

SUMMARY

The aim of this thesis is to present an overview of the results of Palaeolithic research on the eastern slopes of the Drahaný Highlands in the Vyškov and Prostějov regions. The research centred on the determination of the exact location and extent of Palaeolithic sites mentioned in specialist literature and on determining the cultural affiliation of the stone artefact collections from these sites. Further issues concerned analyses of settlement strategies, particularly the definition of settlement strategies associated with specific technocomplexes, as well as the outlining of areas with a higher probability of occurrence of new Palaeolithic sites.

The initial chapters present an overview of natural conditions in the studied area and summarize the history of Palaeolithic research in the Vyškov and Prostějov regions. The key part of the thesis is a list of all the Palaeolithic sites in the region with descriptions of their exact location, brief history of research, description of finds and their approximate age. Surface prospection was the main method used for re-locating the sites listed. The author has visited a total of 84 sites. It proved impossible to collect any artefacts on 25 sites because of unfavourable conditions (forest, grass, buildings...). As regards the remaining 59 sites, Palaeolithic stone artefacts were discovered on 28 sites. Researchers could determine on these sites their exact location and site area by recording the coordinates of all the finds using a GPS device. No artefacts were found on the remaining 31 sites mentioned in literature. Four new surface sites (Dryšice V, Ondratice V, Skalka I and Vyškov I) and one new stratified site (Želeč I) were discovered during the surface prospection. Over the last four years, researchers have conducted a rescue archaeological excavation on this site.

The Želeč stratified site is the only site in the region with absolute dates. The excavation of this site has produced very interesting information. Two settlement horizons were distinguished on this site. The older one, dated by AMS to 42–45 ky BP cal, relates to the main cultural layer in the largest ditch Zel_4a with three hearths and probably also with the majority of finds from the nearby surface site Ondratice I/Želeč. The younger horizon, which was dated to 34–38 ky BP cal, is represented by one hearth in trench Zel_12b and by one feature of unknown function in ditch Zel_12a. The results of the micromorphological analysis confirmed the interpretation of charcoal lens as hearths and based on these results, the deposition of the main cultural layer took place during the interpleniglacial climate (Lisá 2010). Anthracologist Jan Novák identified the pieces of charcoal as larch, pine and juniper (Novák 2010). Raw material composition

of the lithic material is rather unexpected; white patinated spongolite dominates, followed by radiolarite and Moravian Jurassic cherts. Finds of rare tools and technologically interesting artefacts such as a leaf point, a steep end-scrapers, two side-scrapers, numerous bifacial thinning flakes and flakes with faceted platforms together with the results of the AMS dating allow us to date the main cultural layer situated on the boundary of layers D and E to the Initial Upper Palaeolithic.

Another part of this thesis was the technological-typological analysis of the collection of lithics from surface sites in the studied region, with the aim of exact description of these collections in regard to local specifics and their assignment to particular Palaeolithic technocomplexes, which could help date these sites by drawing a comparison between them and similar absolutely dated collections from other regions. For this reason, more than ten thousand lithic artefacts were analysed; most of them are deposited in the Anthropos Institute of the Moravian Museum in Brno (7,786 pieces), another 2,790 artefacts come from the author's collections and a small number of the analysed lithics are deposited in the Vyškov and Prostějov museums. Each particular artefact, including debris, was measured and described by the E4 programme. Results were saved in Microsoft Access databases. Further data concerning the sites in the Vyškov region was derived from the author's seminar thesis (Mlejnek 2004), and in the case of sites that had already been analysed (Ondratice Ia, Alojzov I, Kelčice I, Vincencov I), information published in several papers was used (Oliva 2004; Oliva 1987; Svoboda, Přichystal 1987; Svoboda, Přichystal 1990). A detailed description of lithics found on each site was put together on the basis of these analyses. These descriptions include raw material composition, technological and typological characteristics and are included in the List of Sites.

On the basis of typological and technological analyses supported by cluster analysis, it was possible to distinguish intense occupation dating back to the Initial Upper Palaeolithic, less homogenous Aurignacian occupation and finally relatively dense Epiaurignacian occupation in the Prostějov area and Epigravettian occupation in the Vyškov area. Few artefacts can be dated back to the Middle Palaeolithic and individual artefacts from the Skalka I site were assigned to the Late Palaeolithic. The apparent absence of Gravettian and Magdalenian sites in the studied region is noteworthy.

Whereas the Middle Palaeolithic occupation of the studied region is rather scarce, settlement dating back to the Initial Upper Palaeolithic is quite dense. In the Drnovice area, several sites can be assigned to this horizon. Presence of flat

retouched artefacts (side scrapers, leaf points) in combination with rare Levallois products is typical of these collections. End scrapers dominate over burins among the Upper Palaeolithic tool types on these sites. The Vincencov-Kamenice site is located north of Otaslavice in the Prostějov region. A collection from this site could be assigned to the Szeletian because of the abundance of flat retouched tools. However, the dominance of burins over end scrapers sets this site apart from other surrounding ones dated to the Initial Palaeolithic, as well as apart from other Szeletian sites in other regions. The most numerous collections from this period come from the area between Drysice, Želeč and Ondratice, where the richest site Ondratice I/Želeč (Mlejnek *et al.* 2012) can be found. These collections can be assigned to the specific type of industry on the boundary between the Szeletian and the Bohunician. The large amount of the Levallois products is in favour of the Bohunician assignment, whereas the presence of flat retouched tool types is typical of the Szeletian. The author has proposed a term “industry of the Ondratice type” (Mlejnek *et al.* 2012, 311) for this kind of lithic collection. According to the AMS dating from the Želeč I stratified site, which is located on the edge of the Ondratice I/Želeč surface finds concentration, it can be assumed that the age of this type of industry could be about 42–45 thousand years.

The Aurignacian settlement seems to be less homogeneous, which has been demonstrated by the cluster analysis. Vítovice I is the only Aurignacian site in the Vyškov area. It is interesting due to the abundance of splintered pieces and less numerous steeply retouched end scrapers. Analogical collections can be found in the Brno area, for example, on the nearby Aurignacian site Tvarožná II – Velatické vrchy (Škrdla, Kos 2002). Collections from the surface sites in the surroundings of Otaslavice (Horní Otaslavice I, Dolní Otaslavice I) seem more evolved. Because of the presence of the Levallois products and backed blades in these collections, one could speculate about the presence of a Bohunician and Gravettian admixture. Possible admixtures to the Aurignacian part of the collection should be also taken into account in the case of the surface site Skalka I. Collection from the surface site Kelčice I – Předina seems more archaic, based on the presence of numerous Middle Palaeolithic tool types. Because of the abundance of the “sluňák” type quartzite on this site, it could be interpreted as a workshop processing this raw material. Less numerous collections from Podivice I and Brodek I-Hůrky could be also assigned to the Aurignacian.

Sites that can be dated back to the Middle or possibly Late Upper Palaeolithic are quite numerous as well. In the Prostějov area, collections were identified as Epiaurignacian based on the presence of abundant polyhedral burins (Ondratice II, Ondratice VIII, Alojzov I, Seloutky I). The Epiaurignacian industries are characterized by the dominance of erratic flint among raw materials and burins (mostly polyhedral) among tool types. On the basis of analogy with absolutely dated sites in Austria (Langmannersdorf and Alberndorf), the Moravian Epiaurignacian sites can be also

dated to the period between 29 and 21 thousand years BP cal. If this is correct, they would be approximately contemporaneous with the Gravettian occupation. Nevertheless, the Gravettian (Pavlovian) settlement is concentrated mainly in the vicinity of larger watercourses, which are absent in the studied area. The Epigravettian sites located in the surroundings of Račice-Pístovice (mainly Pístovice II) could be even younger (Stránská skála IV, Brno – Vídeňská Street) based on analogies from the Brno region. This also applies to the Epigravettian collection excavated at the early medieval hillfort Zelená hora by Radslavice. Short end scrapers, polyhedral burins, microburins with one platform and backed blades and bladelets are the most typical artefacts found at the Epigravettian sites in the Vyškov area. While the raw material composition in the collection from Zelená hora is dominated by erratic flint, Moravian cherts together with erratic flint dominate in the collections from the surroundings of Račice-Pístovice.

Other research issues concerned the settlement strategies of particular Palaeolithic technocomplexes. However, settlement strategy analyses in the Vyškov and Prostějov regions proved that the sites of all present technocomplexes are situated in similar locations. All the Palaeolithic sites in the studied region are located in the countryside type B (Aurignacian countryside), according to the countryside typology proposed by J. Svoboda (1995), which means on highland slopes. The major advantage of these locations is a good view into valleys with animal herds passing by. From all the proxies useful in settlement strategy analyses, elevation and good view proved to be the most important ones. More than 90 % of sites are located at the elevation between 270 and 400 metres above sea level, most of them between 300 and 390 metres. Locations with higher elevation were rarely occupied by Palaeolithic people, usually during shorter hunting expedition or procuring of raw material.

Low percentage of the so-called intact ‘fossil’ countryside is the main methodological problem of settlement strategy analyses. Large part of the countryside is inaccessible for surface prospection (forests, towns, grassland); Palaeolithic layers in the river valleys are usually deposited several metres under Holocene fluvial sediments. It can be therefore assumed that analysis of geographical distribution of Palaeolithic sites could be used for picking up locations with higher probability of discovering new Palaeolithic sites. Also, a predictive model of probable presence of new Palaeolithic sites based on altitude has been developed in the studied region. Up to now, this model has helped to discover four new surface sites. Because of the similar settlement strategies of all technocomplexes present in the region, it was possible to develop only a generalised predictive model. It was not possible to assign less numerous or typologically indistinctive collections to particular technocomplexes only on the basis of site location as it was partially possible in the case of the middle course of the Morava River (Škrdla 2005). On the other hand, small differences in geographical location of particular technocomplexes could be observed, for example, the

IUP sites in the Prostějov region were, on average, situated slightly higher than the Epiaurignacian sites.

In this thesis I have tried to summarize the existing knowledge about Palaeolithic settlement of the eastern slopes of the Drahany Highlands in the Vyškov and Prostějov regions. However, no study can be absolutely exhaustive, which is also the case of this thesis. During the analyses of lithic collections from the region, a large amount of data has been collected. Due to time and space, it was not possible to analyse and publish them all in this thesis, and it thus opens many research and publishing opportunities for the future.

Surface prospection of some rich Palaeolithic sites has proved that more surface finds are to be expected in the future, and the discovery of new Palaeolithic sites is probable as well. However, Palaeolithic research should aim at discovering new stratified sites that could be examined by state-of-the-art scientific methods and that could be absolutely dated. Without archaeological excavations of stratified sites it will not be possible to answer the main research questions concerning the chronology and relationships between particular Palaeolithic technocomplexes, or questions concerning the environment in which the Moravian Palaeolithic hunters and gatherers lived.