

SILICITE AXES IN MORAVIA, CZECH SILESIA AND BOHEMIA

Lubomír Šebela & Antonín Přichystal



CZECH ACADEMY OF SCIENCES, INSTITUTE OF ARCHAEOLOGY, BRNO

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I. Scope of the topic

Silicite axes and chisels found in eastern Central Europe represent a special type of knapped flint industry of the Late Stone Age and Early Bronze Age. Three aspects of their functions are studied. Primarily, they served as tools used mainly by men – and were part of their grave goods. They were primarily used for processing and working wood. A secondary function was as a commodity subject to long-distance trade. And thirdly, they had prestigious and symbolic roles. In recent years, their connection with raw material sources has begun to be studied.

This type of knapped industry was first excavated among the Mesolithic finds in North Germany, where various core striking tools were excavated together with genuine flint axes. One such artefact was discovered in Moravia in settlement feature A in Smolín (Břeclav District). According to Karel Valoch, it is a core striking tool made from Olomučany-type chert; it is flat-cut and of roughly rectangular cross-section (Valoch 1992, 69, obr. 2). Analogous finds are among various core striking tools found in northern Germany. The tool is the first of its kind to be found on the territory of the Czech Republic. It proves that the people of Smolín were aware of the function of such tools and it cannot be ruled out that they were in contact with areas where they were produced.

Among other proofs are two finds from neighbouring Poland that date to the era of the early Linear Pottery culture. One of them comes from feature 12 at the settlement in Gniekovice, Wrocław District in the Lower Silesian Voivodeship, where what is most likely a semi-finished silicite axe was found (Lech 1985, 70, Ryc. 1: e). The other artefact, which also can be interpreted as a blank, was found at the settlement of Olszanica near Kraków in Lesser Poland (Milisauskas 1976, 46, Fig. 26: F). Polish researchers consider them stray finds, results of random experimenting with material during the production of typical Neolithic industry. They strictly exclude contact with the hunter-gatherer communities of the Late Neolithic (e.g. Lech 1985, 79–80), although these communities were not insignificant. Generally, in eastern Central Europe, the beginning of the production of silicite axes is associated with the onset of the Late Stone Age – the Eneolithic (Lech 1991, 569; Janák 2005, 209).

Research into flint axes is of paramount importance for the knowledge of technological, socio-economic, and cultural development of the prehistoric societies of the Late Stone Age and Early Bronze Age. The study of archaeological material has focused mainly on ceramics, which date settlement and burial assemblages to a certain stage of prehistoric development. Recent material studies show that both knapped and polished lithic

industry has evidence value, particularly when the typology of the lithic industry is linked with the results of petrographic research. Such analysis is able to provide valuable insights, which point to links between regions and cultures that have not been exposed by the study of archaeological material (especially ceramics).

The aim of this study is to use the methods described above to present silicite (flint) axes and chisels together with their evidence of production and the tools made from them in Moravia, Czech Silesia, and Bohemia. The structure of the text corresponds to this as well. The definition of the topic is followed by a description of the historical lands of the Czech Republic (Moravia, Czech Silesia, and Bohemia). Chapter III is an overview of the research into silicite axes in Moravia, Czech Silesia, and Bohemia. The results of the petrographic research are presented in chapter IV. The following chapter deals with the finds of silicite tools. A critical overview of archaeological sources is followed by a typology of the silicite axes and chisels found in the Czech Republic. In the next two chapters, the focus is on the representation of these artefacts in the archaeological cultures of the Czech Eneolithic (Chapter VI) and Early Bronze Age (Chapter VII). Chapter VIII sets out conclusions. Sources, including the finds from Moravia, Czech Silesia, and Bohemia as of 2016, are presented in Chapter IX. The chapter also deals with foreign finds deposited in the collections of Czech museums. These are evaluated in Chapter X.

We were able to write this monograph thanks to the support of the Institute of Archaeology of the Czech Academy of Sciences, Brno. The credit for support and making possible study trips across the Czech Republic goes to the former director of the Institute, doc. PhDr. Pavel Kouřil, CSc. We would also like to thank the current director of the Institute, PhDr. Lumír Poláček, CSc., for the opportunity to finish our analyses and publish the present monograph in this edition of *Spisy archeologického ústavu AV ČR Brno*. The drawing documentation in this book is largely the work of Jiří Brenner, the draughtsman at the Institute of Archaeology, and Běla Ludíková. Photographic documentation was largely made by Ludmila Plchová, to whom also goes the credit for compiling the photo tables. The maps of the finds of silicite axes and the geomorphologic map were made by Mgr. Marek Vlach, Ph.D. We are immensely grateful to the staff of museums all over the Czech Republic who helped us to search for flint axes and chisels in museum collections and without whom this monograph would have been impossible to finish.

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of the Institute of Archaeology of the Czech Academy of Sciences, Brno. Petroarchaeological analyses carried out by Professor Přichystal were funded by institutional support for research at the Faculty of Science of Masaryk University in Brno (no. 2222/315010).

This monograph about silicite axes is dedicated to the memory of the Moravian archaeologist Prof. PhDr. Josef Skutil, CSc. who pointed out the occurrence of axes made from Polish raw materials on the territory of Moravia and Bohemia already in the interwar period.

Lubomír Šebela, Antonín Přichystal, Brno, 14th September 2020

II. Historical territories of the Czech Republic

The Czech Republic (Czechia) is a state in the eastern part of Central Europe. It borders Germany in the west, Poland in the north, Slovakia in the east, and Austria in the south (Fig. II.1). The Czech Republic is a landlocked territory that consists of parts of what used to be the Lands of the Bohemian Crown for many centuries: Bohemia, Moravia – to which Czech Austria was annexed in 1920 (see below) – and Czech Silesia.

With regard to its geomorphologic structure, the Czech Republic is located in the territory of four geomorphologic provinces. The largest is Český masiv / the Bohemian Massif, which underlies the whole of Bohemia, western Moravia up to Brno, and western Czech Silesia up to Ostrava. The south-eastern and eastern parts of the Czech Republic belong to the Western Carpathians (Fig. II.2). The remaining two provinces are only a small part of Czech territory: the west Pannonian Basin and Lower Morava Valley in the south-east and the North European Plain and Opavská pahorkatina / the Opava Highland in the north-east. The main European watershed, which divides the basins of the rivers that feed the North, Baltic and Black Seas, runs through the Czech Republic. The main watercourses in Bohemia are Labe / the Elbe and Vltava / the Vltava, the Morava and Dyje / the Thaya are the greatest in Moravia, and Odra / the Oder and the Opava in Czech Silesia.

Administratively, the Czech Republic is divided into 14 regions. These do not respect the original land boundaries (Dreslerová et al. 2007, příloha 1). For instance, the cities of Svitavy and Moravská Třebová are situated on the historical territory of Moravia, but currently come under the administration of the Pardubice Region (east Bohemia), while Slavonice and the Dačicko microregion in south-western Moravia now come under the administration of the South Bohemian Region. The territory of the capital city of Prague is at the level of a region. Czech regions are divided into districts, of which there are currently 76; the most recent one, the Jeseník District, was only established on 1 January 1996. The territories of the regions are defined by the sum of their districts.

II.1 Moravia

Moravia is the eastern part of the Czech Republic (Fig. II.3). In the west its historical territory borders Bohemia, in the north-west with the territory of Kłodzko, which was a part of Bohemia until 1742 (Musil 2007, 157) and now belongs to the Lower Silesia Voivodeship in Poland. In the north, it borders Czech Silesia, in the east Slovakia, in the south Lower Austria, one of the nine federal states (Bundesland) of Austria. The land borders



Fig. II.1. Location of the Czech Republic on the map of Europe (black).

have been stable with only Dyjský trojúhelník / the Thaya Triangle being annexed to its territory on 10 September 1919, based on the Treaty of Saint Germain.

The Moravian landscape is largely composed of highlands and lower mountain ranges (the altitude of the highest peak, Praděd, is 1492 m a.s.l.). The border with Bohemia is occupied by Českomoravská vrchovina / the Bohemian-Moravian Highlands, Dražanská vrchovina / the Dražany Highlands and Moravský kras / the Moravian Karst are situated more to the east. The north of Moravia and the south part of Czech Silesia is occupied by Hrubý Jeseník / the Hrubý Jeseník Mts. To the south-west of it, on the border between Bohemia and Kłodzko, is the Králický Sněžník / the Králický Sněžník Group. To the south-east of Hrubý Jeseník / the Hrubý Jeseník Mts. are Nízký Jeseník / the Nízký Jeseník Highland and Oderské vrchy / the Oder Hills. Lowland valleys along the rivers of south and central Moravia separate these mountain ranges from the mountains in east Moravia (Moravskoslezské Beskydy / the Moravskoslezské Beskydy Mts., Vsetínské vrchy / the Vsetín Highlands, Javorníky / the Javorníky Mts. and Bílé Karpaty / the Bílé Karpaty Mts.), and the more westerly Chřibý / the Chřibý Highland and Žďánický les / the Žďánice Forest. Along the River Morava, which runs in the north-south direction through Moravia, are Hornomoravský úval / the Upper Moravian Graben and Dolnomoravský úval / the Lower Moravian Graben. In the north, Hornomoravský úval / the Upper Moravian Graben joins the Bečva part of Moravská brána / the Moravian Gate, and Vyškovská brána / the Vyškov Gate in the south. The latter borders Dyjsko-svratecký úval / the Dyje-Svratka Graben in the south. In the south of Moravia, Pálavské vrchy / the Pálava Hills rises. From the Neolithic to the Eneolithic and the Early Bronze Age, settlement in Moravia was concentrated

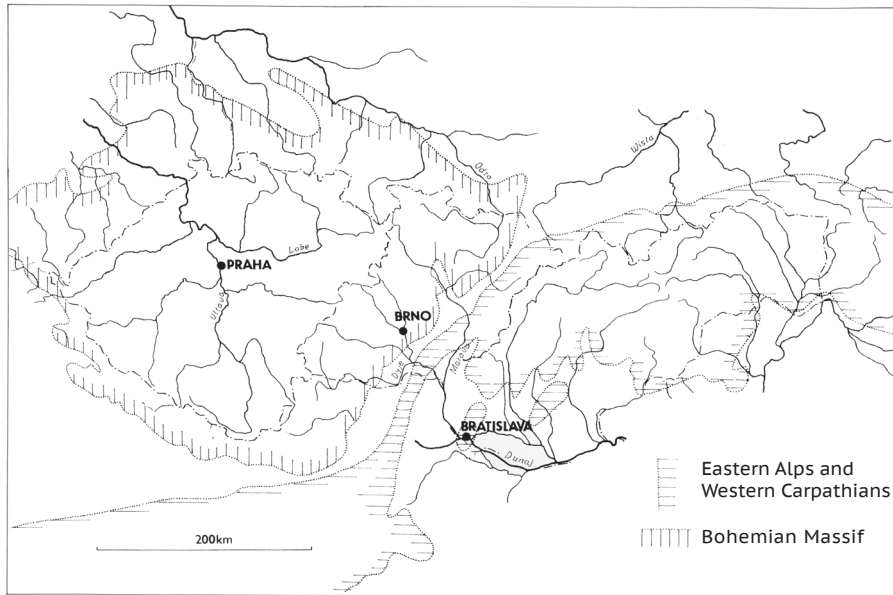


Fig. II.2. Territory of the Czech Republic in the system of the geological units of the eastern part of Europe. Vertical lines delimit the area of Bohemian Massif and horizontal the area of Eastern Alps and Western Carpathians (after Šebela 2016b).

in Hornomoravský úval/the Upper Moravian Graben, Dolnomoravský úval/the Lower Moravian Graben, and Dyjsko-svratecký úval/the Dyje-Svratka Graben (Map II.1: 73–76), all highly fertile areas. The Hornomoravský úval / Upper Moravian Graben is a depression stretching from Libina (Šumperk District) in the north to Otrokovice (Zlín District) in the south. Its axis is the River Morava with its tributaries, the Rivers Haná and Bečva. From Napajedelská brána/the Napajedla Gate, it runs on as Dolnomoravský úval/the Lower Moravian Graben, a river valley of the Morava. In the south-west, it joins Věstonická brána/the Věstonice Gate and Dyjsko-svratecký úval/the Dyje-Svratka Graben. The main axis of this graben is the lower course of the Morava River with its tributary, Dyje/the Thaya. The Dyjsko-svratecký úval/Dyje-Svratka Graben is a geomorphologic unit on the territory of southern Moravia. It extends into neighbouring Austria. It is home to the River Dyje / the Thaya, which runs up to Dolní Věstonice, and the lower course of the River Svratka.

II.2 Czech Silesia

The term Czech Silesia denotes the Czech part of Upper Silesia, a region in the north-eastern part of the Czech Republic (Fig. II.3). For the purposes of our work, small enclaves in Krkonoše/the Giant Mts. and Jizerské hory/the Jizerské hory Mts., which were annexed to Czechoslovakia from Poland in 1959, are not included. We also do not exclude its Moravian enclaves (e.g. the Osoblaha projection), which have always been under the influence of the Silesian authorities. Czech Silesia is essentially identical to the territory of the former Austrian Silesia (until 1918); the difference is that it now includes the Polish part of the Těšín and Hlučín Regions, which were annexed on 4 February 1920, based on the Treaty of Versailles. The Czech part of Silesia borders Moravia in the south, Slovakia (Žilina Region) in the south-east, and

Poland in the east, north and south-west (the Polish part of Upper Silesia).

The western part of Czech Silesia is located in Krkonoško-jesenická soustava/the Giant Mts.-Jeseník System (Map II.1), which contains Rychlebské hory/the Rychleby Mts. and the ranges of Hrubý Jeseník/the Hrubý Jeseník Mts. and Nízký Jeseník/the Nízký Jeseník Highland. In the eastern part, which falls under the province of the Western Carpathians, are Moravskoslezské Beskydy/the Moravskoslezské Beskydy Mts. and Slezské Beskydy/the Slezské Beskydy Mts. There are also uplands in the Osoblaha, the Opava and the Hlučín Regions. Along the River Odra / the Oder begins the Odra part of the Moravian Gate and to the north-east of Ostrava opens Ostravská pánev/the Ostrava Basin. The rivers Opava and Olše form the border with Poland, while the rivers Odra/Oder and Ostrava are part of the border with Moravia. Among the towns lying on the Moravian-Silesian land border are Ostrava and Frýdek-Místek.

Prehistoric settlement of Czech Silesia in the Neolithic is associated with loesses in the traditional settlement area (Janák 2012, 31), which includes Ostravská pánev/the Ostrava Basin and Slezská nížina/the Silesian Lowland (Map II.1: 72 AB, 77). The Ostravská pánev / Ostrava Basin, with the river Odra/the Oder and its tributaries of Opava, Ostrava and Olše, spans northern Moravia, Silesia, and southern Poland. Here, the Silesian Lowland denotes the area of Opava Upland, which is a small part of this lowland that mostly lies in neighbouring Poland.

II.3 Bohemia

Bohemia occupies the western part of the Czech Republic (Fig. II.3). In 1920, the northern part of the Vitoraz region (the area around České Velenice in the Jindřichův Hradec District), based on the Treaty of Saint Germain (10 September 1919), was annexed to the Bohemian part

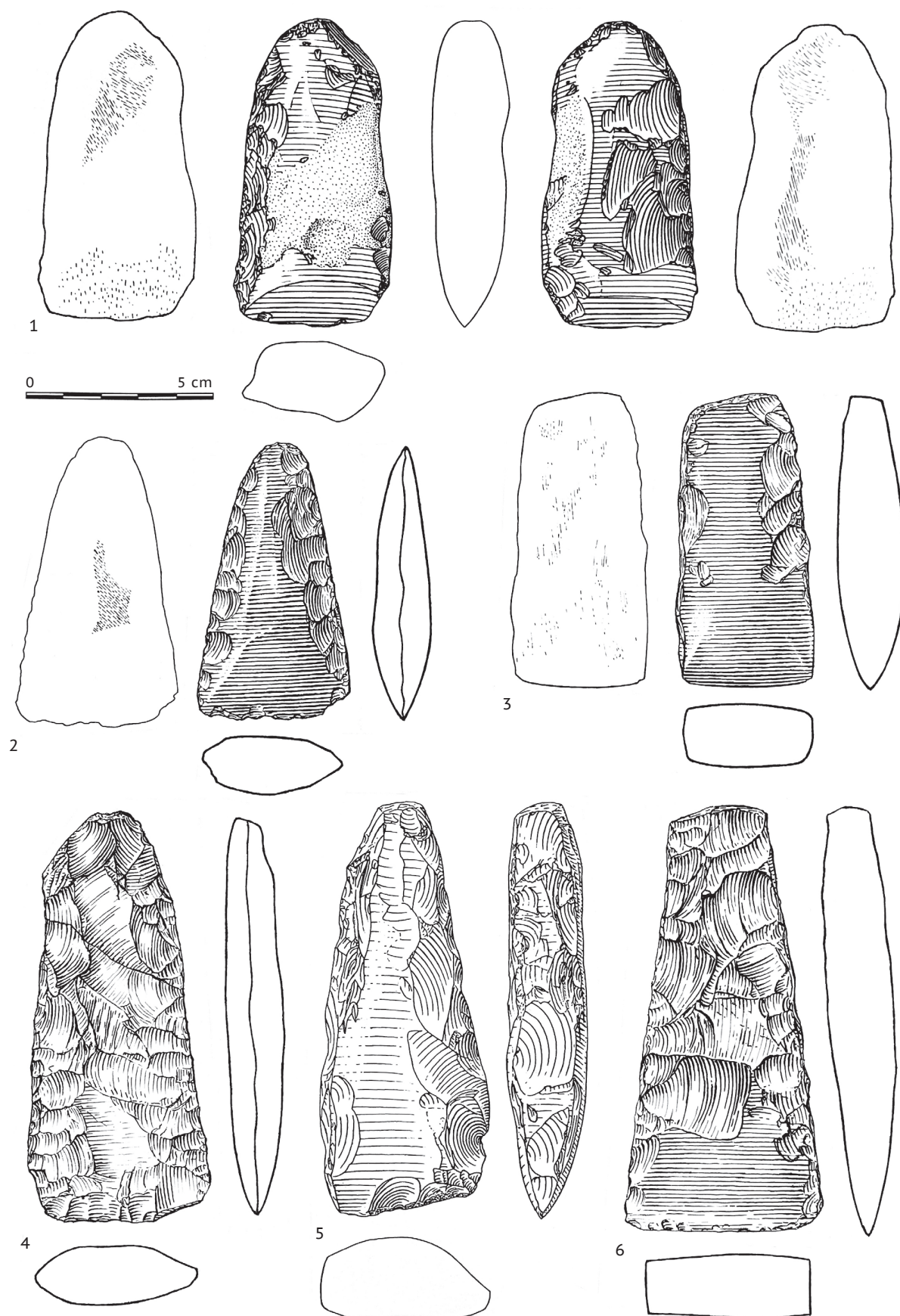


Plate XXIV. Moravia (1-6). 1 - Žopy; 2, 3 - Žeranovice; 4 - Vícemilice (Site I), Grave 5/1937 (after Šebela 1999); 5 - Velehrad; 6 - Vranovice.

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