

LUBOMÍR ŠEBELA  
ANTONÍN PŘICHYSTAL

# Silicite daggers in the territory of the Czech and Slovak Republics

Czech Academy of Sciences,  
Institute of Archaeology, Brno

**Silicite daggers in the territory of the Czech  
and Slovak Republics**

Spisy Archeologického ústavu AV ČR Brno 78  
Editor-in-chief: Balázs Komoróczy

ISSN 1804-1345

# **Silicite daggers in the territory of the Czech and Slovak Republics**

Lubomír Šebela, Antonín Přichystal

Czech Academy of Sciences, Institute of Archaeology, Brno

Brno 2024

The book was published with financial support of the Czech Academy of Sciences.

The Institutional support for the long-term conceptual development of a research organisation RVO: 68081758 – Czech Academy of Sciences, Institute of Archaeology, Brno.



Authors: Lubomír Šebela, Antonín Přichystal

Reviewers:

Prof. PhDr. Jozef Bátora, DrSc.

Prof. Dr. hab. Andrzej Pelisiak

This work utilised data and services from the Large Research Infrastructure Archaeological Information System of the Czech Republic (AIS CR), available at <https://www.aiscr.cz/en>.



Czech Academy of Sciences, Institute of Archaeology, Brno

Brno 2024

© Czech Academy of Sciences, Institute of Archaeology, Brno, and authors

ISBN 978-80-7524-083-5 (print)  
ISBN 978-80-7524-084-2 (online ; pdf)

DOI 10.47382/arub2024-01

ISSN 1804-1345

# Contents

## Chapter I

<b>Silicite daggers in the territory of the Czech and Slovak Republics</b> .....	7
Introduction .....	7

## Chapter II

<b>Historical territories of the Czech and Slovak Republics</b> .....	9
II.1 Bohemia .....	9
II.2 Moravia .....	10
II.3 Czech Silesia .....	11
II.4 Comparison of natural and geographical conditions in the Czech Republic .....	12

## Chapter III

<b>Research history</b> .....	13
III.1 Bohemia .....	13
III.2 Moravia .....	15
III.3 Czech Silesia .....	18
III.4 Slovakia .....	19
III.5 Appendix – Letter from Countess Elise Schlik .....	25

## Chapter IV

<b>Source base</b> .....	27
IV.1 Bohemia .....	27
IV.2 Moravia .....	27
IV.3 Czech Silesia .....	27
IV.4 Slovakia .....	28

## Chapter V

<b>Raw materials used to produce the silicite daggers</b> .....	31
V.1 Introduction .....	31
V.2 Results obtained .....	31
V.2.1 Czech Republic .....	31
V.2.2 Slovakia .....	32
V.3 Characteristics of the raw materials found with daggers from the Czech Republic .....	32
V.3.1 Nordic flint (76 pcs) .....	32
V.3.2 Western raw materials (Bavarian tabular chert; 21 pcs) .....	33
V.3.3 Polish raw materials (3 pcs) .....	34
V.3.4 Probably local Bohemian and Moravian raw materials (6 pcs) .....	34
V.3.5 Unspecified (11 pcs) .....	34

## Chapter VI

<b>Classification and typological division of silicite daggers</b> .....	41
VI.1 Czech Republic .....	41
VI.2 Slovak Republic .....	50

## Chapter VII

<b>Occurrence of silicite daggers in the territory of the Czech and Slovak Republics in the Late Stone Age</b> ....	51
VII.1 Czech Republic .....	51
VII.1.1 Middle and Early Eneolithic .....	51
VII.1.2 Corded Ware culture .....	52
VII.1.3 Bell Beaker culture .....	54
VII.2 Slovakia .....	55

## Chapter VIII

<b>Occurrence of silicite daggers in the territory of the Czech and Slovak Republics in the Bronze Age</b> . . . . .	57
VIII.1 Czech Republic . . . . .	57
VIII.1.1 Bohemia . . . . .	57
VIII.1.2 Moravia . . . . .	59
VIII.1.3 Czech Silesia . . . . .	61
VIII.2 Slovakia . . . . .	62

## Chapter IX

<b>Conclusion</b> . . . . .	65
-----------------------------	----

## Chapter X

<b>Inventory of the finds from the territory of Czech and Slovak Republics</b> . . . . .	67
X.1 Notes on the registry . . . . .	67
X.2 Czech Republic . . . . .	68
X.2.1 Bohemia . . . . .	68
X.2.2 Moravia . . . . .	80
X.2.3 Czech Silesia . . . . .	93
X.2.4 Czech Republic – finds without a locality . . . . .	94
X.3 Slovak Republic . . . . .	95
X.4 Appendix – Catalogue of daggers in figures . . . . .	97

## Chapter XI

<b>Souhrn: Silicitové dýky na území České a Slovenské republiky</b> . . . . .	101
XI.1 Pramenná základna . . . . .	101
XI.2 Suroviny . . . . .	102
XI.3 Klasifikace a typologické členění silicitových dýk . . . . .	103
XI.3.1 Česká republika . . . . .	103
XI.3.2 Slovenská republika . . . . .	107
XI.4 Výskyt silicitových dýk na území České a Slovenské republiky v pozdní době kamenné . . . . .	108
XI.4.1 Česká republika . . . . .	108
XI.4.1.1 Starý a střední eneolit . . . . .	108
XI.4.1.2 Kultura se šňůrovou keramikou . . . . .	109
XI.4.1.3 Kultura zvoncovitých pohárů . . . . .	110
XI.4.2 Slovensko . . . . .	112
XI.5 Výskyt silicitových dýk na území České a Slovenské republiky v době bronzové . . . . .	112
XI.5.1 Česká republika . . . . .	112
XI.5.1.1 Čechy . . . . .	112
XI.5.1.2 Morava . . . . .	113
XI.5.1.3 České Slezsko . . . . .	115
XI.6 Závěrečné úvahy . . . . .	116
<b>References</b> . . . . .	119
<b>Abbreviations of the institutions</b> . . . . .	130
<b>Annexes – photos, plates</b> . . . . .	131
<b>List of maps</b> . . . . .	195
<b>About authors</b> . . . . .	198

# Silicite daggers in the territory of the Czech and Slovak Republics

## I. Introduction

Silicite (flint) daggers (appearing in the territory of the eastern part of Central Europe) represent a special type of chipped stone industry in the Late Stone Age and Early Bronze Age. Their function is monitored on three basic levels. Which tools were primarily used, that they were used mainly by men, and in whose grave goods they are found. Secondly, they were one of the commodities of local and long-distance trade. The third circle of their function was a prestigious and symbolic role. In recent years, their connection to raw material sources has begun to be observed.

Some Paleolithic stone and bone artefacts probably served as daggers. In the Eneolithic and the earlier Bronze Age, daggers appear as a product from the region of Northern Europe. A characteristic feature of these daggers is the two-sided treatment of the surface, which is retouched on the edges or all over on both sides (Sklenář, Sklenářová, Slabina 2002, 83 with pictures). In the Czech specialised literature, they are mainly considered to be imported from the north (Zápotocký 1961; Šebela 1998; Marková 2004), because no evidence of their production in our territory has yet been found. Silicite (usually simply referred to as flint in the archaeological literature) daggers represented prestigious artefacts belonging to the peak in terms of their processing technique, at a time when interest in chipping industry was already generally in decline. To some extent, this contradiction was undoubtedly related to the fact that they imitated a new type of attractive and desirable artefacts – copper, later bronze daggers – at the end of the Eneolithic and in the Early Bronze Age.

The study of silicite daggers is of immense importance for the knowledge of both production-technical and socio-economic levels as well as the cultural level of the prehistoric society of the Late Stone Age and Early Bronze Age. Until now, the study of archaeological material has mainly been focused on ceramics, which, in assemblages of either a residential or grave nature, date the given assemblage to a certain developmental stage of prehistoric development. The latest material studies show that the stone industry, both chipped and smoothed, has its own testimonial value. Especially when the typology of the stone industry is linked to the results of petroarchaeological research. The analysis conceived in this way yields very valuable knowledge, pointing to links between regions and cultures, which had not been detectable by the study of archaeological material (mainly ceramic material) to date.

The task of the presented work is to process silicite (flint) daggers in the territory of the historical lands of the Czech Republic (i.e. Bohemia, Moravia, and Czech Silesia) and Slovakia from this perspective. Its division also corresponds to this. After defining the topic, the characteristics of the individual historical lands of the Czech Republic and Slovakia follow. Chapter III provides an overview of the research on silicite daggers in the Czech Republic from the perspective of their historical lands and Slovakia. In the following Chapter IV the results of the petroarchaeological research are presented. Then follows the article (Chapter V) dealing with the find funds. After a critique of the archaeological sources, the typology of silicite daggers in the territory of both republics is presented here. In the next two chapters, attention is paid to their



representation in the archaeological cultures of the Czech Eneolithic (Chapter VI) and the Early Bronze Age (Chapter VII). The conclusions are formulated in Chapter VIII. The source base containing finds from the territory of Bohemia, Moravia, Czech Silesia, and Slovakia with the status up to 2021 can be found in Chapter X.

We were only able to prepare the presented monograph thanks to the opportunities provided to us at the Czech Academy of Sciences, Institute of Archaeology, Brno. We thank the former director of the Institute of Archaeology of the Czech Academy of Sciences in Brno, doc. Dr. Pavel Kouřil, CSc. To the current director, PhDr. Balázs Komoróczy, PhD., we express our gratitude for the possibility of completing the analyses and publishing the monograph in the Spisy Archeologického ústavu AV ČR Brno series. The drawing documentation is largely the work of Jiří Brenner (former draftsman of the Czech Academy of Sciences, Institute of Archaeology, Brno) and Mrs. Běla Ludiková, who is already retired. The photographic documentation was largely carried out by Mrs. Libuše Plchová (former employee of the Institute of Geological Sciences, Faculty of Science, Masaryk University), she is also owed a great amount of thanks for compiling the photo tables. Photo documentation in some museums was willingly carried out by: Mgr. Milan Metlička (Bzí and Milínov), Mgr. Simona Bubeníková (Svojsice), Mgr. Jan Eigner (Cheb, Cetnov cadastre, Žalov and Brandýsek), Mgr. Rostislav Hetfaiš (Božice), Mojmír Bém (Hulín), Mgr. Iveta Juchelková (Lhota), Mgr. Pavel Stabrava (Stará Ves) and the late Svatopluk Bříza (Úvalno).

The micrographs of the silicites used were taken by Antonín Přichystal. Maps of occurrence of silicite daggers are the work of Mgr. Marek Vlach, PhD., and Milan Filip. The geomorphological map of the Czech Republic was made by Mgr. Jaroslav Bartík, PhD. Many thanks from us go out to the museum workers in both the Czech Republic and Slovakia, the list of institutions is provided on p. 130. Without their help in searching for silicite daggers in museum collections, the monograph dedicated to their issue could not have been created.

The presented monograph was created with the financial support of the institutional project of the Institute of Archaeology of the Czech Academy of Sciences in Brno, *Severské importy na území České republiky* [Nordic imports into the territory of the Czech Republic]. The petroarchaeological analyses of prof. Antonín Přichystal were paid for by Institutional Research Support at the Faculty of Science of Masaryk University in Brno (No. 2222/315010).

We would like to pay tribute to three personalities of Czech and Slovak archaeology in the monograph on silicite daggers, namely Innocenc Ladislav Červinka, who already drew attention to the occurrence of silicite daggers in the Moravian settlement area before the First World War, and Milan Zápotocký, who consistently devoted himself to the issue of silicite daggers in the territory of Bohemia and Klára Marková, who wrote the first comprehensive treatise on silicite daggers in the territory of Slovakia.

Lubomír Šebela & Antonín Přichystal,  
Brno, 20 February 2024

# Classification and typological division of silicite daggers

The first development scheme of Nordic silicite daggers was drawn up at the beginning of the 20th century by S. Müller (1902). His work was built upon by R. Beltz (1910) and A. Tode (1935). Since the late 1930s, when J. E. Forsander (1936, 121–128, Abb. 23) published his study on this issue, the division of silicite daggers into six basic types has been used to this day (cf. Lomborg 1973; Kühn 1979; Agthe 1989a; 1989b; Apel 2001; Fig. VI.1), whereas variants of individual types represent local peculiarities. J. Libera (2001) created his own typology for the territory of Poland and Ukraine. For Bohemia, M. Zápotocký created his own typological system based on the sources he collected (Fig. VI.2). He divided the daggers into lance-shaped and daggers with handles. He created nine types for daggers without a handle – SD 1–9 (Zápotocký 2013, 7–8, obr. 1: 1–9) and nine types for daggers with a handle (Zápotocký 2013, 8–9, obr. 1: 12–18: 3: 1). From his typological system, the SD 11 type cannot be accepted, because it is not a “*flat rectangular handle with a short wing-like extension at the top*” (Zápotocký 2013, 8, obr. 3: 1), but an arch-shaped blade made of Bavarian tabular chert. In our opinion, the author overestimated the drawing reconstruction of this artefact. For this reason, it was not included in our catalogue of silicite daggers (see Chapter X). Even the raw material used, i.e. Bavarian tabular chert, is not suitable. In the collection of daggers from the Bohemian-Moravian settlement area, the mentioned raw material appears only in daggers without a handle.

In this monograph, when creating the typological system, we start from the typological division, which was created for silicite daggers of Nordic

provenance by Ebbe Lomborg (1973, 32–63), which Jan Apel followed up and developed at the beginning of the 2000s (2001, Fig. 8: 1; 8: 2), where types I and II include lancet dagger shapes and types III–VI silicite daggers with handles. The typology of the silicite daggers based on the find fonds obtained from both the Bohemian-Moravian and the Slovak settlement area consists of 13 types (SDT I–XIII), possible varieties are marked with capital letters (A–F) and sub-varieties with numbers (1–3). Daggers of Nordic provenance are included under types SDT I–VI, while daggers of local provenance under types STD VII–XI. Fragments of blades and torsos of silicite daggers, which cannot be classified typologically, are listed under type SDT XII.

## VI.1 Czech Republic

We have a collection of 155 daggers, which can be divided into two basic groups according to their form. The first, represented by 47 pieces (Bohemia – 17 pieces; Moravia – 29 pieces; Czech Silesia – 1 piece), are characterised by specimens without a handle, which have a different blade shape in front view (Fig. VI.3; see SDT I below). Their surface was treated and retouched on both sides. The given form corresponds to type I silicite daggers in Northern Europe, where the given type represents the earliest form of daggers. Daggers without a handle are characterized by different lengths. The longest piece comes from Archlebov (Moravia), it has a length of 245 mm with the centre of gravity in the first third of the length (Plate XVIII: 5). A slightly smaller piece from Sokoleč (Bohemia) is 234 mm long with the centre of gravity in the second third (Plate XIV: 9). We

Type I

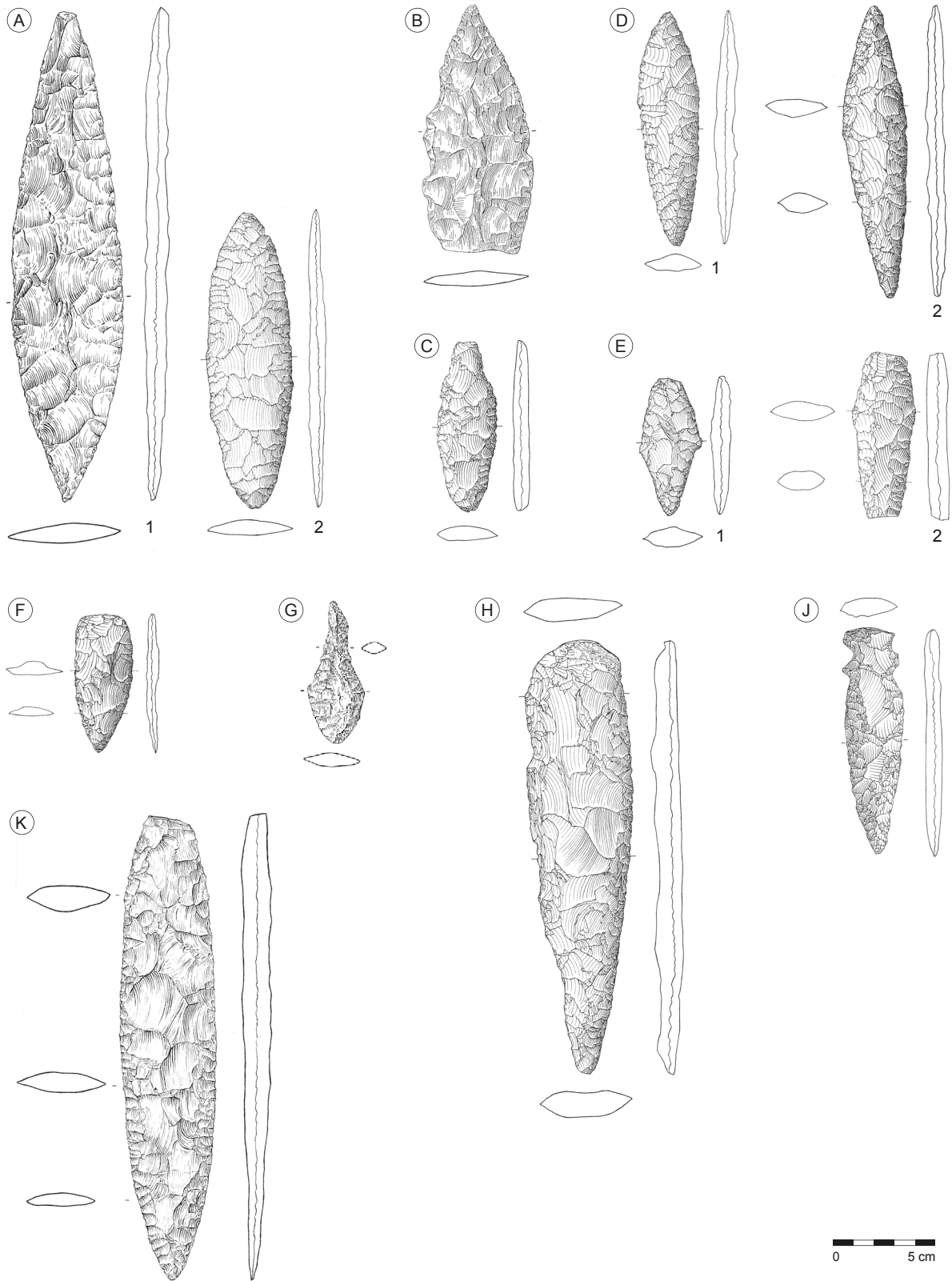


Fig. VI.3. Silicite daggers type I and its variants A to K in the territory of the Czech Republic.

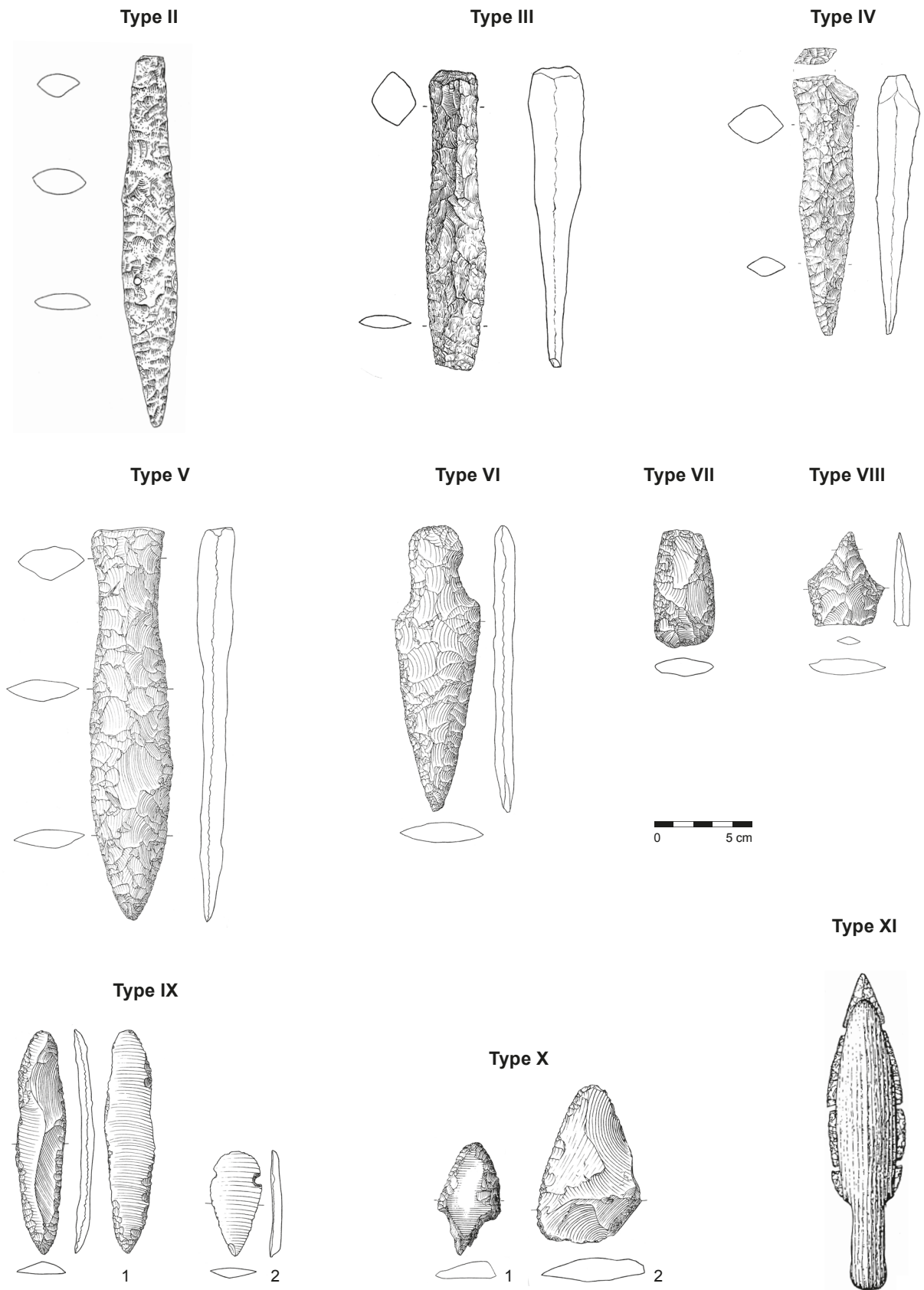


Fig. VI.4. Silicite daggers of type II to XI in the territory of the Czech Republic and Slovak Republic.

# Inventory of the finds from the territory of Czech and Slovak Republics

## X.1 Notes on the registry

The catalogue includes finds of silicite daggers that were discovered through archaeological research, study of museum collections and research of specialised literature. It captures the state of the source base up to 2019. It is divided into four subchapters. The first contains finds from Bohemia, the second from the historical territory of Moravia (including finds from the Svitavy District, which today falls under the administration of the Pardubice Region), the third contains artefacts from Czech Silesia, and the fourth contains finds from Slovakia.

Four finds from Bohemia (Fig. X.1–X.3) were not included in the catalogue, namely an artefact from Horní Sloupnice (Svitavy District), which we classify as a massive blade (cf. Vích 2012, 52–55, tab. 22: 14, 16, 25; 45: 16; 70, tab. 3: 4). According to the photographic documentation, in the case of the artefact from the hillfort of the Cham culture in Srby (Plzeň-jih District), it is not a dagger, but a curved knife (Fig. X.3). Daniel Stolz labelled it as “*a ship-shaped sickle with bifacial peripheral retouching*” (2014, 390, obr. 3.1; 4). A similar piece is from Litoměřice from Höger’s brickyard, which Milan Zápotocký mistakenly considered to be a silicite dagger with a handle based on the drawing documentation published by him (Fig. X.2). He overestimated the drawing reconstruction of the given artefact, which is made of the same raw material as the artefact from Srby (Fig. X.3), it is made of Bavarian tabular chert (Plattensilex) and is identical in shape to it. The last (fourth) piece is an object from Habří (České Budějovice District), which Ladislav Hájek (1954, 117) considered to be “*a semifinished product of a silicite dagger*” (Fig. X.1). In accord with S. Venc, J. Fröhlich and J. Michálek (2006, 95),

we evaluate it as a “*bifacial surface-retouched massive point with a broken tip*”, because it lacks the lenticular-like cross-section that is typical of silicite daggers.

There is a problem with a silicite dagger from the territory of Moravia, which D. Šaurová (1974) introduced into the specialised literature under the name Heršpice (Vyškov District). The writer of this article took this location into his studies (Šebela 1998, 200, Taf. 3: 5; Šebela, Přichystal 2014, 86), but the same find is in the monograph on chipped industries of the Bronze Age by L. Kaňáková Hladíková (2013a, obr. 103a; 2013b, 325) published under the name of the neighbouring municipality, which is Rašovice. The named author does not cite the article by D. Šaurová from *Přehledy výzkumů* for the year 1973 (published in 1974), nor the study by L. Šebela (1998) from the end of the second millennium. We have left the find under the designation of Heršpice, as it is presented in professional articles both in the Czech Republic and abroad. The catalogue did not include a fragment of the blade of a silicite dagger from Ohrazenice (Prostějov District), which J. Skutil published in the 1930s among the finds of Paleolithic age and classified it as a fragment of a laurel leaf (1936, 61, Abb. 9). Its assessment is not possible today, because we do not know where it was deposited, it could not be identified in the collections of the Moravian Museum. For the help in searching for it, we thank doc. Mgr. P. Neruda, Ph.D., head of the Anthropos Institute.

Within individual historical lands, localities are arranged in Czech alphabetical order according to the cadastre of the municipality, similarly to the book *Silicite axes in Moravia, Czech Silesia and Bohemia* (Šebela, Přichystal 2020). If the given municipality is part of another municipality, it is stated in the header in brackets together with the district based on the

administrative division from 1960. The second line contains information about the place of discovery, if it is not specified, it is stated that the artefact was discovered on the cadastre of the municipality.

On the next line, it is described what type of find it is (a grave or isolated find or a find of a residential nature). Then a description of the object follows with data on its size (length, width, and thickness) and the inventory number under which it is registered in the museum collection.

It is also indicated from which raw material the given object was made according to Antonín Přichystal's determinations (the method of examination is described below). If the object is unavailable and has not been subjected to petrographic investigation, *non vidi* is written in the raw material column.

If a dagger comes from a find assemblage and is accompanied by pottery, the dating of the set is recorded. If possible, the accompanying inventory is displayed. At the end, there is information about the place of deposition (abbreviations of the institutions are detailed p. 130) and a link to the unpublished sources and the published literature where the subject is mentioned.

The available pieces have been graphically documented and are shown with any accompanying inventory on Tab. I to XXXIX. Selected pieces were photographed (Photo 1–80) and in some cases the raw material used was also documented under a stereomicroscope (Photo 81–109).

## X.2 Czech Republic

### X.2.1 Bohemia

#### 1. BĚCHOVICE (Prague, Běchovice Cadastre; Capital City of Prague)

Site: *sand quarry* (P. No. 365/3).

Find character: grave find.

##### Grave 1

Description: silicite dagger without a handle with the maximum width of the blade in two thirds of the length of the artefact with two opposing notches; length – 150 mm, width – 42 mm, thickness – 6.6 to 9.4 mm. No Inv. No. Plate I: 7; Photo 1.

Raw material: Nordic flint, Danian; earlier Vencl 1970, 140: *šedý baltský pazourek* / *grey Baltic flint*; Zápotocký 2013, 19: *skvrnitě šedý baltský pazourek* / *spotted grey Baltic flint*. Photo 82 a–b.

Dating: Proto-Únětice culture.

Accompanying inventory: fragments of two vessels (No Inv. No.).

Collection: private collection of J. Zadák.

Literature: Vencl 1970, 140, obr. 2: 1–3; Zápotocký 2013, 19, obr. 5. 5; Šebela, Přichystal 2014, 85, obr. 14: 1a, b; Přichystal, Šebela 2015, Fig II.4.1a, b.

#### 2. BENEŠOV (Benešov District)

Site: *Na Karlově* (at the ruins of the Minorite friary).

Find character: accidental find.

Description: silicite dagger with a handle; length – 171 mm. Inv. No. 10089. Plate I: 6; Photo 2.

Raw material: Nordic flint, Danian; earlier Zápotocký 2013, 26: *hnědavý, šedobíle skvrnitý silicite* / *brownish, grey-white spotted silicite*.

Collection: NM Prague (gift of Jindřich Živný in 1876).

Literature: Smolík 1877, 808; Píč 1899, 98, obr. 18: 3; Buchtela, Niederle 1910, 29, tab. I: 7; Stocký 1924, tab. XXXVII: 4; Hájek 1954, 154, obr. 20: 3; Zápotocký 1961, 167, obr. 2: 2; Zápotocký 2013, 26, obr. 8: 1; Šebela, Přichystal 2014, 85.

#### 3. BÍLINA (German *Bilin*; Teplice District)

Site: *Chlum*.

Find character: accidental find.

Description: silicite dagger without a handle (after Anonym 1941–1942, 140: *Lanzenspitze in nordischen Technik*). The dimensions are not given. Inv. No. is unknown (not identified by L. Šebela).

Raw material: *non vidi*.

Collection: Museum Teplice – fonds of the museum in Bílina.

Literature: Anonym 1941–1942, 140; Muška 1990, 34.

#### 4. BRANDÝSEK (Kladno District)

Site: *sand quarry* on the hill in the northeast of the village on plot number 399, which today is located on the cadastral territory of the neighboring village of Třebušice, in the part called Holousy, on the *U Třebušic* line. Archaeological research carried out under the guidance of O. Kytlicová, Archaeological Institute of the Czechoslovak Academy of Sciences in 1955–1956.

Find character: grave find.

##### Grave 19 (double grave: a woman and a man)

Find situation: The skeletal remains of two individuals were deposited in a rectangular grave pit measuring 240 × 190 cm from the stone-lined part (Fig. X.17: A).

Spisy Archeologického ústavu AV ČR Brno 78  
ISSN 1804-1345

## **Silicite daggers in the territory of the Czech and Slovak Republics**

Lubomír Šebela, Antonín Přichystal

Editor-in-chief: Balázs Komoróczy  
Editors: Markéta Kamenská, Martina Kudlíková

Editorial support: Hedvika Břínková, Jakub Knobloch  
Translation and proofreading: Sean Mark Miller  
Czech proofreading: Alexandr Průša  
Cover design: Milan Filip  
Graphic design and typesetting: Milan Filip  
Print: CCB, spol. s. r. o., Okružní 580/19, 638 00 Brno, Czech Republic  
First edition  
Publisher: Czech Academy of Sciences, Institute of Archaeology, Brno  
Čechyňská 363/19, 602 00 Brno, Czech Republic, [www.arub.cz](http://www.arub.cz)

Brno 2024

ISBN 978-80-7524-083-5 (print)  
ISBN 978-80-7524-084-2 (online; pdf)

DOI 10.47382/arub2024-01

