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Caesurae in the Bronze Age chronology of Eastern Bulgaria

Krassimir Leshtakov, Zoï Tsirtsoni

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IN DER ZIRKUMPONTISCHEN ZONE
UND KONTAKTE MIT IHREN NACHBARGEBIETEN

PRÄHISTORISCHE ARCHÄOLOGIE IN SÜDOSTEUROPA

BAND 30

Herausgegeben

von

BERNHARD HÄNSEL

und

WOLFRAM SCHIER

Institut für Prähistorische Archäologie
der Freien Universität Berlin

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Vorwort

Der vorliegende Band vereint die Beiträge einer Tagung gleichen Titels, die vom 16. bis 20. Mai 2012 in Varna, Bulgarien stattgefunden hat. Sie wurde von einem der Unterzeichneten organisiert und stellte das dritte Humboldt-Kolleg dar, das sich der prähistorischen Archäologie des Schwarzmeerraumes widmete. 2007 hatte ein erstes Humboldt-Kolleg zu dieser Thematik im georgischen Tbilissi stattgefunden, 2010 folgte die zweite Tagung in der moldavischen Hauptstadt Chişinău. In Varna wurde – gegenüber den beiden vorangegangenen Tagungen – der chronologische Rahmen bis etwa 6000 v. Chr. erweitert, um das Frühneolithikum des westpontisch-ostbalkanischen Raumes einzuschließen. Im Untertitel der Tagung wurde wiederum ein etwas anderer Akzent gesetzt, in dem der Fokus auf Wechselwirkungen zwischen den ans Schwarze Meer grenzenden Regionen und Kontakte in ihre Nachbarräume gelegt wurde, womit sich der geographische Bezugsrahmen erweiterte.

Die Vorbereitung des Kollegs wurde unter Mitwirkung von Dr. Krum Bacvarov (Sofia) verwirklicht. Vor Ort unterstützten Dr. Vladimir Slavcev (Varna) und Mag. Nikolaj Hristov (Provadia) die Organisation des Kollegs. Für die reibungslose Organisation und überaus gastfreundliche Aufnahme im Tagungsparkhotel *Persey* mit seinem malerischen Schwarzmeerblick möchten wir Frau Prolet Vasileva und weiteren ungenannten Helferinnen und Helfern herzlich danken.

Knapp zwei Drittel der in Varna präsentierten Vorträge wurden zur Publikation eingereicht und sind im vorliegenden umfangreichen Band enthalten. Sie lassen sich in mehrere Gruppen gliedern. Drei Beiträge (B. Govedarica, O. Höckmann und H. Todorova) haben in großräumiger, teils diachroner Perspektive den Schwarzmeerraum im Blick und behandeln Phänomene von übergeordneter Bedeutung.

Eine größere Zahl von Artikeln behandelt Beziehungen zwischen zwei Teilgebieten, wie etwa Thrakien und die nordwestpontischen Gebiete (V. Becker, R. Krauß), die nordpontischen Steppengebiete in ihren Beziehungen zum westlichen Schwarzmeerraum (N. Kotova, A. Reingruber u. J. Rassamakin), Kontakte und Vergleiche zwischen dem Westpontikum und dem Karpatenbecken (F. Gogăltan, K. Fischl u. R. Krauß, W. Schier) oder Verbindungen zwischen Anatolien und Ägäis sowie dem Ostbalkan und Westpontikum (C. Lichter, Z. Tsirtsoni).

Eine dritte Gruppe von Beiträgen stellt neue Forschungsergebnisse zu einzelnen Fundorten oder Kleinräumen vor. Dazu gehören natürlich die Aufsätze zum Gräberfeld von Varna und der Varna-Kultur (V. Leusch, E. Pernicka u. R. Krauß, V. Slavcev, K. Dimitrov u. M. Etzel, Y. Boyadziev, V. Petrova), aber auch die Vorstellung neuer Forschungsergebnisse aus Provadia (V. Nikolov) und Akladicheiri bei Chernomorets (M. Lyuncheva u. M. Klasnakov, Th. Rehren, P. Leshtakov u. P. Penkova) sowie die Studie über steinerne Streitäxte aus kupferzeitlichen Gräberfeldern NO-Bulgariens (K. Boyadziev).

Zwei Artikel nehmen sozioökonomische Phänomene der Kupfer- bzw. Frühbronzezeit mit Bezug auf theoretische Modelle in den Blick, nämlich der Beitrag von M. Ivanova und jener von J. Müller und A. Windler zur Entstehung sozialer Ungleichheit.

Eine letzte Gruppe von Beiträgen schließlich rundet das chronologische Spektrum des vorliegenden Bandes über die Frühbronzezeit (K. Leshtakov u. Z. Tsirtsoni, R. Gleser, S. Alexandrov u. E. Kaiser) bis hin zur späten Bronze- und Eisenzeit ab (E. Kaiser u. E. Sava, R. Echt, B. Teržan).

Nicht nur geographisch und chronologisch, sondern auch thematisch fächert der Band ein breites Spektrum auf, das von chrono-typologischen Ansätzen über kulturhistorische und sozialarchäologische Fragestellungen bis hin zur Archäometallurgie, Wirtschafts- und Landschaftsarchäologie reicht.

Aus verschiedenen Gründen hat sich die Publikation des Bandes leider verzögert. Den Autorinnen und Autoren, die noch 2015 die Möglichkeit zu Korrekturen und kleineren Ergänzungen hatten, danken wir für ihre kooperative Geduld. M. Hegewisch übernahm das Layout des Bandes und zusammen mit K. Winger die Redaktion. So sind wir überzeugt, dass die Publikation der Humboldt-Tagung in Varna einen repräsentativen Querschnitt der überaus lebendigen und vielfältigen Forschungsaktivitäten zur Archäologie des Schwarzmeerraumes widerspiegelt.

Leider war es der Grande Dame der bulgarischen Archäologie, Henrieta Todorova, nicht vergönnt, das Erscheinen des Tagungsbandes mit ihrem Beitrag zu Klimawandel und Kulturkollaps zu erleben. Wir möchten diesen Tagungsband ihrem Andenken widmen.



Die Teilnehmer des Humboldt-Kollegs in Varna am 16.–20. Mai 2012

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Caesurae in the Bronze Age Chronology of Eastern Bulgaria

Krassimir Leshtakov, Zoï Tsirtsoni

Zusammenfassung

Die Bronzezeit auf dem östlichen Balkan, speziell dem heutigen Ostbulgarien, ist durch kaum verstandene Phänomene geprägt, die sich an drei Zeitpunkten ereigneten: der erste ist der Beginn (der Übergang vom späten Chalkolithikum zur Frühbronzezeit über die „proto-bronzezeitliche“ Cernavoda-III-Phase), der zweite wird durch den Wechsel von gut sichtbaren, vor allem Tell-basierten EBA3-Gesellschaften zu den weniger gut sichtbaren – um nicht zu sagen unsichtbaren MBA-Strukturen charakterisiert, der dritte beinhaltet den Übergang zum EIA am Ende des 2. Jht. v. Chr. Die Ähnlichkeit, mit der sich diese drei großen Einschnitte darstellen (massives Verlassen der Siedlungen, Ausbleiben von archäologisch überlieferten Befunden über weite Regionen und Zeiträume, abrupter Wandel der materiellen Kultur in der nachfolgenden Zeit), haben teilweise zu der Annahme ähnlicher Ursachen geführt. Klimaänderungen und Invasionen sind hierbei die am meisten bemühten Erklärungen, obwohl keine von ihnen die beobachteten Vorgänge zufriedenstellen erklären könnte. Der Beitrag zielt auf den zweiten der genannten Einschnitte ab und erörtert Erkenntnisse aus einer Vielzahl neu ausgegrabener Fundorte verschiedenen Typs (Flachsiedlungen, aber auch Höhenheiligtümer und Gräber) im oberen Thrakien und den Rhodopen. Keramikanalysen sowie 22 neue hochgenaue Radiokohlenstoff (AMS)-Daten ermöglichen es, die Lücke in der Besiedlung des Ostbalkans während des 3. und der ersten Hälfte des 2. Jt. v. Chr. zu überbrücken und somit die bisher im Dunklen liegende Mittelbronzezeit zu beleuchten. Ostbulgarien zeigt somit die einzige fortlaufende kulturelle Sequenz für die gesamte Bronzezeit nördlich von Troja.

Abstract

The Bronze Age period in the Eastern Balkans, and more specifically in present-day Eastern Bulgaria, is marked by poorly understood phenomena at three specific moments of its course: one is the beginning (the transition from the Late Chalcolithic to the Early Bronze Age properly speaking, via the “proto-Bronze” stage known as Cernavoda III), the second is the shift from the highly visible, mostly tell-centred EBA 3 societies, to the more discrete, not to say invisible, MBA formations, and the third – the transition to the EIA at the end of the second mill. BC. The similarities between the external characteristics of these three critical periods (massive abandonment of settlements, subsequent scarcity of evidence over large areas and for long time spans, abrupt change in material culture in the period coming next) have sometimes led to the assumption that the causes would also be similar. Climate changes and foreign invasions are those most frequently advanced, although none of them seems to explain the observed changes in a satisfactory way. The paper focuses on the second timeframe, exploring data from a number of freshly excavated archaeological sites of different types (flat settlements, but also peak-sanctuaries and tombs) in Upper Thrace and the Rhodopes. Evidence from pottery, together with a series of 22 new high-precision radiocarbon (AMS) dates, allow to fill the gap in the settlement of Eastern Balkans during the late 3rd and the first half of the 2nd millennium BC, throwing light on the so-far obscure Middle Bronze Age. Eastern Bulgaria thus displays today a practically continuous cultural sequence for the entire Bronze Age, the only one north of Troy.

Geographical framework

It is hardly necessary to define the term Eastern Balkans for the later prehistory as it has long been adopted by many authors, and is backed by convincing evidence. Here it is worth mentioning that a similar division has already been proposed for the Early Chalcolithic (Lichardus *et al.* 2000, 8). Thus the territorial framework will barely be questioned and it is valid not only for the cultures considered in this paper but also for the earlier cultural development (comment on various opinions in the historiography and culture boundaries mapping see Leshtakov 2006a, 142–151; 2009, 55; 72, fig. 1). To the east this territory is definitely bordered by the Black Sea littoral, whose cultural diversity in the 5–3 mill. BC is well argued in many works, while its western boundary is more intriguing. Evidently, it follows

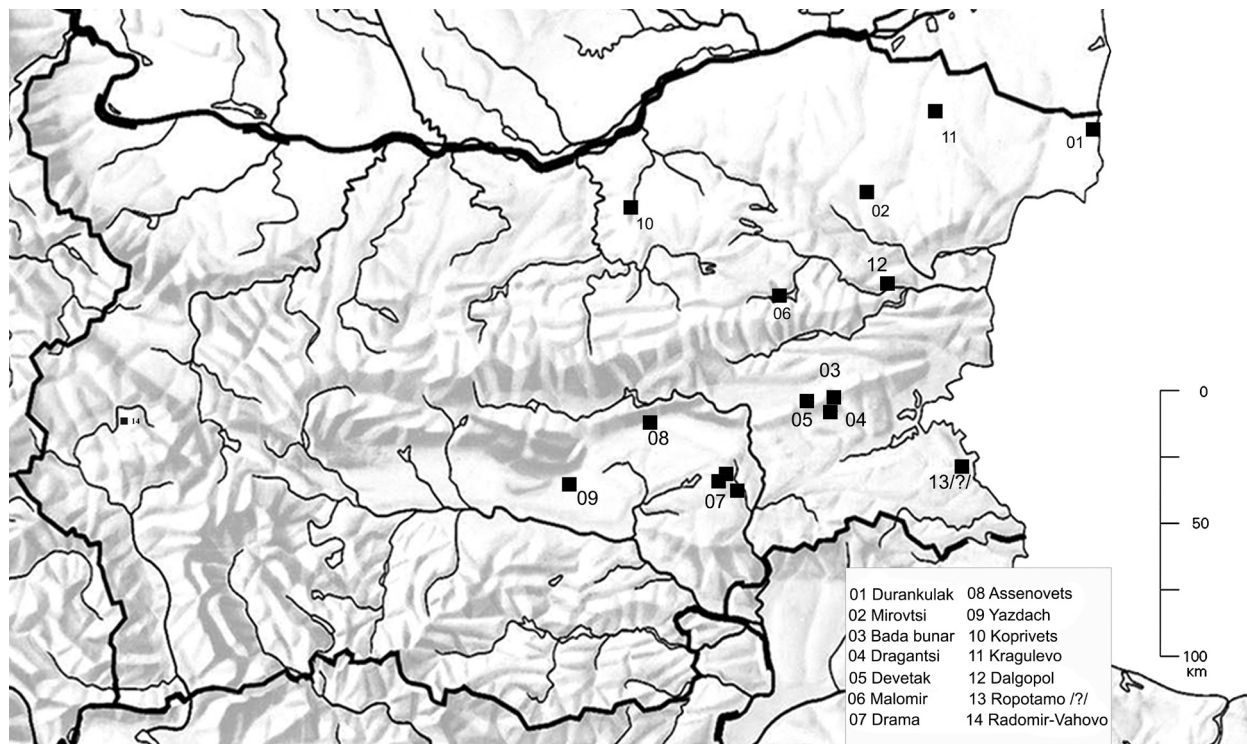


Fig. 1. Map of distribution of Chernavoda III pottery in East Bulgaria. Author: D. Ilieva.

the imaginary line connecting (from South to the North) the island of Thasos, the city of Plovdiv, and North Central Bulgaria. Its southern boundary runs probably along the northern coasts of the Aegean and Marmara Seas (along with the adjacent islands); the northern border though remains to be settled. Quite possibly it stretches to the forest-steppe and steppe zones of tempered Southeast Europe. Despite a certain internal regionalization, cultural and environmental variation, and diversity of the processes that go on within this vast region, the common trends, rate and phases of the development provide a degree of coherence, especially when one sees these phenomena in the perspective of the Eastern Mediterranean or from a Central European point of view. This paper focuses on Eastern Bulgaria as a sub-region of the Eastern Balkans territory; it is further divided into north-eastern and south-eastern areas. From the north and the south this territory is politically delimited, i. e. those borders are entirely artificial. Although the Lower Danube is occasionally set apart as more or less autonomous (Parzinger 1993, 84 ff.; Alexandrov 2011, 308), in our view it should be considered as an integral part of the north-eastern Bulgarian sub-zone, and hence there is no need to consider it separately here. The Balkan Range running west from the coast has often been viewed as an internal natural divider; it should be understood however that it had never actually been a real barrier as those parts of the mountain are relative low and traversed by numerous passes.

Chronological issues

Alas, the issues of the Bronze Age chronology do not fit in the same 'peaceful' picture as the geo-cultural frameworks; at least three chronological spans are subjects of highly charged discussions. The first one refers to the very end of the Late Chalcolithic and the beginning of the next period, the second is concerned with the end of EBA 3 and the beginning of the MBA, as well as the nature of the MBA in general; and the third embraces the very beginning of the LBA. These three timeframes share common questions and certain range of similar themes, and among them the role of proposed climate changes assumed with a great deal of probability... It seems that not only the Late Chalcolithic and the Early Bronze Age but also the LBA vacated the historic scene in a similar manner. However, each 'transitional period' has its own specificities and any mechanical comparison veils a risk of simplification of the reconstructed pictures.

The first debated period¹ has unsettled chronological limits; it covers, potentially, from a couple to a dozen of centuries and comprehends a comparable number of post-Chalcolithic and proto-Bronze Age cultures. Whether their

¹ The 'Transitional period' to the EBA is only mentioned here; see the detailed discussion in Tsirtsoni, this volume.

carriers were immigrants, a product of autochthonous development or the result of a combination of both elements, is a matter of details, as no one doubts they suggest some kind of ethnic manifestation. Hence, the significant cultural transformations seem very plausible and we can hardly seriously think of a total depopulation of the Eastern Balkans any longer. The later chronological limit of these processes reaches the beginning of the Ezero-Nova Zagora-Dyadovo stratigraphic sequence, which consists of at least 23 or 24 building levels, and theoretically it could be placed after the second half of the fourth millennium BC². Obviously, this sequence *per se* spans over the entire third millennium BC and finishes at the very end of it affecting the next debated period, and the transition between EBA and MBA may be highlighted stratigraphically. Unfortunately the same is not valid for the next transition, from the LBA to the EIA, and the problems arise in geometric progression.

Due to page limitation, an in-depth review of the considered domains is impossible; hence I will focus on the issues which are chronologically closer to us and are endowed with ampler fresh information. But before we face the real subject of this paper, a few words are due about the beginning of the EBA in the area, in the light of the recent evidence.

The genetic ancestor of the Ezero A culture still remains to be identified. It seems like the new data poses more questions, focusing on the outstandingly manifested contacts with the Northeast Balkans. One of the new developments that must be stressed is the ever growing area of the Cernavoda III style pottery, which now clearly reaches the Chirpan heights in the very heart of Upper Thrace (Fig. 1). One of these proposed centres is the Tundzha valley and in particular the valley of its right tributary, the small river Kalnitsa. Over there is situated the so-called Drama-Siedlungskammer, a place of long-lasting German-Bulgarian excavation. The recently published radiocarbon dates for Drama Merdzhumekya – South-eastern slope have for the first time clarified with a great degree of confidence (95,4%) the onset of Cernavoda III pottery style in Thrace: between the 38th and the 34th century BC (Gleser 2011, 193–199, Abb. 7; Drama 1, 283–294 and esp. 292). Unfortunately, as it has already been remarked (Leshtakov 2006a, 155) and confirmed recently (Drama 1, 322–323), it is still impossible to speculate on the stratigraphic correlation of Cernavoda III to the Ezero A pottery style. The sites yielding both styles are plotted in Drama micro-region but always at separate locations (Drama 1, 305)³. The situation all over Thrace is quite comparable; nowhere the two styles have been identified together or in a chronological succession mirrored in any stratigraphic profile, either at open-air settlements, or at tell sites. In Drama micro-region, we have a picture of a normal EBA cultural development: after the EBA 1–2 sites there is evidence illustrating the ongoing settlement life. The local BA ceramics repertoire in the Ditch (Objekt 009) is assigned to the EBA 3 (Gleser 2011, 191 with ref.)⁴ or even later; in the literature it is considered as an element of the Nova Zagora MBA culture (Lichardus *et al.* 2000, 21; 34–35). Accordingly, even if Cernavoda III culture exists there, it has no own line of development. We should consider the thesis of smooth transformation of Cernavoda III into Ezero pottery style. At the present stage of the investigations it looks like a bit exotic!

Another element that makes difficult the appreciation of the real nature of Cernavoda III presence at Drama is that the typical sherds are found in a cultural layer⁵ covering only the south-eastern slope of the hill. The interpretation of these remains as a settlement is not very convincing because of the absence of any houses or thermal installations, or any other features on a vast area of ca. 1213 square metres (Drama 1, 24, Abb. I.6, 36 and esp. Nos. 33 and 34)⁶. Accordingly, some alternative variants should also be considered but obviously not here. On the other hand, the later chronological limit coincides with the onset of the Ezero A pottery, which indirectly supports the suggestion that the two styles should have been simultaneous for some time.

However, the general cultural context draws a well-defined contrast: the Ezero A ceramics are associated with a well-developed culture with big tell settlements, stone defensive walls and flat or barrow cemeteries, advanced farming and stock-breeding economy, and finally, clearly manifested southern contacts, the beginning of which is placed immediately after the middle of the fourth millennium BC (Leshtakov 2006a, 170–173 with ref.). In fact, we know no Cernavoda III house, settlement or hillfort, but only pottery sherds and a certain number of entire vessels. Hence we arrive at the crucial question, the answer of which is still eluding us: shall we associate the Cernavoda III pottery

² The distance between the aforementioned large tell-sites is ca. 3–4 km and it lets us think about one main and common sequence in stratigraphic and cultural sense.

³ It is interesting to note that the find-spots of Cernavoda III pottery in the Kalnitsa valley are ca. half a dozen contra a single site with Ezero A ware, cf. Drama 1, 305–306.

⁴ The single bone sample from the Objekt 009 is obviously intruded from earlier features by the digging of the ditch or by erosion, as the date Bln-5116 fits the time of Cernavoda I culture according to Gleser (2011, 191–192).

⁵ Whether this is really a cultural layer of some duration or a thin layer of short occupation is questionable. Cf. Gleser 2011, Abb. 6, p. 192.

⁶ Only the so-called Hüttenlehmstrukturen (Drama 1, 43–44, Abb. IV.4–5) could be interpreted as house debris but there is no secure evidence that they were preserved in situ and not transported by cleaning of the terrain as in many other cases.

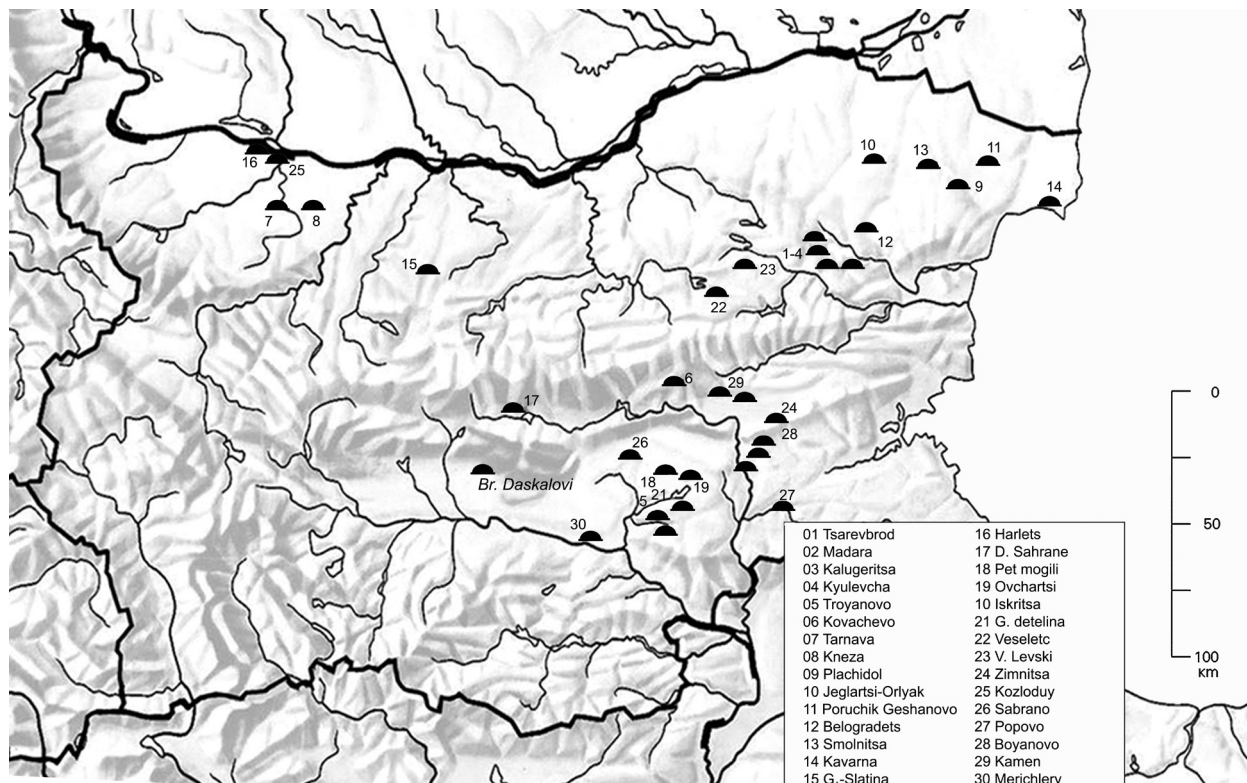


Fig. 2. Map of investigated barrow graves from the EBA in East Bulgaria. Author: D. Ilieva.

south of the Balkan Range with an independent culture, or is this simply a separate pottery style? The assumption of its northern origin – coming from the Lower Danube – seems for the time being well argued. However, the allusion is obvious: it is easy for anyone to find this situation quite reminiscent of the older problem with the origin of *schnurverzierte Keramik* in the Balkans and its role as an archaeological source. Similarly, its ‘expansion’ from the steppes into the south, reaching down to the South Greece (A. Mamas and Eutresis) but not entering the Peloponnese (Hanschmann/Milojčić 1976, 231–235 with ref., Abb. 12) seemed well supported until the 1970s. Considering the accumulation of evidence since the excavation at Ezero, we observed a rapid evolution in the opinions, which culminated in the now generally accepted idea that one of the great production centres overlaps perfectly with the Ezero culture area (Georgiev *et al.* 1979, 503; Roman 1992)⁷. Accordingly, this automatically minimizes their power as proofs in any migration process and, in particular, as an indicator of steppe invasion and any idea of Northern EBA newcomers in Greece⁸.

Returning to the Cernavoda III pottery, the contribution of the excavation at Drama is the record of its general stratigraphic position in the sequence after the Karanovo VI layer. At a first glance the caesura of the “Transitional period” in Thrace seems to be filling in, or at least decreasing in length. The good impression, however, should not be overstated, as neither is the Drama stratigraphic sequence complete, nor do the radiocarbon dates provide the desired succession; at least a few hundred years remain obscure. Perhaps these should be better assigned to the very end of the Late Chalcolithic and the ‘post-Chalcolithic period’ rather than to the ‘proto-Bronze Age’; this is a reasonable hypothesis.

As a second important development in the EBA 1 archaeology, it is worth mentioning here the rapid growth of the number of barrow graves, traditionally considered as an indicator of the ‘Pit-grave culture’ or any of its variants. It was some twenty years ago when EBA tumuli were known only in the area of Maritsa-Iztok energy

⁷ After Roman’s opinion: “Die schnurverzierte Keramik ist tatsächlich eine Komponente des keramischen Verbandes der Ezero-Kultur” (Roman 1992, 89–90) and this is obviously a secondary center no matter where it comes from.

⁸ One can regard the settled farming population of the Ezero culture in opposition to the non-sedentary stock-breeding Cernavoda III tribes. In this perspective the economic and cultural differences yield a scenario already created for the “Pit-grave” and Ezero cultures opposition. To reconsider these easy ideas is a sheer temptation but the speculations obviously have to be developed elsewhere.

complex. Recently the ‘Pit-grave culture’ or ‘Yamnaya-culture’ area has been considerably extended to the south (Fig. 2) and reached the Maritsa banks near Dimitrovgrad/Merichlery (Iliev 2012)⁹, and covered the territory from the Mid- to the Lower Tundzha valley (Dimitrova *et al.* 2012a; 2012b) close to the Turkish border (Agre 2006; Iliev 2011, 382, fig. 1). In addition, some very early barrow graves were proposed, definitely preceding the ‘pit-grave’ burial practice, but those are located in the Danube valley. A significant element is the extended inhumation combined with a stone circle around the grave (Alexandrov 2011, 315–317). The identification of similar features in Upper Thrace will likely be the result of future research, yet even now there are examples of using stones in mortuary rituals. Nevertheless, it is clear that a good number of the ‘steppe elements’ appears more and more ‘native’ as they are broadly practised anywhere in Southeast Bulgaria. It is now reasonable to ask the question: What is the alternative for the invasion scenario with a particular implication on the mortuary practice? There are several possibilities: existence of local semi-nomadic groups, independent emergence of local religious phenomena, migration of religious beliefs and – why not? – appearance of one element of the Bronze Age *Zeitgeist* (Leshtakov 2011a, 572–576). Finally, it is possible to suggest a co-existence of flat graves and tumuli within the same culture or one religious area. I hope that the bio-archaeology and in particular the DNA analyses of the buried individuals will help resolving these questions.

The second debated period covers the end of the third millennium BC and beyond. It has a relatively clear timeframe, but an uncertain character instead. The later chronological border is defined by the break in the stratigraphic sequence of almost all tell sites in Upper Thrace (including Yunatsite to the west), at the very end of the third millennium BC or a little later. The tell of Galabovo is the only exception known so far. No open-air sites could be connected in and shortly after this period to allow the thesis that the settlement life changed but was still vivid. Thus Upper Thrace loses one of the outstanding features of its archaeological record: the long stratigraphic sequence in tells, which was up to this point comparable to the Anatolian, Macedonian or Thesalian centres. To my knowledge, the tell sites in Upper Thrace were never reoccupied in the previous scale, and some obscure remains of minimal settling in the LBA and EIA are only shadows of the old fortified acropolises. As it was mentioned, an exception to this is Galabovo, which was excavated only partially some 15 years ago. Thus, from the point of view of palaeodemography, the second period seems in even worse state than the first one, and discussion includes again such global questions as the proposed total depopulation of a vast area, or the replacement of the farming economy by some forms of mobile stockbreeding economy – transhumance – or/and even nomadism. None has identified a single pottery style, from the northern Aegean coast to the Danube via Thrace and the Bulgarian Black Sea littoral, to fill in these times. Until recently, the real imports supporting positively the relative chronological links were also lacking, with few exceptions. On the other hand it seems that the single occurrence of the Galabovo imports in Thrace (Leštakov 1993; Leshtakov 2002) resulted in a certain suspicion on its value as a real evidence and argument. The feedback from the foreign archaeological academia is scant, to say the least, and I feel the site is generally underestimated. The towns of Troy V and early VI remain a self-contained peninsula in this territory scarred by deficiency of sources, and only their stratigraphic sequence bridges the second half of the second millennium BC. The last grounds for hope, apparently, lie in the radiocarbon dates.

New field evidence

During the past twenty years the expansion of the archaeological record for the Prehistory in Bulgaria was the result mostly of rescue excavations. A consequence of the large-scale infrastructure and energy projects in eastern Bulgaria is the accumulation of new information on almost all site-types dating to the third and second millennium BC: settlement sites, trading and redistributive posts, sanctuaries, flat and barrow cemeteries. The number of stray finds – hoards and single metal artefacts purchased by museums – is also significant. Meanwhile some evidence produced by regular excavations, mostly of barrows and hilltop sites, was also amassed. The record thus became reasonably representative, and is awaiting its detailed analysis and publication. Until recently, a major drawback was the deficit of preliminary reports. The practice of the National Institute of Archaeology and Museum in the last decade to publish comprehensive field reports must be underlined, as it offers a glance at the main facts and the essential information, if not the details. Therefore in the following pages mostly preliminary evidence will be considered, supplemented by some personal observations on the excavations and the collections.

⁹ My gratitude goes to Stanislav Iliev for sharing unpublished information on tumulus No. 1 in 2012. Based on the Ezero 1 pottery found in the cremation burial of a juvenile individual, it appears that the earth barrow covered by stones was made about the end of the EBA 1. After that it was partially enclosed by two curved rows of stones. Field evidence was supported by personal observation in the summer of 2012.

Apart from this information flow there are only a few broader publications. A special volume dedicated to the culture of the second and first millennium BC collected papers given at the conference in Karnobat 2009 (Георгиева и др. 2010). It includes reports on archaeological material of possibly pre-initial LBA date – wheel-made grey ware with characteristically Anatolian shapes – but its date was not sufficiently substantiated. Furthermore, the nature of the site at Vratitsa, which produced these imports (Hristova 2010; Hristova 2011), is uncertain and none of the finds come from secure contexts. Additionally, the Vratitsa grey ware¹⁰ finds parallels in both early and late Troy VI, a period that covers the developed MBA and LBA of NW Anatolia (Blegen *et al.* 1953; Pavúk 2002). The date range expands due to the uncertain production centre: indeed, we have to consider an import not from the core area of this particular pottery style, but perhaps from peripheral workshops¹¹. Another site, Tatul in the East Rhodopes (Ovcharov *et al.* 2008), was also suspected to preserve pre-16th century BC ware, but again there were no certain arguments to support it. Here the problem is different and is connected with the very nature of Tatul which is a sacred site, a sanctuary, and consequently all the collected evidence is useless for establishing any general chronology.

The Turkish-German excavations at Kırklareli in the South Strandzha Mountains provided no new arguments to the table, as it was proven that the stratigraphic sequence of Kanlıgeçit is limited to the last centuries of the third mill. BC according to the published radiocarbon dates (Özdoğan/Parzinger 2012, 268–269, Fig. 223; 277–278). Thus we arrived at the negative conclusion that the problem of the identification of the MBA culture has not advanced towards a solution. In broad outlines, the state of research did not move beyond the idea of the ‘Nova Zagora MBA culture’ and its reconsideration based on the evidence from Constantia (Leshtakov 1993) and Galabovo. However, there is hardly an archaeologist who still upholds that thesis promoted more than twenty years ago without reservations. Thus the virtual archaeological MBA cultures find no support of concrete and commonly accepted arguments, and the question: “Does this culture exist in fact and are we really able to identify it?” still seems actual (Leshtakov 2009, 61–62 with ref.).

Until recently, the help of radiocarbon dating was very poor. Sometimes it even confused the conventional archaeological reasoning. To illustrate this statement I should quote two specialised articles by Y. Boyadzhiev (1995) and by J. Görzdorf and Y. Boyadzhiev (Görzdorf/Boyadzhiev 1996). It is not necessary to comment here some perplexing assertions – e. g., that the EBA–MBA transition at Tell Yunatsite dates between 2600 and 2500 BC, or that the MBA at Tell Nova Zagora and Tell Razkapanitsa started at 2600–2400 cal. BC (Görzdorf/Boyadzhiev 1996, 160–161; 163). Furthermore, one can also read that: “The middle Bronze Age horizons at Tell Yunatsite (VIII–III) are situated between 2570/2530 and 2360/2330 cal. BC... The dates for the middle Bronze Age at Tell Nova Zagora are close to those of horizons VI and VII at Yunatsite...” (Boyadzhiev 1995, 174–175). I need simply to stress that the chronological period labelled in these publications as ‘MBA’, throughout the Eastern Mediterranean is in fact accepted as ‘EBA 3’ or even as ‘EBA 2’ in some regions¹². There is not a single date falling within the first half of the second millennium BC in either of the two papers, which is precisely the chronological segment known and universally accepted under the label of MBA. Leaving aside the dates from tell sites, we have very few later third mill. BC dates which could be considered as markers of the end of the EBA 3, or (eventually) as indicators of the transition to the MBA. Two are from Cherna Gora 1: Bln-5346 after calibration is 2140–2030 BC and Bln-5368 is 2180–2140/2290–2190 BC (Leshtakov 2006b, 429).

The radiocarbon dates from Galabovo are slightly earlier, but come from the fourth building level, which is overlaid by other levels that likely lasted at least 200–250 years (Leshtakov 2002)¹³. We have no dates for the uppermost levels of the Tells of Ezero, Yunatsite and Nova Zagora because of later disturbances of the cultural layer. The EBA dates from the Japanese sector at Tell Dyadovo are not very convincing due to their insecure stratigraphic

¹⁰ The Blegen shapes A56, A60, A61 and possibly A57, rims and handles from vessels A100, as well as their imitations, are represented in the repertoire with a several dozens of sherds in Vratitsa. There are also sherds of ‘tea-pots’ or ‘spouted bowls’ (shape B40) having also Trojan parallels; their chronology in Troy is commented in Pavúk 2002 and esp. 55. The mentioned shapes need a special attention and we are going to consider them elsewhere.

¹¹ I appreciate the consultation of P. Pavúk (Bratislava University); according to him the wheel-made ware does not come directly from Troy but was produced in the same style elsewhere in NW Anatolia.

¹² Behind the last detail a very important discussion which should be placed in a further study is hidden.

¹³ In this respect, it would not be correct to attach all the uppermost levels (at least four in number) to the MBA due to the available ¹⁴C dates and Anatolian imports positioned before the end of the 3rd mill. BC. Only the ‘pilgrim flask’ found in a pit and some other shapes, unfortunately without secure context, should be placed after this boundary. On the other hand, when we seek for parallels it is better to see them in the geographically nearest sites – a principal position equal to the rule that every type has its own tolerance of production, dispersal, use and keeping. Hence, the establishment of the relative chronology of Galabovo is a complicated task embracing a good number of factors.

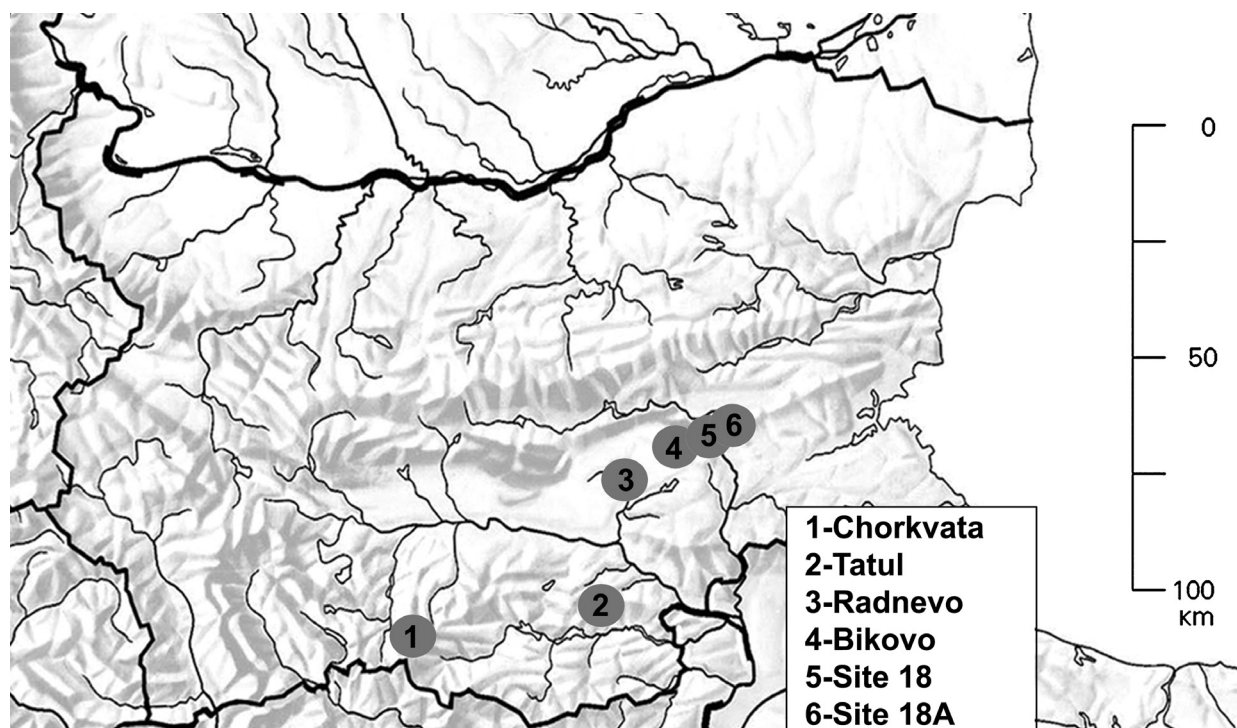


Fig. 3. Map of the sites sampled for radiocarbon analyses discussed in the text.

position¹⁴. Thus, in the absence of radiocarbon dates for the first half of the second millennium BC, it was suggested that the MBA should be placed in the second half of the third millennium BC (Boyadzhiev 1995)! From the point of view of the conventional archaeology, this claim is illogical and has no, and cannot have any, factual support. It was impossible to reject it, however, due to the lack of essential arguments. To contradict the radiocarbon dates with dates extrapolated from the relative chronology is methodologically unsound and thus we patiently waited for new evidence.

In mid-2012, the Radiocarbon Dating Laboratory in Lyon provided those dates, which are in effect a most welcome surprise. The dates come from several sites – both earlier or recently excavated – assigned to the LBA or, at least, to the end of the MBA. The fact that the sites cover the whole spectrum of BA types – two settlements, two sanctuaries (an enclosure and a peak-site) and a human skeleton – increases the representative character of the new evidence.

Context of the samples and associated pottery (Fig. 3)

1. Chokoba, sites 18 and 18A (Petrova/Kazarov 2010; Leshtakov 2010; Leshtakov 2011b).

These two neighbouring sites are separated by a several-hundred-metres-wide area lacking Bronze Age remains of occupation. The houses at Chokoba, site 18, are ground structures of light construction, marked by badly preserved thermal installations and pottery concentrations. Those at Chokoba, site 18A, are usually shallow dug-out structures typical for the LBA that contained a large amount of daub. They are partially disturbed by pits and cuttings from the LIA and the medieval period. The dated samples from both sites come from pits or pottery concentrations of secure context. The typical pottery shapes include spouted bowls or ‘tea-pots’, horizontal handles of the so-called Assenovets type, vertical handles on jugs and cups, etc.

2. The Radnevo skeleton (Savatinov 1995)

The site is situated north of the town of Radnevo and its periphery was damaged by the construction of a modern collector channel. No preserved settlement features were detected, but a small concentration of material indicated a badly damaged structure. With the LBA layer a single inhumation burial of a male adult in extended position is

¹⁴ These dates are not very popular due of their publications in preliminary annual reports. My gratitude goes to Masao Semmoto for collecting the information of all Japanese dates from the Bronze Age strata at Tell Dyadovo and for his comments.

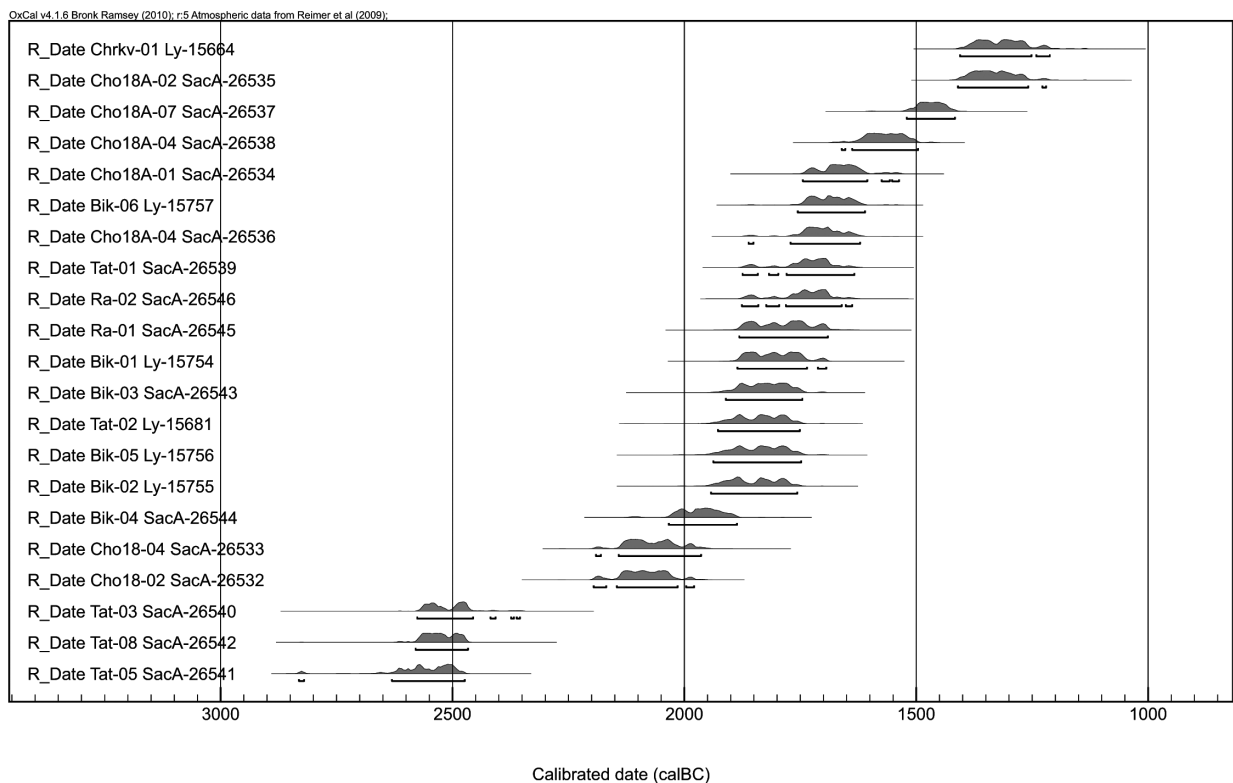


Fig. 4. Diagram with the dates produced at Lyon in 2012 from Bronze Age sites in Southeast Bulgaria, calibrated at 2 sigmas (calibration curve IntCal09, OxCal version 4.1.6). The dates are simply ordered according to their BP values.

associated. Perhaps it was part of a flat cemetery that spread beyond the excavated area. Notable among the pottery repertoire is a sherd from a deep spouted bowl ('tea-pot') and 'Assenovets-type' handles on bowls with comparanda at Assenovets (Kanchev 1984, 145 and fig. 10v-g, p), Bikovo-enclosure¹⁵, Chokoba, and Vratitsa (Hristova 2010, 50, fig. 13.1–2), as well as a broken double-vessel usually labelled as kernos (?). The last was found directly on the skeleton and was regarded as a grave good (Savatinov 1995, 157, fig. 2a–b). The two dates provided for the skeleton contradict the initially proposed date of the site in 14–12 cent. BC, based on pottery parallels at Kastanas. However, the excavator has stated that the chronological position of the grave remains open (Savatinov 1995, 148–149 with ref.).

3. Bikovo-enclosure (Hristova et al. 2009; Hristova/Ivanov 2010)

The site is situated near to the village of Chokoba, sites 18 and 18A, and comprises an elliptical ditch enclosure and complexes of pits and other auxiliary features. The proposed ritual character of the site seems plausible and it dates to the MBA–LBA, based on pottery (Hristova/Ivanov 2010, 125, Fig. 3). The samples submitted for radiocarbon dating were taken from the ditch-fill, so they have secure stratigraphic context.

4. Peak sanctuary of Tatul in the East Rhodopes (Ovcharov et al. 2008)

The Bronze Age layer is almost completely excavated. Due to the presence of a significant number of hearths, concentrated in a limited area, as well as other specific evidence of the material evidence, the site has been interpreted as a peak sanctuary. The samples submitted for radiocarbon dating come from the space under or around the hearths, i.e., they have secure contexts. Part of them fit well with the expected LBA¹⁶ and MBA date, yet others are definitely

¹⁵ I appreciate the kindness of T. Hristova who showed me the pottery from Bikovo.

¹⁶ Thanks to Prof. A. MacKenzie from Scottish Universities Environmental Research Centre in Glasgow we received several LBA radiocarbon dates from Tatul in addition which are not considered here because of their clear associations with 'classical' LBA pottery repertoire and patterns.

in the EBA and they deserve further consideration. As already reported elsewhere the BA layer at Tatul is rather thick which suppose a long cultural and chronological sequence. The comparative chronology observations were supported by some pottery shapes which seemed to be early – published (Ovcharov *et al.* 2008, 40, Fig. 8A.1–6) or not (Fig. 7) – but no one expected to be so early. Accordingly, the position of the group of radiocarbon dates in the mid- and second half of the 3rd millennium BC is a novelty of great importance for prehistory of Southeast Europe because of the special nature of the site, as well as the fact that they are the first evidence of their kind from the East Rodopes that we have in hands.

5. Chorkvata, West Rhodopes (Leshtakov 2006c)

The evidence comes from the salvage excavation of a building situated at the southern slope of the Chorkvata hill near the village of Chepintsi, West Rhodope Mountains. The uncovered ground structure has a rectangular plan and SE-NW orientation; preserved size 10 x 4.5/5.0 m. The walls have stable stone foundations. There were two thermal installations in the dwelling. Fragmented and restorable vessels were uncovered around them, as well as a decorated spindle whorl. Based on pottery, the house dates to the LBA (Leshtakov 2006c, 137–138). The single sample was taken from charcoals on the floor of the structure and the date fits well with the proposed age.

Commentary on the new ¹⁴C dates from Bronze Age sites in Upper Thrace (Fig. 4)

In the spring of 2011, 28 samples from the six aforementioned sites in southeast Bulgaria were sent to the Centre for Radiocarbon Dating at Lyon (France). They were expected to date in the MBA and LBA. Most of them were sampled out between 2005 and 2010, and only in one case (the two bone samples from the human skeleton at Radnevo), fieldwork was dating back to the 1990s (see description of the find contexts *supra*). Samples were of varying nature (charcoal, human and animal bones, seeds) and size, and have been treated accordingly. After a preliminary selection, following both physical and archaeological criteria, we finally proceeded to the measurement of 22 samples. Approximately one third (6 samples) provided enough material for a conventional dating by liquid scintillation, performed at the laboratory in Lyon. The others have been dated by the method of Accelerated Mass Spectrometry (AMS): the preparation of the samples, as well as the calibration of the raw results was made in Lyon, whereas the measurements were made at the facilities of the CEA in Saclay¹⁷.

All dates have very small margins of error (± 30 – 35 years BP), thus providing, after calibration at 2 sigmas (i. e. with a degree of confidence of 95,4%), age intervals of c. 110–200 calendar years¹⁸. This degree of precision is rare for these periods in Bulgaria and neighbouring areas. Indeed, most of the radiocarbon dates published so far from Bronze Age levels in Bulgaria (Boyadzhiev 1995; Görtsdorf/Boyadzhiev 1996) have errors between 50 and 150 years BP: calibrated at 2 sigmas, they give calendar dates that span from 200 up to 800 years, making fine comparisons very difficult¹⁹. The same is true for the majority of published dates from neighbouring Greek Eastern Macedonia (Sitagroi, Dikili Tash, Pentapolis: see respectively Renfrew *et al.* 1986, 173; Treuil 1992, 30; 33; Manning 1995, 180). Only the recent dates from Kanlıgeçit, in Turkish Thrace, provide a comparable degree of precision (Özdoğan/Parzinger 2012, 276–277), as well as a few dates from Greek Eastern Macedonia (new excavations at Dikili Tash and Aghios Antonios on Thasos, new radiocarbon dates from Kastri)²⁰.

The new dates produced in Lyon are in perfect agreement with the stratigraphy, where it existed. This is especially true for Tatul, where dates are clustering clearly into two groups, corresponding to the two stages distinguished by the excavators on the basis of stratigraphy (cf. *supra*). In addition, most of the dates correspond to the expected ages, as declared by the excavators during the submission of samples. Thus, the six Bikovo samples, which were altogether assigned to the MBA and expected (or should we say, hoped) to fall in the first half of the second millennium BC, give indeed dates between 2030–1900 and 1750–1620 cal BC (always at 2 sigmas). The expected MBA/LBA transition grave at Radnevo (two samples) gives also dates in the years 1870–1680 cal BC, whereas the LBA features from the flat settlement at Chokoba, 18A (five samples) are covering the period between 1750–1620 and 1400–1260 cal BC. The single sample from the hilltop site of Chorkvata, also assigned to the LBA, gives a date of 1400–1213 cal BC.

¹⁷ The authors wish to thank the technicians of the two laboratories, as well as their directors (respectively Christine Oberlin and Christophe Moreau), for the care they showed in all the stages of the dating procedure.

¹⁸ The dates have been calibrated with the IntCal09 curve (Reimer *et al.* 2009).

¹⁹ One should be aware that the calibrated dates given in those publications are at 1 sigma, i. e. with only 68,2% confidence. See also discussion in Tsirtsoni, this volume.

²⁰ Dates made at the Centre for Radiocarbon Dating at Lyon as well, or at the Laboratory of Archaeometry “Demokritos” in Athens. Maniatis *et al.* 2015a, 53–54, 56–57; Maniatis *et al.* 2015b.

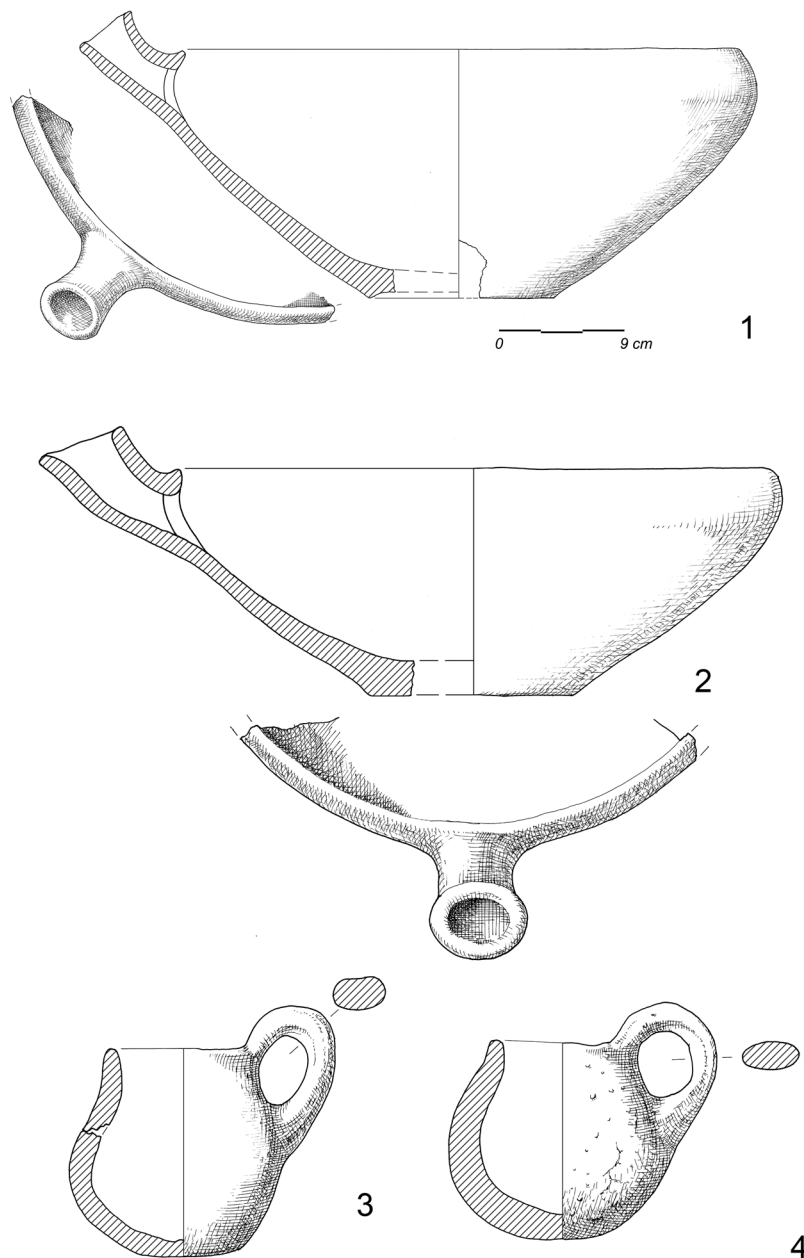


Fig. 5. Pottery from site No. 18 near the village of Chokoba.

The results from the second flat settlement at Chokoba (Chokoba, 18) differ slightly from what was expected, but the contextual evidence was, as we said, rather poor. One of three samples gave a date in the 14th–15th century AD (recent intrusion or contamination), and should be therefore left out of discussion. The other two (one on charcoal and the other on acorn from the same context) are perfectly coherent to each other, but their dates (2190–1980 cal BC) suggest that the occupation should be assigned to the beginning of the MBA rather than to its end, as initially presumed by the excavators.

The same is true for Tatul, where the two stages distinguished on the field were assigned respectively to the Late Bronze Age and to the MBA–LBA transition. The results from the five new radiocarbon datings (all on charcoals) confirm, as we said, the overall sequence (i. e., samples 1 and 2 are indeed roughly contemporaneous and younger than the three others), but not the date. The later cluster (“LBA”) falls in fact in the first, and

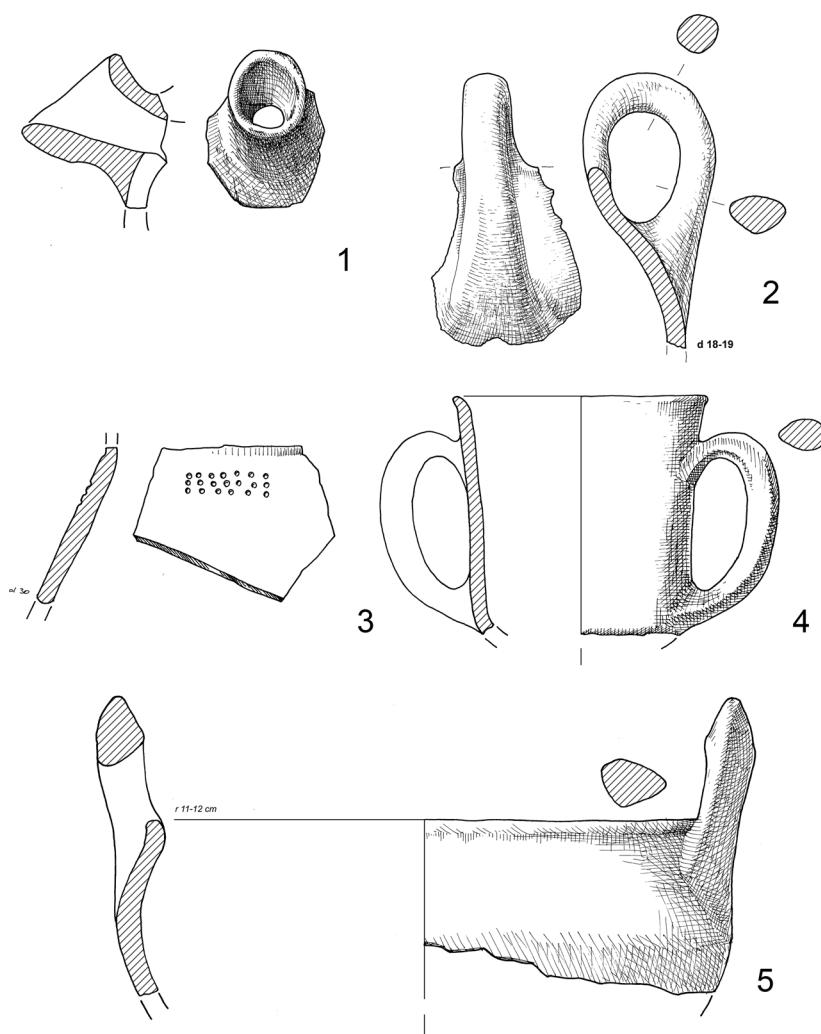


Fig. 6. Pottery from site No. 18A near the village of Chokoba.

not in the second half of the second millennium BC (1930–1650 cal BC), and therefore should be pushed back to the Middle Bronze Age. More importantly, the earlier cluster (“MBA–LBA”) is going back to the mid-third millennium BC, instead of the expected mid-second millennium. These three dates are clustered tightly to the years between 2570–2470 cal BC, i.e. in a period that is more appropriately described as an advanced stage of the Early Bronze Age. In spite of the high dates obtained, it is very unlikely that we have here an ‘old-wood effect’. Indeed, all charcoal samples were collected from areas close to hearths and therefore have more chances to come from small pieces of wood (i. e. young parts of trees) that would have been used as combustible. It is practically inconceivable to imagine that all measured samples would come from re-used woods of the same initial age or from the same inner part of big old timbers. Moreover, if there was some contamination (either in the field or at the laboratory), it would be expected to affect some and not all the samples, and certainly not to produce exactly the same ‘anomaly’, following a pattern that would respect the archaeological stratigraphy! The fact that similar results are obtained by two different methods excludes further the possibility of an error during processing, very rare but always possible. Therefore, we should consider the results as totally reliable and start thinking about their implications.

Concluding remarks

To summarize, the new ^{14}C dates produced in Lyon from a number of Bronze Age sites in southeast Bulgaria belong to three different occupation periods (Fig. 4):

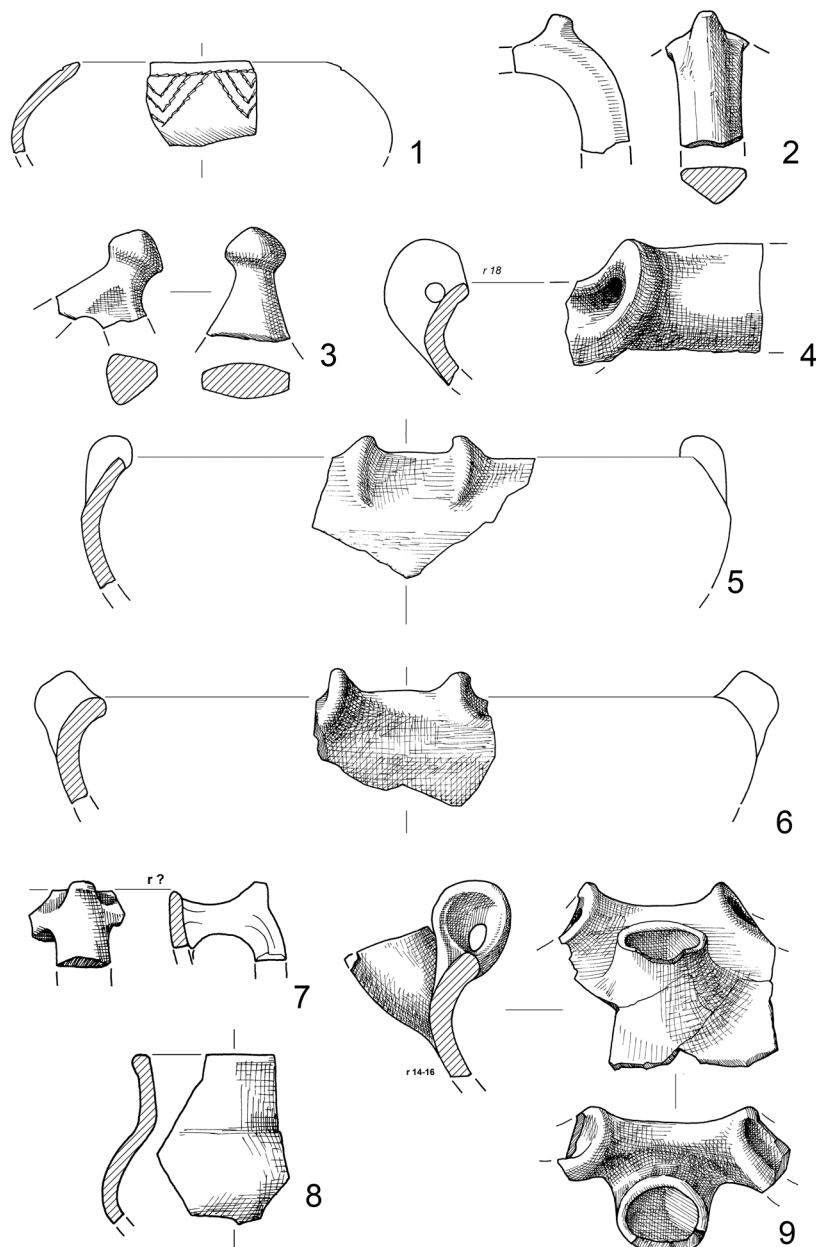


Fig. 7. Tatul early pottery from the Bronze Age.

- Around 2600/2500 cal BC (advanced EBA or, in other words, the beginning of the EBA 3 in Upper Thrace, attested only at the sacred peak-site of Tatul);
- Between 2200/2000 and 1600/1500 cal BC, attested in at least three sites (Bikovo, Radnevo, Chokoba 18A). These dates coincide with those obtained from Tell Galabovo and the developed phase of Cherna Gora 1 enclosure;
- Between 1500/1400 and 1200 cal BC, attested at Chokoba, 18A and Chorkvata. These are the first (and so far the only) Late Bronze Age dates from Bulgarian Thrace (including traditionally the Rhodopes).

Taken altogether, and with the dates already available from other sites in Bulgaria, the new dates cover the whole third and second millennium BC. They fill, in particular, in a definite manner the presumed gap of the early second millennium BC, bridging the interval that separated the last dates of the Ezero-Nova Zagora-Yunatsite horizon, around 2200–2000 cal BC, from the earliest admitted date for the start of the LBA, around 1600/1500 cal BC.

The dates from Tatul need a short comment. As it is already stated *supra*, there is no reason to doubt about their coherence. It is written (Ovcharov *et al.* 2008) that probably this was not an ordinary site but a peak-sanctuary with a strong Mediterranean affiliation, and its establishment so early in the Bronze Age is rather unexpected. On the other hand, even if we would like to make a little compromise and move all Tatul dates by several centuries forward, the earliest ¹⁴C date would be placed in the developed EBA 3 or in the beginning of the MBA. Hence, their value as chronological argument would still be intact and the question of the beginning of the religious worship at the mountain sacred places can be asserted as a very actual one.

According to conventional pottery-style division of the Bronze Age in the Eastern Mediterranean, this is the time of the end of the EBA 3 and MBA: the time for which we lacked stable proves of any character. Now, it has to be categorically stressed, we have not only absolute dates for those ‘Dark Ages’ but they are from closed complexes: houses, pits and ditches, and tombs. In this way, we are now able to contribute to the correlation of radiocarbon dating and ceramic styles and to make the first steps for identifying the typical pottery repertoire so needed for the relative chronology of the MBA. Thus far, these elements seem to be: simple “type of Assenovets” handles, double vessels (*kernoi*), long vertical handles (strap-handles) knobbed on the top and fixed on jugs and cups, two-handled mugs or tankards, conical bowls with four flat perforated projections above the rim, incised decoration and very specific *pointillé* decoration consisting of broad, soft stabs on the body of cups, mugs, jugs, etc. (Figs. 5–7; Savatinov 1995, 157, Fig. 2; Hristova/Ivanov 2010, 125, Fig. 3). The arrangement of ceramics shapes, types and patterns in one or several subsequently developed systems is obviously not a simple task because of very slow and smooth changes in the style during the last two horizons postulated *supra*. Accordingly, the expected chronological tolerance of the types should be broader comparing to time before. Here the imports are of major importance and with their help we hope to make this specification more precise. In addition, we rely upon the stratified evidence from the uppermost levels at Galabovo – the only known until present tell-site where the second defined horizon is present.

In conclusion, it appears that this part of the stratigraphic sequence missing in the tell-sites in Upper Thrace can now be compensated by other evidence and applying other methods, and therefore the attempt of establishing the Bronze Age relative chronology north of Troy seems not so illusory.

Acknowledgments

We appreciate the help of our colleagues from Bulgaria and elsewhere who discussed with us the nature of the major sites, features and materials considered in this article, and shared their views on the main issues. The authors express their gratitude also to all Bulgarian colleagues who provided samples for radiocarbon dating of BA sites and unpublished field information.

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