

SUMMARY

This study is based on five collective burial sites discovered in close proximity during the exploitation of aggregates in the loop of the lower Seine known as the "Boucle du Vaudreuil" (Eure, Normandy, France). These burial chambers, some megalithic others apparently not, form a chronology spanning the Late/Final Neolithic and the Beaker cultures. The main lines of this research focus on the variations between the different monuments, the study of the tombs as a group and finally the subsequent impact of each site on the landscape and on human occupation following the end of its funerary use.

"Sepulture 1", excavated between 1966 and 1968 near the village of Porte-Joie, was a large Neolithic, burial chamber measuring 13 meters by 2 m. This structure, apparently non-megalithic contained at least 73 individuals, their remains concentrated mainly within an area of 4 sq m. All of the skeletal remains found in connection come from this same area. An individual grave, dating from the end of the Bronze Age, was also discovered on the edge of the Neolithic funeral area. Good small bone preservation coupled with certain anatomical connections suggest that the initial primary deposits, spread over the entire surface of the chamber, where subsequently reorganized.

"Fosse XIV", also near to Porte-Joie, was a megalithic burial chamber of 15 m by 3 m and was found in association with several posterior occupations notably a proto-historic funerary enclosure and an early medieval cemetery. The structural remains comprise the chamber floor almost entirely finished in chalk slabs, a few megalithic supports and a fragment of an indented slab used to separate the funerary chamber from the anti-chamber. Work on the site produced two probable secondary accesses, one lateral, and the other axial to the terminal section of the chamber. A large chalk block at the eastern end of the grave could be interpreted as a stele. With only 29 individuals identified, this site is below the average for the five sites included in this study while the quantity of other material is here more important than any of the other four sites.

Despite important disruptions of the sepulchral strata, the osteological links give clear evidence for a principal zone of successive primary deposits, later largely disturbed. A second zone

of primary deposits in the terminal section of the chamber is proved by very large proportion of extremity bones.

The site of "Les Varennes", Val de Reuil is a large non-megalithic gallery chamber of approximately 14 m by 3 m. It contained at least 30 individuals, with a rather important portion of skeletons partially anatomically connected. As observed for Fosse XIV, it had secondary accesses, one lateral and the second axial in the terminal section. Throughout the entire chamber primary deposits have been carried out which were disturbed during the use of the grave during moves favouring the central area of the funerary chamber over that of the terminal zone. The discovery of the remains of certain wild animal species suggests the use of this structure as a den by carnivorous animal(s).

The mass of deposits though poor in ornaments contain clues indicating a brief use of this burial site during late Neolithic.

The collective grave of Beausoleil 3 is a burial pit which has been only identified through a few dig windows. This pit was also found in association with a small early medieval cemetery. Stripping the top soil brought into evidence a burial pit of about 14 m by 3 m, oriented north south in contrast to the other four sites all orientated east west. This diagnostic has furnished an important mass of funerary human remains, many in connection, located in the central part of the pit, abundant artefacts of the late Beaker period and a probable southern entrance. Certain arguments, such as the reoccupation of this site during the early Middle Ages or the presence of burnt sandstone blocks, allow us to consider the possibility of a megalithic architecture.

The site of "La Butte Saint Cyr", without doubt the most complex of this group, is a megalithic gallery burial chamber, 12 m by 3 m, containing the remains of at least 109 individuals. It has an access to the terminal section and probable stele at the end of the antechamber. This monument experienced at least 3 long phases of funeral use accompanied by interventions in the architecture and in the human bone deposits. Corresponding remains from the first 2 phases are sealed under stone architecture elements (orthostats or paving stones). The "cell", a space of more or less 1.5 m², concentrates the main part of the third

phase deposits, and is limited by the foundation trenches of a partition built in perishable material.

This last monument was incorporated, during early Middle Ages, into a cemetery associated with the village. During the early period of this cemetery (second half of the 7th century) the monument was reused to house at least two graves of apparently privileged personages. During the 9th century, there were further degradations and some of the blocks were reused during a campaign to enlarge the associated church. Medieval burials continued to encroach onto those of the Neolithic until the cemetery was eventually abandoned.

The dating of these monuments shows coherent construction periods during the last centuries of the 4th millennium with a shared interval between 3300 and 3100 BC. The more recent deposits from this period suggest a continuous use of the tombs during the Late and Final Neolithic eras, particularly the Gord-Artenac complex with Conguel type ceramics. It is impossible here to identify any prolonged interruptions of their use. The later deposits are clearly linked to the Beaker Culture complex, except for that of the Varennes site. The differences in the deposits are mostly quantitative. The lower count of individual remains found in the two non-megalithic tombs could be explained by a faster rate of natural degradation.

The chronology based on radiocarbon dating of human bones shows a full funerary use during recent Neolithic until the 29-28th millenaries. The lack of data for the Final Neolithic and Beaker Culture periods raises questions about the precise function of the monuments during these periods, particularly when one considers the associated funerary deposits.

In spite of the complete contrast between megalithic and non-megalithic tombs, the architectural organisation of the tombs offers a cohesion in the composition of the different elements: bipartition antechamber-chamber, compartmenting of the chamber, access systems and secondarily passages.

Sex and age at death were not important selection criteria in the choice of the buried population. Only the phenomenon of a

nearly complete exclusion of children under the age of 5, pre-natal death excepted, would here appear to be a rule.

Beyond a certain homogeneity of the studied populations, the statistical treatment of the metric data brings to light differences in bone size, opposing schematically megalithic and non-megalithic tombs in that it concerns their robustness. The origin of this data structure could be linked to an unequal sex ratio but such a ratio could not be established using the hipbone as a base for sex determination. This contrast could be due to better conditions of life for the buried population in the megalithic tombs.

The collective burial sites of Val de Reuil and Porte-joie form a coherent whole resulting from a global development. This offers a rare opportunity to discuss from solid base the hypothesis, often quoted, that the recent-final Neolithic collective tombs have received the major part of the dead population of a unique social group.

The gallery burial chambers of the Parisian Basin have up to now shown an image of equal treatment of the dead, an argument not usually applied to the kind of organisation usually associated with societies of the final periods of the Neolithic era.

Generally speaking data delivered by the work on these sites indicates on one hand an evolution towards an individualisation of the deposits associated with a decrease in spatial volume of the burial chambers and on the other hand a hierarchy within the sites as a group. This data allows the hypothesis of coherence ethno-historic, each site able to define group filiation with the population of "Fosse XIV" representing a dominant group. The rather scattered distribution of the monuments in the landscape seems to us emblematic of this social organization.

Finally, these sites give the possibility to study in a detailed manner the question of the future of the megaliths and their influence in the organisation of the territory, as well as during protohistory, as in the early middle Ages. The phenomenon of funerary reoccupation, which is not isolated, is analysed in detail and different interpretations are discussed.