based on the technological characteristics, the bulk of this lithic toolkit can most probably be assigned to the first part of the fifth millennium cal BC, contemporaneous with the early Swifterbant culture group from the Dutch Delta (Meylemans *et al.* 2016). Several radiocarbon-dated bone and antler tools can also be assigned to these occupation phases. Provenance of raw materials used for the lithic artefacts has up to now only been based on a macroscopic examination. It indicates the use of high quality, fine-grained flints in the case of both Hesbaye type flints and flints probably originating from the upper Scheldt and Dender regions, c. 40–60 km to the south and southeast, as well as lower quality flint from more local sources.

In general, the preservation of the ceramics is poor, being extremely fragmented. In total, 3366 pottery fragments were counted and described in a database. This pottery can be divided in three groups based on their main tempering, consisting of crushed and calcined bone (c. 3 percent), grog and plant material (c. 61 percent), or burnt and crushed flint (c. 32 percent). Based on the combination of temper and decorative characteristics, a number of sherds can be linked to specific periods and/or cultures (Crombé *et al.* 2014).

It is tempting to attribute a small amount of bone tempered pottery to Early Neolithic groups, such as the Groupe de Blicquy, La Hoguette, or Limburg. Two decorated sherds with bone temper clearly present affinities with decoration found on Limburg pottery, characterized mainly by strokes filled with parallel, crossed, or oblique grooves, eventually bordered by impressions. Among

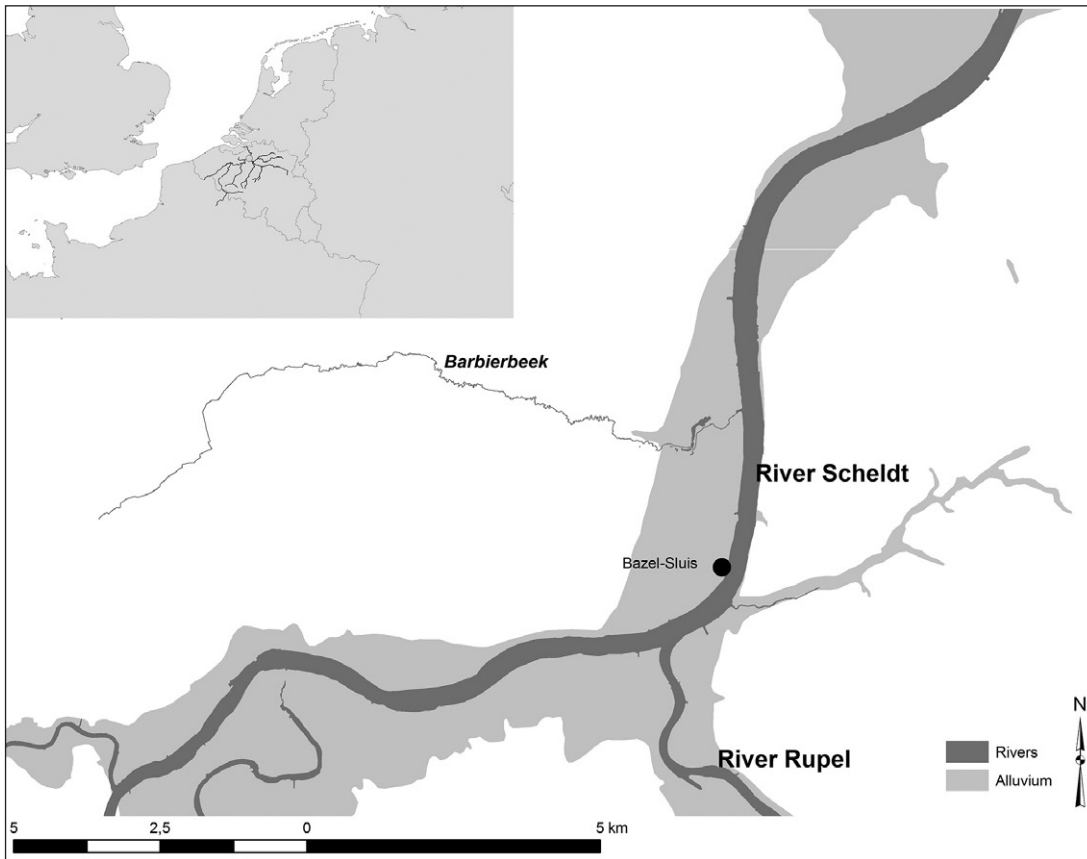


Fig. 113.1. Location of the site of Bazel-Sluis.

the grog/plant tempered pottery a number of sherds also clearly demonstrate affinities with Limburg pottery. A small number of potsherds within this technical group also present clear affinities with late Linear Bandkeramik (LBK) pottery. These are a number of sherds with impressions organized in horizontal bands, with impressions mostly parallel, sometimes transversal or obliquely to the bands. The bulk of the other plant or grog tempered pottery is harder to pinpoint in terms of chronological or cultural attribution. For example, decoration consists of unperforated knobs, *randkerbung*, and fingertip and fingernail impressions, features that are common in several final Mesolithic and Neolithic pottery groups, for example LBK, Swifterbant, Rössen or Epi-Rössen, and Michelsberg. Among the thin-walled, high-quality sherds some decorative elements refer to the western Bischheim tradition, for example the *boutons repoussés* and applied pastilles, and the use of the bi-dented spatula. Also, the application of the *pointillé sillonné* technique, as attested on several potsherds, is typical for the Bischheim.

The radiocarbon dating of charred plant remains included 21 grains of domesticated cereals. These dates cluster in three phases, in accordance with the observed cultural remains and the dates on bone and antler. Important

is a distinct cluster of dates between *c.* 4800 and 4550 cal BC, represented by seven grains. As such, these are by far the oldest cereal grains associated with the Final Mesolithic of the coversand area of north-western Europe (Meylemans *et al.* 2016, 2018).

The animal remains radiocarbon-dated to the first half of the fifth millennium cal BC are all from wild animals, such as red deer, aurochs, and wild boar. The first, clearly domesticated animals (sheep) arrived at the site *c.* 4100 cal BC (KIA47410: 5320±45 BP; KIA47425: 5330±45 BP).

Based on the material evidence and their spatial distribution in several clusters (hearths/knapping locations), the site of Bazel-Sluis must probably be interpreted as a base camp within the Late/Final Mesolithic settlement system (Crombé *et al.* 2015b).

A regional perspective on forager-farmer interactions

The basin of the Scheldt River comprises several tributary valleys originating in the south and southwest, and descending from the loess region at *c.* 40 km south of Bazel-Sluis. In this part of the loess region several settlement clusters of the LBK appear *c.* 5300 cal BC and disappear *c.* 4800 cal BC (Fig. 113.2). The Linear Bandkeramik culture



Fig. 113.2. Location of the site of Bazel-Sluis in relation to the locations of known LBK settlement clusters and the distribution of Limburg pottery.

is succeeded by the Rössen/Cerny cultures, of which, however, there are no known settlements in this part of the loess region. The Middle Neolithic Michelsberg cultural group appears in the loess region and in the Scheldt Valley around c. 4300 cal BC (Vanmontfort 2004).

Evidence of forager-farmer contacts during the LBK in the region is scarce. In the first place, the area provides only few sites that on the basis of radiocarbon dating can be ascribed to this period. Early Neolithic pottery is equally scarce outside the loess area (Amkreutz *et al.* 2010). In our study region this is confined to LBK and Blicquy pottery, mainly at the sites found in the Scheldt Valley, *i.e.* Kerkhove (Crombé 1985), Oudenaarde Donk (Parent *et al.* 1987), two possible sites in the area of the Kalkense Meersen (Bats and De Reu 2006; Perdaen *et al.* 2011a), and the site of Melsele-Hof Ten Damme (Van Berg *et al.* 1992). The distribution of another LBK-‘indicator’, the presence of LBK points, is largely limited to an area of c. 30 km adjoining the LBK settlement territories, mainly in the Meuse Valley. Based on the more widespread occurrence of Rössener *Breitkeile*, it seems that during the

period after the LBK, forager-farmer contacts tended to intensify (Verhart 2013). It is interesting to note that two of these finds have formerly been found just a few kilometres upstream from the site of Bazel (De Laet 1982).

Discussion and conclusions

Despite the palimpsest situation at the site of Bazel, clear evidence of a late-sixth/early-fifth-millennium cal BC occupation has been recovered in the Scheldt Valley for the first time. Part of this occupation is contemporaneous with the late LBK and the subsequent Rössen/Cerny culture of the adjacent loess region. The evidence at the site points towards a ‘Late/Final Mesolithic’ evolved hunter-gatherer package, in which a small number of distinguishable Early Neolithic elements appeared, among which are exotic/foreign pottery and grains of domesticated cereals. These were probably obtained through contact with adjacent farming communities either during migration events of the local hunter-gatherers, the common exploitation and exchange of raw material resources from outcrops in the loess region, or as a result of transhumance activities of

Neolithic herders downstream the Scheldt into the indigenous territory (Crombé *et al.* 2015a).

Similar 'contact finds' have been reported from other Final Mesolithic sites in the Scheldt Valley and the broader region but in all cases they remain restricted to just a few finds, indicating that contact during this stage probably was not of an intensive nature and/or did not entail major changes. This conclusion was also reached by Vanmontfort (2008) by evaluating the scarce presence of Late Mesolithic armatures in farmer settlements from the loess area. However, the appearance of cereal grains at Bazel suggests that contacts between these hunter-gatherers and farmer communities went beyond the acquiring of exotic materials and were somehow interlaced with economic interests and subsistence strategies.

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Volume 1

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- Landscapes
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Volume 2

- People in Their Environment
- Technology
- Social Relations, Communication, Mobility
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