

SUMMARY (traduction : A. Grant)

This work is based on the study of c. 43 000 mammal bones from archaeological sites dated to the early, middle and final Neolithic periods in North-Eastern France (Alsace, Lorraine, Champagne-Ardennes). Its aims are to further the morphometric study of different animal species during the Neolithic, to determine their status and to understand their role and the manner of their exploitation for food. By comparing this information with that from sites in Central and Western Europe, it also attempts to determine the individual characteristics of the system of meat procurement of these first agro-pastoral communities of North-Eastern France, and of their development during the Neolithic.

The biometric study shows the presence of two forms of morphometrically distinct cattle, a wild form, the aurochs, and a domestic one. This differentiation is clear even in the earliest Neolithic, and would thus support the hypothesis that the first domestic cattle in the North East of France were the descendants of already domesticated stock, and thus introduced by the first agro-pastoral communities. The absence of intermediate forms and of evidence for the invigoration of the domestic stock by crosses with the aurochs, weakens support for the hypothesis that there was a local domestication of cattle. The domestic cattle of the early Neolithic of Alsace and Champagne are smaller than those of the same period in Eastern Germany. Different explanations for the difference in cattle size in this two regions are discussed. Diminution of stature is the most marked morphological modification seen in the domestic cattle of North-Eastern France during the Neolithic period. Based on important series of measurements of cattle from the Michelsberg site of Mairy and of complete skeletons from the late Neolithic site of Pagny-sur-Moselle, the evidence for castration, and the morphological modifications that accompany it, shows particularly clearly the effects of man's increasing influence on the animals placed under his control, during the course of the Neolithic. In size and in other morphological characteristics, the ovicaprines of the early Neolithic of Alsace and Champagne seem very little different from those of eastern Europe. During the period from the early to the middle Neolithic there is no evidence for a significant decrease in the stature of the sheep. The Michelsberg sheep of Mairy are smaller in size than those from the northern Chasséen site of Boury-en-Vexin. The Mairy sheep are similar to those of the middle Neolithic in eastern Germany, while the sheep of Boury-en-Vexin have more affinities with those from southern zone. This has implications for understanding the nature of the diffusion of sheep through Europe, and is discussed in detail. As is also the case for cattle, the biometric study of pig remains, suggest that these animals have been introduced, rather than locally domesticated from the wild boar population. It is not clear whether or not the slight evidence, from the Michelsberg site of Mairy, for a size increase in domestic pigs during the Neolithic can be given any more general significance. The only site from which we have information for the size of domestic dogs during this period was that of Mairy. At this site, the dogs fell into at least two size groups, but were no other morphological differences between these groups.

The study of the food economy was based on proportions in which the different species were represented in the faunal assemblages. Hunting seems to have played an unimportant, or even marginal, role at the majority of early Neolithic sites, and was only of any significant importance at one site, that of Juvigny (Ardennes). However, the bones of wild species were present at all the sites of the early Neolithic, but the absence of remains of hunted species characterizes the assemblage from the middle Neolithic site of Mairy. At early danubian sites, the principal hunted species were the large herbivores (aurochs and red deer). The late Neolithic is characterized by an intensification in red deer hunting and a significant diversification by more importance accorded to the small fur game.

Domestic animals, particularly cattle, were the main providers of meat. Pigs were second in importance as meat providers at the majority of sites of the early Neolithic while ovicaprids contributed a rather smaller proportion of the meat consumed. The relative importance of pigs in the early period is a characteristic that, in the present state of research, seems only to be paralleled at some sites in the Rhineland of Germany. It seems to be an individual characteristic of the dietary economy of these sites in North-Eastern France, when compared to sites in the Paris Basin and central Europe. Towards the end of the Linearband Keramik and during the Grossgartach although cattle exploitation continues to be predominant, the importance of pigs and cattle increase slightly. This diversification in the exploitation of different resources at the end of the Linearband Keramik culture and during the Grossgartach is paralleled at Linearband Keramik sites in Eastern Germany.

For all the principal species, it is almost exclusively young animals that are selected for butchery, while older animals kept for reproductive purposes, demonstrating good techniques of animal husbandry. Study of the butchery techniques and the representation of the different anatomical elements demonstrates a meticulous and intensive use of the different parts of all the animal carcass. Numerous analogies with the meat producing of North-Eastern France can be found at sites in central Europe, and more particularly in Western Germany, thus demonstrating cultural affinities with the East, and underlining the importance of the Rhineland. The characteristics of the meat-producing economy and animal exploitation in the middle Neolithic period can only be determined from one single site, the Michelsberg site of Mairy. There is a more rigorous selection of young cattle, castration, and the probable utilization of secondary products of sheep rearing, which reflect an increasing mastery of the techniques of animal husbandry. These changes are paralleled at other contemporary, or culturally similar, sites in Northern France and Western Germany, and seem to be part of a general trend in animal husbandry. At the same time, the cattle management, the utilisation of the different anatomical parts and the formation of the bone assemblages at this sites are unusual, and are not found on habitation sites. This seems to support the view that there was a diversification in the economy, that can be linked with the particular characteristics of each site.