

## **Waremmе-Longchamps, A Fortified LBK Site : Preliminary Report**

by

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### **SITE LOCATION**

Waremmе-Longchamps, in the drainage of the Upper Geer and its tributary, the Faux Geer, is located at the foot of an east-facing slope which gradually descends towards the Geer and sits at 120 m elevation. The site's coordinates on the Lambert Grid are 154.3 North and 211.5 East. As most sites in this region, Waremmе-Longchamps is in close proximity to the river — only 100 meters from the Geer on its north bank.

Waremmе-Longchamps, number 24 in Gosselin's (1986) survey, is located at the northwestern limit of the Hesbayean LBK distribution. It is one of 45 sites which comprise the Upper Geer settlement cell and is situated on the cell's northern boundary (fig. 1). Approximately 3 kilometers to the east and west of the site, also on this boundary, are two recently-excavated fortified LBK sites, *Darion-Colia* (n° 21, Gosselin, 1986) and *Oleye-Al Zépe* (n° 26, Gosselin, 1986). There appear to be no ecological, pedological and/or hydrological reasons for this boundary.

### **EXCAVATION METHODS**

Longchamps was excavated during a brief field season which lasted from 19 August — 9 September, 1987. A surface collection of the field was made and consisted mostly of flint nodules, flakes and blades; a broken adze of phtanite was recovered as well.

The fields in which most LBK sites are located have been plowed for at least two millenia and the floors of the sites have been destroyed. The remains occurring within the plowzone are fragmentary and damaged by the plowing. Postmolds, daub pits, storage pits and rubbish pits, all extending below the plowzone, are well preserved along with their contents. Thus at Longchamps, the method employed was to strip away the plowzone mechanically. Once an area rich in cultural materials was located during the surface collection, long (40-100 m) décapage transects (2-6 m wide), positioned parallel to the average orientation of LBK houses (WNW-ESE) and running through these surface concentrations, were opened mechanically.

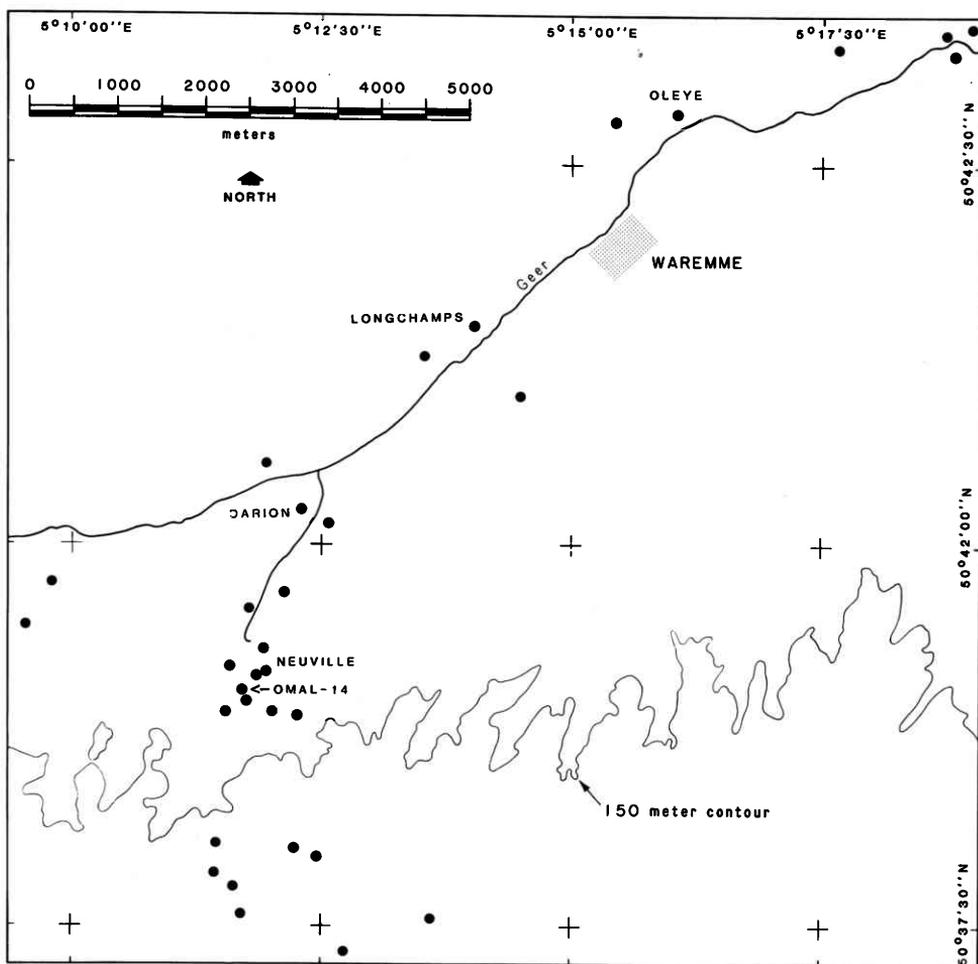


Figure 1 : LBK Sites in Upper Geer Drainage.

House I was located only 15 minutes after opening the Main transect. Previously excavated fortified LBK sites revealed that fortifications were most successfully discovered by searching 10-20 m east or west of houses. Using the same strategy, the fortification ditch at Longchamps was located approximately 15 m west of House 1 (fig. 2). After finding the house and ditch, the features were scribed, mapped and excavated.

Due to time limitations, we concentrated on excavating the house and ditch. The house and its daub pits were completely excavated. Sixteen meters of the ditch and palisade were exposed. Four transverse sections of the ditch were cut by hand. A shallow ditch of uncertain age was found at the north end of the field. Two sections of this ditch were excavated.

### **HOUSE AND PITS**

The small house is most similar to Type II in Modderman's typology (1970) (fig. 3). Its dimensions are : 16 m x 6.7 m (head), 7.7 m (foot). It is oriented 44 degrees west-northwest, east-southeast. There is a wall trench at the head of the house. It is Late LBK for the 'Y' or '7' -post pattern is not present and its plan is trapezoidal. The house is unburned and lies outside the ditch. A daub pit within the enclosure, however, indicates the position of another house.

The following daub pits contained dark fill and were rich in cultural remains : 87022, 87023, 87040 and 87041. No remains were recovered from pits 87065 and 87066 which had grey fill.

### **ENCLOSURE**

Just as at Darion (Cahen *et al.*, 1985) and Oleye, Longchamps has a defensive ditch. The V-shaped ditch is similar in form and fill stratigraphy to those at Darion and Oleye (fig. 4). Exclusively LBK materials were recovered to a considerable depth in its fill. And some very dark, charcoal rich layers suggest hearth cleanings were discarded there. The depth of the ditch from the present surface is 2.5 m ; 3-3.8 m is the width at the top of the preserved section. The palisade is indicated by postmolds situated approximately 1.5 m to the interior of the ditch. The chronological relationship of the enclosure to House 1 is unclear. Results from pollen analyses and C14 dating, currently in progress, should help clarify this matter.

### **CERAMICS**

One objective in the ceramic analysis is to determine the minimum number of vessels present in the assemblage so as to make intra- and inter- site comparisons. All totals presented here were determined from partially reconstructed vessels and rim sherds alone. Partial reconstructions and their associated sherds were counted at as

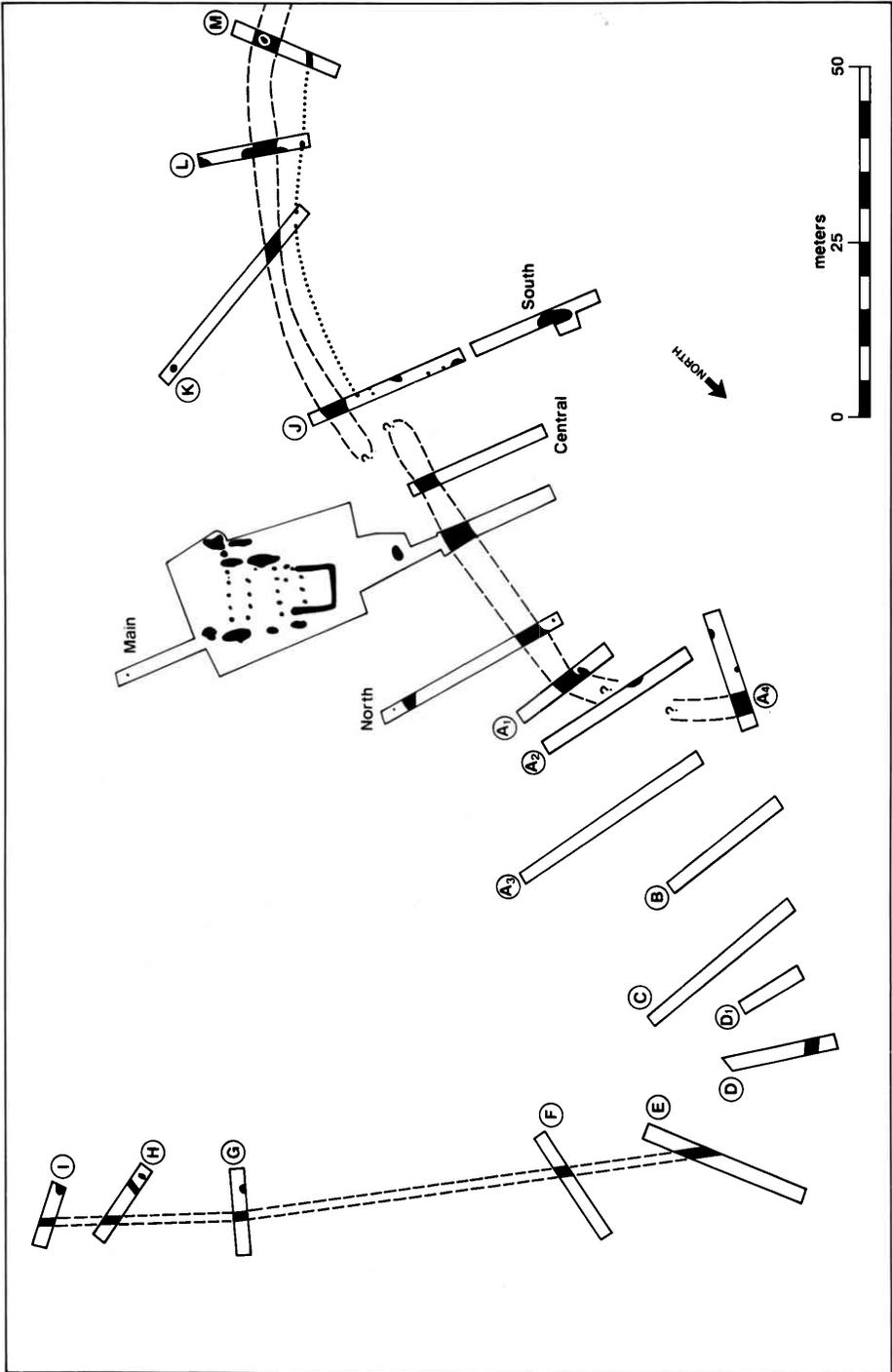


Figure 2 : Plan of Longchamps.

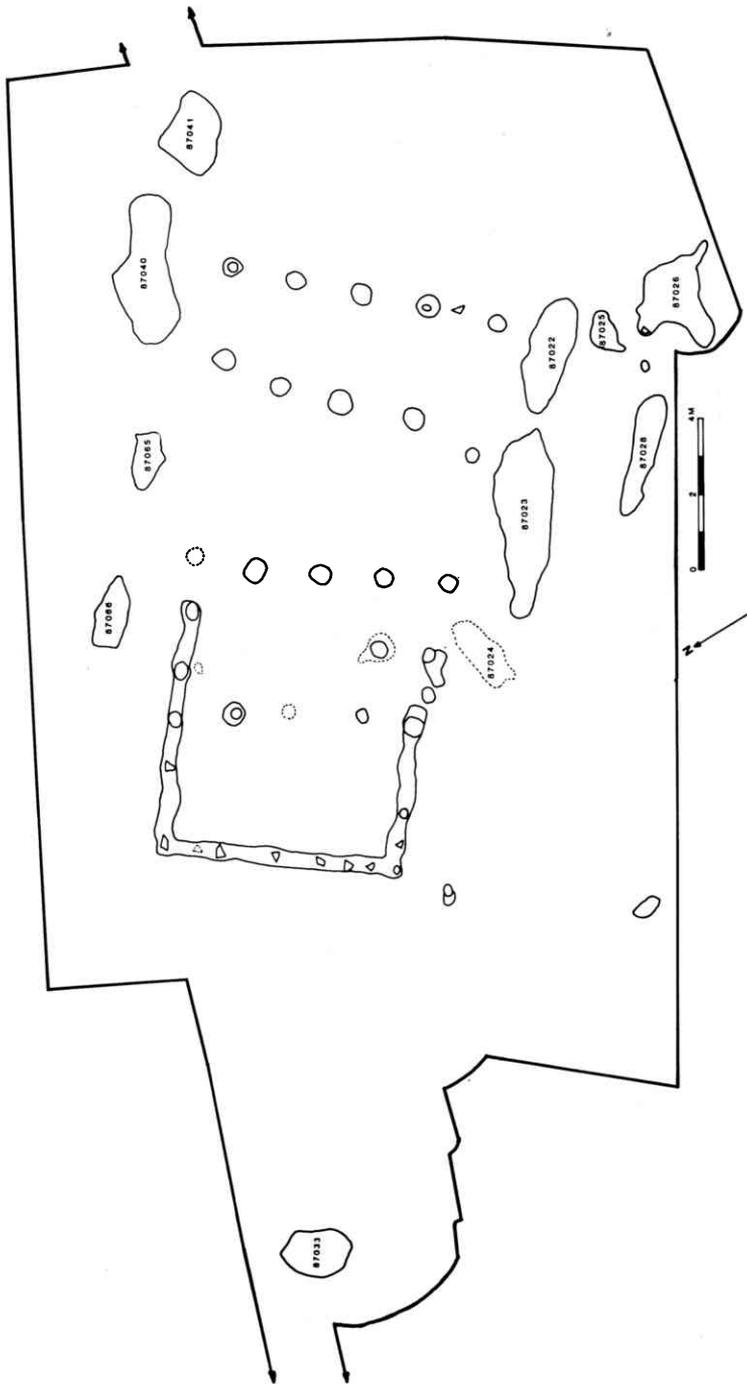


Figure 3 : House 1 and daub pits.

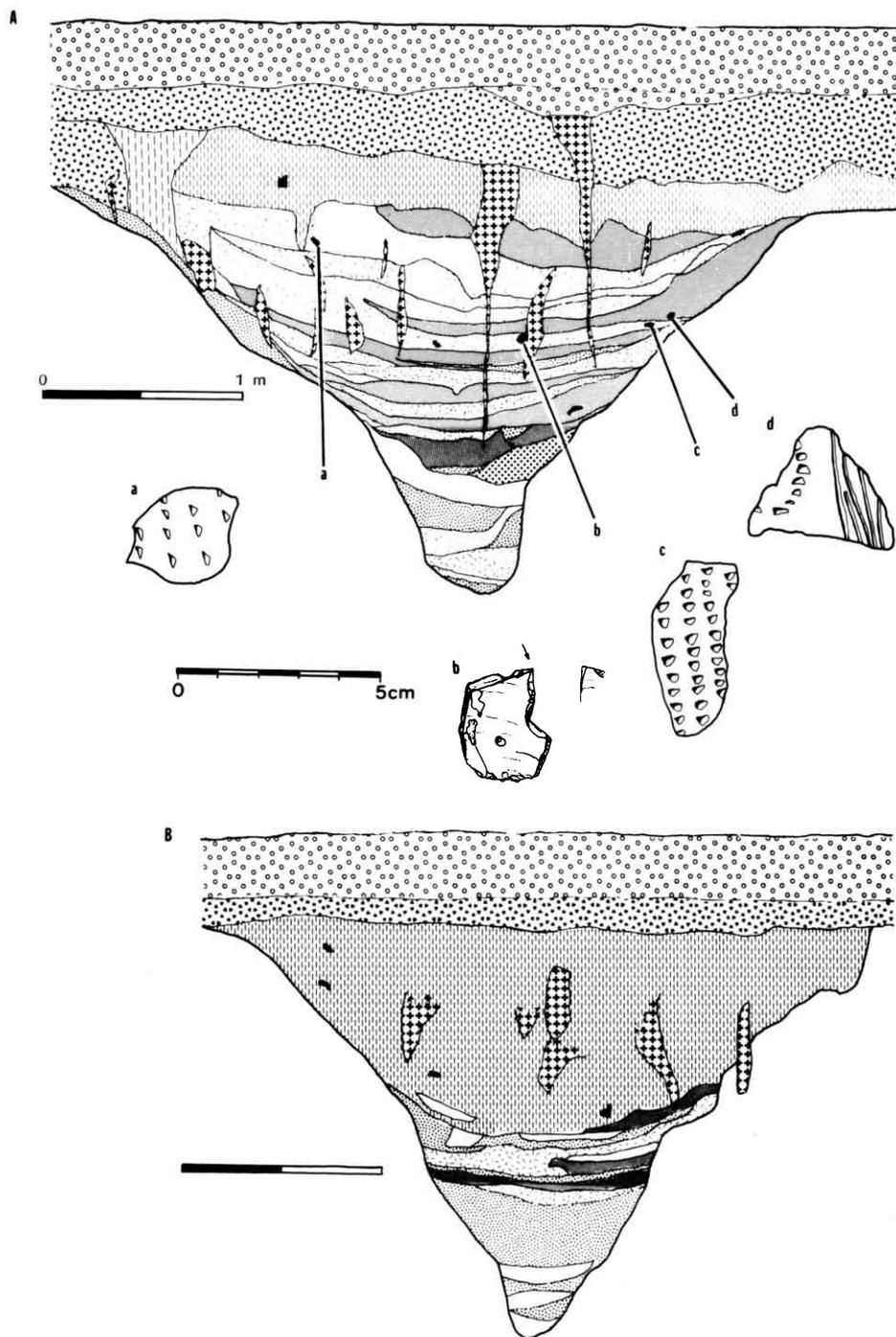


Figure 4 : A) Ditch section at Longchamps and LBK finds therein.  
 B) Ditch section at Oleye.

individual vessels. Rim sherds were grouped according to rim thickness, curvature and paste inclusions. Each rim group was counted as one vessel.

The estimate of coarseware vessels is probably less accurate than the estimate for fineware vessels. This results from having to rely only on color, visible paste inclusions, lip shape and rim angles of coarseware vessels. When counting fineware vessels there is an advantage in that each vessel has a unique decoration. Further, an estimate based only on reconstructed vessels and rim sherds is probably low because body sherds, not associated with a reconstructed vessel, may be present while their associated rim sherds may not be.

The majority of coarseware is buff, but some vessels are black either on the vessel exterior and/or interior. LBK coarseware typically contains organic temper which would result in a black vessel when fired in a reducing atmosphere. A quick visual survey revealed that paste inclusions are mostly flint and crushed pottery. It is not known whether coarse- and/or fineware was crushed for the temper. The shapes represented are hemispheres, spheres, piriformes, bottles and cups (table 1).

Table 1. — Minimum Number of Vessels (MNV)

	Coarseware	Fineware
<i>Reconstructed vessels :</i>		
Hemispheres	1	4
Spheres	10	3
Piriformes	—	3
Bottles	2	—
Cups	1	2
<i>Rim sherds :</i>		
Spheres/hemispheres	14	26
Unknown*	26-30	30-35
<i>Orifice diameter range (cm) :</i>	10-40	6-18
(*) Rim sherds are too small to allow accurate identifications.		

The majority of fineware is black and burnished. There are some poorly fired vessels (between 10-15) which are buff or grey. No burnishing remains on their sandy textured surfaces. This may mean that they are unoxidized. Such a quantity of poorly fired vessels is somewhat unusual as fineware is usually of better construction and firing than coarseware. Paste inclusions cannot be seen with the naked eye. Twelve partially reconstructed vessels are represented (figs. 5, 6, 7). The rim collection reveals that 60 more vessels are part of the fineware assemblage (table 1).

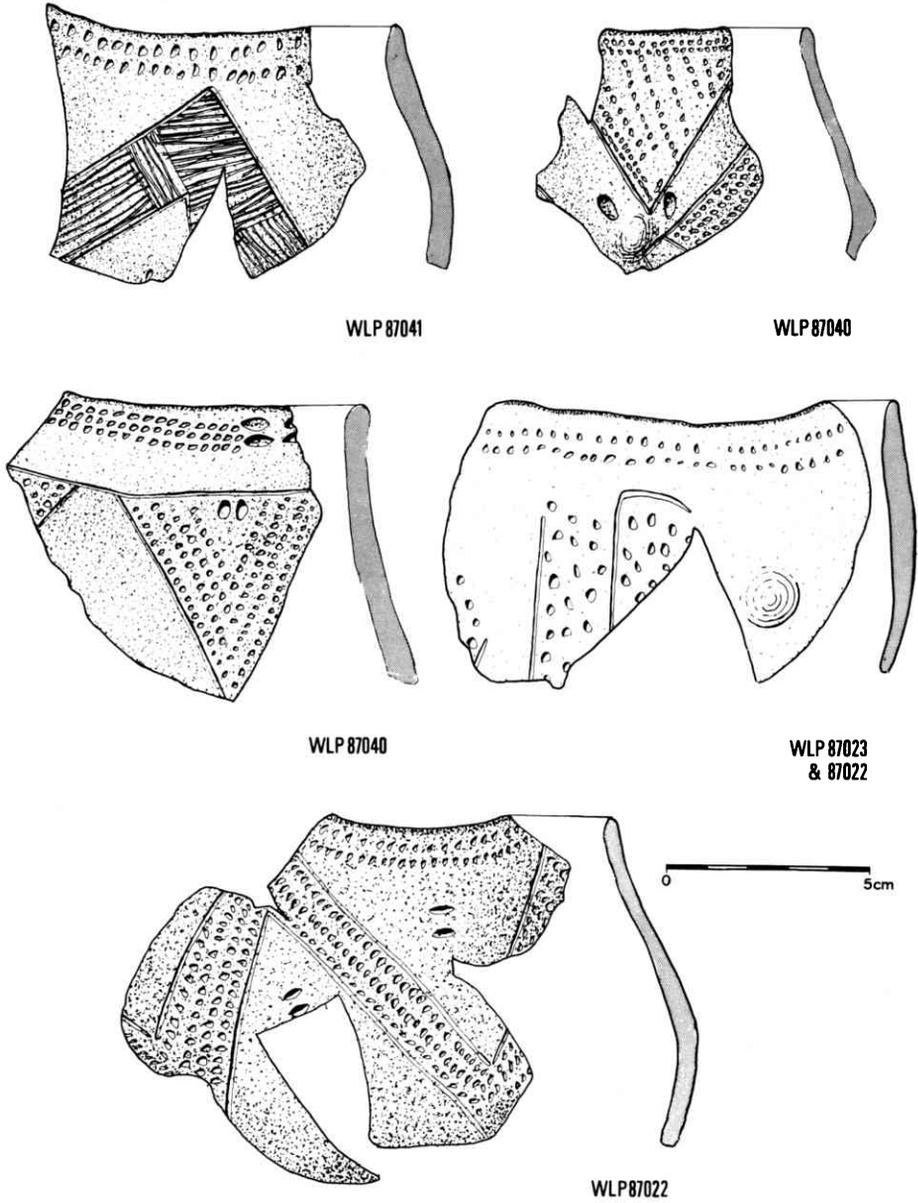


Figure 5 : Reconstructed LBK Fineware Vases.

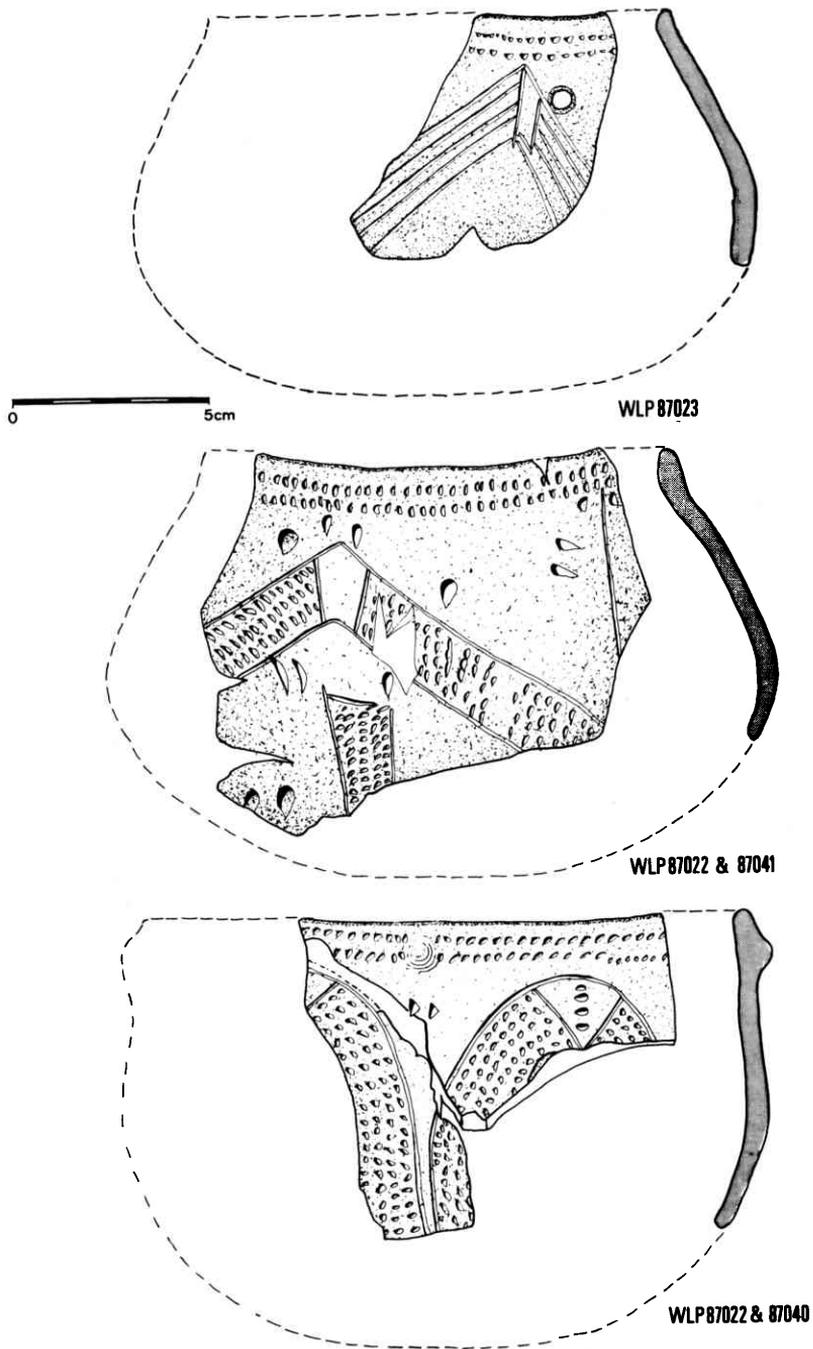
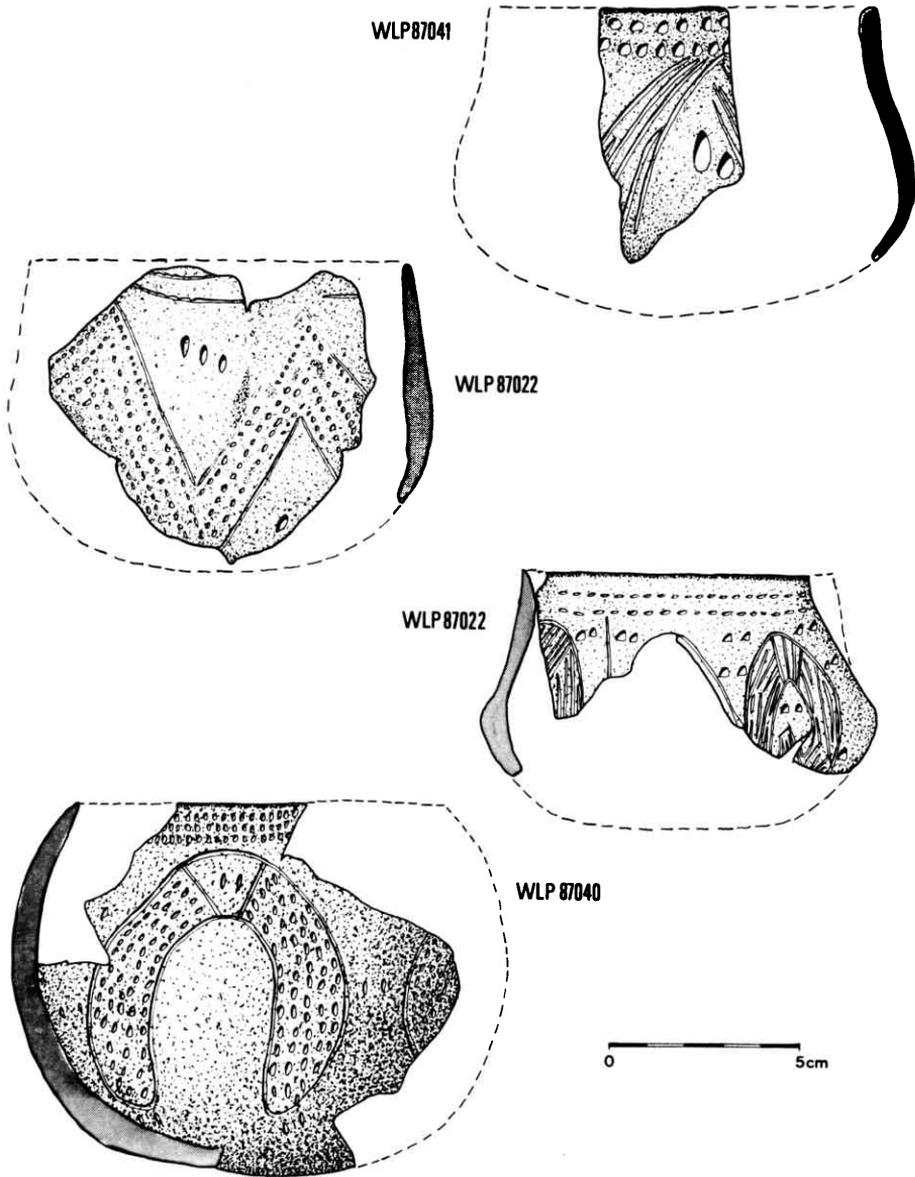


Figure 6 : Reconstructed LBK Fineware Vases.



**Figure 7 : Reconstructed LBK Fineware Vases.**

This ceramic assemblage is made up of a large quantity of coarseware in comparison to fineware. Based on the mean weight per pit (5 pits total), the fine/coarse ratio is .131 (table 2). The high abundance of coarseware may be a peculiarity of House 1, but only further excavations will reveal whether such a pattern is common at Longchamps.

Table 2. — Ceramic Comparisons

	Longchamps	Darion	Oleye
<i>Mean Weight Per Pit (kg.) :</i>			
Fineware	.97	.48	1.18
Coarseware	7.45	3.16	2.44
Fine/coarse ratio	.131	.181	.483
Number of pits	5	15	5

### LITHICS

A large amount of debitage was found in the house pits. The ratio of blades & blade tools to waste is .177 (table 3). The presence of core tablet flakes, crest blades and primary flakes indicate that blade reduction was a common activity at Longchamps.

Table 3. — Lithic Comparisons

	Longchamps	Darion	Oleye
Aver. No. per pit	335.2	535	70.7
Blades + Blade tools/waste	.177	.114	.753

A common LBK lithic artifact, frits, are rare. The most common tools found are endscrapers while sickles are rare. Flake tools are also present (fig. 8).

Groundstone artifacts consisted of querns, grinding slabs and adzes. The querns are common, but all found were broken. Some sandstone manufacturing debris was recovered. The majority of adzes were manufactured from phthanite, the dominant adze material at many other sites in the Upper Geer settlement cell (Toussaint & Toussaint, 1982). While some roughouts are present, there is no waste from adze manufacture.

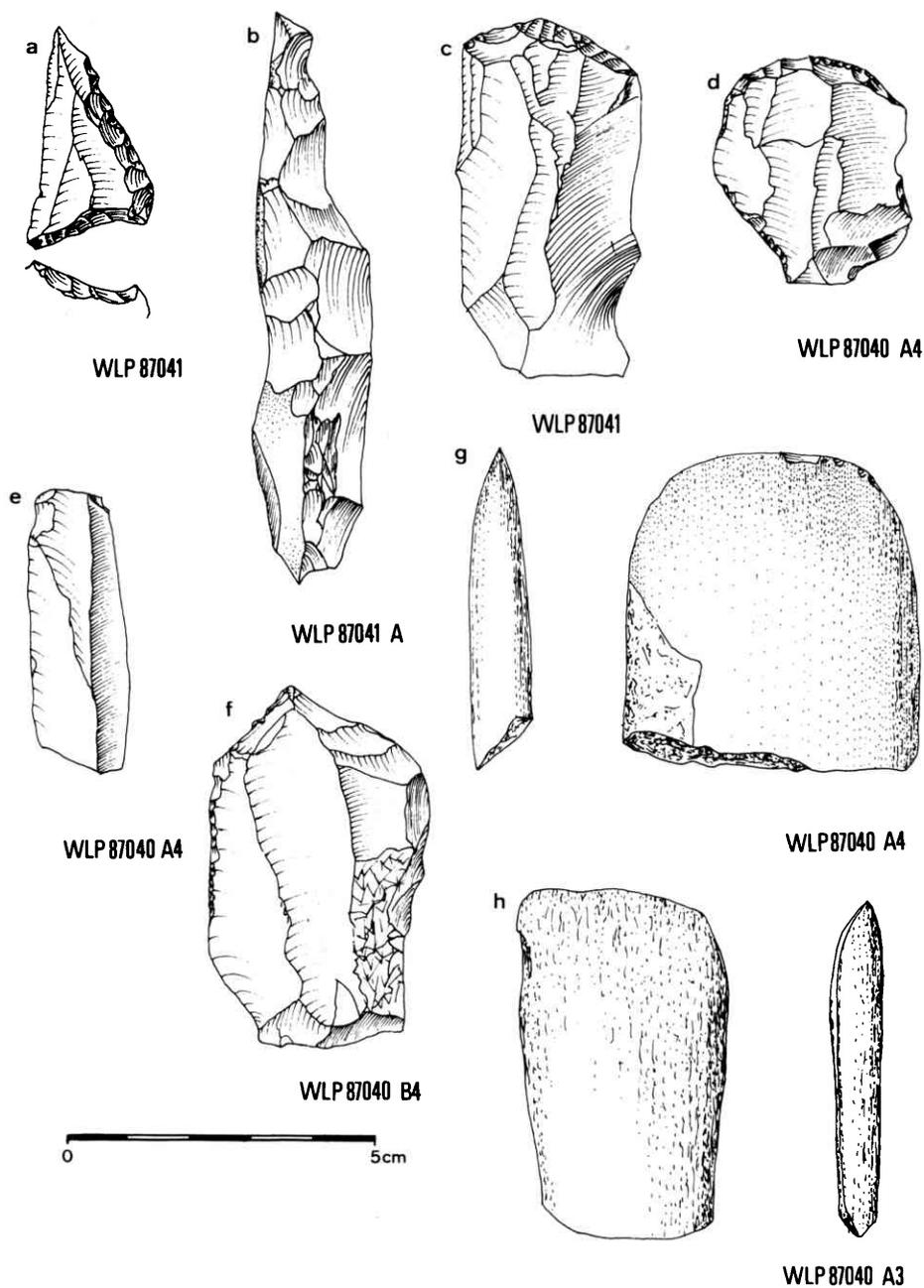


Figure 8 : LBK Lithics — a) Danubian point, b) crest blade, c,d) endscraper, e) sickle, f) piercer, g) adze (phtanite), h) adze (volcanic).

## **LONGCHAMPS, DARION AND OLEYE**

During some period of their respective LBK occupations, Longchamps, Darion (Cahen *et al.*, 1985) and Oleye were all fortified. A brief and preliminary comparison between the findings at each site is important because it has implications for future interpretations of the LBK spread and the socio-economic complexity of the LBK pioneering units.

The lithic artifacts recovered from Longchamps indicate that blade production occurred at the site. An abundance of flaking debris recovered from Darion suggests that blade production was an important activity there as well. While table 2 lists only preliminary results, flaked flint was not as common at Oleye as at the other two sites. The flint artifacts found at Oleye consist of tools and blade blanks; flaking waste is very rare and consists of small retouch/resharpening chips.

The findings from Longchamps and Darion (Cahen *et al.*, 1985) give no indications of ceramic manufacture at these sites while fineware production may be evidenced at Oleye. Comparisons between the amounts of fineware between the sites show significant differences. Oleye has a much greater amount of fineware (table 2). In addition to this fact, debris from a ceramic workshop (pottery clay, grog temper, burnishing pebbles) were recovered at Oleye (feature OZ 87046). Also at Oleye, concentrated finds of sherds which often refit into whole vessels, suggesting that they may be 'wasters' from ceramic production.

The lithic and ceramic artifacts recovered suggest different activities at these three fortified sites. At Longchamps and Darion there is evidence of blade production while at Oleye manufacturing debris is almost nonexistent. Only the ceramic artifacts found at Oleye indicate the possibility of fineware production while such evidence is absent at Longchamps and Darion.

## **CONCLUSION**

Longchamps is a new fortified LBK site located between two other fortified LBK sites, Darion and Oleye. All rest on the northern boundary of their settlement cell. Lithic production occurred at the site while signs of ceramic production appear to be absent. In general, the ceramics are not well-made and fineware is not abundant. However, all these conclusions must be considered as preliminary as they concern only a single house. Our future excavations should clarify these characteristics of Longchamps.

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