DISCONNECTION IN ECONOMIC AND CULTURAL NETWORK DURING LINEARBANDKERAMIK CULTURE: THE EXAMPLE OF MIDDLE MOSEL

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Archaeological research and the relevant publications are often focused on one specialised aspect of the material culture, analysed in very closed details but missing the general view of the of a group or a culture. The result is that one can get an image of a cultural entity which appears as an obvious, coherent system, with its network of affinities or influences over crossing the group itself. Nevertheless, it leads also to a reduced scheme of interpretations that strongly depends on one aspect of the material culture. That is why in this paper, taking the Middle Mosel as a case study, I would like to focus on several, even not all, but main aspects of a culture in order to elaborate a more complex image of the network of intra- and extraregional relations built on either chance occasional contacts or traditions.

1 - Context

The Mosel, is one of the main afluents of the Rhine that runs on its left river bank. It occupied a very important geographical area within the vast territory peopled by the communities of the Occidental Linearbandkeramik Culture (LBK). The Mosel is settled in its middle part, belonging to what it is called the North-West LBK, a stylistic variety within the-group of the Occidental LBK (Fig. 1). Within the frame of this group the Mosel region is located in its southern part, at the border of other regional LBK groups, that from the Neckar valley, the South-West LBK distributed from the centre of the Paris Basin to the southern part of French Lorraine and Alsace, and at least the LBK of Haute-Alsace. In this paper the direct confluence of the Mosel with the Rhine will be excluded from this discussion, taking into consideration only the

So far about hundred sites are registered. Their representativity is high because the amount of work through which they are registered ranges from field surveys to extensive excavations. None of them is fully excavated. The distribution of the settlements tends to express clusters seeming not only linked with archaeological state of knowledge. The region is characterised by a lack of siliceous rocks of a quality good enough to produce a blade debitage in the tradition of the true LBK. The necessary procurement of flints from the outcrops surrounding the country would suggest established relations with those regions. A question arises whether this economic network is connected with some other aspects of the material culture, such as the tools production, the architecture or the ceramic decoration style.

2 - Lithic industry

The procurement in siliceous materials for the Mosel valley shows four types of management clustered in four geographical groups of settlements (Fig. 2). One group is centred on the depression of Wittlich (Germany), and constitutes the major source to the procurement network of the Belgian-Dutch region. At the same time they maintained connections with occidental sources of the East fringe of the Paris Basin. Another one is the Luxembourg cluster essentially oriented towards the import of flint supports or tools made on Belgian-Dutch flint. At least some rare sites seems to focus mainly either on the occidental sources or on the local hornstones.

Even if we have no direct comparisons in between the settlements from Luxembourg and North of Lorraine, we can point out that no differences exist between long/short time settlements or in sites installed in valleys or plateau's. The origin of the raw material of the set of tools gives a homogeneous image whatever is the oro-hydrographical position of the settlements, even their chronological one.

middle section of the river.

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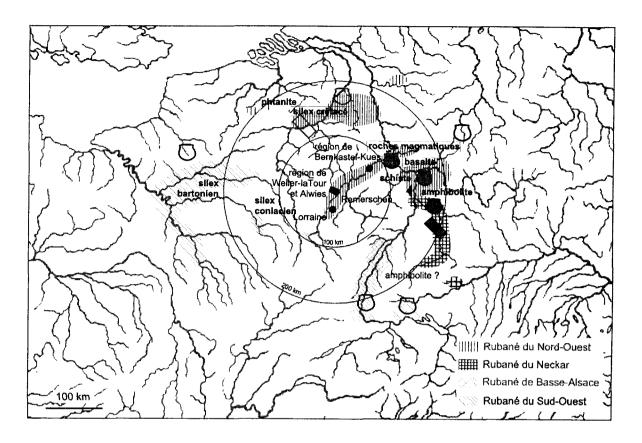


Figure 1. Localisation of the Middle Mosel valley in the cultural context of the Occidental Linearbandkeramik Culture (raw materials, arrowheads, architecture, ceramic). A dark pictogrammes or framed words indicates the strongest relations.

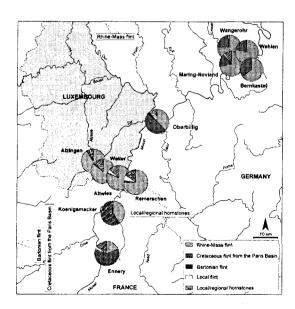


Figure 2. Detail of the raw material procurement for some settlements of the Middle Mosel (data after Hauzeur 2003; Petitdidier et al. 2003; Schmidgen-Hager 1993).

The two settlements characterised by the majority of flint coming from the Paris Basin (Ennery, Lorraine; Oberbillig, Germany) share a common chronological position in the most recent phase of the Mosel LBK. They could attest a turning over the Belgian-Dutch procurement coming from the North of the North-West LBK into a new network in process of establishing an extra-territorial western route. So far no explanations have been given to that phenomenon.

If the Middle Mosel has involved throughout raw material procurement a major axe of relation in the direction to the North, but still remaining inside the stylistic province of the North-West LBK, it is interesting to observe that this main direction does not find the same correspondence in the flint tools, pottery, and architectural traditions.

According to the present state of knowledge and studies, the lithic inventories from Luxembourg do not express evident differences. As for the raw material procurement it seems that no clear distinctions can be made from the point of view of the topographical position (valley/plateau) as for the chronological one (long/short occupation). On the contrary, the analogy

noticed between the settlements of the Middle Mosel and those of the Neckar valley appears to be linked by an identical quality – rather mediocre - of the local raw materials (hornstones). These two regions are indeed characterised by the absence of good quality flints and/or nodules of important size which is in contrast with the northern regions of the North-West LBK, where the settlements are established on or nearby the outcrops.

The main feature of the Mosel assemblages is the generalised presence of arrowheads and pièces esquillées in quantity. This high frequency can be explained by the combination of imported tools and reuse cycles. The pièces esquillées are obviously the final step of the transformation/reutilization cycle of the used tools, such as the sickle blades and the scrapers. The latter "disappear" from the lithic assemblages through this process of reuse. The arrowheads undergo markedly less the recycling process and in case of reuse continue to have the same function. Their quantity in the assemblages remains the same compared to the domestic tools.

Notwithstanding the economic necessities which could have influenced the morphology of the arrowheads of the Mosel region, these artefacts show throughout their characteristic features a great resem-

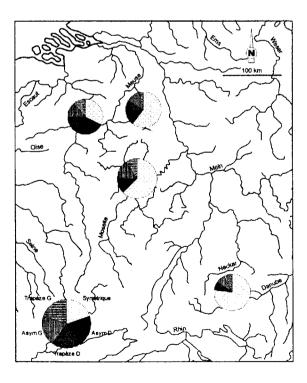


Figure 3. General distribution of arrowheads, symetrical or lateralised (detailed data in Hauzeur 2003).

blance with the southern countries such as the Neckar: predominance of symmetric arrowheads and left lateralisation of the shaping retouch (Fig. 3).

Concerning the adzes, the raw materials used for the manufacturing are coming from local or regional outcrops. The basalt rocks are dominant and are easy to collect when the Mosel cross the Eifel and Hunsrück, nearby the clustered sites of the depression of Wittlich. Other volcanic or metamorphic rocks originated from the Middle Rhine region. This rather local procurement contrasts with the long-distance imported tools made on northern flints from the Meuse basin.

3 - Domestic units

The few rather well preserved plans of houses which have been excavated on the territory of Luxembourg evoke an architectural tradition turned towards the south-eastern regions such as the Neckar. It concerns mostly the houses with bipartite internal division. The nearly systematic presence of a rear foundation trench is in contrast with its rare occurrence in the northern regions of the North-West LBK (Fig. 4). The same phenomenon can also be observed with the shape of the plans. The Mosel territory counts a majority of rectangular or pseudo-rectangular plans, which is very similar in proportions to those from the Neckar valley, even from Bavaria. On the contrary the northern regions of the North-West LBK show more diversity and can be distinguished from the southern ones by the presence of trapezoïdal shapes such as in the Paris Basin.

Despite the fact that the Mosel valley belongs to the North-West LBK, these architectural features are not linked with flint procurements, and express by somewhere the weight of the tradition exceeding the regional border of groups defined by ceramic style.

One of the Luxembourg settlements occupies an unusual topographic position for LBK sites, when these settled normally on the lower fluviatile terraces or on plateau's. It is installed at the edge of a rock shelter head created by tectonic movements. This constitutes the very end of the main plateau, with an open large view spreading down to the Mosel valley provided there are no dense bushes. Moreover the village is directly installed on the sandstone substrate, just covered by a thin layer of sediment. We thought about extraction and distribution of this raw material to other settlements in the surrounding (used as mill- or grinding stones), but no evidence was found during excavations. Even in the lithic assemblage, there is a lack of this material and the corresponding implements. This site could be a special point out of the occupied territory as a limit of a cluster of other villages which are settled in the background plateau and/or could have offered a mark point in the landscape.

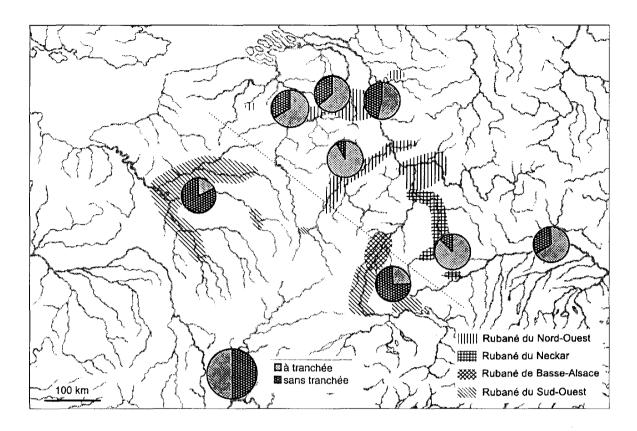


Figure 4. Presence or absence of a rear foundation trench in the houseplans, and its relative frequency amongs the main Occidental LBK groups.

4 - Ceramic

The pottery corpus of Luxembourg settlements indicates a clear stylistic connection with the Middle Rhine, from the confluence of the Rhine-Mosel-Lahn till that with the Main. This "genetic" link manifests itself by a strong similarity with the "Plaidt style" in the decor components such as their organisation (Fig. 5: 1-3,9-10).

In such a frame, ornamental elements of a peculiar style or original decorative organisation gives more information about the relations between the Mosel and easterner countries, such as, for example, the "stylistic province of Leihgestern" (Fig. 5:11,15). The foreign stylistic patterns or decorative organisations reveal contacts between some North-West LBK groups and other contemporaneous groups or cultures. Though few, these elements testify the affinities of the Mosel with the Neckar LBK (Fig. 5:5), with the Hinkelstein Culture (Fig. 5:14,18), and in another direction with the Paris Basin during Late LBK; amongs others the Blicquy – Villeneuve-Saint-Germain Culture (Fig. 5: 17).

Most of these links that are visible throughout

the ceramic styles have no direct connections with economic purposes in relation to flint tools procurement. For that, the massive presence of flint from the Meuse basin in the lithic assemblages of Middle Mosel compared to the rarity of pottery in Rhine-Meuse style (Fig. 5:7-8) makes a strong contrast. It is as if the Mosel populations would have no direct contacts with the northerners or stay impervious to external influences. The noticed contacts with the Neckar valley report more from a tradition or roots. Obviously it is not the poor quality of the hornstones, like those in the Mosel basin, which has induced relations with that region.

More evident contacts combining both the ceramic style and siliceous rocks procurement pattern appear with the Paris Basin. Some LBK settlements of Lorraine kept up the same direction of both economic links (Coniacian flint), and decoration of the pottery (garland motives) at the final stage of the LBK development.

5 - Conclusion

The apparent disconnection between the north-

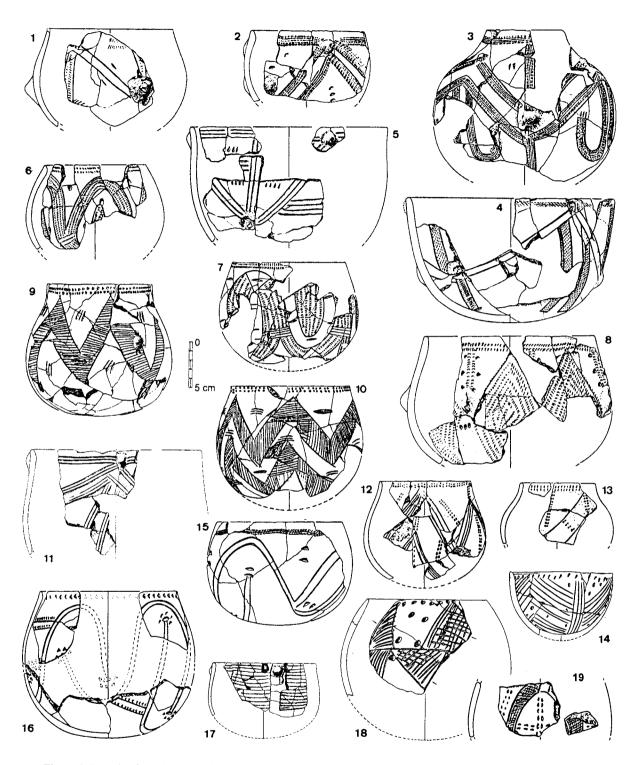


Figure 5. Potteries from the Luxembourg settlements, illustrating different affinities, local (Middle Rhine), regional (Leihgestern, Neckar, Alsace) or from other cultures (Hinkelstein, Blicquy - Villeneuve-Saint-Germain).

ern region of the North-West LBK and the southern one (Mosel) could find an explanation. The origin of the raw material points out the exchange direction, but

the lack of pottery of Rhine-Meuse style could indicate a distribution of the manufactured products by the Northerners, who travel to the Mosel and not the contrary. In such a case, the Mosel groups would have nearly never seen Rhine-Meuse pottery, except those brought by the North-Western people. This could be an alternative hypothesis to explain partially the contrast between the style links for tools, ceramic, architecture, and the economic ones for flint.

Whatever the explanation we can propose, this case study tells us about the great variety and richness of the network imposed by the necessity of raw material procurement. More interesting is to realise that connected or disconnected with the other identity aspects of a community the mineral world as well as the material culture in general reflects the complexity of human societies.

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