



CULTURAL DIVERSITY DURING THE 6TH MILLENNIUM B.C.
IN SOUTHWESTERN GERMANY

Erwin CZIESLA

PRELIMINARY REMARKS

Between 1980 and 1989 a series of excavations took place in the Weidental Cave, situated near the little village of Wilgartswiesen in the rural district of Pirmasens (E.CZIESLA 1986; 1992). The aim of the work was the complete reconstruction of a complex middle mesolithic camp-site with several different activity areas in front of and within the cave. During the fourth excavation campaign a single Bandkeramik potsherd was found some centimetres above the mesolithic occupation-horizon. This was the first Bandkeramik sherd found in the Palatinate Forest.

Two questions arose from this surprising find: how many years passed by between these two occupations, and what can this single sherd tell us about the cultural, logistical, and functional background of the former owner of this Bandkeramik vessel ?

Answering these questions turned out to be much more complicated than initially anticipated. On the one hand, mesolithic sites in the area between Mayence and the French border (Fig. 1) have only been examined in some special, restricted regions, and on the other hand, even the distribution of Bandkeramik sites was unknown up until the late 1980's. Moreover, the nature of the Late Mesolithic and Early Neolithic was completely unknown in this before-mentioned region.

For several regions of Germany, or generally of Central Europe, the simultaneity and chronological sequence of the Mesolithic and Neolithic are subjects of controversial debate (see discussion in : D.CAHEN & M.OTTE (eds.) 1990). According to its geographical position the Middle-Rhine-"triangle" between Mayence and Strasbourg, determined by the three rivers Moselle, Saar, and Rhine (Fig. 1-3), seems to be of special interest. This will be shown in the following short abstract.

THE DISTRIBUTION OF SITES

Before discussing the problem of the cultural relationships between last hunter-gatherer-tribes and first agriculturalists it was necessary to compile an inventory of all the known find-locations. For the sketched area (illustrated in Fig.1) this was accomplished during the last two decades (summarizing : E.CZIESLA 1989, 1990, 1991, 1992 : 270, 1993a : Fig. 8, 1993b). The distribution appears as follows:

Mesolithic sites are very common in this area, but their number and the quality of research always depends on the eagerness and the engagement of local authorities or regional curators. With this in mind, the distribution-map (Fig. 1) shows areas of concentration and some "white" zones, but generally, the whole area was occupied by mesolithic tribes since the Preboreal.

According to the chronological order of microliths (E.CZIESLA 1992 : 273), it was possible to assign most of the site-inventories into the established sequence (Beuronien A, B and C; see W.TAUTE 1971; 1974). From the early beginnings (Beuronien A and B) up to the Middle-Mesolithic (Beuronien C) a continuous settlement-history could be ascertained. And it must be added, that triangular microliths gradually change in form, as demonstrated by observations in the neighbouring regions (see F.SPIER (1990) for Luxembourg and A.THEVENIN (1990; 1991) for eastern France). This continuity was summarized by A.Thévenin and E.Dillmann with the following words: "On a ainsi dans le Palatinat une remarquable continuité avec Kleine Kalmit, Obersulzbachtal, Burgalben/Waldfischbach et la Weidental-Höhle" (A.THEVENIN & E.DILLMANN 1990 : 104). In search of late mesolithic sites with rectangular microliths (Fig. 2) an amazing outcome could be recorded: in the south of the Rhineland-Palatinate, in Saarland and in Lorraine, not a single

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mesolithic site is known with these typical arrowheads (E.CZIESLA 1989 : 68). According to comparable observations in the Ardennian region, carried out by Dr.J.-G.Rozoy (1978 : 665; 1990) and designated with the term "Ardennian", this "non-rectangular-region" should be called "Palatinat" (E.CZIESLA 1991).

Early neolithic Bandkeramik sites are very frequent in this area, and some regions display a density of sites almost unknown in any other Central European area (see E.SANGMEISTER 1979 : 30). For example, numerous neolithic sites can be found in the region of Strasbourg (C.JEUNESSE 1979 : Fig. 2) and near the town of Alzey (E.SANGMEISTER 1967 : Fig. 9; E.PACHALI 1972 : Fig. 2). In the latter mentioned area the type-site of "Flomborn" (see I.RICHTER 1969) - in the nomenclature a synonym for Early Bandkeramik - is situated. Mapping the more than over 300 known Bandkeramik sites (Fig. 3), shows that the whole region is not completely covered; sites are distributed according to soil-quality and height above sea-level; furthermore, soil maps seem to indicate a strong tendency toward occupation on loess-soils in the vicinity of bodies of water (B.SIELMANN 1971 : 185; M.DOHRN-IHMIG 1979 : 210). In addition, not a single site lies more than approx.250m above sea level (see also H.LÖHR 1986 : 267). In other words, all Bandkeramik settlements in this region are located on the flat alluvial sediments of the Rhine Valley and, to a lesser extent, in some open valleys reaching comparatively far into the higher surrounding hill country (see Fig. 3). This is to be seen by a number of isolated settlements near the town of Kaiserslautern (E.CZIESLA 1993c), due to early settlers who, coming from Rhenish-Hesse, followed the river-system of Nahe and Glan. Originally coming through the Neckar (E.SANGMEISTER 1983; H.-C.STRIEN 1990) and - even earlier - through the Main Valley (W.MEIER-ARENDT 1966), the earliest Bandkeramik cultures reached the Rhine Valley near Mayence about 5.600 B.C.(cal.). Starting from this region, the early Bandkeramik settlers/ideas of Flomborn-type spread upstream along the Rhine beyond Strasbourg (A.THEVENIN et al. 1979) reaching Switzerland, and downstream reaching the mouth of the river Moselle (Fig.3). Four

centuries later the settlers finally arrived at the region of the Paris-Basin (G.BAILLOUD 1964; C.THEVENIN 1988 : Fig. 32).

For nearly one decade it has generally been known that besides late mesolithic and early Bandkeramik a third cultural group existed during the sixth millennium b.c. in south western Germany: the ceramic groups of Limburg and La Hoguette (see C.JEUNESSE 1987; C.JEUNESSE et al. 1991; J.LÜNING et al. 1989). We still have a scant knowledge of these very old ceramic-producing groups; as well as the cultural relationships between all of these groups, also dating is still a topic of controversial discussion. It is certain, that these groups - according to their ceramic traditions - are of Southwest European origin. Perhaps coming from northern Africa and sailing along the Italian coast, these first settlers reached the French seashore during the seventh/sixth millennium b.c. Besides sheep and/or goat, these "newcomers" brought with them the cultivated poppy (*Papaver somniferum*; see C.C.BAKELS 1982) and - as a kind of "visiting card" - pottery typically decorated with the imprints of cardium-shells (see discussion in: D.CAHEN & M.OTTE (eds.) 1990).

Descendants (not necessarily taking this word in a stricter anthropological sense) also left their traces behind in the illustrated region (Fig. 2). We found traces of the ceramic traditions commonly known as Limburg (more northerly distributed, especially between the area of the Lower Rhine and Seine) and La Hoguette (for the general distribution see: J.LÜNING et al. 1989: Fig. 2). The latter of these ceramic groups also left its characteristic "property" in the valleys of the Rhine and Mosel. These findspots are mapped together with late mesolithic implements (Fig. 2). It can be seen, that these early ceramic groups did avoid the higher hill-country and, in some cases, also the typical loess-regions.

THE PROBLEM

Isochronous processes probably took their course in the eastern and southern areas of Europe: coming from Greece, cultural ideas and/or people via the Balkans penetrated into our region; in addition from southern

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France new ideas, concepts, and objects, among other things jewelry of spondylus-shells (G.GALLAY 1981; C.JEUNESSE & J.SAINTY 1992; C.JEUNESSE & B.SCHNITZLER 1993 : 65; see also H.-H.MÜLLER 1957), spread along the rivers Rhône, Saône, and Doubs to reach our area as well. These trade routes have a very long tradition and were used since the Early Mesolithic, as is clearly recorded by shells imported from the Mediterranean (W.RÄHLE 1978; E.CZIESLA 1992 : 246).

Consequently, in the area of the Middle Rhine, we are dealing with three cultural groups with different standard of living during the sixth millennium b.c.: late mesolithic, La Hoguette and (earliest-) Bandkeramik. With reference to the latter two of these ceramic groups, it is of special interest to ascertain who first, reached this area and what - if new peoples really arrived - the relationship was to the local mesolithic population? To obtain solutions to these questions, a consideration of the circumstances of find preservation and recovery seems to be very informative.

FIND PRESERVATION AND RECOVERY

The archaeology of Bandkeramik settlement is quite simply and unfailingly definite (since F.KLOPPFLEISCH 1883 : 92); finds and features belong to some of the most characteristic of the Neolithic: resistant ceramics, characteristic stone implements, and spacious buildings, with post-holes solidly consolidated into the profound loess-soil.

The newcomers from the south-west may well have been sheep-and/or goat-herders, enabling them to settle on unfavourable soils; indeed, their cultural relics are less impressionable and characteristic. The ceramic is less resistant and mostly decorated like middle neolithic vessels. Finally, their rectangular microliths can be seen as relicts of the local late mesolithic population. Indeed, for decades they slipped through the "coarse net" of archaeological research.

During the later phase of Bandkeramik settlement-expansion less qualitative soils were also settled on, and

houses were built where La Hoguette-herders had settled some generations before (sandy-soils, see : G.BELLAND et al. 1985; H.LÖHR 1986 : 274; P.-L.VAN BERG 1987; J.LÜNING et al. 1989 : 384f.). Owing to soil erosion (P.J.R.MODDERMAN 1976; 1985 : 118), of up to several decimetres, ephemeral La Hoguette-settlements were completely destroyed. Those rare find objects which were coincidentally resistant enough eroded and were redeposited into younger Bandkeramik pits (see E.GERSBACH 1956), where they survived in "false" cultural contexts. On this account, it is not surprising to find both ceramic-types ("cultures") in the same pits. But it is not correct to speak of cultural-contemporaneity: according to preservation conditions La Hoguette sherds have to be older.

If we carry on this chain of reasoning, and if we also bear in mind that the first Bandkeramik settlers in the Rhine Valley were of early but not of earliest Bandkeramik (Fig. 2), then according to this, La Hoguette herders must have lived here for one or more centuries before the new culture and/or new ideas arrived from western Hungary.

HINTS OF CULTURAL CONTINUITY

Now we come to the point with regard to cultural relationships: a matter of cultural discontinuity or continuity? We have to put this question against the "old-fashioned" concepts of an abrupt end to the "Underdog-Mesolithic" and the generally exclusive dominance of neolithic culture. In the early 1930's the German botanist A.Maurizio wrote: "No foot-bridge leads from virginity of wilderness to ploughland. A yawning abyss separates these two worlds!" (A.MAURIZIO 1933).

Is this still the only archaeological truth? Is this still the only scientific opinion? By studying mesolithic and neolithic material culture, we can find several hints for a much more complex cultural history in the sixth millennium b.c. than was imagined some years ago. Some examples:

Since the Early-Boreal Mesolithic a continuous development of triangular-microliths can be registered also in this region (A.THEVENIN 1991; E.CZIESLA 1992). Such points, only slightly modified (D.GRONENBORN 1990; A.THEVENIN 1992; in press), are typical components of Bandkeramik-culture and, according to this, of local origin.

The same can be said about the famous shoe-last celts (Schuhleistenkeile), completely smoothed and asymmetrically worked adzes with D-shaped section, which were obviously specialist wood-working tools. Comparable tools, commonly known as "mattock-heads" and made of red deer antler or of bone, originate frequently from different mesolithic sites (see A. GOB 1982; F.SPIER 1991 : Fig. 5; J.HAHN & C.-J.KIND 1991 : Fig. 5).

Mapping the afore mentioned triangular arrowheads also gives detailed information not only about their spatial distribution but also about their chronological and cultural context. These asymmetrical triangular arrowheads can be differentiated according to their shorter edge: either on the left, "left-winged" or the right, "right-winged". It is of special interest that the geographical distributions of both of these arrowheads are mutually exclusive of each other and that this remains constant during the Mesolithic: "left-winged" arrowheads are distributed especially south of river Seine and the watershed of the rivers Maas and Moselle, whilst "right-winged" arrowheads are found in Lorraine, Luxembourg, and adjacent areas to the north such as Belgium and the Netherlands (see H. LÖHR 1990a; P.A.GENDEL 1989 : Fig. 7). Nearly the same type of arrowhead, whose form slightly changed during the course of time, is also present in Bandkeramik contexts. Furthermore, the right- or left-winged points occur in exactly the same regions as the equivalent mesolithic artefacts. This reflects an unbroken regional tradition of tool-manufacture resulting (perhaps) from continuity of population. New immigrants could not have established such a tradition, if former spatial divisions had have collapsed (H.LÖHR 1990b).

This population-continuity is also possibly reflected in burial practices. All mesolithic skull-deposits, such as Ofnet-Cave (R.R.SCHMIDT 1913), Hohlestein-Stadl (S.HAAS 1991 : 37), and Abri Mannlefelsen (A.THEVENIN 1980), are rather young (approximately: 6.000/5.500 b.c. (cal.); see R.A.HOUSLEY 1991 : 29). This occurrence is new, and the comparable "mesolithic"-treatment of the dead can also be registered in Bandkeramik contexts in the Upper-Rhine valley (H.-P.STORCH 1985).

These features point to a general continuity of both population and tradition, but which are radically and drastically influenced by an influx of new ideas and new "neolithic"-concepts, also perhaps by (some) new settlers.

STATEMENT

When referring to indications of unbroken spatial distribution, continuous tool-traditions, and religious stability, we have to question whether we can really speak of radical and far-reaching cultural changes during the transition from Mesolithic to Neolithic. There can be no doubt about the great differences of these two "worlds", but how was it possible to cross the "foot-bridge from wilderness to ploughland" in such a short time?

For the last few decades the "West-Mediterranean newcomers" have been viewed as an intermediate agent intervening between these two worlds. From mapping their distribution (Fig. 3), we can perceive that the earliest Bandkeramik stopped at the frontier of the Rhine, perhaps for one or two centuries. As already discussed, La Hoguette-settlers were already present on the left riverbank, and therefore domestic animals - sheep and/or goat - were also already familiar in this region; familiar to La Hoguette-people and to the contemporary mesolithic tribes. This premise is also valid for the cultivation of some plants, among others the poppy (see C.BAKELS, C.CONSTANTIN & A.HAUZEUR 1992), and more plants may come to light in the material of the La Hoguette settlement, excavated in the zoological garden in Stuttgart-Bad Cannstatt during 1991 (C.SCHÜTZ et al. 1992; from the excavators called "Old-Neolithic").

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According to these preconditions, "ploughland" was prepared, thus enabling a Bandkeramik "conquest" to take place in such a rapid and radical way. This process seems to be fast and revolutionary only after a time-span of seven thousand years. In reality, mesolithic tribes were influenced by cultural impulses from the West-Mediterranean and would have had enough time for their own decision making to manage their lives as hunters, gatherers, herders, and agriculturalists. Some generations later people were again confronted with these decisions, but the innovations and changes were not so far-reaching and fundamental as in this paper initially suspected.

If these ideas correspond with the real course of historical events, then we have to imagine a coexistence of different cultural characteristics which left varying conspicuous traces in the archaeological record for the region around the Middle Rhine. At a superficial level we only register the dominant Bandkeramik settlements in the flat-lands, but at a close look we can also register some La Hoguette- and Limburg-herders in between, and in the surrounding hilly landscape "the last" regional mesolithic tribes. Together, a colourful cultural mixture which in this area was a melting-pot for the impulses of successful expansion of neolithic culture.

SUMMARY

Summarizing and answering the questions from the beginning of this paper one can say that the single Bandkeramik pot-herd excavated in the Weidental Cave cannot be interpreted as evidence of a permanent early agriculturalist settlement in the hilly region of the Palatinate Forest, but it demonstrates the presence of the early Bandkeramik ("Flomborn") in this region. Perhaps some explorers or "trappers" visited this area, or this sherd could simply represent contact between mesolithic and neolithic groups. Concerning the second inference, one can assume that middle-mesolithic (Beuronien C) occupation in the Weidental Cave might probably be much younger than formerly stated. The Weidental Cave inventory might reflect a local late mesolithic tradition without

rectangular microliths. If this is true, this time-span between the mesolithic occupation and the Flomborn-expedition would be considerably shortened. In conclusion, we can say that in Rhinehesse-Palatinate in the sixth millennium b.c. not only herders and agriculturalists were living contemporaneously, like the biblical Cain and Abel, but also a third party was still present: the (last) hunter- and gatherer tribes.

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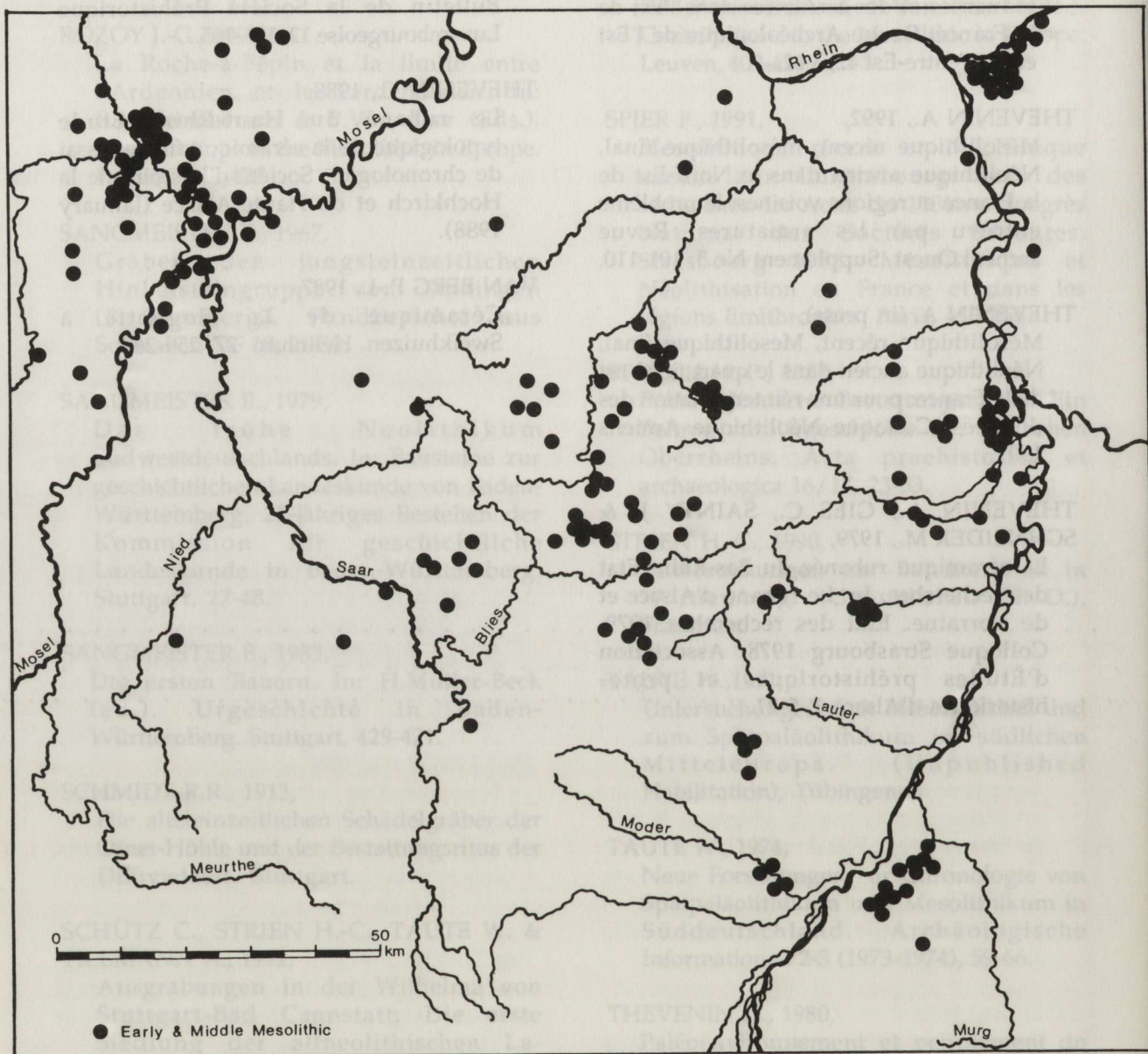


Fig.1: The location of Early- and Middle-Mesolithic sites (N=194; after E.CZIESLA 1991:Fig.1; 1992:270; 1993b).

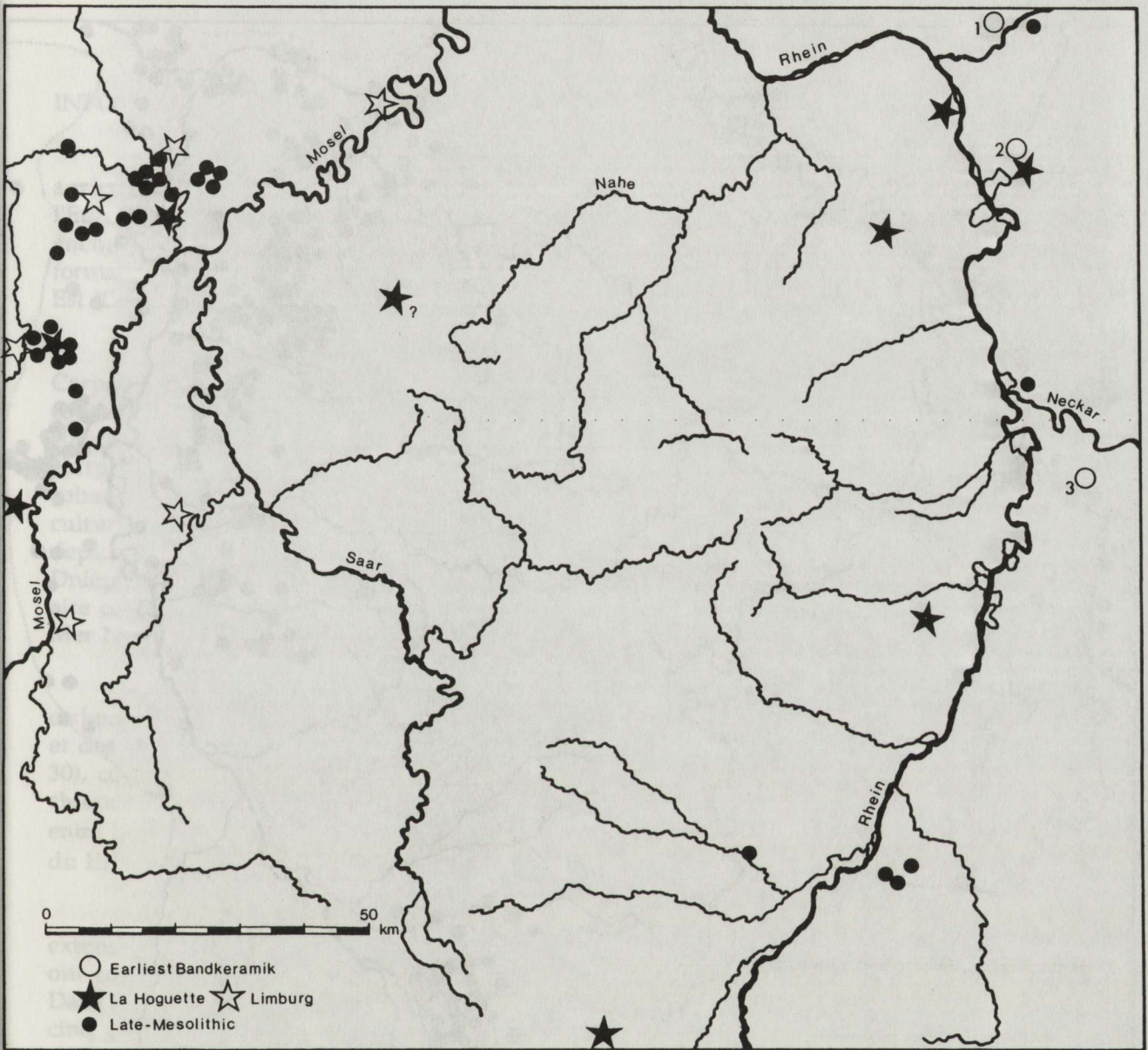


Fig.2: The location of Late Mesolithic findspots (with rectangular microliths), La Hoguette and Limburg ceramics and Earliest Bandkeramik sites (1=Weilbach, 2=Goddelau, 3=Kirchheim "Birst-Äcker"); (after: E.CZIESLA 1991:Fig.2; 1992:270; 1993b).

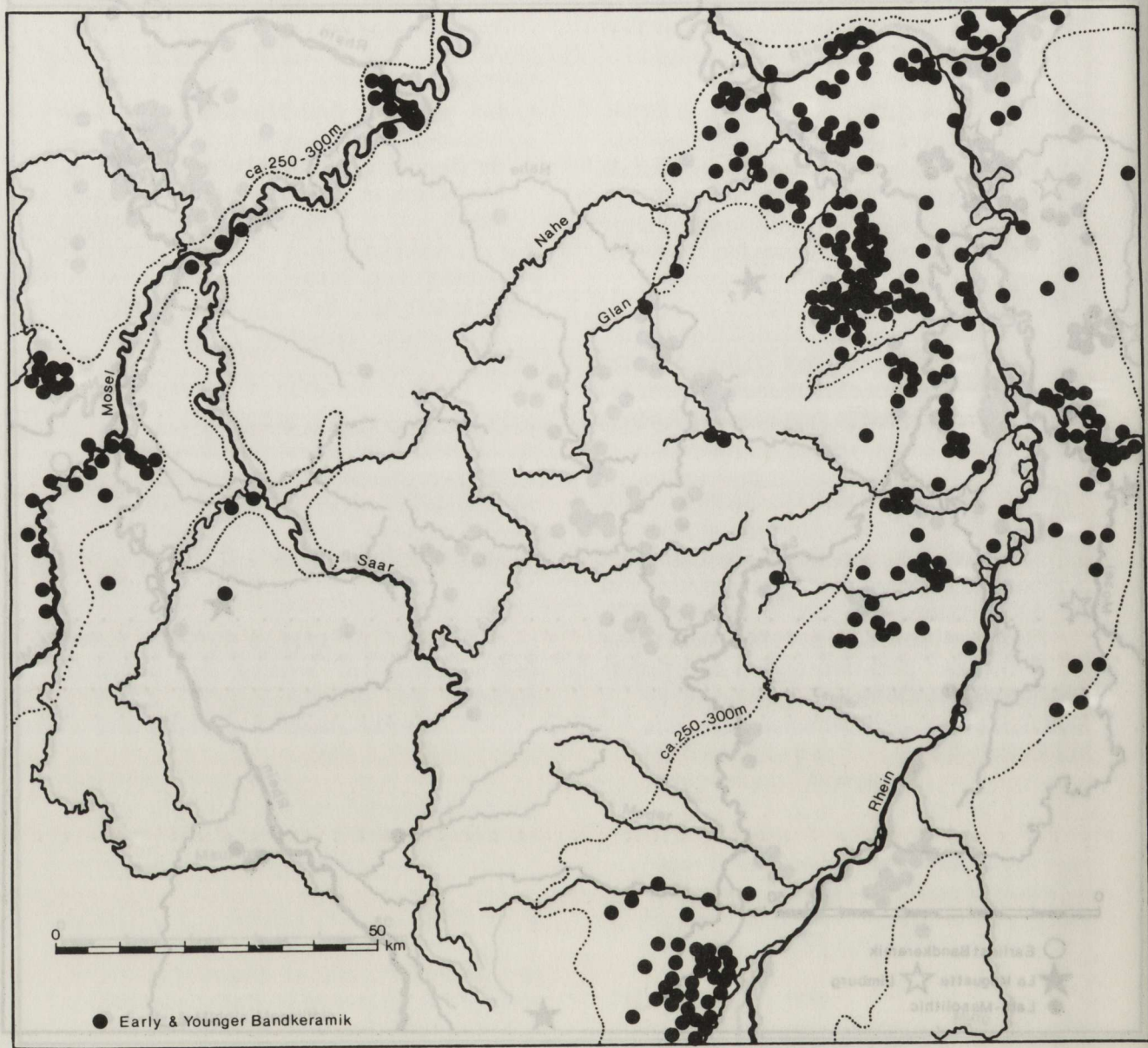


Fig.3: The location of Early ("Flomborn") and Younger Bandkeramik sites (Phase II-IV); (after E.CZIESLA 1991:Fig.4; 1992:278; 1993c:Fig.2).