New data on mammoth bone dwellings of Eastern Europe in the light of the new excavations of the Ginsy site (Ukraine)

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1. Introduction

Mammoth bone settlements of upper and middle Dniepr basin in eastern Europe have been the main source of information to elaborate several interpretative models, well known since a lot of years, of the hunter lifeway during late upper Palaeolithic. Nevertheless, revisiting data from old excavations and exploiting data from recent new excavations, mainly in Ginsy (Ukraine), may contribute to enlighten the knowledge of dwelling structures and their environment, giving a new consideration about existing theoretical models.

2. THE MAMMOTH BONE SETTLEMENTS IN EASTERN EUROPE

Actually, in the upper and middle Dniepr basin, many settlements, built with a large number of mammoth bones, have been discovered: Ioudinovo, Timonovka 1 2, Elisseevitchi 1, 2, Suponevo, Mizine, Kiev-Kirilivska, Dobranichivka, Ginsy (Gontsy), Mejiriche. All these sites are dated by ¹⁴C around 15,000 BP.

The choice to localise the sites and the characteristics of the dwelling structures are revealing several conditions of adaptation of hunters to the cold and dry climate of the late Würm. The open-air camps are installed upon the promontory of a terrace of the slope of a river valley, most often very near a paleoravine. Such a localisation presents the advantage to protect the settlement on a promontory, near-side by paleoravines, above joining easily the plain and under giving a wide view on the river

valley where animals are passing through. The choice for the localisation of the settlement is also associated with mammoth bone concentrations nearby, delivering building elements from which dwelling originality may be illustrated.

Unfortunately the knowledge of the dwelling structures of the different settlements have been only partially recorded for at least two reasons : old excavations for some sites and cryoturbation process disturbing sites located in the upper part of the Dniepr basin. The more evident dwelling structures, but always partially known, have been studied in the settlements of Ginsy, Mizine, Dobranichivka, Mejiriche Ioudinovo (Levitskii 1947; Chovkoplasse 1965; Pidoplichko 1976; Abramova et Grigorieva 1997; Iakovleva 2000; Iakovleva et Djindjian 2000). Nevertheless, the research and consequently the design of interpretative models have focused on the definition of the dwelling structure, constituted by a large mammoth bone hut and several surrounding pits (Bibikov 1967; Chovkoplasse 1965; Pidoplichko 1969,1976).

3. THE NEW EXCAVATIONS IN GINSY (UKRAINE)

The new excavations since 1992 in Ginsy, have revealed for the first time a more complex and more diversified settlement. Using progressive surface excavations of different areas of the Ginsy site, the mammoth bone dwelling structures have then been situated in relationship with the whole site, its environment and with the geomorphology of the valley slope. The Ginsy settlement is located on the promon-



 $Fig. 1 - The \ large \ mammoth \ bone \ hut \ n^{\circ}1 \ (Mizine, \ Ukraine). \ Photo \ Institute \ of \ Archaeology \ NAS \ Ukraine.$

tory of the terrace of the valley slope of the Udaï River.

One large – 5 meter of diameter– mammoth bone dwelling is actually known, surrounded by a dozen of circular pits –1 to 2 meter of diameter and depth– mainly full of mammoth bones, reindeer bones, various artefacts and other animal bones. The dwelling structure is also surrounded with ashy areas where have been found bone



Fig.2 - The small mammoth bone hut in the western part of the Ginsy site. Photo L. Iakovleva & F. Djindjian.

charcoals, bone fragments, chipped stone artefacts, bone tools. A large mammoth bone hut surrounded by numerous pits and various activity areas around and nearby the hut is characterising a typical dwelling, as known with few variations in Mizine, Dobranichivka, Mejiriche and Ioudinovo (Fig. 1).

The settlement is continuing after four meters in the west and north-west direction, with a new hut (Fig. 2), a small one-only 3 meter diameter constituted by two not twisted mammoth tusks built with several mammoth shaped bones (skull, femur). This original ovalar dwelling has been realised with the same architectural technique than the main dwelling. On the ground inside the dwelling, several rare artefacts have been discovered (reindeer antler hammer, engraved pick made with the point of a mammoth tusk, scapula with painted spots, ochre concentrations).

Around the small hut, several structures have been discovered including a hearth for ochre preparation, numerous colour concentrations with ochre sticks and blocks, an accumulation of flint micro-flakes, as if they had been thrown back from a skin used to chip tools, a dispersion of chipped flint tools, bone tools, stone artefacts, and also pits with various artefacts. Typical pits with mammoth bones and other animal bones but also a small atypical pit with chipped flint artefacts, ochre artefacts and some bone tools, have been discovered.



Fig.3 - The butchering area on the paleoravine slope in the eastern part of the Ginsy site. Photo L. Iakovleva & F. Djindjian.

The excavations of the contiguous area have continued in 2001. The microstratigraphy of this part of the settlement has already demonstrated existence of several rich occupation layers in the northern area of the settlement, with numerous flint and bone tools, shells and ochre concentrations.

The eastern part of the settlement has been also excavated during several years. It has been showed that the large mammoth bone hut was several meters far from the slope of a paleoravine, opening out largely towards the down of the valley slope. The wide surface of the slope of the paleoravine was covered by a bone bed of young mammoths, reindeers, bisons, small

carnivores and other animals, associated with chipped flint tools and bone tools (Fig. 3). Hearths are also found in the middle of the bone bed, confirming existence of butchering areas, revealing the main components of day-to-day life inside the hunter camp. The microstratigraphy has also revealed existence of several floors (Fig. 4).

Then, data concerning mammoth bone settlements in Eastern Europe have been completed and increased with the results of the excavations of the Ginsy site. The detailed studies of the abundant data will take time to be processed by the different specialised approaches. Nevertheless, the field operations



Fig.4 - The two archaeological layers in the eastern part of the Ginsy site. Lower layer: the butchering area on the paleoravine slope; Upper layer: an occupation layer on the full up paleoravine. Photo L. Iakovleva & F. Djindjian.

are indicating the Ginsy settlement was not only one complex and diversified dwelling but also several different working areas around the dwelling in a large surrounding settlement, occupied by hunters during their different period of occupations of the site.

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