



Actes du XIV^{ème} Congrès UISPP, Université de Liège,
Belgique, 2-8 septembre 2001

Acts of the XIVth UISPP Congress, University of Liège,
Belgium, 2-8 September 2001



SECTION 7

LE MÉSOLITHIQUE / THE MESOLITHIC

C 7.1

Landscape-Use During the Final-Palaeolithic and Mesolithic in
NW-Europe: The Formation of Extensive Sites and Site-Complexes

Coordinateur / Coordinator: Philippe Crombe

C 7.2

Late Foragers and Early Farmers of the Lepenski Vir-Schela
Cladovei Culture in the Iron Gates Gorges.
A Metamorphosis of Technologies or Acculturations

Coordinateurs / Coordinators: Borislav Jovanović, Dragana Antonović

C 7.3

Intrusive Farmers or Indigenous Foragers:
The New Debate about the Ethnolinguistic Origins of Europe

Coordinateur / Coordinator: Mario Alinei

Sessions générales et posters
General Sessions and Posters

Édité par / Edited by
Le Secrétariat du Congrès

Présidents de la Section 7 :
Philippe Crombe & Pierre Vermeersch

BAR International Series 1302
2004

THE LATE PALAEOOLITHIC OF THE VALDAI REGION

Galina.V. SINITSYNA

Résumé : Les sites d'assemblage lithique de technocomplexe Bromme ont été identifiés sur le territoire du massif élevé de Valdai par les fouilles des 10 derniers ans. La distribution spatiale de ce complexe culturelle d'époque tardiglaciaire ont été élargi d'Angleterre méridionale jusqu'au bassin de Volga supérieure. L'analyse comparative des assemblages lithique des sites a mis en évidence des existences de particularités locales dans ses distributions. D'après la ressemblance typologique un groupe des sites du bassin de Vistule, de Niémen, et Biélorussie est séparé du groupe des sites de Jutland, de la région boisée d'Ukraine et de Valdai. Le plus probable, c'est la conséquence du procès durable de l'évolution locale et de l'influence de la Swiderien.

Abstract: Sites with lithic assemblages of Bromme affiliation were identified in the Valdai Upland by excavations during the last decade. The geographic distribution of the Bromme technocomplex of the Tardiglacial epoch was thus expanded from southern England up to Upper Volga Basin. Comparative analyses of the lithic assemblages revealed the existence of local variations in their distribution. On the basis of typological similarity, one group of sites in Vistula and Neman basins and in Byelorussia, may be distinguished from a group of sites in Jutland, the Ukrainian woodlands, and the Valdai Upland. This is most probably the consequence of long-term processes of local evolution and the influences of the Swiderian.

Problems concerning the colonization of newly deglaciated territories during the Pleistocene-Holocene transition have a special importance in Stone Age archaeology. Most of the archaeological remains from this epoch lie in a secondary depositional context as a result of the massive erosion during this period. Methods of the natural sciences for dating the sites are used very rarely. Very few radiocarbon dates are available, and the comparative-typological method remains the principal instrument of chronology.

Field studies of the past decade in the Valdai Upland, where the sources of the principal East European rivers - Volga, Dnepr and Western Dvina - have yielded a body of new data and an array of new problems.

The Podolskaia sites of Bromme-Lingby affiliation represent the earliest evidence of a human presence in the Valdai Upland. Archaeological entities of the Bromme cultural tradition of the Tardiglacial epoch have been identified in Northern Europe. The Podolskaia culture is one of them (fig. 1:7).

The sites Podol III/1 and Podol III/2 (Sinitsyna, 1996), Ust-Tudovka I (Zhilin, Kravtsov, 1991) in Upper Volga area have yielded substantial archaeological materials of this culture. The lithic assemblages of the sites Baranova Gora (Sinitsyna, 1996), Troitskoye 3 (Lantsev, Miretsky, 1996), Lanino I (Sinitsyna, 1997) and Tioplij Ruchej II (Koltzov, 1994; Miretsky's excavations, the materials of which are not yet published) are typologically similar.

Among the recently excavated settlements of this group, the sites Podol III/1 and Podol III/2 are the most informative. This applies for instance to the information about stone assemblages, spatial organisation, as well as radiocarbon dates and palynological data.

The Podol III sites are situated on the bank of the Vblgo Lake. They were excavated by G. Sinitsyna during 1990 and 1993-1996. One hundred and sixty-six sq. m were exposed at the site of Podol III/1 on the level of a fossil soil of Allerod age. This is a layer (10-15 cm in thickness) of homogeneous and slightly humified sand. The cultural layer of final Palaeolithic times contains an archaeological assemblage of the Bromme technocomplex. An oval dwelling (6 x 2.5 m) with corridor-like entrance was identified (Sinitsyna, 1996) with a central hearth (40 x 50 cm) at a depth (5-10 cm). A radiocarbon date of 9180 ± 75 (LE-5029) was obtained from a charcoal sample from the hearth. A place for flint knapping was located not far from the dwelling.

Unipolar blade cores with smooth striking platforms at an angle of 80° dominate the collection. The blades have a well-pronounced bulb, as a result of a hard hammer use. The most important items in this assemblage are the points, which are similar to typical Bromme-Lingby points (fig. 2: 1-7). The lithic assemblage of Podol III/1 is the oldest evidence of the Bromme technocomplex in the Valdai area and may be recognized as the first stage in the evolution of the Podolskaia culture.

For the first time in Eastern Europe, such points were identified at the Vilnius site and for a long period of time this was the easternmost manifestation of the Bromme technocomplex (Taute, 1968). V. Taute suggested the following criteria for two types of Lingby points as a diagnostic feature of this culture: 1) large points exceeding 5.5 cm in length; 2) narrow and short points — less than 5.5 cm in length. According to Taute, the smaller points are transitional to the Ahrensburgian type. A. Fisher (1985) offered a more detailed definition of the late Palaeolithic points of the Bromme culture. According to him, Bromme points were made on rough blades and flake-blades with a

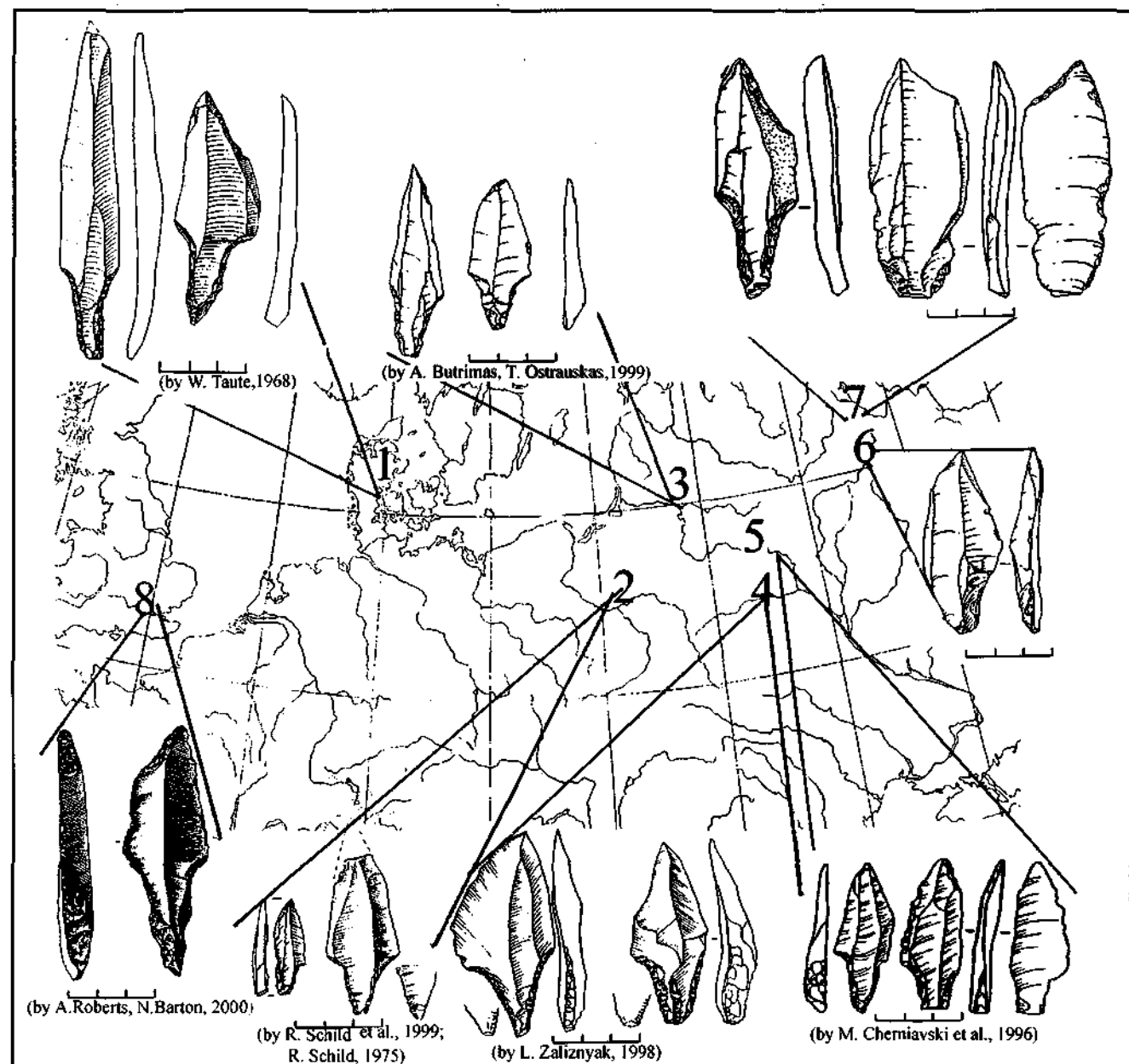


Figure 1. The distribution of Bromme points: 1 - North European group, 2- Poland group, 3- Lithuanian group, 4 - Ukrainian group, 5 - Byelorussia group, 6 - Upper Dneper group, 7 - Upper Volga group, 8 - Britain point.

wide semi- rectangular or pointed tang produced by abrupt retouch, and without a ventral refinement of the tip. Points made on such blades are distinguished by their thickness and size: they are about 8 cm long, 2.2 cm wide, and weigh 6.5 g. Points from Podol III are in keeping with the younger Bromme period, which could indicate the age of this site. Other important indicators of cultural affiliation are burins and end-scrapers made on rough blades (fig. 2: 8-18).

The site of Podol III/2 is situated 50 m east of Podol III/1. Over an excavated area of 187 sq. m at Podol III/2, cultural remains are concentrated in three clusters representing a living space of 56 m². According to the pollen data (Spiridonova and Aleshinskaya, 1999) on samples from a pit, the site appears to be of Younger Dryas age. Materials from this site illustrate the second stage in the evolution of the Podolskaia culture (fig. 2:6-8, 11-15, 18-21).

The cores are represented by prismatic bipolar specimens with scars indicating parallel and convergent blade removals. Several cores exhibit a modification of the posterior surface by a transverse scar. Removals were made from both the smooth unretouched surface and retouched striking platform, and sometimes from a lateral wedge.

There are seven core preforms in the collection. These are massive (12x14x10 cm) nodules with several prismatic blade scars. Multifrontal cores possess a cubic form in the initial stage of use. The core preforms are found in the same area, and represent the majority of the final paleolithic material.

Fifteen tanged points were found (5.6% of the tools) at the Podol III/2 sites. All points are made on thick blades 7-8 cm long with tangs 2-3 cm long. In all cases, the tangs are produced by abrupt dorsal retouch. The typical similarity

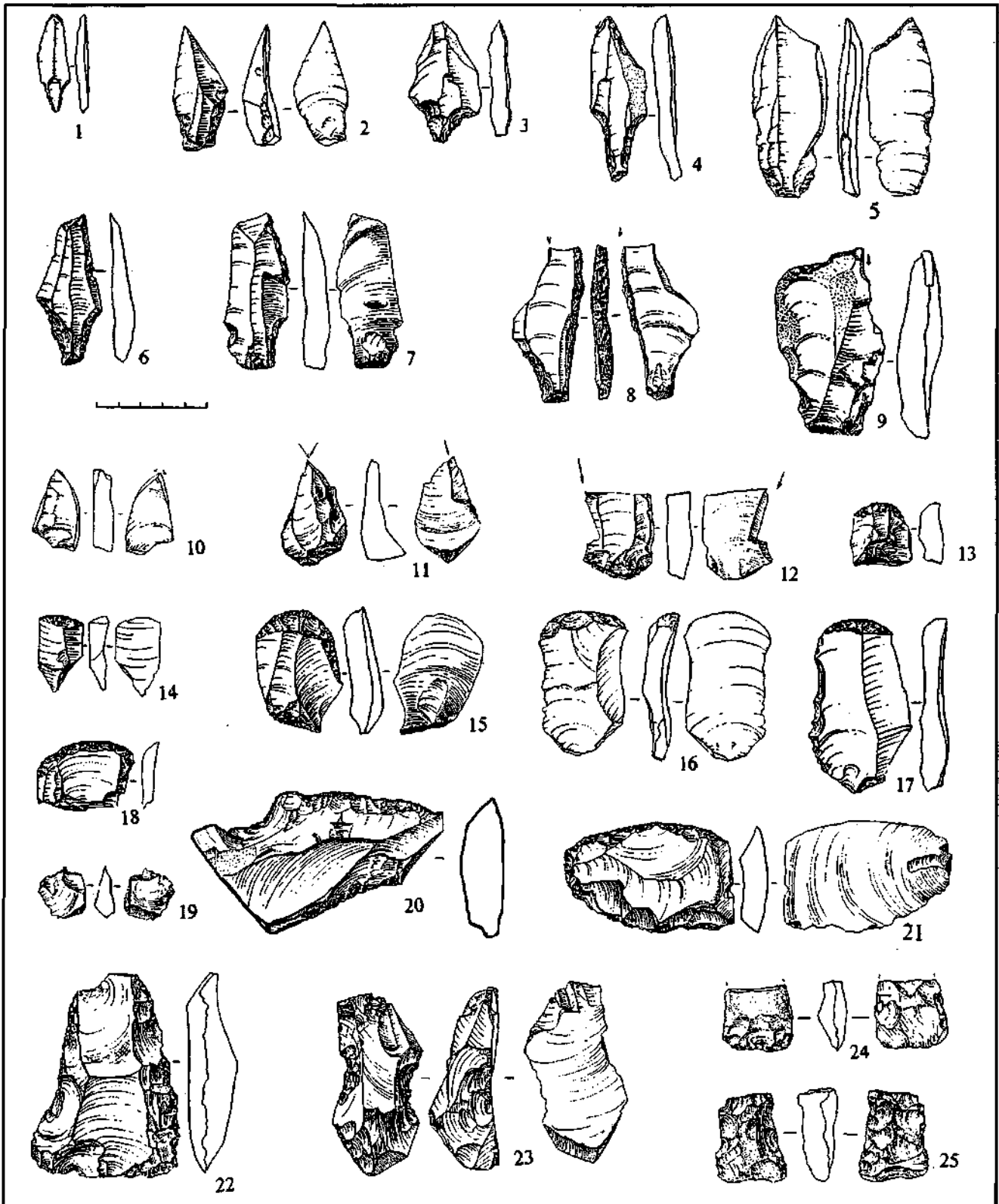


Figure 2. Late Glacial flint tools from sites of Podol culture: 1-5, 9, 16, 17, 22 - site Podol MI/1; 6-8, 11-15, 18-21, 23 - site Podol IN/2; 10, 24, 25 - site Baranova gora.

of these tanged points with the Bromme-Lingby projectile points is a characteristic feature of the industry at this site (fig. 2:6-7).

The other indicator of cultural attribution is the burins, one of which was made on a broken tanged point (fig. 2:8).

Thirty-five end-scrapers (fig. 2:13-15, 18), most of which were found in the southern part of the living area, are the most numerous tools in the assemblage (24.5%).

Side-scrapers (fig. 2:20, 21) are represented by a major group (7% of tools). These are simple elongated forms

manufactured by abrupt dorsal retouch. The axes on the flakes (fig. 2: 22-25) are diagnostic of the Late Glacial and early postglacial period. A single borer is also found in the assemblage (fig. 2:19).

The next (third) chronological stage of the Podol culture sequence is represented by the Ust-Tudovka I site, located near the town of Rzhev (Zhilin, Kravtsov, 1991). According to the pollen analyses, this site dates to the end of Dryas III (Spiridonova and Aleshinskaya, 1999). The typological composition of the assemblage is consistent with the site's chronological position as a prolongation of an evolutionary line already represented by the first two stages. This evolutionary line reflects a developmental trend towards decreased blank size that is especially visible among the points.

Thus, a tendency towards reduced tool size is evident. This is illustrated by the materials from Baranova gora (fig. 2: 10,24,25), which is also located on the northern coast of the lake Volgo, near the site of Podol III.

The analyses of the stratified sites in the Upper Volga region reveal the evolution of the Bromme-Lingby assemblages during the Allerod-Dryas III period. The explanation of the similarity between the Upper Volga and Scandinavian lithic assemblages is open to discussion.

A migration model probably best explains the eastern geographic distribution of Bromme technocomplex, and is consistent with its chronological position.

Different cultural traditions were identified in the Upper Dnepr Basin. N. N. Gurina (1972) discovered a group of eight surface sites in 1969 near the village of Anosovo, and three sites near the village of Vyshegora. These materials were interpreted as flint-knapping workshops and dated to the Final Palaeolithic on the basis of their similarity with Ahrensburgian and Swiderian assemblages.

Located at flint outcrops, these workshops exhibit a typologic composition similar to that of the lithic assemblages of the Grensk archaeological culture (Ksenzev, 1988).

A cultural layer in stratigraphic context was identified and excavated (120 sq. m) at the site Vyshegora I (Sinitsyna, 1996). Cultural remains of Final Palaeolithic age had accumulated here inside a cavity formed by ancient glacial polygonal microrelief. A polygonal depression was filled with light pale yellow loam containing flint nodules and artefacts.

Natural depressions, cavities and hollows were used as shelters by ancient peoples. The existence of a former dwelling was identified at Verholenskaya gora near Irkutsk (Tseitlin, 1979:149), dating to approximately the same time period (10.8-10.3 ka).

The common feature among the artefact assemblages from the Vyshegora workshops is the use of local raw material.

The latter includes a black flint of a high quality, and also pale-gray, yellow, red, and brown flint. Tools with secondary working represent up to 2.3% of the total (5.7% with the addition of utilized flakes).

The complete sequence of knapping is represented in the lithic assemblage. Multipolar cores are predominant (Gurina, 1972) as a starting point for technological processes, in the sequence of which the following forms were found: conic, wedge-shaped, and prismatic (both bipolar and unipolar varieties).

The most characteristic feature of the Vyshegora I collection is the syncretic typological configuration of the lithic assemblage. This could be explained both as a mixture of chronologically different materials, and as the influence of different cultural traditions. There are 11 tanged points (6% of the tool-kit). One of them (6 cm long) is typologically similar to Swiderian projectiles (fig. 3:7). There are also four points, which are close in form to Lingby points (fig. 3:2,5), but with a secondary modification that is unusual for Lingby. A shouldered point with retouch on the lateral margin warrants special attention (fig. 3:77), as a form transitional between Lingby and Grensk projectile types (fig. 3:5). There are also points of semi-triangular form, typical for Baltic Magdalenian assemblages (according to Rimantene, 1978), and one point with a tang produced by abrupt dorsal retouch (fig. 3:4,6,8). There is also one leaf point from the lower layer with a tang made by alternating retouch (fig. 3:7).

Another characteristic feature of the Vyshegora industry is the burins (7%). They are represented by typologically varied forms: dihedral, retouched and transverse (fig. 3:9, 10, 13; fig. 4:6,7). Multifaceted burins, which are found in the lower layer, are also very characteristic of this collection (fig. 4:7, 3). The most numerous items in the collection are end-scrapers (15%) including double forms (fig. 3:14,16,18). The assemblage also contains borers (fig. 3:20, 23; fig. 4:4) of the "Mezin type" (Kopytin, 1999) and many notched tools on blades and bladelets (fig. 3:77, 27, 24).

Axes on massive blanks (fig. 4:5) and bifaces with polished edges (fig. 3:7P) contribute to the unusual composition of the industry, and may be regarded as chronological markers.

At the present time, it is possible to determine the cultural affiliation of these workshop sites (Anosovo, Vyshegora) and but only their general chronological position. These sites can be dated to the end of Final Palaeolithic - Late Mesolithic and affiliated with the tanged-point cultures derived from the Lingby, Ahrensburgian, and Swiderian traditions.

Comparison of the attributes (absolute size and proportion) of the Bromme projectile points reveals the following pattern. The projectiles from Ukrainian (Zalzyak, 1998, 1999) and Russian sites exhibit close morphological similarity with Danish points (Fisher, 1985; Fisher and Nelsen, 1987; Taute, 1968) (fig. 1: 1,4,7) on one hand, and with another group from the territories of Poland (Schild, 1975; Schild et al., 1999), Lithuania (Butrimas, Ostrauskas, 1999), Byelorussia

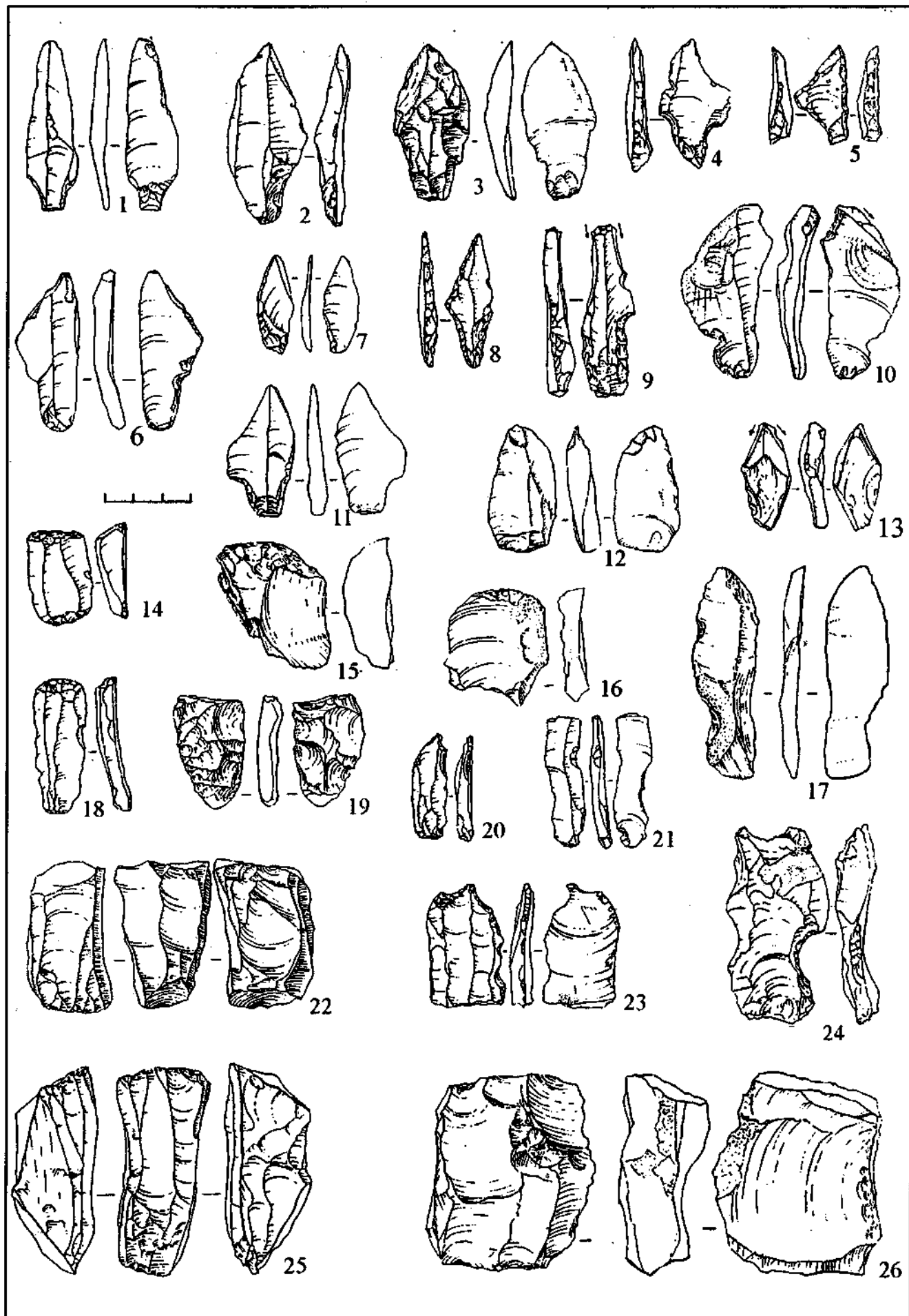


Figure 3. Flint inventory of the Vishegora I.

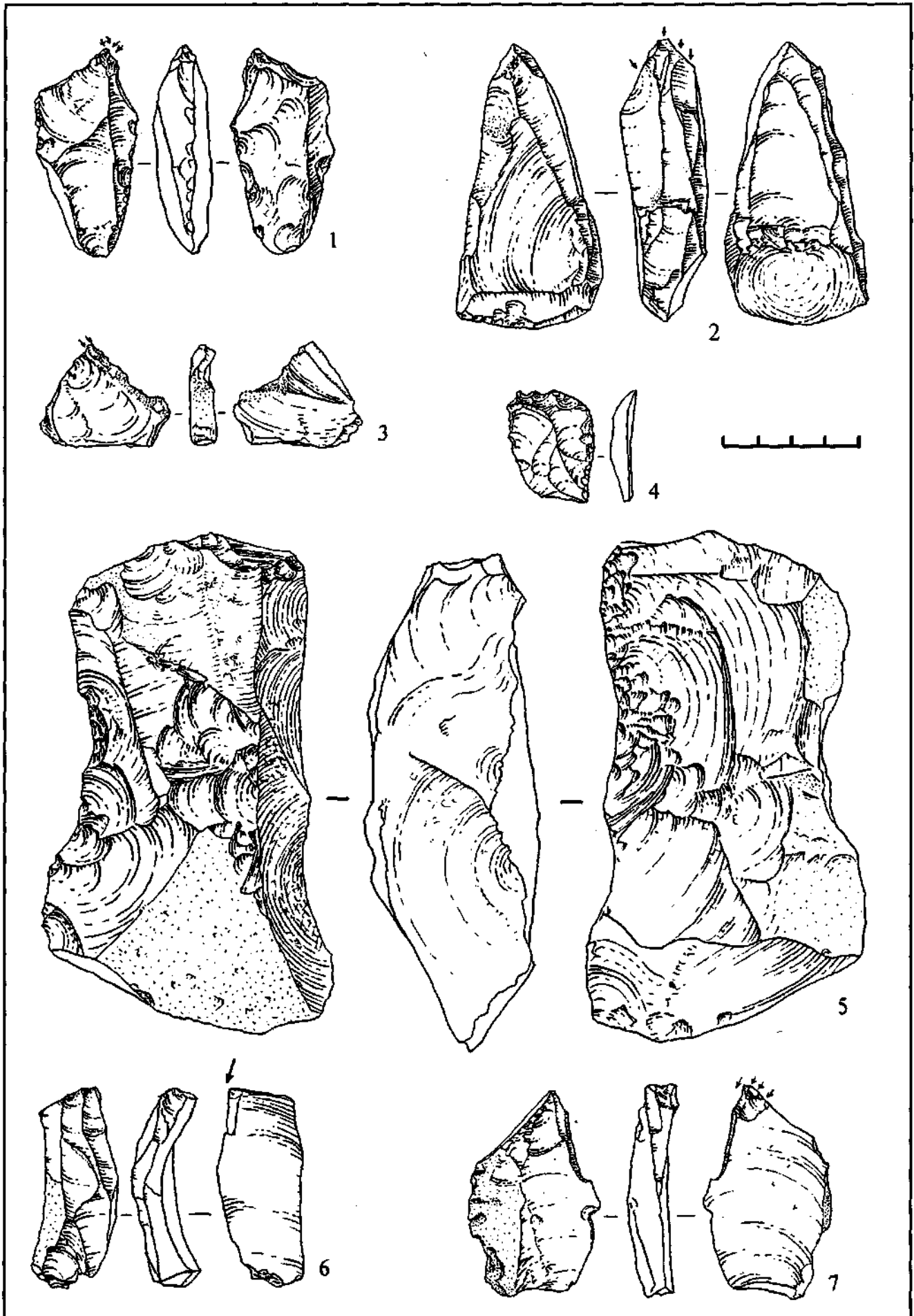


Figure 4. Flint inventory of the Vishegora I.

(Chernjavski et al., 1996), and the Upper Dnepr (fig. 1:2,3,5,6) on the other hand. These two groups may be explained as local varieties of Bromme technocomplex reflecting the influences of the Swiderian in the case of the latter.

The movement of Bromme populations appears to be primarily towards the east. A problematic Bromme point from the British Isles (Roberts and Barton, 2000) remains a probable western point in its distribution. Movement towards the east is also revealed in the Swiderian technocomplex from the beginning of Allerød epoch (fig. 5:1-7). According to radiocarbon evidence, the successive steps of the wave of migration are represented by the site of Kabeliai 2 in Lithuania (fig. 5-3) with dates in the range of 11 ka (Ostrauskas, 1999), and by a series of sites such as Ivanovskoe 7 and Stanovoe 4 further east in the Ivanovo region dating to 9-10 ka (Zarertskaja et al. 2000; Zarertskaja, 2001) (fig. 5-7).

The coexistence of the Bromme and Swiderian technocomplexes in the Valdai area (Upper Volga and Upper Dnepr groups) (fig. 5-5,6) is indicated by the syncretic composition of lithic assemblages, as evidence of contact between the ancient populations.

Acknowledgements

I am grateful to J.F. Hoffecker (Institute of Arctic and Alpine Research, University of Colorado, Boulder, US) for corrections of my English, and the Russian Foundation for Fundamental Researches (project 02-06-80497), in the framework of which the paper was prepared. The participation in XIV Congress of the IUPPS were sponsored by Organizing Committee of the Congress. I would like to acknowledge the support of both agencies, as well as kind and friendly hospitality of the Organizing Committee members.

Author's address

Galina V. SINITSYNA
Palaeolithic department. Institute of the History of Material Culture RAS.
18, Dvortsovaia nab.
St.-Petersburg,
191186 RUSSIA
E-mail: galina@AS6238.spb.edu

Bibliography

BUTRIMAS, A. & OSTRASKAS, T., 1999, Tanged points cultures in Lithuania. In *Tanged Points Cultures in Europe*, edited by S.K. Kozłowski, J. Gurba, L.L. Zaliznyak. Read at the International Archaeological Symposium Lublin, September, 1993. Lublin, p. 267-271.

CHERNIAVSKI, M., KUDRIASHOV, V. & LIPNITSKAJA, O., 1996, *Starazhitnie shakhtsety na Rosi*, edited by V. Isaenko. Minsk.

FISCHER, A., 1985, Late Paleolithic Finds. In *Archaeological Formation Processes. The representativity of archaeological remains from Danish Prehistory*, edited by K. Kristiansen. Copenhagen, p. 81-88

FISCHER, A. & NIELSEN, F.O.S. 1987, Senistidens bopladserved Bromme. En genbearbejdning af Westerby's og Mathiassens fund. In *Aarbøger for Nordisk Oldkyndighed og Historie* (1986). Kobenhavn, p. 5-42.

GURINA, N.N., 1972, Kremneobratyvyushchaia masterskaia v verkhoiakh r. Dnepra in *Paleolit i neolit SSSR. T.I. Materialy i issledovaniya po arkhologii SSSR*, 185, (Flint workshop in the Upper Dnepr basin. In *The Paleolithic and the Neolithic of U.S.S.R.*) edited by Z.A. Abramova, N.D. Praslov. Leningrad, p.244-251.

KOLTZOV, L.V., 1994, O pervonachalnom zaselenii Tverskogo Povolzhia (On the primary colonization of the Tver-Volga region). *Tverskoi arkeologicheskii sbornik*, edited by I. Chernikh. T. 1. Tver, p.7-10.

KOPYTIN, V. F., 1999, Finalnyi paleolit i mesolit verkhnego Podneprov'ia (Final Palaeolithic and Mesolithic of the Upper Dnepr basin). In *Tanged Points Cultures in Europe*, edited by S.K. Kozłowski, J. Gurba, L.L. Zaliznyak. Read at the International Archaeological Symposium Lublin, September, 1993. Lublin, p. 256-266.

KSENZEV, V.P., 1988, *Paleolit i mesolit Belorusskogo Podneprov'ia* (The Palaeolithic and the Mesolithic of Byelorussian Dnepr basin), edited by N.N. Gurina. Minsk.

LANTSEV, A.P. & MIRETSKY, A.V., 1996, Troitskoe 3 - odin iz drevneishikh pamiatnikov Tverskogo Povolzhia (Troitskoye 3 - one of the most ancient site of the Tver-Volga region). *Tverskoi arkeologicheskii sbornik*, edited by I. Chernikh. T. 2. Tver, p. 57-64.

OSTRAUSKAS, T., 1999, Kabeliai 2 - Stone Age Site. *Lietuvos Archeologija*, t. 16. Vilnius, p. 31-66.

RIMANTENE, R.K., 1978, Tipologia paleoliticheskikh i mesoliticheskikh nakonechnikov strel Pribaltiki. In *Orudiya kamennogo veka*. (The tipological analysis of Palaeolithic and mesolithic points of Subbalticum. In *Tools of Stone age*), edited by D.Ja. Telegin, Yu.G. Kolosov, B.I. Neprina. Kiev, p. 20 - 31.

ROBERTS, A.J. & Barton R.N.E., 2000, A Lyngby point from Mildenhall, Suffolk, and its implications for the British Late Upper Palaeolithic. In *A Very Remote Period Indeed. Papers on the Palaeolithic presented to Derek Roe*, edited by S. Milliken, J.Cook. Oxford, p. 234-241.

SCHILD, R. 1975, Późny paleolit. In *Prahistoria Ziemi Polskich. Paleolit i Mezolit*. t.I, edited by W. Chmielewski, W. Hensl. Wrocław-Warszawa-Kraków-Gdańsk, p. 159-336.

SCHILD, R., TOBOLSKL, K., KUBIAK-MARTENS, L., PAZDUR M., PAZRUR, A., VOGEL, J. & STAFFORD JR., T., 1999, Stratigraphy, palaeoecology and radiochronology of the site of Całowanie. *Folia Quaternaria*, 70, Krakow, p. 239-268.

SINITSYNA, G.V., 1996, *Issledovanie finalnopaleoliticheskikh pamiatnikov v Tverskoi i Smolenskoj oblastjakh. Arkheologicheskii izyskaniya, Vyp. 39. (The Research of the Final Palaeolithic sites of the Tver and Smolensk regions). Archaeological Investigation. Vol. 39. St.-Petersburg.*

SINITSYNA, G.V., 1997, Lanino I - pamjatnik kamennogo veka. In *Kamennyi vek Verkhnevolzhskogo regiona. Arkheologicheskii izyskaniya, Vyp. 55. (Lanino-I - the site of Stone Age. Stone Age of Upper Volga Region.) Archaeological Investigation. Vol. 55, Part 2. St.-Petersburg*, p. 5-62.

SPIRIDONOVA, E. A. & ALESCHINSKAJ, A.S., 1999, Rezultaty palinologicheskogo izucheniya mezolita Volgo-Okskogo mezhdurechja. V *Mezolit Volgo-Okskogo mezhdurechja*.

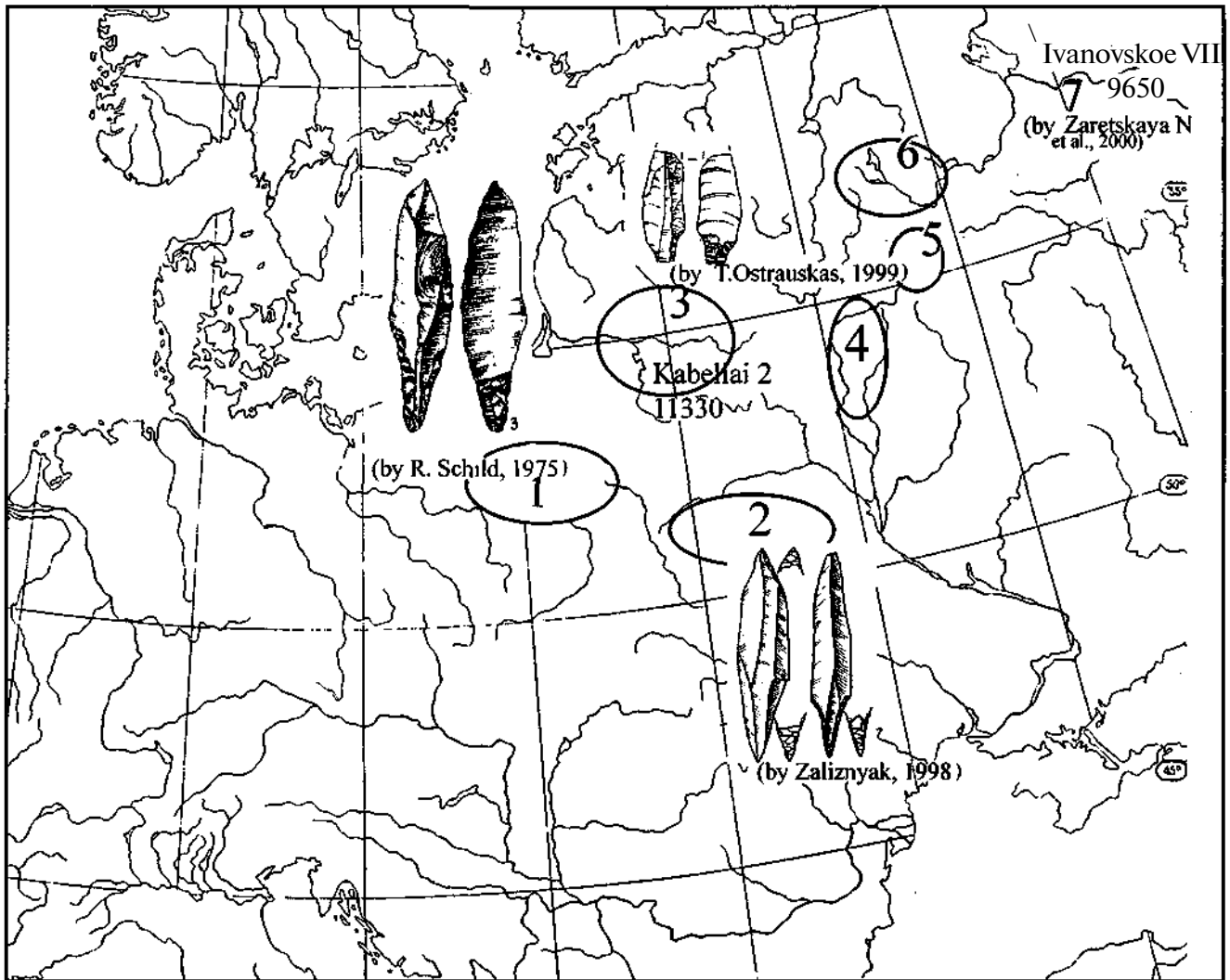


Figure 5. The distribution of Swiderian culture.

(*Pamjatniki butovskoi kultury*) (The results of the palinological research of the Mesolithic in the Volga-Oka river basin. In KOLTZOV, L. V. & ZHILIN, M.G., 1999, *The Mesolithic in the Volga-Oka river basin (The Monuments of the Butov Culture)*, edited by Kh. Amirkhanov. Moscow, p. 139 -153.

TAUTE, W., 1968, *Die Stielspitzen-Gruppen im nördlichen Mitteleuropa. Ein Beitrag zur Kenntnis der späten Altsteinzeit.* Fundamenta, Reihe A, Band 5. Köln.

TSEITLIN, S.M., 1979, *GeologijapaleolitaSevernoiAzii. (Geology of Paleolithic of the Northern Asia)*, Moscow.

ZALIZNYAK, L. L., 1998, *Predystoria Ukrainy X— V tys. do n.e., (Prehistory of Ukraine X— Vth. b.c.)*. Kiev.

ZALIZNYAK, L. L., 1999, Tanged Point Cultures in the Western Part of Eastern Europe. In *Tanged Points Cultures in Europe*. Read at the International Archaeological Symposium Lublin, September, 1993. Lublin.

ZHILIN, M.G. & KRAVTSOV, A.E., 1991, Rannii kompleks stoyanki Yust-Tudovka I. In *Arkheologiya Verkhnego Povolzhia Materialy k svodu pamiatnikov istorii i kul'tury RSFSR.* (Early complex of the site Ust'-Tudovka I. In *Archaeology of the Upper Volga region*). Nizhnii Novgorod p. 3-18.

ZARETSKAYA, N. E., SULERZHITSKII, L.D. & ZHILIN, M.G., 2000, Radiocarbon chronology of multilayer mesolithic-neolithic sites in the peat bogs of the Upper Volga basin. In *Abstracts of the International Radiocarbon Conference, Judean Hills, Israel, June 18-23 2000*, p. 236.

ZARETSKAYA, N. E., 2001, Radiouglerodnye issledovania torfianikov i khronologia sobytii golotsena yuzhnoi Kamchatki i Volgo-Okskogo mezhdurechia. *Avtoreferat dissertatsii na soiskanie uchenoi stepeni kandidata geologo-mineralogicheskikh nauk.* Moskwa.