

The Mesolithic of the Belgian Ardennes

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1. Territory

The Belgian territory presents three major ecological zones, each of them bearing traces of specific cultural phenomena for the period concerned. The southern rocky area shows evidence of a long Mesolithic occupation, without hiatus; middle Belgium, with fertile loamy soils, was the territory occupied by the first Neolithic groups (Linearbandkeramik); the northern zone corresponds to a sandier environment, where hunter-gatherers persisted for a long time, engaged in a slow process of Neolithisation.

2. History of research

Mesolithic research began in Belgium in the late nineteenth century when Édouard Dupont excavated the Montaille caves. Here he found a small industry that he described as “late” hunters’ equipment (Dupont 1872).

During the 1960’s, the distinction between “Tardenoisian” and “Sauveterrian” groups was made for Western Europe and accepted in Belgium as well. The Tardenoisian was identified at most of the sites. At the end of the 1970’s, two different researchers provided the background for the currently accepted taxonomy and chronology. In 1978, Jean-Georges Rozoy defined the “Ardennian” and the “Limbourgian” as cultural traditions with geographic significance, each of which would have been evolving throughout the whole period, the first in the southern region, the second in the northern (Rozoy 1978). At the same moment, André Gob was studying the Ourthe Basin sites. On that basis, he critically reviewed the taxonomy and the chronology of the Mesolithic in South Belgium (Gob 1979; 1981). His work is still valid, although chronological differences can be noted based on recent data. In recent years, Mesolithic research has focused on the excavation of a few but important sites, including burials in rock-shelters, and on chronological issues: dozens of radiocarbon

dates are now available, due to the work of Philippe Crombé and Michel Toussaint, among others (Crombé 1999; Toussaint 2002).

3. Cultural traditions

The view we now have on the Mesolithic in Wallonia divides the period into three main phases: Early, Middle and Late Mesolithic (Crombé/Cauwe 2001). This is based on two principal changes in the lithic assemblages: the appearance of points with flat retouch with the Middle Mesolithic (local specificity), and the appearance of trapezes as a “signature” of the Late Mesolithic (European specificity) (see Gob 1984a; Crombé 1999; 2002) (Fig. 1). The Early Mesolithic is associated with the Younger Dryas Ahrensbourgian, after a hiatus of around 1,000 years. It then developed during the second half of the Pre-Boreal and the first half of the Boreal periods, between 9,500–8,700 BP (or 8,800 and 8,200 cal BC). General characteristics are quite irregular debitage, numerous points with unretouched base, segments, triangles (especially scalene triangles) and points with retouched base.

Three groups have been defined:

- one is Gob’s “Epi-Ahrensbourgian”, or the “Neerharen” group of Piet Vermeersch, with truncated points with unretouched base; for instance at Fond-de-Forêt and during the first half of the Preboreal;
- the second group is Gob’s “Beuronian A”, or the “Ourlaine” group, during the second half of the Preboreal; Beuronian A is characterized the same truncated points and by crescents;
- and the third group is Gob’s “Beuronian B”, or the “Chinru” group, with numerous points with retouched base (including Tardenois points) at the beginning of the Boreal.

Recent dates obtained by Philippe Crombé suggest that some of these groups are contemporaneous during the

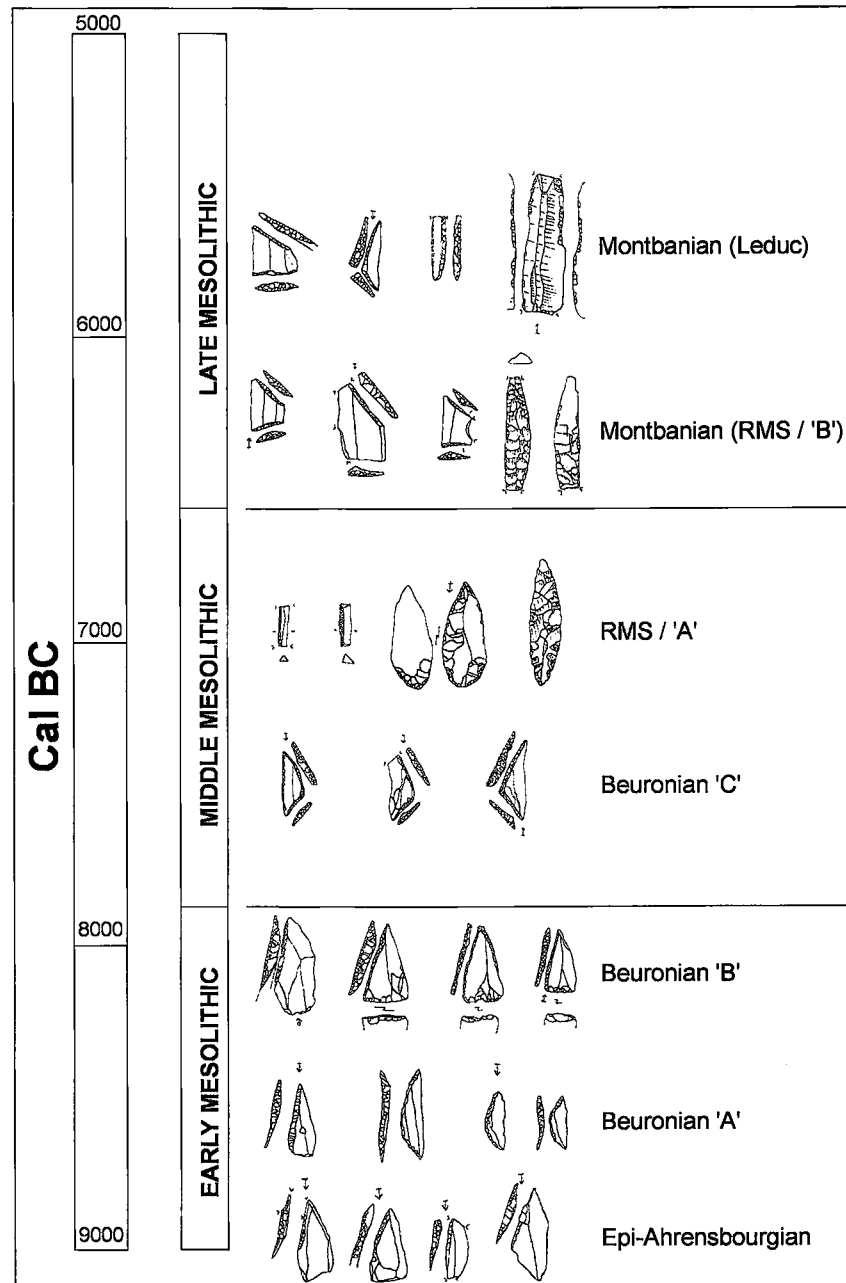


Fig 1: General chronological and typological framework for the Mesolithic in the Belgian Ardennes (chronological background adapted from Crombé/Cauwe 2001; typological background and lithics drawings after Gob 1984a).

second half of the Preboreal, with the last group (the Chinru group) slightly more recent, during the first half of the Boreal (Crombé 1999; 2002), at least across Belgian territory.

During the second half of the Boreal, the Middle Mesolithic is characterized by two new microliths: points with flat retouch and small-backed bladelets. Its chronology remains unclear. Two cultural groups are defined in Belgium:

- the “RMS”, facies “A”, with very few sites south of the Meuse; it is characterized by the appearance of flat retouch and narrow-backed bladelets, but with-

out trapezes (it is believed to come from the local Beuronian);

- the main group in southern Belgium is Gob’s “Beuronian C”, with some few points with flat retouch; especially noticeable are the scalene triangles and there are no trapezes.

It is only with the Late Mesolithic that reduction becomes more regular, of the Montbani type. The oldest occupations are found at sites in Liège and Namur, during the first half of the 7th millennium BC.

Two main groups are defined, but we are now facing probably three different industries:

- the Montbanian of “RMS” facies “B”, with points with flat retouch, narrow-backed bladelets and with trapezes, for instance in Liège–Place Saint-Lambert;
- the other main group is the Montbanian with trapezes, at Station Leduc. Main characteristics include narrow-backed bladelets, trapezes (especially rectangle trapezes), almost no points with flat retouch and rare but very characteristic “Montbani retouched blades”, which are blades with scaled retouch (only one or two specimens in each site);
- recent radiocarbon dates at Place Saint-Lambert (Liège) suggest the existence of a Final Montbanian, characterized by the presence of “evolved” armatures with inverse retouch (van der Sloot et al. 2003) (trapezes with inverse retouch are also found at Trou Al’Wesse; Derclaye et al. 1999).

These cultural complexes are more or less in this chronological order, but the exact time-range is not yet clearly established, especially during the Middle Mesolithic. The excavations undertaken over the past 20 years have yielded new and important data, concerning the habitat, burials and the Neolithisation process.

4. Habitat

Two open-air valley sites have yielded dwelling structures (only fire-places were known for almost a century).

The Station Leduc (Remouchamps), excavated by André Gob around 1980, attests to the presence of the Montbanian in Wallonia, and contains a circular structure of pebbles (Gob 1984a; Gob/Jacques 1985). This is at minimum a natural but modified structure, but could be entirely anthropic. A fireplace and a small pit with burned pebbles were also recovered and on the whole it had a semi-curved shape, with artefacts in between.

At Place Saint-Lambert (Liège), two important distinct occupations were discovered during the 1990’s in a single humic soil (Gustin et al. 1994; Léotard et al. 1995; van der Sloot et al. 2000). They mainly belong to the Late Mesolithic (RMS/B) according to lithic typology (6 points with flat retouch and 2 trapezes) and radiocarbon dates (first half of the 7th millennium BC). One of these structures (southern zone) consists of a semi-elliptical surface of stones on the border of a tributary of the river (Légia). It appears to be the remains of a dwelling floor, associated with domestic tools (endscrapers, blades and bladelets, but no cortical artefacts from initial reduction phases and only a single core). The other structure (northern zone) is located some 60 m away and is a debitage area and a butchering

and hide-processing zone. Local flint was used almost exclusively and most of the blanks produced were taken out of the area; faunal remains were numerous. The remains partly belong to a slightly more recent phase of the Mesolithic (a Final Mesolithic with trapezes with basal inverse retouch), according to ¹⁴C dates. Other bone and lithic remains were also found elsewhere in a third area, still under study, but again very recent according to ¹⁴C dates.

Finally, the Abri du Pape rock-shelter has traces of fireplaces, without any other structures (Straus/Otte 1999). What is important in this site is the diversity of the resources exploited by the Mesolithic people, during several short occupations. Limited remains of macro-fauna were discovered, in association with many fish remains and abundant charcoal which may indicate exploitation of the vegetation. Limited hunting is suggested by the rarity of microlithic points or trapezes (3 artefacts in the upper layer; none in the lower layer).

At Namur, a Late Mesolithic site was excavated in the centre in the city. It also yielded a fireplace with fish remains, in association with remains of mammals (roe deer, red deer, wild boar and aurochs) (Mees/Plumier 1994).

5. Burials

Burials under rock-shelters were also found, all belonging to the Early Mesolithic, specifically the second half of the 9th millennium BC. Three main sites were excavated by Nicolas Cauwe and by our team in Liège with Lawrence Straus from New Mexico.

The first is the Grotte Margaux, where Nicolas Cauwe found a structured collective burial, comprising 10 or 11 women; a kind of “wall” was built in order to preserve the burial (Cauwe 1998). Traces of dismembering were found, indicating that Grotte Margaux is a secondary burial; cut-marks are present on one skull and at least a part of the funerary process occurred outside of the cave.

The second site is the Abri des Autours, where the same researcher found a small pit and a closing wall that indicates a separation between the burials and the other parts of the shelter (where there was a Middle Neolithic burial of Michelsberg tradition) (Cauwe 1994; 1995). Five adults and six children were found whose remains were either dislocated (adults) or concentrated (children). In addition, an individual burial of a woman was discovered (Fig. 2). This gives a very mixed picture of collective and individual burials, in primary and secondary positions, with no connection with a living place.

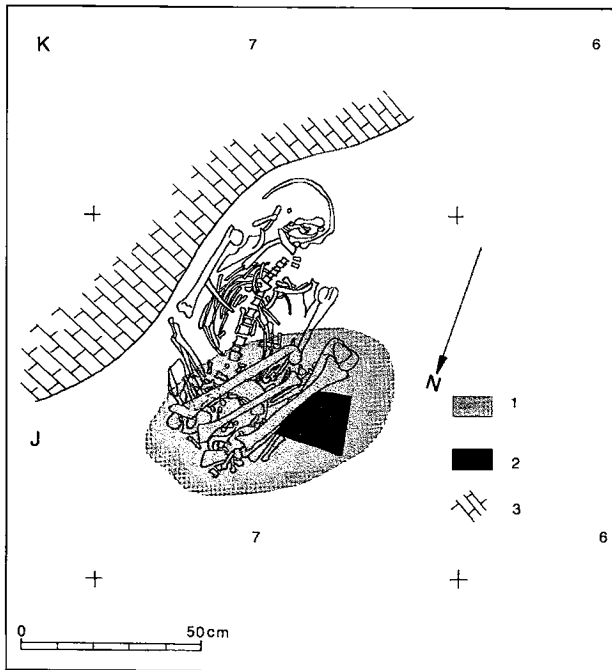


Fig 2: *Abri des Autours*. Individual burial of a woman. 1: ochred zone; 2: slab supporting the legs; 3: wall of the shelter (after Cauwe 1994).

Finally, another collective burial was excavated in Bois Laiterie cave (Toussaint et al. 1998). Four adults and two children were present within breccia attached to the walls and the roof of the cave; a radiocarbon date obtained on a femur also indicates the 9th millennium BC. The same dislocation of the bodies was observed, again with no clear connection with any living place. Tooth abrasion and carbon and nitrogen isotopic analysis point to an important consumption of vegetal resources.

6. Neolithisation

New excavations shed light on the transition from the Late Mesolithic to the Neolithic. Some ceramic sherds appear in specific contexts during the Late Mesolithic. We do not yet have enough data to support the hypothesis of a "Final" Mesolithic with ceramics.

At Trou Al'Wesse, layer 4 contains sherds in a Late Mesolithic context of Montbani tradition (Derclaye et al. 1999). This layer is disturbed (meaning no contemporaneity between the sherds and the lithics), but the cultural tradition of the sherds is yet not well established (LBK, Limbourg?). The very recent component of the lithic industry is attested by a few trapezes with basal inverse retouch (Derclaye et al. 1999) and by the dating of a human bone (not found in a burial; see Toussaint 2002).

At Place Saint-Lambert in Liège, Mesolithic artefacts were discovered during the 1980's in association with sherds of Limbourg type, but post-depositional mixing was evoked as an explanation (Gob 1984b; 1988). This opinion was not shared by M. Otte: ceramics of La Hoguette or Limbourg types were associated with Mesolithic implements and this would be a hint for a Mesolithic ware production (Otte 1993). During the 1990's, other sherds of Limbourg and La Hoguette types (both non-LBK traditions) were found close to the main Mesolithic lithic industry, but the geological context and evidence of vertical dispersion exclude the interpretation of clear association (van der Sloot et al. 2003); thus the problem remains unsolved. The younger dates of the Mesolithic industry (the Final Mesolithic) are slightly older than the ones for the closest LBK artefacts in the same part of the site (end of 5th millennium BC) (van der Sloot et al. 2003), but LBK dates from the 1980's in another part of the site are very similar (Otte 1993); the interpretation, however, is not clear for all researchers because some of these old dates fall directly in a plateau in the calibration curve (between -5,240 and -5,050 CalBC). Thus, while the Mesolithic industry and the LBK sherds can be dissociated from a chronological point of view, the question of the non-LBK sherds makers remains open.

7. Radiocarbon dates

A systematic program of radiocarbon dates has been undertaken by Michel Toussaint (see Toussaint 2002). The main goal is to date as many burials as possible, from old or amateur excavations, some without any artefacts. Most of them were attributed to the Neolithic period, if not the Bronze Age. Today it appears that 10 collective burials belong to the Early Mesolithic. Dates are also available for 9 settlement sites. A comparison between the chronologies of the sites and the burials shows the disappearance of the burials around the transition from the Early to the Middle Mesolithic.

8. Continuity in the Neolithic?

The hypothesis of continuity in funeral practices from the Late Mesolithic to the Middle Neolithic still needs to be addressed by new excavations and data.

In the *Abri des Autours*, a Middle Neolithic collective burial was found, dating from the end of the 5th millennium BC, and testifying to continuity in the use of the shelter (Cauwe 1995). Caves and shelters are used again for funeral practices during the Middle Neolithic,

until the middle of the 4th millennium BC (for instance, at the Abri du Pape shelter; Toussaint 1998). This suggests continuity, but further evidence is lacking. The continuity could also appear in the zone of Michelsberg presence, that is the non-loessic parts of the country where it represents the “first” Neolithisation, and in the ceramics, which are more similar to the Ertebøl- lian than to the LBK; moreover, funeral practices in caves or shelters are not found in the LBK in Belgium (Cauwe 1995).

But today there is still a gap between the 9th millennium and the middle of the 5th millennium BC, due to the chance of research, misattribution of the discoveries, and lack of radiocarbon dates or modifications in the funeral practices.

9. Conclusions

In a geographically limited territory, specific funeral practices seem to be the tie between Early Mesolithic people during the 9th millennium BC. While the Middle phase of the Mesolithic is still poorly known, the Late Mesolithic is now better understood, due to recent excavations. No burials have been found but the same territory is occupied, and the technology doesn't really change. The typology shows an evolution, however, but the persistence of archaic elements suggests a cultural continuity mainly rooted in the preceding and local Beuronian. Evidence for at least two chronological phases supports the idea of a contemporaneity with the LBK people.

References

- CAUWE 1994 N. CAUWE, Il y a près de 11.000 ans, l'histoire d'une Mésolithique. *Notae Praehistoricae* 14, 1994, 91–93.
- CAUWE 1995 N. CAUWE, Chronologie des sépultures de l'Abri des Autours à Anseremme-Dinant. *Notae Praehistoricae* 15, 1995, 51–60.
- CAUWE 1998 N. CAUWE, La grotte Margaux à Anseremme-Dinant (Liège 1998).
- CROMBÉ 1999 PH. CROMBÉ, Vers une nouvelle chronologie absolue pour le Mésolithique de Belgique. In: A. THÉVENIN (ed.), *L'Europe des derniers chasseurs. Épipaléolithique et Mésolithique. Actes du 5^e colloque international UISPP, 18–23 septembre 1995 (Paris 1999)* 189–199.
- CROMBÉ 2002 PH. CROMBÉ, Quelques réflexions sur la signification de la variabilité des industries lithiques mésolithiques de Belgique. In: M. OTTE/J. K. KOZŁOWSKI (eds.), *Préhistoire de la Grande Plaine du Nord de l'Europe. Les échanges entre l'Est et l'Ouest dans les sociétés préhistoriques. Actes du colloque « Chaire Francqui » de Liège, 26 juin 2001 (Liège 2002)* 99–114.
- CROMBÉ/CAUWE 2001 PH. CROMBÉ/N. CAUWE, Le Mésolithique. *Anthropologica et Praehistorica* 112, 2001, 49–62.
- DERCLAYE et al. 1999 CH. DERCLAYE/I. LÓPEZ BAYÓN/F. COLLIN/M. OTTE, Contributions à la connaissance du Mésolithique récent en Ardennes: étude archéologique de la couche 4 du Trou Al'Wesse (Petit-Modave, province de Liège). *Notae Praehistoricae* 19, 1999, 85–95.
- GOB 1979 A. GOB, Le Mésolithique dans le bassin de l'Ourthe. *Helinium* 19, 1979, 209–236.
- GOB 1981 A. GOB, Le Mésolithique dans le bassin de l'Ourthe (Liège 1981).
- GOB 1984a A. GOB, Les industries microlithiques dans la partie sud de la Belgique. In: D. CAHEN/P. HAESAERTS (eds.), *Peuples chasseurs de la Belgique préhistorique dans leur cadre naturel (Bruxelles 1984)* 195–210.
- GOB 1984b A. GOB, L'industrie lithique mésolithique. In: M. OTTE (dir.), *Les fouilles de la Place Saint-Lambert à Liège 1 (Liège 1984)* 147–152.
- GOB 1988 A. GOB, Industrie mésolithique. In: M. OTTE (dir.), *Les fouilles de la Place Saint-Lambert à Liège 2 (Liège 1988)* 105–117.
- GOB/JACQUES 1985 A. GOB/M.-CL. JACQUES, A Late Mesolithic Dwelling Structure at Remouchamps, Belgium. *Journal of Field Archaeology* 12, 1985, 163–175.
- GUSTIN et al. 1994 M. GUSTIN/J.-M. LÉOTARD/M. OTTE, Le Mésolithique de Liège: campagne 1994. *Notae Praehistoricae* 14, 1994, 113–123.

- LÉOTARD et al. 1995 J.-M. LÉOTARD/M. OTTE/M. GUSTIN/I. LÓPEZ BAYÓN/A. WARNOTTE/J.-L. CHARLIER, Fouilles de niveaux préhistorique sous la place Saint-Lambert à Liège: campagne 1995. *Notae Praehistoricae* 15, 1995, 81–90.
- MEEES/PLUMIER 1994 N. MEEES/J. PLUMIER, Premier état des recherches sur le Néolithique et le Mésolithique au Grognon, à Namur. *Notae Praehistoricae* 14, 1994, 109–112.
- OTTE 1993 M. OTTE, Le Rubané de Liège. In: *Le Néolithique du nord-est de la France et des régions limitrophes, Actes du XII^e colloque interrégional sur le Néolithique, Metz, 10–12 octobre 1986 (Paris 1993)* 68–75.
- ROZOY 1978 J.-G. ROZOY, Les derniers chasseurs. L'Épi-paléolithique en France et en Belgique. Essai de synthèse. *Bulletin de la Société Archéologique Champenoise (special issue) (Charleville 1978)*.
- STRAUS/OTTE 1999 L. G. STRAUS/M. OTTE, Contributions au Mésolithique de la Belgique: camps et sépultures du début de l'Holocène dans le bassin de la Meuse au Nord-Ouest de l'Ardenne. In: J.-M. LÉOTARD/L. G. STRAUS/M. OTTE (eds.), *L'Abri du Pape (Liège 1999)* 333–349.
- TOUSSAINT 1999 M. TOUSSAINT, Approche anthropologique des ossements humains néolithiques de l'Abri du Pape (Freyr, Dinant, province de Namur). In: J.-M. LÉOTARD/L. G. STRAUS/M. OTTE (eds.), *L'Abri du Pape (Liège 1999)* 215–247.
- TOUSSAINT 2002 M. TOUSSAINT, Problématique chronologique des sépultures du Mésolithique mosan en milieu karstique. *Notae Praehistoricae* 22, 2002, 141–166.
- TOUSSAINT et al. 1998 M. TOUSSAINT/I. LÓPEZ BAYÓN/M. OTTE/L. G. STRAUS/J.-M. LÉOTARD/M. VANDENBRUANE/A. GAUTIER/S. LAMBERMONT/V. ANCION/PH. LACROIX, Les ossements humains du Mésolithique ancien de la grotte du Bois Laiterie, à Profondeville (province de Namur): note préliminaire. In: J. PLUMIER/CL. DUHAUX (eds.), *Sixième journée d'archéologie namuroise (Gembloux 1998)* 33–50.
- VAN DER SLOOT et al. 2000 P. VAN DER SLOOT/M. REMACLE/P. HAESAERTS/I. LÓPEZ BAYÓN/J.-M. LÉOTARD, Nouvelles recherches menées dans le secteur « SDT » de la place Saint-Lambert à Liège. *Notae Praehistoricae* 20, 2000, 143–149.
- VAN DER SLOOT et al. 2003 P. VAN DER SLOOT/FR. DAMBLON/N. DEBENHAM/K. FECHNER/A. GOB/P. HAESAERTS/A. HAUZEUR/I. JADIN/J.-M. LÉOTARD/M. REMACLE/B. VANMONFORT, Le Mésolithique et le Néolithique du site Saint-Lambert à Liège dans leur contexte chronologique, géologique et environnemental. Synthèse des données et acquis récents. *Notae Praehistoricae* 23, 2003, 79–104.