

АРХЕОЛОГИЯ

The Abashevo Culture

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The article is devoted to a brief description of the Abashevo culture. This culture emerged in forest areas of Eastern Europe at the end of the Middle Bronze Age. Abashevo monuments date back to the 22nd–19th centuries BC. It was the culture of cattle herders and metallurgists. The Abashevo culture is represented by barrow cemeteries, settlements, hoards and random finds. This article analyzes the funeral rites of the Abashevo culture. Several types of vessels are distinguished in the ceramic material, and their ornamentation is described (elements, motifs, composition, style). The article presents a typology of metal, bone and stone artifacts (weapons, tools, adornments, symbols of power). The Abashevo culture is represented by two local variants — in the Middle Volga (two territorial groups are known here — on the right and on the left banks of the Volga) and in the South Ural. The origin of the Abashevo culture, most likely, had the character of transformation. It was based on cultures with Central European roots and local, Eastern European cultures. The end of the Abashevo culture is associated with the emergence of the Seyma-Turbino cultural group in Eastern Europe. The confrontation between the Abashevo and Seyma-Turbino military units led to the withdrawal of the Abashevo culture from traditional territory. In the new cultural environment, under the influence of the southern Ural variant of the Abashevo culture, Sintashta culture was formed. Pokrovka culture was formed under the influence of the Middle Volga variant of the Abashevo culture. Therefore, a significant role of the Abashevo culture in the formation of the Volga-Ural cultural genesis centre is evident.

Keywords: Abashevo culture, Middle Bronze Age, typology, absolute chronology.

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Абашевская культура

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Статья посвящена краткой характеристике абашевской культуры. В настоящее время она рассматривается как культура конца эпохи средней бронзы (абсолютные даты по радиоуглероду XXII–XIX вв. до н.э.) и относится к нулевому периоду Волго-Уралья по схеме В. С. Бочкарева. Абашевская культура локализовалась в лесной полосе Восточной Европы. Поздние ее памятники известны также в зоне лесостепи. Это культура скотоводов и металлургов. Она представлена двумя локальными вариантами — средневожским и южноуральским. Памятники средневожского варианта абашевской культуры известны как на правом, так и на левом берегах Волги. Абашевская культура представлена могильниками, поселениями, кладами и случайными находками оружия — топоров и наконечников копий. Поселения абашевской культуры известны только на Южном Урале и в Волго-Уралье. В большинстве из них есть свидетельства занятий металлургией и металлообработкой. В статье проанализирован погребальный обряд абашевской культуры. В керамическом материале выделены типы сосудов и описана их орнаментация (элементы, мотивы, композиция, стиль). В статье представлена типология металлического, костяного и каменного инвентаря (оружие, орудия труда, украшения, символы власти). Происхождение абашевской культуры, скорее всего, имело характер трансформации. В основе ее лежали культуры с центрально-европейскими корнями и местные, восточно-европейские культуры. Наиболее ранние памятники абашевской культуры зафиксированы в правобережье Среднего Поволжья. Конец абашевской культуры связан с появлением в Восточной Европе сейминско-турбинской культурной группы. Противостояние абашевских и сейминско-турбинских военных отрядов привело к уходу абашевской культуры с ее традиционной территории. В новой культурной среде на основе южноуральского варианта абашевской культуры сформировалась синташтинская культура. Покровская культура сложилась при участии средневожского варианта абашевской культуры. Таким образом, становится ясна значимая роль абашевской культуры в становлении волго-уральского очага культурогенеза и в формировании ведущих культур начала эпохи поздней бронзы.

Ключевые слова: абашевская культура, средний бронзовый век, типология, абсолютная хронология.

The purpose of the article is a brief presentation of the Abashevo culture. This was the culture of the forest areas of Eastern Europe at the end of the Middle Bronze Age. The contribution of the Abashevo culture to the formation of the Late Bronze Age cultures shows its special role in the development of the Volga-Ural center of cultural genesis.

The Abashevo culture was discovered by V. F. Smolin¹ as a result of the study of the cemetery near the village of Abashevo (the right bank of the Middle Volga, Cheboksary). The monuments of the Abashevo culture have been published extensively². The materi-

¹ *Smolin V. F. Abashevskii mogil'nik v Chuvashskoi respublike // Trudy obshchestva izucheniia Chuvashskogo kraia. Vol. 1, issue 1. Cheboksary, 1928. P. 3–56.*

² *Krivtsova-Grakova O. A. Abashevskii mogil'nik // Kratkie soobshcheniia instituta istorii material'noi kul'tury. 1947. No. XVII. P. 92–98; Efimenko P. P., Tret'iakov P. N. Abashevskaiia kul'tura v Povolzh'e*

als of the Abashevo culture were analyzed in a number of studies³. The monuments of the Abashevo culture are found over a wide area from the Desna to the Southern Ural (Fig. 1). However, their significant accumulation is located only in the Middle Volga region (Fig. 2, *a*) and in the Southern Urals (Fig. 2, *b*). The Abashevo culture is represented by two local variants — in the Middle Volga (two territorial groups are known here — on the right and on the left banks of the Volga) and in the Southern Urals.

The Abashevo barrow cemeteries

On the right bank of the Middle Volga region, the Abashevo barrow cemeteries are located between the Sura and Sviaga rivers. There are 23 barrow cemeteries with 320 barrows. Most of them are located in the Bolshoi Tsivil Basin. They contain 13–50 barrows in each of them.

// *Materialy i issledovaniia po arkheologii SSSR*. 1961. No. 97. P.43–110; *Merpert N. Ia*. Abashevskie kurgany severnoi Chuvashii // *Materialy i issledovaniia po arkheologii SSSR*. 1961. No. 97. P.111–156; *Khalikov A. Kh*. Pamiatniki abashevskoi kul'tury v Mariiskoi ASSR // *Materialy i issledovaniia po arkheologii SSSR*. 1961. No. 97. P.157–241; *Khalikov A. Kh., Lebedinskaia G. V., Gerasimova M. M.* Pepkinskii kurgan (Abashevskii chelovek). Ioshkar-Ola, 1966; *Bol'shov S. V.* Srednevolzhskaia abashevskaiia kul'tura (po materialam mogil'nikov) // *Trudy Mariiskoi arkheologicheskoi ekspeditsii*. Vol. VIII. Ioshkar-Ola, 2003; *Sal'nikov K. V.* Abashevskaiia kul'tura na Iuzhnom Urale // *Sovetskaia arkheologiia*. 1954. No. XXI. P.52–94; *Zbrueva A. V.* Mogil'nik Metev-Tamak // *Kratkie soobshcheniia instituta istorii material'noi kul'tury*. 1958. No. 72. P.28–36; *Gorbunov V. S., Morozov Iu. A.* Nekropol' epokhi bronzy Iuzhnogo Priural'ia. Ufa, 1991. P.3–73, 116–126; *Obydenov M. F., Gorbunov V. S., Muravkina L. I., Obydenova G. T., Garustovich G. N.* Tiubiak: poselenie bronzovogo veka na Iuzhnom Urale. Ufa, 2000; *Tkachev V. V.* Stepi Iuzhnogo Priural'ia i Zapadnogo Kazakhstana na rubezhe epokh srednei i pozdnei bronzy. Aktobe, 2007; *Kuz'mina O. V.*: 1) Abashevskaiia kul'tura v Samarskom Povolzh'e // *Bronzovyi vek*. Samara, 2000. P.85–121; 2) The Ermitazhnaia kolleksiia abashevskoi kul'tury poseleniia Balanbash // *Arkheologicheskie pamiatniki Orenburzh'ia*. Issue 9. Orenburg, 2011. P.92–117; *Krainov D. A.* Kukhmarskii kurgannyi mogil'nik // *Kratkie soobshcheniia instituta arkheologii*. 1962. No. 88. P.51–63; *Bader O. N.* Bassein Oki v epokhu bronzy. Moscow, 1970. P.64–72; *Lun'kov V. Iu., Engovatova A. V.* Kurgannyi mogil'nik Orlovo-1 (Abashevskaiia kul'tura v Volgo-Okskom mezhdurech'e) // *Abashevskaiia kul'turno-istoricheskaiia obschnost': istoki, razvitie, nasledie*. Cheboksary, 2003. P.193–197; *Artemenko I. I., Pronin G. M.* Pam'iatki abashevskoi kul'turi na Desni // *Arkheologia*. 1976. No. 20. P.66–77.

³ *Sal'nikov K. V.* Ocherki drevnei istorii Iuzhnogo Urala. Moscow, 1967. P.17–146; *Chernykh E. N.* Drevneishaia metallurgiiia Urala i Povolzh'ia // *Materialy i issledovaniia po arkheologii SSSR*. 1970. No. 172. P.108–109; *Chernykh E. N., Kuz'minykh S. V.* Drevniaia metallurgiiia Severnoi Evrazii. Moscow, 1989; *Priakhin A. D.* Abashevskaiia kul'tura v Podone. Voronezh, 1971; *Priakhin A. D.* Poseleniia abashevskoi obschnosti. Voronezh, 1976; *Priakhin A. D.* Pogrebal'nye abashevskie pamiatniki. Voronezh, 1977; *Priakhin A. D., Khalikov A. Kh.* Abashevskaiia kul'tura // *Arkheologiia SSSR*. Moscow, 1987. P.124–131; *Gorbunov V. S.* Abashevskaiia kul'tura Iuzhnogo Priural'ia. Ufa, 1986; *Gorbunov V. S.* Bronzovyi vek Volgo-Ural'skoi lesostepi. Ufa, 1992; *Kuz'mina O. V.*: 1) Abashevskaiia kul'tura v lesostepnom Volgo-Ural'e. Samara, 1992; 2) Sootnoshenie abashevskoi i pokrovskoi kul'tur // *Konvergentsiia i divergentsiia v razvitii kul'tur epokhi eneolita — bronzy Srednei i Vostochnoi Evropy*. Part II. Saratov, St. Petersburg, 1995. P.27–51; 3) Keramika abashevskoi kul'tury // *Voprosy arkheologii Povolzh'ia*. Issue 1. Samara, 1999. P.154–205; 4) Kosti zhivotnykh v pogrebal'nom obriade abashevskoi kul'tury // *Vzaimodeistvie i razvitie drevnih kul'tur iuzhnogo pograniich'ia Evropy i Azii*. Saratov, 2000. P.59–66; 5) *Ukrasheniia abashevskoi kul'tury // Problemy arkheologii Evrazii*. Moscow, 2002. P.157–174; 6) *Pogrebal'nyi obriad abashevskoi kul'tury // Chteniia, posviashchennye 100-letiiu deiatel'nosti Vasiliiia Alekseevicha Gorodtsova v Gosudarstvennom Istoricheskom muzee*. Part 1. Moscow, 2003. P.152–155; *Korenevskii S. V.* Metallicheskie vtulchatye topory Ural'skoi gorno-metallurgicheskoi oblasti // *Sovetskaia arkheologiia*. 1973. No. 1. P.39–53; *Bol'shov S. V.*: 1) Srednevolzhskaia abashevskaiia kul'tura (po materialam mogil'nikov) // *Trudy Mariiskoi arkheologicheskoi ekspeditsii*. Vol. VIII. Ioshkar-Ola, 2003; 2) *Lesnaia polosa Srednego Povolzh'ia v epokhu srednei bronzy*. *Problemy kul'turogeneza pervoi poloviny II tys. do n. e.* Ioshkar-Ola, 2006. P.51–80.

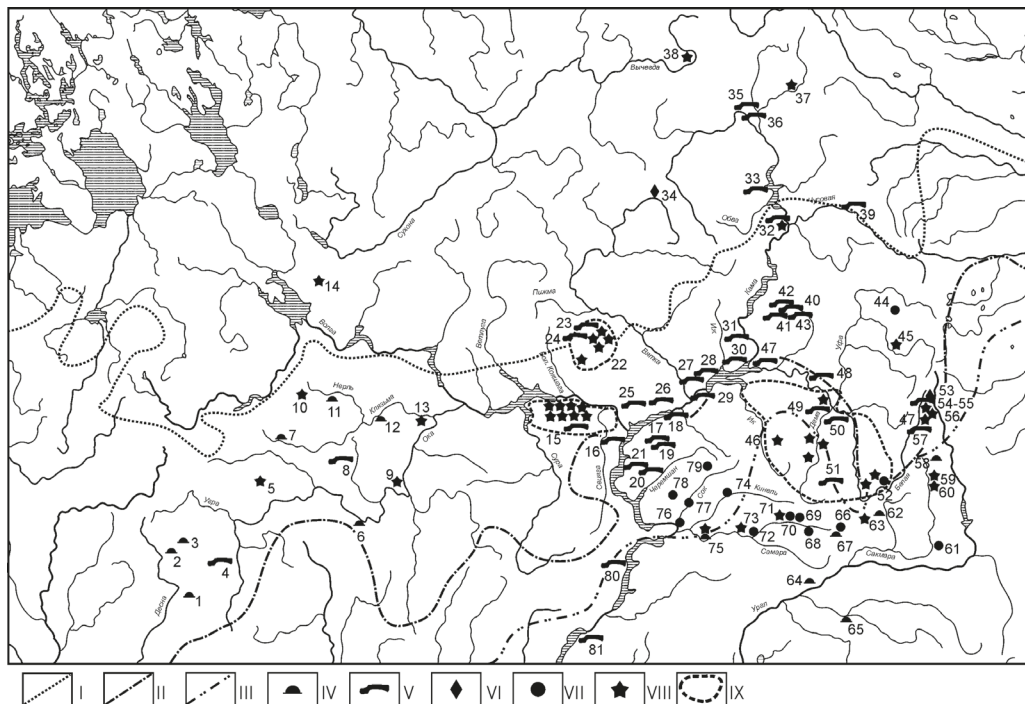
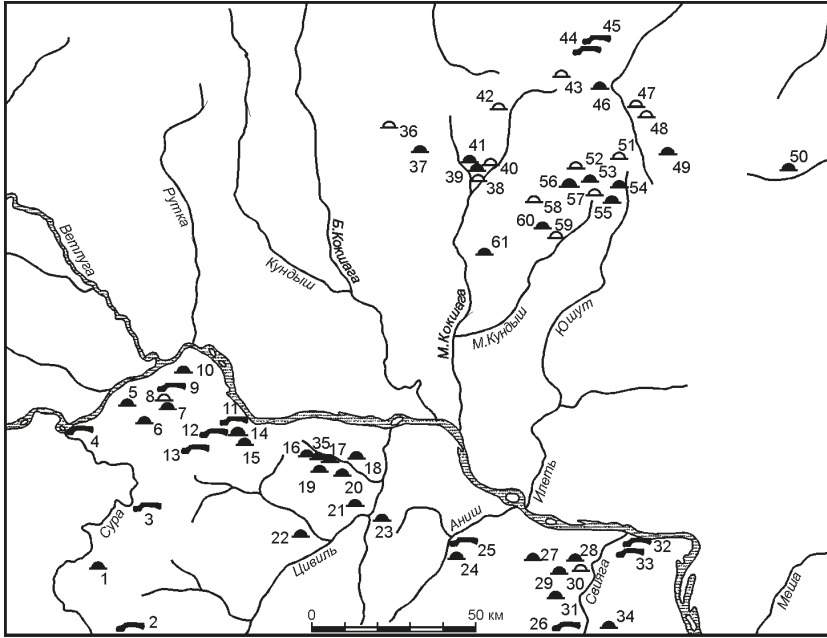
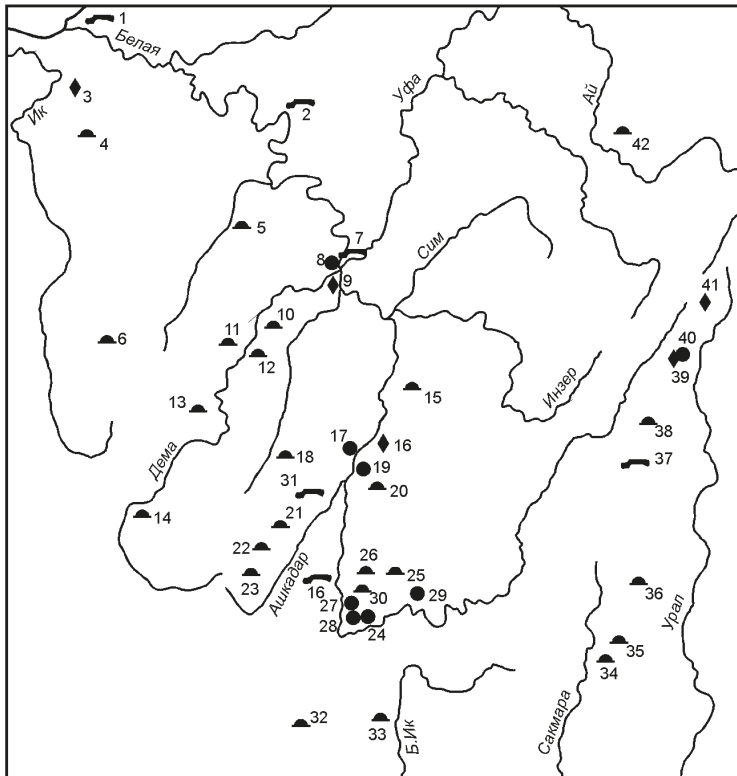


Fig. 1. Map of the distribution of the Abashevo monuments: 1 — Saltanovka, 2 — Lunevo, 3 — Nemerichi, 4 — Nekrasovka, 5 — Ogub', 6 — Starshii Nikitinskii, 7 — Orlovo I, 8 — Voimezhnoe, 9 — Zemskoe, 10 — Kukhmarskii, 11 — Petriakha, 12 — Seninskii Dvoriki, 13 — Podboritsa-Shcherbinskaia, 14 — Galichskii treasure, 15 — Sursko-Sviiazhskoe interfluve (Fig. 2: 1), 16 — Kulanga, 17 — Biliarsk, 18 — Chistopol'skii district, 19 — Il'deriakovo treasure, 20 — Kartashikha, 21 — Bolgary, 22 — Volgo-Viatskoe interfluve (Fig. 2: 1), 23 — Iaranskii district, 24 — Berezenki, 25 — Devlezeri, 26 — Laishevskii district, 27 — Rozhdestvenskii, 28 — Elabuga, 29 — Anan'inskaia diuna, 30 — Gremiachii Kliuch, 31 — Sarapul, 32 — Turbino, 33 — Baglino, 34 — Korshunovskii treasure, 35 — Cherdyn', 36 — Ust'-Shugor, 37 — Pisanyi kamen', 38 — Ul'ianovo, 39 — Gorbunovskii peat bog, 40 — Kitrium, 41 — Korovino, 42 — B. Osh'ia, 43 — Sivinskoe, 44 — Sernyi Kliuch, 45 — Iukalekulevo, 46 — the Southern Urals (Fig. 2: 2), 47 — Kuteremovo, 48 — Birsik, 49 — Ufa, 50 — Milovka treasure, 51 — Sterlibashevskii district, 52 — Azanui, 53 — Veselova treasure, 54 — Malo-Kizil'skoe, 55 — Verkhne-Kizil'skii treasure, 56 — Baishevo IV, 57 — Tagan-Tash, 58 — I Al'mukhometovskii, 59 — Tavlykaevskii VI, 60 — Kuseevo, 61 — Rodnikovoe, 62 — Russko-Tangirovskii, 63 — Maksimovskii, 64 — Ibragimovo III, 65 — Ilekshar I, 66 — Belozerka I, 67 — Berezovaia, 68 — Pushkinskoe I, 69 — Ivanovka I, 70 — Tokskoe, 71 — Kaliapovo, 72 — Sukhorechenskoe II, 73 — Nikiforovskii, 74 — Krasnye Peski, Venera I, Glubokoe Ozero, Tochka, 75 — Chelovech'ia golova, S'ezzhee, Krasnosamarskii II, Maksimovka I, 76 — Brat'ev Greve cave, Belozerki, Staro-Semeikino, 77 — Il'inka IV, Krasnyi Gorodok, Lebiazhinka IV, Lebiazhinka V, Russkaia Selit'ba II, Chesnokovka I, 78 — Almazovka, Bul'kunovka, Shabanovka, 79 — Surush, 80 — Viazov Dol, 81 — Podstepnaia.

Legend: I — the border line between the mixed forest zone and the broad-leaved forest zone, II — the border line between the broad-leaved forest zone and the forest-steppe zone, III — the border line between the mixed forest-steppe zone and the steppe zone, IV — barrow cemeteries, V — random finds of axes, VI — hoards, VII — settlements, VIII — monuments with typical Abashevo adornments, IX — area of distribution of the Abashevo monuments. Map by O. V. Kuzmina



a



b



On the left bank of the Middle Volga region, the Abashevo barrow cemeteries are located in the basin of the Malaia Kokshaga river. There are 21 barrow cemeteries with 245 barrows. Most of them are located between the rivers Malaya and Bolshaia Oshla. They contain 28–50 barrows in each of them.

In the Southern Urals, the Abashevo barrow cemeteries are located between the rivers Ik and Ural. There are more than 20 barrow cemeteries with more than 250 barrows. Most of them are located in the basins of the Dema and Belaya rivers. Each contains up to 30 barrows.

As a rule, 1–4 burials were located under the barrow. The graves had a single or double rectangular or elliptical timber fence. These fences were built of logs. One fence was attached to another. Remains of bonfires and pits from pillars of idols are fixed behind the fences and inside them. In the Southern Urals, there are not only timber fences but also stone ones. The remains of bonfires were near the graves or on their overlaps. Coals from bonfires were placed into a grave pit.

The graves were arranged in pairs or rows. Some graves are located perpendicular to the main pair or row of graves. The grave pit is small. The skeleton lies on the back with legs bent at the knees. Hands lie on the pelvic bones or on the chest. Sometimes hands are extended along the body. The head of the skeleton is generally oriented to the southeast, and less often — to the east. Several burials with cremations are known in the Southern

*Fig. 2. Map of the distribution of the Abashevo monuments in the Middle Volga region (a) and in the Southern Urals (b). **Sursko-Sviiazhskoe interfluve:** 1 — Tikhankinskii, 2 — Alatyř, 3 — Iadrinskii district, 4 — Vasil'surskoe, 5 — Miniashkinskii, 6 — Paratmarskii, 7 — II Vilovatovskii, 8 — I Vilovatovskii, 9 — Tanysh-Kasy, 10 — Pepkino, 11 — Bogorodskoe, 12 — Karamyshevo, 13 — Mozharı, 14 — Algashi, 15 — Stan'ialy, 16 — Pikshik, 17 — Bol'shoe Iangil'dino, 18 — Abashevo, 19 — Tokhmeevo, 20 — Ikkovo, 21 — Tebi-Kasy, 22 — Dosaevo, 23 — Taush-Kasy, 24 — Katergino, 25 — St. Shagali, 26 — Kaibitsy, 27 — Tiurlema, 28 — Karashamskii, 29 — Vasiukovskii, 30 — Pobedenskii I, 31 — Pobedenskii II, 32 — Sviiazhskii district, 33 — Kulanga, 34 — Iulduzskii, 35 — Shorkinskii. **Volgo-Viatskoe interfluve:** 36 — Studeno-Kliuchevskii, 37 — Upshinskii, 38 — Pelenger II, 39 — Pelenger I, 40 — Velikopol'skii, 41 — Malokugunurskii, 42 — Bol'shepuial'skii, 43 — Kuglanurskii, 44 — Iaranskii district, 45 — Berezenki, 46 — Vil'ialy, 47 — Sosnovskii, 48 — Shinurskii, 49 — Shukshierskii, 50 — Nartasskii, 51 — Basalaevskii, 52 — Aleevskii, 53 — Prokopevskii, 54 — Tapsher, 55 — Semeikinskii, 56 — Troitskii, 57 — Russko-Kolianurskii, 58 — Akashevskaiia, 59 — Abasnurskaiia, 60 — Sretenskii, 61 — Turunovskii. **Iksko-Bel'skoe interfluve:** 1 — Kuteremovo, 2 — Birska, 3 — Moskatel'nikova treasure, 4 — St. Kuruchevo, 5 — Syntysh-Tamaksii, 6 — Metev-Tamak, 7 — Ufa, 8 — Romanovka II, 9 — Milovka treasure, 10 — Kuchumovskii, 11 — St. Iabalykly, 12 — Chukrakly, 13 — N. Churakevskii, 14 — Naberezhnyi, 15 — Tugaevskii, 16 — Dolgaia gora (Kushtau) treasure, 17 — Balanbash, 18 — Kazburunovskii III, 19 — Urniak, 20 — Akhmerovskii II, 21 — Umetbaevskii, 22 — Iakupovskii, 23 — Ishmukhametovo, 24 — Tiubiak, 25 — Iumakovskii, 26 — Beregovskii, 27 — II Beregovskoe, 28 — I Beregovskoe, 29 — Azanui, 30 — Krasnogorskii III, 31 — Sterlibashevskii district, 32 — Maksimovskii, 33 — Russko-Tangirovskii, 34 — Tavlykaevo VI, 35 — Kuseevo, 36 — I Al'mukhometovskii, 37 — Tagan-Tash, 38 — Baishevo IV, 39 — Verkhne-Kizil'skii treasure, 40 — Malo-Kizil'skoe, 41 — Veselova treasure, 42 — Iukalekulevo.*

Legend: I — excavated barrow cemeteries, II — random finds of socketed axes, III — hoards, IV — settlements, V — undiscovered barrow cemeteries. Map by O. V. Kuzmina

Urals⁴. One vessel stands at the head of the skeleton, and one stands at the legs. The clothes of the buried people had a lot of metal adornments. Tools are rarely found in the graves, and weapons are found in isolated cases.

Bones of domestic and wild animals were found in the barrows. Small articular bones (talus and phalanges) of small cattle, pigs, and less often — of cattle and bears were placed near the arms or skull of the skeleton.

Altars were made up of the leg bones and lower jaws of small cattle, cattle or horses. In some cases, it was a whole skeleton of an animal. They were near the grave or on the overlap of the graves. Sometimes bones of sacrificial animals lay on the remains of bonfires.

Settlements of the Abashevo culture were discovered in the Southern Urals and in the Volga-Urals. They were located on the banks of the rivers. Earth defensive fortifications were discovered on the Malo-Kizil'sk settlement. Most of settlements were small. This is evidenced by a small number of ceramics and animal bones in the cultural layer. The dwellings had a ground structure. Other settlements were metal processing sites. Metal-working remains and dwellings were found in settlements of Balanbash, Malo-Kizil'skoe, Beregovskoe I, II, Urniak, Tiubiak⁵.

*Hoard*s of the Abashevo culture were found in the Southern Urals (Dolgai gora/Kushtau, Tikhanovskii, Verkhne-Kizil'skii) and in the Volga-Kama region (Korshunovskii, Galichskii)⁶. The hoards contained weapons, tools, and adornments. The Seima-Turbino bronzes are found in some Abashevo hoards too.

The Abashevo ceramics

The ceramics of the Abashevo culture are divided into several groups according to morphological characteristics.

Forms of the ceramics. *Bowls* (Fig. 3: 1)⁷ are large vessels. They have round (sometimes flattened) bottom and smoothly bent neck. Their surface is polished.

Small vessels with a rib on the body (Fig. 3: 7–8) have a short or high, sharply or smoothly bent neck, a flat or flattened bottom. The rib is located in the middle or in the lower part of the body. Their surface is polished.

Small cylindrical jars (Fig. 3: 3–5) have a flat bottom. Some of them have an oval shape when viewed from above (Fig. 3: 4). Other vessels have a short-bent rim (Fig. 3: 3).

Jars (Fig. 3: 11) have a rounded body and a flat bottom.

Spherical vessels (Fig. 3: 2) have a round (sometimes flattened) bottom, a rounded body and a short, sharply bent rim. Sometimes there is a groove on the inner side of the rim.

⁴ Gorbunov V.S. Abashevskaja kul'tura Iuzhnogo Priural'ia. P.43–44.

⁵ Sal'nikov K.V. Abashevskaja kul'tura na Iuzhnom Urale. P.52–81; Gorbunov V.S. Abashevskaja kul'tura Iuzhnogo Priural'ia. P.22–35; Kuz'mina O.V. Ermitazhnaia kolleksiia abashevskoi kul'tury poseleniia Balanbash. P.92–117; Obydenov M.F., Gorbunov V.S., Muravkina L.I., Obydenova G.T., Garustovich G.N. Tiubiak: poselenie bronzovogo veka na Iuzhnom Urale.

⁶ Efimenko P.P., Tret'jakov P.N. Abashevskaja kul'tura v Povolzh'e. P.79–81; Sal'nikov K.V. Ocherki drevnei istorii Iuzhnogo Urala. P.40–46; Kuz'mina O.V. Metallicheskie izdeliia i voprosy otnositel'no khronologii abashevskoi kul'tury. P.99–100.

⁷ Henceforth, objects found during excavations are listed in accordance with the following principle — found in: the name of burial, the number of barrow / the number of grave. In the case of isolated barrow, i. e., the barrow without a number, space is left before the slash.

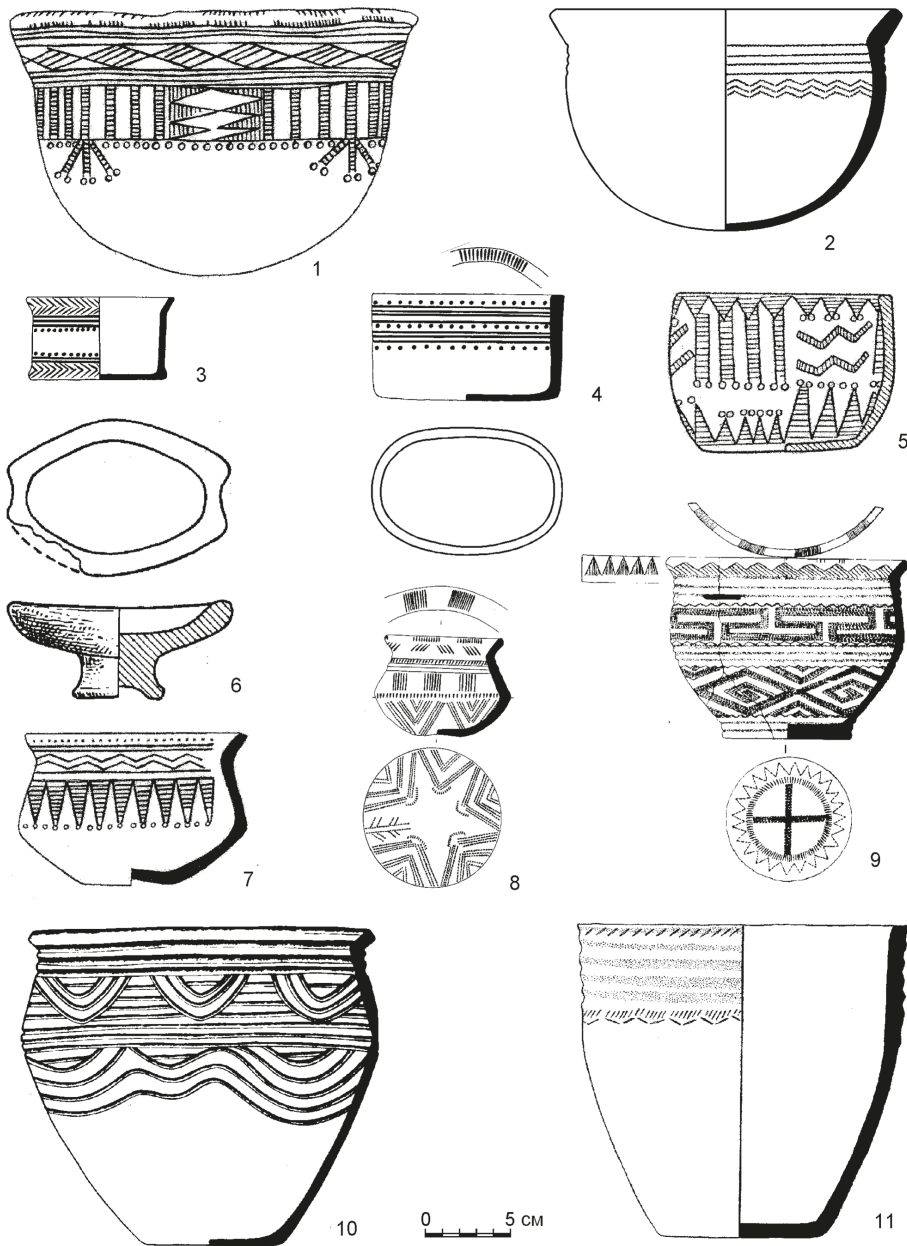


Fig. 3. Ceramics of the Abashevo culture.

Place names of the discovery / excavation of objects: 1 — Pikshik, 12/1 [Merpert, 1961. Fig. 11: 2]; 2 — Pelenger I, 13/1 [Bol'shov, 2003. Fig. 36: 2]; 3 — Pelenger I, 26/3 [Bol'shov, 2003. Fig. 47: 10]; 4 — Pelenger I, 16/1 [Bol'shov, 2003. Fig. 39: 2]; 5 — II Vilovatovskii, 10/1 [Khalikov, 1961. Tabl. II: 4]; 6 — Sretenka, 4/3 [Khalikov, 1961. Tabl. X: 1]; 7 — Pikshik, 3/4 [Merpert, 1961. Fig. 6: 6]; 8 — Pelenger I, 1/1 [Bol'shov, 2003. Fig. 23: 2]; 9 — Nikiforovskii [Vasil'ev I. B., Priakhin A. D. Beskurgannii abashevskii mogil'nik u Nikiforovskogo lesnichestva v Orenburzh'e // Sovetskaia arkheologiya. 1979. No. 2. Fig. 5: 6]; 10 — Nikiforovskii, 9 [Vasil'ev, Priakhin, 1979. Fig. 5: 2]; 11 — Starye Iabalykly, 11/4 [Gorbusov, Morozov, 1991. Fig. VIII: 7]

Pots (Fig. 3: 9–10) have a short, sharply bent rim, a rounded body and a flat bottom.

Crucibles (Fig. 3: 6) have an oval or round bowl (sometimes with two spouts) and a foot. The foot of some crucibles is characterized by a wide groove or a high base.

The shape of the vessel is related to its ornamentation. The ornament could be located on the outer surface, on the bottom, on the top and on the inside of the rim.

The ornamentation elements. A “ladder” (vertical rectangle with horizontal hatching) is also a characteristic element of the Abashevo ornament. Initially only bowls and later — small vessels with a rib on the body were ornamented with ladders. This element (ladders) existed in a large number of variants both due to the opportunity of its spatial arrangement (horizontal, vertical, zigzag-shaped) and to the methods of visual representations (groups of vertical lines, uncharted ladders), which led to the creation of meanders and “pole-axe-shaped” figures.

A *narrow triangle* with horizontal hatching is the main version of the ladder. This element can also be displayed in different variants due to the spatial turn (top up or top down), to visual arrangement (outlined and hatched; consisting of a bunch of lines or inscribed angles; obtained by hatching the zigzag angles), and to change of angles (narrow, wide, rectangular triangle). The triangle was most often used to ornament small vessels with a rib on the body.

A *rhombus* is the most significant geometric element of the ornament. Rhombuses originally decorated bowls. Later, the rhombus began to be used to ornament other ceramic forms. It was located in the upper motif in the most complex compositions. The variants of the rhombus are formed by a double outline of the rhombus or different hatching of the inner space.

Herringbone elements are represented by a horizontal and a vertical herringbone, a horizontal zigzag (single and multi-rowed), a vertical zigzag, a grid, a “hut”, and a straight or oblique cross.

Relief elements of the ornament are represented by rollers and flutes (straight or wavy).

The main elements of the ornament were decorated with round or oval pits or short notches.

The ornamentation motifs. Rhombuses form a continuous row in a motif. A row of vertical ladders is divided by horizontally arranged elements — a triangle, a horizontal or a vertical herringbone. Ladders (classical or in the form of simple vertical lines) can be arranged in a bundle of three. Narrow triangles make up a continuous row in the motif, or they are arranged in groups alternating with a vertical herringbone. Meanders form motifs with one element flowing into another.

The motifs are separated by horizontal lines or flutes. The motifs are doubled and even repeated many times. Sometimes the space between them has the form of a row of rhombuses, crosses or zigzags. Repeating motifs with grouped elements form a chess-board pattern.

The ornamentation compositions. The classical composition of the Abashevo ornament comprises three motifs. The first (upper) motif consists of a horizontal row of rhombuses. The second motif is made up of alternating vertical ladders and horizontally arranged elements. The third motif represents groups of vertical ladders or bundles of ladders.

The classical composition and classical elements (a ladder, a rhombus) were placed on bowls (Fig. 3: 1). The ornament occupied most of the bowl's outer surface.

A simplified version of the classical composition consists of only two upper motifs. Classical elements are replaced with their versions (a triangle, a zigzag). Such compositions decorated small vessels with a rib on the body (Fig. 3: 7) and some small cylindrical jars (Fig. 3: 5).

The simplest compositions (with no geometric elements) were used for spherical vessels, pots and large jars (Fig. 3: 2, 10–11).

The ornamentation style. Ceramics of the Middle Volga region are characterized by a drawn ornament. A combed decoration was used rarely. At first it was intended only for bowls but later — for all forms of ceramics. Relief roller ornamentation was used for bowls. Relief flutes were used for spherical vessels.

Ceramics of the Southern Ural region are characterized by combed decorations. Drawn ornament is rare. Relief flutes ornamentation was used for all forms of ceramics.

A geometric style is characteristic of the Abashevo ornament. The Abashevo composition is distinguished by a combination of a depressed (drawn or combed) and relief (rollers, flutes) ornament. The complex, neat, combed ornament looks like embroidery.

The Abashevo weapons and tools

Socketed axes (Fig. 4: 1). A type of axe with a narrow, lowered back⁸ known as the Abashevo type⁹. A number of studies have been devoted to socketed axes¹⁰. These are axes with a narrow, lowered back, a long narrow wedge, and an oval section of the socket. The axe can have a drop-shaped or a lenticular section of the wedge. The axe with stiffeners has a rhombus-shaped section of the wedge. The length is 11.7–13.1 or 14.3–21.2 cm. The weight of the axe is 288–909 g. According to spectral analysis, the socketed axes were made of pure copper from copper sandstones or natural arsenic alloys of the Tash-Kazgan deposit¹¹. Socketed axes are found in the Volga-Kama and Volga-Ural regions (Fig. 1–2). Most of axes belong to the category of random finds (48 items) and to the category of axes of unknown origin (20 items). Only 4 of them come from burials, 3 — from hoards, and 2 — from settlements.

A *mold* (Fig. 4: 2) for casting a socketed axe is made of clay. It has a closed shape and a pouring gate. Molds and liners for them were found in a burial (Pepkino, /1) and in the settlements (Sernyi Kliuch, Azanui, Balanbash) of the Abashevo culture.

Flat axes (Fig. 4: 3–4) are large tools with parallel sides known as the Korshunovo type¹². One flat axe has a top in the form of pince-nez. Another has a hole at the top.

⁸ Gorodtsov V. A. Kul'tury bronzovoi epokhi v Srednei Rossii // Otchet Imperatorskogo Rossiiskogo Istoricheskogo Muzeia za 1914 g. Moscow, 1915. P. 121–224.

⁹ Bochkarev V. S. Etapy razvitiia metalloproduktstva epokhi pozdnei bronzy na iuge Vostochnoi Evropy // Stratum plus. 2017. No. 2. P. 184.

¹⁰ Tikhonov B. G. Metallicheskie izdeliia epokhi bronzy na Srednem Urale i v Priural'e // Materialy i issledovaniia po arkhologii SSSR. 1960. No. 90. P. 59–62; Chernykh E. N. Drevneishaia metallurgii Urala i Povolzh'ia. P. 58–59; Korenevskii S. V. Metallicheskie vtulchatye topory Ural'skoi gorno-metallurgicheskoi oblasti // Sovetskaia arkhologiya. 1973. No. 1. P. 44–47; Chernykh E. N., Kuz'minykh S. V. Drevniia metallurgii Severnoi Evrazii. P. 125, 127–128; Kuz'mina O. V.: 1) Metallicheskie izdeliia i voprosy otnositel'no khronologii abashevskoi kul'tury. P. 79–88; 2) K voprosu o nesluchainosti sluchainykh nakhodok bronzovykh boevykh toporov i nakonechnikov kopii abashevskoi kul'tury // Aktual'nye problemy arkhologii Urala i Povolzh'ia. Samara, 2008. P. 49–57.

¹¹ Chernykh E. N. Drevneishaia metallurgii Urala i Povolzh'ia. P. 149, 164–169.

¹² Bochkarev V. S. Etapy razvitiia metalloproduktstva epokhi... P. 185.

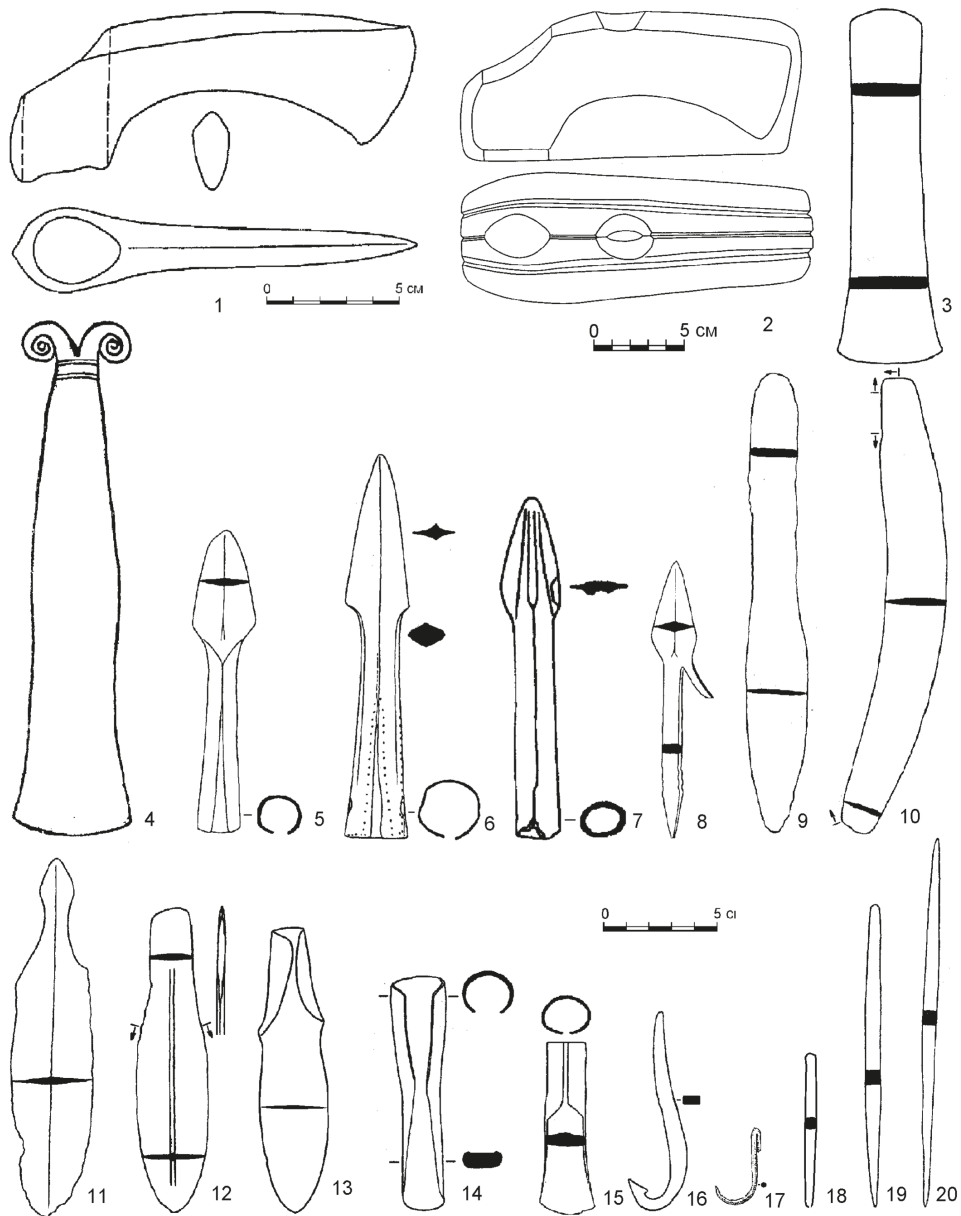


Fig. 4. Metal products of the Abashevo culture: socketed axe (1), mold (2), flat axes (3–4), spearheads (5–8), knives (9, 11–13), sickle knife (10), socketed adze (14), socketed chisel (15), hooks (16–17), rod-shaped tool (18), goad (19), awl (20).

Place names of the discovery/excavation of objects: 1 — Koz'modem'ianskii district, Kazanskaia region (drawing by O. V. Kuzmina); 2 — Pepkino, /1 [Khalikov, Lebedinskaia, Gerasimova, 1966. Tabl. VIII]; 3, 6, 10, 12, 14, 16, 20 — Verkhne-Kizil'skii treasure (drawing by O. V. Kuzmina); 4 — Russko-Tangirovo [Gorbunov, 1986. Tabl. XV: 12]; 5, 8, 15, 19 — Kushtau (drawing by O. V. Kuzmina); 7 — Shartash Lake (drawing by O. V. Kuzmina); 9 — Turbino, /62 (drawing by O. V. Kuzmina); 11 — Turbino, /27 (drawing by O. V. Kuzmina); 13 — Nikiforovskii, /7 (drawing by O. V. Kuzmina); 17 — Metev-Tamak, /1 [Zbrueva, 1958. Fig. 5: 3]; 18 — Nikiforovskii, /2 (drawing by O. V. Kuzmina)

The length is 12.7–21.1 cm. Found: cemeteries — Russko-Tangirowskii, Tugaevskii, Turbino, Nikiforovskii, /7; hoards — Verkhne-Kizil'skii, Korshunovskii; settlement — Malo-Kizil'skoe.

Socketed chisels (Fig. 4: 15) have a flat, wide working end. The length of the chisel from the Kushtau hoard is 7.6 cm. Found: Kushtau and Tikhanovskii hoards.

A *socketed adze* (Fig. 4: 14) has a forged socket and a grooved massive working end. The length is 10.6 cm. Found: Verkhne-Kizil'skii and Tikhanovskii hoards.

Spearheads (Fig. 4: 5) (more than 13 items) have short blades and long forged sockets open at the top. This is known as the Kushtau type¹³. The length is 8.6–15 or 22 cm. Found: hoards — Kushtau, Tikhanovskii; settlements — Tiubiak, Beregovskoe II; random finds — in the Middle Volga region (Volchany, Mimi, Krasnyi Oktiabr', Tashkermen'), Zausailov's collection, in the Kama region, from the Museum of Yekaterinburg.

Spearheads (Fig. 4: 6) have a short blade, a long-forged socket closed on top and a massive rod between the blade and the socket. This is known as the Verkhne-Kizil type¹⁴. The socket has a chased ornament. One of them (Turbino) has an ornament of false metal triangles. The length is 14.1–28 cm. Found: Turbino cemetery; Verkhne-Kizil'skii and Korshunovskii hoards.

A *spearhead* (Fig. 4: 7) has a short blade, a long forged, closed socket and short cast leaf-shaped blade with a longitudinal groove. The length is 15.1 cm. It was found on Shartash (the Sverdlovsko-Tagil'skii district of the Ekaterinburg region). Large spearheads with a long blade were found in the Krasnoiarskii hoard and Bakhmutino (random find)¹⁵. They are known as the Krasnoiarskii type¹⁶.

Spearheads (Fig. 4: 8) have a short blade, a long rod shaft and one long tenon. The shaft has three grooves. The length is 12.2 cm. It was found in the Kushtau hoard.

Knives (Fig. 4: 11) have a double edge blade, a guard (crosshairs), a waist and a wide flat tang. A tang has a top in the shape of a rhombus or a triangle. The length is 9.7–26.1 cm. Found: cemeteries — Naberezhnyi, 3/1; Nizhne-Churakaevskii, B/1; Starye Iabalykly, 59/2; Chukraky, 15/1; Staro-Kuruchevo, 3/1; Turbino; hoards — Verkhne-Kizil'skii, Galichskii; settlements — I Beregovskoe, Tiubiak. A knife with a rectangular top of tang also exists. Found: Turbino cemetery; Tiubiak and I Beregovskoe settlements. A socketed knife is also known (Fig. 4: 13) (Nikiforovskii, /7).

Knives (Fig. 4: 12) have a double edge blade, but no guard. The tang has a rectangular, triangular or rhombus-shaped top. One knife has a rod-shaped tang. The length of the knife is 7.1–13.5 cm. Found: cemeteries — Metev-Tamak, /3; Turbino; Nikiforovskii, a destroyed burial; hoards — Verkhne-Kizil'skii, Tikhanovskii; I Beregovskoe settlement.

Knives (Fig. 4: 9) have a double edge blade, a long metal handle and no guard. The length of the knife is 12.9–20.3 cm. Found: cemeteries — III Krasnogorskii, 8/2; Tugaevskii; Starye Iabalykly, 10/1; Nikiforovskii, /2; Turbino. One knife has a socketed handle (Tiubiak settlement).

Sickle knives (Fig. 4: 10) have a slightly curved blade. Only one side of the blade is sharpened. This is known as the Beregovka type¹⁷. One of them (Starye Iabalykly,

¹³ *Bochkarev V. S. Etapy razvitiia metalloproduktstva epokhi... P. 183.*

¹⁴ *Ibid.*

¹⁵ *Sal'nikov K. V. Ocherki drevnei istorii Iuzhnogo Urala. Fig. 8: 1–2.*

¹⁶ *Bochkarev V. S. Etapy razvitiia metalloproduktstva epokhi... P. 183.*

¹⁷ *Dergachev V. A., Bochkarev V. S. Metallicheskie serpy pozdnei bronzy Vostochnoi Evropy. Chisinau, 2002. P. 31–35; Bochkarev V. S. Etapy razvitiia metalloproduktstva epokhi... P. 184.*

56/2) has an S-shaped form. The length is 13.9–20.8 cm. Initially the single-blade knife may have had functions of a weapon. Afterwards, it became the basis for a plane, a scythe, and a sickle. Found: cemeteries — Turbino, Metev-Tamak, Starye Iabalykly, 56/2 and 11/4; hoards — Verkhne-Kizil'skii, Kushtau; settlements — Balanbash, I–II Beregovskoe, III–IV Iumakovskoe, Tiubiak.

Hooks (Fig. 4: 17) are made of wire. They have loop wrapped backs and no spikes. Small hooks have a length of 2.1–4 cm. Found: cemeteries — Abashevo, V/4; Starye Iabalykly 1/1; Metev-Tamak, /1; Nizhne-Churakaevskii, B/1; settlements — Krasnyi Gorodok, Malo-Kizil'skoe, Lebjazhinka V. Large hooks have a length of 5.5–7.4 or 9 cm. Found: settlements — I–II Beregovskoe, Tiubiak (loop on the side), Balanbash. The hook from II Beregovskoe has a spike.

Hooks (Fig. 4: 16) are made of rod. They have spikes and no loops. The end for attaching the hook is pointed (Verkhne-Kizil'skii), forged (Turbino), or forged and has a hole in which a bronze nail is inserted (Starye Iabalykly). The length is 11 cm.

Awls (Fig. 4: 20) are made of a rod or wire. Both ends are pointed. The length is 4.1–17.8 cm. Found: cemeteries — Taush-Kasy, 5/1 and 9/2; II Vilovatovskii, 17/1, 17/4, 17/8; Abashevo, VI/2 and 9/15; Algashi, 1/3, 3/2, 8/2; Pepkino, /1; Turunovo, 2/2 and 3/1; Podboritsa-Shcherbinskaia; Zemskoe, /2; Nikiforovskii, /2, /4, /6, a destroyed burial; Chelovech'ia golova; Iukalekulevo, 1/1; Iumakovo, 1/2; Metev-Tamak, /2; Baishevo IV, 1/1; Malo-Kizil'skoe/burial; hoards — Verkhne-Kizil'skii, Tikhanovskii; Tiubiak settlement.

A goad (Fig. 4: 19) is made of a rod or wire. One end was pointed, the other one was blunted. The length is 4.1–17.8 cm. Such a sting was inserted into the top of a stick for driving cattle or horse. Found: cemeteries — II Vilovatovskii, 14/1 and 17/3; Abashevo, V/4; Sretenka, 4/1; Starye Iabalykly, 55/2; Kukhmarskii, 6/1 and 31/1; Turbino, /2 and /90; hoards — Korshunovskii, Kushtau, Tikhanovskii; settlements — Tiubiak, I Beregovskoe.

Rod-shaped tools (Fig. 4: 18) have blunt ends. One end is flattened by hammering. The length is 4.6–19.4 cm. Found: cemetery — Nikiforovskii, /2; settlements — Tiubiak, I Beregovskoe.

Arrowheads (Fig. 5: 37) are made of flint. They have a triangular form, a triangular shaft, and two lowered spikes. Their surface is covered with comedial or transmedial retouch. The length is 3.1–9.7 cm. Found: cemeteries — Algashi, 12/1; Abashevo, V/3 and 9/6; II Vilovatovskii, 10/1; Pepkino, /1; Pikshik, 10/1; Taush-Kasy, 2/2; Russko-Tangirovskii; Turbino. Some of them do not have spikes. Found: cemeteries — Vasiukovo, Zh/1; Abashevo, IV/ from the trench; Russko-Tangirovskii; Pepkino, /1.

Arrowheads (Fig. 5: 36) are made of bone. They have a triangular form and a long shaft. Some arrowheads have 1–2 spikes. One of them is awl-shaped. The length is 6.0–9.9 cm. Found: cemeteries — Taush-Kasy; Metev-Tamak, /4 and from destroyed burials; II Krasnosamarskii, 1/2.

Arrowheads (Fig. 5: 34–35) are made of bronze. They have shafts. Some of them have rhombic end of the shaft. Some arrows have one lowered spike. The length is 4.1–6.3 cm. Found: cemeteries — Algashi, 3/1 and 4/3; Abashevo, V/4; Malokugunurskii, 2/1; Iukalekulevo, 2/1; Nizhne-Churakaevskii, A/4; Tikhanovskii hoard.

Some arrows have one lowered spike and no shaft. Found: Tikhanovskii hoard.

Heads of standards (Fig. 5: 27–28) have a form of spatula. They are made of animal bone or horn. They have a flat or socketed fastening. There are holes in the base of the socket or in the base of the spatula. Found: Pepkino, /1.

Rings (Fig. 5: 31) are made by trimming animal tubular bone or horn. The diameter is 2–2.6 cm. One ring is ornamented with two carved horizontal lines. There were 1–2 or 7 rings in the burial. Found: cemeteries — Taush-Kasy, 9/1; II Vilovatovskii, 14/1; Abashevo, VI/2 and 9/3; Katergino, 2/1; Pepkino, /1; Metev-Tamak, /2.

A *disk* (Fig. 5: 30) is made of the femoral head of a large ungulate. Found: cemeteries — Metev-Tamak, /1, Malo-Kizil'skoe/burial.

Pestles are made of stone. They have pyramidal or cylindrical form. The lower and upper ends are polished. Found: cemeteries Metev-Tamak, Pepkino, /1, Nikiforovskii, /2.

Grindstones have oval or sub-rectangular forms. The surfaces of the grindstones are erased. Found: cemeteries — Metev-Tamak, Pepkino, /1.

The Abashevo metal adornments

Small bronze adornments (Figs. 5–6) are sewn onto a leather or fabric base. They create the impression of a ribbon. The composition is based on an alternation of rows of small spirals and rows of half-pea plaques and beads. Adornments hang from the ribbon. These are flat plaques and rosette pendants, pince-nez-shaped pendants, which were suspended on large smooth and grooved tubes. Such sewn compositions decorated hats, headbands, and clothes.

Half-pea plaques (Fig. 5: 5–7) have the shape of a hemisphere with two holes at the base. The diameter is 5–8 mm; the thickness is 0.3–0.4 mm. Possibly, half-pea plaques were cast by bead technology because they are standard and small, and a large number of them are in sewn onto each place (in one burial there were more than 600 items). Alternatively, they may have been stamped from thin copper sheets¹⁸. Found: cemeteries — II Vilovatovskii, 11/1, 11/6–7, 14/1, 17/1, 17/3–4, 17/7–8; Abashevo VI/2; Algashi, 1/3, 4/1–3, 8/2–3, 11/8, 16/1; Tiurlema, 4/1; Zemskoe, 2/1; Nartassy, 5/1; Vil'ialy, 1/1; Pelenger I, 26/2, 29/1, 35/1; Starshii Nikitinskii, /7; Chukrakly, 18/1; Starye Iabalykly, 1/2, 4/2, 56/2, 59/2, 59/destroyed burial, 71/1, 73/1, 80/1; Malo-Kizil'skoe/burial, Metev-Tamak, /3; Galichskii hoard.

Spiral tubes (Fig. 5: 18) are made of wire. Other tubes are made of a forged plate and have a smooth or grooved surface (Fig. 5: 13, 17). Grooves are at one or both ends and in the middle of the tube. There are tubes with a completely grooved surface as an imitation of a spiral tube. There are triple grooved tubes (cemeteries — Algashi, 1/3, Starye Iabalykly). There are unique grooved tubes with a raised rosette at one end¹⁹. A spiral tube made of a narrow-forged tape is also known. It is ornamented with groups of oblique short notches. Small tubes were used in sewing. Large ones were used to fasten rosette pendants or pince-nez-shaped pendants. Found: cemeteries — Katergino, 2/4–5; Taush-Kasy, 1/2, 5/1; II Vilovatovskii, 11/1, 11/6–7, 14/1, 17/1, 17/3–4, 17/7–8; Abashevo VI/2, 9/8, 9/10, 9/12, 9/15; Algashi, 1/2–3, 3/2, 4/1–3, 8/2–3, 11/8, 16/1; Pepkino, /2; Tiurlema, 4/1; Kukhmariskii, 24/1, 31/1, 38/1; Zemskoe, /2; Tapsher, 1/1; Nartassy, 5/1; Vil'ialy; 1/1, Pelenger I, 26/1–2, 29/1; Starshii Nikitinskii, /7–8; Chukrakly, 18/1; Metev-Tamak, /3–4; Iukalekulevo, 1/1; Starye Iabalykly, 1/2, 4/1, 6/3, 10/3, 55/1–2, 56/2, 57/2, 59/2–3, 73/1, 80/1; Iukalekulevo, 1/2; Baishevo IV, 1/1, 2/1–2; Turbino, /62; Nikiforovskii, /1–3, 6, destroyed burial; II Krasnosamarskii, 1/2; hoards — Verkhne-Kizil'skii, Galichskii, settlement — Malo-Kizil'skoe/burial, Kaliapovo.

¹⁸ Efimenko P.P., Tret'iakov P.N. Abashevskaya kul'tura v Povolzh'e. P. 60.

¹⁹ Ibid. Fig. 16: 11.

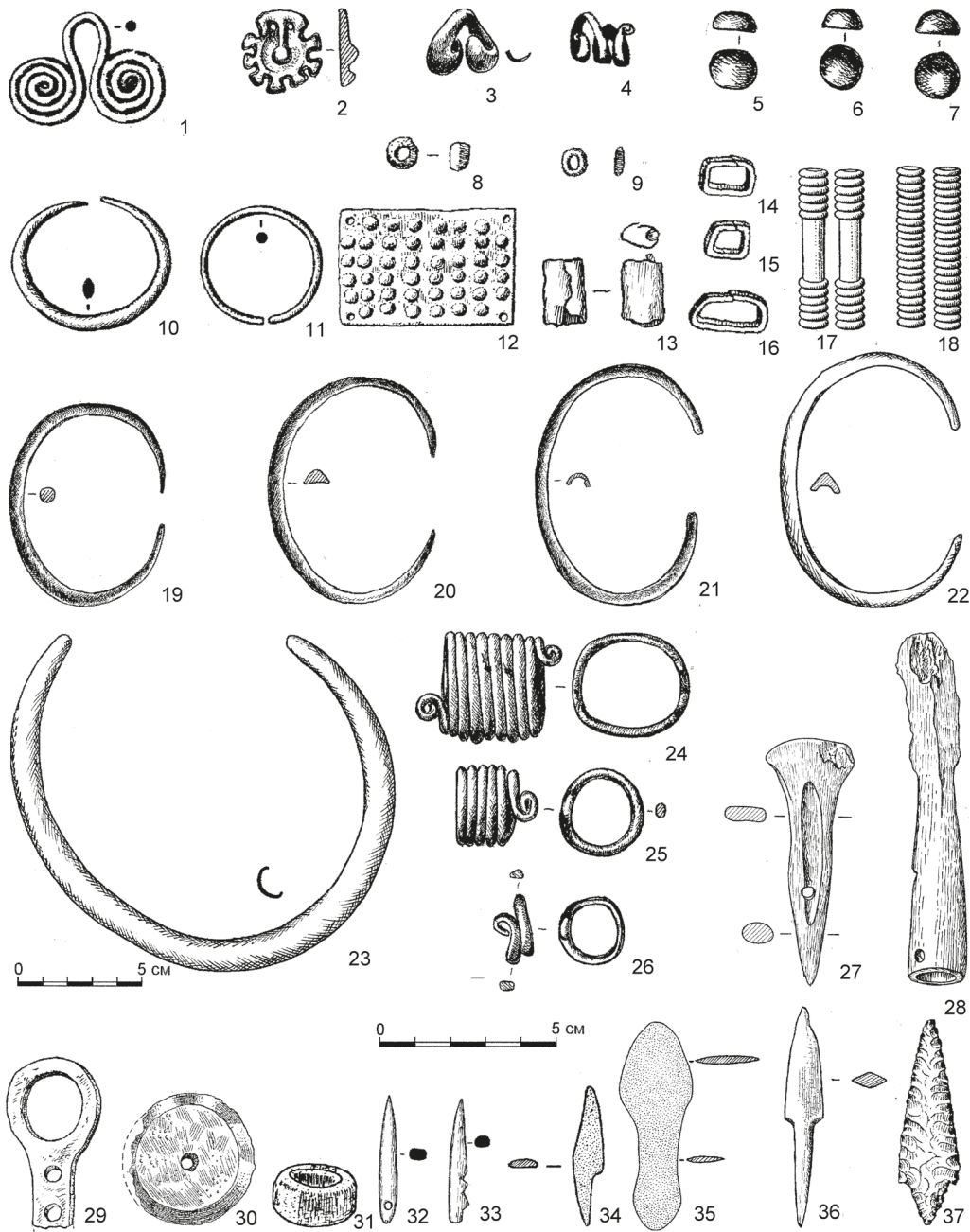


Fig. 5. Products of the Abashevo culture: pince-nez-shaped pendant (1), rosette pendant (2), temporal pendant in 1.5 turns (3), temporal pendant in 2-3 turns with a reverse loop and curls at the ends (4), half-pea plaque (5-7), beads (8-9), temporal pendants (10-11), flat ornamented plate (12), forged tube (13), clips (14-16), forged tubes with grooved ends (17), spiral tubes (18), bracelets (19-22), grivna (torc) (23), rings (24-26), head of standards (27-28), buckle (29), disk (30), ring (31), barrettes (32-33), arrowheads (34-37).

Materials: 1-26, 34-35 — metal, 27-33, 36 — bone, 37 — flint.

Place names of the discovery/excavation of objects: 1, 4, 10–11 — Chelovech'ia golova [Vasil'ev I. B. Abashevskie pamiatniki Kuibyshevskogo Zavolzh'ia // Iz istorii Srednego Povolzh'ia i Priural'ia. Issue V. Kuibyshev, 1975. Fig. 4: 1, 11, 6, 16]; 2, 21 — II Vilovatovskii; 14/1 [Bol'shov S. V., Kuz'mina O. V. Novye issledovaniia II Vilovatovskogo mogil'nika // Drevnie indoiranskii kul'tury Volgo-Ural'ia. Samara, 1995. Fig. 15: 24; 14: 4]; 3 — II Vilovatovskii, 21/1 [Bol'shov, Kuz'mina, 1995. Fig. 15: 16]; 5–7, 19 — II Vilovatovskii (Bol'shov, Kuz'mina, 1995. Fig. 14: 10]; 8, 30 — Metev-Tamak, /1 [Zbrueva, 1958. Fig. 5: 1]; 9, 13 — Metev-Tamak, 3 [Zbrueva, 1958. Fig. 5: 5]; 12 — Taush-Kasy, 4/3 [Efimenko, Tre'tiakov, 1961. Fig. 8: 6]; 14–16 — Algashi, 3/1 [Efimenko, Tre'tiakov, 1961. Fig. 8: 2]; 17–18 — II Vilovatovskii, 11/1 [Khalikov, 1961. Fig. 22b]; 20 — II Vilovatovskii, 17/1 [Bol'shov, Kuz'mina, 1995. Fig. 14: 8]; 22 — Algashi, 4/3 [Efimenko, Tre'tiakov, 1961. Fig. 17: 8]; 23 — Verkhne-Kizil'skii treasure (drawing by O. V. Kuz'mina); 24 — II Vilovatovskii, 17/3 [Bol'shov, Kuz'mina, 1995. Fig. 15: 4]; 25–26 — II Vilovatovskii, 17/8 [Bol'shov, Kuz'mina, 1995. Fig. 15: 5–6]; 29 — Algashi, 1/1 [Efimenko, Tre'tiakov, 1961. Fig. 9: 1]; 27–28, 31–33 — Pepkino, 1 [Khalikov, Lebedinskaia, Gerasimova, 1966. Tabl. VI: 1, 6; VII: 13, 1]; 34 — Iukalekulevo, 1/2 [Sal'nikov, 1967. Fig. 3: 20]; 35 — Algashi, 4/3 [Efimenko, Tre'tiakov, 1961. Fig. 9: 9]; 36 — Metev-Tamak, /4 [Zbrueva, 1958. Fig. 5: 13]; 37 — Taush-Kasy, 2/2 [Efimenko, Tre'tiakov, 1961. Fig. 8: 4]

Clips (Fig. 5: 14–16) are made of bronze or silver plates. Small clips were tightly strung on a leather strap one after another, and together made a long tube. Large clips were found in the burial, one at a time. Found: cemeteries — II Vilovatovskii, 17/10; Algashi, 3/1, 4/1, 5/1, 8/2; Tapsher, 1/1; Pepkino, /1; Starye Iabalykly, 1/2; Nikiforovskii, /2–3, 5, 7, a destroyed burial; Nartassy, 5/1; Malo-Kizil'skoe/burial.

Beads (Fig. 5: 8–9) are made of a thin bronze or silver wire bent into a ring. The diameter of the beads is 2–2.5 or 4–6 mm. One cast cylindrical bead is known (Pelenger, 19/2). Its length is 1.6 cm; diameter 7 mm. Found: cemeteries — Taush-Kasy, 5/1; II Vilovatovskii, 17/4, 17/8; Abashevo, VI/2; Algashi, 1/3, 4/3, 8/2, 11/8; Pelenger I, 19/2; Nizhne-Churakaevskii, A/4; Metev-Tamak, /1–4; Starye Iabalykly, 56/2, 59/1, 59/3, 73/1, 75/1, 80/1; II Krasnosamarskii, 1/2; Nikiforovskii, /3, Malo-Kizil'skoe/burial.

Flat plaques (Fig. 5: 12) have rectangular, round, oval or comb shapes. They have holes for sewing and a punch or chased ornament. Found: cemeteries — Taush-Kasy, 4/3; Algashi, 1/3, 3/2, 8/1, 3, 16/1; Katergino, 2/1; Turunovo, 4/2; Vil'ialy, 1/1; Pelenger I, 15/1, 35/1; Kukhmarskii, 38/1; Starye Iabalykly, 59/1, 80/1; Nizhne-Churakaevskii, A/4; Nikiforovskii, /2, 6, a destroyed burial; Turbino; Malo-Kizil'skoe/burial.

A *flat plaque* has a comb shape and no ornament. It was made of bone²⁰. Found: cemetery Zemskoe, /2.

Rosette pendants (Fig. 5: 2) have 7–10 petals and a ledge. The ledge has a segmented, trapezoidal or rectangular shape. The ledge has two holes. This is known as the Abashevo type²¹. The size of the rosette is 13–21 or 30 mm. Rosette pendants were cast in a lost-wax process. Found: cemeteries — II Vilovatovskii, 11/1, 11/6–7, 14/1, 17/3, 17/7–8; Algashi, 1/3, 3/2, 4/1, 4/3, 8/2, 11/8, 16/1; Abashevo, VI/2, 9/8, 9/15; Pepkino, /1–2; Vil'ialy, 1/1; Turunovo, 4/4; Zemskoe, /2; Ogub', /1; Kukhmarskii, 14/3, 24/1; Starshii Nikitinskii, /7–8; Iandashevo; Iukalekulevo, 1/1; Chukrakly, 18/1; Starye Iabalykly, 11/2, 56/2, 59/3, 59/a destroyed burial, 73/1; Baishevo IV, 1/1; III Krasnogorskii, 9/1; VI Tavlykaevskii, 1/7; Urniak; II Krasnosamarskii, 1/2; Nikiforovskii, /a destroyed burial; Kuseevo; Ul'ianovo; Pisanyi kamen'; Verkhne-Kizil'skii hoard; settlements — Podboritsa-Shcherbinskaia, Vis, Kaliapovo, Urniak, Malo-Kizil'skoe.

²⁰ Bader O. N. Bassein Oki v epokhu bronzy. Fig. 14: 9.

²¹ Bochkarev V. S. Etapy razvitiia metalloproduktstva epokhi... P. 184.

Pince-nez-shaped pendants (Fig. 5: 1) are made of wire. The ends of the wire are folded in 1–4 turns of a spiral. The height of the pendant is 6–23 mm. There are 1–10 pince-nez-shaped pendants in the burial. Found: cemeteries — Tiurlema, 4/1, Taush-Kasy, 1/2, II Vilovatovskii, 11/1, 7, 14/1, 17/3–4, 17/7–8, 21/1; Abashevo, 9/8, 9/12; Algashi, 1/3, 3/2, 4/1–3, 8/3, 11/8, Kukhmarskii, 38/1, Zemskoe, /2, Turunovo, 2/2, Pelenger I, 26/2, Iukalekulevo; Verkhne-Kizil'skii hoard.

Temporal pendants in 1,5 turns of a spiral (Fig. 5: 3) are made of a grooved plate. They have a round shape and wide, convex ends. This is known as the Abashevo type²². The pendants are stamped from thin silver sheets. Two pendants are made of wire (Taush Kasy, 1/1, Troitskoe, 3/1). The height of the pendant is 8–14 mm. There are 1–6 pendants in the burial. Found: cemeteries — Pikshik, 13/1; Vasiukovskii, D/1; Tiurlema, 5/3; Taush-Kasy, 1/1–3, 4/2–3; II Vilovatovskii, 3/1, 4/1, 5/1, 11/1, 11/3, 11/6, 12/2–3, 17/4, 17/8–9, 21/1–2; Algashi, 1/3, 8/1–3; Abashevo, 3/1, V/3, VI/2, 9/12; Stan'ialy, 2/1; Katergino, 1/1–2, 2/3, 2/6; Pepkino, /2; Malokugunurskii, 22/1; Troitskoe, 3/1–2; Tapsher, 1/1; Vil'ialy, 1/1; Pelenger I, 1/1, 3/1, 9/1–2, 11/1, 11/13, 19/1, 20/1, 24/1, 26/1, 30/1, 34/1, 35/1, 38/1, 40/1; Turunovo, 2/1, 3/1, 4/1–2, 4/4, 5/1; Nartassy, 5/1; Kukhmarskii, 31/1; Starye Iabalykly, 1/2, 80/1; Nizhne-Churakaevskii, A/1; Iumakovo, 1/2; Chelovech'ia golova; S'ezzhee, /8; Nikiforovskii, /a destroyed burial.

Temporal pendants in 2–3 turns of a spiral (Fig. 5: 4) are made of a grooved plate. Some of them have a reverse loop and pince-nez-shaped curls at the ends. Found: cemeteries — Nikiforovskii, /2 and a destroyed burial, Chelovech'ia golova, Malo-Kizil'skoe/burial

Temporal rings (Fig. 5: 10–11) have tapering or blunt ends. The rings were made of bronze or silver wire, rod or forged plate. Some bronze rings are covered with silver foil. The diameter of the ring is 4.5 or 5.7–6.8 cm. Found: cemeteries — Abashevo, VI/2, 9/12; Kukhmarskii, 21/1; Starye Iabalykly, 80/1; Iukalekulevo, 1/1; Turbino; Chelovech'ia golova.

The grivnas (torcs) are made of a wire or a rod. The wire has a round cross-section. The rod has a triangular section. One torc has hooks at the ends; the other one has a hook at one end and a hole at the other flat end. Found: cemeteries — Starye Iabalykly; II Akhmerovskii, 2/1; Beregovskii, 3.

The grivnas (torcs) (Fig. 5: 23) have a rounded, grooved section. One of them is made of the plate and covered with a thin silver foil. They have narrowed ends. Found: Verkhne-Kizil'skii hoard.

The diameter of the grivna is 12.6–18 cm.

Bracelets (Fig. 5: 19–20) are made of thin rod or wire. They have narrowed, open ends. Single bracelets are ornamented with a series of transverse notches. The section of the bracelet is round or semicircular, square, rhombic, or triangular. Bracelets with a rhombic section are known as the Algashi type²³. Found: cemeteries — Pikshik, 12/3; Tiurlema, 4/1; Taush-Kasy, 1/2, 3/1, 25/1–2; Katergino, 2/5; Algashi, 3/2, 4/1–2; II Vilovatovskii, 11/1, 11/3–4, 11/6–7, 12/1, 14/1, 17/3–4, 17/7–8; Abashevo, V/1–2, 9/1, 9/5, 9/8, 9/15; Miniashkino, 2/2; Pepkino, 2; Tapsher, 1/1; Troitskoe, 2/1; Turunovo, 2/1–2, 4/3–4; Pelenger I, 1/1, 14/1, 26/1–2, 29/1, 34/3, 39; Vil'ialy, 1/1; Kukhmarskii, 14/2–3, 15/1, 21/1, 31/1, 38/1; Zemskoe, 2/1; Turbino; Nikiforovskii, /2–3; Metev-Tamak, /4; Starye Iabalykly, 56/2, 55/2, 59/4; Beregovskii, 3; Iukalekulevo, 1/1–2; Malo-Kizil'skoe/burial.

²² Bochkarev V. S. Etapy razvitiia metalloproduktov epokhi... P. 184.

²³ Ibid. P. 183.

Bracelets (Fig. 5: 21) are made of a forged plate. They have a rounded, grooved or flat (only 2 items) cross-section. One of them was covered with silver foil. Found: cemeteries — Abashevo, 6/2; Algashi, 4/1, 4/3; II Vilovatovskii, 17/1; Turbino; Starye Iabalykly, 55; Staro-Kuruchovo, 3/1; III Krasnogorskii, 5, 9/3; Nikiforovskii, /1, Malo-Kizil'skoe/burial.

Bracelets (Fig. 5: 22) are cast. They have a ribbed-grooved cross-section. This is known as the Verkhny Kizil type²⁴. Found: cemeteries — Algashi, 4/3; II Vilovatovskii, 17/1; Starye Iabalykly, 59/3; Turbino; Verkhne-Kizil'skii hoard.

Spiral rings (Fig. 5: 24–26) have curls at one or both ends. They are made of thin, bronze or silver wire. The spiral rings have 1.5–15 turns of a spiral. This is known as the Algashi type²⁵. Found: cemeteries — Taush-Kasy, 2/1–2, 20/1–2; II Vilovatovskii, 11/1, 11/6, 17/3, 17/8; Algashi, 1/3, 4/1, 4/3, 8/2–3, 11/7; Abashevo, 1/2, 3/1, V/2, 4–5, 9/6, 9/15; Stan'ialy, 2/3; Katergino, 1/1, 2/1–2, 2/6; Pepkino, /1; Pelenger I, 15/1; Kukhmar-skii, 51/1; Metev-Tamak, /1–2; Chukrakly, 5, 16/3; Nizhne-Churakaevskii, B/2; Starye Iabalykly, 15/1, 59/2; Tugaevskii; Beregovskii, 2, 5; III Krasnogorskii, 4; Iumakovo, 1/2; Nikiforovskii, /7; IV Baishevo, 1/1; Verkhne-Kizil'skii hoard.

A *pendant* is made of slate. It has a rectangular shape and a hole for hanging²⁶. Found: cemetery — Turunovo, 6/1.

Amulets are made from the teeth of wild animals (fangs of a bear, wild boar, beaver incisors) or fangs of a dog. They have a hole for hanging. Found: cemeteries — Taush-Kasy, 9/2; Vilovatovskii II, 11/6; Metev-Tamak, /2; Starye Iabalykly, 59/1.

A *bone buckle* (Fig. 5: 29) has a ring shape and a long, narrow ledge with two holes. The length is 4.7 cm. This is known as the ring-shaped narrow-ledge buckle type²⁷. Found: cemetery — Algashi, 1/1.

Barrettes (Fig. 5: 32–33) are made of bone. One end is pointed, and the other end has a hole, protrusion or notch. The length is 1.3–7.2 cm. Found: cemeteries — II Vilovatovskii, 10/1, 1 item, Pepkino, /1, 15 items.

Both variants of the Abashevo culture have the same set of tools, weapons and adornments: socketed axes (all cross-sectional shapes); the Kushtau-type spearheads; awls; chisels; hooks with a spike; spikeless hooks; arrowheads; small bronze adornments sewn onto fabric; rosette pendants; temporal pendants in 1.5 turns of spiral; pince-nez-shaped pendants; temporal rings; bracelets of all types; rings.

Nevertheless, there are a number of quantitative and qualitative differences. In the Middle Volga variant of the Abashevo culture, adornments are numerous and represented in the graves in the complex, but weapons and tools are rare (except for socketed axes and spearheads). In the South Ural variant of the Abashevo culture, the set of types is wider. Here there are also spearheads of the Verkhny Kizil and Krasny Yar types; flat axes/chisels; socketed chisels; socketed adzes; knives; sickle knives; hooks with no loop and with a spike. These types were made by masters of the Southern Urals. The adornments set is supplemented with grivnas (torcs) and temporal pendants in 2–3 turns of a spiral. However, it should be noted that adornments are very often not found in the Southern Urals monuments.

²⁴ Ibid. P. 184.

²⁵ Ibid.

²⁶ Khalikov A. Kh. Pamiatniki abashevskoi kul'tury v Mariiskoi ASSR. Tabl. VII: 16.

²⁷ Bratchenko S.N. Priazhki epokhi pozdnei bronzy i ikh severokavkazskie formy // Materialy konferencii i diskussii "Konvergentsiia i divergentsiia v razvitii kul'tur epokhi eneolita — bronzy Srednei Vostochnoi Evropy". Part II. St. Petersburg, 1995. P. 21.

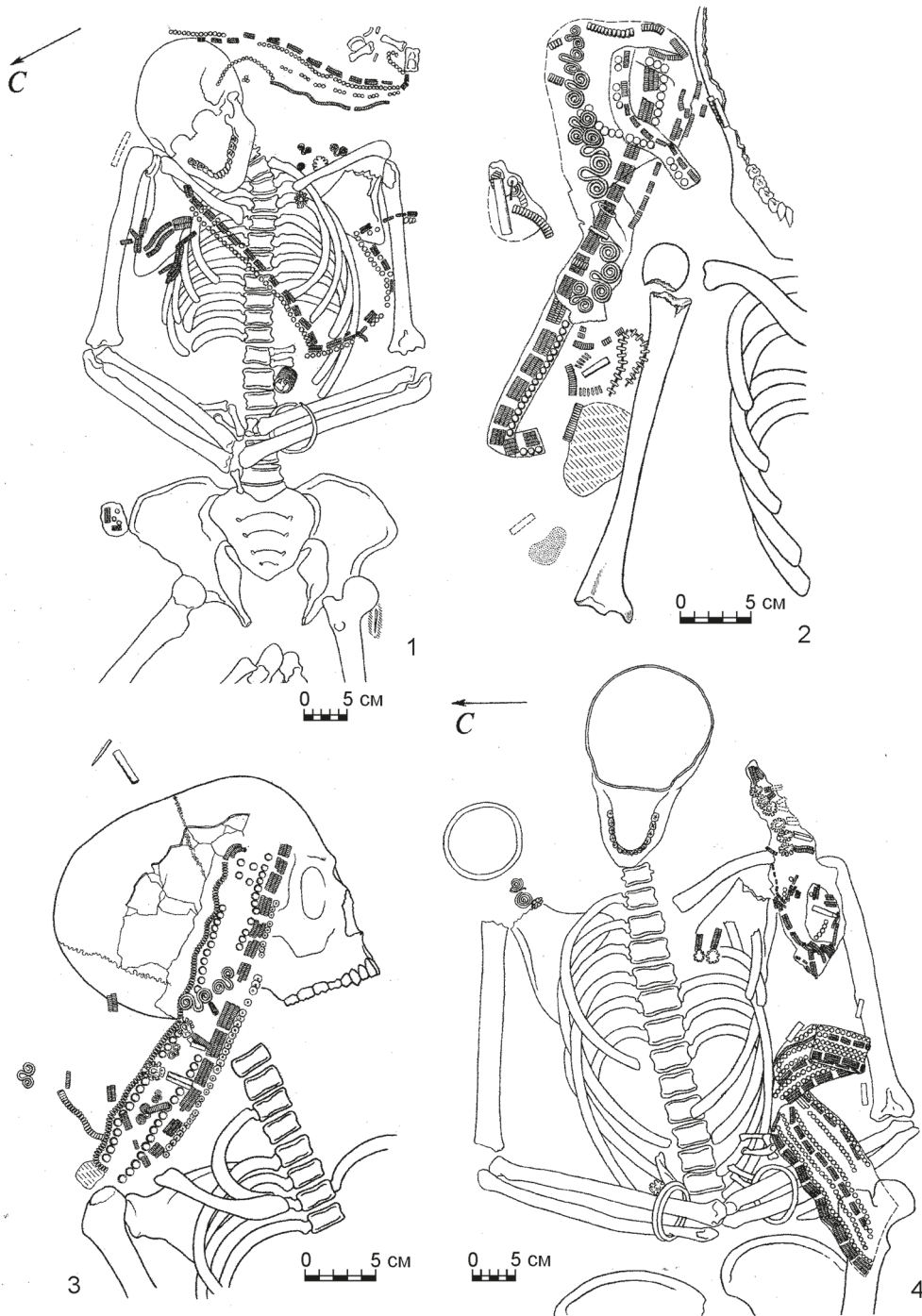


Fig. 6. Adornments of the Abashevo culture: sewing, pendants, bracelets, rings.

Place names of the discovery /excavation of objects: 1 — II Vilovatovskii, 17/3 [Boľshov, Kuz'mina, 1995. Fig. 12]; 2 — II Vilovatovskii, 17/4 [Boľshov, Kuz'mina, 1995. Fig. 11]; 3 — II Vilovatovskii, 17/8 [Boľshov, Kuz'mina, 1995. Fig. 13]; 4 — II Vilovatovskii, 14/1 [Boľshov, Kuz'mina, 1995. Fig. 10]

The Abashevo masters created an original set of metal products. Socketed axes, spearheads of the Kushtau, Verkhne-Kizil, and Krasny Yar types, rosette pendants, small metal adornments, sewn onto fabric of leather, and bracelets with a grooved rib section are specific to the Abashevo culture. According to their characteristics, these types of products correspond only to the Middle Bronze Age. Other types, such as double-blade knives with a guard, sickle knives, flat axes, and hooks with a spike first appeared in the Abashevo culture and continued to be produced in a modified form in the early Late Bronze Age cultures. Almost the entire set of weapons, tools and adornments of the beginning of the late Bronze Age (Sintashta and Pokrov cultures) is based on modifications of products of the Abashevo culture²⁸.

Abashevo culture created its own center of metallurgy and metal processing. Masters of the Abashevo culture began to use not only pure copper but also its arsenic alloys. They created a new technology for the production of the socketed axes and spearheads, and a new mold for casting socketed axes. They began to apply new technology to making adornments by melting a wax model. Overall, they expanded a range of weapons, tools, adornments and produced them in large numbers. Abashevo metal production was one of the largest and most developed in Eastern Europe at the end of the Middle Bronze Age²⁹.

Metallurgy and metalworking were important branches of the economy of the Abashevo culture, but its basis was cattle breeding. Cattle prevailed in the herd, although there were also sheep, pigs and horses. Settlements have no evidence of farming.

Abashevo society was divided into several social ranks, but in general it was at a primitive stage of development.

The Abashevo culture is understood as the culture of the end of the Middle Bronze Age. The absolute dates for the Abashevo culture, obtained by the radiocarbon method, are few. The Abashevo monuments date back to the XXII–XIX centuries BC³⁰. Its later monuments are synchronous with the Turbino and the post-catacomb block of South Eastern Europe cultures. The Abashevo culture belongs to the 0 period, according to the Late Bronze Age periodization of the Southern half of Eastern Europe³¹. The Abashevo culture was replaced by the Pokrovka and Sintashta cultures of the early Late Bronze Age³².

²⁸ *Kuz'mina O. V.*: 1) *Metallicheskie izdeliia i voprosy odnositel'no khronologii abashevskoi kul'tury*. P. 102–104; 2) *Ob odnom tipe rogovykh i kostianykh izdelii kontsa epokhi srednei bronzy — nachala epokhi pozdnei bronzy Dono-Volgo-Ural'ia // Samarskii krai v istorii Rossii*. Issue 6. Samara, 2017. P. 200–201; *Bochkarev V. S.*: 1) *Epokha bronzy v Vostochnoi Evrope // Bronzovyi vek. Evropa bez granits*. St. Petersburg, 2013. P. 55; 2) *Etapy razvitiia metalloproduktstva epokhi... P. 163, 170; Bochkarev V. S., Kuz'mina O. V. O novom tipe proushnykh toporov nachal'noi pory epokhi pozdnei bronzy Dono-Volgo-Ural'ia // Materialy mezhrional'noi nauchnoi konferentsii*. Samara, 2015. P. 110, 112.

²⁹ *Bochkarev V. S. Kul'turogenез i drevnee metalloproduktstvo Vostochnoi Evropy*. St. Petersburg, 2010. P. 109.

³⁰ *Kuznetsov P. F. Territorial'nye osobennosti i vremennye ramki perekhodnogo perioda k epokhe pozdnei bronzy Vostochnoi Evropy // Bronzovyi vek Vostochnoi Evropy: Kharakteristika kul'tur, khronologiya i periodizatsiya*. Samara, 2001. P. 179; *Kuz'minykh S. V., Mimokhod R. A. Radiouglerodnye daty Pepkinskogo kurgana i nekotorye voprosy khronologii srednevolzhskoi abashevskoi kul'tury // Vneshnie i vnutrennie svyazi stepnykh (skotovodcheskikh) kul'tur Vostochnoi Evropy v eneolite i bronzovom veke (V–II tys. do n. e.)*. St. Petersburg, 2016 P. 40–41; *Mimokhod R. A. Paleoklimat i kul'turogenез v Vostochnoi Evrope v kontse III tys. do n. e. // Rossiiskaia arkheologiya*. 2018. No. 2. P. 43.

³¹ *Bochkarev V. S. Etapy razvitiia metalloproduktstva epokhi... P. 163, 170, 177.*

³² *Malov N. M. «Abashevskie plemena» Nizhnego Povolzh'ia (Pamiatniki pokrovskogo tipa) // Dokt. Diss.* St. Petersburg, 1992; *Kuz'mina O. V. Sootnoshenie abashevskoi i pokrovskoi kul'tur*. P. 48–50; *Bochkarev V. S. Etapy razvitiia metalloproduktstva epokhi... P. 162–163.*

There are several points of view on the origin of the Abashevo culture. The migration concept³³ suggests that the Abashevo culture should be considered as the final stage in the development of the Eastern European cultures (the Middle Dnieper, Fatyanovo, Balanovo) that came from Central Europe. The most radical representatives of this view consider that the formation of the Abashevo culture took place with the direct participation of cultural carriers from the Carpathian-Balkan region and Central Europe³⁴.

An autochthonous concept maintains that the formation of the Abashevo culture was based on the Iamnaya culture³⁵.

The transformational concept supposes both an introduced and a local component in the composition of the Abashevo culture³⁶. This concept looks most convincing.

Similarly to other Eastern Europe cattle-breeding cultures³⁷, the formation of the Abashevo culture was monocentric³⁸. The Abashevo culture formed on the right bank of the Middle Volga. Here, in the Tsvil Basin, its earliest monuments are recorded. At the end of the early stage, the Abashevo monuments appeared on the left bank of the Middle Volga. The expansion of the boundaries of the Abashevo culture was originally natural and driven by two forces — the development of new spaces for animal husbandry and the search for copper ore deposits. As a result, at the developed stage of the Abashevo culture, its monuments emerged in the Southern (Bashkir) Urals. However, these movements can be described only as partial migration³⁹ as not the whole population participated in it. Part of the population continued to dwell in the Middle Volga region until the end of the Abashevo history. The simultaneous existence of the Abashevo culture in the Middle Volga and in Southern Urals is evidenced, in particular, by the fact of the presence of metal from the Tash-Kazgan deposit in both regions⁴⁰.

During the final stage of the Abashevo culture, its monuments appeared far beyond the boundaries of the main territory — in the Upper Volga region, in the Middle and Upper Prikamye, in the Volga-Urals, and in Orenburg region. The expansion of the boundaries of the Abashevo culture was forced⁴¹. In fact, the Abashevo culture left its traditional territory due to the pressure of the Seyma-Turbino cultural group (in the terminology of V. S. Bochkarev). The arrival of the Seyma-Turbino cultural group in the Volga-Kama led to a difficult military-political situation. This is evidenced, in particular, by the collective burials of the killed Abashevo warriors in the barrows on the right bank of the Middle Volga (Pepkino, Algashi, Katergino), on the rivers Bolshoi Tsvil (Abashevo), Sura (Staroar-

³³ Bader O. N. Mogil'nik v urochishche Karabai bliz der. Balanovo v Chuvashii // *Sovetskaia arkhologiiia*. 1940. No. VI. P. 87; *Krivtsova-Grakova O. A. Khronologiiia pamiatnikov fat'ianovskoi kul'tury // Kratkie soobshcheniia instituta istorii material'noi kul'tury*. 1947. No. XVI. P. 33; *Efimenco P. P., Tret'iakov P. N. Abashevskia kul'tura v Povolzh'e*. P. 89; *Merpert N. Ia. Abashevskie kurgany severnoi Chuvashii*. P. 154.

³⁴ *Mimokhod R. A. Paleoklimat i kul'turogenез v Vostochnoi Evrope v kontse III tys. do n. e.* P. 40.

³⁵ *Khalikov A. Kh. Pamiatniki abashevskoi kul'tury v Mariiskoi ASSR*. P. 222–226; *Priakhin A. D. Abashevskia kul'tura v Podon'e*. P. 173–178.

³⁶ *Sal'nikov K. V. Ocherki drevnei istorii Iuzhnogo Urala*. P. 137–138.

³⁷ *Bochkarev V. S. Epokha bronzy v Vostochnoi Evrope*. P. 53–54.

³⁸ *Kuz'mina O. V.*: 1) *Keramika abashevskoi kul'tury*. P. 200–201. Fig. 36; 2) *Metallicheskie izdeliia i voprosy otноситel'no khronologii abashevskoi kul'tury*. P. 65–76.

³⁹ *Bochkarev V. S. Epokha bronzy v Vostochnoi Evrope*. P. 60.

⁴⁰ *Chernykh E. N., Kuz'minykh S. V. Drevniaia metallurgiiia Severnoi Evrazii*. P. 81, 96–97, 108–109.

⁴¹ *Bochkarev V. S. Kul'turogenез i drevnee metalloproizvodstvo Vostochnoi Evropy*. P. 106–107, 112; *Bochkarev V. S. Epokha bronzy v Vostochnoi Evrope*. P. 62.

datovskii), and Ai (Iukalekulevo). All these monuments are located in the contact zone of the Abashevo culture with the Seyma-Turbino cultural group.

The promotion of the Abashevo culture in the forest-steppe zone of the Volga-Don, in Southern Trans-Urals and in the forest-steppe and steppe of Volga-Ural resulted in important consequences. The Abashevo culture fell into the world of post-catacomb cultures but did not dissolve in it. The Abashevo culture had great creative potential. In the new territories, with the participation of Southern Ural variant of the Abashevo culture, the Sintashta culture was formed. In the northern regions of the Middle Don, with the participation of the Middle Volga variant of the Abashevo culture, the Pokrovka culture emerged⁴². Therefore, we can assume that Abashevo culture had a significant role in the formation of the Volga-Ural cultural genesis centre.

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