Straus L.G., Otte M. et Haesaerts P. (éds.), *La Station de l'Hermitage à Huccorgne*. Liège, ERAUL 94, 2000.

CHAPTER 17

SUMMARY AND CONCLUSIONS

Lawrence Straus and Marcel Otte

The Hermitage open-air site at Huccorgne was apparently first visited (probably on many brief occasions) by the Neandertal makers of Mousterian tools. Dating of the Mousterian assemblages that have been found over the years (by Tihon, by Haesaerts and by us) in different levels is fraught with uncertainly, although at least some of them may have corresponded to or predated some of the major humid periods of oxygen isotope stage 5 (*sensu lato*) (Ulrix-Closet 1975), while the most recent ones are thought to date to stage 3 (Moershoofd or Hengelo) (Haesaerts 1978:127 and personal communication). Although none were found by us, bifacial foliate pieces have been found at HH--a phenomenon characteristic of many Middle Paleolithic industries in northwestern and central Europe. Presumably Neandertals were drawn to Huccorgne for its flint; there are no faunal remains that would give us a hint as to possible subsistence activities at the site. Certainly the densities of artifactual material in levels below Stratum 4/4.1 are infinitely lower than those of the Gravettian horizon, at least in the excavation areas where these earlier levels were attained. Neandertals were at HH at times when the environmental conditions were considerably more moderate than during the Gravettian in early oxygen isotope stage 2.

Attracted by locally available nodular chalk flint of excellent quality, as well as by a strategic setting on an oxbow ridge cutting across the Méhaigne River gorge midway between the surface of the Hesbaye Plateau and the middle Belgian Meuse valley in Liège Province, foragers of the Gravettian period repeatedly visited the open-air site of Huccorgne-Hermitage. Like its "sister" site, Maisières-Canal in Hainaut Province, HH witnessed both intensive quarry-workshop activity and hunting. But the visits were ephemeral and evidence of investment in constructions is minimal (i.e., a possible hearth in the central part of the site, excavated by Joseph Destexhe and the Chercheurs de la Wallonie 30 years ago, and problematic "arrangements" of limestone blocks found in the UNM/ULg excavations near the eastern end of HH). The exposed ridge-top location would have provided scant protection and the site would have been particularly unliveable in winter. Warm-season forays onto the plateaux of Middle Belgium from over-wintering bases in the caves in and near the Ardennes Massif may have been in order during the millennia leading up to the Last Glacial Maximum, by which time the entire territory of Belgium (and indeed all of northwest Europe) was abandoned by humans. There is only the slightest (and rather ambiguous) hint of warm season visits to HH in the form of shed cervid antlers that may have been collected by humans following their cold season loss by the animals.

Excluding a couple of totally erroneous, contaminated dates, the plausible radiocarbon determinations point to human occupations of HH during the period between c. 28-23 kya. With the assumption that the date of 23 kya, done several years ago on a bulk sample of bone fragments from the main Gravettian layer in the Destexhe excavation, is too

young (due to contamination from humic acids, for example), we can narrow the timeframe of Gravettian occupation at HH to the period between 28-24 kya. By eliminating the younger of two determinations (done on whole bone collagen) from a single bone, we can further narrow the range down to the period between 28-26.5 kya (with single standard errors of c. 400 years). This estimate is based on 4 AMS dates of carefully prepared samples of collagen (in some cases, on the aspartic acid fraction) from 3 bones found intimately associated with numerous flint artifacts at the base of Stratum 4 in one small area of the eastern excavation area near the railroad cut. The fact that this part of the site was occupied during this period does not, of course, preclude the possibility that there may have been younger occupations in other sectors.

Geomorphological evidence, supported by these radiocarbon dates, suggests that HH was occupied by humans during the Maisières (a.k.a. Kesselt) oscillation, which saw a moderately cold climate in Belgium, with limited humiferous soil formation, surface runoff and colluvial redeposition of loess. While this episode represented a significant interruption in pleniglacial conditions, the environment was still rigorous, with open steppe-tundra vegetation, but probably few or no trees or bushes in the vicinity of HH. (Attempts to obtain pollen grains in samples taken systematically from the UNM/ULg excavation sections were unfortunately all unsuccessful.) The presence of runoff on lightly vegetated surfaces (perhaps disturbed by human activity) is manifest at the base of the Stratum 4 loess, and the relative humidity and somewhat moderated temperature are attested by the weathering that is shown by oxidized Stratum 4.1.

It is likely that--especially toward the west-- there was post-depositional disturbance at HH, consisting of running water, with some rilling and size-sorting of artifacts. This is apparent both in the western *sondage* dug by the UNM/ULg crew near the road cut in the main ("Dock") site and in the trenches dug by crews from the IRSNB under the direction of Paul Haesaerts along both the eastern and, especially, western faces of the road cut that separates the "Dock" and "Smetz" properties. Evidence of water flow erosion was also apparent in both pits dug in the western ("Smetz") site by UNM/ULg. Movement of artifacts and redeposition seems to have been part of the picture in this western part of HH. Nonetheless, there is considerable evidence of intactness in the central area of the "Dock" property dug by Destexhe (hearth, distinct flint-knapping areas) and near its eastern edge along the railroad cut, dug by UNM/ULg, with knapping areas, small clusters of moderately well-preserved bones (mainly mammoth), and, most spectacular, a spatially-restricted cluster of blades and flakes that refit to a single prismatic blade core. The existence of at least two episodes of (first successful and then failed) blank removal from this core, separated by a period of surface exposure and hard freezing of the core, proves that the site was visited at least twice, although several more visits likely took place, perhaps over centuries, if not millennia. The spread of dates is suggestive of a long period of episodic use (probably centered on the somewhat more temperate, humid Maisières oscillation, but perhaps also later during the Tursac phase--after which human occupation of Belgium became impossible). But it is also clear (especially with the rather broad vertical scatter of artifacts and the existence of a few lithic refits spanning several centimeters of vertical separation along the eastern face of the road cut) that part of the spread within the Gravettian horizon is also the result of reworking by geomorphological processes, notably slope runoff and perhaps solifluction.

The presence of mammoth, horse and reindeer remains are emblematic of a "mammoth steppe" (a.k.a. periglacial steppe-tundra) habitat. The suggestion of red deer presence (a single shed antler fragment from the IRSNB excavation), as identified by Gautier, is disconcerting in this context. Its apparent association with the above-mentioned taxa (and with marmot) could only slightly moderate the overall impression of cold, open conditions, albeit with fodder adequate to support several large-bodied herd ungulates. The faunal assemblages are far too small and fragmentary to say anything about human hunting or butchering practices. The question as to whether they actually hunted mammoths or not remains open, although HH joins a long list of Gravettian and Pavlovian sites across that North European Plain that contain mammoth remains in close association with artifacts. Mammoth carcasses (or just mammoth skeletons) may have been attractive additional resources of scavengable food and/or fuel at certain sites. Their bones and teeth are prominent on the Gravettian landsurface at HH. However, nothing at this site suggests highly specialized hunting of any one species, although horse may actually have been the most important game species at HH. The discrete presence of tanged Font-Robert points in the Tihon and Destexhe collections and of shouldered and/or "stiletto-like" Gravette points in the IRSNB and UNM/ULg ones testifies to hunting as a significant--if not predominant--activity at HH, perhaps underestimated by the badly preserved faunal assemblages. Certainly the humans took advantage of hunting opportunities when they presented themselves at this strategically located site.

HH was, however, fundamentally a place to which humans came to knap flint, probably for the acquisition of large blades which were then transported back to residential sites. The latter most likely included caves in the sheltered valleys of the flint-less uplands. The assemblages from the IRSNB and UNM/ULg excavations (and probably from the Destexhe ones as well) are overwhelmingly dominated by knapping debris (especially débitage and "chunks", which are often exhausted core remnants). Debris outnumber retouched tools and weapons by 40 to 1 in the combined IRSNB collections from the trenches along both faces of the road cut and by 93 to 1 in the combined UNM/ULg excavations in the main ("Dock") site. There is an apparent, roughly east-to west gradient, however, in the ratio of debris to tools across the site: 66 to 1 in the excavation area adjacent to the railroad trench; 200 to 1 in the *sondage* near the road cut; 41 to 1 in the trenches along the east face of the road cut; 32 to 1 in the trenches along the west face of the road cut; and 12 to 1 in the west ("Smetz") area. The most dramatically different collection is, however, the one from the UNM/ULg *sondage* near the road cut, where there are many flakes and blades, but few tools or microdébitage items. The scarcity of the latter can be explained by runoff, but the rarity of the former might be due to the existence of definite activity areas within the site. As noted by earlier excavators, and as observed by us, both in our excavations and in study of the distribution plans drawn by Haesaerts, it is apparent that there were distinct knapping areas at HH, especially at and around the center of the site. Perhaps tools associated with other activities (preparation for hunting, butchering, hide-scraping, bone/ivory/ antler-working, etc.) were mainly to be found in peripheral areas--notably to the west (the eastern periphery having been essentially destroyed by the wide railroad trench, while the northern periphery is under a house and outbuildings and the southern periphery too deeply buried in loess to be easily accessible). The distribution of finds is certainly far from even across this large site, suggesting that

different activities had been spatially discrete and that the site had had a certain organizational structure. One can imagine, for example, the logical physical separation of knapping, butchering and food preparation and consumption activities. The long history of excavations and the disparate state of the archeological record from various parts of the site prevents, however, the development of a complete, integrated picture of the detailed site structure of HH.

It is apparent that the objective of the flint knappers at HH was the production of blades (and bladelets). The HH assemblages are highly laminar overall. Only the best blades were chosen for local tool manufacture or--more commonly--for export. Many apparently unused blades and bladelets were abandoned at the site. Indeed the artifacts are generally striking in their "freshness", even despite subsequent periglacial processes such as cycles of freeze and thaw.

Despite the fact that burins are the dominant tool type among all the small collections of tools, burin spalls are relatively scarce. Dihedral burins far outnumber truncation burins. End-scrapers and perforators are very few, testifying to the rarity of processing and maintenance activities at HH. The same is true of denticulates, notches, and truncated pieces. Together with the paucity of hearths and absence of significant, clear-cut structures, this suggests that HH was not a long-term residential site, but rather a frequently re-visited, special-purpose knapping locale. Only a minimum of formal tools and weapon tips was left behind after visits to HH.

The presence of Font-Robert points places HH squarely within the tradition of tanged point Gravettian assemblages in the northwestern end of the North European Plain, although shouldered elements (more common to the east) are present in trace quantities here as in other Belgian sites (e.g., Maisières, Spy) (Otte 1979).

HH has had a long, complex history of excavation that makes it difficult to piece together a full picture of this large open-air site. Unfortunately, the modern, controlled excavations that are mainly published here, were limited in area and peripheral in location vis à vis the central part of the site, which was mainly excavated by Destexhe. It was in this area that there apparently had been at least one hearth, in addition to distinct knapping areas. Similarly dense concentrations of débitage and core remnants were uncovered near the railroad trench and along the east face of the road cut by the UNM/ULg and IRSNB projects respectively. Naturally occurring limestone slabs blocks (probably derived by gravity and solifluction from the cliffside to the east and the butte at the western end of the ridge) may have served as "site furniture", but the extent (if any) to which they may have been arranged by humans remains unclear. No definite structures have been detected, although simple shelters (perhaps using mammoth bones as construction elements) are not out of the question.

In the last analysis, it is the mass of flint artifacts (especially knapping debris) that defines the HH site. Not counting the western ("Smetz") area, where artifacts are very few, densities of artifacts range from 251/sq.m in the UNM/ULg road-side *sondage* down to 33/sq.m in the IRSNB trenches along the west side of the road cut, with intermediate values of 79/sq.m in the UNM/ULg railroad-side excavation and 145/sq.m in the IRSNB trenches

along the east face of the road cut. Judging from Destexhe's plan, the masses of artifacts, especially in the northwest sector of his large excavation, must have been even more impressive in the central part of the site (said to be locally >600 artifacts/sq.m according to Destexhe [Haesaerts 1978:128]). Although the Gravettian component of HH is undoubtedly a palimpsest resultant from several (many?) visits to the site, the intensive nature of knapping activity here is patent. What is absent here is evidence of long-term occupation. The unsheltered nature of the location, its probable lack (or great scarcity) of wood for fuel, and the likely absence of game in winter all make HH a reasonable case for warm-season occupation by humans and a site that was complementary to the Gravettian-age cave sites of Upper Belgium, from Trou Walou in the east to Trou Magrite in the west. In this way, HH may have been fundamentally similar to Maisières-Canal, similarly located in an exposed, albeit flint-rich, setting in the broad valley of the Haine and perhaps seasonally complementary to such well-sheltered cave sites as Spy and Montaigle.

Survival in the Belgium of early oxygen isotope stage 2 depended on humans' ability to find shelter, food, fuel, water and flint. Not all these essentials could be found at the same place at the same time, but by combining the positive attributes of the cave sites in and along the Ardennes with those of the open-air localities at chalk flint outcrops, not far away in Middle Belgium, and perhaps moving with the horse and reindeer herds between the southern valleys and the plateaux to the north, survive they did for a few brief millennia on the most remote frontier of the Western Gravettian world--until they could do so no more and had to retreat ultimately to the Last Glacial Maximum refugia of southern France and Iberia. Future discoveries excavations of sites both on the plateaux and in the upland caves, especially if they yield seasonality data and positive identification of the sources of flint blanks and tools found in the cave, hopefully should be able further to put this attractive hypothesis to the test. As it is, the site of HH, even with its imperfections stemming from some geologic disturbance to a checkered history of excavation, joins Maisières--also with its problems of dating and palimpsest deposits--in shedding some light on the lithic technology and wider adaptations of the last Early Upper Paleolithic settlers on the northwestern fringes of the Gravettian *oikumene*.