

THE METAL AGES AND MEDIEVAL PERIOD

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The Most Important Archaeological Discoveries Relating to the Neolithic to Early Iron Age Cultures of Siberia

On the basis of the current knowledge, key archaeological discoveries made in Siberia and the Russian Far East over the three centuries, and spanning the interval from the Neolithic to the Early Iron Age, are assessed. Principal scholars and their works are listed. Rescue excavations have made it possible to construct archaeological typologies and to model historical and cultural processes. D.G. Messerschmidt's role as the discoverer of the Early Iron Age of Khakassia and of the Tom rock art site is described. Later, this rock art site was thoroughly studied by A.P. Okladnikov and A.I. Martynov. Achievements of the 20th century continued those of the 18th and 19th centuries. On the basis of typologies elaborated by S.A. Teploukhov for Khakassia, similar cultural and chronological models for neighboring areas of Western Siberia were constructed. A.P. Okladnikov's typology for the Cis-Baikal Neolithic and Bronze Age were elaborated by his colleagues and students. The earliest stages of the Amur Neolithic with the most ancient ceramics in Northern Asia, dating to 16,780–14,200 cal BC, were described. E.N. Chernykh's and S.V. Kuzminykh's theory of Seima-Turbino—a transcultural phenomenon of key importance for the Eurasian Bronze Age—is outlined. While its basic features are better known today, their theory has retained its relevance. With regard to the Early Iron Age, the major excavations concerned mounds such as Arzhan-1, Arzhan-2, and Chinge-Teya-1 in Tuva. In the Altai Mountains, likewise outstanding Pazyryk kurgans (600–200 BC) were excavated. An entirely new stage in Scythian age archaeology was marked by N.V. Polosmak's excavations of “frozen”, undisturbed burials of middle-ranking and low-ranking Pazyryk people on the Ukok Plateau. Similar burials were excavated by Z. Samashev and H.P. Francfort on the western slopes of the Altai. Pazyryk chronology was elaborated owing to the use of the tree-ring analysis.

Keywords: *Siberia, Far East, Early Iron Age, hypotheses, discoveries, cultural and chronological models, researchers.*

Introduction

It has become clear today that importance of any discovery depends largely on the level of knowledge obtained from interdisciplinary studies of archaeological sources, which highlights the fundamental nature of the discovery (Derevianko, Molodin, Shunkov, 2007).

Archaeological research currently carried out as a part of rescue works often yields a conceptually new assessment of unique discoveries made, for example, in

the north of Siberia. The evidence from rescue excavations allowed researchers to elaborate the models for historical and cultural periodization (see M.P. Gryaznov for the Upper Ob region (1956) and V.F. Gening and his students for the Middle Irtysh region (1970), etc.).

A fundamentally new research area, which has been developing more and more actively each year, is archaeology of Russians in Siberia. A good example is the study of Mangazeya, initiated by M.I. Belov, O.V. Ovsyannikov, and V.F. Starkov (1980, 1981).

Especially important results were obtained from excavations of lower permafrost layers under direction of G.P. Vizgalov (Vizgalov, Parkhimovich, 2008). Clearly, the written sources on the development of Siberia by the Russians cannot be exhaustive, and excavations of sites left by the Russian population contribute to expanding the corpus of material sources for the study of military, political, economic, and cultural development of Siberia by the Russians in the 16th–18th centuries (Tataurova et al., 2022).

Research into rock art of Siberia and the Far East, initiated and largely carried out under the leadership of A.P. Okladnikov and his students, has undoubtedly resulted in some of the most important discoveries in archaeology of Siberia. Remarkable rock art sites were discovered and copied on the Angara, Tom, Lena, and Amur rivers, Lake Baikal, and in the Altai Mountains and Mongolia (see, e.g., (Okladnikov, 1959, 1966, 1971)).

Noteworthy are many years of preparation and publication of the “Archaeology of the USSR” (published in 20 vols.), where considerable space was given to various periods of archaeology of Siberia in several volumes. The general idea of this edition belongs to B.A. Rybakov (see, e.g., (Epokha bronzy..., 1987)).

The purpose of this article is to describe the most significant discoveries in archaeology of the Late Bronze Age in Siberia.

Research results

The works of D.G. Messerschmidt (2020) in Khakassia should be mentioned as the most important study in archaeology over the past three hundred years. In this region, Messerschmidt made first scholarly excavations of the Early Iron Age cemeteries, which were later attributed to the Tagar archaeological culture (Radlov, 1888: App. 13). These studies were carried out at a fairly high scholarly level for their time. The discovery of the Yenisey inscriptions on the Uibat stele by Messerschmidt is of particular importance. The inscriptions were deciphered in our time by the corresponding member of the Soviet Academy of Sciences S.E. Malov (1952).

Information on the wonderful world of Siberian archaeology was first published in Stockholm in 1730 in a book of P.J. Strahlenberg (1730), who took part in the Messerschmidt’s expedition. The book was republished in Germany, was translated into English, French, and Spanish, and became world famous.

Apparently, Messerschmidt may also be credited with discovery of the Tomskaya Pisanitsa, a remarkable rock art site on the Tom River* (Tunkina, Savinov, 2017). Many

scholarly and popular works have analyzed the images from the Tom rock art site. The studies clarified available data and suggested new ideas for its interpretation (see, e.g., (Kovtun, 2013; Rusakova, 2012; and others)). In 1970s, Academician A.P. Okladnikov and A.I. Martynov made a great contribution to studying this site. They also wrote the monograph “Treasures of the Tom Rock Art Sites” (1972).

Scholars of the 18th–19th centuries laid the foundation for further research, which allowed researchers of the 20th century to reach a qualitatively new level of comprehensive interpretation of evidence. Almost a hundred years ago, S.A. Teploukhov proposed his periodization of history for some regions of Siberia, and it became the basis for developing periodizations of historical and cultural processes for a number of Siberian regions. The chronological model for the development of archaeological cultures in Southern Siberia was preceded by targeted eight-year excavations by Teploukhov in Khakassia, as well as his careful study of museum collections. According to Teploukhov’s research (1927, 1929), thirteen “chronological groups” successively replaced each other in the region: 1) Afanasyevo culture; 2) Andronovo culture; 3) Karasuk culture; 4–7) Minusinsk Kurgan culture (with four stages in its development); 8, 9) Tashtyk culture (two stages were distinguished); 10) stone kurgans of the 5th–7th centuries; 11) single stone kurgans of the 7th century; 12) stone kurgans of the 8th–10th centuries, and 13) flat graves of the 11th–12th centuries. Notably, Teploukhov both elaborated a typology and also proposed the chronological framework for the stages (and he did it without radiocarbon analysis, which was not available in the 1930s).

Although periodization by Teploukhov should have included the Okunev culture identified by G.A. Maksimenkov (1965) between the Afanasyevo and Andronovo, it remains a working model even today. Models for historical and cultural development of the adjacent regions of Western Siberia have been developed on its methodological basis, including periodization of processes in the Upper Ob region, proposed by M.P. Gryaznov (1956), in the Ob region of the Tom by V.I. Matyushchenko (1973a, b, c; 1974), in Tuva by A.D. Grach (1980), in the southern taiga zone of Western Siberia by M.F. Kosarev (1981), in the Plain Altai by Y.F. Kiryushin (1986), in the forest-steppe Ob-Irtysh region by V.I. Molodin (1983), etc.

Periodization of the Neolithic and Bronze Age cultures in the Baikal region by A.P. Okladnikov (1950, 1955), which has not lost its scholarly value until today, was one of the most successful historical and cultural models based on the representative and original evidence. Chronological boundaries of individual stages identified by Okladnikov have been corrected using radiocarbon dates. Periodization was further developed in the works

*Its publication by P.J. Strahlenberg was already a “planigraphic composite” (Kovtun, Rusakova, 2021).

of N.N. Mamonova, L.D. Sulerzhitsky (1989, 2008), L.P. Khlobystin (1996), and N.A. Saveliev (1989). Currently, following up the model by Okladnikov, scholars continue to improve systematization of the Neolithic complexes in the region.

Particularly noteworthy is the periodization of the Amur Neolithic based on the evidence from large-scale excavations by the Far Eastern Archaeological Expedition led by Okladnikov, identifying the earliest periods of the Neolithic (dated to the Late Pleistocene) with the earliest pottery in North Asia. These periods correlate with the Gromatukha culture in the Western Amur region (Okladnikov, Derevianko, 1977), dated to 10,400–13,300 BP (*Radiouglerodnaya khronologiya...*, 1998: 87), and Osinovka culture in the Lower Amur region, dated to 13,260–9890 BP (Derevianko, Medvedev, 1995). In addition, another four successive Neolithic cultures—the Mariinskoye, Malyshevo, Kondon, and Voznesenskoye—have been identified in the region. Distinctive and original material evidence of these cultures (Medvedev, 2022) testifies to emergence of pottery production in the Amur region in the Late Pleistocene.

The importance of discovering ancient pottery goes beyond the scope of individual field of Humanities, because this was the first ever invention of an artificial material. The range of the carbon dates for the earliest pottery in the Lower Amur region ranges from 16,780 to 14,200 cal BC.

Currently, Gasya is the only site in Russia yielding the early pottery which paste contains only two components: clay and organic matter. According to V.E. Medvedev and Y.B. Tsetlin (2013, 2017), raw material for producing the earliest pottery in the region was not clay, but silt. Traces of artificial admixture (“organic solution”) have been detected in the shards of some finds. A specific feature of the Gromatukha pottery is the presence of vegetable organic matter in the paste (Okladnikov, Derevianko, 1977). The common features of the earliest pottery assemblages from East Asia are their paucity and fragmentation. The collections include from several tens to several hundreds of small vessel fragments. One of the features of the earliest pottery from the Lower Amur region is the flat bottom. Such dishes were rarely decorated. When present, ornamental decoration was applied to the upper part of the vessels by imprints of comb, smooth, and rope stamps, and pit impressions of a stick with rounded end (Medvedev, Tsetlin, 2017). Firing was predominantly low-temperature and weak, and was carried out in ordinary open fire (Derevianko, Medvedev, 2006).

Articulation by E.N. Chernykh and S.V. Kuzminykh of the issue of the Seima-Turbino bronzes—identification of place and time of discovering the thin-walled castings (specific bronze weapons in the form of massive forked spearheads, celts, and single-

edged daggers with figurate pommels)—was certainly of fundamental importance for studying the Bronze Age of Eurasia (1987: 100–105; 1989).

The Seima-Turbino transcultural phenomenon and the related issues are supplemented with new details because of the discovery of new funerary and settlement complexes studied in the field (see, e.g., (Korochkova, Stefanov, Spiridonov, 2020; Satyga XVI..., 2011; Molodin et al., 2015)), expansion of collections with artifacts from these sites, such as solid cast bronze daggers (Molodin, 2015), and finds of similar items in China. Chernykh and Kuzminykh elaborated the first typology of the Seima-Turbino bronzes, which remains unchanged to this day. The theory of the Seima-Turbino cultural phenomenon has not lost its relevance; however, the currently available opportunities allow the interpretation of its individual components in a new way. For example, Chernykh proposed to consider the place of origin of the Seima-Turbino bronzes (“the starting point of the phenomenon”) more southern regions of Xinjiang than previously thought (2013: 391). The carriers of the Seima-Turbino technological traditions moved up the Irtysh River to Western Siberian forest-steppe not only in the northwestern, but also in the northeastern direction. However, the presence of the second, Eastern Siberian, component has not been confirmed so far.

The chronological framework of this phenomenon also needs to be corrected. It is believed today that it emerged in the mid-second half of the 3rd millennium BC; therefore, its time of existence significantly increases (Molodin, 2013). Obviously, in the future, with accumulation of sources, we may expect new discoveries related to the Seima-Turbino transcultural phenomenon and new ideas for its interpretation.

An important event in archaeology of Siberia became the excavation of the Early Scythian kurgans of Arzhan-1, -2, and Chinge-Teya-1 (the latter is still in the process of excavation) in Tuva, which contained burials of “kings” or chiefs. Arzhan-1 has the most sophisticated structure of huge logwork consisting of numerous compartments, which is covered with stone embankment. One hundred and sixty riding horses were buried in the compartments. Six log chunks are located around the central logwork, where several people and horses were buried. The kurgan is surrounded by numerous altars. According to Gryaznov, in that burial mound, the “king” and “queen” wearing lavish clothes were buried. They were accompanied by rich grave goods, including a massive (unparalleled in size) bronze plaque of a predator curled up into a ring. The buried horses might have been the gifts from the vassal and independent neighboring tribes. The site was initially dated to the 8th–7th centuries BC, but radiocarbon analysis and dendrochronology gave the date of the 9th century BC. Gryaznov described the evidence from

Arzhan in a brilliant monograph (1980), for which he was awarded the State Prize of the USSR.

Excavations in the Valley of the Kings in Tuva continued at the turn of the 21st century. Research of the Arzhan-2 kurgan was carried out under the leadership of K.V. Chugunov, H. Parzinger, and A. Nagler (Čugunov, Parzinger, Nagler, 2006; Chugunov, Parzinger, Nagler, 2017). A male and female burial, containing many items, was discovered in the kurgan. A large golden torque, horse figurines crowning the headdress, various gold plaques, and items of richest military equipment made of iron and decorated with gold, accompanied the deceased male. The outfits of the buried persons were decorated with golden figurines of panthers. The assemblage included bronze cauldrons and wooden dishware. The kurgan was dated to the 7th–6th centuries BC. Several funerary chambers with burials of people and horses were found under the mound. The studies of the Arzhan-2 kurgan yielded unique and highly artistic items, which have been comprehensively studied by scientific methods.

In 2022, Chugunov began to explore the royal tomb named Chinge-Teya-1 in Tuva. Male burial No. 9, which was found there, was similar to the male burial from Arzhan-2 in terms of grave goods and funerary rite. The finds from this assemblage included a classic vase of glass made by the artisans of the Assyrian state. This burial is a unique complex of the Early Scythian period; its materials significantly expand the wealth discovered in Arzhan-2.

World-class complexes belonging to the Pazyryk culture of the Early Iron Age (6th–3rd centuries BC) have been discovered and explored in the Altai Mountains and adjacent regions of Southern Siberia. Academician V.V. Radlov studied first burial complexes of the Pazyryk culture in 1865, during the excavations of the Berel and Katanda kurgans (1989). The culture gained wide popularity after research of the 1st Pazyryk mound by Gryaznov (1950), as well as four mounds at the Pazyryk cemetery and two probably royal mounds at the Bashadar cemetery by S.I. Rudenko (1953, 1960). These complexes reveal an unprecedented world of material and spiritual culture of the Siberians living in the Altai Mountains in the Scythian period. The finds, often highly artistic, were preserved by permafrost lenses. They strike the viewer with sophisticated technique of metal, fabric, fur, leather, and wood processing. The collections include amazingly perfect items of weapons and everyday life, as well as magnificent carpets and fabrics, saddle covers, vehicles made of wood, and imported items from China and Asia Minor. Plastic and applied arts, which evolved in the framework of canons of the Scythian-Siberian animal style, manifest the richness of the spiritual world of the Pazyryk people.

A qualitatively new stage in studying not only the culture, but also Scythian issues in general, was

associated with the discovery of Pazyryk kurgans with permafrost on the Ukok plateau by N.V. Polosmak (1994, 2001). “Frozen” undisturbed burials of the middle class representatives of the Pazyryk society, as well as ordinary nomads, were studied for the first time in the world. Field research was carried out at a qualitatively new level, with restoration and conservation of numerous items and mummies of a female and a male. The sources obtained were interpreted using natural and exact sciences (Fenomen..., 2000), which significantly expanded our knowledge on the culture and its carriers who lived in Southern Siberia. Z. Samashev and H.P. Francfort (Samashev, 2011) carried out excavations of Pazyryk kurgans with permafrost on the western Altai slopes. According to A.A. Tishkin and P.K. Dashkovsky, over a thousand Pazyryk burials have been studied (2003); yet, complexes with permafrost remain the main source of information.

The chronology of the Pazyryk sites in the Altai Mountains has been clarified using the methods of dendrochronology. It has been established that all sites in Ukok and adjacent areas of Mongolia belonged to a time span of fifty years with the calendar interval of 326–275 BC (Slyusarenko, 2011: 248). Multidisciplinary studies reveal ethnic syncretism of the Pazyryk people, while data from archaeology, linguistic paleontology, and anthropology indicates autochthonous Mongoloid component as a basis for these people, who at the same time were associated with representatives of the Saka ethno-cultural community (Chikisheva, 1996, 1997). According to paleogenetic studies, the set of the mtDNA variants of the Pazyryks in the Altai Mountains was close to those of the Samoyeds (Molodin et al., 2000). The mtDNA variants identified in the carriers of the Pazyryk culture in Northwestern Mongolia suggest the western vector of connections typical of the east of Southwest Asia (Pilipenko et al., 2010). The dominants of the indigenous (Samoyed) and alien (Iranian) components could be different in different parts of the Pazyryk area (Molodin, 2011). For the study of the unique Pazyryk complexes, the researchers were awarded the State Prize of the Russian Federation in the field of science and technology.

Main discoveries in the archaeology of Siberia and the Far East have been described in the two volume “The History of Siberia” (Istoriya Sibiri, 2019: Vol. 2; 2022: Vol. 1). Leading scholars, mostly from the Institute of Archaeology and Ethnography of the Siberian Branch of the Russian Academy of Sciences, as well as other scientific centers of Russia, participated in the edition. Large-scale exploration of Siberia continues, and there is no doubt that future brilliant world-class discoveries will further enrich our knowledge of the history of Russia.

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