Chapter 16

Aurignacian and Gravettian Settlement Patterns in Central Europe

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1. INTRODUCTION

Early Upper Paleolithic cultures—the Aurignacian and the Gravettian—are rarely represented at sites in central Europe. Only two new sites have been excavated since the last syntheses by Hahn (1977) on the Aurignacian and by Otte (1982) on the Gravettian. Both authors emphasized the existence of regional cultural areas, one of which was located in southwestern Germany. This discussion will, therefore, not deal with the culture-historical reconstruction but will focus on site formation processes. They will be evaluated as a necessary prerequisite for the recognition of activities performed at the sites and for a reconstruction of more general settlement patterns. Faunal assemblages and proveniences of raw material will be examined in relation to mobility strategies and settlement systems.

2. GENERAL BACKGROUND

In central Europe, the Aurignacian culture apparently replaced the Mousterian. With the notable exception of an unpublished loess site of Remagen-Schwalbenberg, no transitional industry has been identified to date. Radiocarbon chronology indicates that the earliest Aurignacian date is 36,000 B.P. that comes from Level III of Geissenklösterle Cave. The dates of 23,000 B.P. for the Aurignacian of Vogelherd are probably wrong and a result of contamination. The Gravettian has been dated between 28,000 (Weinberghöhlen) and 20,000 B.P. (Bockstein-Törle).

Even though a good number of samples have been radiocarbon dated (e.g., Lommer-sum and Vogelherd), the dates for site levels and the sites, generally, are too few in number and are often contradictory. Other dating methods should be used to control radiocarbon
dates. To estimate dates more accurately, a sufficient number of dates per event should be available. Although the appearance of the Aurignacian in the area probably predates 30,000 B.P., more precise dating is premature. The singular small numbers of \(^{14}\)C dates on hand at present suggest that these reservations about chronologies have to be applied to practically all early Upper Paleolithic sites in Europe.

Because there is a gap in dates between 20,000 and 18,000 B.P. found all over Europe and even North Africa, the end of the Early–Middle Upper Paleolithic dates at 20,000 B.P. may be artificial. It is assumed that a major disturbance in the radiocarbon record, perhaps due to the maximum advance of the Würm glaciers, is responsible for this gap. If this is so, then the sites and dates attributed to this period also become questionable.

Although no major geomorphological change has been observed between the Mousterian and the Aurignacian, a major one occurred between the Aurignacian and Gravettian. A general flattening of relief is visible in the loess sections of northwestern Europe from 29,000 to 28,000 B.P. During the previous Aurignacian, hill relief was more pronounced and valley floors were up to 5 m lower than today. This suggests the existence of drier conditions with major erosional episodes on the valley floors. The Gravettian seems to coincide with a colder and more humid climatic change which eroded the hilltops and filled the valleys. It must have also had a major impact on vegetation and faunas, although up to now, this problem has not been analyzed. This process apparently lasted for only a few centuries and contributed much to the present land forms. This episode is probably marked in the caves by a major erosional hiatus.

3. SITE FORMATION PROCESSES

Only the Aurignacian site of Lommersum and the Aurignacian and Gravettian sequence at Geissenklösterle cave have been examined for natural processes that shaped the archaeological record. The open air site, Lommersum (Hahn, in press) contains six Aurignacian levels, three of which were found in secondary deposits. Analysis of the evolution of the ancient landforms and the refitting of lithic material and of bones indicate that most, if not all, of these levels were originally one. A major concentration, possibly a residential camp, was located upslope. Shortly after its deposition, sheet solifluction transported lenses of the main archaeological level downslope where it was stopped by a periglacial step in the slope. Sheet solifluction occurred several times. The frontal parts of these lenses were later eroded and deposited downslope above the peripheral area of the site. This area stayed intact because the steep slope protected it from runoff water more effectively than on the upper slope.

Refitting of the artifacts and bones helped to reconstruct these events that otherwise would have been interpreted as a succession of several Aurignacian occupations. Contrary to expectation, the archaeological level in the lower part of the slope was preserved in primary position. On the upper part, however, it was moved by solifluction. Red ocher lenses and lower leg bones of reindeer found in primary or near primary anatomical position indicate, however, that the disturbance was not too severe.

The Geissenklösterle Cave (Hahn et al. 1977) contained 12 Gravettian and Aurignacian levels that were distinguished by artifact concentrations and evident features like hearths, ash and red ocher lenses in different sediments. The top levels of the Gravettian and the Aurignacian sequence are characterized by numerous crushed artifacts. This