

Filling the Gap. Cheekpieces from the Present-day Bulgarian Lands

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Abstract

This publication is dedicated to artefacts known as cheekpieces, which are rare finds in the territory of present-day Bulgaria. The artefacts were uncovered at the Early Iron Age settlement near the village of Assenovets, at Tell Galabovo, and at the Late Bronze Age settlement near Belokopitovo. Based on parallels with similar artefacts discovered in the Carpathian-Danube region and central Europe, they have been defined as elements of horse harness. They are usually related to the domestication and riding of horses and the arrival of newcomers who were probably skilled in the making and use of chariots. This type of artefact is typical for the period after the early 2nd millennium BC, and its distribution covers a wide area including the territory between the Mediterranean and the Middle East, the Ural Mountains, the Carpathians, and also central and eastern Europe. The cheekpieces functioned as elements of the horse harness. They comprise a pair of vertical rods which were attached perpendicularly to the 'bit', or were integrated into 'bit-less' bridle forms; in either case, one fitted on each side of the horse's head. The artefacts found at the three sites provoked interest because until now such objects have never been observed together, and so have never been analysed in detail in present-day Bulgaria.

Keywords

Cheekpieces, chariot, Bulgaria, Carpathian-Danube region, Bronze Age, Iron Age

Zusammenfassung – *Bisher unbekannte Trensenknebel aus dem heutigen Bulgarien*

Diese Publikation ist Artefakten gewidmet, die als Trensenknebel bezeichnet werden und auf dem Gebiet des heutigen Bulgariens bislang selten dokumentiert wurden. Diese Artefakte wurden in der früheisenzeitlichen Siedlung in der Nähe des Dorfes Assenovets, am Tell Galabovo und in der spätbronzezeitlichen Siedlung bei Belokopitovo gefunden. Aufgrund von Parallelen zu ähnlichen Artefakten, die in der Karpaten-Donau-Region und in Mitteleuropa entdeckt wurden, wurden sie als Elemente eines Pferdegeschirrs gedeutet. Sie werden in der Regel mit der Domestizierung und dem Reiten von Pferden und der Ankunft von Neuankömmlingen in Verbindung gebracht, die wahrscheinlich Kenntnis von der Herstellung und dem Gebrauch des Streitwagens hatten. Diese Art von Artefakten ist typisch für die Zeit nach dem

frühen 2. Jahrtausend v. Chr. und ihr Verbreitungsgebiet erstreckt sich über einen weiten Bereich, welcher das Gebiet zwischen dem Mittelmeer und dem Nahen Osten, den Ural, die Karpaten sowie auch Mittel- und Osteuropa umfasst. Die Trensenknebel dienten als Elemente des Pferdegeschirrs. Sie bestehen aus zwei vertikalen Stäben, die senkrecht zum Gebiss angebracht oder in gebisslosen Zaumzeugen integriert waren; in beiden Fällen wurde auf jeder Seite des Pferdekopfes je ein Stab angebracht. Die an den drei Fundorten gefundenen Artefakte erweckten Interesse, weil derartige Objekte bislang noch nie zusammen gefunden und daher im heutigen Bulgarien auch noch nie im Detail analysiert worden sind.

Schlüsselbegriffe

Trensenknebel, Streitwagen, Bulgarien, Karpaten-Donau-Region, Bronzezeit, Eisenzeit

1. Introduction

The present-day Bulgarian territory is a blank space on the map of southeastern Europe in relation to publications dedicated to the so-called cheekpieces. These artefacts made from antler and bone were introduced in the 2nd millennium BC, and such finds have never been commented upon in Bulgaria, not even in relation to their appearance in the archaeological record for different decades during the final millennia BC. This article focuses on several artefacts related to this category of objects which were discovered in a settlement dated to the late 2nd millennium BC in the locality of Markova Vodenitsa near the village of Assenovets, Nova Zagora region, at Tell Galabovo, and at a Late Bronze Age settlement near Belokopitovo, Shumen region (Fig. 1).

Generally, the above-quoted artefacts belong to two main cheekpiece types: (1) rod-shaped cheekpieces (Assenovets, Tell Galabovo, Belokopitovo: Fig. 3/2, 10) and (2) so-called grooved cheekpieces (Belokopitovo: Fig. 3/9). To date disc-shaped cheekpieces have never been found or known of in the modern Bulgarian lands.



Fig. 1. Map of distribution of the cheekpieces (Asenovets, Tell Galabovo, Belokopitovo, Tutrakan: yellow points. – Finds from Kamen: red point) from present-day Bulgaria, and their parallels (blue points) (Map: D. Sandeva).

2. The Archaeological Context and Description of the Artefacts

Generally, the artefacts come from settlements. They were found together with pottery and other elements associated with daily life in a residential context.

2.1. Asenovets (Fig. 2)

The artefact¹ was found in sector B of the settlement, but there is no further information about the context.² It is dated to the 12th century BC based on the analysis of the associated pottery.³ The artefact is made from antler and has an oval cross-section. The surface is perfectly polished. Each of the two ends of the object, which have different diameters, are shaped and have a small round opening. There is a central longitudinal oval opening in the middle of the body. The

artefact has the following dimensions: length: 12.9 cm, diameter of the back part: 2.5 cm, diameter of the middle part: 2.0 cm, length/width of the central opening: 2.5 × 0.95 cm, diameter of the end openings: 0.8 × 0.9 cm (at the back part), 0.7 × 0.9 cm (at the narrow end). The excavator defined it as an element of horse gear.⁴

2.2. Tell Galabovo (Fig. 3/1–8)

From the eponymous settlement mound, the following objects are recognized as cheekpieces: OF III/026, OF III/044, OF III/073 and OF III/117. The last number indicates a ‘treasure’/collective find of two objects and a handle found in the 3rd building level.⁵ The finds are made of horn, and the interpretation of some of them is debatable, as there are no holes to attach the strap, and they are

1 The cheekpiece is listed in the inventory book under no. 3935.

2 KANCEV 1974, 75–76 and Fig. 16.

3 KANCEV 1974, 76.

4 KANCEV 1974, 76.

5 Square I3, locus South 1.30 m and West 4.80 m. – See LESHTAKOV 2021, 38, 66 and Fig. 18/1–8.

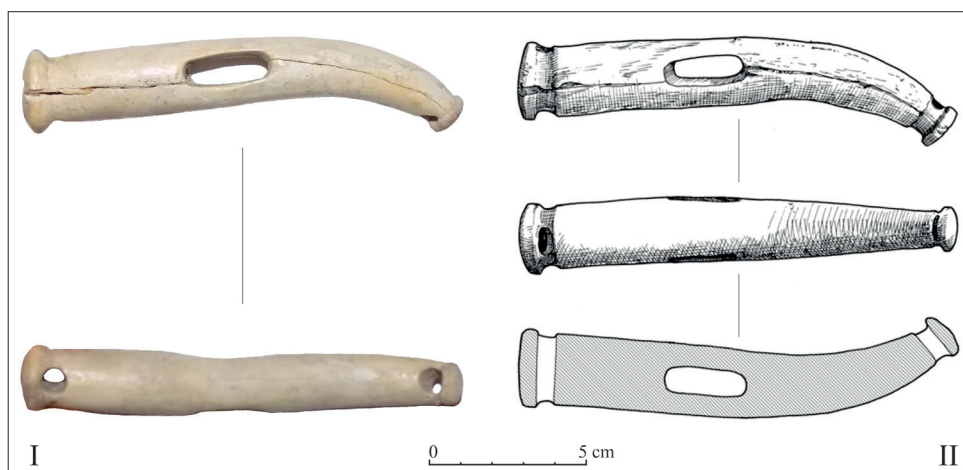


Fig. 2. Cheekpiece from Assenovets: I. Photo image (D. Markov). – II. Graphic illustration (after LESHTAKOV 2021).

poorly preserved.⁶ It is possible that they are preparations for psalia. They are precisely made and Krassimir Leshtakov notes that the edges of some of the finds bear traces of polishing due to prolonged use.⁷ Some of the objects are decorated with incised lines.⁸

2.3. Belokopitovo (Fig. 3/9–10)

One of the objects was found in the Late Bronze Age layers (Fig. 3/9), while the second was found in a compromised context (Fig. 3/10).⁹

As is mentioned above, at this site two types of cheekpieces were found. They are single finds and, as shown, they are only partly preserved.

The first item is a convex plank-shaped object with a curved outline (Fig. 3/9). Its dimensions are not described, but based on the scale provided, one can assume a preserved length of around 6 cm and a width between 0.6–1.5 cm. An oval/ellipsoidal hole is located in the middle part of the body, while circular semi-preserved holes on the edges can be observed. Other laterally crossing holes are drilled on the upper part of the object. The engraved zigzag decoration is located on the edges of the plank.

⁶ LESHTAKOV 2021, 66 and Fig. 18/4–8.

⁷ LESHTAKOV 2021, 28.

⁸ LESHTAKOV 2021, 28.

⁹ LESHTAKOV 2021, 29. – See also LESHTAKOV 2021, 37: “The cheekpiece with field no. 084 was found in sq. E31, and the one with no. 005 in sq. I41. While the first has a certain context – it originates from an LBA layer in a dwelling – the layer where the second one laid, was intersected by several later pits. According to Dr M. Daskalov, the shape and decoration of the second psalia are different from those made in Late Antiquity and the Early Middle Ages, from which time the pits are. Therefore, dating in LBA is very likely.”

The second cheekpiece has a curved outline and several lateral oval holes (Fig. 3/10). The shape is simple, with a pair of grooves on the lower part. Based on the scale shown, the preserved length is 10–11 cm and the width varies between 1.5 and 2 cm.

3. Parallels and Relative Chronology

3.1. Parallels

Generally, the artefacts have parallels within a numerous and diverse group of finds, discovered over a vast territory including central and eastern Europe, Greece, and parts of Anatolia. These items are known in the literature as cheekpieces, and their use is related to a prosperous and migrant population that used to breed and use horses extensively. These people are also considered the inventors of chariots. The introduction and distribution of these artefacts in Europe is dated to the beginning of the Middle Bronze Age, and they remained in use until the end of the Late Bronze Age and beginning of the Early Iron Age. A number of scholars have worked on the emergence and distribution of the cheekpieces. Among them the following can be mentioned: Joost H. Crouwel, Ute L. Dietz, Anthony Harding, Hans-Georg Hüttel, Manfred O. Korfmann, Mary A. Littauer, Wolfgang M. Werner and Petar Zidarov.¹⁰

The closest parallels to the finds from Bulgarian lands originated from central and eastern Europe and parts of present-day Romania, as is shown on the map (Fig. 1).

¹⁰ COLLON, LITTAUER, CROUWEL 1976. – LITTAUER, CROUWEL 1979. – CROUWEL 1981. – HÜTTEL 1981. – HARDING 1984, 193–194. – WERNER 1988. – CROUWEL 1992. – DIETZ 1998. – HARDING 2000. – HARDING 2005. – KORFMANN, ZIDAROV 2006.



Fig. 3. Cheekpieces from Tell Galabovo (1–8) and Belokopitovo (9–10) (after LESHTAKOV 2021).

3.1.1. Assenovets

Very closely analogous artefacts to that from Assenovets – rod type cheekpieces of the Spiš type – come from Vatin and Castione dei Marchei.¹¹

Similar artefacts from so-called Little Poland recently published by Marcin Przybyła are also comparable to the

Assenovets artefact.¹² The closest parallel is a cheekpiece from Jakuszowice, Kazimierza Wielka district, site 2.¹³ The second artefact was found at Morawianki, Kazimierza

¹² PRZYBYŁA 2020, 103–138.

¹³ PRZYBYŁA 2020, 112 and Fig. 8/1. – For details, see PRZYBYŁA 2020, 112: “Preserved length: 62 mm. Oval-shaped in its cross-section, with a diameter of 10 × 12 mm. In its lower (?) part the cheek-piece has a mushroom cap-like head, clearly distinguished from the body.

¹¹ HÜTTEL 1981, 94–99 and Pls. 9/82, 39/II-8.

Middle Bronze Age	Late Bronze Age	Early Iron Age
Tell Galabovo 3 rd building phase	Belokopitovo	Assenovets 12 th century BC

Tab. 1. Chronology of the cheekpieces from present-day Bulgarian lands.

Wielka district, site 10.¹⁴ The closer parallel from Jakuszowice is related to the Füzesabony type, and Przybyła suggests that the studied artefact can be considered a local variant, a mixture of the different types of cheekpieces introduced in Little Poland via the Carpathian Basin.¹⁵ The second find belongs to the so-called Spiš type typical for the Borjas type; its distribution is documented in the Carpathian Basin.¹⁶

As far as the relative chronology of these parallels is concerned, they are dated to the Early and the Late Bronze Age. For example, the artefacts of the Füzesabony type are dated to the Br A period and were in use as late as the Br B stage. They are documented in the Hatvan, Otomani, Füzesabony and Maďarovce cultures.¹⁷ The Spiš type cheekpieces were in use for a longer period and are dated to the Br A2 period; they remained in use until the beginning of the formation of the Urnfield Culture.¹⁸ Based on these observations, it is stated that the time span of the introduction and the functioning of the artefacts is related to the Trzciniec Culture; the parallels of Br A2–B belong to this territory (17th–15th centuries BC).¹⁹

3.1.2. Tell Galabovo

In the case of the finds from Tell Galabovo, no examples with which the specimens from the settlement mound of the same name directly correlate are known. It can be noted that these are the only objects from a settlement mound in the Bulgarian lands, which is also the only tell mound with reliably identified imports from the lands of Anatolia during the early Middle Bronze Age and the Late Bronze Age.²⁰

3.1.3. Belokopitovo

The finds from Belokopitovo belong to the grooved cheekpiece/Komarovka type and demonstrate its characteristic

features.²¹ Partial similarities to the Belokopitovo²² finds are observed in materials from Tiszafüred, Ceclar, Coslogeni, Cavadinesti, Pecica, Varsand, Otomani, Babadag, Silistea as well as Kraków-Cło and Morawianki, Kazimierz Wielka district, grave no. 56 – found next to the skull of horse no. 3.²³ These examples are dated to the interval from the Early Danubian period (corresponds to Reinecke A2) through the Middle Bronze Age and reach to the end of the Late Bronze Age and the beginning of the Urnfield period (Ha B).²⁴

3.2. Relative Chronology

Based on the analysis of the pottery, scholars have suggested the 12th century BC as a probable date for the artefact from Assenovets.²⁵ The date also marks the end of the Late Bronze Age and the beginning of the Early Iron Age in the present-day Bulgarian territories.

The finds from Tell Galabovo are stated to have been found in the 3rd building level; thus, they date from the Middle Bronze Age.²⁶ The finds from Belokopitovo date to the Late Bronze Age.²⁷

In conclusion, the first appearance of the cheekpieces was sporadically dated to the 2nd millennium BC, after that the cheekpieces were registered at the very end of the Late Bronze Age and the beginning of the Early Iron Age (Tab. 1).

Directly above the head there is an oval-shaped perforation with dimensions of 10 × 5 mm. The artefact is undecorated”.

¹⁴ PRZYBYŁA 2020, 103, 108 and Fig. 4/4.

¹⁵ PRZYBYŁA 2020, 119.

¹⁶ PRZYBYŁA 2020, 112, 116.

¹⁷ PRZYBYŁA 2020, 121.

¹⁸ PRZYBYŁA 2020, 122.

¹⁹ PRZYBYŁA 2020, 122.

²⁰ LESHTAKOV 1996. – LESHTAKOV 1997. – LESHTAKOV 2016. – HRISTOV 2021. – LESHTAKOV 2021.

²¹ GRIGORIEV 2021, 166 and Fig. 10.

²² A similar find from a clear archaeological context was discovered during excavations at the site of Gjaur Punar, Tutrakan. The find is fragmentary, and from the schematic drawing presented in the publication it is evident that it probably belongs to the type of the so-called grooved cheekpieces / Plattenknebel. The context to which it belongs is a pit (no. 2), the accompanying finds being three ceramic spindle vertebrae, and a loom weight: ALEXANDROV et al. 1998, 13, 16, and Pls. 2–4. On the basis of analogies with similar materials and finds from the Radovanu site, north of the Danube, the site, and thus the psalian fragment, can be assigned to the Late Bronze Age, and its cultural affiliation is with the Koslogeni: ALEXANDROV et al. 1998, 16, 28.

²³ HÜTTEL 1981, 32 and Pl. 1/11. – BOROFFKA 1998, 95–97 and Figs. 5/1–2, 6, 9; 6/2–3; 7/7, 11–14. – PRZYBYŁA 2020, 108 and Fig. 4/4; 113 and Fig. 9/4.

²⁴ BOROFFKA 1998, 103–106.

²⁵ See, e.g., KANCEV 1974, 76.

²⁶ LESHTAKOV 2021, 37.

²⁷ LESHTAKOV 2021, 29.

4. Discussion

The questions related to the finds from Bulgaria are related to the big questions in the discussion about the origin, appearance, and distribution routes of cheekpieces and are an inseparable part of it. The discussion of the scientific literature has been transformed to a new conceptual level – a rethinking and reassessment of the existing facts, supplemented with the latest information related to these findings of interest. Basically, they concern the issues related to the debate around the introduction of chariots and the origins of the cheekpieces. They are briefly presented below and are intended to help in understanding the origin and presence of the Bulgarian cheekpieces.

4.1. The Introduction of the Chariot

There are two basic assumptions about the origin of chariots as a mode of transport.²⁸ Supporters of both hypotheses point to the territories of the steppes and the Urals on the one hand, and Mesopotamia and the Middle East on the other as the first centres. The main arguments that defend both hypotheses are presented in the following lines.

The opinion that the earliest chariots originated in Mesopotamia in the 2nd millennium BC and then spread to Egypt, the Aegean, and Europe²⁹ has been revised by Joseph Maran with the data from necropolises associated with the Sintashta Culture; the finds contained in the graves date to the beginning of the 2nd millennium BC.³⁰ In this way, the diffusionist interpretation of the emergence of the chariot, referring it to the space locked between the southern Urals and central Kazakhstan, is rejected.³¹

The ‘romantic’ thesis about the carriers of this engineering innovation³² – a warrior caste that migrated to various parts of Europe and the Middle East, where they settled as an aristocracy – is also rejected by Maran.³³ The author criticizes the migrationist approach to explain the appearance and spread of the chariot, considering it deeply flawed.³⁴ The basis for the migrationist and diffusionist views is that horse-drawn chariots represent a complex that

was generated in a specific area “(...) and was transferred from there unidirectionally as a fixed package of technology, function and social appreciation”.³⁵ Maran emphasizes that the general difference between these two interpretive models consists in the identification of the region of origin (Eurasia or the Middle East) and the transfer mechanisms (exchange or migration). The horse-drawn chariot complex is the result of multifaceted engineering, and analysing it reveals some contradictions. These stem from the “controversial uniformity” of the technological package that undergoes revision and refinement, where the infiltration of the innovation into the host community should be assessed very carefully.³⁶ Based on this, the separate analysis and study of the individual components of the chariot complex has been adopted as a new research approach.³⁷ This, in turn, led to the conception of the elements of the chariot as a heterogeneous complex.³⁸ This is also complemented by the analysis of the cheekpieces distributed in different regions. For example, disc-shaped cheekpieces predominate in the Sintashta Culture area, while rod-shaped cheekpieces are typical in the Carpathian-Danube basin. Making different types of cheekpieces leads to the mixing of different elements and styles and the creation of new hybrid types. This, according to Maran, is evidence of a thorough knowledge of different elements of horse harness, but also of the desire to expand their species diversity.³⁹ Another factor that makes this possible is his observation that the regions north and south of the Caucasus were mutually connected through contacts based on mutual exchange carried out thanks to the chronologically earlier vehicles/wagons whose development had advanced significantly.⁴⁰

In the latest studies it was pointed out that the earliest evidence of chariots was found in the southeastern Urals and in northern Kazakhstan. These are graves from the Sintashta-Petrovka complex, where in each a chariot burial

²⁸ See the contribution by S. Grigoriev in this journal’s current issue [editor’s note].

²⁹ This opinion is held *inter alia* by F. Hančar, A. Kammenhuber, M. A. Littauer, J. H. Crouwel and P. R. S. Moorey, see the summary in MARAN 2020a, 506 with further literature.

³⁰ MARAN 2020a, 506.

³¹ MARAN 2020a, 507–508.

³² The main scholars behind this hypothesis are S. Penner and R. Drews, whose arguments are observed in detail by MARAN 2020a, 508–511.

³³ MARAN 2020a, 507.

³⁴ MARAN 2020a, 511.

³⁵ MARAN 2020a, 511.

³⁶ MARAN 2020a, 511.

³⁷ MARAN 2020a, 511.

³⁸ MARAN 2020a, 511–512.

³⁹ MARAN 2020a, 512.

⁴⁰ MARAN 2020a, 512. – It is noteworthy that compared to the Carpathian region and Transylvania, where a large number of ceramic models of wheels and vehicles were found, in the period 3500–2200/2000 BC no ceramic wheel models are known from mainland Greece and the Aegean Islands. The only image pointing to the appearance of the wheel as an innovation in the lands of Greece is on a fragmentary ceramic spindle vertebra from Pevkakia, dating to late Early Helladic III. It depicts a car/cart with four wheels. However, the decorative motif is so small and sketchy that it is unclear whether it is a depiction of a wheeled vehicle or something else, see MARAN 2020b, 211.

with spoked wheels was recovered and, in some cases, entombed horses as well.⁴¹

The ¹⁴C dates provided cover the interval 2100–1800 calBC as the last possible use of two-spoked wheel chariots in the South Urals is 1950–1888 calBC.⁴² The earliest images of spoked chariots in Anatolia are usually depicted on seals. These are depictions on a seal from Kültepe-Kanesh (Kārum level II) – dated to 1950–1836 BC – and a seal image of unknown origin at the Metropolitan Museum of Art in New York.⁴³

Despite the above-mentioned assumptions and the indirect data about the presence of chariots presented here, the discussion about the initial appearance of the chariot has not been exhausted and has its own polemics. According to Stanislav Grigoriev, if the chariot as a novelty appeared independently and on its own in the Urals and the Carpathians, then where was the initial focus of its origin? The author notes that this may be the lands of the Middle East.⁴⁴ In the literature, it is accepted that the prototypes of the chariots were depicted at Tell Barak and date from the end of the 3rd millennium BC until the beginning of the 2nd millennium BC.⁴⁵ It is believed that the four-spoke wheeled chariot appeared in the 18th–17th centuries BC, while the war chariot emerged in eastern Asia and dates to the 17th–16th centuries BC.⁴⁶ The idea of the early appearance and presence of the chariot in the Middle East is based on depictions of chariots on cylinder seals,⁴⁷ a ceramic vessel from eastern Iran (accepted as the earliest depiction of chariots),⁴⁸ and bronze and ceramic chariot models.⁴⁹ Some of this indirect evidence is accompanied by absolute dates, such as the seal from Tell Hissar with a ¹⁴C date of 2500–2350 BC,⁵⁰ the bronze model of a chariot from Asemhüyük, Anatolia, found in the 3rd layer dated to the 19th–18th centuries BC, the seal from Kültepe-Kanesh (Kārum level II) dated to 1950–1836 BC⁵¹ and a Syrian seal dated to 1750–1600 BC.⁵² Grigoriev notes

that it is more difficult to find information about the chariot in written sources. For instance, from the 2nd millennium BC the ideogram ^{G15}GIGIR denotes chariots. However, its writing dates to the 3rd millennium BC, and the Hittites used it to describe military actions.⁵³ Regarding the appearance of chariots in the Urals and steppes/Sintashta Culture, it is generally accepted to date to the period of the 17th–16th centuries BC, with the available radiocarbon dates spanning the interval between the 20th and 18th centuries BC, and in the Middle East, to the 18th–17th centuries BC.⁵⁴ Thus, a paradox was created, in which the Middle Eastern chariots are dated according to the so-called ‘traditional dates’, and the complexes from Sintashta according to ¹⁴C dates.⁵⁵ This creates confusion and an accumulation of mistakes when discussing the early appearance of chariots.⁵⁶ These inaccuracies have been critically debated, dating the appearance of steppe chariots chronologically after the depiction of the same on a seal from Kültepe-Kanesh (Kārum level II) from the period 1980/1970–1850/1840 BC.⁵⁷ Thus it was assumed that in the Near East chariots appeared around the 20th–18th centuries BC, while the eight-spoke wheeled chariots were known after the 18th century BC, at the same time as Sintashta chariots are thought to have emerged.⁵⁸ Grigoriev associates this with different types of migrations from Syria and Anatolia, whose main components actually form the Sintashta Culture.⁵⁹ These ‘migrations’ in the Sintashta range probably took place in the 18th century BC, but the event span has been placed within broad limits, spanning 1800–1740 BC. Considering the duration of the existence of the Sintashta Culture lasting 130–200 years, it is assumed that the appearance of chariots within its borders falls in the lower part of this interval.⁶⁰

Various opinions and assumptions circulate about the appearance of the chariot in the Mycenaean world. Regarding the penetration of chariot technology, the hypothesis

41 MARAN 2020a. – GRIGORIEV 2021. – METZNER-NEBELSICK 2021. – GRIGORIEV 2022.

42 METZNER-NEBELSICK 2021, 113 with references.

43 METZNER-NEBELSICK 2021, 113.

44 GRIGORIEV 2021, 177.

45 See, e.g., GRIGORIEV 2020, 69–70.

46 GRIGORIEV 2020, 69–70.

47 GRIGORIEV 2020, 70–72 and Figs. 2–11.

48 GRIGORIEV 2020, 75.

49 GRIGORIEV 2020, 70–72 and Figs. 1–2.

50 However, the date is questionable due to differences in the results of the older and more recent ¹⁴C dating, see GRIGORIEV 2020, 75.

51 METZNER-NEBELSICK 2021, 113. – According to S. Grigoriev, the Kārum Kanesh layer is dated in the so-called system of middle chronology in the interval 2000–1850 BC, GRIGORIEV 2020, 70.

52 GRIGORIEV 2020, 69, 71–72 and Figs. 1–2.

53 GRIGORIEV 2020, 70.

54 GRIGORIEV 2020, 73.

55 GRIGORIEV 2020, 73.

56 GRIGORIEV 2020, 73.

57 GRIGORIEV 2020, 75.

58 GRIGORIEV 2020, 75–76.

59 GRIGORIEV 2020, 73–74. – The probable causes of these migrations/movements of populations are events described in written sources. Such, for example, are the second Kassite campaign in the Khybur basin in 1740 BC; the conquest of the Zalwar, Ursha and Hasshum dynasties that led to the expansion of Mama’s kingdom around 1775 BC; another event that can be correlated with the appearance of Sintashta (the campaigns of King Shamshi-Adad I (1808–1776 BC) reaching the Euphrates bend) and which corresponds partially to the end of the Kanesh Kārum level II stage.

60 GRIGORIEV 2020, 76.

that it happened from the steppes is rejected by Grigoriev. The arguments for this are, on the one hand, that the end of the Sintashta Culture precedes the beginning of the horizon of the shaft graves at Mycenae, and on the other hand, the difference in the number of spokes: ten/twelve spokes for the wheels of the chariots from the steppes and four spokes for the wheels of the chariots from Mycenae. It seems illogical for a developed technology to enter a developed environment and revert to examples using wheels with fewer spokes i.e. four.⁶¹ One of the possible places from which the four spokes are assumed to have entered Greece is Anatolia, where images of chariots with four- and eight-spoked wheels are known, and the finds from Kültepe also have four-spoked wheels.⁶²

It is believed that the cheekpieces from Mycenae are comparable to finds from the Carpathians and have no definite parallels with the objects from the steppes.⁶³ This imposes the idea that the skills required for making and using chariots entered Greece from the Carpathian Basin and had nothing to do with the steppes.⁶⁴ Images of similar artefacts are known on the vessel from the Susiu de Sus Culture of Vel'ké Raškovce, wheel patterns from the Maďarovce and Otomani-Füzesabony cultures, possibly illustrating four spokes.⁶⁵ From Pocsaj, belonging to the Gyulavarsánd Culture, a model of a cart with four-spoked wheels was found. Four spokes are also depicted on two chariot models from Dupljaja, an object belonging to the Žuto Brdo-Dubovac group dated to the Middle Bronze Age.⁶⁶ Based on this data, it is noted that chariots appear independently in the west and east, and in the finale of Sintashta, the two traditions are combined. It is mentioned by Grigoriev that the

appearance of the chariot in the Mycenaean world is related to the Carpathians, not the Eurasian steppes. The arguments for this are related to the emergence of the so-called 'Carpatho-Mycenaean' motif, which arose in the time of the Br A2b phase.⁶⁷ This was probably an impulse, as a result of which a number of innovations in the construction and modelling of the psalia appeared. This coincides with the appearance of grooved cheekpieces.⁶⁸ This serendipity matched with the end of Sintashta, the end of the early stage of Alakul, Petrovka, Lower Volga Abashevo and the Potapovka Culture mounds.⁶⁹

Another possible hypothesis is that the appearance and development of the chariot in the Mycenaean world was due to infiltrations mainly from the Near East (seeking grounds in the earliest depiction of a light chariot in Greece, a clay seal dating to Middle Minoan IIIB/Late Minoan IA from the East Temple Repository at Knossos, showing an impression of a signet ring bearing a scene of a chariot drawn by two galloping griffins).⁷⁰ On the other hand, it could be accepted as an eclectic combination of different elements of horse harness from different areas such as the Carpathian-Danubian basin or the steppes.⁷¹

Most researchers agree on the lack of data on the presence of elements of chariots or cheekpieces in the territory of the central and eastern Balkans.⁷²

Thus, according to the data presented, the need for an in-depth discussion about the indications of the places where the chariot was generated developed as an engineering innovation and the stages of its dissemination is evident. At its heart, the discussion has been provoked by the controversy over the treatment of ¹⁴C dates from sites with such artefacts, as well as their correlation with other dating approaches.⁷³ It is accepted that with recent summarizing studies, it has been confirmed that the earliest appearance of chariots is recorded in the lands of the Middle East (the

61 GRIGORIEV 2021, 172–173.

62 GRIGORIEV 2021, 173.

63 GRIGORIEV 2022, 162. – This is contrary to what was said by Nikolaus Boroffka, namely that the introduction of the chariot should not be viewed in the context of dependency of either the Carpathian on the Mycenae area or the other way around, as they were equally advanced. Boroffka believes that the regional mechanisms and reasons that led to the development of the chariot vary; nevertheless, they were simultaneous and independent from one another. The common factor for all regions and populations was the important role the chariot played as a prestigious symbol in the customs and rituals of cult practices and burials, see BOROFFKA 1998, 117.

64 GRIGORIEV 2022, 162. – Grigoriev points out similarities in the making of cheekpieces between the Carpathians and the Urals, Kazakhstan, etc., with the features of the Carpathian finds dating back to the very beginning of the Sintashta Culture. Based on this, it was noted that the introduction of the chariot, as a technological innovation in the Carpathians, has no chronological and typological basis.

65 GRIGORIEV 2021, 173.

66 GRIGORIEV 2021, 173.

67 GRIGORIEV 2022, 174.

68 GRIGORIEV 2022, 174.

69 GRIGORIEV 2022, 174. – Grigoriev marks the genesis and the development of the grooved cheekpieces in Anatolia as unclear at this state of research.

70 MARAN 2020a, 516 with further references. – According to Maran the manner in which the chariot is depicted differs in at least two respects from the depictions of chariots known from the shaft graves at Mycenae. The basket/chariot body appears to have a front section rising at an angle from the rest of the body. This morphological feature is unknown from depictions of chariots found in the shaft graves but is reminiscent of the front parts of Near Eastern chariots.

71 MARAN 2020a, 516.

72 See, e.g., MARAN 2020a, 518. – GRIGORIEV 2021, 176.

73 GRIGORIEV 2020, 73.

lands of Syria and Anatolia), with one of the earliest depictions of a chariot in a developed form being from northeastern Iran.⁷⁴ Another equally important issue is the critical analysis of hypotheses regarding how chariot technology spread, and the migrationist and diffusionist views that explain it.⁷⁵ Factually, the cited research approaches overlap and complement each other. The blanks left unfilled are the answers to the questions concerning how the chariot reached Greece, for example. The two possible assumptions and suggestions are for via the Carpathians and the Middle East. Solving this question would be much easier if there were, in the future, to be an increase in the number of cheekpieces from the contiguous regions like the central Balkans and Anatolia.

4.2. An Introduction to Cheekpieces

In the specialized literature, cheekpieces are divided into three main groups: disc-shaped, rod-shaped, and grooved.⁷⁶ They have a vast distribution which encompasses a wide region from east to west – Kazakhstan's steppes, the Urals, the Carpathian-Danube region, Greece and Anatolia. An introduction to them is very important for understanding and analysing the Bulgarian finds. The aforementioned belong to the rod-shaped and grooved cheekpieces (described above).

4.2.1. Disc-shaped Cheekpieces / Scheibenknebel

This type has been extensively studied and analysed by Grigoriev.⁷⁷ At the same time, surprisingly, no specimens of it have been found in the Bulgarian lands. The basic information about this type is presented in the following lines.

The finds from the steppes are divided into several groups: Sintashta, Alakul, Petrovka, Pokrovsk (Pokrovsk-Abashevo) and Potapovka (heterogeneous), depending on which evolutionary scheme the development of the disc-shaped cheekpieces was compiled within.⁷⁸ Based on detailed analyses of the specific features of this type of cheekpiece, the evolutionary infiltration of the so-called Sintashta-Petrovka cheekpieces is traced in the Transurals.⁷⁹ On the other hand, the so-called post-Sintashta changes in eastern Europe are not clear.⁸⁰

74 GRIGORIEV 2020.

75 MARAN 2020a, 506–508.

76 See, e.g., HÜTTEL 1981, 24.

77 GRIGORIEV 2021, 159–164 and Figs. 6–9. – GRIGORIEV 2022, 163–167 and Figs. 1–4.

78 GRIGORIEV 2021, 163. – GRIGORIEV 2022, 167.

79 GRIGORIEV 2021, 163.

80 GRIGORIEV 2021, 163.

4.2.2. Rod-shaped Cheekpieces / Stangenknebel

The type has been examined in detail by Grigoriev, and some of the main data about them are presented in the following lines.⁸¹

Its appearance was registered for the first time in the Carpathian-Danube basin, from where the type's spread began. If we look at some specific contexts, rod-shaped cheekpieces appear in the last phase of the Carpathian Early Bronze Age and persist chronologically until the beginning of the Hallstatt period. They are present in some depictions of Egyptian and Assyrian chariots. At the end of Br A1b, as a result of transformations of a different nature, the Monteoru, Wietenberg and Otomani-Füzesabony cultures emerged. In the early phases, the first patterns of rod-shaped cheekpieces – synchronous with disc-shaped examples – were generated. It can be said that this is the time of the 3rd–2nd millennium BC.⁸² In the literature, the opinion has been adopted that disc-shaped cheekpieces from the Eurasian steppes appeared at the same time as the rod-shaped type from the Carpathians at the end of the 3rd and the beginning of the 2nd millennium BC.⁸³ In general, their cultural affiliation is to Noua, and the earlier objects are related to the lower Ic3 stage⁸⁴ of Monteoru and are compared to the Br A2b/c phase.⁸⁵ The origin of the finds from Assenovets and Belokopitovo can be linked to them. The Carpathian specimens differ morphologically from the steppe ones, and it cannot be assumed that they are borrowed from them. From here follows the conclusion that all the features considered as later innovations of the Eurasian cheekpieces appear simultaneously with those in the Carpathians, together with the characteristic Sintashta cheekpieces (earlier than Pokrovski, Abashev and Potapov) in the period Br A1c. To the east, these innovations appear in the final phase of the Sintashta, Pokrovsko-Abashev and Early Alakul complex. Their collective appearance points to a contact impulse with the West in the Br A2b period.⁸⁶

4.2.3. Grooved Cheekpieces / Plattenknebel

The characteristics of this type are summarized by Grigoriev,⁸⁷ and below some important data about them are presented.

81 GRIGORIEV 2021, 168. – GRIGORIEV 2022, 169–170.

82 GRIGORIEV 2022, 170, 174 and Tab. 2.

83 GRIGORIEV 2022, 170.

84 The different phases of the cultures are shown in detail in GRIGORIEV 2021, 174 and Tab. 2.

85 GRIGORIEV 2022, 170.

86 GRIGORIEV 2022, 170.

87 GRIGORIEV 2021, 165. – GRIGORIEV 2022, 167–169.

The appearance of the type is associated with the end of the Sintashta Culture, with its spread covering vast territories located between eastern Europe, the Urals and Kazakhstan.⁸⁸ There is unanimity about the origin and development of this type of cheekpiece, namely that it was formed on the basis of disc-shaped cheekpieces, and the main reason for this, probably, was to simplify and reduce the production cost.⁸⁹ In the east, the earliest examples of grooved cheekpieces were found in Aksaiman and Obilukin Lug.⁹⁰ In eastern Europe, the earliest specimens are of the Novoklyuchevsky type.⁹¹ The type is characterized by simplified production, which is probably the reason for its wide distribution. The ways in which these items are made overlap with the ways of making disc-shaped items, and the marks of use on them are the same as on disc-shaped ones, both spiked and unspiked. Therefore, this is a continuation of the old tradition: all of them can be used in the harnessing of horses for pulling chariots, but disc-shaped cheekpieces are more convenient for this.⁹² The use of these cheekpieces for riding is possible but not documented anywhere. Probably, they were originally used in combination with disc-shaped objects. Subsequently, the simplification led to the formation of grooved cheekpieces. This probably reflects their use in some cases to harness horses not to chariots but to two-wheeled vehicles. They appeared immediately after the end of the Sintashta Culture, but it is impossible to reliably determine the area of their appearance, since they everywhere reflect the features of the local disc-shaped cheekpieces. We can probably agree with the opinion about the earlier appearance of these cheekpieces in the east, in the Petrovka Culture. In this case, the spread of this tradition to the west reflects, apparently, the same eastern connections that are manifested in the appearance in the west of disc-shaped cheekpieces with an elongated or triangular board and simple spikes. In terms of time, these phenomena approach the end of the Sintashta Culture.

4.2.4. Mycenaean-type Cheekpieces

The Mycenaean type of cheekpieces are represented by eleven finds. They correlate with finds from Sintashta, Petrovski, Alakul and Pokrovs.⁹³ Therefore, they can be considered as infiltrations from the steppes passing through the Carpathians. Closest to the steppe ones are four cheekpieces from Tomb 4 of Grave Circle A at Mycenae, attributed

to type 1 (variants 1 and 3).⁹⁴ The cited specimens have a round body without plates and with a circular opening in the middle. On the front surface, a Carpatho-Mycenaean motif is depicted, and on the reverse three massive spikes with a triangular cross-section are attached, which distinguishes them from the steppe ones, which are equipped with four spikes each.⁹⁵ All the specimens are dated to Late Helladic II or Late Helladic III, and their closest steppe analogues are from Trahtemirova, Kamenki, Balanbasha and plateless cheekpieces from the Sintashta cultural sphere of influence.⁹⁶

5. Conclusion

Until the present, similar artefacts have not been detailed or commented upon in the publications of finds from the present-day Bulgarian territories.⁹⁷ Similarly, the lack of artefacts from the horse harness groups found in southeastern Europe, especially the present-day Bulgarian territories, has not been discussed by academics. The artefacts from Tell Galabovo, Assenovets and Belokopitovo were each found in a settlement context, which suggests that they might have been manufactured there and used by a sedentary community.

The presence of only a few specimens with incomplete information about their contexts and environment of discovery makes it much more difficult to analyse them.⁹⁸ Nevertheless, a few important conclusions and observations can be made.

The formal typological characteristics of the studied artefacts point to the area of the Carpathian-Danube basin as their most probable origin, which is confirmed by the

⁸⁸ GRIGORIEV 2021, 165.

⁸⁹ GRIGORIEV 2021, 165. – GRIGORIEV 2022, 167.

⁹⁰ GRIGORIEV 2022, 167.

⁹¹ GRIGORIEV 2022, 169.

⁹² GRIGORIEV 2021, 165.

⁹³ GRIGORIEV 2021, 170. – GRIGORIEV 2022, 170.

⁹⁴ GRIGORIEV 2021, 170. – GRIGORIEV 2022, 170. – Other bone, bronze and ceramic cheekpieces were found at Kakovatos; Mycenae, “Shield house”; Mycenae Tomb 15; Dendra, Tomb 15.

⁹⁵ GRIGORIEV 2022, 171.

⁹⁶ GRIGORIEV 2022, 171.

⁹⁷ It is possible that artefacts belonging to the discussed horse gear group are kept in some of the museum collections in Bulgaria but have not been identified as such.

⁹⁸ Here it can be mentioned that similar relics dated to an earlier period were found during excavations of a burial mound near the village of Kameno, Sliven region, see DIMITROVA, MARKOV, SIRAKOV 2012. – DIMITROVA 2014. – DIMITROVA 2018. – MINKOV in press. – These artefacts could be related to bearers of material innovations (briefly discussed below) passing through the territory of Europe in the Middle and Late Bronze Age via present-day Upper Thrace. Their discovery in a specific compact area between the villages of Assenovets and Kameno (Nova Zagora and Sliven regions) as well as the mapping of the published imported artefacts and local imitations dated to the end of the Early Bronze Age and the beginning of the Middle Bronze Age allow us to draw a hypothetical route along which the discussed artefacts were distributed, see VASILEVA, MINKOV 2018, 98 and Map 1.

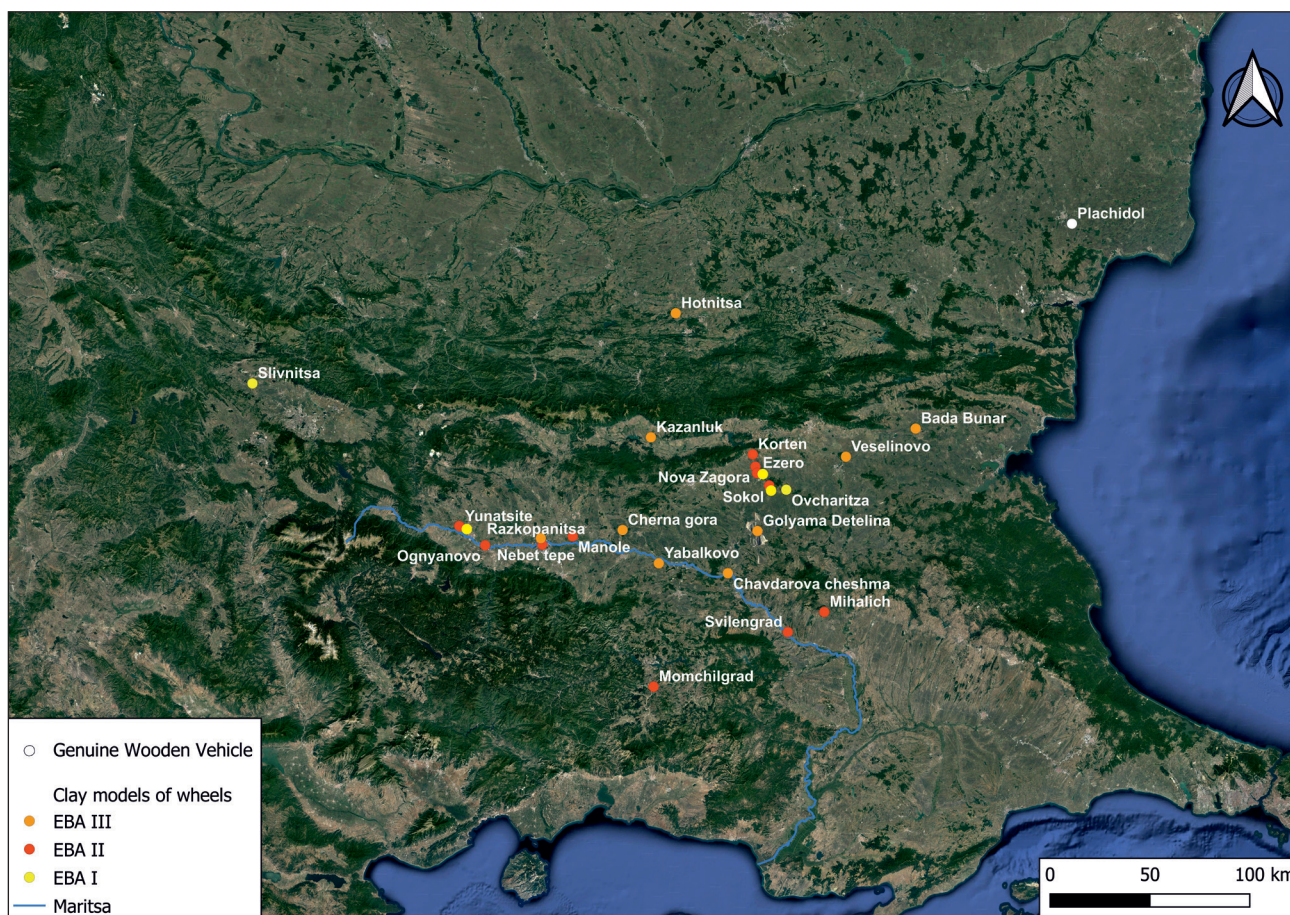


Fig. 4. Map of distribution of the so-called clay models of wheels during the Early and Middle Bronze Age in present-day Bulgaria (Map: D. Sandeva).

indicated parallels in the Bulgarian finds in sites with radial distances to each other, the most distant of which are in central Europe, as the most dense concentration of similar objects was recorded in the territories of present-day central and northern Romania.

The lack of similar finds (in Bulgarian territories) in more distant territories, where the presence of cheekpieces is inherent – eastern Europe, the Urals, and the steppes of Kazakhstan, etc. – as well as the lack of disc-shaped cheekpieces in today's Bulgarian lands, indicates that the appearance of this type of artefact in today's Bulgarian lands was influenced by secondary contacts with a population that had already mastered and adopted their making and use in various settlements and sites in today's Romania. The secondary character of their appearance could also explain their later chronological appearance. It can be noted that for the modern Bulgarian lands, these items were rare, judging by the scarce findings. The presence of single finds allows us to assume that the cheekpieces from Tell Galabovo, Assenovets and Belokopitovo were imported and/or made in the local environment

during the implementation of communication along the existing corridor routes between the Carpathians-Lower Danube and the Mycenaean world, although in transit in a local environment i.e. their appearance is due to single pulses of contact between the sites where they were found in Bulgaria and the areas where the distribution of these objects is pronounced and well documented.

The small number of finds from Bulgarian lands corresponds to the small number of finds in Greece and Anatolia, respectively. The presence of single finds from various points serves to trace the routes of passage of chariots and users of such objects. These are probably the same routes along which the cheekpieces in Bulgaria and Greece were transported and distributed. Why this type of subject, or this technological innovation, has not gained mass and more popularity is still a fundamental and open question. It can only be noted that, similarly to the finds from the Carpathian-Danube basin and those in the Bulgarian lands, the finds were discovered in settlement contexts, they represent single finds (not pairs) and there is no other data about them.

In conclusion, it can be said that contacts between the populations inhabiting the territories of the Carpathians, the Lower Danube and the modern Bulgarian territories were certainly established in light of the discussed cheekpieces. These contacts do not have a permanent character and reflect separate episodes in communications. This is evidenced by the wide expanses of time between the individual finds – Tell Galabovo (Middle Bronze Age), Belokopitovo (Late Bronze Age) and Assenovets (Late Bronze Age/Early Iron Age). This indicates that even in the early stages of the development of rod-shaped cheekpieces, there was an information channel through which the idea of making these objects was probably transferred, even more so considering the importance and strategic importance of Tell Galabovo as a centre of communication and exchange of goods and materials (and ideas) with Anatolia in the Middle Bronze Age.

A review of a group of small clay artefacts found in the territory of present-day Bulgaria and dated to the Early Bronze Age illustrates that the distribution of the clay models of wheels is concentrated in the territory along the Maritsa River⁹⁹ (Fig. 4) and covers the same area of distribution as that of the bone artefacts dated to the Middle Bronze Age, the Late Bronze Age, and the Early Iron Age.¹⁰⁰ The models of wheels do not explicitly confirm the use of horses during this early period of the Bronze Age, but their presence delineates the area of distribution and circulation of other goods and imports, such as ceramic vessels, figurines, ingots, ox-hides and metal artefacts in the Bronze Age.¹⁰¹ In this way, a continuous connection (despite the chronological distance between these two groups of objects) between wheeled transport/wheel models and cheekpieces can be indirectly traced.¹⁰²

It is speculative to talk about the presence of chariots in the Bulgarian lands during this period, considering the single piece of indirect data presented here. The presence of a single copy of the so-called grooved cheekpieces could be considered an indirect indication of its use as a chariot element. This assumption is due to the opinion that the

use of this type of cheekpiece can be associated with chariot harness dating to the post-Sintashta period (immediately after the end of Sintashta Culture) in the interval 1600–1560/1500 BC.¹⁰³

The finds from Tell Galabovo, Belokopitovo and Assenovets certainly show the influence of the Carpathian-Danube area, but it is difficult to determine whether the finds were produced in a local environment or were imported. Due to the lack of disc-shaped cheekpieces and the cheekpieces found in today's Bulgaria, as well as materials that would directly testify to chariot transport in these lands (such as images, ceramic models, etc.), it can be assumed that we are dealing with imported cheekpieces isolated in a local environment. At the current level of research, we could consider the Bulgarian lands as more like a transit area of distribution for these artefacts, but not as part of the main areas of their production and distribution, and likely not even as their periphery.

Acknowledgements

I am extremely grateful to Orlene McIlpatrick and Tatyana Stefanova, National Archaeological Institute with Museum at the Bulgarian Academy of Sciences (NAIM-BAS), for the translation of the text. I would like to express my gratitude to Mr. Gencho Dimitrov, Director of the Historical Museum of Nova Zagora, and Mr. Dragomir Markov, curator at the museum depository, for the opportunity to use the find from Assenovets. I would like to express deeply my gratitude to Prof. Krassimir Leshtakov, Sofia University "St. Kliment Ohridski" (Department of Archaeology, Faculty of History), for the opportunity to use his article before its publication. Last, but not least, I would like to express my gratitude to the reviewers and editors of the article, without whose notes and comments it would not have been published in this form.

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⁹⁹ MINKOV 2021, 205–206 and Fig. 1.

¹⁰⁰ According to Istvan Bona, the models of vehicles were introduced for the first time in Mesopotamia and Syria from where they spread to Anatolia, Crete, and the Caucasus during the transition between the 3rd and the 2nd millennium BC. According to him, this innovation infiltrated to the Carpathians through the Balkan Peninsula, see BONA 1960, 110. Bona believes that the routes through which the wheels and the models of vehicles reached the Carpathians and central Europe followed the valleys of the Maritsa and Morava rivers, see BONA 1960, 98.

¹⁰¹ LESHTAKOV 2006. – VASILEVA, MINKOV 2018. – HRISTOV 2021.

¹⁰² Independently from the present study, a similar opinion was already suggested by Leshtakov, see LESHTAKOV 2021, 29.

¹⁰³ GRIGORIEV 2021, 165.

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