

---

The Final Palaeolithic of Northern Eurasia  
Proceedings of the Amersfoort, Schleswig and  
Burgos UISPP Commission Meetings

SCHRIFTEN DES MUSEUMS FÜR ARCHÄOLOGIE SCHLOSS GOTTORF

Ergänzungsreihe

Band 13

Herausgegeben vom Museum für Archäologie  
und dem Zentrum für Baltische und Skandinavische Archäologie  
in der Stiftung Schleswig-Holsteinische Landesmuseen  
Schloss Gottorf  
durch Claus von Carnap-Bornheim

# The Final Palaeolithic of Northern Eurasia

Proceedings of the Amersfoort, Schleswig and  
Burgos UISPP Commission Meetings

Edited by  
Berit Valentin Eriksen, Eelco Rensink and Susan Harris

Ludwig

Redaktion: Isabel Sonnenschein  
Satz und Bildbearbeitung: Cornelia Lux-Kannenberg

## Ludwig

Verlag Ludwig  
Holtenauer Straße 141  
24118 Kiel  
Tel.: 0431-85464  
Fax: 0431-8058305  
info@verlag-ludwig.de  
www.verlag-ludwig.de

ISSN 2364-4680  
ISBN 978-3-86935-363-0

Bibliografische Information der Deutschen Nationalbibliothek. Die Deutsche Nationalbibliothek verzeichnet diese Publikation in der Deutschen Nationalbibliografie; detaillierte bibliografische Daten sind im Internet über <<http://dnb.d-nb.de>> abrufbar.

Alle Rechte, auch die des auszugsweisen Nachdrucks, insbesondere für Vervielfältigungen, der Einspeisung und Verarbeitung in elektronischen Systemen sowie der photomechanischen Wiedergabe und Übersetzung vorbehalten

© 2019 Zentrum für Baltische und Skandinavische Archäologie in der Stiftung Schleswig-Holsteinische Landesmuseen  
Schloss Gottorf, Schleswig

# Contents

Foreword .....	7
Felix Riede, Mara-Julia Weber, Brian Westen, Kristian M. Gregersen, Kamilla K. Lundqvist Eriksen, Andrew S. Murray, Peter S. Henriksen and Morten F. Mortensen Krogshøjle, a new Hamburgian site in eastern Denmark .....	11
Hans Peeters and Eelco Rensink Hamburgian hunter-gatherers in the area of the ice-pushed ridges of the central Netherlands. Combining information from old collections and newly discovered sites .....	31
Marcel J. L. Th. Niekus, Gijsbert R. Boekschoten and Jos H. C. Deeben† A Late Preboreal site from Zwolle, province of Overijssel, and some remarks on the Ahrensburgian in the Netherlands.....	51
Jurre P. van Veldhuizen and Alexander Verpoorte Reconsidering Tienray Op de Hees: Creswellian or <i>Federmesser</i> ?.....	81
Mara-Julia Weber, Boris Valentin and Pierre Bodu It's all about volume – New observations on specific aspects of core reduction at the Belloisian site Donnemarie-Dontilly (Seine-et-Marne, France) .....	91
Ludovic Mevel and Sonja B. Grimm From one camp to another. First results of a comparative techno-economic analysis of the <i>Federmesser-Gruppen</i> lithic industries from the Central Rhineland .....	105
Michael Baales, Susanne Birker, Bernd Kromer, Hans-Otto Pollmann, Wilfried Rosendahl and Bernhard Stapel <i>Megaloceros</i> , reindeer and elk – first AMS- <sup>14</sup> C-datings on Final Palaeolithic finds from Westphalia (western Germany).....	137
Sönke Hartz, Mara-Julia Weber, John Meadows and Stefanie Klooff One in a hundred – the rediscovery of a potential arrow shaft from Stellmoor (Schleswig-Holstein, Northern Germany).....	155
Inger Marie Berg-Hansen Alt Duvenstedt LA 121 revisited – Blade technology in Ahrensburgian culture.....	169
Julia K. Kotthaus The <i>Federmesser</i> site of Borneck-Ost, Ahrensburg tunnel valley: revised results and new perspectives following a re-analysis of the lithic material .....	193
Volker Neubeck Klein Lieskow 120 – a Late <i>Federmesser</i> site with Malaurie points in Lower Lusatia (Brandenburg, Germany).....	209

Inga Kretschmer	
Demographic studies of hunters and gatherers in the European Late Upper Palaeolithic . . . . .	231
Martin Moník and Jan Eigner	
Raw material distribution in the Late Palaeolithic of Bohemia and Moravia . . . . .	247
Paweł Valde-Nowak, Anna Kraszewska and Damian Stefański	
Arch-Backed and Tanged Points Technocomplexes in the northern Carpathians. The current stage of research . . . . .	257
Iwona Sobkowiak-Tabaka, Iwona Okuniewska-Nowaczyk and Magdalena Ratajczak Szczerba	
Lateglacial human occupation in the Lubrza region (Łagów Lake District, Western Poland) . . . . .	277
Justyna Orłowska and Grzegorz Osipowicz	
Bone working practices in Final Palaeolithic Poland: an example of a three-edged bone point from Lisi Ogon, site 13 . . . . .	299
Grzegorz Osipowicz	
Final Palaeolithic and Mesolithic flint collections from the Chełmno-Dobrzyń Lakeland, central Poland. Functional structure and preferences in tool production . . . . .	309
Ilga Zagorska and Małgorzata Winiarska-Kabacińska	
A first glimpse of the organisation of space in the Late Palaeolithic of Latvia . . . . .	329
Ilga Zagorska, Berit Valentin Eriksen, John Meadows and Vitālijs Zelčs	
Late Palaeolithic settlement of Latvia confirmed by radiocarbon dating of bone and antler artefacts. . . . .	343
Galina V. Sinitsyna	
Colonization of the Valdai Highland in the Final Palaeolithic . . . . .	363
Mikhail Zhilin	
The bottom layer of Zolotoruchje 1 and transformation from the final Paleolithic to the Mesolithic on the Upper Volga basin . . . . .	379

---

# Colonization of the Valdai Highland in the Final Palaeolithic

By Galina V. Sinitsyna

*Keywords: Eastern Europe, Final Palaeolithic, Valdai Highland, colonization, chronology, typology*

*Abstract: Problems regarding the initial peopling of the Valdai Highland (north-western Russian Plain) after the retreat of the last glaciers are discussed. A number of dated sites makes it possible to conclude that the region was first settled during the Bølling Interstadial and, more intensely, during the Allerød. Sites of the Upper Dnieper basin provide evidence of the evolution of Late Palaeolithic Epigravettian cultural traditions in the Final Palaeolithic period. The results of palaeomagnetic and typological analyses are used to re-evaluate both the chronology and traditional models of cultural evolution. Typological analysis of stratified assemblages demonstrates the development of one technological tradition on the Upper Dnieper and other distinct cultural communities in the Upper Volga basin.*

## 1 INTRODUCTION

The time of the initial peopling of the Valdai Highland (source of the main rivers of eastern Europe: Volga, Dnieper, Western Dvina; in the Tver and Smolensk districts; Fig. 1) after the retreat of the last glaciers witnessed abrupt climatic changes associated with the Pleistocene to Holocene transition. It was a time when the processes of erosion and destruction prevailed over the processes of accumulation, which explains the fact that the majority of archaeological finds come from re-deposited contexts. According to Yu. A. Lavrushin (LAVRUSHIN et al. 2002, 145), “the end of the last glaciation was characterized by the following depositional events: the avalanche speed of accumulation of fluvioglacial deposits, a particular hydrological regime of water streams distinct for the absence of seasonal floods, and intensive slope sedimentation”. As a result, scientific data are difficult to obtain for most archaeological sites. Under such conditions, questions of chronology are usually addressed by means of comparative-typological analysis of archaeological material.

The aim of this paper is to re-evaluate both the chronology and traditional models of cultural evolution in the Valdai Highland during the Final Palaeolithic in the light of new evidence from palaeomagnetic and typological analyses.

## 2 SITES IN THE UPPER VOLGA BASIN

### 2.1 Introduction

Among the Final Palaeolithic sites of the Valdai Highland and adjacent areas there are only a few that have been researched scientifically. These are situated on the northern shore of Lake Volgo (Tver district) and include Baranova gora, Podol III/1, and Podol III/2 (Fig. 1; SINITSYNA 1996). Their geologi-

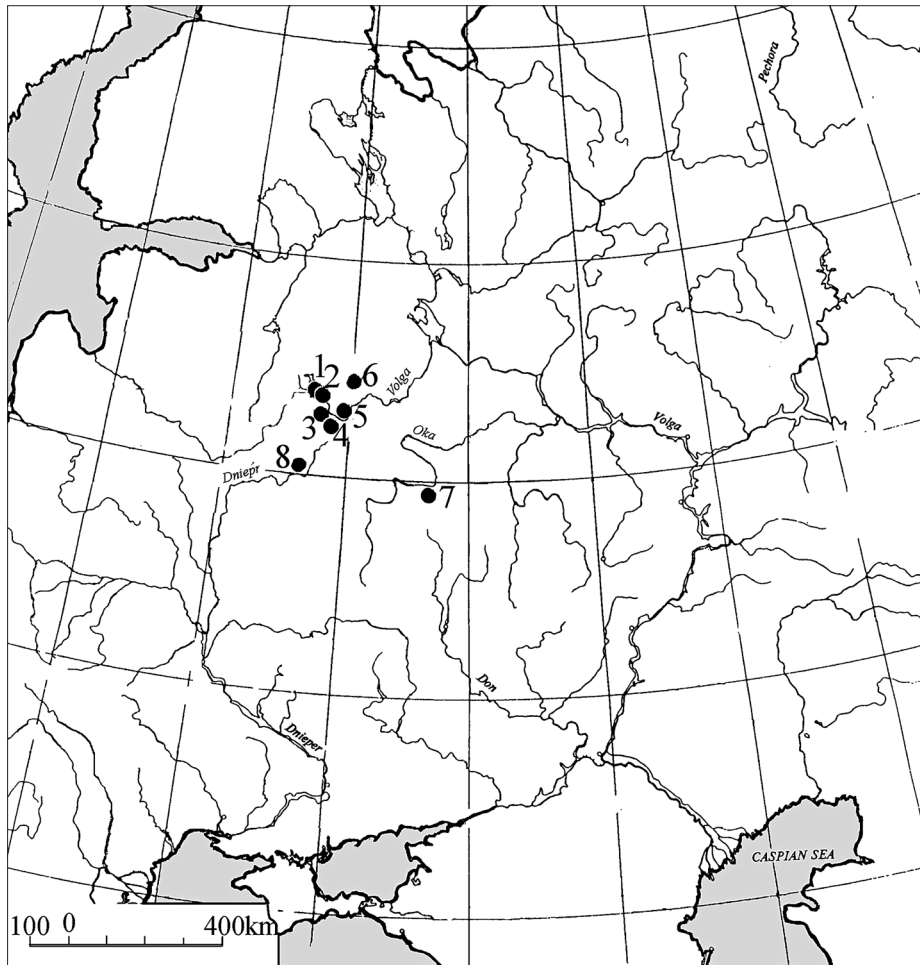


Fig. 1. Final Palaeolithic sites of the Valdai Highland: 1 Baranova gora; 2 Podol III/1, Podol III/2; 3 Tyoplyi ruchej 2; 4 Ust'-Tudovka I; 5 Troitskoe 3; 6 Akulovo; 7 Rostislavl'; 8 Vyshegora I (© the author).

cal history can be traced back to the end of the Bølling Interstadial around 12,300 BP (the chronological sequences of climatic fluctuations are based on MARKOVA/VAN KOLFSCHOTEN 2008). The sites are confined to the zone of the Edrovo glacial stage boundary (TCHEBOTAREVA et al. 1965, fig. 4), being concentrated on a narrow strip of land between Lake Volgo and the adjacent bedrock slope formed of Carboniferous limestone. The geomorphology and stratigraphy of the sites were described by Yu. A. Lavrushin (SINITSYNA et al. 2009).

### 2.2 Baranova gora: Bølling Interstadial

The oldest deposits were found only at Baranova gora (SINITSYNA et al. 2009), where there are Bølling, Dryas II, Allerød, Dryas III, and Pre-Boreal deposits (Fig. 2; Tab. 1). Their identification, initially established on the basis of pollen data, was confirmed by subsequent magnetic and geochemical analyses, and agrees well with the results of the comparative-typological analysis of the cultural remains. They consist of various lake and colluvial deposits, which include cultural remains. The excavated area measured 108 m<sup>2</sup>, while the lowermost layers studied covered an area of 40 m<sup>2</sup>. The pollen samples taken from all the deposited layers were analyzed by E. A. Spiridinova. The oldest archaeological finds were associated with thin humic patches of small size and diffuse outline.



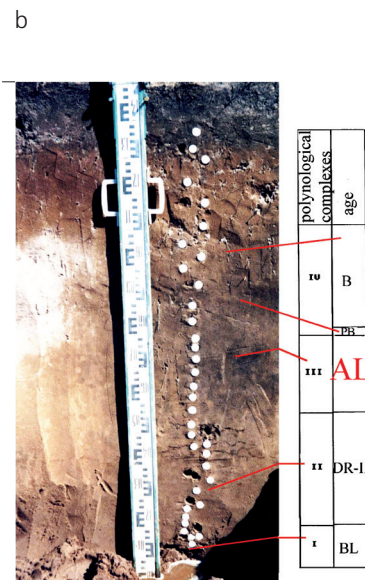
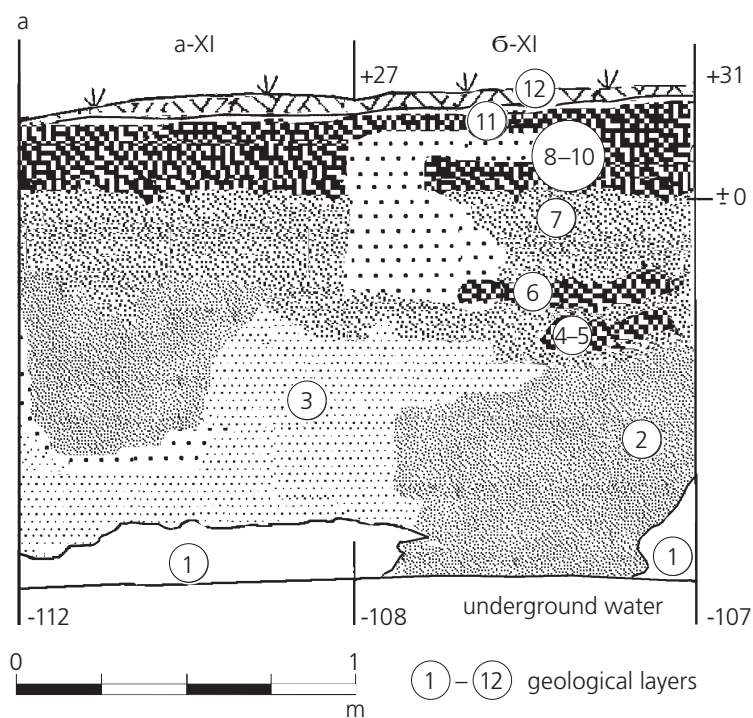


Fig. 2. Baranova gora. a Section of the northern wall; 1–12 Geological layers (description in Tab. 1); b photo of the northern wall.

Tab. 1. Stratigraphy of the northern wall of the Baranova gora site. 1996. Sq.–X (test pit 2). Pollen samples (nos. 1–10) were taken in the northern part of the Baranova gora site, from the lowermost strata of the 1996 test pit, sq. –X. The pollen analysis has demonstrated the presence of the late Pleistocene deposits from the Bølling through Pre-Boreal ones. The stratigraphy of the northern wall of test pit 2 (sq. A–X), cf. Fig. 2.

Depth in cm	Layer	Nos. of pollen samples	Blytt-Sernander periods after E. A. Spiridonova	Description of the section after Yu. A. Lavrushin
	12			Modern soil.
	11			Light-grey inequigranular sand, marking a temporary high stand in the lake-level.
	10			Same but looser material, inequigranular sand coloured with humus
	9			Slightly humic sand – soil ablation
	8			Inequigranular humic sand – buried soil
	7			Yellowish grey fine-grained sand with humic patches, partly reworked by the lower part of the soil layer. Penetrated by small tongues of the overlying layer.
	6			Yellowish dark-grey sand with bands of humus – reactivation of slope soil ablation
0.40	5	10	B	Same dark-grey sand coloured with humus – diluvium
0.45		9		Same sand, reddish-brown, fine-grained, patches coloured grey with humus – truncated buried soil of the Final Palaeolithic. Well-defined upper boundary.
0.52	4	8	PB (?)	
		7		
0.80	3	6	AL	Sand analogous to that of layer 1
		5		
100	2	4	DR-II	Same sand with weakly expressed organic patches and barely visible whitish spots. This horizon might have been associated with hydromorphological processes of soil formation and forestation
		3		
	1	2	BL	Reddish-brown fine-grained homogenous sand (visible thickness 0.5 m)
150		1		

The pollen spectra of the lowermost cultural layer at Baranova gora reflect a xerophytic periglacial phase in the development of the vegetation, dominated by spruce and pine. In all likelihood, it corresponds to the final stages of the Valdai glaciation and is characteristic of the final phase of the Bølling Interstadial. The faunal remains consist of small calcinated fragments. The flint inventory comprises a small but fairly representative collection. The primary flaking technology was aimed at the production of microblades and broad blades. The width of the blades is quite consistent and averages around 2.5 cm; the thickness is about 1 cm while the length exceeds 7 cm. Four microblade fragments are of the same kind of flint and have standard dimensions: 2.2 cm long and 0.5–0.7 cm wide (Fig. 3,14–17). They seem to have been struck from the same core and served as inserts in the same implement. The collection includes exhausted prismatic (double-platform) and conical cores (Fig. 3,23). Worthy of note is a “soft” hammerstone made from a fine-grained sub-triangular sandstone slab (9.6 x 7.6 x 3.7 cm). One of its surfaces is concave and intensely ground while the other shows only slight traces of grinding. The surface retains parts of an ornamental design in the form of an oblique rhombus-shaped net. The tool set includes traditional types, such as end scrapers made from broad blades (Fig. 3,22), as well as some special forms, exemplified by chisel-like tools made from blades (Fig. 3,20–21) with distal working ends formed by low-angle flaking and transverse burin blows, ventral end-scrapers, and side-scrapers with sharpened working edges (Fig. 3,24–25). Of special interest is a double perforator made on a massive flake (Fig. 3,19). Two short prongs, formed by notches, are set at an angle diagonally opposite each other. The collection also includes a combined tool: an end-scraper with angle burins (Fig. 3,18). These two types are characteristic of Late Palaeolithic cultures (ABRAMOVA et al. 1996, fig. 25). The site inventory is unusual in its combination of broad blades with microblades, as well as in the presence of tools that have analogies in material from Late Palaeolithic sites. On the whole, the flint inventory from the Bølling deposits at Baranova gora testifies to the survival of Epigravettian traditions that go back to the Upper Palaeolithic of the Russian Plain.

### 2.3 *Baranova gora: Dryas II*

The next stage in the history of the Baranova gora site is represented by archaeological material associated with intermittent humic lenses dated to Dryas II and located downslope of the area with the Bølling deposits. According to E. A. Siridonova (SINITSYNA et al. 2009) this period witnessed the coexistence of open landscapes and small woodlands of birch and pine with elements of periglacial flora. The faunal remains consist of small calcinated bone fragments. The archaeological material is remarkable both typologically and technologically, and clearly differs from the material in the underlying (Bølling) and overlying (Allerød) layers. There are differences in the raw material, blank size, secondary-treatment techniques, and tool typology. The primary flaking was performed directly on the site, as is evidenced by the presence of hammerstones, retouchers, and cortical flakes. Flint debitage accounts for as much as 97 % of all finds. The cores are narrow-face and flat-convex prismatic forms (Fig. 3,5,8). They were used to produce bladelets measuring between 3.5 and 9 cm long (Fig. 3,2). Most of the blanks are small bladelets about 3 cm long, 1 cm wide and 0.2 cm thick. They seem to have been produced by soft-hammer percussion and exterior platform polishing (to remove overhang). The inventory also includes sandstone hammers and pebbles with polished surfaces. The tool assemblage is very distinctive and differs from that of the underlying layer. As well as a single arrowhead with a short asymmetric pointed tang, worked by flat ventral retouch (Fig. 3,1), there are two burins: one dihedral, and the other transversal (Fig. 3,3–4). There are also splintered pieces (Fig. 3,7), specific forms of side scrapers and micro-adzes. The side scrapers (14 items) have serrated edges made by invasive stepped dorsal retouch (Fig. 3,9). The working edges of multiple side scrapers often converge at an acute angle (Fig. 3,6). The adzes (5 items) are small (3–7 cm long) and bifacially worked (Fig. 3,10–11). Their distinguishing feature is a longitudinal back created by steep retouch (Fig. 3,12–13). The only perforator is made from a flint chip, its asymmetric beak-like prong formed by steep marginal retouch.

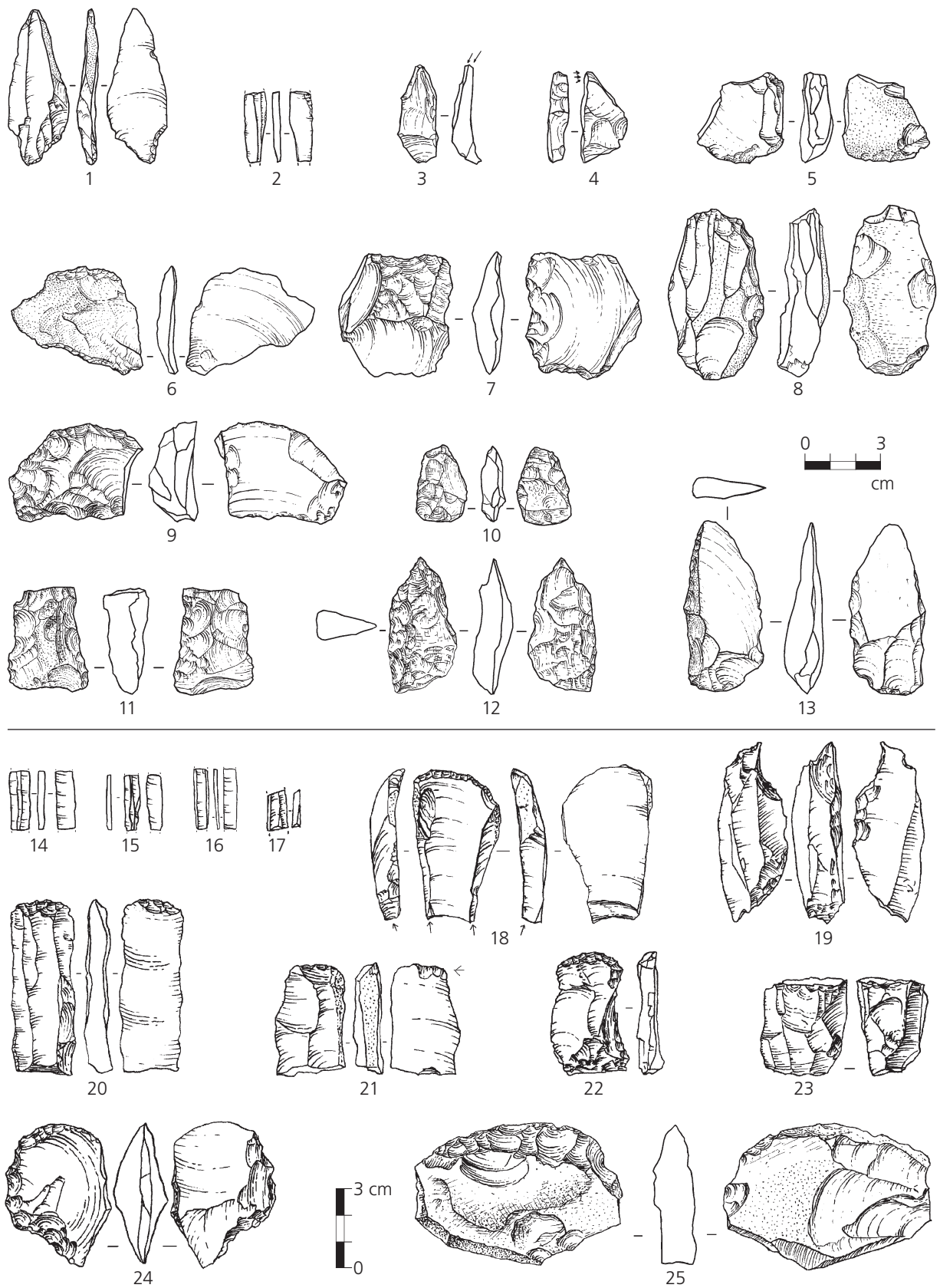


Fig. 3. Baranova gora. Finds from Dryas II (1–13) and Bølling (14–25) deposits (© the author).

The flint inventory from the Dryas II (12,000–11,800 BP) deposits at Baranova gora has analogies in the material from the Akulovo site on Lake Udomlya in Tver' district (Fig. 1,6). The excavator of Akulovo, V. V. SIDOROV (1996; 2009) dates the site to around 15,000–13,000 BP in view of the fact that the material is associated with the alluvium of the upper lake terrace. The radiocarbon date of  $9,990 \pm 70$  BP, obtained from a charcoal sample in this alluvium, is dismissed by him as too young. The Akulovo inventory is similar to that of Baranova gora in the character of the cores and blanks, secondary-treatment technique, and typological composition. In addition, it has the same dimensions and proportions. All the artefacts from Akulovo are made of white silicified limestone. In V. V. Sidorov's view, the Akulovo tradition persisted till the Middle Holocene, its continuation can be seen in the material from Yurievskaya gorka 1, Vasilievo 1, and Kurovo 4. He connects its origin with the Late Palaeolithic of the Yenisey basin in Siberia. However, there is no substantial evidence for this theory. The problem of the genesis of the Akulovo tradition remains an open question, as does Sidorov's conjecture regarding the development of this tradition over a long period of time. At present, only two short-term seasonal sites can be attributed to the Akulovo tradition: the Akulovo site itself and the assemblage from the Dryas II layer at Baranova gora.

#### 2.4 Podol III: Allerød–Dryas III

The north-western and western origins (Bromme technocomplex) of the Valdai colonization are demonstrated by the material of the Podol culture, which existed during the Allerød–Dryas III period (SINITSYNA 2000). It is thought to have been affiliated with the Bromme-Lyngby technocomplex (Fig. 4a). The dense distribution of sites in the Upper Volga region, their chronological proximity (Allerød – Dryas III) and technological similarity make it possible to classify them together as a distinct archaeological culture that is named after the oldest site in the group (Podol III/1). This culture also includes such sites as Baranova gora, Allerød layer (SINITSYNA 2000), Tyoplyi ruhei 2 (MIRETSKIJ 2007), Troitskloe 3 (LANTSEV/MIRETSKIJ 1996), Ust'-Tudovka 1 (ZHILIN/KRAVTSOV 1991), and Rostislavl' (TRUSOV 2011) (Fig. 1). Five of the eight sites of the Podol culture have yielded some scientific evidence: pollen diagrams are available for Podol III/1, Podol III/2, Baranova gora, and Ust'-Tudovka 1.

The Allerød Interstadial is reflected in pollen complex III from Baranova gora and pollen zone I from Podol III/1 (SPIRIDONOVA/ALESHINSKAJA 1999). The end of this interstadial is characterized by patchy forests and periglacial vegetation with *Artemisia*. The Allerød age of the Lake Volgo sites is

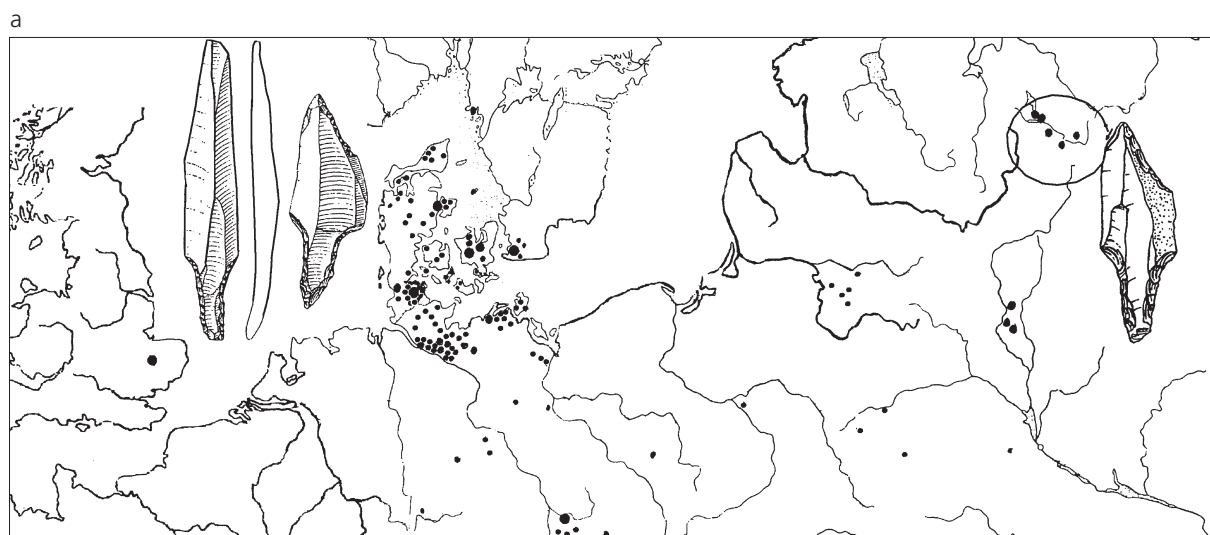
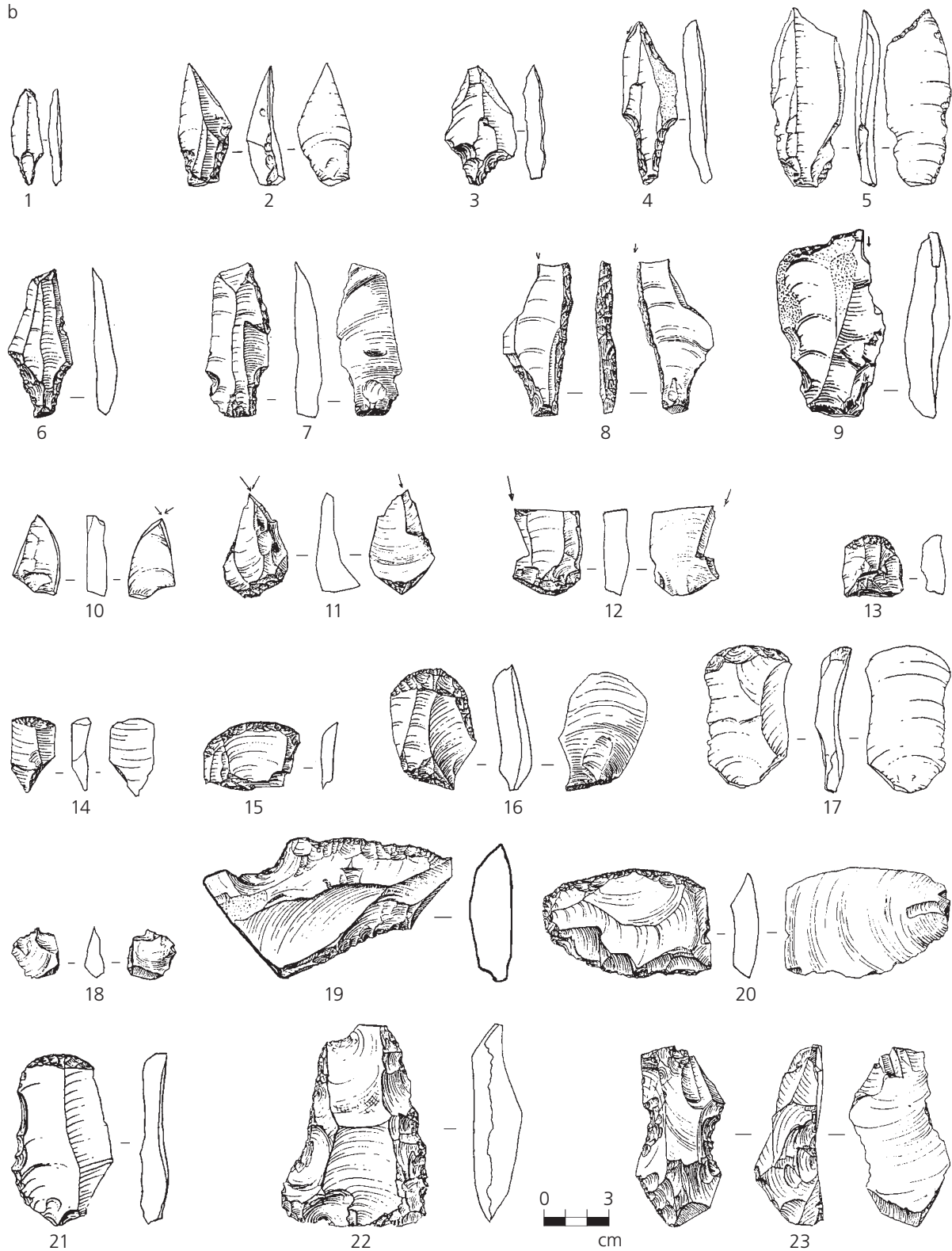


Fig. 4a. Distribution of the Podol-culture sites, affiliated with the Bromme-Lyngby technocomplex (maps compiled after ANDERSEN 1988; FISCHER 1991; RIMANTIENE 1971; ROBERTS/BARTON 2000; SCHILD 1975; SINITSYNA 1996; TAUTE 1968; TERBERGER 1996; ZALIZNYAK 1989); b finds from Podol III ► (© the author).



b



confirmed by the results of palaeomagnetic studies, which revealed the development of the Gothenburg excursion (GUS'KOVA et al. 2006).

According to E. A. Spiridonova, the Podol cultural layers at Podol III/2, Ladyzhino 3, and Ust'-Tudovka 1 should be dated to Dryas III, which agrees well with the results of the comparative-typological

analysis. Like Baranova gora, the Podol III site is also situated on a narrow strip of land between Lake Volgo and the adjacent bedrock slope of Carboniferous limestone, on both sides of an ancient ravine. Two areas were excavated, one pit to the right of the ravine (Podol III/1), the other to the left (Podol III/2), at a distance of 50 m from one another. In total, 353 m<sup>2</sup> were excavated: pit 1 had an area of 166 m<sup>2</sup>; pit 2 measured 187 m<sup>2</sup> (SINITSYNA 1996). While some Allerød and Dryas III finds were discovered in both pits, the cultural layer of the Allerød period was found only in pit 1 (Podol III/1) and the Dryas III cultural layer only in pit 2 (Podol III/2), where it was associated with fan deposits from mudflows.

The Final Palaeolithic cultural layer on the right side of the ravine is distinguished by its clear spatial arrangement with a number of structures, including slightly sunken elongated-oval dwellings with a corridor-like entrance and central hearth, a “working area” and concentrations of small calcinated bones.

The Allerød soil has not been preserved in the excavated part of Podol III/2, but the cultural remains include three concentrations of flint artefacts that are typologically similar to those from the Allerød sediments at Podol III/1.

The stone tools found on both sites were made of local chert, available in the form of large tabular nodules of light-grey colour. It is important to note that nearly all the tools, including the arrowheads, were made of this material. Common to both assemblages is the hard-hammer technology. Characteristic of the Podol-culture flaking technology is the use of cores with both plain and faceted striking platforms. The different shapes of the cores reflect different stages of their exploitation. Conical cores are most numerous, while there is only the occasional narrow-faced core (SINITSYNA 2008). The Allerød assemblages at Podol III/1 and III/2 differ from the assemblages of the overlying layers in raw material, blank size and type, as well as in the character of the secondary treatment and typological composition of the tool set (Fig. 4b). The blanks are dominated by blades struck with the use of a hard hammer. They are 6–8 cm long, 2–2.5 cm wide and up to 1 cm thick.

### *2.5 Dryas III (Podol culture)*

The next stage of the Podol culture dates to Dryas III and is characterized by blades about 5 cm long, 1.5–2 cm wide and 0.5–0.7 cm thick. The raw material becomes more diverse and consists of at least three different kinds of rock. Primary flakes are triangular in cross section, and crested blades also are more massive with a thickness of 1–1.5 cm. One of the specific features seen on the blanks of this period is their asymmetric cross section. The use of a hard hammer is evidenced by the presence of bulbs with microscars, big striking platforms and deep flake scars on the residual cores. However, the soft-hammer technique was also used since some blanks have pointed and lipped platforms.

Lithic assemblages from the series of sites (Podol III/2 [pit], Tyoplyi ruchej 2, Troitskoe 3, Ust'-Tudovka I) show that the transition from one stage of cultural development to the next during the Allerød–Dryas III periods was gradual.

### *2.6 Discussion*

For the time being, it appears that the similarity between the inventory of the Podol culture, on the one hand, and the Bromme technocomplex, on the other, can best be explained by population movements that started at the end of the Allerød period and were connected with reindeer migrations. The Final Palaeolithic has traditionally been considered a period of reindeer hunters (ZALIZNYAK 1989; 1998) due to the presence of extremely rich faunal data from several sites in the Stellmoor valley to the north-east of Hamburg (RUST 1943; TAUTE 1968), where the Hamburgian and Ahrensburgian sites furnish evidence of intensive seasonal reindeer hunting. The migrations of the people associated with the cultures characterized by tanged arrowheads were therefore linked with reindeer migrations, which, in turn, were caused by the appearance of new pastures as the glaciers retreated northward. The intensification of the migrations during the transition from one period to the next under very

unstable climatic conditions, was characteristic of the whole of northern Europe (SCHILD 1975; ANDERSEN 1988; BOSINSKI 1997), including the Russian Plain (KOL'TSOV 1994).

### 3 SITES IN THE UPPER DNEIPER BASIN

#### 3.1 Introduction

The autochthonous development of the Late Palaeolithic culture can be traced in the southern part of Valdai. Until recently, the problem of the autochthonous *versus* the migratory character of the origin of the Final Palaeolithic cultures in the Upper Dnieper basin was discussed on the basis of material dated by means of comparative-typological analysis. The gap of 3000–5000 years between Late Palaeolithic (Mezin, Youdinovo, etc.) and the Final Palaeolithic Grensk culture was the main argument against the autochthonous development of the local Stone Age cultures for V. P. KSENZOV (1999; 2006), in his discussion with V. F. KOPYTIN (1999; 2000). Chronology becomes the crucial aspect of this problem, especially in view of the evidence furnished by palaeomagnetic analyses of the section at the Vyshegora I site.

#### 3.2 Vyshegora I

At the multilayered Vyshegora 1 site (south-western slope of the Valdai, Fig. 1 & 5a), the age of the buried soil containing material from the Final Palaeolithic has recently been established by means of palaeomagnetic analysis, which revealed the presence of the Gothenburg excursion (SINITSYNA et al. 2012a; 2012b).

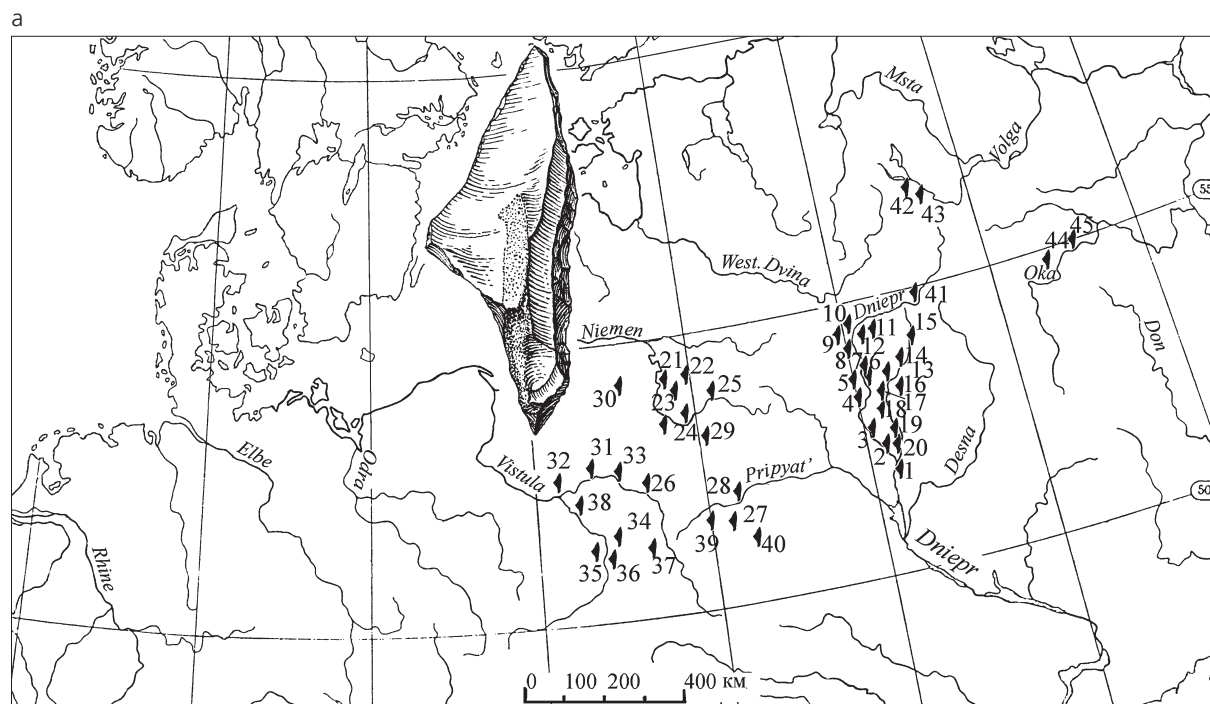
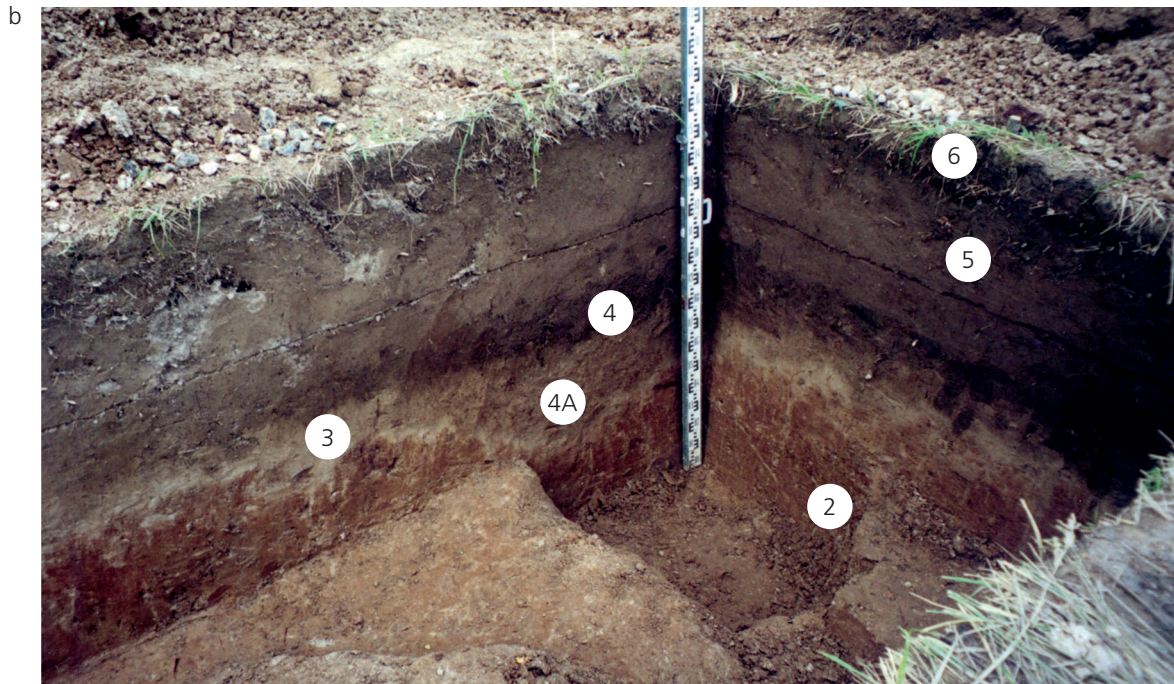


Fig. 5a. Distribution of the Grenskian sites and surface material (maps compiled after KOPYTIN 1999; 2000; KOZŁOWSKI 2006; OBUKHOVSKY 2007; RIMANTIENE 1971; SCHILD et al. 1999; SINITSYNA 1996; SOROKIN 2004; SULGOSTOWSKA 2005; TRUSOV 2011; ZALIZNYAK 1989; 1998). Diagnostic Grenskian point on the map is from layer 4a of Vyshegora I. 1 Rekord; 2 Rechitsa; 3 Schichov; 4 Verichev; 5 Chigirinka; 6 Koromka; 7 Ludchitsi; 8 Dal'nee Liadovo; 9 Borovka; 10 Mogilevskaia; 11 Chvoinaia; 12 Schkelov; 13 Grensk; 14 Litvinovichi; 15 Poklady II; 16 Gronov; 17 Gorki; 18 Zburavel'; 19 Rudnia; 20 lake Glinas; 21 Ezharinas; 22 Miargiazharis; 23 Koval'tsi; 24 Zbliani; 25 Morino II; 26 Golachevo; 27 Lasitsk III; 28 Borki; 29 Krasnosel'ski VI; 30 Zhechki Male; 31 Stankovichi III; 32 Os'nitsa; 33 Granne; 34 Zembozhitse; 35 Rydno; 36 Chernuev; 37 Bialka; 38 Grabe Stare; 39 Nobel'; 40 Chudvi; 41 Vyshegora I; 42 Podol III/2; 43 Ust'-Tudovka I; 44 Umrishinka III; 45 Bragino (© the author).





*Fig. 5b. Stratigraphy of the north-west section of the Vyshegora I site, 2000. 2–6 geological layers: 2 brown loam; 3 light pale sandy soil; 4 dark grey slightly humic sandy loam and buried soil with the Gothenburg excursion; 4a filling of the polygonal crack; 5 grey slightly humic sandy loam; 6 turf and modern soil (© the author).*

The workshop/habitation sites near the source of the Dnieper, in Smolensk district, were discovered in 1929 by V. R. Tarasenko. He collected stone artefacts in the ploughed fields near the village of Anosovo. Up until 1985, only surface finds had been collected here. Based on archaeological analogies, N. N. Gurina dated this material to the Late Palaeolithic/Early Mesolithic and ascribed it to the Baltic Magdalenian (GURINA 1972). This view was confirmed by subsequent research. Of the eight localities known near the source of the Dnieper, the Vyshegora I site proved to be the most promising as several strata contained lithic material. The excavation exposed an area of 150 m<sup>2</sup> (SINITSYNA 2012; SINITSYNA et al. 2012a; 2012b). Of primary importance is the presence of buried soil with the Gothenburg excursion. The site is situated on the surface of the Upper Dnieper glacial depression that gently slopes towards the Dnieper (after Yu. A. Lavrushin). The height of the flood plain here is 5–6 m. No terraces are present. The surface has an ancient polygonal macrorelief. The polygons are filled with deposits of fine pale sandy loam, separated by brown loam containing flint concretions, limestone, and granite boulders. Six lithological horizons were distinguished here (Fig. 5b). The turf and modern soil (layer 6, 10–20 cm) lie on top of grey slightly-humic sandy loam (layer 5, 15–45 cm), beneath which is the buried soil with the Gothenburg excursion, formed by dark-grey slightly-humic sandy loam (layer 4, 10–14 cm). Its upper boundary bulges and the soil marks the de-watering of the polygon. Layers 4–6 yielded numerous finds, most of which were localized along the polygonal fissure, but there were no domestic structures. Beneath the buried soil was a 2 m wide wedge-shaped depression (layer 4a, i.e. the filling of the polygonal fissure). Its infill included a light soil (pale sandy loam) on top of compact brown loam saturated with manganese inclusions. The archaeological finds associated with the pale sandy loam were in three accumulations inside the polygonal fissure and along its sides. Natural depressions and shelters were often used by prehistoric people. Indeed, human habitation in similar conditions has been reported at the Magdalenian site of Wilczyce in Poland (FIEDORCZUK/SCHILD 1999) and Verkholenskaya gora near Irkutsk in Siberia (TSEITLIN 1979).



The character of the inventory does not contradict the dating of Vyshegora I to the Final Palaeolithic. The tools were made of local Carboniferous flint of various colours, nodules of which are abundant on the banks of the Dnieper. The presence of rich sources of raw material permitted the uneconomical use of flint, which explains the fact that waste products (chips, primary flakes, massive removals, etc.) make up as much as 97 % of the inventory.

The analysis of the inventory from all the layers shows the continuity of cultural traditions during the whole period of the site's existence. The flaking technology of the lowermost layer, below the Allerød soil, is characterized by conical and double-platform prismatic cores (Fig. 6,31.34), which mainly served to produce blade blanks. Both hard and soft hammer percussion techniques were used, accompanied by exterior platform polishing to remove overhang. The peculiarity of the lower-layer industry is manifest primarily in the morphology of the arrowheads, which have parallels on Lithuanian sites (RIMANTIENE 1971) (Fig. 6,18). Tanged points coexist here with transverse points (Fig. 6,19–20). The tool set is dominated by burins, which include transverse (Fig. 6,24), retouched (Fig. 6,25), dihedral (Fig. 6,26), angle (Fig. 6,30), and multifaceted (Fig. 6,27) types. In addition to burins, the inventory contains end scrapers made from blades (Fig. 6,36), including double ones (Fig. 6,32), and side scrapers made from flakes (Fig. 6,29.33.35). A distinctive feature of the inventory is the presence of perforators made from blades and bladelets (Fig. 6,21–23), as well as a great number of notched and shouldered tools (Fig. 6,28).

The finds from the buried soil, along the polygonal fissure, are typologically similar to the inventory of the lower layer, although there are more waisted axes (Fig. 6,17). The collection includes conical and narrow-face cores (Fig. 6,13.15), which served to produce blades (Fig. 6,16). Waste products predominate (97.5 %). End scrapers and burins are present in equal numbers. Most of the former were made from blades (Fig. 6,14). The arrowheads were made from blades and blade flakes (Fig. 6,8–12) and are of various types, including Baltic-Magdalenian (Fig. 6,8), Grensk (Fig. 6,11), and transverse types (Fig. 6,10).

The finds from layers 5 and 6 (modern soil) were not particularly different from those in the underlying layer. Worthy of note is a tanged arrowhead made from a blade with a triangular projection on one of the lateral sides (Fig. 6,1), similar to a so-called “shouldered” form typical of the Hamburgian culture (Bølling period). Analogous objects are known from the material of the Mezin site (SHOVKOPLIAS 1965). On the whole, the composition of the inventory duplicates that of the inventory in the buried soil. Here (i.e. in layers 5–6), too, we see retouching and transverse burins (Fig. 6,3–4). However, the numerical composition changes: the tool set is dominated by end scrapers made from blades (Fig. 6,5) and flakes (Fig. 6,6–7). A distinctive feature is the presence of an oblique end scraper (Fig. 6,6), and a marker-like tool (Fig. 6,2).

Analogies to the inventory of the different layers at Vyshegora I can be seen in the material from Lithuania (RIMANTIENE 1971; 1978; BUTRIMAS/OSTRAUSKAS 1999), and the early stage of the Grensk culture in the Upper Dnieper region of Byelorussia. The genesis and chronology of the latter have long been debated issues (BUD'KO 1966; 1970; KSENZOV 1999; 2006; KOPYTIN 2000). V. D. Bud'ko dated the middle stage of the Grensk culture to a period not earlier than the Bølling and not later than the Allerød Interstadial, which corresponds to the interval between 12,700 and 11,800 BP and agrees well with both the age of the buried soil at Vyshegora I and the fact that the material is associated with a cryogenic microrelief (SINITSYNA et al. 2012a).

### 3.3 Discussion

Leaving aside the debatable question of the Magdalenian *versus* Epigravettian cultural affiliation of Late Palaeolithic sites in the Upper Dnieper basin, it is important to establish that there was in fact a Late Glacial population with local (autochthonous) traditions in the southern part of the Valdai region. If the Allerød age of the buried soil is confirmed, the existence of a chronological gap be-

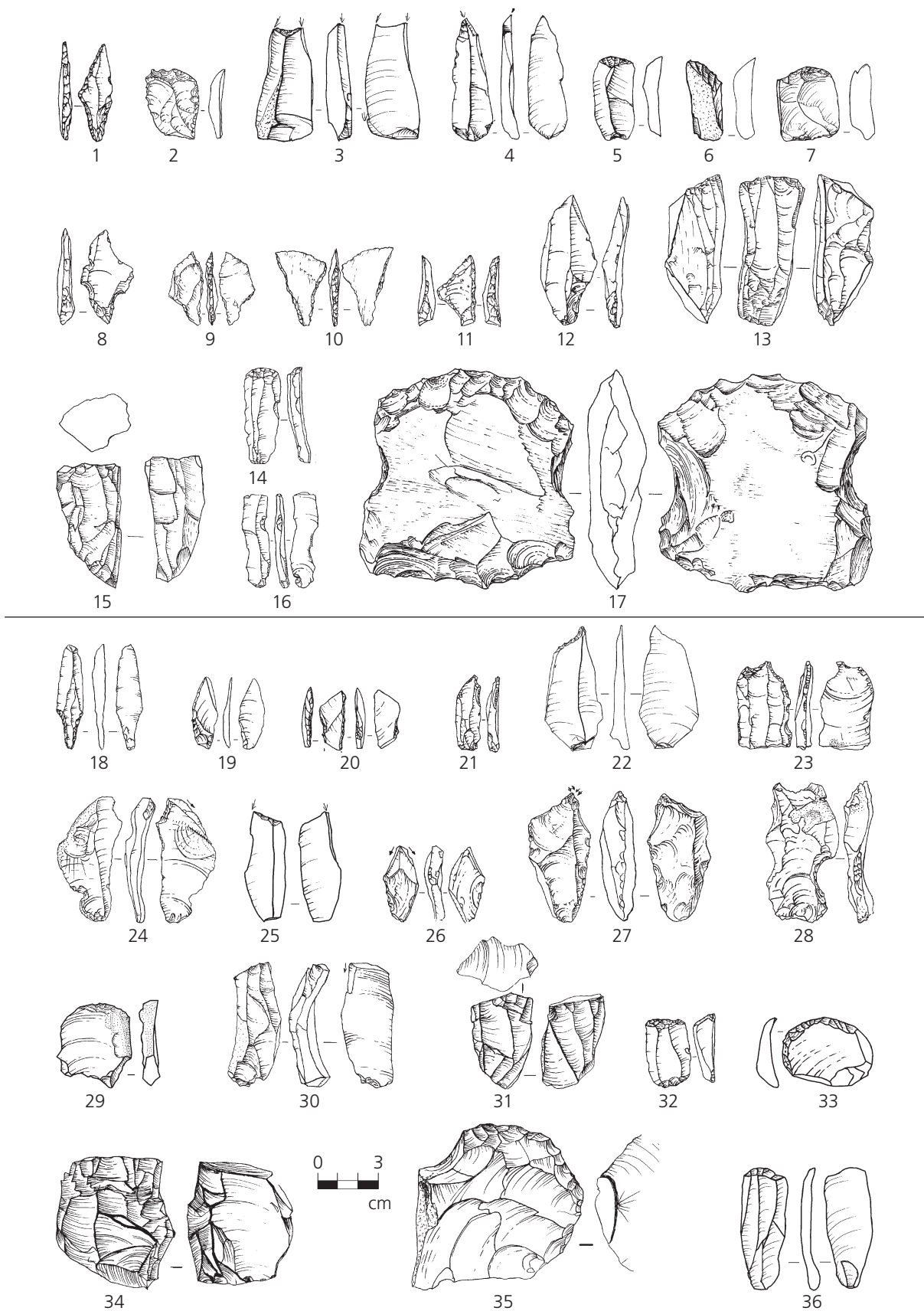


Fig. 6. Vysbegora I. 1–7 finds from the modern soil; 8–17 finds from the buried soil with signs of the Gothenburg magnetic excursion; 18–36 finds from the lowermost layer 3 (© the author).

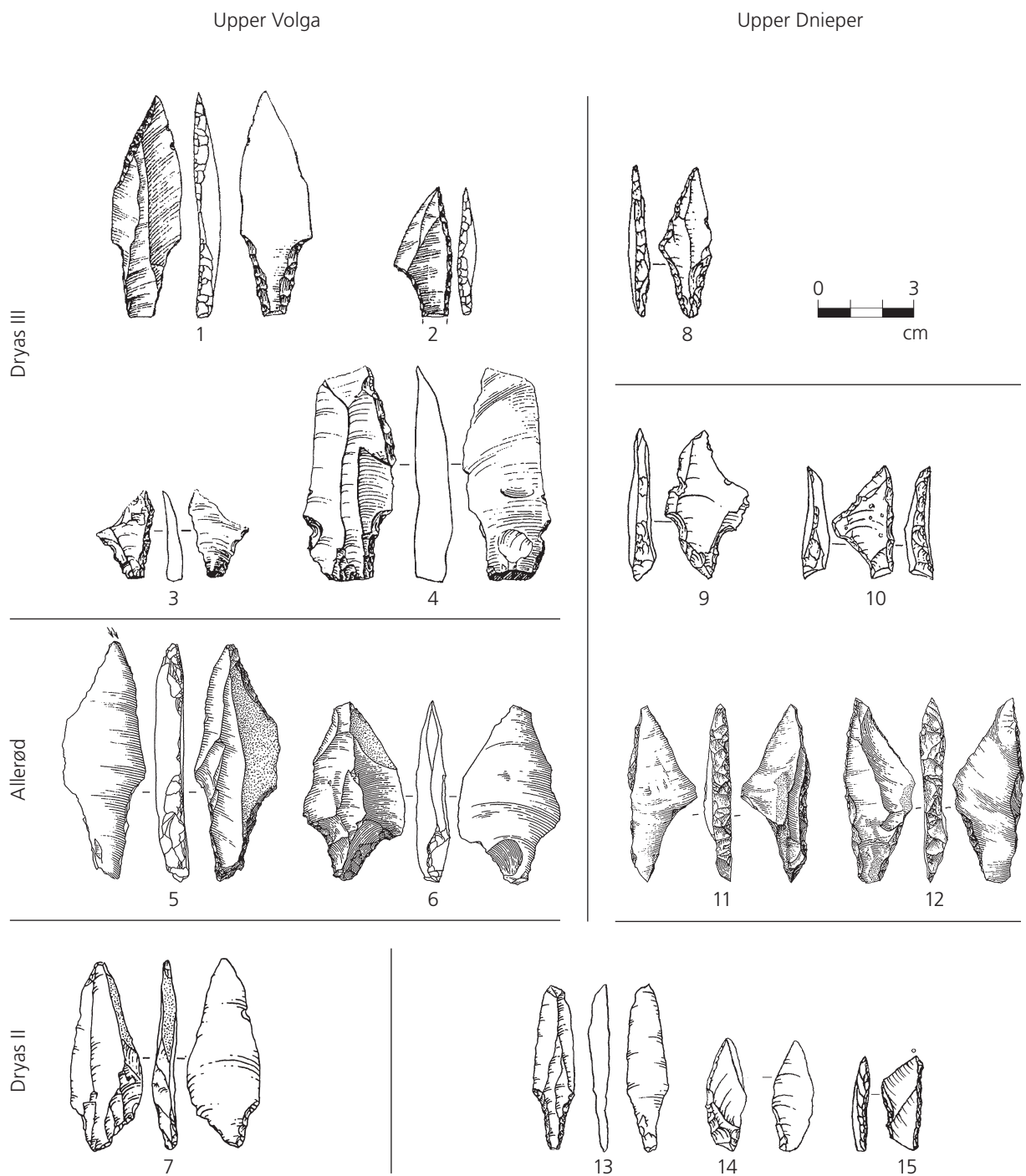


Fig. 7. Chronological sequences of the varieties of tanged points in the Valdai Highland (Upper Volga 1-7, Upper Dnieper 8-15): 1-2 Ust'-Tudovka I; 3-4 Podol III/2, Dryas III pit; 5-6 Podol III/1; 7 Baranova gora, Dryas II soil; 8-15 Vyshegora I: 8 layer 5; 9-10 layer 4; 11-12 layer 4A; 13-15 layer 3 (© the author).

tween the Late and Final Palaeolithic cultures will be disproved. V. F. Kopytin's point of view is also supported by the character of the Final Palaeolithic material from the Upper Dnieper, which differs clearly from that of the Bromme-Lyngby technocomplex, considered by V. P. Ksenzov as the source for the Grensk culture. The difference can be seen in both the flaking technologies and the typological composition of the inventory, which makes it possible to delineate the distribution area of the

tradition over the whole area of the Upper Dnieper with its tributaries, including the territories of Byelorussia, Lithuania and Poland (Fig. 5a).

#### 4 CONCLUSION

The material considered in this paper permits the assumption of an autochthonous evolution from Late to Final Palaeolithic in the southern Valdai region (Upper Dnieper basin: Fig 7, right). The cultures of the Upper Volga basin, in contrast, appear to have been formed as a result of eastward migrations of the tanged-point cultures, which moved “in the wake” of reindeer (Fig. 7, left). It is important to note that some sites (Akulovo traditions) show the influence of the eastern-circle cultures.

#### 5 ACKNOWLEDGMENTS

My sincere gratitude to Berit V. Eriksen for the invitation to take part in this volume, and to A. Sinitsyn and L. Vishniatsky for corrections of my English. This paper is a contribution to RFBR project 17-06-00319 and to state assignment No. 0184-2018-0011.

#### 6 LITERATURE

- ABRAMOVA et al. 1996: Z. A. АБРАМОВА/G. V. GRIGOR' EVA/M. CHRISTENSEN (Абрамова З. А., Григорьева Г. В., Кристенсен М.) Верхнепалеолитическое поселение Юдиново. Вып. 2. СПб. 161 с.
- ANDERSEN 1988: S. ANDERSEN, A survey of the late palaeolithic of Denmark and Southern Sweden. In: M. Otte (ed.), *De la Loire à l'Oder. Les civilisations du Paléolithique final dans le nord-ouest européen. Actes du Colloque de Liège 1985, vol. II.* BAR Internat. Ser. 444. Etudes et recherches archéologiques de l'Université de Liège 25 (Oxford 1988) 523–566.
- BOSINSKI 1997: G. BOSINSKI (Бозинский Г.) Переход от мадлена к азилю как результат изменения окружающей среды (по материалам долины Рейна) // Развитие культуры в каменном веке. Краткое содержание докладов на Международной конференции, посвященной 100-летию Отдела археологии МАЭ. СПб.: 104–109.
- BUD'KO 1966: V. D. BUD'KO (Будько В. Д.) Памятники свидеро-гренской культуры на территории Белоруссии. МИА. № 126. Наука, М.-Л.: 35–46.
- BUD'KO 1970: V. D. BUD'KO (Будько В. Д.) Палеолит. Очерки по археологии Белоруссии. Наука и техника. Минск: 9–48.
- BUTRIMAS/OSTRAUSKAS 1999: A. BUTRIMAS/T. OSTRAUSKAS, Tanged point cultures in Lithuania. In: S. K. Kozłowski/J. Gurba/L. Zaliznyak (eds.), *Tanged Points Cultures in Europe.* Lubelskie Mat. Arch. 13 (Lublin 1999) 267–271.
- FIEDORCZUK/SCHILD 1999: J. FIEDORCZUK/R. SCHILD, Wilczyce – a new late Magdalenian site in Poland. In: B. V. Eriksen/B. Bratlund (eds.), *Recent studies in the Final Palaeolithic of the European plain.* Proceedings of a U.I.S.P.P. Symposium, Stockholm, 14.–17. October 1999. Jutland Arch. Soc. Publ. 39 (Højbjerg 2002) 91–100.
- FISCHER 1991: A. FISCHER, Pioneers in deglaciated Landscapes: the Expansion and adaptation of Late Palaeolithic societies in Southern Scandinavia. In: N. Barton/A. J. Roberts/D. A. Roe (eds.), *The Late Glacial in north-west Europe: Human Adaptation and Environmental Change at the End of the Pleistocene.* Council for British Archaeology. Research Report 77 (Oxford 1991) 100–121.
- GURINA 1972: N. N. GURINA (Гурина Н. Н.) Кремнеобработывающая мастерская в верховьях р. Днепра. Палеолит и неолит СССР. Т. 7. МИА № 185. Л.: 244–251.
- GUS'KOVA et al. 2006: E. G. GUS'KOVA/O. M. RASPOPOV/A. G. IOSIFIDI/G. V. SINITSYNA/A. A. SINITSYN (Гуськова Е. Г., Распопов О. М., Иосифиди А. Г., Синицына Г. В., Синицын А. А.) Палеомагнитные исследования отложений много-слоистой стоянки Подол III/1 на озере Волго в Тверской области // ТАС. Вып. 6. Тверь: 44–54.
- KOL'TSOV 1994: L.V. KOL'TSOV (Кольцов Л. В.) О первоначальном заселении Тверского Поволжья // ТАС. Вып. 1. Тверь: 7–10.
- KORYTIN 1999: V. F. KORYTIN (Копытин В. Ф.) Финальный палеолит и мезолит Верхнего Поднепровья. In: S. Kozłowski/J. Gurba/L. Zaliznyak (eds.), *Tanged Points Cultures in Europe* (Lublin 1999) 256–266.
- KORYTIN 2000: V. F. KORYTIN (Копытин В. Ф.) У истоков гренской культуры. Боровка. Могилёв, издательство МГУ им. А. А. Кулешова, 2000.
- KOZŁOWSKI 2006: S. K. KOZŁOWSKI, Mapping the Central/East European Terminal Palaeolithic/Early Mesolithic. *Archaeologia Baltica* 7 (Klaipeda 2006) 29–35.
- KSENZOV 1999: V. P. KSENZOV (Ксензов В. П.) Новые памятники гренской культуры в Белорусском Поднепровье // Tanged Points Cultures in Europe (Lublin 1999) 229–240.



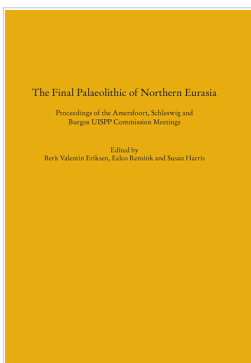
- KSENZOV 2006: V. P. KSENZOV (Ксензов В. П.) Мезолит Северной и Центральной Беларуси // Матэрыялы па археалогіі Беларусі. – Мінск: ДНУ, Інстытут гісторыі НАН Беларусі.
- LANTSEV/MIRETSKY 1996: A. P. LANTSEV/A. V. MIRETSKY (Ланцев А. П., Мирецкий А. В.) Стоянка Троицкое 3 – один из древнейших памятников Тверского Поволжья // Тверской археологический сборник. Вып. 2. Тверь: 57–64.
- LAVRUSHIN et al. 2002: YU. A. LAVRUSHIN/E. A. SPIRIDONOVA/G. V. Kholmouoy (Лаврушин Ю. А., Спиридонова Е. А., Холмоовой Г. В.) Календарно-событийная стратиграфия позднегонеоплейстоцена // Третье Всероссийское совещание по изучению четвертичного периода. – Смоленск, Изд-во ГИИ РАН, Смоленский гос. пед. университет, М., 2002. Т. 1. С. 143–145.
- MARKOVA/VAN KOLFSCHOTEN (eds.) 2008: A. K. MARKOVA/T. VAN KOLFSCHOTEN (Маркова А. К., ван Кольфсхотен Т. [ред.]). Эволюция экосистем Европы при переходе от плейстоцена к голоцену (24–8 тыс. л.н.). Evolution of the European Ecosystems during Pleistocene-Holocene transition (24–8 kyr BP) (Moscow 2008).
- MIRETSKY 2007: A. V. MIRETSKY (Мирецкий А. В.) Финальнопалеолитическая стоянка Теплый ручей на Верхней Волге // Своеобразие и особенности адаптации культур Лесной зоны Северной Евразии в финальном плейстоцене – раннем голоцене. М.: 123–133.
- ОВУКHOVSKY 2007: V. S. ОВУКHOVSKY (Обуховский В. С.) «Гренский след» в финальном палеолите междуречья Немана, Припяти и Вислы // Романовские чтения-3: сборник трудов Международной научной конференции (Могилёв, 23–24 ноября 2006 г.). Могилёв: 157–161.
- RIMANTIENE 1971: R. K. RIMANTIENE (Римантене Р. К.) Палеолит и мезолит Литвы. Вильнюс, Минтис.
- RIMANTIENE 1978: R. K. RIMANTIENE (Римантене Р. К.) Типология палеолитических и мезолитических накопителей Прибалтики // Орудия каменного века. Киев: 20–31.
- ROBERTS/BARTON 2000: A. J. ROBERTS/R. N. E. BARTON, A Lyngby point from Mildenhall, Suffolk, and its implications for the British Late Upper Palaeolithic. In: S. Milliken/J. Cook (eds.), A Very Remote Period Indeed. Papers on the Palaeolithic presented to Derek Roe (Oxford 2000) 234–241.
- RUST 1943: A. RUST, Die alt- und mittelsteinzeitlichen Funde von Stellmoor (Neumünster 1943).
- SCHILD 1975: R. SCHILD, Późny paleolit. In: W. Chmielewskii/W. Hensl (eds.), Prahistoria Ziemi Polskich. Paleolit i Mezolit. t. I. (Wrocław, Warszawa, Kraków, Gdańsk 1975) 159–338.
- SCHILD et al. 1999: R. SCHILD/K. TOBOLSKI/L. KUBIAK-MARTENS/M. F. PAZDUR/A. PAZDUR/J. C. VOGEL/T. W. JR. STAFFORD, Stratigraphy, palaeoecology and radiochronology of the site of Calowanie. Folia Quarternalia 70 (Krakov 1999) 241–267.
- SHOVKORLIAS 1965: I. G. SHOVKORLIAS (Шовкопляс И. Г.) Мезинская стоянка. Наукова Думка. Киев.
- SIDOROV 1996: V. V. SIDOROV (Сидоров В. В.) Мезолит бассейна р. Съежи // ТАС. Вып. 2. Тверь: 75–92.
- SIDOROV 2009: V. V. SIDOROV (Сидоров В. В.) Реконструкция в первобытной археологии. М.
- SINITSYNA 1996: G. V. SINITSYNA (Синицына Г. В.) Исследование финальнопалеолитических памятников в Тверской и Смоленской областях // Археологические изыскания. Вып. 39. СПб.
- SINITSYNA 2000: G. V. SINITSYNA (Синицына Г. В.) Финальный палеолит и ранний мезолит – этапы развития материальной культуры на верхней Волге // ТАС. Вып. 4, Т. 1, Тверь: 61–71.
- SINITSYNA 2008: G. V. SINITSYNA, Blade technology of Eastern Bromme (Podol culture. Valdai Upland. Allerød-Dryas III. 11.8–10.2 ka). In: L. Longo/N. Skakun/M. Saracino (eds.), Prehistoric technology 40 years later. Functional studies and the Russian legacy: proceedings of the International Congress, Verona (Italy), 20–23 April 2005. BAR Internat. Ser. 1783 (Oxford 2008) 421–425.
- SINITSYNA 2012: G. V. SINITSYNA, Human adaptation to the Periglacial environment in the Late Palaeolithic. In: Geomorphic processes and geoarchaeology. From Landscape Archaeology to Archaeotourism. International conference. August 20–24, 2012, Moscow-Smolensk (Moscow, Smolensk 2012) 261–264.
- SINITSYNA et al. 2009: G. V. SINITSYNA/YU. A. LAVRUSHIN/E. A. SPIRIDONOVA/E. G. GUS'KOV/O. M. RASPOPOV/A. G. IOSIFIDI (Синицына Г. В., Лаврушин Ю. А., Спиридонова Е. А., Гуськова Е. Г., Распопов О. М., Иосифиди А. Г.) О хронологии археологических материалов и возрасте вмещающих отложений многослойной стоянки Баранова гора в Тверской области. // ТАС. Вып. 7. Тверь: 52–70.
- SINITSYNA et al. 2012a: G. V. SINITSYNA/YU. A. LAVRUSHIN/E. A. SPIRIDONOVA (Синицына Г. В., Лаврушин Ю. А., Спиридонова Е. А.) Геоархеологические объекты финального палеолита: Баранова гора, Подол III/1, Вышегора I на великом водоразделе Волги и Днепра // Феномен геоархеологической многослойности Байкальской Сибири. 100 лет Байкальской научной археологии: материалы Всерос. науч. конф., посвящ. 100-летию со дня открытия Б. Э. Петри Улан-Хадь. Евразия в кайнозое. Стратиграфия, палеоэкология, культуры. Вып. 1. Иркутск: 192–204.
- SINITSYNA et al. 2012b: G. V. SINITSYNA/E. G. GUSKOVA/O. M. RASPOPOV/A. G. IOSIFIDI (Синицына Г. В., Гуськова Е. Г., Распопов О. М., Иосифиди А. Г.) О хронологии материалов многослойной стоянки финального палеолита Вышегора I в истоках Днепра. // Первобытные древности Евразии. К 60-летию Алексея Николаевича Сорокина. М.: 239–254.
- SOROKIN 2004: A. N. SOROKIN (Сорокин А. Н.) Мезолит Волго-Окского бассейна // Проблемы каменного века Русской равнины. Научный мир. М.: 69–91.
- SOROKIN 2006: A. N. SOROKIN (Сорокин А. Н.) Проблемы мезолитоведения. The Mesolithic Problems. М.
- SPIRIDONOVA/ALESHINSKAYA 1999: E. A. SPIRIDONOVA/A. S. ALESHINSKAYA (Спиридонова Е. А., Алешинская А. С.) Опыт применения палинологического анализа для периодизации мезолита Волго-Окского междуречья // Труды Государственного Исторического музея. Вып. 103. Забелинские научные чтения – 1955–1996. Исторический музей – энциклопедия отечественной истории и культуры. М.: 127–141.
- SULGOSTOWSKA 2005: Z. SULGOSTOWSKA, Kontakty społeczności późnopleistoceny i mezolitycznych między Odrą,

- Dźwina i Górnium Dniestrem. Studium dystrybucji wytworów ze skał krzemionkowych (Warszawa 2005) Objętość.
- TAUTE 1968: W. TAUTE, Die Stielspitzen-Gruppen im nördlichen Mitteleuropa. Ein Beitrag zur Kenntnis der späten Altsteinzeit. Fundamenta, Reihe A, Bd. 5 (Köln, Graz 1968).
- ТСНЕВОТАРЕВА et al. 1965: N. S. ТСНЕВОТАРЕВА/К. N. ARGASOVA/М. А. FAUSTOVA/Р. Р. ВАЙТЕКУНАС/Е. I. DEVIATOVA (Чеборатева Н. С., Аргасова К. Н., Фаустова М. А., Вайтекунас П. П., Девятова Э. И.) Деградация льдов валдайского оледенения. Границы валдайского оледенения и краевые образования максимальной (бологовской) стадии // Последний Европейский ледниковый покров. К VII Конгрессу INQUA (США, 1965). Наука. М.
- TERBERGER 1996: TH. TERBERGER, The Early Settlement of Northeast Germany (Mecklenburg-Vorpommern). In: L. Larsson (ed.), The earliest settlement of Scandinavia and its relationship with neighbouring areas. Acta Arch. Lundensia, Ser. in 8°, No. 24 (Stockholm 1996) 111–122.
- TRUSOV 2011: A. V. TRUSOV (Трусов А. В.) Палеолит бассейна Оки. Изд-во «Репроцентр-М». М.
- ТШЕИТЛИН 1979: S. M. ТШЕИТЛИН (Цейтлин С. М.) Геология палеолита Северной Азии. Наука, М.
- ZALIZNYAK 1989: L. L. ZALIZNYAK (Зализняк Л. Л.) Охотники на северного оленя Украинского Полесья эпохи финального палеолита. Киев. Наукова думка.
- ZALIZNYAK 1998: L. L. ZALIZNYAK (Зализняк Л. Л.) Передісторія України X–V тис. до н.е. Київ.
- ZHILIN 2004: M. G. ZHILIN (Жилин М. Г.) Мезолит Волго-Окского междуречья: некоторые итоги изучения за последние годы // Проблемы каменного века Русской равнины. М.: 92–139.
- ZHILIN/KRAVTSOV 1991: M. G. ZHILIN/A. E. KRAVTSOV (Жилин М. Г., Кравцов А. Е.) Ранний комплекс стоянки Усть-Тудовка I // Археология Верхнего Поволжья. Материалы к своду памятников истории и культуры РСФСР. Нижний Новгород: 3–18.

## 7 ABBREVIATIONS

- МИА – Материалы и исследования по археологии СССР (Materials and studies for archaeology in the USSR)
- ТАС – Тверской археологический сборник (Tver Archaeological Collection)

Galina V. Sinitsyna  
 Institute for the History of Material Culture  
 Russian Academy of Sciences, St. Petersburg  
 Russia  
 gv-sinitsyna@yandex.ru



**Ludwig**  
VERLAG LUDWIG

Verlag Ludwig  
Holtenauer Str. 141  
D 24118 Kiel

Telefon: +49(431) 85464  
Telefax: +49(431) 8058305  
Email: [info@verlag-ludwig.de](mailto:info@verlag-ludwig.de)  
Internet: [www.verlag-ludwig.de](http://www.verlag-ludwig.de)

14.05.2019

**Berit Valentin Eriksen, Susan Harris, Eelco Rensink (Hrsg.)**

## **The Final Palaeolithic of Northern Eurasia**



Proceedings of the Amersfoort, Schleswig and Burgos UISPP Commission Meetings

Schriften des Museums für Archäologie Schloss Gottorf - Ergänzungsreihe Band 13

400 Seiten, 128 S/W- und 94 Farbabbildungen,

Broschur, Fadenheftung,

21 x 29,7 cm,

ISSN: 2364-4680,

ISBN: 978-3-86935-363-0,

EUR 69,90

### **Kurztext**

The present volume brings together 21 papers presented at meetings of the UISPP Commission for "The Final Palaeolithic of Northern Eurasia". Our research focuses on the emergence and migration of hunter-gatherer groups into previously unoccupied territories across the North European Plain during the Late Glacial and Early Postglacial periods (approx. 15,000 to 8,000 BP). Given the magnitude of climate fluctuations and changes in landscape, vegetation and fauna, the Late and Final Palaeolithic cultures of Northern Eurasia were characterized by a variety of adaptive responses reflected in lithic and organic technologies, settlement patterns, subsistence practices, social organizations and even ideologies. The present volume covers all of these topics. We hope that the collection of papers will provide a solid fundament for future research on the Late and Final Palaeolithic.

Verlag Ludwig  
Holtenauer Str. 141  
D 24118 Kiel

Telefon: +49(431) 85464  
Telefax: +49(431) 8058305  
Email: info@verlag-ludwig.de  
Internet: www.verlag-ludwig.de

Verlag Ludwig  
Holtenauer Str. 141  
D 24118 Kiel

## Bestellung:

Berit Valentin Eriksen, Susan Harris, Eelco Rensink (Hrsg.)  
The Final Palaeolithic of Northern Eurasia  
ISSN: 2364-4680,  
ISBN: 978-3-86935-363-0,  
EUR 69,90



Anzahl

### Rechnungsanschrift:

\_\_\_\_\_  
Name, Vorname

\_\_\_\_\_  
Firma / Institution

\_\_\_\_\_  
Straße

\_\_\_\_\_  
PLZ                      Ort

\_\_\_\_\_  
Tel.                                      Fax

\_\_\_\_\_  
E-Mail

\_\_\_\_\_  
Datum / Unterschrift

Bitte senden Sie mir regelmäßig Ihren Verlagsprospekt.

Bitte senden Sie mir regelmäßig Ihren Newsletter per E-Mail.

### Lieferanschrift:

(wenn abweichend)

\_\_\_\_\_  
Name, Vorname

\_\_\_\_\_  
Firma / Institution

\_\_\_\_\_  
Straße

\_\_\_\_\_  
PLZ                      Ort

\_\_\_\_\_  
Tel.                                      Fax