

FINDS OF STRUCTURAL DETAILS OF COMPOSITE BOWS FROM ANCIENT RUS

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Abstract: This paper is concerned with the problem of the appearance and distribution of the traditional nomadic weapon—the composite bow—in Ancient Rus. The authors have summarised evidence on fifteen complexes with new finds of composite bows at the most ancient Russian sites. The preserved overlays of the bows enable us to reconstruct the technology of assembling bows of various types. The article also summarises evidence on the characteristic items of the equipment of eastern archers, which together with a composite bow constituted a single set: bowcases for keeping the bows and quivers. The results of the present studies have drawn the authors to the conclusion about the wide distribution of complex nomadic bows throughout Ancient Rus in the 10th century. The outmost concentrations of the finds have proved to be related with early towns and the culture of the rising Ancient-Russian elite—“*druzhinas*”. In the present study, the use of two types of bows in Rus—the “Hungarian” and the “Pechenegian” (“Turkic”) types—has been demonstrated. Among the Ancient-Russian finds, bows of the “Hungarian” type hold a prominent place. The most ancient finds are dated to the third quarter of the 10th century. The appearance of composite bows was part of the process of distribution of items of armament, horse-gear, costume and accessories connected with the nomads of Eastern Europe among the Ancient-Russian military subculture. Some of the finds come from rich funerary complexes which belonged to professional warriors of a high social status, who may have been participating in the war campaigns of Prince Svyatoslav in the Balkans and on the Danube.

Keywords: composite bow, bowcase, quiver, Ancient Rus, 10th century, bows of the “Hungarian” type, Ancient-Russian military subculture, Shestovitsa cemetery, Prince Svyatoslav

The complex of the Ancient Russian weaponry from the very origins of its formation combined a number of different cultural traditions. The “western” and “eastern” influences interacting with the local tradition merged, became transformed and resulted in the establishing of a culture of the local Russian weaponry. Today, the accumulation of new evidence and publication of new studies allow us to shed particular light on the penetration of a number of innovations into the ancient Russian complex of weaponry in the course of its formation. The present paper deals with the composite bows which were a redoubtable weapon of medieval nomads.

The majority of medieval nomads used composite reflex bows, which consisted of several basic details: grip (the middle part of the bow), terminals or ears (the tips of the bow) and arms (the parts of the bow between the handle and the tips). In order to render it at once more rigid and elastic, the wooden core (Russian *kibit'*) of a bow, was provided with bone laths, which in terms of their positions are divided into the central and tip ones and in turn into frontal, lateral and rear overlays.

Many researchers concerned with studies of composite bows have published stray finds and made attempts to trace the evolution ways of this weapon from Central Asia to Eastern Europe.¹ Leningrad scholars A. I. Semenov and A. M. Savin applied a new approach to studies of medieval bows.² They developed a typology of composite bows

¹ LITVINSKIY 1966; KHAZANOV 1966; 1971; KAMINSKIY 1982; IZMAYLOV 1993; IZMAYLOV 1997; IZMAYLOV 1998; SAVINOV 1981; KHUDYAKOV 1980; KHUDYAKOV 1986; KHUDYAKOV 1991;

KHUDYAKOV 1993; KHUDYAKOV 1997; FLEROVA 2000; FLEROVA 2001, etc..

² SEBESTYÉN 1930; SEBESTYÉN 1932.

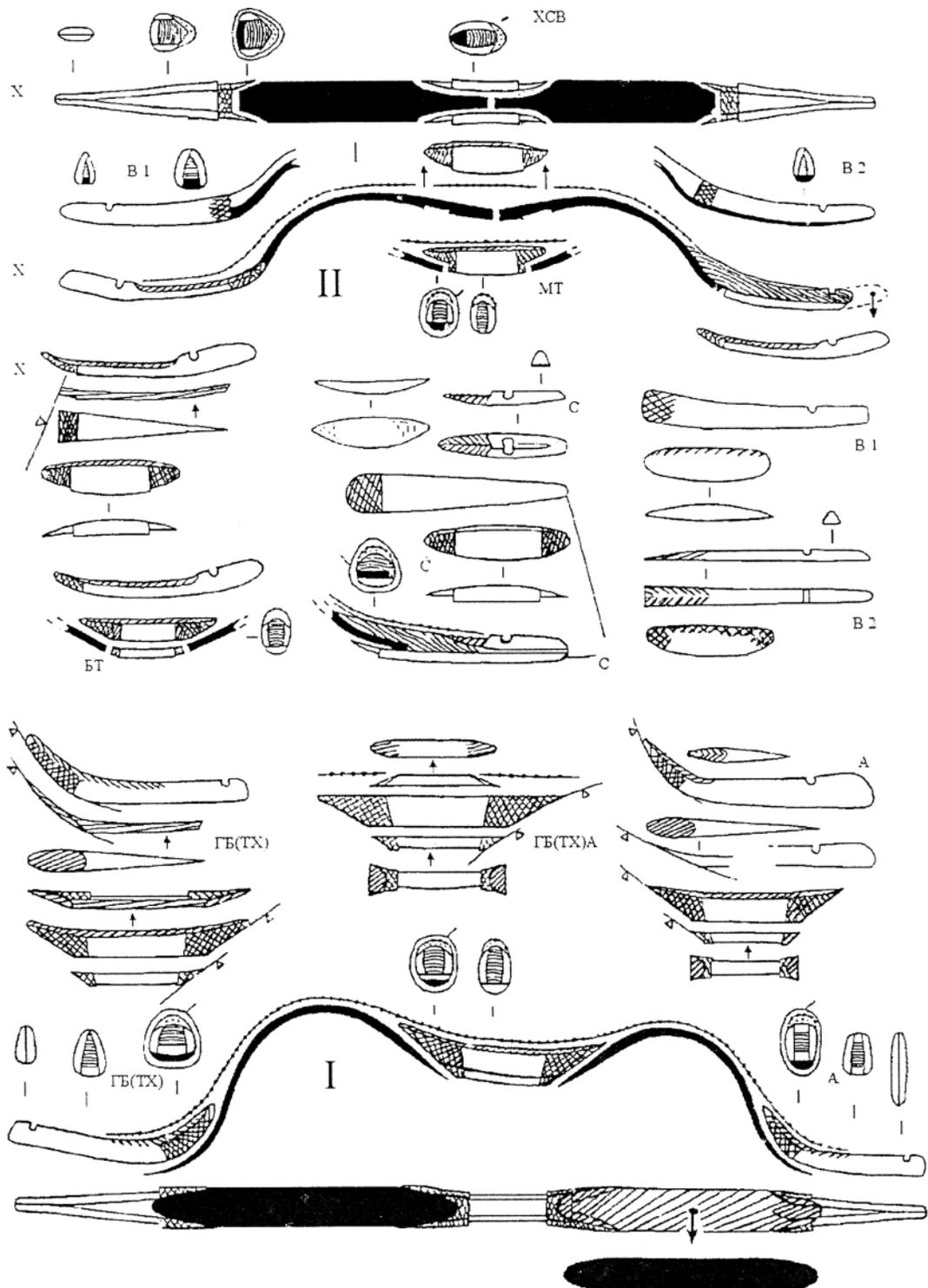


Fig. 1. Technological series of the evolution of the Early Mediaeval composite bows in Eastern Europe. I: "Hun-Bulgarian-Avar" ("Turkic-Khazarian" according to E.V. Kruglov) series. Techniques and schemes of the assemblage: A—"Avar" type; HB—"Hun-Bulgarian" ("Turkic-Khazarian" according to E.V. Kruglov) type; II: "Khazar-Saltovo-Hungarian" series. Techniques and schemes of the assemblage: Kh—"Khazarian" type; S—"Saltovo" type; M—"Hungarian" (Magyar) type, variants 1 and 2; Bt—bow from Borotal; MT—bow from Mongun-Taiga (SAVIN-SEMENOV 1997, 42, fig. 3; KRUGLOV 2005a, 100–101, fig. 2)

(Fig. 1) based on the works of Hungarian ethnographer K. Cs. Sebestyén.³ This typology rests on the peculiarities of the technique of making the bow overlays and the manner of their fixation to the wooden core. According to the established views, several technological varieties of steppe composite bows are distinguishable in Eastern Europe. These variants are united in two major isolated groups: Hunno-Bulgarian and Saltovo-Khazarian ones. The bows of these groups were used during different periods and were widespread in particular geographic zones.⁴ In recent years, the approach of Semenov and Savin was continued in studies by Evgeniy V. Kruglov.⁵ He has published a considerable number from 150 finds of early medieval East-European bows and proposed his variant of the typology of the construction and technological features of early medieval bows.

Kruglov put forward criticism of Semenov and Savin's hypothesis about the independent character of the "Hunno-Bulgarian" and "Khazarian" technological groups. In his opinion, the development of the composite bow in East Europe of the second half of the 7th and 8th centuries was of a "continuous evolutionary character". The replacement of the techniques of manufacturing and fixation of horn overlays onto the wooden core took place at the turn of the 7th and 8th centuries and was induced by the "necessity to adapt the weapons to the climatic realities of East Europe" and clashes with the armoured enemy. This author also stresses that the «ethnic terms, which use such presumable constructions as the "Avar", "Hunno-Bulgarian", "Khazarian" "Saltovo", "Hungarian" or "Pecheneg" ones, are so far to be considered only as an indication of potential interrelation of the given varieties of arms with those historical epochs, during which some of the enumerated ethnoses dominated or may have dominated». ⁶ The superficiality of the terms "Hungarian, Turkic, Khazarian, etc., type of the bow" is accentuated in the article by Á. Biró, P. Langó and A. Türk, where parts of composite bows of the 10th–11th centuries from the Carpathian Basin are discussed. They, in addition, attempt to compare the Hungarian finds with the East-European ones.⁷ Their paper leads us to conclude that in the period specified in the territory of Hungary there existed several construction types of bows, differing in number, the set of plates and laths and in their morphological traits. The situation is complicated by the fragmentary state of many finds, as well as by the insufficient level of the archaeological documentation.

With rare exceptions, the known finds from ancient Russian sites have remained beyond the scope of these summarizing studies.

A. F. Medvedev was the first who considered and annotated details of composite bows from Ancient Rus.⁸ In his opinion, fragments of bone overlays from nine Russian complexes date to the time span from the 9th to 10th century:

1–5. Fragments of central lateral bow-grip lath from kurgans nos. 47, 85, 290, 355 and 365 at the burial ground of Timerevo in north-eastern Russia (Fig. 2.2)

6. Fragment of a central lateral grip lath from kurgan no. 38 of the cemetery of Petrovskoye in north-eastern Russia

7–8. Sets including four lateral tip overlays and two lateral overlays for the grip from kurgans nos. 42 and 110 at the burial ground of Shestovitsa near the city of Chernigov in Ukraine (Fig. 2.1)

9. Lateral overlay for the grip from Staraya Ladoga in north-western Russia (17.7 × 1.8 × 0.6 cm) (Fig. 2.3).⁹

The finds from the burial field of Shestovitsa were later reviewed by A. I. Semenov and A. M. Savin. They attributed the bone overlays from kurgans nos. 42 and 110 to the technological group of composite bows of the "Hungarian" type,¹⁰ In a paper by Hungarian researchers, the similarity of bow overlays from kurgan 110 of the Shestovitsa cemetery and analogous finds from the Carpathian Basin is noted.¹¹

³ The present authors are sincerely grateful to A. I. Semenov for his consultations and help during the preparation of this study. We also wish to thank A. I. Semenov and A. M. Savin for the kind permission to publish their genuine drawing/reconstruction of the tip overlays of a bow from the burial ground of "Berezki".

⁴ SAVIN–SEME NOV 1989; SAVIN–SEME NOV 1990; SAVIN–SEME NOV 1991; SAVIN–SEME NOV 1992a; SAVIN–SEME NOV 1992b; SAVIN–SEME NOV 1992c; SAVIN–SEME NOV 1995; SAVIN–SEME NOV 1997; SAVIN–SEME NOV 1998; SAVIN–SEME NOV 1999; Semenov 1996.

⁵ KRUGLOV 2005a, 307–320; KRUGLOV 2005b, 73–142.

⁶ KRUGLOV 2005b, 74.

⁷ Biró–Langó–Türk 2009, 413–414.

⁸ MEDVEDEV 1966, 37–38.

⁹ The second central lateral overlay from the layers of the Zemlyanoye Hillfort in Staraya Ladoga was found in 1911 during excavations of N. I. Repnikov in the deposits, where artefacts of the 11th–13th centuries dominated (DAVIDAN 1966, 110, fig. 6, 7).

¹⁰ Basing on analysis of sections of the rear edge of the lateral overlays A. I. Semenov and A. M. Savin supposed that the bow of the "Hungarian" type from Shestovitsa kurgan no. 42 was provided with rear tip overlays made from the unstable bull's horn (SAVIN–SEME NOV 1992b, 205; SAVIN–SEME NOV 1998).

¹¹ Biró–Langó–Türk 2009, 414.

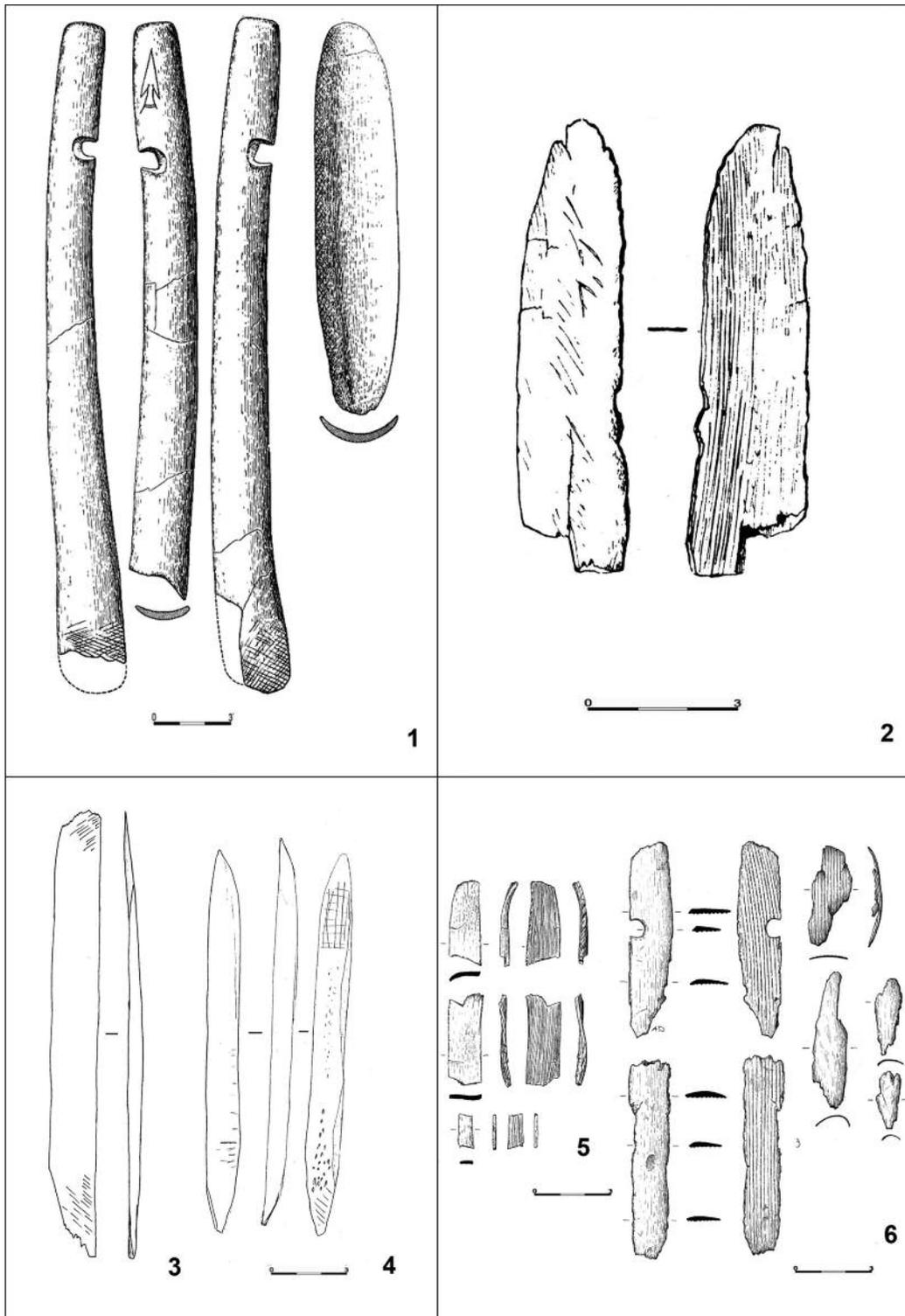


Fig. 2.1: Bow overlays from kurgan no. 110 of the Shestovitsa burial ground (Medvedev 1966, 125, pl. 5);
 2.2: Fragment of an overlay of bow from barrow no. 290 of the Timerevo burial ground (NEDOSHIVINA 1963, 63, fig. 36, 2);
 2.3–4: Central overlays of bow from Staraya Ladoga (3) and Birka (4). Drawing by K. Mikhailov; 2.5–6:
 Bow overlays from kurgans of Gnezdovo Ts-251 (5) and Ts-255 (6) at burial ground of Gnezdovo. Drawing by A. Dement'eva

An additional series of finds related to composite bows from Ancient-Russian sites have been yielded by the excavations during the forty years since A. F. Medvedev's study was completed. What is of still more importance, moreover, owing to the technological and construction typologies proposed by K. Sebestyén, A. M. Savin and A. I. Semenov, as well as that by E. V. Kruglov, it became possible to incorporate the stray Russian finds into the general system of the evolution of the composite bow in Eastern Europe. The following finds are considered here as details of bows unrecorded by the precedent researchers:

10. A fragment of an overlay (probably the central lateral lath) for the bow grip from kurgan 390 at the cemetery of Timerevo in north-western Russia.

11–12. Fragments of central lateral overlays for the bow grips from kurgans nos. 5 and 433 at the cemetery of Timerevo.¹²

13–14. Fragmentary terminal lateral overlays¹³ from kurgans Ts-251 and Ts-255 at the cemetery of Gnezdovo near Smolensk (*Fig. 2.5*)¹⁴

15. Fragments of two terminal lateral overlays from kurgan no. 15 at the burial ground at the old cemetery “in Berezki” in Chernigov (*Fig. 3.1*)¹⁵

16. A fragmentary overlay from kurgan no. 40 at the cemetery of Shestovitsa.¹⁶ The small fragment preserved does not allow us to attribute unambiguously this piece to a terminal or central overlay.¹⁷

17. A fragment of a lateral tip overlay from a layer of the Novgorod (Ryurik) hillfort (11 × 2 cm) (*Fig. 3.2*)¹⁸

18. Lateral tip overlay from the cultural deposits of Staraya Ladoga. It was retrieved from the Zemlyanoye Gorodishche (Earthen Hillfort) in 2008 during the excavations of the Staraya-Ladoga Archaeological Expedition of the Institute of the History of Material Culture (IIMK) RAS under A. N. Kirpichnikov.¹⁹ This overlay is a flat and narrow antler plate. It is 24 cm long with the widths of 2.0 cm in the upper part and 2.3 cm in the lower quarter; its thickness is about 3 cm (*Fig. 3.3*). At present, this is the best preserved and the earliest detail of a composite bow from Ancient-Russian sites.

Unfortunately, the fragmentary state of the majority of overlays and their “incompleteness” do not allow us in each case to identify for the bows one type or another according to the Savin/Semenov's typology. Naturally, we do agree that the attribution of certain constructions and types of the bows to a particular ethnos is incorrect. Nevertheless, due to the established tradition, we will use here the terms of that typological system implying under the “ethnic terms” a definite set of the plates and a characteristic construction of the bow. Among the numerous construction schemes of composite bows in Eastern Europe, it is exactly the “Hungarian” manner of the assembling a bow and the shape of the tip plates has proved to be the most similar to many of the earliest Russian items. In our opinion, to the “Hungarian” type belong (*Fig. 6.2*):

– overlays from kurgans nos. 42 and 110 of the cemetery of Shestovitsa (*Fig. 2.1*)

– overlays from kurgan no. 15 of the burial field at the old cemetery “in Berezki” in Chernigov (*Fig. 3.1*)

– tip overlay from the Zemlyanoye Gorodishche in Staraya Ladoga (*Fig. 3.3*).

The closest parallels of the latter find from Staraya Ladoga come from Hungarian sites of the “Conquest of the Fatherland” epoch. Among the examples we may mention tip overlays from burial no. 39 in Kiszombor and Kunágota, as well as from graves nos. 7 and 8 at the cemetery of Tiszavasvári-Aranykerti tábla dated to the 10th century.²⁰

¹² NEDOSHIVINA 1991, 169.

¹³ In kurgan Ts-255, probably fragments of central overlays were also revealed, however the extremely poor state of preservation of the organics and fragmentary character of the finds enabled the archaeologists to identify reliably only a single fragment of a terminal lateral overlay.

¹⁴ We are grateful to T. A. Pushkina for possibility to study the unpublished finds from excavations of the Gnezdovo cemetery.

¹⁵ BLIFEL'D 1965, pl. III, 12.

¹⁶ BLIFEL'D 1977: 198, pl. IX, 8.

¹⁷ Judging by the extant width of the fragment (over 2 cm), it was part of a central overlay.

M. K. Karger mentioned about finds of bows in burials nos. 105 and 115 of the Kiev burial ground (KARGER 1958: 167,

188). However it has proved impossible to find more detailed information on these bows. Pieces of ornamented bone artefacts from the Gulbishche Kurgan identified by B. A. Rybakov as fragmentary bow overlays are actually parts of bits with antler cheek-pieces of type Ib according to A. N. Kirpichnikov's typology (RYBAKOV 1949, 36–37, fig. 11).

¹⁸ We are grateful to E. N. Nosov for the kind permission to use unpublished materials of the excavations. The find from Ryurik Gorodishche comes from the northern bank of the Sivers Canal where the ancient ditch was excavated in 1999 (The field inventory list No. NOE-99/RG-SB, №272).

¹⁹ We thank A. N. Kirpichnikov for his permission to publish this find.

²⁰ SEBESTYÉN 1930, fig. 9; SEBESTYÉN 1932, 177–178, Abb. 2, a, c; RÉVÉSZ 2007, Abb. 16, 18, 20.

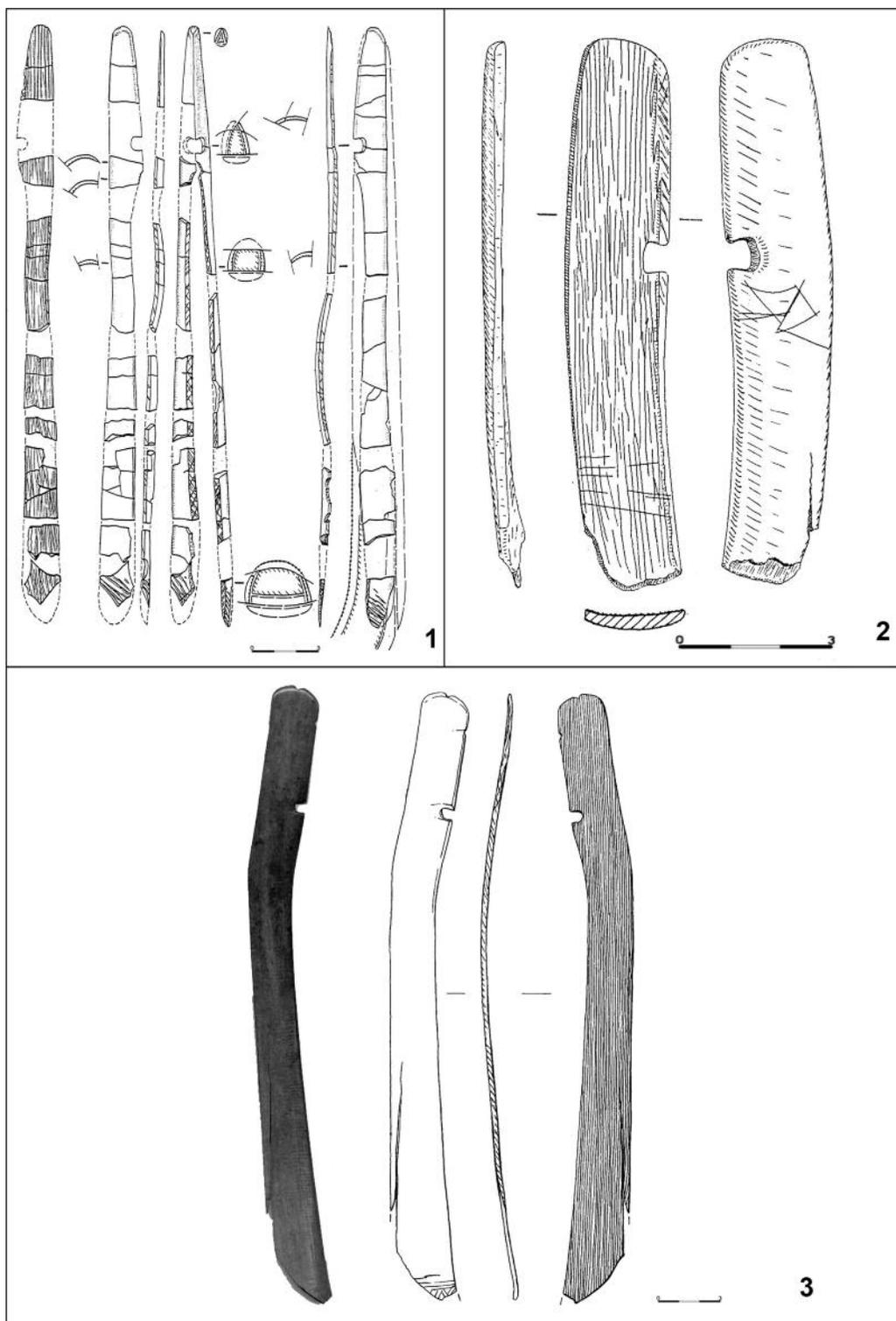


Fig. 3.1: Bow overlays from kurgan no. 15 of the burial ground at the old cemetery "in Berezki" in Chernigov. Reconstruction by A. I. Semenov; 3.2: Tip overlay of bow from the Novgorod Hillfort (Ryurik Gorodishche). Drawing by V. Vasil'ev, K. Mikhailov; 3.3: Tip overlay of bow from the cultural deposits of the Zemlyanoye Gorodishche (Earthen Hillfort) in Staraya Ladoga. Drawing by M. Nikitina, K. Mikhailov

Possibly, the fragmentary overlays from kurgans Ts-251 and Ts-255 at Gnezdovo, as well as the fragment of a lateral tip overlay found at the Novgorod Hillfort (Ryurik Gorodishche) (*Fig. 2.5–6*) should be attributed to the same bow type.

Nine finds of parts of composite bows have been recorded at burial grounds of the Yaroslavl Volga Region–Timerevo (8 items) and Petrovskoye (1 item). They all come from burials with cremations, and, what is of importance, it was possible here to identify them as exceptionally fragments of central lateral overlays of the grip sections. In one instance (kurgan 355 of the Timerevo burial place), from the burial a pair of central lateral overlays were recovered. In two cases, fragments of only a single central lateral overlay was encountered. All of the other finds most probably pertained to central lateral overlays although due to the extremely small size of their fragments this statement is only presumable.

The absence of tip overlays in some of the graves hardly may be explained by their destruction in the funerary fire. It seems that the predominant number of bows retrieved from the Yaroslavl burial grounds is of the so-called “Pecheneg” type of composite bows. That type also was included into the “Khazar-Saltovo-Hungarian” group of archery according to “Savin-Semenov’s” typology.²¹ I. L. Izmaylov after D. G. Savinov, proposed to attribute the composite bows, strengthened with only two central lateral overlays of the “elongated oval shape with tapering terminals”, as bows of the “Turkic” type. Bows of this kind penetrated the Volga region from Central Asia and Southern Ural area and became widespread from the second half of the 8th century until the 10th century.²² In the opinion of Á. Biró, P. Langó and A. Türk, «the central lateral plates of bows of the “Turkic” type... are identical in their shape to the overwhelming majority of the central lateral plates of the 10th–11th century from the Carpathian Basin».²³ The construction of a bow with only central lateral overlays is the most widespread type throughout the Carpathian Basin.²⁴ Moreover, both paired and single central lateral overlays have been recorded in burials.

Some experts in weaponry hold that the bow described above was better adapted for shooting at short distances than its forerunners and was more reliable in use.²⁵ The absence of lateral tip overlays made of horn in the funerary complexes mentioned above possibly is connected with the fact that this material is non-persistent. Indeed, they may have been manufactured from the soft bull’s or aurochs’ horn.²⁶

Thus, all identifiable parts of the earliest composite Russian bows belong to two structural varieties, viz. the “Hungarian” (according to “Savin/Semenov’s” typology) and “Pechenegian” (according to Izmaylov) types. It is of note that composite bows of the “Turkic” or “Pechenegian” type have been encountered only in the Yaroslavl Volga area. Characteristic of the most ancient Russian sites of the Dnieper region and north-western Rus are finds of bow plates of exclusively “Hungarian” type. It is so far difficult to propose a convincing explanation of this fact. In this connection, it is interesting that throughout the Carpathian Basin too, bows both with a set of tip and central overlays and with only the central ones were distributed.²⁷

Missing in this series is the find of a central lateral overlay from Staraya Ladoga (15.3 × 1.3 × 0.8 cm),²⁸ which, in the opinion of A. I. Semenov, was manufactured by a local craftsman, who was not too well acquainted with items of steppe archery.²⁹ This find has proved to be not a single one. At the well-known Scandinavian settlement-site of the Viking Age in Birka (Central Sweden), a similar plate was found (*Fig. 2.4*), made of bone (15.1 × 1.4 cm).³⁰ The back side of the plates from Ladoga and Birka, which served for gluing to the wooden core, was smoothed and polished. On the tips of the plates, crossing lines were scratched with a pointed tool.

The finds of central lateral plates from Birka and Ladoga are rare evidence of attempts of repairing or manufacturing composite bows far outside the limits of the areas of their distribution. Judging by the slightly distorted

²¹ The “Pecheneg” type is discussed in a paper of 1992 (SAVIN–SEME NOV 1992b, fig. 1), while in later typological tables presented in publications by Semenov and Savin this type is lacking.

²² IZMAYLOV 1998, 244–247, 250–251.

²³ Biró–Langó–Türk 2009, 417–418.

²⁴ Biró–Langó–Türk 2009, 423, fig. 1:5.

²⁵ KHUDYAKOV 1980, 74.

²⁶ Savin and Semenov believed that this feature was characteristic of the earliest variants of bows of technology II (SAVIN–SEME NOV 1999, 27).

²⁷ Biró–Langó–Türk 2009, 423, fig. 1:5.

²⁸ DAVIDAN 1966, 110, fig. 3, 12.

²⁹ As compared with other overlays, this one turned to be slightly narrower and thicker.

³⁰ The find from Birka comes from excavations of Hjalmar Stolpe at the settlement-site of Svarta Jorden (Black Earth). This item is deposited in the National Historical Museum in Stockholm (SHM). Collection number: 5208: 1442. Until present days, it has not been attributed nor published. The present authors wish to thank the authorities of the Archaeological Department of the Museum and personally I. Jansson for the opportunity to examine the find.

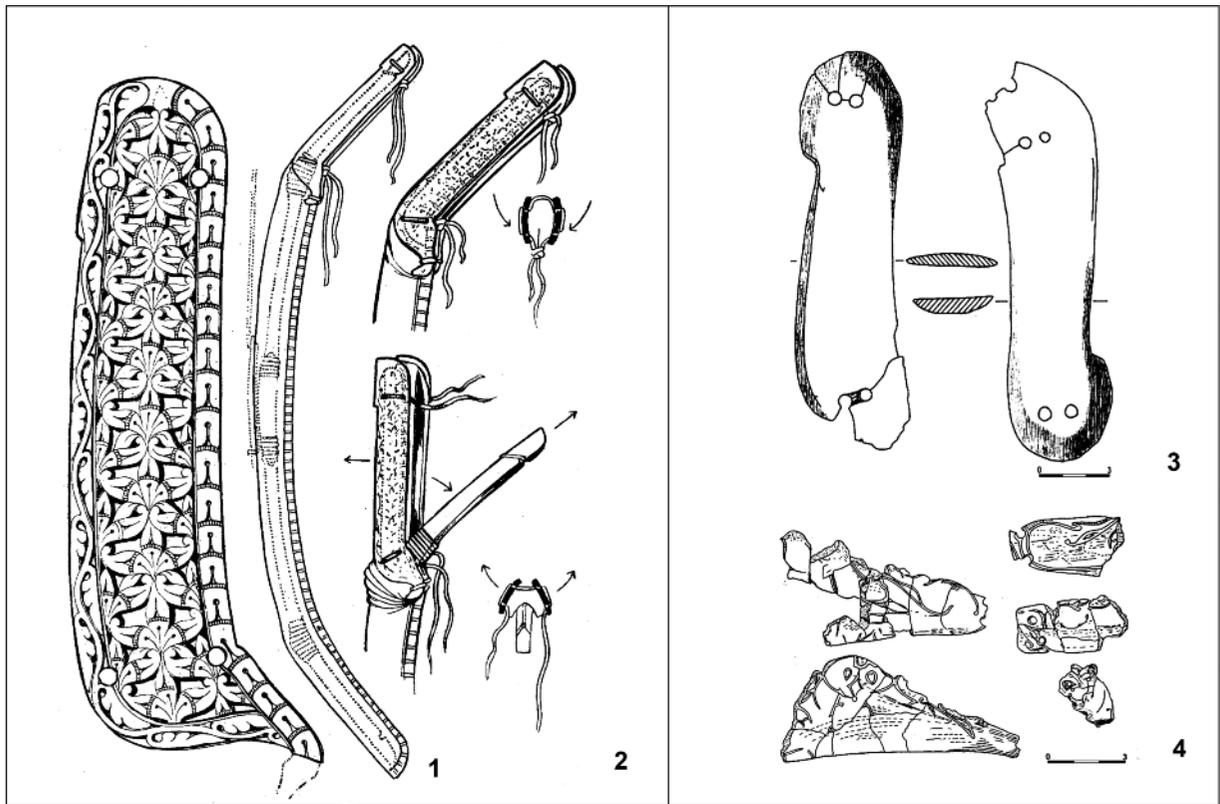


Fig. 4.1: Overlay of the soft bowcase from Kenézlő, burial 39 (LÁSZLÓ 1955, 111, fig. 16, XXVI. Vol. 1–2, XXVII. Vol. 1–2); 4.2: Reconstruction of the arrangement and application of overlays of soft bowcases (LÁSZLÓ 1955, 112, fig. 16); 4.3: Overlays of soft bowcases. Kurgan no. 110 of the burial ground of Shestovitsa (CHERNENKO 2007, fig. 45, 1, 2); 4.4: Overlays of soft bowcases. Kurgan no. 15 of the burial ground at the old cemetery “in Berezki” in Chernigov (BLIFEL’D 1965, pl. III)

proportions of these plates, they may have been made by a craftsman who was not specialized in manufacturing bow overlays.³¹

Along with composite bows, also other characteristic items of the equipment of medieval horse bowmen were found in the territory of Ancient Rus.

BOWCASE

An object not directly included into the structure of a composite bow but characteristically accompanying it has received considerably less attention in publications as compared with the bow itself. The object concerned is the bowcase. Bowcases were cases for keeping a bow when its immediate use was not intended. They protected the bows against effects of the environment and mechanical stresses. In terms of their construction and purpose, two kinds of bowcases are distinguishable, namely the rigid and soft ones. The stiff bowcases were made of hard leather and occasionally were ornamented with plaques. In the rigid bowcases, strung bows were kept, which fact defined the shape of these sheaths. Soft bowcases were long sheaths made of soft matter (fabric or leather). Bows with the unbraced bowstrings were set into them. On the ends of soft bowcases occasionally bone plates were fixed for a more

³¹ The presence of East-European archers in Birka of the second half of the 10th century recently was confirmed by finds from new excavations in the Garrison area. Among the remains of a dwelling

house were found arrowheads of the peculiar “eastern” type, an iron ring for drawing the bowstring and fragments of iron cases of quivers of the “Hungarian” type (LUNDSTRÖM 2006).

rigid positioning of the mouth of the sheath (*Fig. 4.2*). Thus the soft bowcases served for storing unstrung bows while the rigid ones allowed to keep battle-ready strung bows.

Information on different types of bowcases and finds of their various parts in the steppes of Eastern Europe is summarized in the works by A. V. Kryganov and V. E. Flerova.³² Among the Ancient Russian specimens dated to the 10th century, details of the both types of bowcases are recorded. The soft bowcases are identified by finds of paired, mostly bone or horn flat overlays, which were fixed on the mouth of the soft leathern sheath. This feature (*Fig. 4.1–2*) was in the 10th century perhaps the most characteristic of the Hungarian sites.³³

A complete set of bone plates for a soft bowcase was preserved in kurgan no. 110 of the Shestovitsa cemetery (*Fig. 4.3*). The plates are of an elongated shape with the two ends rounded and turned in opposite directions. One end of the plate has a lateral protrusion. The dimensions are: length 17.5 cm and width 4 cm. Both ends of the plate have two holes each.³⁴ Close parallels to Shestovitsa plaques are found at Hungarian burial places. For example, similar plates were recovered from the cemeteries of Kenézlő II and Tiszaeszlár in Hungary.³⁵ Several plates for soft bowcases were reported from Danubian Bulgaria, where they were found during excavation of a palace complex in Pliska, at the settlement of Odertsy and in the deposits of Derestr.³⁶ The Bulgarian finds date to the 10th century. However, they can prove to be vestiges of the Hungarian raids to the Balkans, rather than a part of the equipment of an archer of the epoch of the 1st Bulgarian Kingdom.

It is possible that fragments of bone plates for a soft bowcase were found in kurgan no. 15 of the burial ground at the old cemetery “in Berezki” in Chernigov and at the Chernigov barrow of Gulbishche (*Fig. 4.4*),³⁷ where numerous decorated bone details were preserved.³⁸

Along with soft bowcases also hard-leather ones were possibly used in Ancient Rus. This supposition is based on the finds of plaques of a peculiar “wing-like” shape with a slit for the strapping. Absolutely identical plaques recovered from burials with the inhumation rite are considered by Hungarian archaeologists as details of the suspension of stiff bowcases.³⁹ Careful field records of the finds allowed researchers to propose reconstructions of the outer appearance of rigid bowcases (*Fig. 5.1*). L. Révész has registered over the territory of Hungary nineteen similar finds, of which four plaques undoubtedly pertained to bowcases, seven items, judging by their arrangement, very probably were parts of bowcases, six finds may be presumed hypothetically as such and yet two other wing-shaped plaques were elements of the suspension of the bags.⁴⁰ The face surface of some of the bowcases was decorated with fairly numerous plaques, which, in the opinion of Révész, marked a high status of the interred. Along with such examples there were undecorated bowcases. Some of the latter may have been without any wing-shaped plaques at all.

As to Ancient Rus, presumable wing-shaped plaques were found in three Kiev mortuary chambers: burial no. 109 under the apses and burial no. 113 in the nave of Desyatinnaya (Tithe) Church, as well as in a funerary chamber near Alexander Nevsky Church in Bolshaya Zhitomirskaya Street.⁴¹ In addition, wing-shaped plaques were found in yet three other Ancient-Russian graves: burial at the kurgan Ts-253 of the Gnezdovo cemetery, burial V of the cemetery of Tabayevka and in an undocumented grave excavated in the 19th century in the area of Suzdal Opolye (*Fig. 5.2–5*).⁴²

It is noteworthy that wing-shaped plaques were widely distributed and have been found besides Hungary in the areas of Volga Bulgaria, Danube Bulgaria, at Alan sites of the Northern Caucasus, and in Sarkela/Belaya Vezha.⁴³ A series of burials in the Northern Caucasus have yielded completely preserved leathern bowcases.

A rather surprising find of a wing-shaped plaque comes from burial 1125B in the Swedish burial place of Birka. On its back side, the edge of a bowcase is preserved folded in two, as well as a fragment of the suspension strap in the slit. In the same association, iron overlays and suspension loops from a quiver were uncovered.⁴⁴

³² KRYGANOV 1996, 344–352; FLEROVA 2000; FLEROVA 2001, 45–56.

³³ SEBESTYÉN 1932; LÁSZLÓ 1955, 111–122.

³⁴ BLIFEL'D 1977, pl. XXXI, 1–2.

³⁵ SEBESTYÉN 1932; *The Ancient Hungarians* 1996, 154–155, №11, 157, №15, 194, №2–3.

³⁶ YOTOV 2004, 20, pl. IV, 29–31.

³⁷ BLIFEL'D 1965; pl. III.

³⁸ This object, which we hypothetically identify as a fragment of a plate of a soft bowcase, is deposited in the State Historical Museum, Moscow (Inventory List 1540/47).

³⁹ RÉVÉSZ 1992.

⁴⁰ RÉVÉSZ 1992, 354–356.

⁴¹ KARGER 1956, 25, 29; MOVTJAN 2004, 54–55.

⁴² BLIFEL'D 1955, 20, pl. II, 7.

⁴³ KAZAKOV 1992, 143, fig. 53, 14–16; 215, fig. 79, 32–33; YOTOV 2004, 31–33, pl. XXVI, 390–396; KUZNETSOV 1968, pl. XI, 3; PLETNEVA 1990, 66 fig. 19, 1.

⁴⁴ ARBMAN 1943, 464, Abb. 435, Taf. 136, 4.

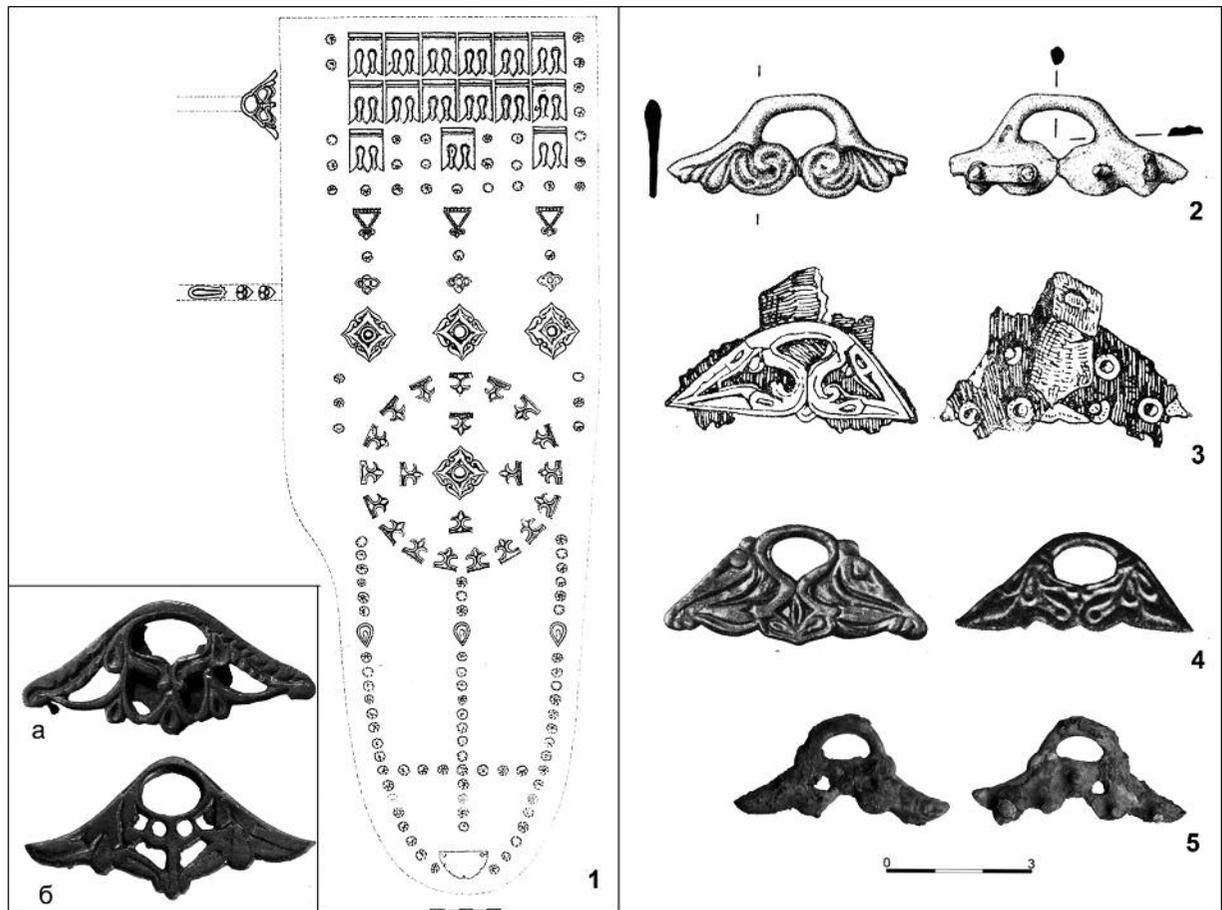


Fig. 5.a-b: Suspension plaques of stiff bowcases from Hungary, a: Kenézlő I, burial 3; b: Eperjeske, burial 2; after *The Ancient Hungarians* 1996, 153, fig. 3; 74, fig. 7; 5.1: Reconstruction of the Hungarian stiff bowcase (REVÉSZ 1992, 351, Abb. 5); 5.2: Suspension plaques of a stiff bowcase from Ancient Rus. Burial ground of Gnezdovo Ts-253; 5.3: Suspension plaques of a stiff bowcase from Ancient Rus. Burial ground of Kiev, grave no. 113; 5.4: Suspension plaques of a stiff bowcase from Ancient Rus. Burial ground of Kiev, grave no. 109 (KARGER 1958, 181, fig. 25; 29, 175); 5.5: Suspension plaques of a stiff bowcase from Ancient Rus. Burial ground of Tabayevka, burial no. V (BLIFEL'D 1955, 20, pl. II, 7)

Unfortunately, the problem of dating of the appearance of wing-shaped plaques in different regions of Europe has not as yet become a subject of studies. At present, we are just able to state that similar plaques were widespread in Eastern Europe already since the 9th century (Tankeyevo cemetery) until the 11th–12th century (Zmeysky burial place). On the Volga, “wing-like” plaques are reported from burials of the 9th–10th century of the Tankeyevo cemetery and among the finds from the townsite of Bilyar.⁴⁵ A similar plaque has been retrieved also from the catacomb Zmeysky (Zmeisky) cemetery dated to the 11th–12th century.⁴⁶

It has proved possible to define no exact analogies to Ancient Russian wing-shaped plaques among the finds from Hungary, although items resembling them are reported from burial places of Karos II and Kenézlő I.⁴⁷ It is worth noting that, judging by the published finds, there are no two identical plaques also among the Hungarian specimens. This fact evidently indicates an individual rather than serial manufacture of these objects.

⁴⁵ KAZAKOV 1992, 143, fig. 53, 14–16; 215, fig. 79, 32–33.

⁴⁶ KUZNETSOV 1968, pl. XI, 3.

⁴⁷ *The Ancient Hungarians* 1996, 100, fig. 32; 153, fig. 3.

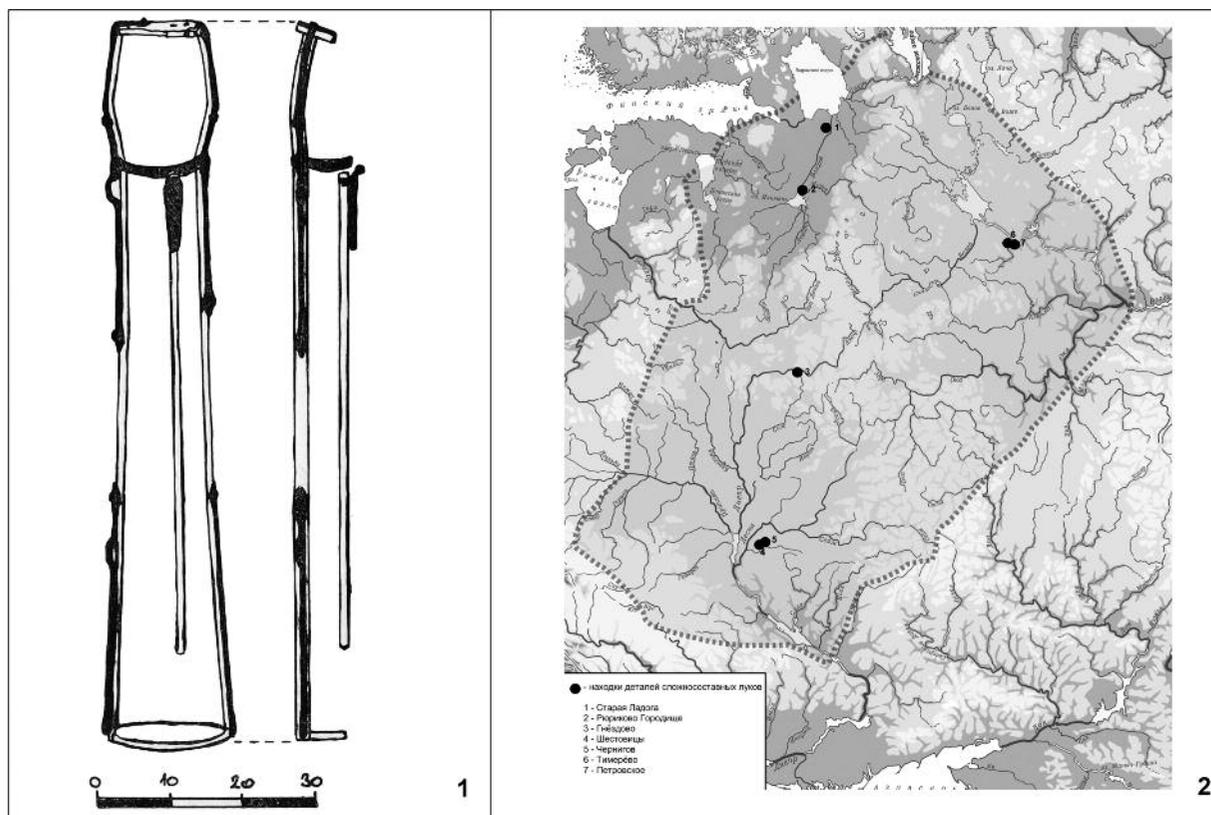


Fig. 6.1: Reconstruction of the Hungarian quiver (RÉVÉSZ 1985, tabl. V, 2);
6.2: Map of finds of details of composite bows from the area of Ancient Rus
(the numbers of the finds specified in the text of the paper are given in brackets)

QUIVERS

In the 10th century, an innovation appeared in the ancient Russian assemblage of arms. It was quivers of semi-cylindrical shape provided with metal details: a metal bottom case and suspension loops.⁴⁸ Quivers of this kind have been found in at least 26 ancient Russian burials of the 10th century (Gnezdovo–9, Timerevo–5, Mikhaylovskoye–1, Petrovskoye–1, Shestovitsa–5, Chernigov–2, Kiev–2, Tabayevka–1) and in the cultural deposits of three fortified sites—Novgorod, Gnezdovo and Shestovitsa.⁴⁹

The poor preservation state, together with the unsatisfactory documentation of the arrangement of the uncovered details, make it so far impossible to reconstruct completely the ancient Russian quiver. Close parallels (*Fig. 6.1*) to metal parts of ancient Russian quivers are found among the Hungarian evidence.⁵⁰ It is interesting that outside the borders of Ancient Rus and Hungary, a quiver with iron overlays, along with the already mentioned wing-shaped plaque for fixation of the bowcase of a composite bow come from burial no. 1125B at the Swedish burial ground of Birka.⁵¹

The mapping of finds of parts of the composite bow and the equipment of the mounted archer clearly demonstrates their ties with the earliest Ancient-Russian sites of the “*Druzhina*” (prince’s retinue) type. Staraya Ladoga, Rurik Gorodishche near Novgorod, Shestovitsa, Gnezdovo, Tabayevka, Kiev, Timerevo, Mikhaylovskoye

⁴⁸ MEDVEDEV 1966, 21.

⁴⁹ MEDVEDEV 1966, 41–42; KOVALENKO *et al.* 2008, 184, fig. 7, 6. We are profiting here of the opportunity to thank S. S. Zozulya for the possibility to examine the manuscript of his diploma thesis “Predmety

vooruzheniya Yaroslavskego Povolzh'ya X–XI vv.” (Items of Weaponry of the Yaroslavl Volga Region of the 10th–11th century). Moscow 2007.

⁵⁰ RÉVÉSZ 1985, 50–53, Taf. I–VI; THE ANCIENT HUNGARIANS 1996, 277, fig. 1, 2; 308, fig. 2.

⁵¹ ARBMAN 1943, Abb. 465.

and Petrovskoye are sites immediately related to the formation of the Ancient-Russian culture (*Fig. 6.2*). In the 10th century, these sites were connected with the international trade in furs and silver. They are characterized by a very complicated interweaving of cultural impulses and imports from Scandinavia, Byzantium and the Black Sea steppe.

Most details of composite bows, bowcases and quivers are yielded by burials and only a single complete overlay and a fragment of a tip plate, one central overlay and a number of quiver parts come from cultural deposits of settlement-sites. The predominating quantity of the mentioned details were retrieved from graves with cremations at cemeteries of Timerevo and Mikhaylovskoye, and only in three instances (Gnezdovo Ts-255 and Shestovitsa nos. 42 and 110), the composite bows and soft bowcases (kurgan 110 of Shestovitsa) were uncovered in burials with the inhumation rite. Almost everywhere, where among the grave goods, overlays of soft bowcases were found, details of composite bows were evidently also present. The most complete set of a mounted archer was uncovered in kurgan no. 110 of the Shestovitsa cemetery. It comprised a composite bow, a soft bowcase, a quiver with metal parts and a so-called special “saadak” belt, to which a bowcase and a quiver were fixed.⁵²

CHRONOLOGY

Presently, a series of new finds allows us to date more precisely the appearance of the composite bow in Ancient Rus. A lateral tip plate from the excavations at Rurik Gorodishche comes from a layer with handmade and early wheel-made pottery.⁵³ The finds from this layer resemble artefacts from Horizon D of Staraya Ladoga. The organics-containing horizon which yielded the overlay,⁵⁴ cannot be dated to a period earlier than the second quarter of the 10th century and later than 979 AD (most probable is the middle–third quarter of the 10th century). In the mortuary chamber of kurgan no. 42 at the burial ground of Shestovitsa, where the remains of a bow were found, also a sword of type W was uncovered. Concerning the date of that type of swords J. Petersen noted that “we have a very limited number of finds at our disposal for solution of the chronological problem”. Basing on his own dating of spearheads of type I to the first half of the 10th century, as well as on the “herring-bone” ornamentation which the researcher holds to be analogous to the decoration of one of the swords of type P, some swords of type I and spearheads of type K. J. Petersen dates the swords of type W “most probably to the first half of the 10th century”. At the same time, however, he does not rule out an earlier date.⁵⁵ A sword of the same type from burial no. 100 at the cemetery of Timerevo was uncovered together with coins of the late 10th century. They suggest for the sword of type W a date earlier than the 970–980s AD.⁵⁶ Hence, swords of the type under consideration could have been used in Eastern Europe for a longer period than in Scandinavia, or otherwise the dating of Petersen is not quite precise. Furthermore, in burial 42 of the cemetery of Shestovitsa, was found a horn comb of group II (according to O. I. Davidan’s classification) with an etui and paired bone plates decorated with a pattern in the Scandinavian style of Mammen. The oldest objects decorated with similar design are dated in Scandinavia to a period not earlier than 960–970 AD.⁵⁷ The interment under consideration took place in the 960–970s AD. In chamber no. 110 of the cemetery of Shestovitsa, a sword of type V according to Petersen’s classification was uncovered.⁵⁸ On the territory of Ancient Rus, twelve swords of that type, dated to the middle–second half of the 10th century, were found.⁵⁹ The set of grave offerings from kurgan no. 15 at the old cemetery of “Berezki” in Chernigov has a date not earlier than the second or third quarter of the 10th century. There, together with the remains of a hunting bag, also a comb of the second group (according to Davidan’s classification) was found. In the Zemlyanoye Gorodishche (Earthen Townsite) of Staraya Ladoga, a lateral overlay of a bow was uncovered which is attributed by O. I. Davidan to Horizon D, i.e. it dates probably to 930–960 AD.⁶⁰ Taking into account that the potter’s wheel appeared in Gnezdovo not earlier than the second quarter, or rather the middle, of the 10th century, the wheel-made pottery from kurgans Ts-251 and Ts-253 allows

⁵² In the opinion of G. V. Kubarev, the “classical” saadak belt included three trifurcators and a hook occasionally replaced with a buckle. By means of two trifurcators, the quiver was suspended to a belt of such a kind on the right side, and on the left side, the bowcase was suspended using one trifurcator. Sometimes, the belt was provided with only two T-joints and then only a quiver was suspended (KUBAREV, 2005, 92).

⁵³ NOSOV *et al.* 2000, 40–41.

⁵⁴ NOSOV–GORYUNOVA–PLOKHOV 2005, 89–96.

⁵⁵ PETERSEN 2005, 186.

⁵⁶ NEDOSHIVINA 1991, 166, fig. 1, 1; JANSSON 1991.

⁵⁷ JANSSON 1991, 284.

⁵⁸ KIRPICHNIKOV 1966, 76, 68; BLIFEL’D 1977, 61.

⁵⁹ KAINOV 1998, 208–209.

⁶⁰ CHERNYKH 1996, 115.

us to date these barrows to the time span not earlier than the second or third quarter of the 10th century. The burial in kurgan Ts-255 was accomplished according to the rite of inhumation in a mortuary chamber. Taking as the basis the hypothesis of the distribution of chamber burials in Gnezdovo beginning with the mid-10th century, the assemblage of these graves may be dated presumably to the second half of the 10th century.⁶¹ In the burial places of Timerevo and Petrovskoye, composite bows were found in the graves with a date not earlier than the second quarter of the 10th century (Timerevo—graves no. 5, 47, 85; Petrovskoye—no. 38).⁶²

The last Staraya Ladoga find was uncovered in square K-XIX, south of the wall of a large house, at the depth of 19 cm.⁶³ If one judges by the published plans of horizons, it seems that the find was deposited between Horizons G-1 and G-2, over the wooden pavement of a large house. This horizon yielded a dendrochronological series, which allowed Kirpichnikov to date the construction of this large building to 930–931 AD. The construction of pavements south of the house is dated by the researcher to 939–940 AD.⁶⁴ Hence, the bow overlay came into the cultural deposits of the settlement not earlier than the second quarter—the middle of the 10th century. Most probable is the date of the middle–second half of the 10th century.

Thus, the appearance of the composite bow (as well as of other equipment of mounted archers) in the territory of Ancient Rus seems to pertain to the period not earlier than the second quarter or the middle of the 10th century.

The cultural context of the Russian finds is not linked with the nomadic component of the burial rite. On the contrary, the remains of three composite bows come from burials in wooden chambers with a rite undoubtedly of the Scandinavian provenance. The other finds were uncovered in burials with the cremation rite. That practice was not directly related with nomads, although it is not possible to establish exactly the ethnos of the interred. The style of the tamga in the form of an arrow on the tip overlay from Shestovitsa seems to indicate a North-European area of the distribution of these arms. However, along with objects of Scandinavian origin, a number of grave offerings are certainly of a nomadic provenance (lance, battle-axe of the *chekan* type, gamebag and earrings in barrow Ts-255; gamebag from kurgan no. 15 in Chernigov; belt overlays from Shestovitsa and Gnezdovo barrows; etc.). Evidently, the appearance and spread of composite bows and the outfit of mounted archers, as well as of quite a series of other steppe weaponry, clothing and accessories, is to be attributed both to the changes in the battle tactics of the Russians (acquiring of the skills of the mounted fight⁶⁵) and to the propagation of a kind of a “steppe” fashion in the *druzhina* milieu induced by these changes.

Many Russian archaeologists considered the bow (and the composite bow as well) as the weapon of the “junior *druzhina*” i.e. of common warriors of modest means.⁶⁶ On the face of it, several poor burials with details of composite bows confirm this supposition (kurgans 290, 355 and 433 at the Timerevo cemetery). But at the same time, it must be noted that the burials with parts of bows at Shestovitsa and Gnezdovo are among the richest ones at these burial grounds as the grave offerings are concerned. The remains of bows here were associated with sets of diverse arms, harnesses and a horse burial. A similar situation is found in Sweden, where at the cemeteries of Valsgärde and Birka, sets of arrows were found among the grave goods of the most luxurious burials. Scandinavian scholars tie these finds with a high status of the interred, since it is known that Scandinavian military chiefs send round “battle” arrows when mustering their forces. Finds of richly decorated arrows from the royal boat burial in Hedeby (south Jutland) and sets of arrows from the aristocratic burial ground in Valsgärde in Central Sweden⁶⁷ indicate that the bow and arrows actually may have been symbols of northern rulers. Scandinavian king’s sagas preserve the evidence that among the merits of Viking *konung* Olaf the Saint and his fellow-fighter Paunch-Shaker was the fact that they wielded the art of accurate bow-shooting.⁶⁸ Hence, the bow and arrows may have been a sign of a high social status also in the symbolic system of the burial rite. Neither the fact that these finds of composite bows were connected

⁶¹ ZHARNOV 1998, 99; MURASHEVA–ENIOSOVA–FETISOV 2007, 70.

⁶² The other five graves (nos 290, 355, 365, 390, 433) contained no narrowly dated artefacts.

⁶³ In the inventory list it was attributed to Horizon V (B being here for the Russian letter) (2007), excavation of which was completed in 2008. (KIRPICHNIKOV 2008, Appendix: plan of Horizon V). SAE-2008, 542.

⁶⁴ KIRPICHNIKOV 2008, 354.

⁶⁵ Perhaps, one of the first attempts of the Russians to test their strength in a horsed combat took place in the Battle of Dorostol in 971: “They (Russians) set out, having formed up the battle order, and then they first appeared mounted, whereas in the precedent battles they fought afoot” (*Lev Diakon*, 128).

⁶⁶ KIRPICHNIKOV–MEDVEDEV 1985, 321.

⁶⁷ MÜLLER-WILLE 1976, 80–82, Abb. 35–36

⁶⁸ *Snorri Sturluson*, 176

with professional warriors is any uncertain. Many medieval written sources inform us that a long term and specific skills were needed in order to make use of the composite bow. The belonging of these objects to professional military men is indirectly confirmed also by the find from Ryurik Gorodishche which undoubtedly was the place of residence of the princely *druzhina* (armed retinue). It is tempting to discern in these finds of the second and third quarter of the 10th century a reflection of some real historical events connected with military and political contacts between the Russians and nomads. Thus, for instance, during the raid of Prince Igor to Byzantium in 944, he was allied with the Pechenegs. John Skilitza and Leo the Deacon alleged that, together with the Pechenegs, the Magyars-Huns were the allies of Prince Svyatoslav during his military campaign against Bulgaria and Byzantine Empire.⁶⁹ It is of importance that the set of equipment of a mounted archer including a composite bow, a soft and a stiff bowcases, and a quiver with iron details, discovered within the limits of Ancient Rus, is typical also for the territory of Hungary where the closest parallels of it have been found. Numerous peculiar fragments of belt and harness sets, items of armament, some objects of horseman's gear and certain types of ornaments uncovered by archaeologists at early Russian sites confirm the hypothesis about the Russian-Hungarian alliance in the second half of the 10th century.⁷⁰ For example, A. N. Kirpichnikov and G. F. Korzukhina identified traces of Hungarian-Russian interrelations in the ornamentation of ceremonious sabres of the 10th century. O. A. Shcheglova described a reflection of close contacts between the Ancient Russian and Hungarian elites in the technology of manufacture and decoration of the famous *rhytons* from the large "princely" kurgans in Chernigov.⁷¹ In recent years, objects ornamented with Hungarian designs were found in Pskov and at some other Ancient-Russian sites. However, at present, this extremely interesting subject is as yet awaiting its researchers.

Unfortunately, Clio has preserved for us only stray records about the earliest Hungarian-Russian connections, having deleted all other from her tables. We are able therefore to sum up only the most general facts:

1. The fairly wide distribution of the nomadic bow throughout Ancient Rus in the 10th century
2. The concentration of the finds of bows in burial grounds and settlements connected with the earliest towns and the establishing ancient Russian elite—the "*druzhina*" (?)
3. The use of at least two structural types of bows in Ancient Rus: the "Hungarian" type (according to the typology by Savin/Semenov) and the "Pecheneg" (according to Savin and Semenov) or "Turkic" type (after the typology by Izmaylov)
4. The most ancient finds of parts of the "Hungarian" bow are limited to the second and third quarter of the 10th century (most probable date seems to be the middle or third quarter of the 10th century)
5. The appearance of composite bows was a component part of the process of spreading of items of weaponry, horse harness, clothing and accessories tied with the nomadic milieu throughout Ancient Rus
6. The belonging of the set of the "Eastern" archer and composite bow to professional warriors of high social rank. The interred with bows undoubtedly belonged to the Scandinavian-Russian retinues of the first princes of the house of Rurik. The distribution of Hungarian weaponry and other Hungarian objects possibly was connected with their participation in Svyatoslav's military campaigns at the Balkans.

⁶⁹ *Lev Diakon*, 58–59, 201

⁷⁰ It seems that presently the most obvious is the Hungarian influence on the spread of nomadic weaponry and the horseman's equipment (including the composite bow and accompanying gear of the mounted archer) throughout the territory of Ancient Rus. However,

it is evident that other nomadic peoples also had an impact on that process and left their marks in the Ancient Russian complex of weaponry of the 10th century.

⁷¹ SHCHEGLOVA 1997, 246–257.

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