

## CHAPTER 13

### LITHIC REFITTING IN THE IRSNB GRAVETTIAN COLLECTIONS

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#### INTRODUCTION

Both Straus (during his 1993 classification of the IRSNB collections from HH) and Martinez (during his stay at the IRSNB in 1994) systematically attempted to refit lithic artifacts from the Gravettian component of Haesaerts' trenches. This was done as a consequence of Martinez's success in refitting a prismatic core from our excavation area at the eastern edge of the main ("Dock") site in 1992-3 (Martinez and Guilbaud 1993). That refit ensemble demonstrated the intactness of the activity area around the limestone slab and mammoth bone feature and it showed the existence of at least two shortly spaced occupations, since the core was knapped during two episodes that were separated by a freeze that crazed the flint. Searches for evidence of knapping activity areas and of mechanical reworking of the deposits along the western edge of the main site in Haesaerts' trenches were the goals of our refitting efforts at the IRSNB. In addition, this work provided further insights into the technology of lithic reduction and blank manufacture during the Gravettian occupations of the HH site. Most (but not all) the refitted items had point-provenience data, but some only had "northings" (distances from Haesaerts' origin point).

#### THE REFITS

Table 1 details all the refit sets obtained among the artifacts of the Haesaerts collection. There are 17 sets involving 43 artifacts. Two sets are not composed of physical refits, but are items that are very likely to have come from the same distinctive, frost-crazed flint nodules.

Several of the refits are pairs of snapped blade fragments. Seven refit groups involve a core or chunk and one or more flakes/blades. These can be considered as indicative of individual knapping episodes. In addition, although they lack cores or chunks (which are often exhausted cores), there are two groups that involve platform renewal flakes to which 2-3 flakes refit. Nine of the groups are pairs; 3 groups involve 3 refitted items each; 2 involve 4; 1 involves 5.

Interestingly, most refit groups involve flakes *or* blades, but never both. More than half the sets (9) are of blades, clearly showing the laminar character of the flint reduction practiced during the Gravettian at HH. Five of the blade refit sets involve all or some decortication blades. Presumably many of the interior (non-cortical) blades were removed from the site for use elsewhere, either unmodified, or retouched into tools or weapons.

Most of the refitted materials are of the local, fine-grain, bluish-gray Hesbaye flint. But some are on the also local, yellowish patinated variety of Hesbaye flint. And there are 3 sets whose items are of a very fine grain, jet black flint that resembles Oboug flint from Hainault. It is likely, however, that this too is a local, very high-quality, Upper Cretaceous chalk flint from the Hesbaye region.

There is one snapped blade of non-local Brussels sandstone.

## DISPLACEMENT OF REFITTED ARTIFACTS

Among those sets with full or partial Cartesian coordinate information, the maximum distance of separation along the north-south axis (more or less corresponding to the hypothesized direction of possible water flow along the Gravettian landsurface) is 80 cm, but the average is only 29.7 cm (n=11 sets) (see Fig. 1). The maximum east-west separation is 51 cm, with an average of 30.6 cm (n=8). The maximum vertical separation is 15.5 cm, with an average of 6.9 cm (n=8). This rather unspectacular vertical separation evidence is, however, paired with the fact that at least 7 sets have refitting items that cross-cut Haesaerts' geological subdivisions of Stratum G. This may be less meaningful than it first appears, however, as part of the variation he monitored clearly involves facies differences of the same loess unit. There is possibly some evidence of water flow, especially as concerns localized unit G4, which might be the fill or a depression, channel or rill (?). In that case, some materials from G2 or G3 may have been redeposited a short distance downstream in G4. Yet this idea is contradicted by one of the two cases we have of refits of items from G4 and G2 or G3. In that case, the G4 item is further *north* (upslope) than the G2 item. Items from 6 of the refit sets are all from only one stratigraphic unit and data are unfortunately absent for 4 other sets. It is also worth noting that if there had been a lot of north-south flow, the average refit separation distance along that axis should have been much greater than the average east-west separation distance, but that is not the case as the two averages are identical at 30 cm. Nevertheless, it is clear that some items did move up and down very short distances in the stratigraphy, as well as short (and occasionally moderate) distances along horizontal axes. The former movements could have been caused by freeze-thaw, loess wetting-drying worms, rodents, etc. The latter could have been caused by human action (scuffling, trampling, transport, tossing, etc.) or, in some cases, by water flow (rilling) and soil creep. Evidence for major movement is absent in the Haesaerts eastern road-side trenches, in strong contrast to the Froment western road-side pits, where there are geological and artifact size-sorting indicators of running water (in incipient channels?), and--tellingly--no refits.

The materials from the Haesaerts thus tend to corroborate the evidence for *in situ* knapping areas and minimal displacement in our railroad-side excavation area. They also point to the distinct emphasis on blade production (from prismatic blade cores) at HH during the Gravettian.

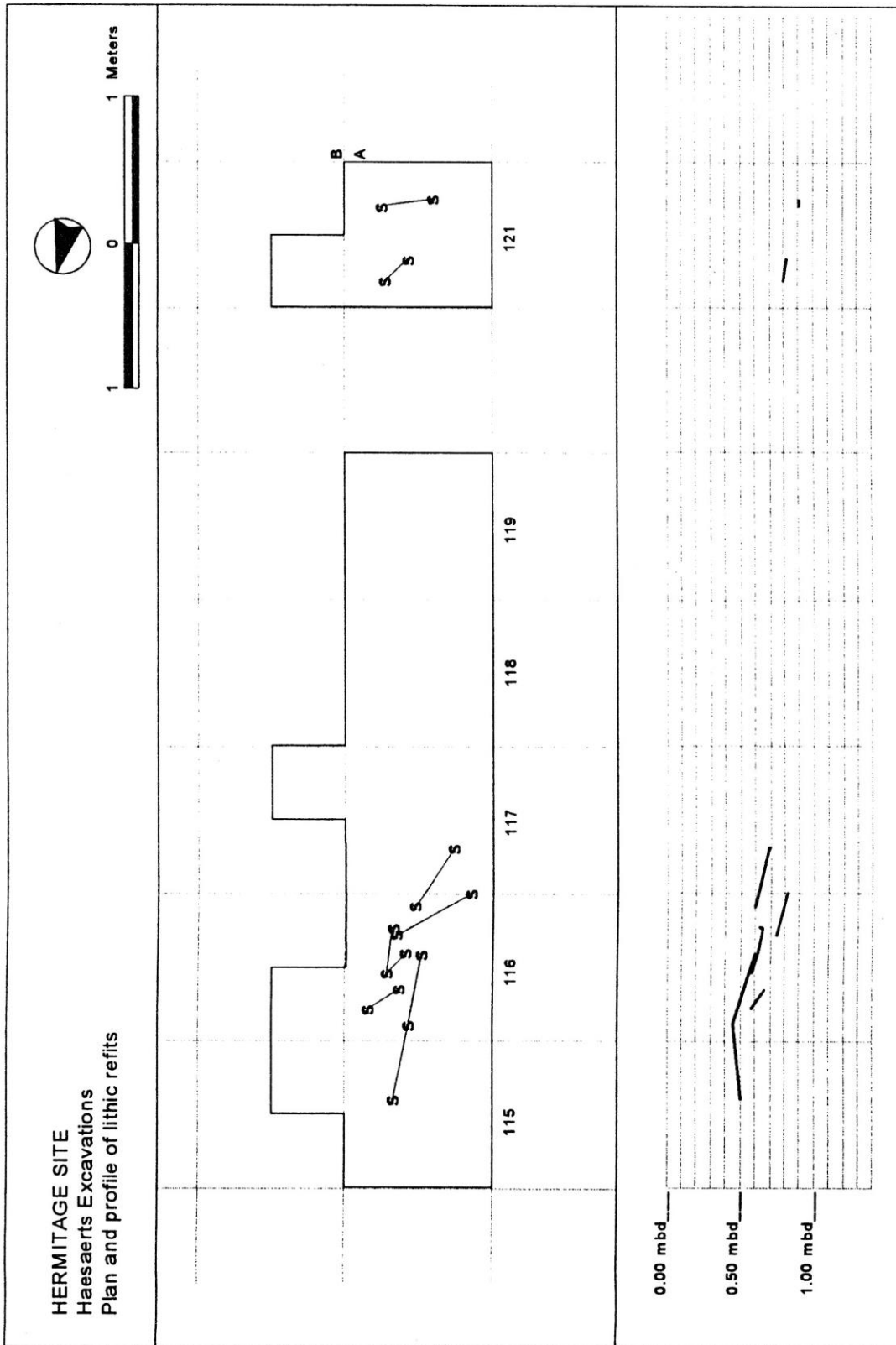


Figure 1. Plan and profile of lithic refits (prepared by A. Martinez).