

Complex Societies of Central Eurasia from the 3rd to the 1st Millennium BC

Regional Specifics in Light of Global Models

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The Problem of Chronological Correlation between Sintashta Type and MRC Sites

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The culture of multi-roller ceramics (MRC) and the Sintashta culture are relatively "new" among the known cultures of the Bronze Age of the Eurasian steppe zone. The MRC was first recognized and described in the 1960-1970s. Similar studies of Sintashta type sites mainly took place in the 1970-1990s, and researchers paid attention to the principle of similarity of the two cultural formations remote from each other by more than 1,000 kilometers (Fig. 1). This happened in the second part of the 1970s when the Sintashta type sites had not yet been singled out, and these types of sites were related to the Novokumaksky chronological horizon. This similarity was first shown in the comparison of ceramic vessels; their forms and ornamentation, were compositions of modeled small rollers and bumps were distinctive (Gening 1975:95; Smirnov and Kuzmina 1977:27, 29). It should be mentioned that to illustrate models of MRC vessels authors in most cases showed ceramics with multi-roller ornaments that belonged to complexes of the Srednedonskaya Catacomb culture, that was regarded by some researchers as MRC (Smirnov and Kuzmina 1977:27-31, fig. 9). The described similarity in ceramic ornamentation seemed to allow for making a conclusion about the simultaneous development of the Novokumakskiy horizon and MRC, and to assume the influence of the latter on the near Urals region (Smirnov and Kuzmina 1977:26-27, 32, 42).

S.S. Berezanskaya made a more detailed examination of the chronological correlation between MRC and sites of the Novokumakskiy horizon (Berezanskaya 1986). That author pointed to an abundance of parallels in the arrangement of burial constructions and rites of the compared cultures. She distinguished several types of articles made of stone, tusks, metal, and ceramics characteristic of Sintashta and MRC. On the basis of considerable similarity between MRC and sites like Sintashta, Novy Kumak, and Petrovka, Berezanskaya concluded that there was a cultural closeness. She suggested singling them out together with the Abashevo culture, in a unified pre-Timber-Grave horizon on the territory

from the Dniester River to the Ural. Berezanskaya has also underlined the possibility of absolute synchronization of these sites (1986:37). At the same time she was inclined to synchronize Sintashta-Novokumak antiquities with the early period of the MRC (Berezanskaya 1986:39).

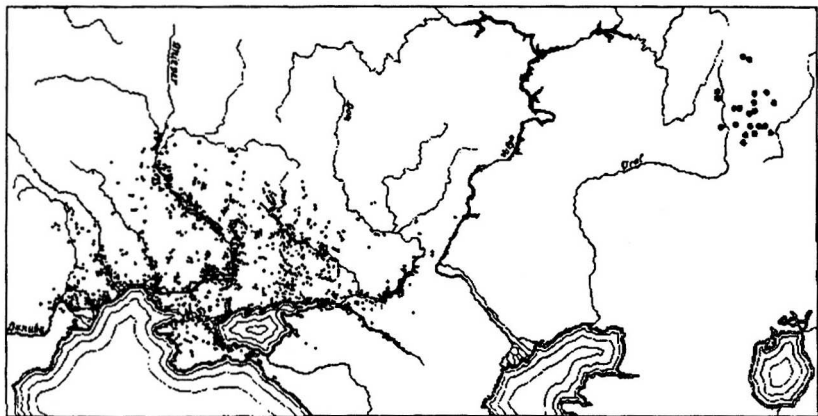


Fig. 1: The map of the spreading of the Sintashta culture and the MRC.

The discovery of new materials in the near Urals area as well as in the Volga area provided the correctness of separating post-Catacomb and at the same time pre-Timber-Grave Alakul chronological horizons on the vast territory of the Eurasian steppe and partially forest-steppe. In the framework of this horizon were the consolidated MRC, Abashevo in the Volga-Don region, Sintashta, Petrovskaya culture, Potapovsky, and Pokrovsky types of sites (Malov 1992:12; Vasilyev, Kuznetsov, and Semenova 1994:74-88; Kuzmina 1994:171-186; Sharafutdinova 1995:132, 140). Further, researchers showed that sites included in this horizon are not absolutely simultaneous and should be separated into, at least, two consecutive groups. Sites of the Sintashta and Potapovo type, the earlier stage of Dono-Volzhsкая Abashevo culture, and MRC are usually referred to the early group. Sites of the Petrovka culture, Pokrovsky type, late Dono-Volzhsкая Abashevo culture, and late MRC are referred to the late group (Besedin 1995; Vasilyev, Kuznetsov, and Semenova 1994:77-78, 92-93; Vinogradov 1995; 1999; Epimakhov 1998; 1999; Otroshchenko 1997; 1998; 1999; Tkachov 1998; etc). However, it should be mentioned, that not all researchers have the same opinions concerning this chronological scheme.

Given an appreciation of the present state and direction of the transition from the Middle to Late Bronze Age culture research, we notice, that one of the natural tendencies of this study is the extending of chronological problems, including the chronological correlation of selected cultures and cultural types. Propounding these questions became possible

due to the inner chronological breaking up of separate cultures and the creation of their periodization, based mainly on the cemetery materials. However, development in this direction for each region or culture progressed differently. Perhaps, the greatest success has been achieved in MRC periodization. Two factors contributed to this: 1) the early distinguishing of the culture; 2) the existence of stratified kurgan graves, which have paramount significance for chronological formations. Thus, regional MRC schemes include two to four stages, distinguished on the basis of a correlation-stratigraphical method (Kovaleva 1981; Pislary 1983; Dubrovskaya 1985; Sharafutdinova 1987; Savva 1992; Litvinenko 1996).

The absence or deficit of stratigraphical observations in the Don-Volga-Ural region makes it difficult to create analogous chronologies and leaves to researchers only the traditional comparative typological method of investigation, because methods of absolutely precise dating are far from perfect. At the same time, in the literature for example, there exists a notion of a Dono-Volzhskaya Abashevo culture which had passed through two, three, or even four stages (Pryakhin 1977:99-100; Pryakhin and Besedin 1996:49-50; Malov 1992:14; Kuzmina 1992:75). A three-stage chronology was suggested for the Petrovskaya culture (Zdanovich 1988:167, tab. 7). During recent years, there has been expressed points of view on the chronological extent of Sintashta which is subdivided into two: the early and late (Gening 1990; Vasilyev, Kuznetsov, and Semenova 1994:93; Tkachov 1999) or three: early, classical, and late (Grigoryev 1999:109) stages or horizons.

At the same time, the existing schemes of an inner periodization remain unnecessary in developing problems concerning chronology or intercultural and interregional levels. Researchers still use wider temporal scopes as if they do not suspect or refuse to admit the possibility of even slight asynchronic processes of cultures and cultural transformations and changes in different regions. Apparently, the popular concept substantiated by V.S. Bochkaryov played a great role. This concept is about development and changes of cultural blocks (Bochkaryov 1993; etc.). Of course, if it is a question of a matter of occurrences, happening within the framework of an obviously united process, i.e. culturogenesis, that was caused by the primarily South Ural center impulse, rather than the gap in time between the neighboring territories phenomena would not be significant. But this slight gap is quite permissible and even natural, because spreading innovations in space, regardless of the way of spreading, and the notion of space itself is connected with the notion of time. However, this theoretical gap might be so insignificant that it would be difficult to notice it at the archaeological level, even taking into account "allowing ability" of the developed bronze chronology and the level of the up-to-date elaborations in this field.

At the beginning of the South Ural phenomenon discovery, which was designated the "Novokumaksky chronological horizon," the similarity between sites of this period and the late Catacomb and MRC was explained by their influence on the near Urals area (Smirnov and Kuzmina 1977:27, 32). At the beginning of 1990s, after generating the concept of the Volga-Ural (Bochkaryov 1991; 1995), then of the South Ural (Otroshchenko 1996) and Sintashta (Zdanovich and Malyutina 1996) centers of culturogenesis, the phenomenon of similarity between Sintashta and MRC was explained by some scientists from completely opposite points of view. According to a new approach, the essence of similarity lies in both cultures' origin interconnection, particularly in the MRC formation under the influence of the South Ural cultural center in a western direction (Otroshchenko 1996:30; 1998:56). Such an assumption leads to a chronological priority of Sintashta in regards to MRC and Abashevo in the Volga-Don region, which is synchronized with the MRC (Otroshchenko 1997:69; 1998:56). It should be mentioned that not all authors are so categorical when solving the problem of the chronological correlation between MRC and Sintashta. For example, some archaeologists, with different levels of conviction and working out in detail, speak about a parallel process of cultures created as a result of the Catacomb cultural-historical community decay (Vinogradov 1999:64-65), or as a result of an impulse, made by a reverse western wave (the principle of compressed demographical spring) from the expansion of the Catacomb culture tribes to the Balkans and Carpatho-Danubian region (Chernyakov 1996:63; Epimakhov 1998:34). However, the last variant of culturogenesis, taking into account the direction of the impulse, suggests a chronological priority of western cultures in relation to the eastern. There is no need to focus our attention on the hypothesis concerning the role of the Balkano-Danube culturogenesis center in creating the culture of the Middle to Late Bronze Age transition period in southeastern Europe and the South Urals (Chernyakov 1996). This is because it evokes many questions and objections even on a theoretical level, but above all, there is no convincing confirmation in the archaeological material. It is more important to analyze the basis of the famous hypothesis concerning the role of the Volga-Ural (South Ural) center of culturogenesis in creating the MRC. However, there still has not been a detailed set of arguments. According to V.V. Otroshchenko, everything started at the beginning of the 1990s when at a scientific seminar V.S. Bochkaryov announced the idea about the necessity to consider the MRC in the Volga-Ural center of culturogenesis sites system. V.V. Otroshchenko used this slight supposition as "an extra argument in favor of the fact that the Sintashta culture sites cannot be dated later than the earlier MRC complexes" (Otroshchenko 1994:41). However, the logic of the modeled culturogenesis mechanism suggested not only synchronism but also an earlier age of Sintashta compared with MRC that

was created under its influence. As has already been mentioned, such a conclusion has been made recently (Otroshchenko 1996:30; 1998:56).

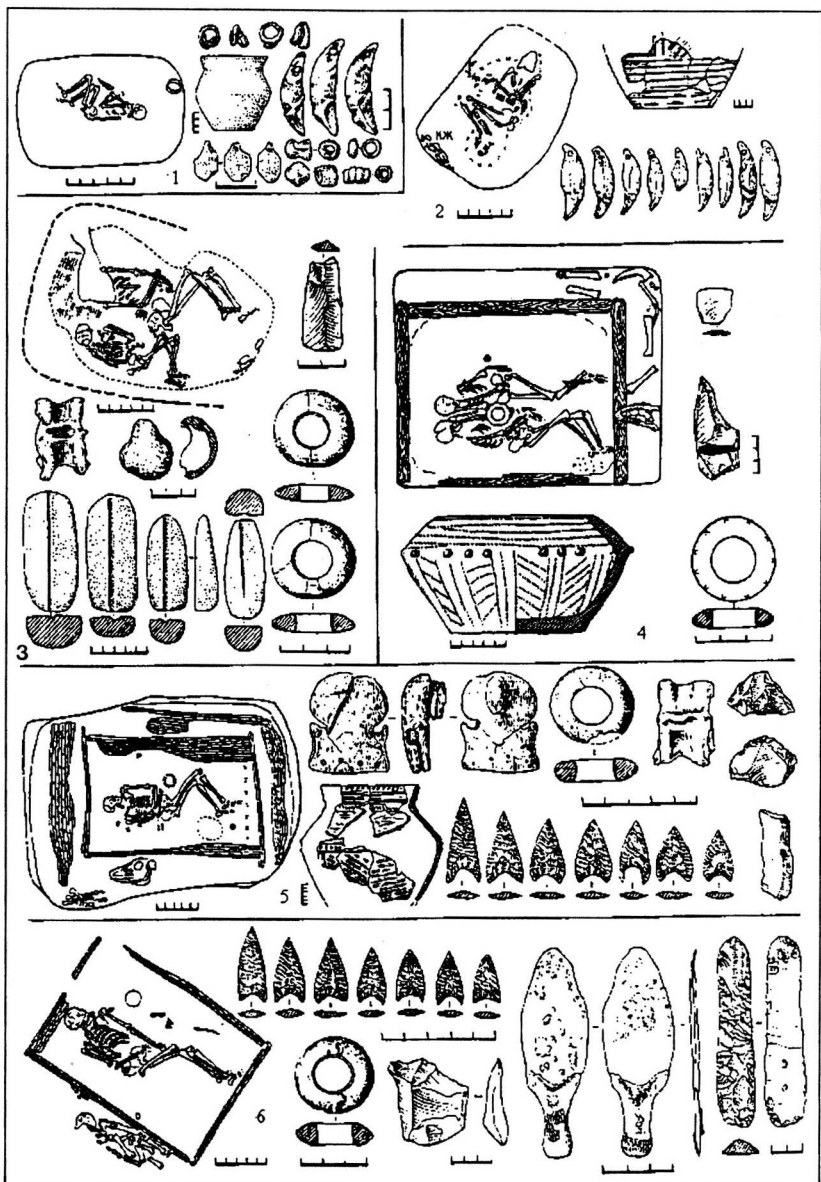


Fig. 2: Elite burials of the early MRC. 1) Andreevka, kurgan 1, burial 1; 2) Ilyovka, kurgan 2, burial 4; 3) Tsymlyanka-II, kurgan 1, burial 3; 4) Gubinikha-II, kurgan 3, burial 10; 5) Beeva Mogila, burial 3; 6) Nikolaevka, kurgan 1, burial 8.

To prove the existence of the cause and effect links between the influence of the South Ural culturogenesis center and the MRC origin, we should advance some arguments, at least, for two statements: 1) MRC must have a real resemblance with this center's cultural derivative, including Sintashta as a cultural ancestor (or cultural stimulator); 2) Sintashta and other eastern cultural relatives should have a certain chronological priority on the MRC—as a most remote form of the culturogenesis center. Let us compare the theoretical statements with the facts.

There is no need to prove, that all cultures which are in this or that way connected with the Volga-Ural (South Ural) culturogenesis center, have a large spectrum of similar features. The main distinguishing features are: a) Abashevo heritage (or component), which is most clearly seen in ceramics and metals (Bochkaryov 1995:26; Kuzmina 1992; Vinogradov 1999; Gorbunov 1992; Vasilyev, Kuznetsov, and Semenova 1994:92-93; Zdanovich and Malyutina 1996; Otroshchenko 1999:53-55; etc.); b) the complex of the so-called "nobility subculture" (chariot-warriors, chariot nobility), that was clearly found in the burial rituals (Masson 1994:7; Bochkaryov 1995:23; Zdanovich 1997:21-63; Epimakhov 1998:21; Otroshchenko 1998:56-57; etc.). Both features, but with some signs of combined peculiarities, always exist in the sites of Sintashta, Potapovka, and Abashevo in the Don-Volga region in the territory from the South Urals to the Don river. In the MRC, it is enough to compare western cultures' ritual—the inventory, according to Otroshchenko, continues the Sintashta-Abashevo layer up to the Carpathians (Otroshchenko 1998:56), where these signs are absent. To prove this, compare the material complex with that of the MRC (Figs. 2-4). Taking into account the fact that attempts to find Sintashta signs in MRC have already taken place in the literature, it is now necessary to analyze them subjectively—the more so that only a few of them were mentioned (Otroshchenko 1998a:116-117).

The basis of all constructions form the thesis according to which MRC is included into the circle of the so-called "chariot cultures" and is therefore why it is characterized by features inherent for this culture. Which ones? Probably it is a question of collective burial under burial mound cemeteries, individual and collective vaults of charioteers, including four-chambered, chariots' remains, teamed horses, cheekpieces, different kinds of weapons, such as metal tips for spears, axes, daggers, quiver sets, and other numerous but similar inventory sets. In MRC only one item out of this numerous set was found—quiver sets, and they were discovered only in four complexes out of more than 2000 burial places in this territory. Otroshchenko suggested interpreting wooden planked frames of MRC burial structures as chariot backs and horses placed near the hides as teamed animals

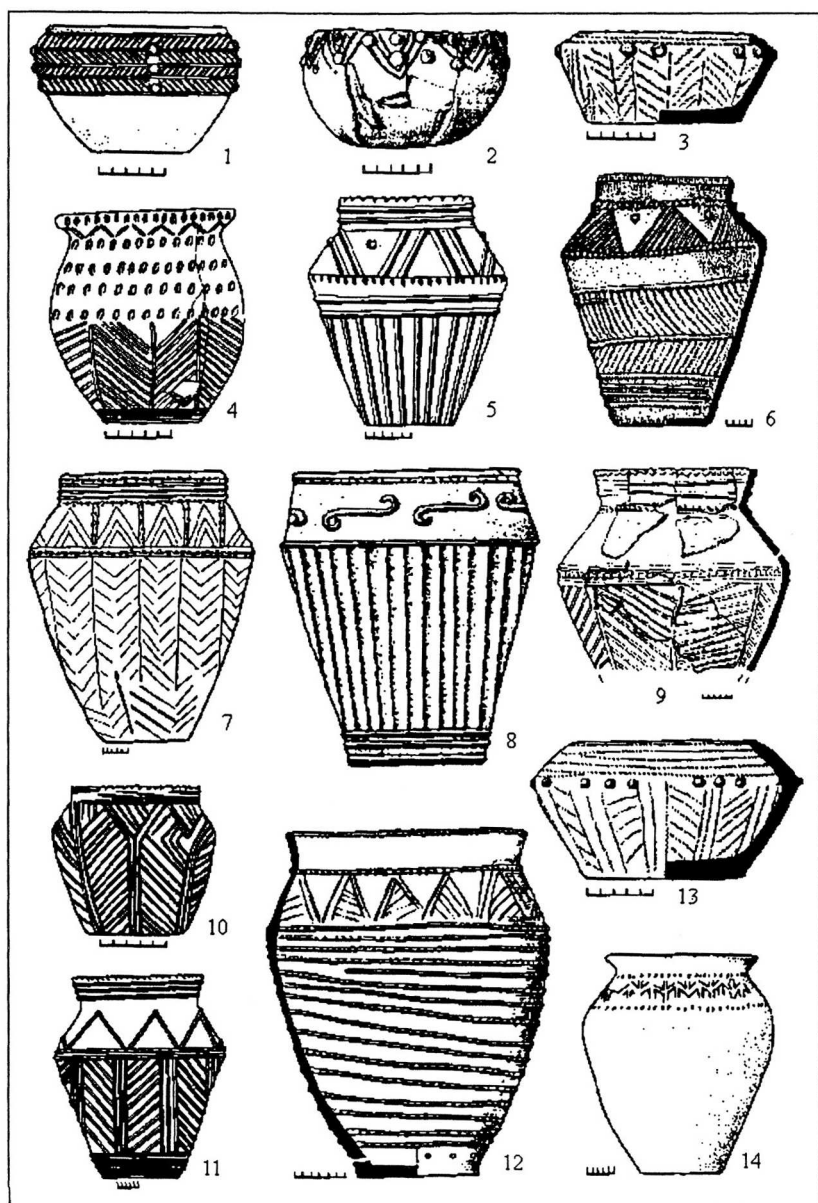


Fig. 3: Ceramics from early MRC cemeteries: 1) Podgorodnoe-V, kurgan 7, burial 2; 2) Polkovoe, kurgan 1, burial 8; 3) Kompaniytsy, burial 261b; 4) Nikolaevka, kurgan 3, burial 1; 5) Zaplavka-II, burial 1; 6) Beleben-II, kurgan 6; 7) Chapaevka (Zavalovka); 8) Zaplavka-II, kurgan 1; 9) Beeva Mogila; 10) Nikolaevka, kurgan 8, burial 6; 11) Zhutovo, kurgan 21, burial 4; 12) Krucha-II, burial 5; 13) Gubinkha-II, kurgan 3, burial 10; 14) Barvinovka, kurgan 8, burial 1.

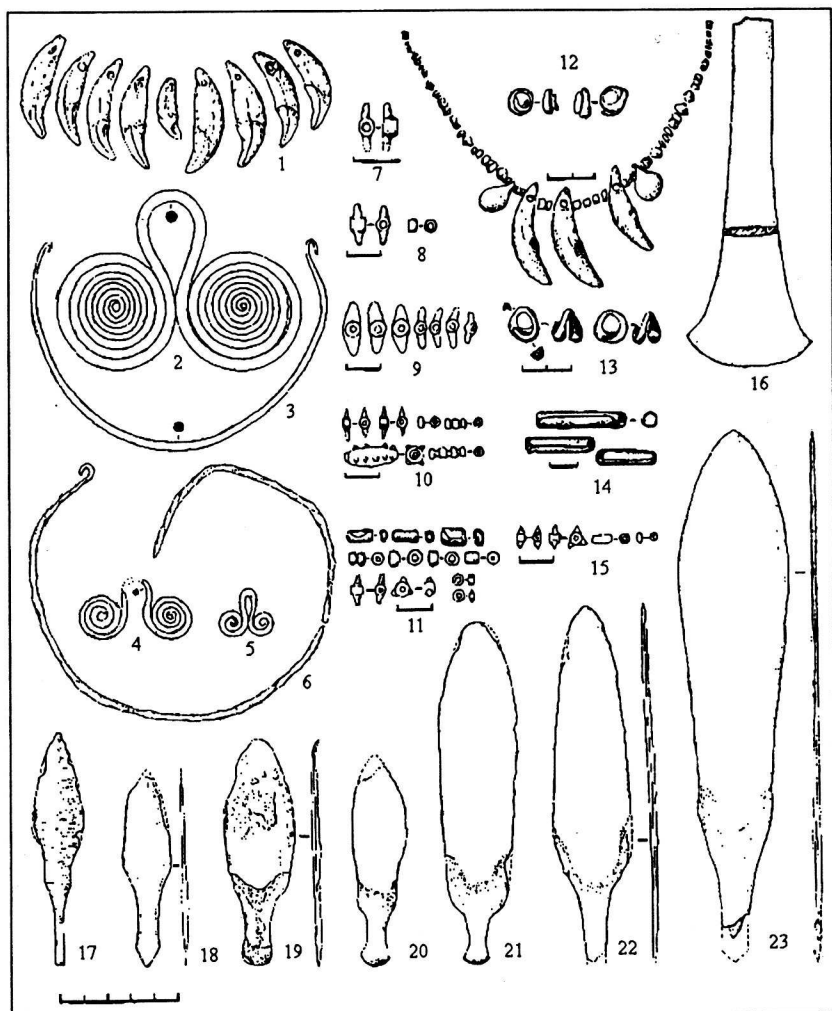


Fig. 4: Ornaments, adze, and knives from early MRC burials. 1) Obilnoe, kurgan 2, burial 5; 2, 7) Shakhtersk, kurgan 8, burial 2; 3) Vozrozhdenie-II, kurgan 2, burial 4; 4, 9) Chikmari-II, kurgan 1, burial 4; 5, 14) Novofilippovka, kurgan 2, burial 2; 6) Kerchik, kurgan 16, burial 5; 8) Vysokoe, kurgan 3, burial 5; 10) Sokolovo, kurgan 5, burial 11; 11) Novoaleksandrovka-I, kurgan 2, burial 1; 12) Andreevka, kurgan 1, burial 1; 13) Gnorovskoe, kurgan 1, burial 6; 15) Buzovka-XXII, kurgan 1, burial 6; 16) Morokino, kurgan 8, burial 1; 17) Nikolaevka, kurgan 5, burial 2; 18) Aleksandrovka, kurgan 1, burial 4; 19) Nikolaevka, kurgan 1, burial 8; 20) Krivoi Rog, Ostraya Mogila, kurgan 1, burial 1; 21) Sokolovsky, burial 2; 22) Novo-Andreevka, kurgan 3, burial 5; 23) Krasnopartizansk, kurgan 2, burial 4 (1, 12) bone; 2-6, 11-14, 16-23) cooper/bronze; 7-11, 15) paste).

(Otroshchenko 1998a:115-116). But he did not take into account that together with the horse, livestock also played the role of escorting animals in the MRC burial places (Litvinenko 1997). Moreover, it remains unclear in the hypothesis about the South Ural MRC roots, as to why such an element as a wooden chariot frame-back was found in a culture so remote from the center, while there is nothing in common closer and more akin to the sites of the Potapovsky type Dono-Volzhsкая Abashevo culture. Supporters of Sintashta migration from the Trans-Urals to the Volga and Don areas point out that on its way to the west, the essential cultural complex undergoes changes, eroding and reducing the share and ever losing features of burial rituals and material culture (Kuzmina 1992:46, 75; Otroshchenko 1997:69-70).

The MRC also does not belong to the Abashevo type culture due to its material complex, and especially due to it is cultural diagnostic components, such as ceramic vessels and objects made of metal and tusks. I think this fact is so obvious that there is no need to prove it. The common conclusion cannot change the existence of some analogies between multi-roller and Abashevo material complexes (Bratchenko 1985:455, 457; Berezhanskaya 1986:30; Chernykh 1995:16) because those analogies are solitary and even controversial. This means that consideration of the mentioned cultures in the framework of a unified block, layer, or horizon especially in the geographical territory from the Urals to Southern Poland, the Carpathian basin field, and the Balkan peninsula (Lichardus and Vladar 1996; Otroshchenko 1998:56) is very relative and can be admitted only with some reservations.

I am personally not absolutely sure, that the early MRC and post-corded ware cultures should be included in this chronological horizon. They seem to be earlier and can be synchronized with Middle-Volga Abashevo and Volsk-Lbishche sites in the east. Nevertheless, we cannot speak about complete synchronization of the last two types.

The great importance of the problem of the cultural-chronological correlation between the MRC and the western block cultures is found in the so-called belt-buckle question. Nowadays a point of view prevails according to which buckles in the Don-Volga-Ural cultures appeared under MRC influence. If we draw a general conclusion, we can reduce it to three points: 1) the main area of their dispersal is in the MRC region; 2) in the western direction to the Don and the Volga rivers, the number of buckles discovered is greatly reduced; 3) according to the typological-chronological scheme of buckle development, this is based not only on the MRC material basis but also on Dono-Volga Abashevo and Pokrovskaya Timber-Grave cultures (Matveev 1996; Litvinenko 1996). It is typical for the Don-Volga-Ural sites that different kinds of buckles are characteristic for late MRC horizons. The attempt to synchronize two-holed buckles of the Dono-Volga

Abashevo cultures with ring-like early MRC buckles and to present them as prototypes of the late MRC buckles (Otroshchenko 1998:56) is not convincing. It pays no attention to stratigraphic data, received for the Dono-Volga Abashevo culture (Sinyuk and Kozmirchuk 1995:38-39) nor to the fact that in the MRC development, its buckles had not only a single stage and two stages—early and late—but also three and even four stages (Pislary 1983; Dubrovskaya 1985; Sharafutdinova 1987; Bratchenko 1995; Litvinenko 1996; 1998). If late MRC is synchronized with the early stage of the Pokrovska Timber-Grave culture (Pokrovska type sites), then the pre-Pokrovska age of the Dono-Volga Abashevo culture burials with buckles (Matveev 1996:31) does not imply their synchrony with the early MRC stage, which is marked by ring-like buckles (Otroshchenko 1998:56). The above facts, which exist in the system of versatile connections and conformity, do not allow us to argue with suggestions that “the change of buckle types in MRC happened under the influence of the Dono-Volga Abashevo culture,” nor does it force us to revise the known chronology of buckles (Otroshchenko 1998:56). This could undermine the principles of archaeological chronology, one of which was clearly formulated by V.V. Otroshchenko: “it would be right to suppose simultaneous functioning of the same type of things in synchronic cultures” (Otroshchenko 1986:149). However, there are other points of view concerning this problem (Safronov 1968:88-89; Rychkov 1994; Penner 1998:40).

We should note that V.V. Otroshchenko stuck to this principle when proving the synchronism between Sintashta and the early MRC stage where he used horn-type “wart” and faience beads as artifact dating categories (Otroshchenko 1994:40). We should bear in mind that “wart” and horn-type beads are two different kinds of beads thought somehow to be similar. We think that behind this singularity a certain chronological difference can be found.

Is it possible to relate this single conclusion to the chronology of different types of ornaments with that are convex? The point is that in most of the early MRC burials (16 complexes), short double-horned beads and long “wart” tubular beads with four knobs, are more typically known in the late Catacomb sites (Bratchenko 1976:152; Bratchenko and Shaposhnikova 1985: 418; Derzhavin 1989:186, fig. 26; Gey 1995:9-10, fig. 4.4; Smirnov 1996:93, fig. 41.9; 47.31). Only in two MRC burials (Novoaleksandrovka 1, kurgan 2, burial 1 and Buzovka-XXII, kurgan 5, burial 2) were double-horned beads combined with short “wart” beads with three knobs found. In one additional burial of the middle-late MRC stage (Minovka-XVII, kurgan 2, burial 1) a bead with two asymmetrical knobs was found.

Three “wart” beads are not typical for Catacomb sites but beads with four knobs, sometimes called “fourhorned” are (Bratchenko 1976:100, 147-148). However, the appearance of “wart” beads, probably relates to the late

Catacomb (Manychesky, Pozdnedonetsky) stage. This is confirmed by the fact that similar beads with smoking pots on cross-shaped legs have been found in a near Caucasus Catacomb burial: Tsagan-Usn-V cemetery in Kalmykiya, kurgan 1, burial 9 (S.V. Arapov's discoveries in 1987). But the main period of existence of beads with three "warts" in steppe sites relates to the final period of the Middle Bronze Age. They are represented in the Kalmykiya and Caucasus regions by the sites that are attached by different authors to horizon D2 of the IV Kalmykiya and near Caucasus group (Safronov 1974:103-111), to Timber-Grave-Catacomb or Timber-Grave-near Caucasus (Kuibyshev and Chernosvitov 1984:99-101), to the final stage of the Stavropol Middle Bronze Age burial group (Derviz 1989), partially, to the III-d group of the Catacomb culture's Baturin variant (Trifonov 1991:102-103, 111), to a particularly late Catacomb cultural group (Gey 1995:7), and to the post-Catacomb group of East Manych (Bratchenko 1995:11, 19), which are usually synchronized by most of the mentioned authors with MRC. "Wart" beads with three horns are widely represented in the Trans-Caucasus and in the Northern Caucasus, where they are connected with sites of Trialeti and Gincha cultures as well as others. Though there are many beads with knobs in the Caucasus region and nearby territories, the approximate time of existence of already known types ("wart" tubular beads, short "wart" with three or four knobs, double-horned beads) is still difficult to define. Therefore, there is a point of view in the literature regarding a rather wide chronological scope of this kind of jewel and their weak dating abilities. It should also be mentioned, that nobody has ever dealt with this question. This fact, and also the achieved level of the Caucasian cultures study mentioned above, does not help to point out their precise chronological correlation neither between each other nor with the Middle Bronze Age steppe of the near Caucasus region and northern territories sites, nor with MRC, while taking into account its division into several periods. However, as I have tried to point out, long horned beads, short four-horned, and double horned beads play the role of earlier types of ornaments in the sites of the steppe near the Caucasus and Northern Pontic regions. They are typical for late Catacomb cultures and early MRC. Three-horned (with three "warts") mark the post-Catacomb period in the steppe. We can assume that in the early MRC there is a moment of chronological junction and partial co-existence between earlier double horned beads and later ones with three "warts." However, there are not enough details to make a final conclusion.

Returning to the main topic of this article, let us point out, that in most cases exactly three convexed beads are represented in eastern "chariot culture" cemeteries: Sintashta, Grafskie Razvaliny, Verkhnyaya Alabuga, Krivoe Ozero, Kamenny Ambar-V, Tanabengen-II, Storozhevka. From our point of view, these may indicate their chronological status in comparison

with the early MRC. Sintashta type sites are the eastern outlying area of horned beads spreading west and their appearance in the Volga-Ural region might have been late if we compare them with the main areas of living—Caucasus, near Caucasus area, Lower Don, and part of Ukraine (left bank of the Dnieper river). Kurgan 4 of the Sintashta culture cemetery, Kamenny Ambar-V gives an additional argument in favor of these suppositions. Here, in one of the graves the finds constituted beads with three “warts” and a round tusk buckle with bent profile and two holes of different size—the latest, according to typological-chronological MRC buckles scale (Epimakhov 1997:246).

Eventually as one of the most important, if not the most important, of cultural historical links and MRC synchronization on the one hand and Sintashta and other chariot cultures on the other, are cheekpieces. Let us speak briefly about them. I have not supplied a detailed commentary to this question due to the fact that until the present they have not been found in authentic (closed) MRC complexes. The following features are considered to belong to MRC: 1) the cheekpiece from Trachtemirovo is a non-identified find (Leskov 1964); 2) the cheekpiece from Kamenka is found in the settlement's open cultural layer, connected with the Kamensko-Levinrovskaya group of sites, and it is necessary to find the chronological correlation with the MRC (Bratchenko 1985a); 3) the cheekpiece from the multi-layered Polyuny-I settlement also does not have a clear cultural date and is related by many researchers to both the MRC (Bratchenko 1985:454; Berezanskaya 1986:24) and to the late Catacomb culture (Berestnev 1997:94). From my point of view, according to its typological-morphological characteristics the cheekpiece from Polyany should be correlated with the Alakul finds (Alakul, kurgan 13, grave 2; Novonikolskoye, kurgan 5, grave 2) and dated to the period of the Timber-Grave culture (Kuzmina 1994:180-181). I will not absolutely deny the existence of chariots in the MRC tribes, because I have neither positive nor negative information. Regardless of a further solution of this problem, the fact, according to all archaeological parameters MRC does not belong to the Don-Volga-Ural set of “fighting chariot cultures,” remains undoubted. Even if we assume, that cheekpieces, e.g., in Trachtemirovo, that is on MRC territory, were related to MRC, the problem to what stage they belong remains unclear. That is why it is impossible to use cheekpieces to solve the problem concerning MRC and Sintashta type sites chronology.

In summary, we can establish the following.

- 1) A certain similarity of Sintashta type sites in the South Ural region and the MRC of the Pontic region is defined by common features. The features can be conventionally called “the heritage of Middle Bronze Age” if the genetic connection between the MRC and the late Catacomb world,

primarily in the Middle Don (Kharkov, Voronezh) Catacomb culture, has convincing space-time grounds. In this case, the Catacomb (Catacomb-Poltavka?) "coloring characteristic" of the Sintashta sites, modified and complimented by the prevailing Abashevo and some unknown component still remains without any explanation.

2) While establishing the western (agreed multiroller) element as one of the main elements in creating Sintashta, the eastern (agreed Abashevo-Sintashta) component, on the contrary, is not established in the MRC. What probably reflects the real culturogenetic impulse direction at the end of the Middle Bronze Age is from the west to the east.

3) According to the general appearance and partial characteristics, MRC does not belong to the set of the so-called "fighting chariots cultures" of the Don-Volga-Ural region and cannot be described as a result of the Volga-Ural (South Ural) culturogenesis center at the turn of the Middle-Late Bronze Age.

4) It is still impossible to establish the exact chronological correlation between Sintashta and MRC, taking into account the different stages within them. At the same time, it can be definitely concluded, that the creating of Sintashta in the South Urals and the appearance of similar sites in the Volga region (Potapovka) and Don basin (Dono-Volga Abashevo), could not precede the creation of MRC. On the contrary, taking into account all the above mentioned facts, it is possible to admit the slight chronological priority of MRC over Sintashta and other chariot cultures.

There are not enough facts to make a definite conclusion and one can only say, that the early MRC and Sintashta are sometimes simultaneous, while late MRC is synchronic with the Petrovska culture that replaced Sintashta.

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