A MIDDLE BRONZE AGE SPECIAL GATEWAY COMMUNITY IN EASTERN TRANSYLVANIA

TIBOR-TAMÁS DARÓCZI

Abstract: The Ciuc depression offers an unique research environment, especially for the Bronze Age, due to its clearly defined limits by high mountain ranges which not only act as geographical borders but also as cultural ones, since access to it and from it can only be gained through a handful of high passes and gorges. The successful combination of methods of land-scape archaeology, analysis of material culture and social theory enabled the recognition of a special gateway community in the mentioned region during the Middle Bronze Age I-II. The landscape study is an innovative one for the Eastern Carpathian Basin as it uses ArcGIS 10 software in order to associate Bronze Age sites with digital elevation models and subsurface lithology. It also provides a detailed, well-argued and dated repertoire of Bronze Age finds of the depression. The resulting interpretation of a fortified settlement located in higher lying regions of the Ciuc depression as a special gateway community is a first for the Eastern Carpathian Basin. Finally, the social theories of a gateway community and a contact zone are also alloyed with this occasion for the first time.

Keywords: Transylvania; Ciuc depression; Bronze Age; landscape archaeology; social archaeology; special gateway community.

Rezumat: Depresiunea Ciucului prezintă un cadru de cercetare unic datorită lanțurilor muntoase, care în epoca bronzului formau limite nu numai geografice, ci și culturale, de vreme ce aceasta putea fi accesată doar prin câteva pasuri și defileuri situate la cote înalte. Combinația fericită a metodelor folosite în arheologia peisajului, analiza culturii materiale, dar și a teoriilor sociale a permis recunoașterea unei comunități de tip "special gateway" în această regiune, in epoca bronzului mijlociu I-II. Arheologia peisajului reprezintă un domeniu inovativ pentru estul bazinului carpatic, deoarece folosește programul ArcGIS 10 pentru a asocia siturile din epoca bronzului cu modele digitale de elevație și litologie subterană. De asemenea, oferă un repertoriu detaliat, bine argumentat și datat, al siturilor din epoca bronzului din această depresiune. În estul bazinului carpatic a fost identificată și interpretată pentru prima dată o așezare de înălțime fortificată drept o comunitate de tip "cap de pod", ceea ce a contribuit la îmbunătățirea teoriilor sociale privind legătura dintre acest tip de comunitate și cea aflată în zona de contact.

Cuvinte cheie: Transilvania; depresiunea Ciucului; epoca bronzului; arheologie de peisaj; arheologie socială; "special gateway community".

Introduction

This study will approach the issue of recognising and defining a special gateway community from a multi-directional perspective¹. It proposes a combination of meth-

¹ I would like to thank the field director of the Păuleni-Ciuc - *Dâmbul Cetății/Várdomb* excavation, Dan Buzea, for the support and guidance in researching this paper. Furthermore, I am grateful for useful comments on earlier drafts of this paper offered by Joseph Maran, Mihai Rotea, Laura Dietrich, Imola Kelemen and Lærke Recht.

ods from landscape archaeology, material culture analysis and social theory in order to argue for the presence of such a community. Since special gateway communities have not yet been defined in the Bronze Age (BA) of the Eastern Carpathian Basin, the study might prove significant for the reconstruction of social structures within Transylvania and the neighbouring areas. The landscape study is part of a forthcoming wider project that was suggested in previous publications². In order to be able to argue for the existence of a special gateway community, a combination of methods from landscape archaeology, material culture analysis and social theory is proposed. The study uses the methods developed of landscape archaeology in order to highlight and rank sites in their natural environments and periods. Through this, the more important sites can be singled out and their features and material culture analysed from the prism of social theories focussing on social structures in wider regions.

The Ciuc depression is located in the central-easternmost part of Transylvania, in the eastern part of the Carpathian basin (Pl. IV - medallion). It is a north-northwest to south-southeast oriented, elongated feature, bordered in the west and east by high mountains. In its western, northern and eastern parts, access to the depression is gained through a handful of higher passes³. In the south, the Olt River cuts a narrow gorge, which links this depression to the southern depression of Braşov. The lowest point of the basin is in the south, at the gorge, where it drops from ~ 640 m to ~ 620 m above sea level (a.s.l.). Through the middle of the Ciuc depression, running from north to south, is the Olt River. It has a narrower flood plain, followed by the first terraces on both sides, in some areas broader than in other, while second terraces only occur in the wider parts of the basin.

In terms of Holocene phases, the BA (roughly from 3000 to 1000 BCE) overlaps with the middle part of the Subboreal period, also known as the first Beech phase in the Blytt-Sernander system⁴. Towards the closing of this period, the dominant species is the Beech (Fagus sp.)⁵, though in the earlier and middle phase, the area was dominated by hornbeam species (Carpinus sp.)⁶. Furthermore, since the area has high altitudes, spruce (Picea sp.) is quite common⁷. It is in this period that around 4150+/-35 BP, cereal pollen is first documented at the bog of Luci on the eastern outskirt of the depression⁸. The climate of the Subboreal undergoes a series of shorter, rapid cooling events and has a relatively balanced mean annual temperature with short, cool summers (mean July temperature of ~17-18 °C) and milder winters; in the middle of the period, the humidity slightly increased (+~100 mm), thus becoming somewhat more moist⁹.

The applied chronological system is taken from a wider study of the funerary landscapes of the Eastern Carpathian Basin from the Neolithic to the Bronze Age

² Daróczi, Dobos 2009a, 190; Daróczi, Dobos 2009b, 62, note 47.

³ Bader 2001, 19, nos. 13-15, map 1.

 $^{^4}$ Horváth 2002, 2, tab. 1; Tanțău 2006, 116–117; Daróczi 2012, Fig. 1.

⁵ Tanțău et alii 2003, 122 (LPAZ 16), tab. 2, Figs. 3/a-b, 4/a-b.

⁶ Tanțău et alii 2003, 122 (LPAZ 14-15), tab. 2, Figs. 3/a-b, 4/a-b.

⁷ Tanțău 2006, 56, 68, 116, tab. 4, Figs. 11-13.

⁸ Tanțău 2006, 116, Fig. 13.

⁹ Daróczi 2012, 40-41, Fig. 9.

(Pl. I)¹⁰. This system is an adaption of somewhat older systems¹¹ to the newest results, especially those of the EBA¹².

Archaeological landscapes of the Ciuc depression during the Bronze Age

Two stages of the earlier BA, Early Bronze Age (EBA) I and III, have not yet been documented in the Ciuc depression, though some pottery shapes and decoration have been highlighted as possibly indicating a link between the EBA II and the earliest Middle Bronze Age (MBA), i.e. Ia¹³. In the remaining phases of the BA, 62 sites are documented in total (Pl. II/3). Most likely, this lack of documentation of the earliest and the latest EBA is due to the type of research conducted in the region. Most of the sites have been identified as chance finds during agricultural or construction activities (Pl. II/1). During such earthworks, archaeological features of the BA have only been discovered in two instances [29, 50]^{14*}, while only one BA site has been identified [3] during the few archaeological surveys conducted in the depression. Very few sites have information which is the result of intrusive archaeological research (sondage or excavation) (Pl. II/1), and even these are quite limited in terms of excavated surface; even fewer had as their main goal the research of the BA sites located in the lower layers.

A second explanation for the poor research of the BA and the total absence of evidence for the EBA I and III phases in this region might be tied to the research interest in the depression in the past 150 years. The research targeting especially the EBA of the depression from 1950s to the mid-1970s must be highlighted [2, 11, 15-19, 22-23, 27, 29, 33, 41, 48, 51-53, 55] and the same is true of past two decades since the area has had several well-organised research projects, which have targeted especially some MBA sites [17, 23, 40-41] (Pl. II/2).

Some of the sites have several layers of various phases, though none of the sites has a continuity that stretches over all the phases of the BA. In the EBA II (25), in all three phases of the MBA (I-29, II-30, III-25), and in the latest of the Late Bronze Age (LBA) (III-23), the number of sites is more or less the same, with only slight oscillations in the EBA II and in LBA III. The periods of LBA I and II show a significant decrease in sites with only 12 and 9, respectively, documented in the entire depression (Pl. II/3). If we compare these seemingly equally spaced phases of the BA to the radiocarbon dates (Pl. I), it becomes clear that although quite a few of the sites exist for the BA of Transylvania, this apparently balanced picture slightly changes. This is especially true for the two earlier phases of the LBA, since these, according to

¹⁰ Daróczi 2011b, 53-63, 68-69, Pl. 1, Fig. 11.

 $^{^{11}}$ Székely 1970a; Roman 1981; Roman 1986; Kacsó 1987, 67–75; Gogâltan 1995, 47; Gogâltan 1998; Gogâltan 1999, 71–78.

¹² Cavruc 1996; Cavruc 1997; Cavruc, Cavruc 1997; Cavruc 1999; Cavruc, Dumitroaia 2000; Cavruc 2001; Cavruc, Buzea 2002, 50-51; Cavruc 2004; Cavruc 2005; Marta 2010; Horváth 2011, 74-75, 91-95, 96-99, Fig. 5/2.

¹³ Cavruc, Dumitroaia 2000, 132-133, Pls. V/2-4; VI; VII/5-9; VIII; Cavruc 2005, 92.

 $^{^{14}}$ $^{\circ}$ Numbers inside the square brackets indicate the settlement number in the repertoire.

the newest radiocarbon dating of the LBA III¹⁵, had to be fairly short phases, each comprised of roughly a century. In this line of reasoning, short time-spans would imply fewer sites. The opposite is true of the EBA II, since it spans at least a couple of hundred years, which would imply less intense activity in the area, given the fact that the same amount of sites has been documented for a longer period of time, just as in the shorter three phases of the MBA and LBA III (Pls. I; II/3).

The issue of site continuity is an important aspect, and since our perception of the passing of time in the BA is limited by how refined our knowledge of the archaeological material sequencing is, especially that of pottery and metals, and the accuracy of this study is limited by this. It can be argued that the more phases documented at a site, the longer it was in use, and that there is a high probability that this use was continuous over the documented phases. A higher number of sites with continuity from one phase to another indicate stability in the use and settling of a region. The transitions from the MBA I to the MBA II and from the MBA II to the MBA III show quite high values (Pl. II/4), which indicate stability of the social structures of the region in the MBA. In contrast to this, starting in the LBA, site continuity decreases significantly, most likely indicating major changes in the social structures and relations of the area.

Since there is no evidence for the EBA III in the entire Ciuc depression, the present research stance indicates that all sites of the earliest MBA phase started being used during this phase ¹⁶. This period has the highest values of the entire BA of the depression (Pl. II/5), which suggests a significant increase of activity in the area, and possibly also in the demographic. In the following phases, new sites are quite rare and usually indicate either burial grounds, or more commonly, single finds or hoards of metals (Pls. II/5; III/2). An exception to this trend seems to occur in the latest BA phases, i.e. LBA III, where almost 20 new sites are documented (Pl. II/5), probably indicating similar changes in the use of the landscape to those in the MBA I phase.

Another interesting aspect is that of the abandonment of sites in each phase of the BA. It is assumed that since there is no evidence for the EBA III in this region, all sites of the EBA II period start and end within this timespan. Most of the sites that started their use in the MBA I continue into the following phase, with the exception of the site of Tuşnad - *intersecția drumurilor Vrabia*, *Cozmeni*, *Lăzăreşti* [58]. In the following two periods, MBA II and III, there is a significant abandonment of settlements and sites, which showed their earliest evidence in the MBA I phase (Pl. II/6). The sudden sharp increase in abandonment of sites during the MBA III probably indicates a major reorganisation of social structures and a decrease in the demographics of the region. Although in the LBA, the number of sites for each period and of new sites which start in the earlier phases is quite low, there is a comparatively high abandonment rate in the LBA I and II (Pl. II/6), especially since these sites are either burial grounds or hoards, and no definitive evidence for settlements exists (Pl. III/2).

¹⁵ Harding, Kavruk 2010, 148, 150-152, 154, Figs. 31-32, tab. 1; Metzner-Nebelsick et alii 2010, 223-224, Fig. 7.

¹⁶ Some scholars believe that the material culture specific for the MBA Ia (the so called Ciomortan group) might have existed already in the EBA III, or possibly in the later EBA II (Cavruc 2002, 90, 93; Cavruc 2004, 271; Munteanu 2010, 173; Popa, Totoianu 2010, 108–109), but this is based on possible typological similarities of a handful of shapes, and is not backed up by stratigraphic evidence.

Certain periods display clear preferences for specific a.s.l. placement of sites. It seems that in the EBA II, sites are most commonly located between the values of 635 and 765 m, specific for the lower geographic features of the depression. The material culture of the only two sites with evidence of use in this period above 800 m is very scarce, consisting of a broken polished stone axe [1] and a few sherds at the site of Păuleni-Ciuc - Cetate/Dealul Cetății/Movila Cetății/Várdomb [41]. The same is true of all three phases of the MBA, and in these instances the only sites located above 800 m are those of Miercurea Ciuc - Şumuleu Mic/Kis-Somlyó [36] and Păuleni-Ciuc - Cetate/Dealul Cetății/Movila Cetății/Várdomb [41]. The placement of sites on features of a broader elevation range in this period indicates intimate knowledge of the geographic landscape and likely testifies to a well-structured and specialised use of it (Pl. II/1). Sites of the LBA I and II generally do not exceed elevations of 800 m, while those of the LBA III are usually below 750 m. Such choice of sites resonate well with the slight climatic changes, especially rapid cooling events and increased humidity, described above for the closing periods of the BA and the Subboreal.

The various types of sites of the Ciuc depression offer an interesting picture in terms of differentiation in the choice of micro-location in the landscape. Due to the dominant type of research (Pl. II/1), it was only possible to establish the functionality of a few sites. In the EBA II, most of the sites are either settlements or chance finds of mostly sherds. The only exception to this is the chance discovery of a copper axe of the *Baniabic-type* at the site of Miercurea Ciuc – *Toplița* [37]. The settlements of this period are usually placed on hill tops (promontories or edges), though in rare instances they are also found on the first terraces of either side of the Olt river and small streams (Pl. III/2). The quite high number of settlements on hill tops and sites of unknown types on first terraces might indicate quite a distinctive cultural choice; lower elevation sites might suggest activity areas rather than actual settlements.

In the MBA, the previous trends in settling of the landscape in the depression change, becoming more diversified. In the MBA I, most of the settlements and sites are located on the first terraces, on either the left or right-hand sides of the Olt and smaller streams, but also in one case on an interfluve [7]. Furthermore, two burial grounds have been identified in this period: one is within a fortified settlement on a saddle [41], the other on the second terrace [9], though its attribution to any of the MBA phases is unclear. The clear and sharp division between sites of higher and lower features is quite distinct in this period (Pl. III/2), which might indicate a well-established social structure that most likely arrived pre-established in this region, especially since almost all the MBA sites start in this period (Pl. II/5). In the MBA II, the previously established tendencies and ratios do not seem to change and in these two earlier phases of the MBA the settling and use of the landscape seems to have been part of a broad and established social system, at least in this depression. The only major difference in these previous trends is the appearance of a site with a single metal find (Pădureni-type axe) at the site of Tomești - Cărbunar/Szénégető [56]. In the last phase of the MBA, the sites are mostly located on the terraces of rivers and higher lying sites almost disappear from the repertoire (Pl. III/2). Similar conclusions regarding differentiation of sites located on lower and higher lying features in the

MBA of southeastern Transylvania have been reached by studies which included wider areas than just the Ciuc depression¹⁷.

In most of the LBA, the use of geographical features becomes very limited, which might be tied not only to the lower number of documented sites but also to their type, meaning that they are either burial grounds, hoards or quite simply unknown in function. Usually, lower lying features are preferred. This seems to change in LBA III, when the use of the landscape becomes more diversified and higher lying features, like various areas of hill tops, become settled and used again (Pl. III/2).

Evidence for the EBA II comes mostly from the southern and central part of the depression (Pl. IV). These sites are either chance finds of sherds, meaning that the nature of the site is not determinable, or they are the results of intrusive archaeological research conducted to a large extent in the 1960s and 1970s¹⁸. An exception to these two types of sites is the discovery of a copper axe of the *Baniabic-type* at the site of Miercurea Ciuc - *Toplița* [37]. Most of the sites are located on or in the immediate vicinity of good agricultural soils of the eutirc fluvisols type; only three [1, 2, 41] are located in areas with cambic podzol soils (Pl. XI). From the dispersal of sites in the depression, one could argue that they are placed at choke-points of the basin, e.g. in the area of the Jigodin gorge, in the central part, which divides the upper part of the depression from the lower one [15–19, 22, 24–25, 29, 33, 37], and at further passes [1, 14] and gorges [2, 61] (Pl. V). This dispersal might indicate the direction of contacts with the neighbouring depressions in the upper Olt basin in this period to the southeast and south and the extra-Carpathian areas. Furthermore, the lack of fortified settlements in this period does not indicate control over the area and its landscape by the social structures of this period.

With the start of the MBA, the previously presented picture seems to substantially change in the Ciuc depression. Sites are dispersed all over the study region (Pl. V), settlements are quite common on terraces (Pl. III/2), and areas with fertile soils, e.g. eutric fluvisols and cambic podzols, good for agriculture, are preferred, though the MBA is the only documented period when sites are placed on umbric andosols [31] (Pl. XI). It is no surprise that the first evidence for cereals in the region comes from this period¹⁹. As well as settlements, located even in the northern and easternmost parts of the depression, and various types of sites of unidentified function, burial grounds appear in this period [9, 41]. An interesting aspect is that the only fortified settlement, that of Păuleni-Ciuc - Cetate/Dealul Cetății/Movila Cetății/Várdomb [41], is located far above the average a.s.l. site usage and stands out in terms of its function and materials, especially for the MBA I and II of the region²⁰. In the following period, the site usage and settlement patterns seem to continue uninterrupted (Pls. III; VI). It must be noted that the discovery of a Pădureni-type axe at the site of Tomești - Cărbunar/ Szénégető [56] is unique for the MBA and its placement in the northern part of the depression, close to the pass into the Gheorgheni depression, might be significant. In the final stage of the MBA, the previous realities seem to alter, since the site patterns

¹⁷ Dietrich 2010, 202, Figs. 1-2.

¹⁸ Roman et alii 1973, 569-570, Fig. 1; Roman et alii 1992, 143-153, 173-175, Figs. 10-18; Kavruk et alii 2008a

 $^{^{19}}$ Tanțău 2006, 116, Fig. 13.

²⁰ Please see discussion on the function and nature of the site below.

and types change (Pl. III/2). Quite a large number of previously used sites stop being used (Pl. II/6), settlements are less frequent and sites located on higher elevations disappear (Pl. III/1). Although the entire depression shows signs of use in this phase (Pl. VII), one cannot help but feel a less active period here. The appearance of a site with a single metal find [56], possibly at the end of the previous phase, might indicate the type of changes and the ways that these changes were taking place in this period.

By the earliest phase of the LBA, the depression seems far less active and almost deserted (Pl. VIII); only a few sites of unknown function are known, and the only ones with certain function are burial grounds [4, 10, 28] and single finds of metals [49] or hoards [32] (Pl. III/2). This brief enumeration of the types of sites makes it clear that by this period, the site patterns and the associated social structures which created them, changed. In this sense, it is interesting to note the discovery of a single Transylvanian-type socketed axe [49] in the northernmost parts of the depression, in the area of the pass to the Gheorgheni depression. Furthermore, the hoard [32] in the area of the Jigodin-gorge, where the MBA activity was the most intense, as reflected by the site patterns (Pls. V-VII), close to a site which ended in the latest MBA [32] might indicate major social instability and changes by the LBA I period. The precursors of these changes are to some extent already visible in the later MBA II and augmented in the following MBA III phase with a culmination in the LBA I and II. It is no surprise that the site of Păuleni-Ciuc - Cetate/Dealul Cetății/Movila Cetătii/Várdomb [41], by excellence the dominant settlement of the region after the site-ranking of a previous study²¹, only shows signs of activity in the MBA I and the earlier MBA II²². The same is true for the LBA I and LBA II, since the division of the two earlier phases of the LBA is unclear and both are fairly short phases. The number of sites further declines in the LBA II and reaches the lowest documented values for the entire BA (Pl. II/3). Sites are usually found along the Olt River, on its terraces, although the discovery of a Lappenbeil-type axe at the site of Ciucsângeorgiu [6] near a pass through the Carpathian range in the southeastern part of the depression seems to indicate additional, new directions of contacts and interaction (Pl. IX). It is quite surprising that sites are mostly located on eutric fluvisols and only in exceptional instances on cambic podzols [6, 61] (Pl. XI). In the latest phase of the BA, the number of sites increases significantly (Pl. II/3) and their placement within the landscape becomes just as varied as in the earlier MBA (Pl. III/2). The sites are spread more or less equally through the entire depression, with a predisposition to be located on river terraces, especially of the Olt and some of its smaller tributaries (Pl. X). The site-use and settlement patterns are different from those of the EBA II and MBA periods. Settlements are located near the Olt River, and there is a significant increase in the number of sites that yielded single finds of metals and hoards [6, 34-35, 37, 43, 51]. Furthermore, the site of Tuşnad - Piscul cetății-Cetatea cu idoli/Dâmbul cetății/Vârful cetății/Vártető [59], which is a fortified settlement and also yielded finds of bronze and iron objects, is located in the southernmost end of the depression, at the entrance to the gorges which connects to the south to the Braşov depression (Pl. X). This type of

²¹ Dietrich 2010, 204, no. 5/29.

²² Cavruc, Buzea 2002, 50; Cavruc 2005, 91.

site re-emerges for the first time after the MBA II, and it seems it is the only one of this type in the entire region. Just as in the case of the MBA, sites of the LBA III are either placed on fertile eutric fluvisols or on cambic podzols (Pl. XI).

As a summary, it may be stated that during the BA, three different and distinct horizons of landscape use and settlement pattern emerge in the Ciuc depression. In the EBA II, sites are equally distributed between lower terraces and higher lying hill tops, though no fortifications, fortified settlements or burial grounds are known from this period. The hiatus of sites of the EBA III is a phenomenon that could be explained by the present research stance in the region. The second horizon is that of the MBA I and II in which in a "sudden" burst during the first period of the MBA a large number of sites are in use and new settlements are founded, including the site of Păuleni-Ciuc - Cetate/ Dealul Cetății/Movila Cetății/Várdomb [41]. Towards the end of the MBA II period, the first single metal finds of the MBA appear and a trend of site abandonment starts, culminating in the LBA I and II with the lowest number of sites documented in the entire BA (Pl. II/6). A final stage in the BA starts in the LBA III and most likely continues in the EIA. Fortified settlements reappear in this period and there is a strong presence of single finds of metals and hoards. Since the use of the landscape and settlements patterns are quite distinct in all three horizons, these are most likely the results of different social structures oriented towards different neighbouring areas via well-defined and specific paths and ways. The EBA II societies make use of high and low features of the region in a contrasting way, while the MBA societies use and settle the region with such intensity and in such a varied manner that suggest nothing less than close familiarity with the landscape and its characteristics. Finally, in the LBA III, quite a linear pattern of settlement and site pattern emerges, with its linearity tightly structured on the proximity to the axe of the Olt River, with a possible main focus point in the south [59]. It is precisely from this timescape and landscape of the Ciuc depression that the site of Păuleni-Ciuc - Cetate/Dealul Cetății/Movila Cetății/Várdomb [41] emerges as a unique and distinct fortified settlement, not only by its placement in the above detailed settlement landscapes but also by nature of its moveable and immovable material culture.

The MBA I–II site of Păuleni-Ciuc – Dâmbul Cetății/Várdomb

The site is located on a saddle, just to the northeast of the modern town of Miercurea Ciuc. From the nearby peaks, connected by the saddle, there is a clear view to the southwest on to the middle part of the Ciuc depression and the Şumuleul Mare hill and its dominant peak (Pl. XIII/1-2). To the northwest of the site flows a small stream through a swampy area that is now fenced in (Pls. XII; XIII/6). At least three fortification ditches and a rampart are identifiable even without intrusive research (Pl. XIII/3-4). The present day climatic conditions are slightly different than the BA ones, in that it is slightly dryer and warmer, though the instability can be quite surprising²⁵. These conditions generate a different phenomenological experience of the landscapes of the depression and the general feel of the environment (Pl. XIII/1-4).

 $^{^{23}}$ In one morning of early August of the excavation campaign of 2005 we woke up to a temperature that dropped to -2 $^{\circ}$ C and heavy hoar frost.

The earliest references to the site of Păuleni-Ciuc - Cetate/Dealul Cetătii/Movila Cetătii/Várdomb [41] in the literature appear shortly after the middle of the 19th century in the travel books written on the southeastern part of Transylvania²⁴. From these earliest references in the middle of the second half of the 19th century, the mention of the site first appears in archaeological publication, in the form of a repertoire of archaeological sites of Transylvania²⁵. At the beginning of the last century, through the surveying and excavation activities in the area, some errors regarding the shape and size of the sites were corrected by the work of I. Martian, and these were summarised in a slightly more detailed report on the visible features and some of the finds²⁶. Following this, the site reappears in all the major archaeological²⁷ and fortification repertoires²⁸ from the beginning of the last century, but also in an archaeological synthesis²⁹ and further travel books of the region³⁰. The first major synthesis on the site with a full reference of the relevant literature appeared just before the Second World War with a detailed description of the features, some of its finds and an a.s.l. reading of just above 830³¹, with the mention of an accurate reading of 837 m a.s.l. by a local school teacher, K. Bakó³². In the archaeological repertoire of Transylvania published in the early 1940s, the site is briefly mentioned twice³³. The first intrusive archaeological research took place in 1954, undertaken by Muzeul Secuiesc al Ciucului, though the results of this research were never published³⁴. Z. Székely undertook excavation at the site (Pl. XII) in 1956^{35} , 1960^{36} and 1967^{37} and evidence for the MCA and LCA, but also of the BA was unearthed³⁸. In one of these reports, two fortification trenches (Pl. XII) were mentioned and the a.s.l. of 770 m of the site is erroneous³⁹, probably a misreading of an earlier report⁴⁰. The results of these soundings and excavations were summarised in 1970 in a brief excavation report that mostly focused on the MBA Ia pottery of the site and defined the so-called Ciomortan group, though its exact chronological position is still uncertain⁴¹. With the definition of the group and the publication of some of the materials, the site entered in the scientific circuit as one that emphasised contacts with the eastern regions, located just on the oriental

 $^{^{24}\,}$ Benkő 1869, 75; Orbán 1869a, 22.

²⁵ Gooss 1876, 217.

²⁶ Marțian 1903, 285, no. Id.

 $^{^{27}}$ Marțian 1909, 326, no. 123; Marțian 1920, 14, no. 173.

²⁸ Könyöki, Nagy 1905, 282, 284.

²⁹ Roska 1929, 293.

³⁰ Vámszer 1934, 72.

⁵¹ Ferenczi 1938, 290-296, 309, 311, no. 8; Maxim, Crişan 1995, 753, no. III.4, Pl. IV/2, 10.

³² Ferenczi 1938, note 1.

³³ Roska 1942, 59, no. 46; 220, no. 16.

³⁴ Székely 1970a, 71.

 $^{^{35}}$ Popescu, Dumitrescu 1957a, 338, no. 16; Popescu, Dumitrescu 1957b, 355, no. 16; Székely 1959, 238–240, no. 5, Pl. 9/3–9.

³⁶ Popescu 1961a, 570, no. 27; Popescu 1961b, 136, no. 26; Székely 1970c, 305, no. 8.

³⁷ Popescu 1968a, 679, no. 17; Popescu 1968b, 423, no. 17; Székely 1973, 219, nos. 1/1-7, 2, 3/3.

³⁸ Székely 1970a, 72-73.

³⁹ Székely 1959, 237.

⁴⁰ Ferenczi 1938, 290.

⁴¹ Székely 1970a.

slopes of the Carpathians⁴². Shortly after the definition and publication of the results, it was established that there is an undocumented chronological sequence between the manifestations of the EBA II Jigodin group and the earlier MBA I Ciomortan group, probably occupying the period of the EBA III⁴³. Moreover, since the publication of these results, the indication of a strong presence in the MBA Ib-II became evident and is considered one of the most important, if not the most important, settlement of the period in the Ciuc depression⁴⁴. In the last years of the 1990s, the results of a smaller survey conducted in the depression that also targeted the site were published⁴⁵.

Since 1999, a series of systematic excavation campaigns started to research the site under the auspices of the Museum of the Upper Olt and Eastern Carpathians of Sfântu Gheorghe under the direction of V. Cavruc. The project has mostly focused on the excavation of the northeastern part of the site (Pl. XII). As a direct result of this research, a clear stratigraphic relationship has been established between the earlier MBA I (Ciomortan group) and the later MBA I and MBA II (Wietenberg culture) cultural manifestations at the site⁴⁶. The results of the first two campaigns of 1999 and 2000 were quickly published. The MBA Ia levels revealed two important features *Cmp* 13 and a feature of a surface structure L 7a (Pl. XIV/1)⁴⁷. These were partially superimposed by a dwelling (L ?) of the MBA Ib-II period (Pl. XV/1-2); this was clearly placed in a line (Pl. XIV/2) along with another dwelling of the same period (L 8) discovered in these campaigns (Pl. XV/3, 5) and some discovered later⁴⁸. Other features discovered in these campaigns belonging to the later MBA I and MBA II were a pit with two vessels ($Cmp\ 1$), a further pit ($Gr\ 3$) with the skeleton of a 5-6 months old child (Pl. XIV/2)⁴⁹ and a pit with a vessel and terracotta wheel inside it⁵⁰. Another interesting result of these early campaigns was that some light was shed on the construction of the *rampart*. Two parallel rows of vertically posted beams were placed in the ground and the space between them was filled in on several occasions with various layers of soil from within and around the site and some of its use has been dated to the earliest MBA I⁵¹, though it was still maintained and used in the MBA Ib-II period⁵². Cmp 13 is a corridor-like feature that cuts through the entire rampart, designated by the excavators as a possible gateway with a tower superstructure (Pl. XIV/13), dated to the MBA Ia⁵³, though only fully investigated in the following two campaigns. L Za

⁴² Zaharia 1970, 65-66; Székely 1971a, 393; Székely 1971b, 307-308; Muscă 1979.

 $^{^{43}}$ Muscă 1979, 88-89; Roman et alii 1973, 571-572.

 $^{^{44}}$ Soroceanu 1973, 500, no. 44; Székely 1988, 157, 159, Pls. III/3-4; VIII/1-4; XIV/1-5; Boroffka 1994, 65, no. 323.

⁴⁵ Jánovits 1999, 124, no. 13.

⁴⁶ Rotea 2000, 30; Cavruc 2001, 46; Cavruc 2004, 272-273; Cavruc 2005.

 $^{^{47}}$ Cavruc 2000a, 95, no. 7; Cavruc, Dumitroaia 2000, 131–132; Cavruc et alii 2001, 246; Cavruc, Buzea 2002, 43.

⁴⁸ Cavruc 2000a, 95, no. 8; Cavruc et alii 2000, 103; Cavruc, Rotea 2000, 155, Pls. I-III; Rotea 2000, 24–25; Cavruc et alii 2001, 246–247.

 $^{^{49}}$ Cavruc 2000a, 95, no. 8; Cavruc, Rotea 2000, 156, Pls. IV; VI/3-4; IX/1; XII/5; Comşa 2000, 173, Pl. I; Rotea 2000, 23-24, Pl. I.

⁵⁰ Cavruc, Rotea 2000, 155, Pl. V/1-3.

⁵¹ Cavruc, Dumitroaia 2000, 131, Pl. IV/B-C.

⁵² Cavruc, Rotea 2000, 157.

⁵³ Cavruc, Dumitroaia 2000, 131-132, Pl. II.

is located at the southern end of $Cmp\ 13$; it is a shallow feature with postholes along its sides. Among the more important finds were animal bones and sherds but also two fragments of human bones, a mandible (individual older than 25 years) and skull, also dated to the MBA Ia (Pl. XIV/1)⁵⁴.

In the excavation campaigns of 2001 and 2002, the earliest dating of the rampart⁵⁵ (Pl. XII) was clarified and it became clear that the lowest levels were erected in the period of the LCA IIb during the time of the Cotofeni I culture; its second phase was build and used during MBA Ia; its third during the MBA Ib-II period; and finally there was possibly a later phase as well⁵⁶. The wider, northern-eastern *fortifi*cation ditch was sectioned, and at its bottom, sherds of the MBA Ia period came to light, which means that the feature was already in use at least by the beginning of the MBA^{57} . The research of L 7a was finalised in 2001^{58} . A further feature was unearthed over several metres, Cmp 15 (Pl. XIV/1), that had the shape of a shallow trench with occasional postholes in it, which followed the line of the rampart⁵⁹; its dating is still uncertain, though it was located below the MBA Ia and MBA Ib-II dwellings⁶⁰. In the campaigns of 2001 and 2002, the northern part of *Cmp 13* was researched as well. A wood-framed construction was discovered in this part. Planks fastened on vertical beams reinforced the sides of a 0.7-0.8 m wide place, and the ground was also covered by the same material, as indicated by the large pieces of charcoal and heavy burning in the area (Pl. XIV/1). Furthermore, the upper side of the earthen walls were slightly corbelled (about 1 m high from the wooden "floor"), which the excavators interpreted as indicating support for the "roof". On the floor, the remains of three skeletons were discovered, one adult and two children (Pl. XIV/1) among flat stones, which were interpreted as originating from the "roof" construction. Sherds found within the feature were all dated to the MBA Ia period, and the area above the feature showed heavy burning, since the earth was fired to red, and it was interpreted as a tower structure⁶¹. The final interpretation of the feature was that it had two functions: first, it was used as a gateway, and then it was ritual connected with the abandonment and intentional burning of the site at the end (?) of the MBA Ia⁶². The interpretation as a gateway seems unlikely⁶³, since the width of the "corridor", accounting for the space occupied by the side wood-lining, is only about 0.7-0.8 m, and its outer northern end seems to end in a palisade, a feature recognised by the excavator⁶⁴. The "wood box-like" feature below what seems to be a wooden superstructure, possibly a tower, seems to have rather been a feature cut into the rampart for funerary use, and even the excavator

 $^{^{54}}$ Cavruc, Dumitroaia 2000, 132; Cavruc et alii 2000, 103; Comșa 2000, 173, Pl. II; Cavruc et alii 2001, 246.

⁵⁵ It does not have a stone core as stated by Roxana Munteanu (2010, 93).

⁵⁶ Cavruc, Buzea 2002, 41-42; Cavruc et alii 2002; Cavruc, Buzea 2003.

⁵⁷ Cavruc, Buzea 2002, 42.

⁵⁸ Cavruc et alii 2002.

⁵⁹ Cavruc, Buzea 2002, 42; Cavruc, Buzea 2003.

 $^{^{60}}$ Cavruc et alii 2002.

⁶¹ Cavruc, Buzea 2002, 43-45; Cavruc et alii 2002; Cavruc, Buzea 2003.

⁶² Cavruc, Buzea 2002, 45.

⁶³ Daróczi 2011b, 190, no. 445.

⁶⁴ Cavruc, Buzea 2002, 45.

has stated that it seems that the "the roof of the corridor was covered by the fill of the rampart before burning"65. It would seem that the two features, the "wood-lined box" and the wooden superstructure are not functionally related. The research of dwelling L 8 was completed during these campaigns as well (Pl. XIV/2). Postholes, along its sides, and two hearths were discovered, and the moveable finds included objects of bronze (?), bone, stone and terracotta⁶⁶. In the line of dwellings L Z and L S a further dwelling L 9 was discovered and excavated (Pls. XIV/2; XV/4-5). Like the previous dwellings, this also had two hearths and was placed in the same line and orientation. The finds consisted of antler and sandstone (Krummesser) tools, miniature vessels and spindle whorls⁶⁷. Not surprisingly, in the line of these three dwellings, a fourth was discovered, L 10 (Pls. XIV/2; XV/5). This was slightly different since it had an annexe and two hearths, one of which had a running spiral decoration. The finds consisted of a ceramic disc, spindle whorls, bone and sandstone tools (Krummesser)⁶⁸. A further four pits have been discovered in the campaigns of 2001-2002, belonging to the MBA Ib-II period. *Gr* 5 was a 2.15 m deep pit, *Gr* 6 had six complete vessels in it, and *Gr* 7 was a 1.6 m deep pit⁶⁹. *Cmp 14* was discovered not far from *L 10*; it was an elongated pit that housed the remains of two human skulls, under which a complete skeleton in contracted position was discovered (Pl. XIV/1)⁷⁰.

In the excavation campaign of 2007, the feature $Cmp\ 15$ was further researched and a fifth house appeared in the line of the other four, next to $L\ 10$, numbered $L\ 32$ (Pl. XV/6)⁷¹. The western half of $Gr\ 7$ was completely researched, and appeared to be a 2.2 m deep pit with MBA Ib-II sherds⁷². In 2008, $Cmp\ 15$ and $L\ 32$ were the only BA features further researched⁷³. In 2009, the research of $L\ 32$ continued, though the ground level of the dwelling has not yet been reached⁷⁴. Not far from this dwelling, a pit $(Cmp\ 36)$ was discovered with the remains of a child, placed in contracted position on its side and oriented west-east⁷⁵.

After the presentation of the more important features, some conclusions can be drawn in relation to this site. There are contradicting interpretations whether or not there is continuity at the site between the MBA Ia and MBA Ib-II. One side believes that there cannot be any doubt about the continuity between these two phases⁷⁶, while the other is cautious in this regard⁷⁷. I personally believe that there is evidence that the two phases could not be more than two generations apart. It can be seen that the MBA Ib-II dwellings are superimposed and have more or less the same orientation as in the MBA Ia period. Furthermore, the elaborate rampart constructed of vertical

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65 Cavruc, Buzea 2002, 45.
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⁶⁶ Cavruc, Buzea 2002, 46-47; Cavruc et alii 2002; Cavruc, Buzea 2003.

⁶⁷ Cavruc, Buzea 2002, 47-48; Cavruc et alii 2002; Cavruc, Buzea 2003.

⁶⁸ Cavruc, Buzea 2002, 48-49, Pl. XXXII; Cavruc et alii 2002; Cavruc, Buzea 2003.

⁶⁹ Cavruc, Buzea 2002, 49-50; Cavruc, Buzea 2003.

⁷⁰ Cavruc, Buzea 2002, 50; Cavruc, Buzea 2003.

⁷¹ Kavruk et alii 2008b, 303.

⁷² Kavruk et alii 2008b, 303.

⁷³ Kavruk et alii 2009, 214.

⁷⁴ Kavruk et alii 2010, 182-183.

⁷⁵ Kavruk et alii 2010, 183.

⁷⁶ Cavruc, Rotea 2000, 158; Rotea 2000, 29-31.

⁷⁷ Cavruc, Buzea 2002, 50.

wooden beams placed in rows and filled in with debris and earth would require some sort of previous knowledge before attempting a consolidation or improvement of such a structure. An abandonment of the settlement and intentional destruction by fire of at least part of the structure at the end of the MBA Ia has also been suggested⁷⁸. Several arguments against this opinion might be raised, one of them being that the MBA Ib-II phase has a systematic reconstruction and construction phase, in that housing units are replaced regularly and constructed in a similar manner (Pls. XIV/2; XV/5), which suggests an established central power in the local community. Such a social structure certainly did not come to be out of nothing, and previous knowledge of the existing inner structure of the rampart would have been needed for a consolidation to take place. What might have happened at the transition from the MBA Ia to the MBA Ib-II period is that the material culture of the site, and implicitly of the local community, radically changed, in that the earlier phase was dominated by eastern elements (Pl. XVII/1, 5-8, 12) and the later by western elements (Pl. XVII/1-11, 19-21).

A MBA I-II special gateway community in the Ciuc depression

What I am proposing in the present study is a reinterpretation, in which the periods of MBA Ia and MBA Ib-II are viewed as a single temporal unit, with a major shift in its relations at the end of the MBA Ia period. The most fitting interpretations for this site and its social structure are those of a *special gateway community*, which is defined in this paper as the alloying of the traits of a gateway community and those of a *contact zone*.

The interpretations of gateway communities have been successfully applied in BA Aegean, in the case of the site of Mochlos on Crete⁷⁹, and will be used as a guiding reference with obvious adaptions to the local realities. A gateway community would be part of a dendritic market system controlling exchange in its region⁸⁰, which interpreted in a social sense can be called a gateway community⁸¹. The traits of this kind of community have been summarised with eight key criteria⁸²:

- 1. it occurs particularly on the periphery of world systems;
- 2. it occurs at a passage point for a cultural or natural region;
- **3.** it is located on a line of communication between areas with good mineral or agricultural resources, or high craft production;
 - 4. it supports a limited elite hierarchy;
- 5. the elite manipulate the social system by control of exchange and of prestige products;
 - **6.** imported products are plentiful at the site, scarce elsewhere;
 - 7. craft specialism/production increases at the site;
 - 8. the site draws on a zone for its subsistence.

⁷⁸ Cavruc, Buzea 2002, 45.

⁷⁹ Branigan 1991.

⁸⁰ Smith 1976, 315, 345-353, esp. Fig. 1d, tab. 2.

 $^{^{81}\,}$ Hirth 1978, 37–39, esp. Fig. 2.

⁸² Branigan 1991, 103.

If these traits are matched against the characteristics of the MBA site of Păuleni-Ciuc - Cetate/Dealul Cetății/Movila Cetății/Várdomb [41], the following might be stated:

- 1. The type of community usually occurs on the edge of world systems⁸³: although our site is slightly further away from the so-called world systems, it could still be regarded as being part of the periphery network⁸⁴. However, this is not a necessary attribute.
- 2. According to the above landscape study, there cannot be any doubt that the site is placed at the natural passage ways to the east (Pls. V-VI), through the Eastern Carpathian Mountains, which by their geographic and environmental characteristics act not only as natural but also as cultural barriers⁸⁵.
- 3. Although the Ciuc depression is quite poor in natural resources other than mineral water, the neighbouring areas are quite rich in salt deposits and copper⁸⁶. Moreover, it has been noted that the areas just east of the site, on the oriental slopes of the Carpathians are quite rich in bronze finds in this period, though no significant copper deposits are known in these regions⁸⁷.
- 4. Elites are always a difficult social aspect to prove archaeologically, but some elements of material culture might be used in order to argue for their presence. The presence of a hearth decorated with running spirals is quite a rare occurrence in the MBA of Transylvania. It has only been documented in four instances at three sites, and it has been suggested to indicate local power centres, and implicitly elites⁸⁸. The fact that especially the MBA Ib-II period dwellings have been built as a seemingly planned system, with a rigorous construction plan and orientation (Pls. XIV/2; XV/5) is a strong argument for the presence of some sort of centralised power, at least as of this period. Furthermore, the two re-building phases of the fortification system, and in these especially those of the rampart (Pl. XII), dated to the MBA Ia and Ib-II periods might be seen not only as functional, but as elements of prestige. This might be especially true in the context, where in this period in the entire Ciuc depression no other fortified settlement is documented (Pl. III/2), and more than that, it is the highest documented inhabited feature of the depression (Pls. III/1; V-VI). In this line of reasoning, choice and type of site might be viewed as attributes of local elites⁸⁹.
- 5. The manipulation by the elites of the social system by the control of prestige goods is quite problematic, since the central part of the settlement has not yet been excavated, and the burial ground belonging to this settlement has not been found. As such, very little might be stated concerning the distribution of prestige items within the society and the issue still remains open.

 $^{^{83}}$ Rowlands 1987, 4–5; Kristiansen 1994, 7–8, 15–17; Kristiansen 2005b, 280, 282, 293–296; Rowlands 2005, 220–221.

⁸⁴ Kristiansen 1987, 81-82; Larsen 1987, 52-53, 55, Fig. 5.3; Kristiansen 2005a, 268-270.

⁸⁵ Bader 2001, 19, nos. 13-15, map 1.

 $^{^{86}}$ Andronic et alii 2006, 69; Chintăuan 2006; Drăgănescu 2006; Cavruc 2008, 83–86; Dietrich 2010, 202, Fig. 6.

⁸⁷ Andronic et alii 2006, 69.

 $^{^{88}}$ Seraphin 1902; Horedt, Seraphin 1971, 74–76, Pls. 59–60; Wollmann 1999; Cavruc 2000b, 208, XLIIb2, no. 686; Daróczi 2011a, 119–120, 124, no. 6, Pl. 1/6.

⁸⁹ Chapman 1991, 81.

- 6. The issue of imported products is an important one, since the presence of the eastern material culture especially in the MBA Ia is very distinct at this site in the Ciuc depression (Pl. XVI/1, 5-8, 12), and even in the later, documented periods of the MBA is significant (Pl. XVII/12, 18). It is important to note that this type of pottery is only found in significant amounts at this site, which, based on the research of the 1950s and 1960s was interpreted as a new, local group⁹⁰. It was research in the last decade that clarified that in fact it is the westernmost manifestation of an eastern style of manufacturing pottery⁹¹. The presence of significant quantities of eastern pottery (whether imported or locally manufactured based on the "imported", eastern know-how) is in contrast to the almost total lack of this at other sites in the depression, and certainly differentiates this site by its imported material culture. The presence of miniature vessels (Pls. XVI/9-10; XVII/13-15) in earlier and later habitation phases of the site might be seen as containers of locally made or imported aromatics (perfumes and unguents), a possibility that has been disregarded, especially for the Transylvanian BA, mostly due to the lack of residual analysis of pots. Evidence for the production of these commodities and the use of miniature vessels to contain them exists in the Aegean⁹², along with evidence from Linear B tablets⁹³.
- 7. Specialised craft production at this site might be suggested in connection with the miniature vessels, especially as of the MBA Ib-II period (Pl. XVII/13-15), since, for example, pine resin and iris oil are mentioned as ingredients of Aegean BA aromatics (residual analysis)⁹⁴, that would have been available in the area. Further elements of material culture, especially from the second MBA habitation layers, like spindle whorls (Pl. XVII/1-6) used in production of textiles and *Krummessers* (Pl. XVII/8-9) most likely used for the skinning of animals⁹⁵ (for leather) are clear indicators of specialised local craftsmanship.
- 8. The location of the site on a high saddle does not allow for the production of agricultural goods needed for the subsistence of the community. The fact that most of the sites of the MBA I-II period are located on eutric fluvisols (Pl. XI), mostly on river and stream terraces (Pl. III/2), with an a.s.l. elevation at least 100 m below that of Păuleni-Ciuc Cetate/Dealul Cetății/Movila Cetății/Várdomb [41] (Pl. III/1), and no other site in the area has such a high-lying position or is fortified might suggest that the goods necessary for the subsistence of the local community were procured from the lower lying regions of the depression. This is especially true since cereal production is documented in the valley already in this period⁹⁶. Whether this was done by exchange/trade or in forms of dues owed by the communities of the lower-lying settlements to the community, and especially the elites, of the site cannot be stated with certainty at present. Whichever the means, the social system of exchange/trade of the depression was certainly a dendritic one.

⁹⁰ Székely 1970a.

⁹¹ Cavruc 2005.

⁹² Soles 1992, 227 - with a full reference to further examples; Tzedakis, Martlew 1999, 44-46, 48-49, esp. 51, no. 19.

⁹³ Ventris, Chadwick 1973, 223-224; Beck, Beck 1978.

⁹⁴ Tzedakis, Martlew 1999, 50, no. 12.

⁹⁵ Roman et alii 1992, 154.

 $^{^{96}}$ Tanțău 2006, 116, Fig. 13.

The other approach mentioned above is the *contact zone*. The use of this approach is needed since the traits of a gateway community are far too broad to express the nature of complexity and social changes occurring at the site in discussion. The entanglement of these two approaches is seen as the best way to describe the nature of the site at Păuleni-Ciuc – *Cetate/Dealul Cetății/Movila Cetății/Várdomb* [41].

A contact zone has been defined as a "social space where cultures meet, clash, and grapple with each other, often in contexts of highly asymmetrical relations of power, such as colonialism, slavery" Although a contact zone as described by Pratt does not focus on aspects of how this might manifests itself in a social space, it can nevertheless in some aspects be related to archaeology, especially in literary periods. Two important characteristics might be singled out which might be related to archaeological features and finds.

- 1. Autoethnography is seen "as selective collaboration with and appropriation of idioms of the metropolis or the conqueror" 98.
- 2. Transculturation, which involves a "process whereby members of subordinated or marginal groups select and invent from materials transmitted by a dominant or metropolitan culture" 99.

Based on the above landscape study it is clear that the social space of Păuleni-Ciuc - *Cetate/Dealul Cetății/Movila Cetății/Várdomb* [41] is a place where cultures meet and interact in a synchronous and diachronous timeframe.

- 1. Autoethnography without texts is difficult to prove, but the fact that fortification system, dwelling orientations and the site itself were reused following the MBA Ia might indicate a selective collaboration of previous and following social spaces. Whether this collaboration meant a gradual change or a sudden, maybe even aggressive, takeover is not clear based on the available evidence, but the interaction of these two groups is nevertheless obvious.
- 2. Transculturation at the site may be seen in case of the transition from the MBA Ia to MBA Ib, since a previously marginal social space becomes integrated into the larger network of Transylvanian MBA Ib. Furthermore, finds typical for regions to the east of the Carpathians have been found at this site which further suggests an interaction with materials and possibly ideas from this region. The assemblage suggests an interaction only with selected items of the eastern material culture and their use might have been reinvented at this site.

Conclusions

Since the traits of a gateway community fit many important sites, though not in this region, it would seem that an alloying of these traits with those of a *contact zone* would be useful. A synthesis of the traits of the two types of interaction would define a *special gateway community*. The characteristics of a special gateway community are encountered at this site, and it can be safely stated that the MBA I-II community

⁹⁷ Pratt 1991, 33.

⁹⁸ Pratt 1991, 34.

⁹⁹ Ortiz 1987, 93, 96-97; Pratt 1991, 34.

was such a social group. This naturally does not exclude other types of social systems to be associated with this community. As further research might reveal, it could also be a local power centre. Its unparalleled location within the Ciuc depression, the type of the site and the unique material culture, if structured after the above criteria, leave no doubt that this community was indeed an important focal point in the eastwest connections between the inner and outer Carpathian areas. The sharp shift from the earlier habitation characterised mostly by the eastern type of material culture to the later one of predominantly western material culture type might suggest a fast restructuring of contacts and shifts of power relations between the Ciuc depression and neighbouring areas. It is not surprising that this community ended its existence during the MBA II period, since signs of sites abandonment starting towards the end of the period and culminating during the MBA III (Pl. II/6) are obvious. Along with the increased appearances of hoards in the LBA (Pl. III/2), these are clear indicators of social instability and unrest in the region. A successful combination of a detailed BA landscape study, analysis of relevant material culture and theories of over-regional social and exchange/trade structures has thus enabled the delimitation for the first time in the Eastern Carpathian Basin of a special gateway community.

Bronze Age sites of the Ciuc Basin

The known BA sites of the Ciuc basin are listed in alphabetical order, followed by their toponymes and their Hungarian and German names, if they apply. The type of investigation of each site is documented as the following entry. They are grouped in categories of: chance finds in case of moveable archaeological material discovered through non-systematic archaeologically activities; chance discoveries in case of non-moveable archaeological material discovered through non-systematic archaeologically activities; survey in case of systematic, non-intrusive, archaeological field research; sondage in case of small-scale, systematic, intrusive, archaeological field research and excavation in case of large-scale, systematic, intrusive, archaeological field research. The sites are further categorised by: unknown, settlement in case of conclusive evidence for habitation (e.g. adobe of surface dwelling, hearth etc.) but no fortification elements; fortified settlement in case of conclusive evidence for habitation with fortification elements (rampart and/or palisade and/or ditch); burial ground in case of human remains and hoard in case of metal finds (single finds included as well). The dating is specified in a double manner, first by its cultural attribution with the mentioned of the specific phase, if applicable, followed by the relative-absolute chronological system (Pl. I). The micro-location of each site is determined with the help of the $ArcGIS\ 10^{100}$ software and these are: river/stream terraces, which are determined by the association of the nearest body of flowing water; hill top is regarded as a group of specific geographical features like proper tops of hills, edges of such hill tops, promontories of hills; ridge is also a collective term for geographical features, which might be proper ridges or saddles and finally knolls are seen as slightly raised features in the lower lying areas

 $^{^{100}}$ I would like to thank ESRI Deutschland GmbH for awarding a full license of the ArcGIS 10 software through the ESRI Absolventen programm.

of the Olt floodplain or its broader river terraces. The subsurface lithology 101 is also determined with the help of the ArcGIS 10 software (Pl. XI). The following main soil reference groups are found within the study region: umbirc andosols (ANu) consisting of soils resulting from volcanic ejecta or glasses with an umbric horizon 102; dystric cambisols (CMd) comprising of soils with at least an incipient subsurface soil formation with increasing clay percentage and a low base saturation 103; eutric cambisols (CMe) meaning soils with at least an incipient subsurface soil formation with increasing clay percentage and a high base saturation 104; eutric fluvisols (FLe) are genetically young, azonal soils in alluvial deposits with a high base saturation ¹⁰⁵, while *cambic podzols* (PZb) are soils with an ash-grey upper subsurface horizon, bleached by loss of organic matter and iron oxides, on top of a dark accumulation horizon with brown, reddish or black illuviated humus and/or reddish iron compounds 106. The description of the site will contain notes on its location in the landscape, mention of its research history if it is documented, more important and relevant finds and in some cases a discussion of its dating, if needed. The bibliography is intended to provide a full reference for each site from its earliest discoveries through further research and re-interpretations and possible re-dating.

¹⁰¹ Based on the SOTER programme for Central and Eastern Europe (ver. 1.0), developed at the University of Wageningen (2nd edition 2005), implemented by the Food and Agriculture Organization of the United Nations, the International Soil Reference and Information Centre and the United Nations Environment Programme under the auspices of International Union of Soil Sciences.

¹⁰² FAO 1988, 19; FAO 2006, 70.

¹⁰³ FAO 1988, 18; FAO 2006, 75.

¹⁰⁴ FAO 1988, 18; FAO 2006, 75.

¹⁰⁵ FAO 1988, 18; FAO 2006, 79-80.

¹⁰⁶ FAO 1988, 18; FAO 2006, 91.

[1] Armăşeni, (Ménaság, Csíkménaság), Harghita county.

Type of investigation: chance finds.

Type of site: unknown.

Dating: Jigodin (?); EBA II (?).

Micro-location: 1st terrace (?).

Subsurface lithology: cambic podzols (PZb).

Description: The exact location of the site is unknown, probably from the territory or the outskirts of the modern village, on the first terrace of a small stream. A broken polished stone axe was mentioned from this village in the József Nyerő collection. Based on its shape and position of the shaft hole it is most likely dated to the EBA II¹⁰⁷.

Bibliography: Roska 1941, 56, no. 62; Roska 1942, 60, no. 55; Maxim, Crişan 1995, 753, no. III.1, Pl. III/1; Cavruc 2000b, 85, VIIIa3, no. 134.

[2] Băile Tuşnad - cariera de piatră ponce, (Tusnádfürdő), Harghita county.

Type of investigation: chance finds.

Type of site: settlement (?).

Dating: Jigodin/Schneckenberg B; EBA II. Micro-location: hill top.

Subsurface lithology: dystric cambisols (CMd).

Description: The site is located on the western outskirt of the modern village, on top of a hill spur with three steep sides. During stone quarrying in the mid-1960s, a polished stone axe with an off-set shaft hole was discovered here. The repertoire dates it to either the Neolithic or Bronze Age, but after careful inspection of the shape and the position of the shaft hole, it becomes clear that the best analogies for this are found at Leliceni-Muntele de piatră [17] (Roman et alii 1992, 155, 222, Pl. 67/14; VI/14) and Braşov-Schneckenberg (Prox 1941, 49-50, 51, esp. no. 6, Fig. 30 = Pl. XXXV/2, 9). It must be mentioned that, somewhat similar shapes are reported from the Tiszapolgár (ECA) and Cotofeni (LCA Ib-EBA Ia) cultures being defined as type IC (Kalmar 1981, 108-109, Pl. 2/7), though the presented, examples (Bognár-Kutzián 1963, 53, Fig. 23a,

Pl. XIX/1; Roman 1976, 17, Pl. 9/11; Roman 1977, 17, Pl. 9/11) do not show close resemblance to the axe in discussion. Furthermore, somewhat similar later examples are found in the Wietenberg culture, type SD1 a and b (Boroffka 1994, 217, Pl. 30/10-11), though the analogies are not very convincing here either.

Bibliography: János, Kovács 1967, 50, XVIII, no. 56, Pl. XXVII/189; Cavruc 2000b, 80, IIIa1, no. 101.

[3] Cetățuia - Görgös¹⁰⁸, (Ciatoseg, Csatószeg, Csíkcsatószeg), Harghita county.

Type of investigation: survey.

Type of site: unknown.

Dating: Wietenberg; MBA/LBA III (?).

Micro-location: 1st terrace.

Subsurface lithology: dystric cambisols (CMd).

Description: The site is located just south of the modern village, on an interfluve of the streams Fişag/Fiság and Görgös, on their first terrace. During surveying in the mid-1960s, several sherds belonging to the Wietenberg culture were discovered and along with a decoration of an urn in the shape of a wild goat (?), possibly dating to the latest stage of the mentioned culture. Sherds of the Ha period are mentioned as well.

Bibliography: János, Kovács 1967, 49, XIV, no. 42, Pl. XXIV/150(?)-151; Muscă 1980, 11, no. 15a; Boroffka 1994, 78, 94, nos. 415 and 540; Cavruc 2000b, 203, XLIa1, no. 662.

[4] Ciceu - casa inginerilor (Harghita Băi, Hargitafürdő), Harghita county.

Type of investigation: chance finds.

Type of site: burial ground (?).

Dating: Noua; LBA I-II.

Micro-location: 1st terrace.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located on the territory of the modern village, on the first, left-hand side terrace of the Olt River¹⁰⁹. A kantharos

¹⁰⁷ See discussion on the dating of this type of polished stone axe at Băile Tuşnad - *cariera de piatră ponce* [2].

¹⁰⁸ The two entries of N. Boroffka refer to the same site (Boroffka 1994, 78, 94, nos. 415 and 540).

¹⁰⁹ The indication that the site is in the nearby town of Miercurea Ciuc is incorrect (Cavruc 2000b, 151, XXVIb16, no. 423) - personal communication

was retrieved from this area, probably indicating an inhumation burial that was destroyed. **Bibliography:** Florescu 1991, 75, no. 251/K, 6; Cavruc 2000b, 151, XXVIb16, no. 423; Sava 2002, 120; Daróczi 2011b, 130, no. 121; Motzoi-Chicideanu 2011, 110, no. 433.

[5] Ciucani - *izvorul de apă minerală* (Cechefalău, Csekefalva, Csíkcsekefalva), Harghita county.

Type of investigation: chance finds.

Type of site: settlement.

Dating: Wietenberg; MBA.

Micro-location: 1st terrace.

Subsurface lithology: cambic podzols (PZb). Description: The site is located on the northeastern outskirts of the modern village, on the first, right-hand side terrace of a small stream. During cleaning and unclogging of the field next to the path, nearby the mineral water spring some Wietenberg sherds were found. Bibliography: János, Kovács 1967, 48, XII, no. 37, Pl. XX/108-110; Muscă 1980, 11, no. 20; Boroffka 1994, 94, no. 544; Cavruc 2000b, 200, XLa1, no. 641.

[6] Ciucsângeorgiu (Cic-Sângeorz, Ciuc-Sângeorgiu, Csíkszentgyörgy), Harghita county.

Type of investigation: chance finds.

Type of site: hoard. Dating: LBA II-III

Micro-location: 1st terrace (?).

Subsurface lithology: cambic podzols (PZb). Description: The location of the site is unknown, but is most likely situated on the territory or the vicinity of the modern village; it would be placed on the first terrace of a small stream. In the second part of the 19th century a bronze lobed axe (*Lappenbeil*) is reported from here. Although, it was not documented, just mentioned, in the series of Prähistorische Bronzefunde, it was noted that all the known examples are from Transylvania and are usually single finds. The general dating of these types of axes falls into the depot period of Uriu-Domănești, in the LBA.

Bibliography: Hampel 1896, 38; Al. Vulpe 1975, 81; Cavruc 2000b, 88, VIIIc8c, no. 150.

of Antal Kosza of the County Patrimony Protection and Conservation Office.

[7] Ciucsângeorgiu - grădina Potowski/ Potoczkikert/curtea parohiei romano-catolice, la cimitirul vechi (?)¹¹⁰ (Cic-Sângeorz, Ciuc-Sângeorgiu, Csíkszentgyörgy), Harghita county.

Type of investigation: chance finds and sondage.

Type of site: settlement/burial ground (?)/hoard.

Dating: Wietenberg B/Monteoru; MBA I-II/LBA III (?).

Micro-location: 1st terrace.

Subsurface lithology: cambic podzols (PZb).

Description: The site is located on the territory of the modern village on the interfluve of two streams, Martonos/Mártonos and Fişag/ Fiság, which is the first, high terrace of both of them. In 1956 a multi-layered settlement was discovered with layers of the Wietenberg culture. Slightly to the north of this site from the courtyard of the Roman-Catholic parish, a juglet of the Wietenberg culture, phase B, is reported. In 1963, a sondage yielded amongst other finds a handle of the Monteoru culture. In the mid-19th century, evidence of an LBA incineration burial ground was found here. Due to the body treatment of the individuals and the shapes of the vessels ("Die Urnen sind von 11-13 Cm. hoch und die Wände derselben, welche von einem engen cylindrischen Fusse weit ausladen, werden im letzten Fünftel ihrer Höhe scharf eingezogen und gehen dann in den cylindrischen Hals aus. Auf der Einziehung sind beiderseits kleine Henkel aufgesetzt". Gooss 1876, 224) it is, most likely, dated to the LBA and EIA period, since in the earlier periods of the LBA inhumation is the dominant body treatment. The discovery of a sickle is reported from here as well.

Bibliography (MBA): János, Kovács 1967, 44, II, no. 10, Pl. XIII/33; Muscă 1980, 12, no. 12g; Boroffka 1994, 94, nos. 545–546; Cavruc 2000b, 85–86, 87, VIIIb1 and c3,

¹¹⁰ The two toponymes are mentioned as two different sites in the literature, though it is clear that they belong to the same site, at least in the MBA. Further, the "sites" mentioned by Valeriu Cavruc (2000b, 85–86, 87, 88, VIIIb1, c3, c4 and c8d, nos. 135, 143, 144 and 151), probably, indicate the same BA find spot.

nos. 135 and 143. Bibliography (LBA III?): Gooss 1876, 224; Marțian 1909, 327, no. 129; Marțian 1920, 14, no. 179; Roska 1942, 60, no. 61; János, Kovács 1967, 44, II, no. 10, Pl. XIII/32; Muscă 1980, 12, nos. 21b, f; Crişan 1993, 242, no. 4, Pl. 5/5; Cavruc 2000b, 87, 88, VIIIc4 and c8d, nos. 144 and 151.

[8] Cozmeni - borbélyok (Cozmaş, Kozmás, Csíkkozmás), Harghita county.

Type of investigation: chance finds.

Type of site: unknown.

Dating: Wietenberg; MBA.

Micro-location: 1st terrace.

Subsurface lithology: cambic podzols (PZb). Description: The site is located in the western

end of the modern village, on the right-hand side, first terrace of a small stream. During the construction of a house, sherds of the

Wietenberg culture were unearthed.

Bibliography: János, Kovács 1967, 45, IV, no. 15, Pl. XV/47-49; Muscă 1980, 13, no. 25e; Boroffka 1994, 34, no. 141; Cavruc 2000b, 201, XLb2, no. 643.

[9] Cozmeni - zona cimitirului (Cozmaş, Kozmás, Csíkkozmás), Harghita county.

Type of investigation: chance finds.

Type of site: burial ground (?).

Dating: Wietenberg (?); MBA (?).

Micro-location: 2nd terrace.

Subsurface lithology: cambic podzols (PZb).

Description: The site is located to the west of the modern cemetery, on the second, left-hand side terrace of the Olt River. In the early-1960s, human remains (skull fragments) and BA sherds were found at this site. It might be dated to the MBA, due to the vicinity of the nearby site of Cozmeni - Borbélyok [8].

Bibliography: János, Kovács 1967, 45, IV, no. 16; Muscă 1980, 13, no. 25f; Cavruc 2000b, 201, XLb3, no. 644.

[10] Delniţa - lângă biserica Sf. Ioan (Delne, Csík-delne), Harghita county.

Type of investigation: chance finds.

Type of site: burial ground (?).

Dating: Noua (?); LBA I-II (?).

Micro-location: knoll.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located west of the modern village, but also immediately east of the Catholic Sf. Ioan church. During construction work several burials were destroyed, probably MBA. Skull fragments of a child and of an adult are reported. The fragments belonging to the adult were stained by copper/bronze-oxid and showed traces of green colouring. Just three sherds of possibly earlier LBA date were found alongside them.

Bibliography: Jánovits 1999, 122, no. 4; Cavruc 2000b, 172, XXXIIIa3, no. 523; Daróczi 2011b, 139, no. 172.

[11] Ineu - depozitul C.A.P. (Csíkjenőfalva), Harghita county.

Type of investigation: chance finds.

Type of site: unknown.

Dating: Noua; LBA I-IIIa.

Micro-location: 1st terrace.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located on the territory of the modern village, on the first, right-hand side terrace of the Olt river. Sherds of the Noua culture are reported from here.

Bibliography: Cavruc 2000b, 84, VIIb3, no. 121.

[12] Ineu - Grădina Kósa/Kósakert (Csíkjenőfalva), Harghita county.

Type of investigation: chance finds and sondage.

Type of site: settlement.

Dating: Wietenberg A-B (?); MBA I-II (?)/LBA III (?).

Micro-location: hill top.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located to the east of the modern village, on top and upper slopes of the hill. During agricultural fieldwork in 1966, sherds and spindle whorls of the Wietenberg culture were revealed. This prompted a subsequent sondage.

Bibliography: János, Kovács 1967, 44-45, III, no. 12, Pl. XIV/37-38, 41-42, 43(?); Jánovits 1999, 121, no. 5a, Pl. XXXII/5-6; Cavruc 2000b, 83, VIIb1, no. 119; Dietrich 2010, 204, no. 5/16.

[13] Ineu - Grădina lui Barabás Áron (Csíkjenőfalva), Harghita county.

Type of investigation: excavation.

Type of site: unknown.

Dating: Wietenberg (?); MBA (?).

Micro-location: 1st terrace.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located on the territory of the modern village, on the first, right-hand side terrace of the Olt river. In 1965, a rescue excavation was conducted here and besides the Late Iron Age finds BA pottery, probably MBA, was discovered.

Bibliography: Jánovits 1999, 122, no. 5/b; Cavruc 2000b, 83, VIIb2, no. 120.

[14] Lăzărești - *Nyírpatak*, (Lázárfalva) Harghita county.

Type of investigation: chance finds.

Type of site: unknown.

Dating: Jigodin/Wietenberg; EBAII/MBA.

Micro-location: 1st terrace.

Subsurface lithology: dystric cambisols (CMd). Description: The site is located on the first, right-hand side terrace of the Nyír stream, between the modern villages of Lăzăreşti and Tuşnad-sat. Sherds of the Jigodin and Wietenberg culture are reported from here.

Bibliography: Cavruc 2000b, 202, XLc1, no. 653; Munteanu 2010, 17, 60, nos. A10, IV. 23.

[15] Leliceni - între Pădurea rotundă/ Kerek erdő şi Muntele de Piatră/Kőhegy (Ciuc-Sânlelek, Szentlélek, Csíkszentlélek), Harghita county.

Type of investigation: chance finds.

Type of site: unknown.

Dating: Jigodin (?)/Wietenberg (?); EBA II (?)/MBA.

Micro-location: 1st terrace.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located on the south-western outskirts of the modern village on a prominent knoll. Sherds of the BA are reported from here, probably relating to the EBA II and MBA nearby site of Leliceni - Muntele cu Piatră/Kőhegy [18].

Bibliography: Jánovits 1999, 121, no. 6d; Cavruc 2000b, 192, XXXVIIIa5, no. 608.

[16] Leliceni - locul oprit (Ciuc-Sânlelek, Szentlélek, Csíkszentlélek), Harghita county. Type of investigation: chance finds and excavation.

Type of site: settlement (?).

Dating: Jigodin; EBA II.

Micro-location: hill top.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located west of the modern village, on the northern end of an elongated, north-south oriented hill top (promontory). Sherds of the EBA II period were found here as a result of excavations carried out at the site in 1971, 1974 and 1978.

Bibliography: Roman et alii 1973, 568-569, Fig. 1/8; Roman et alii 1992, 173, Figs. 10/3, 12/B.

[17] Leliceni - Muntele cu piatră/Muntele de piatră/Kőhegy (Ciuc-Sânlelek, Szentlélek, Csíkszentlélek), Harghita county.

Type of investigation: chance finds and excavation.

Type of site: settlement.

Dating: Jigodin/Wietenberg; EBA II/MBA. Micro-location: hill top.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located west of the modern village, on the southern end of an elongated, north-south oriented hill top (promontory) and with steep slopes on all sides except the northern one, between two streams, Pârâul Mic/Kicsirét and Pârâul Nagyrét. Most of the site has been destroyed by the stone quarrying since the late 1960s. A small sounding took place in 1956, and due to quarrying, two rescue excavations in 1969 and 1971 were carried out, and between 1973-1977, systematic excavations took place, with a final destruction of the settlement by the quarry in 1978. Three dwellings, dated to the Jigodin group, of wattle and daub were documented alongside some hearths. Rich EBA materials were found consisting of sherds and complete vessels, Krummessers, polished stone axes and chisels, flint arrow-heads, scrapers and sandstone moulds (for axes, chisels and daggers). Sporadic traces of the Wietenberg culture are reported from these investigations, mostly comprised of sherds. The excavation

campaign of 2007 revealed finds of the EBA II period.

Bibliography: Székely 1959, 238, no. 4; Roman et alii 1973; Stoia 1976, 279, no. 69; Stoia 1978, 356, no. 74; Roman et alii 1992, 143–150, 154–172; Boroffka 1994, 53, no. 248; Jánovits 1999, 121, no. 6a; Cavruc 2000b, 192, XXXVIIIa3, no. 606; Kavruk et alii 2008a; Dietrich 2010, 204, no. 5/19; Munteanu 2010, 17–18, 60, nos. A11 and IV. 24.

[18] Leliceni - Pădurea rotundă/Kerek erdő (Ciuc-Sânlelek, Szentlélek, Csíkszentlélek), Harghita county.

Type of investigation: chance finds.

Type of site: unknown.

Dating: Jigodin (?)/Wietenberg (?); EBA II (?)/MBA.

Micro-location: knoll.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located southwest of the modern village on a prominent knoll. Sherds of the BA are reported from here, probably relating to the EBA II and MBA nearby site of Leliceni - *Muntele cu Piatră/Kőhegy* [17].

Bibliography: Jánovits 1999, 121, no. 6b; Cavruc 2000b, 192, XXXVIIIa4, no. 607.

[19] Leliceni - Suta III (Ciuc-Sânlelek, Szentlélek, Csíkszentlélek), Harghita county. Type of investigation: chance finds.

Type of site: settlement.

Dating: Jigodin; EBA II. Micro-location: hill top.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located west of the modern village, on the northern end of an elongated, north-south oriented hill top (promontory). Sherds of the EBA II period were found here as a result of stone quarrying activities, which started at this site in the middle of the last century.

Bibliography: Roman et alii 1973, 568-569, Fig. 1/9; Roman et alii 1992, 173, Fig. 10/4.

[20] Leliceni - Vereskép (Ciuc-Sântlelec, Szentlélek, Csíkszentlélek), Harghita county. Type of investigation: chance finds. Type of site: unknown.

Dating: Wietenberg; MBA.

Micro-location: knoll.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located on the northeastern outskirts of the modern village, near the fortified church on a prominent knoll. Sherds of the Wietenberg culture were found here.

Bibliography: Cavruc 2000b, 191, XXXVIIIa1, no. 604.

[21] Mădăraş (Csíkmadaras), Harghita county.

Type of investigation: chance finds.

Type of site: unknown.

Dating: BA.

Micro-location: 2^{nd} terrace.

Subsurface lithology: eutric fluvisols (FLe).

Description: From the territory of the modern village, on the right-hand side, first terrace of the Olt river finds of three clay beads were reported from the beginning of the last century. The county's repertoire mentions three spindle whorls.

Bibliography: Roska 1942, 60, no. 53; Cavruc 2000b, 123, XIIb1, no. 278.

[22] Miercurea Ciuc - *Băi*¹¹¹ (Csíkszereda, Szeklerburg), Harghita county.

Type of investigation: chance finds and sondage.

Type of site: unknown.

Dating: Jigodin/Wietenberg A-B; EBA II/MBA I-II.

Micro-location: 1st terrace.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located on the right-hand side, first terrace of the Olt river, just to the west of the modern town. In the 1960s chance finds of sherds and in 1980 several, smaller sondages unearthed further sherds of the Jigodin and Wietenberg culture.

Bibliography: Marțian 1903, 283-284, no. Ic1; János, Kovács 1967, 46, VIII, no. 24, Pl. XVII/69-72; Székely 1970b, 479; Roman et alii 1973, 570, Fig. 1/6; Stoia 1981, 371, no. 77a; Roman et alii 1992, 174, Fig. 10/5;

¹¹¹ Same site discussed at both points by Valeriu Cavruc (2000b, 143, 150, XXVIa6, no. 397, XXVIb3, no. 408).

Boroffka 1994, 57, no. 279; Cavruc 2000b, 143, 150, XXVIa6, no. 397, XXVIb3, no. 408; Munteanu 2010, 16-17, no. A1.

[23] Miercurea Ciuc - Cioboteni-curtea școlii generale (Csíkszereda, Szeklerburg; Ciuboteni, Ciobotfalău, Csobotfalva, Csíkcsobotfalva), Harghita county.

Type of investigation: chance finds.

Type of site: settlement.

Dating: Wietenberg A2-C; MBA I-III.

Micro-location: 1st terrace.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located on the first, right-hand side terrace of the Sumuleu stream, in the easternmost end of the modern town, which was the village of Cioboteni till 1913. In the courtyard of the primary school five complete vessels were retrieved during earthworks. The complete vessels may indicate destruction or abandonment layers of the MBA. In 2005 a rescue excavation campaign unearthed sherds of the A2-B phase of the Wietenberg culture.

Bibliography: Muscă 1980, 11, no. 19; Boroffka 1994, 94, no. 543; Buzea 2006; Munteanu 2010, 62, no. IV.31.

[24] Miercurea Ciuc - Csáka/Dealul Csáka/Czáko/Dealul lui Czáko/Czákó/Dâmbul Czáka/Czáka dombja/Pădurea Ciuntă (?)¹¹² (Csíkszereda, Szeklerburg), Harghita county. Type of investigation: chance finds.

Type of site: settlement (?).

Dating: Jigodin/Wietenberg B; EBAII/MBA II.

Micro-location: hill top.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located on the northeastern outskirts of the modern town, on a hill. The finds (few sherds) were collected at the beginning of the last century and indicate an EBA II and MBA presence at this site.

Bibliography: Marțian 1903, 283, no. Ia; Roska 1942, 61, no. 67; Roman et alii 1973, 569, Fig. 1/3; Roman et alii 1992, 175, Fig. 10/8; Maxim, Crişan 1995, 754, no. IV.5, Pl. IV/4-5, 7, 9; Cavruc 2000b, 143, 151, XXVIa6, no. 397, XXVIb13, no. 420; Dietrich 2010, 204, no. 5/24; Munteanu 2010, 17, no. A8.

[25] Miercurea Ciuc - Culmea muntelui/Bérchegy (Csíkszereda, Szeklerburg), Harghita county.

Type of investigation: chance finds.

Type of site: settlement (?).

Dating: Jigodin/Wietenberg B; EBAII/MBA II.

Micro-location: hill top.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located on the eastern outskirts of the modern town, on a flat topped hill. Finds (few sherds) were collected in the middle of the last century and indicate an EBA II presence at this site.

Bibliography: Roman et alii 1973, 569-560, Fig. 1/4; Roman et alii 1992, 175, Fig. 10/7; Cavruc 2000b, 143, XXVIa6, no. 397; Munteanu 2010, 17, no. A7.

[26] Miercurea Ciuc - *Jigodin băi-Capătul digului/Gátvége*¹¹³ (Csíkszereda, Szeklerburg; Jigodinu, Jigodin-baie, Jeged, Zsögödfürdő, Csíkzsögöd), Harghita county.

Type of investigation: chance finds.

Type of site: unknown.

Dating: Wietenberg/Noua I; MBA/LBA I.

Micro-location: 1st terrace.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located on the first, right-hand side terrace of the Olt river, just to the west of the modern village. Sherds of MBA and LBA were found at this site at the beginning of the last century. During sand quarrying in the early-1940s, sherds and a zoomorphic figurine-head (deer?) were discovered here.

Bibliography: Marțian 1903, 283, no. Ib; Székely 1946, 37, note 13; Székely 1955a, 858, Fig. 3/4, 8-13, 15-16; Székely 1955b, 52; Székely 1959, 243, no. 8, Fig. 2; Horedt 1960, 112, no. 89; Székely 1965, 23; Székely 1970b, 479; Székely 1988, 157, Pl. XIII/3-3a;

¹¹² Same site discussed at both points by Valeriu Cavruc (2000b, 143, 151, XXVIa6, no. 397, XXVIb13, no. 420).

¹¹³ The site mentioned by V. Cavruc (2000b, 143, XXVIa1, no. 391), probably, indicates the same BA find spot.

Boroffka 1994, 57, no. 281; Cavruc 2000b, 143, XXVIa3, no. 394.

[27] Miercurea Ciuc - *Jigodin băi-casa Imre Nagy* (Csíkszereda, Szeklerburg; Jigodinu, Jigodin-baie, Jeged, Zsögödfürdő, Csíkzsögöd), Harghita county.

Type of investigation: chance finds.

Type of site: unknown.

Dating: Wietenberg/Noua; MBA/LBA I-IIIa. Micro-location: 1st terrace.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located on the territory of the modern day village (southern end of the modern town), on the first, left-hand side terrace of the Olt river. During the construction of the memorial gallery of Imre Nagy in the early-1970s (?), sherds of the Wietenberg and Noua cultures were unearthed.

Bibliography: Cavruc 2000b, 396, XXVIa5, no. 396.

[28] Miercurea Ciuc - *Jigodin băi-centrul cartierului* (Csíkszereda, Szeklerburg; Jigodinu, Jigodin-baie, Jeged, Zsögödfürdő, Csíkzsögöd), Harghita county.

Type of investigation: chance discovery.

Type of site: burial ground.

Dating: Noua I; LBA I.

Micro-location: 2nd terrace.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located in the middle of the modern day village, on the second, left-hand side terrace of the Olt river. It is located within the settlement and it was an inhumation placed into a stone cist along with five vessels.

Bibliography: János, Kovács 1967, 46, VIII, no. 26, Pl. XVII/74–76; Cavruc 1999, 14–15, 29; Cavruc 2000b, 144, XXVIa7, no. 398; Cavruc 2001, 49; Daróczi 2011b, 177, no. 375.

[29] Miercurea Ciuc - *Jigodin băi-Coasta stejarului/Csereoldal/Vârful cu stejari/Csertető*¹¹⁴ (Csíkszereda, Szek-lerburg;

Jigodinu, Jigodin-baie, Jeged, Zsögödfürdő, Csíkzsögöd), Harghita county.

Type of investigation: chance discovery and excavation.

Type of site: settlement.

Dating: Jigodin; EBA II.

Micro-location: hill top.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located on the southeastern outskirts of the modern town, on top of a prominent hill. In 1954, with the start of stone quarrying activities, significant finds of the EBA II period were made here. Subsequently, in 1955, a rescue excavation was conducted. Complete, though smashed, vessels, sherds, stone tools (polished stone, sandstone and flint) and further clay objects (spindle whorls and perforated plaques) were found during these investigations.

Bibliography: Székely 1955a, 845–846, Pl. 1/1–10, 4/1–9; Székely 1957, 152–154, no. 2. Fig. 6, 7/1–10; Bichir 1962, 88, Fig. 1, note 13; Roman et alii 1973, 559, Fig. 1/2; Roman et alii 1992, 173–174, Fig. 10/1; Jánovits 1999, 122–123, no. 8, Pl. V/2–3; Cavruc 2000b, 143, 193, XXVIa4, no. 395, XXXVIIIc3, no. 614; Munteanu 2010, 17, 21, nos. A6 and A21.

[30] Miercurea Ciuc - Jigodin băi - Jigodin I/Câmpul Morii/Malomföld (Csíkszereda, Szeklerburg; Jigodinu, Jigodin-baie, Jeged, Zsögödfürdő, Csíkzsögöd), Harghita county. Type of investigation: chance finds and excavation.

Type of site: settlement.

Dating: LBA III-EIA.

Micro-location: hill top.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located to the southwest of the modern town, on a promontory above and to the west of the baths, overlooking the Olt River¹¹⁵. In the excavation campaign of 1988 a bronze knife was discovered, with good analogies at the site of Moldova Nouă-*Izvor Suvarov* (Gumă 1979, 481, 482-483, Pl. I) in a context dated to the LBA IIIa

¹¹⁴ Same site discussed at both points by Valeriu Cavruc (2000b, 143, 193, XXVIa4, no. 395, XXXVIIIc3, no. 614) and Radu Munteanu (2010, 17, 21, nos. A6 and A21).

¹¹⁵ Erroneously placed on the map by Valeriu Cavruc (2000b, 312 map XXVI/no. 399), since S. Ferenczi clearly places it in the immediate vicinity of the Olt river (Ferenczi 1938, 239, Fig. 1/1).

(Szentmiklosi 2009, 409, no. 145). Sherds of the Gáva period are mentioned as well.

Bibliography: Marţian 1903, 283-284, no. Ic1; Marţian 1909, 327, no. 133; Marţian 1920, 24, no. 374; Vámszer 1934, 71; Ferenczi 1938, 240-242, 312, no. 1; Crişan 1993, 245, no. 22, Pl. 8/2; Cavruc 2000b, 145, XXVIa8, no. 399.

[31] Miercurea Ciuc - Jigodin băi - Jigodin III/Vâful Cetății/Piscul Cetății/Cetățuia/Piscul Cetății/Cetățuia/Piscul Cetățuia/Kisvártető (Csíkszereda, Szeklerburg; Jigodinu, Jigodin-baie, Jeged, Zsögödfürdő, Csíkzsögöd), Harghita county. Type of investigation: chance finds and excavation.

Type of site: unknown.

Dating: Wietenberg; MBA.

Micro-location: hill top.

Subsurface lithology: umbric andosols (ANu). Description: The site is located west of the modern town/village on a hill top with three steep sides. It was surveyed in the early-1900s, 1930s and smaller excavations were carried out here in 1950 and 1996. The Bronze Age is only represented through with finds of the Wietenberg culture in the shape of sherds mixed-in with the later La Tène finds.

Bibliography: Orbán 1869a, 34; Marțian 1903, 284, no. Ic2; Könyöki, Nagy 1905, 282; Marțian 1909, 327, no. 133; Marțian 1920, 24, no. 374; Vámszer 1934, 71; Ferenczi 1938, 260–267, 309–311, no. 3; Roska 1942, 61, 313, nos. 74 and 16; Macrea et alii 1951, 308–310, Fig. 12; Jánovits 1999, 123, no. 9b; Cavruc 2000b, 146–148, XXVIa10, no. 401; Dietrich 2010, 204, no. 5/18.

[32] Miercurea Ciuc - Köcsükland/ Köcsülánd/Suta (Csíkszereda, Szeklerburg), Harghita county.

Type of investigation: chance finds and sondage.

Type of site: settlement/hoard.

Dating: Wietenberg C (?)/Noua; MBA III (?)/LBA I-II.

Micro-location: 1st terrace¹¹⁶.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located on the eastern outskirts of the modern town, on the first, right-hand side terrace of the Şuta stream. In 1954 a small archaeological sondage revealed finds of the Wietenberg culture and some sherds of the Noua culture. The archaeological material mostly consisted of sherds, large fragments probably indicating destruction layers of the settlement. Small finds include a polished stone chisel, a terracotta spoon, a clay disc with two perforations and a decorated wagon/chariot wheel with four (?) spokes. In 1966, during stone quarrying a depot was unearthed consisting of seven objects (four socketed bronze axes of the Transylvanian-type, variant C₅ (Rusu 1966, 26, Fig. 3/C5), a spearhead, a sickle and a chisel), to which later further two objects (arm-rings) were attributed, which was dated to the Brz D period of the Uriu-Domănești series (Rusu 1966, 30) of the LBA I-LBA II horizon.

Bibliography: Székely 1955a, 852, Fig. 3/7, 17; 8/1-2, 4-5; 9/1; Székely 1955b, 52-53, Fig. 3/1-2, 4-5; R. Vulpe 1955, 566, Fig. 5; Horedt 1960, 112, no. 89; Bichir 1964, 81, no. 41, note 76, Fig. 7/4; Székely 1970b; Székely 1971a, 393, 397, 399; Székely 1971b, 308, Figs. 1/1-7; 2/1-12; Mozsolics 1973, 126; Petrescu-Dîmboviţa 1977, 63-64, Pl. 54/1-7; Petrescu-Dîmboviţa 1978, 63, 104, no. 1719, Pl. 38/B7, no. 51, Pl. 38/B; Székely 1988, 154, 157, Fig. 4; Bader 1990, 185; Crişan 1993, 241, no. IIIa1, Pl. 3/1-7; Boroffka 1994, 57, no. 280; Cavruc 2000b, 149-150, XXVIb2, no. 407; Dietrich 2010, 204, no. 5/23.

[33] Miercurea Ciuc - str. Tudor Vladimirescu/ Dealul cu praf de puşcă/Pulberărie/Dealul pulberăriei¹¹⁷ (Csíkszereda, Szeklerburg), Harghita county.

Type of investigation: chance finds.

Type of site: unknown.

Dating: Jigodin/Wietenberg; EBA II/MBA.

modern town, and as such on the higher terraces of the Olt River.

¹¹⁶ Erroneously placed on top of a hill (≈*Höhensieldung*), by L. Dietrich (2010, 204, no. 5/23), since it is located on the eastern outskirts of the

¹¹⁷ Same site discussed at both points by V. Cavruc (2000b, 143, 150, XXVIa6, no. 397; XXVIb4, no. 409)

Micro-location: 2nd terrace¹¹⁸.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located on the territory of the modern town, in its southern end, though still to the north of Jigodin. It is on the second, left-hand side terrace of the Olt river. In the late-1960s, during stone quarrying, sherds of the Wietenberg culture were discovered and during construction of the Colegiul Naţional "Octavian Goga" (fomer Liceul nr. 2) sherds of EBA II were reported.

Bibliography: Székely 1961, 182; Roman et alii 1973, 570, Fig. 1/5; Roman et alii 1992, 175, Fig. 10/6; Cavruc 2000b, 143, 150, XXVIa6, no. 397, XXVIb4, no. 409; Dietrich 2010, 204, no. 5/25; Munteanu 2010, 17, no. A9.

[34] Miercurea Ciuc - Şumuleu Ciuc - vatra satului (Csíkszereda, Szeklerburg; Csíksomlyó, Csíksomlyó-Várdotfalva, Schomlenberg, Somlyoerberg), Harghita county.

Type of investigation: chance finds.

Type of site: hoard.

Dating: LBA III.

Micro-location: 1st terrace.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located in the northern part of the modern village, on the first, left-hand side terrace of a small stream. A chance find of an axe with disc of the *Drajna-type* is reported from here. Based on its typology, it dates to the Uriu-Dragomireşti horizon, in the LBA III.

Bibliography: Al. Vulpe 1970, 59-60, 100; Crişan 1993, 241, no. II4, Pl. 2/3; Cavruc 2000b, 150, XXVIb6, no. 411.

[35] Miercurea Ciuc - *Şumuleu Ciuc - vatra* satului (Csíkszereda, Szeklerburg; Csíksomlyó, Csíksomlyó-Várdotfalva, Schomlenberg, Somlyoerberg), Harghita county.

Type of investigation: chance finds.

Type of site: hoard.

Dating: LBA III-EIA.

Micro-location: 1st terrace.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located in the eastern part of the modern town, on the territory of the former Csíksomlyó-Várdotfalva (till 1913) village; on the left-hand side, first terrace of the Şumuleu stream. A socketed bronze axe is reported from this site as having been found in the earlier part of the last century. It is of a *Transylvanian-type*, variant C_7 (Rusu 1966, 27, Fig. 4/C7) and dated to the Ha A_1 - B_2 horizon (Novotná 1970, 97–98, e.g. no. 785, Pl. 43/785; Rusu 1966, 27, 30), which correlates with the LBA III-EIA.

Bibliography: Roska 1937, 144, Fig. 85/2; Roska 1942, 299, no. 39.

[36] Miercurea Ciuc - *Şumuleu Mic/Kis-Somlyó* (Csíkszereda, Szeklerburg), Harghita countv.

Type of investigation: chance finds.

Type of site: unknown.

Dating: Wietenberg (?), MBA (?).

Micro-location: hill top.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located east of the modern town, on top of the Sumuleu Mic/Kis-Somlyó hill. Chance finds of pottery are reported from here, possibly MBA.

Bibliography: Jánovits 1999, 124, no. 10d; Cavruc 2000b, 151, XXVIb15, no. 422.

[37] Miercurea Ciuc - *Toplița* (Csíkszereda, Szeklerburg; Csíktapolca, Csíktoplica), Harghita county.

Type of investigation: chance finds.

Type of site: hoard.

Dating: Jigodin; EBA II/LBA IIIa.

Micro-location: 2^{nd} terrace.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located on the territory of the modern town, in its northwestern part, in the area of the former village of Toplița, in the second, left-hand side terrace of the Olt river. A Baniabic-type copper axe has been found here, which might be associated with the period of the Jigodin group. A fragment of the blade of a Griffzungenschwerter mit profiliertem Mittelwulst type, variant mit breitem flachen Mittelwulst, mit drei Rippen was reported from this site as well, dated to the older Ha A (LBA IIIa).

¹¹⁸ Erroneously placed on top of a hill (≈*Höhensieldung*), by L. Dietrich (2010, 204, no. 5/25), since it is located on the territory of the modern town, and as such on the higher terraces of the Olt River.

Bibliography: Roska 1942, 61, no. 69, Fig. 64; Al. Vulpe 1970, 27, no. 33, Pl. 3/33; Bader 1991, 107, no. 268, Pl. 26/268; Crişan 1993, 151, no. 21, Pl. 2/4; Cavruc 2000b, 150, XXVIb5, no. 410.

[38] Mihăileni - lângă cimitirul vechi (Csíkszentmihály), Harghita county.

Type of investigation: chance finds.

Type of site: unknown.

Dating: Wietenberg C-Noua I (?); MBA III-LBA I.

Micro-location: 1st terrace.

Subsurface lithology: cambic podzols (PZb). Description: The site is located on the territory of the modern village, in the immediate vicinity of the catholic cemetery, on the first left-hand side terrace of a small stream. BA sherds and an antler disc used as bridle decoration are reported from here. Though, the disc might have been found at the nearby site of Mihăileni - ruinele satului Czibre [39].

Bibliography: Cavruc 2000b, 152, XXVIIb1, no. 426; Daróczi, Kelemen 2011.

[39] Mihăileni - ruinele satului Czibre (Csíkszentmihály), Harghita county.

Type of investigation: chance finds.

Type of site: unknown.

Dating: Wietenberg C-Noua I (?); MBA III-LBA I.

Micro-location: 1st terrace.

Subsurface lithology: cambic podzols (PZb). Description: The site is located to the east of the modern village, on the first, right-hand side terrace of a small stream. BA sherds and an antler disc used as bridle decoration are reported from here. Though, the disc might have been found at the nearby site of Mihăileni - lângă cimitirul vechi [38].

Bibliography: Cavruc 2000b, 152, XXVIIb2, no. 427; Daróczi, Kelemen 2011.

[40] Misentea - Templom-tizes (Misentiu, Csíkmindszent), Harghita county.

Type of investigation: chance finds.

Type of site: unknown.

Dating: Wietenberg; MBA/LBA III (?).

Micro-location: 2nd terrace.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located on the territory of the modern village and on the second, right-hand side terrace of a small stream. Sherds of the MBA and Ha were retrieved from the courtyard of the Catholic parish.

Bibliography: Jánovits 1999, 124, no. 12, Pl. XXIII/1, 3; Cavruc 2000b, 193, XXXVIIIb1, no. 610.

[41] Păuleni-Ciuc - Cetate/Dealul Cetății/ Movila Cetății/Várdomb (Palfalău, Păuleni, Csíkpálfalva), Harghita county.

Type of investigation: chance finds and excavation.

Type of site: fortified settlement and burial ground.

Dating: Jigodin/Costişa-Ciomortan/Wietenberg A2-B; EBA II/MBA I-II.

Micro-location: ridge.

Subsurface lithology: cambic podzols (PZb). Description: The site is located northeast of the modern village, on a low knoll situated on a saddle stretching between two peaks. For a detailed account of the research history, the MBA finds and contexts please consult the above text.

Orbán Bibliography: Benkő 1869,*7*5; 1869a, 22; Gooss 1876, 217; Martian 1903, 285, no. Id; Könyöki, Nagy 1905, 282, 284; Martian 1909, 326, no. 123; Martian 1920, 14, no. 173; Roska 1929, 293; Vámszer 1934, 72; Ferenczi 1938, 290-296, 308, 311, no. 8; Roska 1942, 59, 220, nos. 16, 46; Popescu, Dumitrescu 1957a, 338, no. 16; Popescu, Dumitrescu 1957b, 355, no. 16; Székely 1959, 238-240, no. 5, Pl. 9/3-9; Popescu 1961a, 570, no. 27; Popescu 1961b, 136, no. 26; Popescu 1968a, 679, no. 17; Popescu 1968b, 423, no. 17; Székely 1970a; Székely 1970c, 305, no. 8; Zaharia 1970, 65-68; Székely 1971a, 391-393, Figs. 3/1-9; 5/1-6; 6/1-4; 7/1-7; Székely 1971b, 307-308, Figs. 4/5-6, 10-11, 5/8-11; 6/6-8; Roman et alii 1973, 571-572; Soroceanu 1973, 500, no. 44; Székely 1973, 219, Figs. 1/1-7; 3/3; Muscă 1979; Székely 1988, 157, 159, Pls. III/3-4; VIII/1-4; XIV/1-5; Boroffka 1994, 65, no. 323; Maxim, Crişan 1995, 753, no. III.4, Pl. IV/2, 10; Jánovits 1999, 124, no. 13; Cavruc 2000a; Cavruc 2000b, 173-174, 175-177, XXXIIIb1, no. 526; Cavruc, Dumitroaia 2000; Cavruc et alii 2000; Cavruc, Rotea 2000; Comşa 2000; Rotea 2000; Cavruc 2001, 46-47, 50, 53; Cavruc et alii 2001; Cavruc 2002; Cavruc, Buzea 2002; Cavruc et alii 2002; Cavruc, Buzea 2003; Cavruc 2004, 272-273; Cavruc 2005; Kavruk et alii 2009, 214; Kavruk et alii 2008b, 302-303; Dietrich 2010, 204, no. 5/29; Kavruk et alii 2010; Munteanu 2010, 49, 67, 85, 90, 92, 93, 96-98, 108, 112-113, 173-174, 176, 180, 182, 199, 203, 207-209, 215, 219, nos. II. 23, IV. 50, Figs. 19-21, 83-84; Popa, Totoianu 2010, 14, 106-116, 130-131, Fig. 111; Daróczi 2011b, 189-190, nos. 444-445.

[42] Racu - Dealul Bogat/Câmpul Cetății/Bogát tető/Racu I¹¹⁹ (Racul Ciucului, Racoş, Rákos, Csíkrákos), Harghita county.

Type of investigation: chance finds.

Type of site: settlement.

Dating: Jigodin/Wietenberg A2-B; EBA II/ MBA I-II/ LBA III (?).

Micro-location: hill top.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located west of the modern village, on the right-hand side of the Olt river on top of a prominent hill with steep eastern and northeastern sides. The site has been surveyed repeatedly since the middle of the 19th century, when a possible rampart and a fortification trench was noted as well. Reported finds mostly consist of sherds, though a stone bead is mentioned as well. An EBA juglet (?), probably of the Jigodin group, was found here (Pál Péter Domokos collection). Sherds of the Ha period are mentioned as well.

Bibliography: Orbán 1869a, 69; Orosz 1901, 41-42, no. 60; Könyöki, Nagy 1905, 282; Marțian 1909, 326, no. 126; Marțian 1920, 32, no. 537; Vámszer 1934, 72; Ferenczi 1938, 274-278, 308, 312, 316, no. 5, Fig. 44; Roska 1942, 59, no. 58; Székely 1955a, Fig. 8/3; Székely 1955b, 52, Fig. 3/3; R. Vulpe 1955, 565-566; Boroffka 1994, 68, no. 344; Maxim, Crişan 1995, 754, no. III. 6, Pls. I/4; III/3, 5-6; Cavruc 2000b, 214-215,

XLIIIb1, b4a-b, nos. 708, 711-712; Dietrich 2010, 205, no. 5/35; Munteanu 2010, 65, no. IV. 42.

[43] Sâncrăeni (Csíkszentkirály), Harghita county

Type of investigation: chance finds.

Type of site: hoard.

Dating: LBA III (?).

Micro-location: 1st terrace.

Subsurface lithology: eutric fluvisols (FLe).

Description: From the territory of the modern village a socketed bronze axe is reported to have been found at the beginning of the last century. **Bibliography:** Roska 1942, 60, no. 63; Cavruc 2000b, 196, XXXVIIIc9b, no. 621.

[44] Sâncrăeni - Dealul Borvizului/Borvíz dombja (Csíkszentkirály), Harghita county.

Type of investigation: chance finds.

Type of site: unknown.

Dating: LBA III (?).

Micro-location: hill top.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located north of the modern village, on the left-hand side of the Olt river on top of a hill. Ha period sherds are reported from here.

Bibliography: János, Kovács 1967, 47-48, XII, no. 35, Pl. XXI/123-125; Cavruc 2000b, 193, XXXVIIIc2, no. 613.

[45] Sâncrăeni - Fabrica de cărămidă/ Ecken-Tiva/Telek/Teleac (Csíkszentkirály), Harghita county.

Type of investigation: excavation.

Type of site: settlement.

Dating: Gáva (?); LBA III.

Micro-location: 1st terrace.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located on the southern outskirts of the modern village, on the first, high, right-hand side terrace of the Olt river. During the excavations of the mid-1950s finds of the earlier Ha period were discovered here.

Bibliography: R. Vulpe 1955, 559-568; Preda 1959, 827, 829-836, 831-845; János, Kovács 1967, 48, XII, no. 36, Pl. XXII/128-143; Jánovits 1999, 125, nos. 15b and 15c, Pl. I/3-4,

¹¹⁹ Same site discussed at all three points by V. Cavruc (2000b, 214-215, XLIIIb1, b4a-b, nos. 708, 711-712).

Pls. XXX/2; XXXIII/1-2, 4; XXXV/1; Cavruc 2000b, 194, XXXVIIIc7, no. 618.

[46] Sâncrăeni - Gara C.F.R. (Csíkszentkirály), Harghita county.

Type of investigation: chance finds.

Type of site: unknown.

Dating: LBA III.

Micro-location: 1st terrace.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located in the eastern part of the modern village, nearby the train station, on the first, left-hand side terrace of the Olt River. A complete, storeyed vessel was found at this site.

Bibliography: Morintz 1970, 95; Cavruc 2000b, 194, XXXVIIIc5, no. 616.

[47] **Sâncrăeni** - *grajdurile C.A.P.* (Csíkszentkirály), Harghita county.

Type of investigation: chance finds.

Type of site: unknown.

Dating: Jigodin; EBA II.

Micro-location: 2nd terrace.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located on the northern outskirts of the modern village, on the second, right-hand side terrace of the Olt river. During the construction of the communal stables in the middle of the last century, sherds of the EBA II period were found.

Bibliography: Roman et alii 1992, 175, Fig. 11/10.

[48] **Sâncrăeni** – *Karimósarka* (Csíkszentkirály), Harghita county.

Type of investigation: chance finds.

Type of site: settlement (?).

Dating: Jigodin/Wietenberg (?); EBA II/MBA (?).

Micro-location: 2nd terrace.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located southeast of the modern village, on the second, left-hand side terrace of the Olt river. Sherds of the MBA (?) were collected from here.

Bibliography: Roman et alii 1992, 175, Fig. 11/10; Cavruc 2000b, 197, XXXVIIIc13, no. 630.

[49] Sândominic (Csíkszentdomokos),

Harghita county.

Type of investigation: chance finds.

Type of site: hoard.

Dating: LBA I-II.

Micro-location: 2nd terrace.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located on the territory of the modern village, on the left-hand side, second terrace of the Olt River. In the 1960s a *Transylvanian-type*, variant B_1 (Rusu 1966, 25, Fig. 2/B1) socketed bronze axe was found. It is dated to the Brz D horizon (Rusu 1966, 26), which places it to the LBA I-II.

Bibliography: Székely 1967, 328-329, Fig. 1/4.

[50] Sânmartin - gropi de nisip lutos/Câmpul capelei (Sânmartin, Cic Sânmartin, Ciuc-Sânmartin, Csíkszentmárton), Harghita county.

Type of investigation: chance finds and chance discovery.

Type of site: settlement.

Dating: Jigodin/Wietenberg A-B; EBA/MBA I-II.

Micro-location: 1st terrace.

Subsurface lithology: cambic podzols (PZb). Description: The site is located on the territory of the modern village, on the first, right-hand side terrace of a small stream. From the first quarter of the last century, sherds of the MBA are mentioned at this site. In the mid-1950s in an area with silty-clay, where small sized quarrying has been conducted a pit-house of the Wietenberg culture was discovered. Sherds are the only finds reported from here. From the nearby area of *Câmpul capelei*, EBA II sherds were collected.

Bibliography: Schroller 1933, 74, no. 15; Roska 1941, 56, no. 64; Roska 1942, 61, no. 64; Roska 1944, 24, no. 15; Horedt 1960, 115, no. 182; Kovács 1967, 48, no. 38, Pl. XX/111-112; Székely 1988, 154; Roman et alii 1992, 175, Fig. 11/17; Boroffka 1994, 78, no. 411; Cavruc 2000b, 203, XLe1, no. 657.

[51] Sânsimion (Sânsimion, Simoneşti, Csíkszentsimon), Harghita county.

Type of investigation: chance finds.

Type of site: hoard.

Dating: LBA IIIa.

Micro-location: 1st terrace.

Subsurface lithology: eutric fluvisols (FLe).

Description: The provenance of the object is unknown, probably from the area of the modern village, from the first, high, left-hand terrace of the Ollt river. The upper half of a beaked socketed axe is reported from this area. It is of the Schnabeltüllen-beile von Ostkarpatischer type, specific for the area of Transylvania. Its best analogies are Novotná 1970, 74, 75, 76, 77, nos. 482, 486, 492-494, 496 and 533, Pls. 27/482; 28/486, 492-494, 496; 30/533 and the one bearing the highest resemblance, no. 482, was found in the hoard of Blatná Polianka of the Kisapáti horizon (Mozsolics 2000, 20-21, Fig. 3), which might be paralleled in Romania with the Cincu-Suseni horizon and by this dated into Ha A₁, in the present system into LBA IIIa.

Bibliography: Crişan 1993, 244, no. 17, Pl. 8/8.

[52] Sânsimion - cariera de nisip/grajdurile CAP/Kőházkert¹²⁰ (Sânsimion, Simoneşti, Csíkszentsimon), Harghita county.

Type of investigation: chance finds and excavation.

Type of site: settlement.

Dating: Jigodin/Wietenberg; EBA II/MBA. Micro-location: 1st terrace.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located northwest of the modern village, on the first, left-hand side terrace of the Olt river. In the earlier part of the second half of the last century, during sand quarrying, amongst others, finds of the Wietenberg culture were retrieved. This prompted rescue excavations led by I. Ferenczi. In the years of 1987 and 1988 systematic excavations concentrated on the Iron Age finds of the site. During this work, MBA finds were discovered in several instances. A handful of EBA II sherds are reported from here.

Bibliography: János, Kovács 1967, 48, XIV, no. 40; Muscă 1981; Roman et alii 1992, 175,

Fig 11/12; Cavruc 2000b, 204-205, XLIb1 and b3, nos. 668 and 670.

[53] Sântimbru - Dealul Mic/Kishegy (Cic-Sântimbru, Ciuc-Sântimbru, Csíkszentimre), Harghita county.

Type of investigation: chance finds.

Type of site: settlement.

Dating: Jigodin/Wietenberg A-B; EBA II/MBA I-II/LBA III (?).

Micro-location: 1st terrace.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located northeast of the modern village, on the first, high, left-hand side terrace of the Olt river. During agricultural activities in the mid-1960s, sherds of the EBA and completely restorable vessels of the Wietenberg culture were found here. The latter may indicate destruction or abandonment levels in the MBA at this site. Ha are also reported from here.

Bibliography: János, Kovács 1967, 49, XV, no. 43, Pl. XXV/160-164; Roman et alii 1973, 570, Fig. 1/11; Székely 1988, 154, 158, Pl. 1/4; Roman et alii 1992, 175, Fig. 11/11; Boroffka 1994, 79, no. 420; Jánovits 1999, 125, no. 16a; Cavruc 2000b, 198, XXXVIIId1, no. 632; Munteanu 2010, 21, 65, nos. A22 and IV.45.

[54] Sântimbru - vatra satului (Cic-Sântimbru, Ciuc-Sântimbru, Csíkszentimre), Harghita county.

Type of investigation: chance finds.

Type of site: settlement (?).

Dating: Wietenberg (?); MBA (?).

Micro-location: 1st terrace.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located on the territory of the modern village, in its western part, on the first, right hand-side terrace of the Olt River. A BA hand millstone has been found here

Bibliography: Cavruc 2000b, 199, XXXVIIId, no. 637.

[55] Siculeni - Siculicidium monument (Ciuc-Matişfalău, Madefalău, Mádéfalva, Csíkmádéfalva), Harghita county.

Type of investigation: chance finds.

Type of site: unknown.

¹²⁰ Same site discussed at both points by V. Cavruc (2000b, 204, 205, XLIb1 and b3, nos. 668 and 670).

Dating: Jigodin; EBA II.

Micro-location: 1st terrace.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located on the territory of the modern village, on the right-hand side, first terrace of the Olt river. During the laying of the foundation of a house, located nearby the *Siculicidium monument*, an EBA II juglet was discovered.

Bibliography: János, Kovács 1967, 46, VI, no. 22, Pl. XVI/63; Cavruc 2000b, 216, XLIIIc1, no. 714; Munteanu 2010, 11, no. A24.

[56] Tomeşti - Cărbunar/Szénégető (Csíkszenttamás), Harghita county.

Type of investigation: chance finds.

Type of site: hoard.

Dating: Wietenberg B; MBA II.

Micro-location: 2nd terrace.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located on the second, left-hand side terrace of the Olt river, on the southeastern outskirts of the village. In the mid-1960s a *Pădureni-type* of bronze axe was found at this site.

Bibliography: János, Kovács 1967, 49, XVI, no. 48, Pl. XXVI/171; Al. Vulpe 1970, 45, 48, no. 129a, Pl. 56/C5; Crişan 1993, 241, no. II3, Pl. 2/1; Cavruc 2000b, 84, VIIc2, no. 123; Dietrich 2010, 194, 202, no. 1/12; Munteanu 2010, 67, no. IV.52.

[57] Tomeşti - Köd (Csíkszenttamás), Harghita county.

Type of investigation: chance finds.

Type of site: unknown.

Dating: LBA III (?).

Micro-location: 2nd terrace.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located on the northeastern outskirts of the modern village, on the second, left-hand side terrace of the Olt river. Sherds of the Ha period are reported from here, which would allow for the possibility of dating them to the LBA III period.

Bibliography: Cavruc 2000b, 84, VIIc3, no. 124.

[58] Tuşnad - intersecția drumurilor Vrabia, Cozmeni, Lăzărești (Tusnád, Csíktusnád), Harghita county.

Type of investigation: chance finds.

Type of site: unknown.

Dating: Wietenberg A; MBA I.

Micro-location: knoll.

Subsurface lithology: dystric cambisols (CMd).

Description: The site is located on the northeastern outskirts of the modern village, next to the present-day cemetery on a knoll. Chance finds of what seems to be an early stage of the Wietenberg culture are reported from here.

Bibliography: János, Kovács 1967, 50, XVII, no. 52, Pl. XXVII/187(?)-188; Cavruc 2000b, 242, XLIXa1, no. 834.

[59] Tuşnad - Piscul cetății-Cetatea cu idoli/ Dâmbul cetății/Vârful cetății/Vártető (Tusnád, Csíktusnád), Harghita county.

Type of investigation: chance finds and excavation.

Type of site: fortified settlement.

Dating: Lăpuş II-Gáva I (?); LBA III-EIA.

Micro-location: hill top.

Subsurface lithology: dystric cambisols (CMd).

Description: The site is located just south of the modern village, on the left-hand side of the Olt river on top of a hill. During the excavation of 1963, a fortified settlement of the earlier Ha period was discovered here. A rampart was identified and the possible remains of surface dwellings with a stone base are mentioned. Four arm-rings of the gerippte Armbänder type (variants rundliche gerippte Armbänder mit flacher Innenseite and ovale gerippte Armbänder mit flacher Innenseite) were found within the settlement, which are dated to the Ha A (Petrescu-Dîmbovița 1998, 185). Not far from these, an iron knife and sherds of the Lăpuş II-Gáva I are reported, some of which could be reconstructed as storeyed vessels. The iron knife found nearby is dated to the Ha B period (László 1975, 24).

Bibliography: Orbán 1869a, 37; Orbán 1869b, 70-71; Könyöki, Nagy 1905, 282; Vámszer 1934, 70; Marţian 1909, 348, no. 702; Marţian 1920, 40, no. 705; Ferenczi 1938, 302-307, no. 11; Horedt 1964, 125-126, no. 22, Fig. 1/10; Morintz 1970, 94; László 1975, 22, 24, no. 20; Horedt 1976; Crisan

1993, 245, no. 23a-d, Pl. 8/4-7; Petrescu-Dîmbovita 1998, 182-183, nos. 2258-2260, 2267, Pls. 158/2258-2260; 159/2267; Cavruc 2000b, 242, XLIXa3, no. 836.

[60] Tuşnad - Vârghiş, Vargyas (Tusnád, Csíktus-nád), Harghita county.

Type of investigation: chance finds.

Type of site: unknown.

Dating: LBA III.

Micro-location: hill top.

Subsurface lithology: dystric cambisols (CMd).

Description: The site is located just south of the modern village, on the left-hand side of the Olt river on top of a hill. In the mid-1960s finds of the earlier Ha were discovered here. Bibliography: János, Kovács 1967, 50, XVII, no. 55, Pl. XXVII/184-185; Cavruc 2000b, 243, XLIXa4, no. 837.

[61] Tuşnadu Nou - vatra satului (Újtusnád), Harghita county.

Type of investigation: chance finds.

Type of site: unknown.

Dating: BA.

Micro-location: 1st terrace.

Subsurface lithology: dystric cambisols (CMd).

Description: The site is located on the territory of the modern village, on the right-hand side, first terrace of a small stream. BA sherds were found here.

Bibliography: Cavruc 2000b, 243, XLIXb1, no. 840.

[62] Văcărești - cariera de piatră (Vacsárics), Harghita county.

Type of investigation: chance finds.

Type of site: unknown.

Dating: Jigodin; EBA II.

Micro-location: hill top.

Subsurface lithology: eutric fluvisols (FLe).

Description: The site is located west of the modern village on the top of a hill. In the middle of the last century, a stony quarry destroyed a site. Chance finds indicate an EBA II date. Bibliography: János, Kovács 1967, 47, IX,

no. 30, Pl. XVIII/87-98; Roman et alii 1973, 570, Fig. 1/1; Roman et alii 1992, 175, Fig. 11/9.

Bibliography

Andronic et alii 2006 M. Andronic, D. L. Buzea, V. Cavruc, A. F. Harding, R. Munteanu, Gh. Matei, E. Rența, Repertoriul selectiv al siturilor arheologice cu vestigii ale exploatării sării din România. In: V. Cavruc, A. Chiricescu (eds.), Sarea, timpul și omul. Catalog de expoziție, Sfântu Gheorghe 2006, 56-86. **Bader** 1990 T. Bader, Bemerkungen über die ägäischen Einflüsse auf die alt- und mittelbronzezeitliche Entwicklung im Donau-Karpatenraum. In: T. Bader (ed.), Orientalisch-ägäische Einflüsse in der europäischen Bronzezeit. Ergebnisse eines Kolloquiums, RGZM Monographien 15, Bonn 1990, 181-208. **Bader** 1991 T. Bader, Die Schwerter in Rumänien (Prähistorische Bronzefunde IV/8), Stuttgart 1991. Bader 2001 T. Bader, Passfunde aus der Bronzezeit in den Karpaten, CommArchHung, 2001, 15-39. Beck, Beck 1978 L. Y. Beck, C. W. Beck, Wi-ri-za wool on Linear B tablets of perfume ingredients, AJA, 82, 1978, 213-215. Benkő 1869 K. Benkő, Marosszék ismertetése, Cluj-Napoca 1869. Bichir 1962 Gh. I. Bichir, Beitrag zur Kenntnis der frühen Bronzezeit im südöstlichen Transsilvanien und in der Moldau (im Lichte der Grabungen von Cuciulat und Mândrişca), Dacia N.S., VI, 1962, 87-114. Gh. I. Bichir, Autour du problème des plus anciens modèles de chariots Bichir 1964 découvertes en Roumanie, Dacia N.S., VIII, 1964, 67-86. Bognár-Kutzián 1963 I. Bognár-Kutzián, The Copper Age cemetery of Tiszapolgár-Basatanya (Archaeologia Hungarica, S.N. 42), Budapest 1963. Boroffka 1994 N. Boroffka, Die Wietenberg-Kultur. Ein Beitrag zur Erforschung der Bronzezeit in Südosteuropa (UpA 19), Bonn 1994. K. Branigan, Mochlos - An Early Aegean "Gateway Community"? In: Branigan 1991 R. Laffineur, L. Basch (eds.), THALASSA. L'egée prèhistorique et la mer; Actes de la 3. Rencontre Égéenne Internationale de l'Université de Liège, Station de Recherches Sous-marines et Océanographiques (StaReSO), Calvi, Corse (23-25 avril 1990), Aegaeum 7, Liège 1991, 97-105. Buzea 2006 D. L. Buzea, Miercurea Ciuc, Harghita county. Punct: Ciuboteni, CCA. Campania 2005, București 2006, 220-222. Buzea, Lazarovici 2005 D. L. Buzea, Gh. Lazarovici, Descoperirile Cucuteni-Ariușd de la Păuleni Ciuc-Ciomortan "Dâmbul Cetății". Campaniile 2003-2005. Raport preliminar, Angustia, 9, 2005, 25-88. Cavruc 1996 V. Cavruc, Câteva considerații privind originea culturii Noua, Angustia, 1, 1996, 67-78. Cavruc 1997 V. Cavruc, The final stage of the Early Bronze Age in south-eastern Transylvania (in the light of new excavations at Zoltan), Thraco-Dacica, 18, 1997, 97-133. Cavruc 1999 V. Cavruc, Considerații privind situația etnoculturală în sud-estul Transilvaniei în epoca bronzului mijlociu, Angustia, 4, 1999, 14-41. Cavrue 2000a V. Cavruc, Noi cercetări în așezarea Păuleni (1999-2000). Raport preliminar, Angustia, 5, 2000, 93-102. Cavruc 2000b V. Cavruc (ed.), Repertoriul arheologic al județului Harghita.

Monografii Arheologice II, Sfântu Gheorghe 2000.

Cavruc 2001	V. Cavruc, Some references to the cultural situation in the south- east Transylvania in the Middle and Late Bronze Age. In: C. Kacsó (ed.), Der nordkarpatische Raum in der Bronzezeit, Bibliotheca Marmatia 1, Baia Mare 2001, 45-82.
Cavruc 2002	V. Cavruc, Noi considerații privind grupul Ciomortan, Angustia, 8, 2002, 89-98.
Cavruc 2004	V. Cavruc, <i>Câteva precizări privind perioada timpurie a epocii bronzului din sud-estul Transilvaniei</i> , Memoria Antiquitatis 23, Piatra Neamţ 2004, 265–275.
Cavruc 2005	V. Cavruc, The Ciomortan group in the light of new researches, Marmatia, 8, 2005, 81-117.
Cavruc 2008	V. Cavruc, The present stage of the researches regarding prehistoric salt production in the Carpatho-Danubian region, Angustia, 12, 2008, 79-89.
Cavruc, Buzea 2002	V. Cavruc, D. L. Buzea, Noi cercetări privind epoca bronzului în așezarea Păuleni (Ciomortan). Campaniile din anii 2001-2002. Raport de activitate, Angustia, 7, 2002, 41-88.
Cavruc, Buzea 2003	V. Cavruc, D. L. Buzea, <i>Şoimeni (Ciomortan - Csikcsomortán)</i> , com. <i>Păuleni-Ciuc, Harghita county. Punct: Dealul Cetății (Várdomb)</i> . In: CCA. Campania 2002, București 2003, 314-316.
Cavruc, Cavruc 1997	V. Cavruc, G. Cavruc, Așezarea din epoca bronzului timpuriu de la Zoltan, Angustia, 2, 1997, 157-176.
Cavruc, Dumitroaia 2000	V. Cavruc, Gh. Dumitroaia, Descoperirile aparținând aspectului cultural Ciomortan de la Păuleni, Angustia, 5, 2000, 131-154.
Cavruc, Rotea 2000	V. Cavruc, M. Rotea, <i>Locuirea Wietenberg de la Păuleni</i> , Angustia, 5, 2000, 155-171.
Cavruc et alii 2000	V. Cavruc, Gh. Dumitroaia, M. Rotea, Zs. Székely, <i>Şoimeni</i> (Ciomortan), com. Păuleni, Harghita county. Punct Várdomb (Dealul Cetății). In: CCA. Campania 1999. București 2000, 103-104.
Cavruc et alii 2001	V. Cavruc, D. L. Buzea, Gh. Dumitroaia, Gh. Lazarovici, M. Rotea, <i>Şoimeni (Ciomortan), com. Păuleni, Harghita county: Punct:</i> "Várdomb/Dealul Cetății/Dâmbul Cetății". In: CCA. Campania 2000, București 2001, 245-247, 345.
Cavruc et alii 2002	V. Cavruc, D. L. Buzea, Gh. Lazarovici, <i>Şoimeni (Ciomortan), com. Păuleni-Ciuc, Harghita county: Punct: "Várdomb/Dealul cetății/Dâmbul Cetății"</i> . In: CCA. Campania 2002, București 2002, varianta electronică (CD).
Chapman 1991	J. C. Chapman, <i>The early Balkan village</i> . In: O. Grøn, E. Engelstad, I. Lindblom (eds.), Social space: human spatial behaviour in dwellings and settlements. Proceedings of an interdisciplinary conference, Odense University Studies in History and Social Sciences 147, Odense 1991, 79-99.
Chintăuan 2006	I. Chintăuan, Sarea și manifestările saline din zona Carpaților Răsăriteni. In: V. Cavruc, A. Chiricescu (eds.), Sarea, timpul și omul. Catalog de expoziție, Sfântu Gheorghe 2006, 17-21.
Comşa 2000	Al. Comşa, Date antropologice referitoare la osemintele umane aparținând epocii bronzului descoperite la Păuleni, Angustia, 5, 2000, 173-176.
Crişan 1993	V. Crişan, Obiecte din cupru şi bronz aflate în colecțiile muzeelor din

județul Harghita, ActaMN, 26-30, 1993, 239-250.

Daróczi 2011a	TT. Daróczi, Associations of archaeological finds in the Middle
20114	Bronze Age centres of the Eastern Carpathian Basin - Aspects of
Daróczi 2011b	power, Acta Terrae Septemcastrensis 10, Sibiu 2011, 113-140. TT. Daróczi, The funerary landscapes of the Eastern Carpathian Basin, PhD thesis, Facultatea de Istorie şi Patrimoniu "Nicolae Lupu"/Institut für Ur- und Frühgeschichte und Vorderasiatische Archäologie, Universitatea "Lucian Blaga"/Ruprecht-Karls
Daróczi 2012	Universität, Sibiu - Heidelberg 2011. TT. Daróczi, Environmental changes during the Holocene in
Duroum 2012	Transylvania, A Csíki Székely Múzeum Évkönyve 8, Miercurea Ciuc 2012, 27-58.
Daróczi, Dobos 2009a	TT. Daróczi, Z. Dobos, Bronze Age Bixad-"Vápavára". A functional typology of the pottery and a study of the archaeological landscape of south-east Transylvania, Acta Terrae Septemcastrensis 8, Sibiu 2009, 179-226.
Daróczi, Dobos 2009b	TT. Daróczi, Z. Dobos, Studiu de tipologie funcțională a ceramicii
	de epoca bronzului de la Bixad - "Vápavára" și de peisaj arheologic al siturilor aparținând culturii Wietenberg din sud-estul Transilvaniei, Bruckenthal Acta Musei 4, Sibiu 2009, 57-92.
Daróczi, Kelemen 2011	TT. Daróczi, I. Kelemen, A Bronze Age bridle decoration from
	Mihăileni (Csíkszentmihály), depr. of Ciuc, A Csíki Székely Múzeum Évkönyve 7, Miercurea Ciuc 2011, 27-31.
Dietrich 2010	L. Dietrich, Eliten der frühen und mittleren Bronzezeit im südöstlichen Karpatenbecken, PZ, 85, Berlin 2010, 191-206.
Drăgănescu 2006	L. Drăgănescu, Sarea gemă din extra- și intracarpaticul României. In: V. Cavruc, A. Chiricescu (eds.), Sarea, timpul și omul. Catalog de expoziție, Sfântu Gheorghe 2006, 13–16.
FAO 1988	Food and Agriculture Organization (ed.), Revised legend of the FAO - UNESCO Soil Map of the World (provisional edition of the final text), World Soil Resources Report 60, Roma 1988.
FAO 2006	Food and Agriculture Organization (ed.), World reference base for soil resources 2006. A framework for international classification, correlation and communication, World Soil Resources Report 103, Roma 2006.
Ferenczi 1938	S. Ferenczi, <i>Cetăți antice în județul Ciuc</i> , Anuarul Comisiunii Monumentelor Antice. Secția pentru Transilvania 4, București 1938, 238-352.
Florescu 1991	A. C. Florescu, Repertoriul culturii Noua-Coslogeni din România, CCDJ, 9, 1991, 13-414.
Gogâltan 1995	Fl. Gogâltan, Die frühe Bronzezeit im Südwesten Rumäniens. Stand der Forschung, Thraco-Dacica, 16, 1995, 55-79.
Gogâltan 1998	Fl. Gogâltan, Early and Middle Bronze Age chronology in south-west Romania, general aspects. In: H. Ciugudean, Fl. Gogâltan (eds.), The Early and Middle Bronze Age in the Carpathian basin. Proceedings of the International Symposium in Alba Iulia, 24–28 September 1997, Bibliotheca Musei Apulensis 8, Alba Iulia 1998, 191–212.
Gogâltan 1999	Fl. Gogâltan, Bronzul timpuriu și mijlociu în Banatul Românesc și pe cursul inferior al Mureșului: cronologia și descoperirile de metal, Colectia Historia 1, Timișoara 1999.

Gooss 1876 C. Gooss, Chronik der archäologischen Funde Siebenbürgens. Im Auftrage des Vereins für siebenbürgische Landeskunde. I. Funde aus vorrömischer Zeit. II. Funde aus der Zeit der Römerherrschaft. III. Funde aus der Zeit der Völkerwanderung. 271-895 nach Christo, Archiv des Vereins für siebenbürgische Landeskunde 13/2, Sibiu 1876, 203-338. Gumă 1979 M. Gumă, O nouă descoperire hallstattiană timpurie la Moldova Nouă, ActaMN, XVI, 1979, 481-493. J. Hampel, A bronzkor emlékei magyarhonban. 3. Áttekintő ismerte-Hampel 1896 tés, Budapest 1896. Harding, Kavruk 2010 A. F. Harding, V. Kavruk, A prehistoric salt production site at Băile Figa, Romania, Eurasia Antiqua 16, Mainz am Rhein 2010, 131-167. K. G. Hirth, Interregional trade and the formation of prehistoric gate-Hirth 1978 way communities, American Antiquity 43, Washington DC 1978, Horedt 1960 K. Horedt, Die Wietenbergkultur, Dacia N.S., IV, 1960, 107-137. Horedt 1964 K. Horedt, Die Verwendung des Eisens in Rumänien bis in das 6. Jahrhundert, Dacia N.S., VIII, 1964, 119-132. Horedt 1976 K. Horedt, Eine befestigte Höhensiedlung der späten Bronzezeit bei Tuşnad in Siebenbürgen. In: H. Mitscha-Märheim, H. Friesinger, H. Kerchler (eds.), Festschrift für Richard Pittioni zum siebzigsten Geburtstag. I. Urgeschichte, Archaeologia Austriaca, Beiheft 13, Wien 1976, 397-405. Horedt, Seraphin 1971 K. Horedt, C. Seraphin, Die Prähistorische Ansiedlung auf dem Wietenberg bei Sighisoara-Schässburg, Antiquitas, Reihe 310, Bonn 1971. Horváth 2002 A. Horváth, Újholocén klíma- és környezetváltozások vizsgálata hazai régészeti adatok segítségével. In: G. Gábris (ed.), Geográfus Doktoranduszok VII. Országos Konferenciája, Budapest, ELTE TTK, 2002. október 25-26, Budapest 2002, 1-11. T. Horváth, Hajdúnánás-Tedej-Lyukas-halom - An interdisciplinary Horváth 2011 survey of a typical kurgan from the Great Hungarian Plain region: a case study (The revision of the kurgans from the territory of Hungary). In: Á. Pető, A. Barczi (eds.), Kurgan studies: an environmental and archaeological multiproxy study of burial mounds in the Eurasian steppe zone. BAR, International Series 2238, Oxford 2011, 71-131. P. János, D. Kovács, Periegheză arheologică în bazinul Ciucului, János, Kovács 1967 Marisia, 2, 1967, 43-52. Jánovits 1999 I. Jánovits, Noi periegheze arheologice din depresiunea Ciucului, Angustia, 4, 1999, 121-150. Kacsó 1987 C. Kacsó, Beiträge der Kenntnis des Verbreitungsgebietes und der Chronologie der Suciu de Sus-Kultur, Dacia N.S., XXXI, 1987, 51-75. Kalmar 1981 Z. Kalmar, Unelte din piatră șlefuită descoperite la Oarța de Sus, Marmatia, 5-6, 1981, 107-114. Kavruk et alii 2008a V. Kavruk, D. L. Buzea, D. Garvan, E. R. Munteanu, Leliceni, com. Leliceni, Harghita county. Punct: Muntele cu piatră - Kőhegy. In: CCA. Campania 2007, București 2008, 181-182. V. Kavruk, D. L. Buzea, Gh. Lazarovici, D. Garvăn, Şoimeni-

Ciomortan, com. Păuleni Ciuc, Harghita county. Punct: Dâmbul

Cetății. In: CCA. Campania 2007, București 2008, 302-304.

Kavruk et alii 2008b

Kavruk et alii 2009 V. Kavruk, D. L. Buzea, Gh. Lazarovici, *Şoimeni*, com. Păuleni Ciuc, Harghita county: Punct: Dâmbul Cetății. In: CCA. Campania 2008, Târgoviște 2009, 213-214. Kavruk et alii 2010 V. Kavruk, D. L. Buzea, A. Mates, Gh. Lazarovici, Gh. Dumitroaia, D. Garvăn, R. Munteanu, Soimeni - Ciomortan, com. Păuleni Ciuc, Harghita county: Punct: Dâmbul Cetății. In: CCA. Campania 2009, București 2010, 182-186. J. Könyöki, G. Nagy, A középkori várak, különös tekintettel Könyöki, Nagy 1905 Magyarországra, Budapest 1905. K. Kristiansen, Center and periphery in Bronze Age Scandinavia. Kristiansen 1987 In: M. Rowlands, M. T. Larsen, K. Kristiansen (eds.), Centre and periphery in the ancient world, New Directions in Archaeology, Cambridge 1987, 74-85. Kristiansen 1994 K. Kristiansen, The emergence of the European World System in the Bronze Age: divergence, convergence and social evolution during the first and second millennia BC in Europe. In: K. Kristiansen, J. Jensen (eds.), Europe in the first millennium B.C., Sheffield Archaeological Monographs 6, Sheffield 1994, 7-30. Kristiansen 2005a K. Kristiansen, Centre and periphery in Bronze Age Scandinavia. In: K. Kristiansen, M. Rowlands (eds.), Social transformations in archaeology. Global and local perspectives, Material Cultures, London - New York 2005, 260-279. Kristiansen 2005b K. Kristiansen, The emergence of the European World System in the Bronze Age: divergence, convergence and social evolution during the first and second millennia BC in Europe. In: K. Kristiansen, M. Rowlands (eds.), Social transformations in archaeology. Global and local perspectives, Material Cultures, London - New York 2005, 280-316. Larsen 1987 M. T. Larsen, Comercial networks in the Ancient Near East. In: M. Rowlands, M. T. Larsen, K. Kristiansen (eds.), Centre and periphery in the ancient world, New Directions in Archaeology, Cambridge 1987, 47-56. László 1975 A. László, Începuturile metalurgiei fierului pe teritoriul României, SCIVA, 26, 1975, 17-35. Macrea et alii 1951 M. Macrea, L. Buzdugan, G. Ferenczi, K. Horedt, I. Popescu, I. I. Russu, Z. Székely, N. Vasiu, I. Winkler, Despre rezultatele cercetărilor întreprinse de santierul arheologic Sf. Gheorghe - Bretcu, 1950, SCIV, 2, 1951, 1, 285-311. Marta 2010 L. Marta, Lăpuș II - Gáva I discoveries in the Plain of Satu Mare. In: L. Marta (ed.), Amurgul mileniului II a. Chr. în Câmpia Tisei si Transilvania. Simpozion, Satu Mare 18-19 iulie 2008, Studii si Comunicări Satu Mare, 26, 1, Satu Mare 2010, 317-328. Martian 1903 I. Martian, Régi telepek és lelhelyekről a királyhágóntúli területen,

AÉrt, 23, 1903, 283-287.

Marțian 1909

I. Martian, Archaeologischprähistorisches Repertorium Siebenbürgens, Mitteilungen der Anthropologischen Gesellshaft in Wien, 39, Wien 1909, 321-358.

Martian 1920

I. Marțian, Repertoriu arheologic pentru Ardeal, Bistrița 1920.

Maxim, Crişan 1995

Z. Maxim, V. Crişan, Materiale arheologice din județul Harghita în Muzeul Național de Istorie al Transilvaniei (I), ActaMN, 32, 1995, 751-759.

Mare, 26, 1, Satu Mare 2010, 219-233.

Transilvaniei, Aluta, 2, 1970, 93-97.

Motzoi-Chicideanu 2011 I. Motzoi-Chicideanu, Obiceiuri funerare în epoca bronzului la Dunărea Mijlocie și Inferioară, București 2011.

Metzner-Nebelsick et alii 2010

Morintz 1970

Mozsolics 1973

Mozsolics 2000

C. Metzner-Nebelsick, C. Kacsó, L. D. Nebelsick, A Bronze Age

ritual structure on the edge of the Carpathian Basin. In: L. Marta (ed.), Amurgul mileniului II a. Chr. în Câmpia Tisei și Transilvania. Simpozion, Satu Mare 18-19 iulie 2008, Studii și Comunicări Satu

S. Morintz, Probleme ale Hallstattului timpuriu în sud-estul

A. Mozsolics, Bronze- und Goldfunde des Karpatenbeckens:

A. Mozsolics, Bronzefunde aus Ungarn: Depotfundhorizonte Hajdúböszörmény, Románd und Bükkszentlászló, Prähistorische

Depotfundhorizonte von Forró und Ópályi, Budapest 1973.

	Archäologie in Südosteuropa 17, Kiel 2000.
Munteanu 2010	R. Munteanu, Începutul bronzului mijlociu în depresiunile marginale ale Carpaților Orientali, Bibliotheca Memoriae Antiquitatis 24,
	Piatra-Neamţ 2010.
Muscă 1979	T. I. Muscă, Unele observații în legătură cu fenomenul cultural Ciomortan, Apulum, XVII, 1979, 87-89.
Muscă 1980	T. I. Muscă, Repertoriul descoperirilor din orânduirea comunei primitive în estul Transilvaniei (partea I), Cumidava, 12, 1980, 7-15.
Muscă 1981	T. I. Muscă, <i>Materiale hallstattiene târzii descoperite la Sânsimion</i> , Apulum, XIX, 1981, 47-49.
Novotná 1970	M. Novotná, Die Äxte und Beile in der Slowakei, Prähistorische Bronzefunde IX, 3, München 1970.
Orbán 1869a	B. Orbán, A Székelyföld leírása történelmi, régészeti, természetrajzi és népismei szempontból. II Csíkszék. Pest 1869.
Orbán 1869b	B. Orbán, A Székelyföld leírása történelmi, régészeti, természetrajzi és népismei szempontból. III Háromszék, Pest 1869.
Orosz 1901	E. Orosz, <i>Ösembertani leletek Erdélyből</i> , Orvostudományi Értesítő II. Természettudományi szak, 26. évf., 23. köt., 1. füzet, Cluj-Napoca 1901, 16-46.
Ortiz 1987	F. Ortiz, Contrapunteo del tabaco y el azúcar, Biblioteca Ayacucho 42, Caracas 1987.
Petrescu-Dîmbovița 1977	M. Petrescu-Dîmbovița, Depozitele de bronzuri din România, Biblioteca de Arheologie XXX, București 1977.
Petrescu-Dîmbovița 1978	M. Petrescu-Dîmbovița, Die Sicheln in Rumänien: mit Corpus der jung- und spätbronzezeitlichen Horte Rumäniens (PBF XVIII/1), München 1978.
Petrescu-Dîmbovița 1998	M. Petrescu-Dîmbovița, Der Arm- und Beinschmuck in Rumänien, Prähistorische Bronzefunde X, 4, Stuttgart 1998.
Popa, Totoianu 2010	C. I. Popa, R. Totoianu, Aspecte ale epocii bronzului în Transilvania (între vechile şi noile cercetări), Biblioteca Musei Sabesiensis 1, Cluj-Napoca 2010.
Popescu 1961a	D. Popescu, Les fouilles archéologiques dans la République Populaire Roumaine en 1960, Dacia N.S., V, 1961, 567-581.
Popescu 1961b	D. Popescu, <i>Săpăturile arehologice din Republica Populară Română în anul 1960</i> , SCIV, 12, 1961, 133-153.
Popescu 1968a	D. Popescu, Les fouilles archéologiques dans la République Socialiste de Roumanie en 1967, Dacia N.S., XII, 1968, 677-698.

Popescu 1968b D. Popescu, Săpăturile arheologice din Republica Socialistă România în anul 1967, SCIV, 19, 1968, 421-443. D. Popescu, Vl. Dumitrescu, Les fouilles archéologiques dans la Popescu, Dumitrescu 1957a République Populaire Roumaine en 1956, Dacia N.S., I, 1957, 337-345. Popescu, Dumitrescu D. Popescu, Vl. Dumitrescu, Săpăturile arheologice din R. P. Română 1957b în anul 1956, SCIV, 8, 1957, 353-359. **Pratt** 1991 M. L. Pratt, Arts of the contact zone, Profession 91, 1991, 33-40. Preda 1959 C. Preda, Săpăturile arheologice de la Sâncrăeni, MCA, VI, 1959, 825-870. Prox 1941 A. Prox, Die Schneckenbergkultur, Braşov 1941. P. I. Roman, Cultura Cotofeni, Biblioteca de Arheologie XXVI, Roman 1976 București 1976. Roman 1977 P. I. Roman, The Late Copper Age Cotofeni culture of south-east Europe BAR, Supplementary Series 32, Oxford 1977. Roman 1981 P. I. Roman, Zur Rumänischen Frühbronzezeit (Der Foschungsstand). In: N. Kalicz, R. Kalicz-Schreiber (eds.), Die Frühbronzezeit im Karpatenbecken und in den Nachbargebieten. Internationales Symposium Budapest-Velem 1977, Mitteilungen des Archäologischen Institut der Ungarischen Akademie der Wissenschaften, Beiheft 2, Budapest 1981, 157-169, 307-313. Roman 1986 P. I. Roman, Perioada timpurie a epocii bronzului pe teritoriul României, SCIVA, 37, 1986, 29-55. Roman et alii 1973 P. I. Roman, P. János, C. Horváth, Cultura Jigodin o cultură cu ceramică șnurată în estul Transilvaniei, SCIV, 24, 1973, 559-574. Roman et alii 1992 P. I. Roman, A. Dodd-Opritescu, P. János, Beiträge zur Problematik schnurverzierten Keramik Südosteuropas, Monographien/ Heidelberger Academie der Wissenschaften III, Mainz am Rhein 1992. Roska 1929 M. Roska, A Székelyföld őskora, Emlékkönyv a Székely Nemzeti Múzeum ötvenéves jubileumára, Sfântu Gheorghe 1929, 258-326. Roska 1937 M. Roska, Adatok Erdély bronzkorához, AÉrt, 50, 1937, 141-145. Roska 1941 M. Roska, Az Aeneolithikum Kolozskorpádi I jellegű emlékei Erdélyben, Közlemények az Erdélyi Nemzeti Múzeum, Érem- és Régiségtárából 1, Cluj 1941, 44-99. Roska 1942 M. Roska, Erdély régészeti repertóriuma I. Őskor, Thesaurus Antiquitatum Transsilvanicarum - Praehistorica I, Cluj-Napoca Roska 1944 M. Roska, A Kolozskorpádi II jellegű kulturfacies kerámiai emlékei Erdélyben, Közlemények az Erdélyi Nemzeti Múzeum, Érem- és Régiségtárából 4, Cluj 1944, 22-42. M. Rotea, Beiträge zur Kenntnis der Phase I der Kultur Wietenberg. Rotea 2000 Die Bewohnung von Păuleni (Ciomortan), Kreis Harghita, ActaMN, 37, 2000, 21-41. Rowlands 1987 M. Rowlands, Centre and periphery: a review of a concept. In: M. Rowlands, M. T. Larsen, K. Kristiansen (eds.), Centre and periphery in the ancient world, New Directions in Archaeology,

Cambridge 1987, 1-11.

London - New York 2005, 214-235.

M. Rowlands, Centre and periphery: a review of a concept. In: K. Kristiansen, M. Rowlands (eds.), Social transformations in archaeology. Global and local perspectives, Material Cultures,

Rowlands 2005

Rusu 1966	M. Rusu, Depozitul de bronzuri de la Balşa, Sargetia, IV, 1966, 17-40.
Sava 2002	E. Sava, Die Bestattungen der Noua-Kultur: ein Beitrag zur
	Erforschung spätbronzezeitlicher Bestattungsriten zwischen Dnestr
	und Westkarpaten, Prähistorische Archäologie in Südosteuropa 19,
	Kiel 2002.
Schroller 1933	H. Schroller, Die Stein- und Kupferzeit Siebenbürgens,
	Vorgeschichtliche Forschungen 8, Berlin 1933.
Seraphin 1902	C. Seraphin, Berichte über eine merkwürdige Thonplatte von einer
	Feuerstelle bei Schaessburg in Siebenbürgen, Nachrichten über
	deutsche Altertumsfunde. Ergänzungsblätter zur Zeitschrift für
	Ethnologie 13, 1902, 73-74.
Smith 1976	C. A. Smith, Exchange systems and the spatial distribution of the
	elites: the organization of stratification in agrarian societies. In: C. A.
	Smith (ed.), Regional Analysis. Volume II. Social systems, Studies in
0.1.4000	Anthropology, New York - San Francisco - London 1976, 309-374.
Soles 1992	J. S. Soles, The Prepalatial cemeteries at Mochlos and Gournia and
	the house tombs of Bronze Age Crete, Hesperia Supplements 24,
Soroceanu 1973	Princeton 1992. T. Sanasanan, Dessanaririla din anaga kranyuksi da la Okraia Gud
Soroceanu 1975	T. Soroceanu, Descoperirile din epoca bronzului de la Obreja (jud. Alba), ActaMN, X, 1973, 493-515.
Stoia 1976	A. Stoia, Les fouilles archéologiques en Roumanie (1975), Dacia N.S.,
Otola 1370	XX, 1976, 273-286.
Stoia 1978	A. Stoia, Les fouilles archéologiques en Roumanie (1977), Dacia N.S.,
01014 1010	XXII, 1978, 348-362.
Stoia 1981	A. Stoia, Les fouilles archéologiques en Roumanie (1980), Dacia N.S.,
	XXV, 1981, 363-380.
Székely 1946	Z. Székely, Jegyzetek Dácia történetéhez, Sfântu Gheorghe 1946.
Székely 1955a	Z. Székely, Contribuții la cronologia epocii bronzului în Transilvania,
	SCIV, 6, 1955, 843-863.
Székely 1955b	Z. Székely, Date referitoare asupra epocii bronzului din Regiunea
	Autonomă Maghiară. In: Z. Székely (ed.), Muzeul Regional Sfântu
	Gheorghe, Almanah 1879-1954, Târgu-Mureş 1955, 48-54.
Székely 1957	Z. Székely, Cercetările și săpăturile de salvare executate de Muzeul
0 (1 1 4050	regional din Sf. Gheorghe în anul 1955, MCA, III, 1957, 149-161.
Székely 1959	Z. Székely, Raport preliminar asupra sondajelor executate de Muzeul
C_4l_al_ 1061	Regional din Sf. Gheorghe în anul 1956, MCA, V, 1959, 231-245.
Székely 1961	Z. Székely, Săpăturile executate de Muzeul Regional din Sf. Gheorghe (Reg. Autonomă Maghiară), MCA, VII, 1961, 179-190.
Szálzaly 1065	Z. Székely, Contribuții la dezvoltarea culturii Noua în sud-estul
Székely 1965	Transilvaniei, Studii și Comunicări Sibiu, 12, Sibiu 1965, 21-34.
Székely 1967	Z. Székely, Noi descoperiri de unelte de aramă și de bronz din
Ozekely 1307	Transilvania, SCIVA, 18, 1967, 327-332.
Székely 1970a	Z. Székely, <i>Cultura Ciomortan</i> , Aluta, 2, 1970, 71-76.
Székely 1970b,	Z. Székely, Depozitul de obiecte de bronz de la Miercurea-Ciuc, SCIV,
- · · · · · · · · · · · · · · · · · · ·	21, 1970, 473-479.
Székely 1970c	Z. Székely, Săpăturile executate de muzeul din Sf. Georghe (1959-
•	1966), MCA, IX, 1970, 297-315.
Szálzaly 1071a	7 Sachaly Contributi la guno geterra anogii hrangului în aud cetul

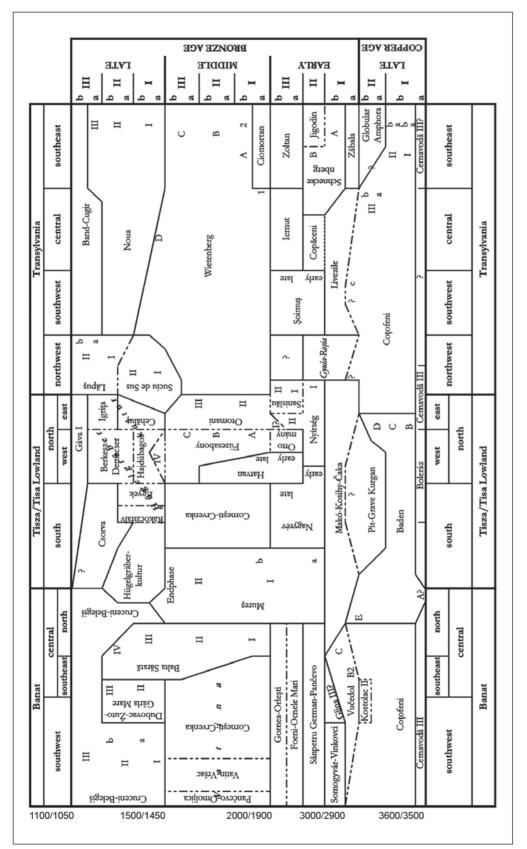
Z. Székely, Contribuții la cunoașterea epocii bronzului în sud-estul Transilvaniei, SCIV, 22, 1971, 387-400.

Székely 1971a

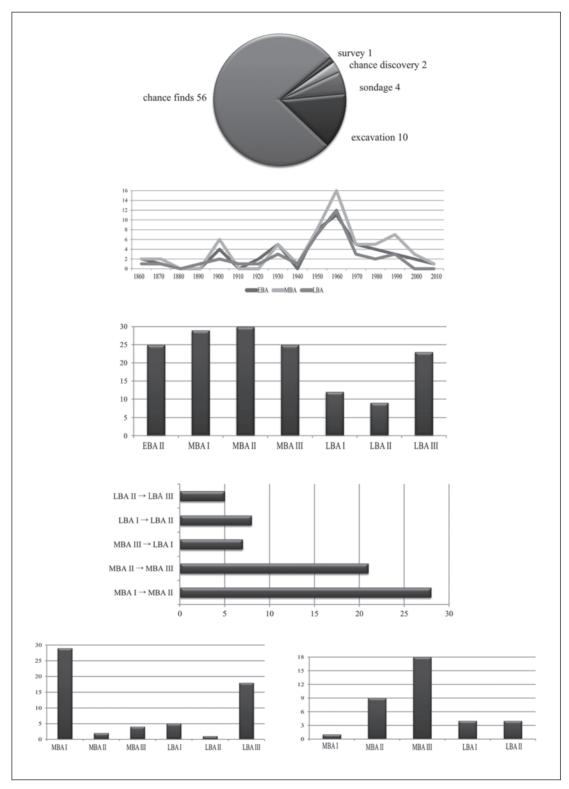
Székely 1971b	Z. Székely, Contributions à la connaissance du développement de la civilisation Wietenberg, Dacia N.S., XV, 1971, 307-317.
Székely 1973	Z. Székely, Săpăturile executate de Muzeul din Sf. Gheorghe (1967-1970), MCA, X, 1973, 219-224.
Székely 1988	Z. Székely, Considerații privind dezvoltarea culturii Wietenberg în sud-estul Transilvaniei, Aluta, 17-18, 1988, 153-188.
Szentmiklosi 2009	Al. Szentmiklosi, Aşezările culturii Cruceni-Belegiš în Banat, PhD thesis, Facultatea de Istorie și Filologie, Universitatea "1 Decembrie 1918", Alba Iulia 2009.
Tanțău 2006	I. Tanțău, Histoire de la végétation tardiglaciaire et holocène dans les Carpates Orientales (Roumanie), Cluj-Napoca 2006.
Tanțău et alii 2003	I. Tanțău, M. Reille, JL. de Beaulieu, S. Fărcaş, T. Goslar, M. Paterne, Vegetation history in the Eastern Romanian Carpathians: pollen analysis of two sequences from the Mohoş crater, Vegetation History and Archaeobotany 12, Berlin - Heidelberg 2003, 113-125.
Tzedakis, Martlew 1999	Y. G. Tzedakis, H. Martlew (eds.), Minoans and Mycenaeans - flavours of their time: National Archaeological Museum, 12 July - 27 November 1999, Athens 1999.
Vámszer 1934	G. Vámszer, Csík vármegye turistakalauza és térképe, Miercurea Ciuc 1934.
Ventris, Chadwick 1973	M. Ventris, J. Chadwick, Documents in Mycenean Greek, Cambridge 1973.
Vulpe 1955	R. Vulpe, Săpăturile de salvare de la Sâncrăieni (1945) (r. Ciuc, Regiunea Autonomă Maghiară), SCIV, 6, 1955, 559-569.
Vulpe 1970	Al. Vulpe, Die Äxte und Beile in Rumänien I, Prähistorische Bronzefunde IX, 2, München 1970.
Vulpe 1975	Al. Vulpe, Die Äxte und Beile in Rumänien II, Prähistorische Bronzefunde IX, 5, München 1975.
Wollmann 1999	V. Wollmann, Über den spiralverzierten Herd von der prähistorischn Ansiedlung auf dem Wietenberg bei Schäßburg. In: N. Boroffka, T. Soroceanu (eds.), Transsilvanica. Arhcäologische Untersuchungen zur älteren Geschichte des südöstlichen Mitteleuropa. Gedenkschrift für Kurt Horedt, Internationale Archäologie: Studia Honoraria 7,
	Rahden - Westfalen 1999, 39-51.

Tibor-Tamás Daróczi

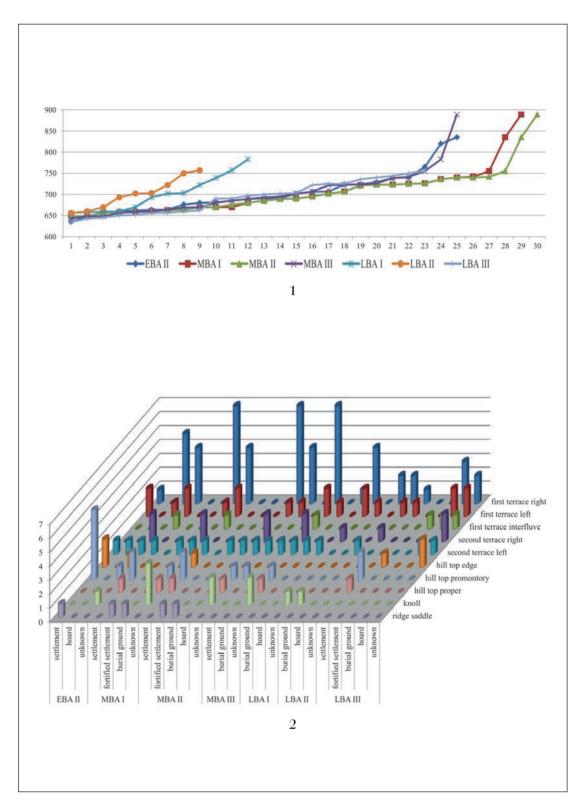
Institut für Ur- und Frühgeschichte und Vorderasiatische Archäologie Ruprecht-Karls Universität, Heidelberg csibike3@yahoo.com



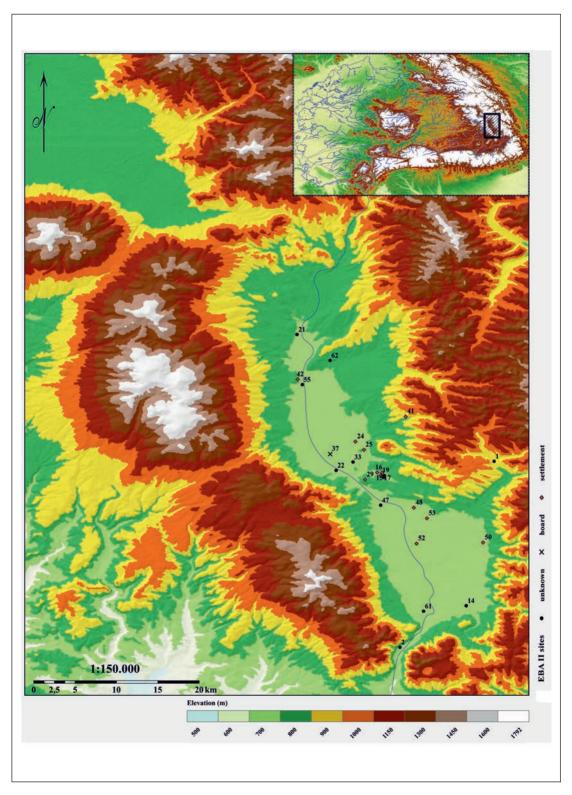
Pl. I. Chronological table from the Bronze Age of the Eastern Carpathian Basin.



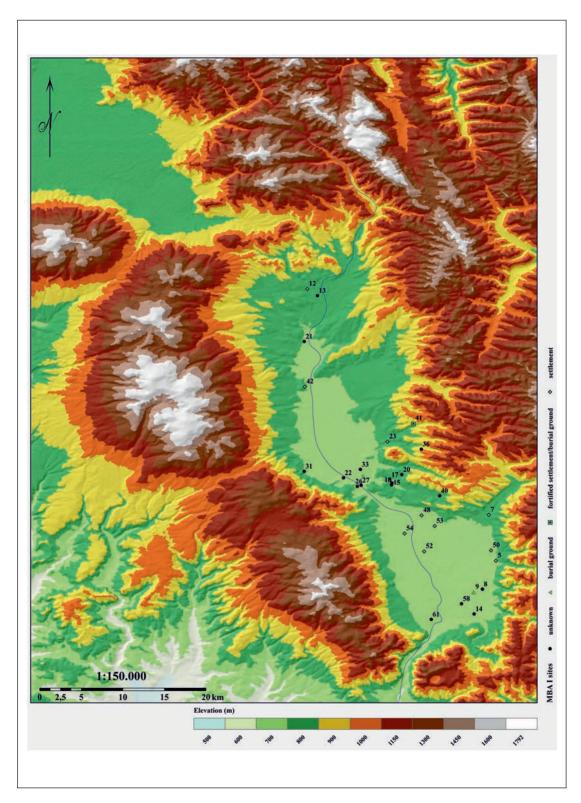
Pl. II. Statistics of the BA sites from the Ciuc depression: 1. Type of research at the BA sites; 2. Research intensity of BA sites; 3. Number of sites documented in the BA phases; 4. Continuity of use of BA sites in consecutive phases; 4. Number of BA sites starting their use in each phase; 5. Number of BA sites starting their use in each phase; 6. Number of BA sites ending their use in each phase.



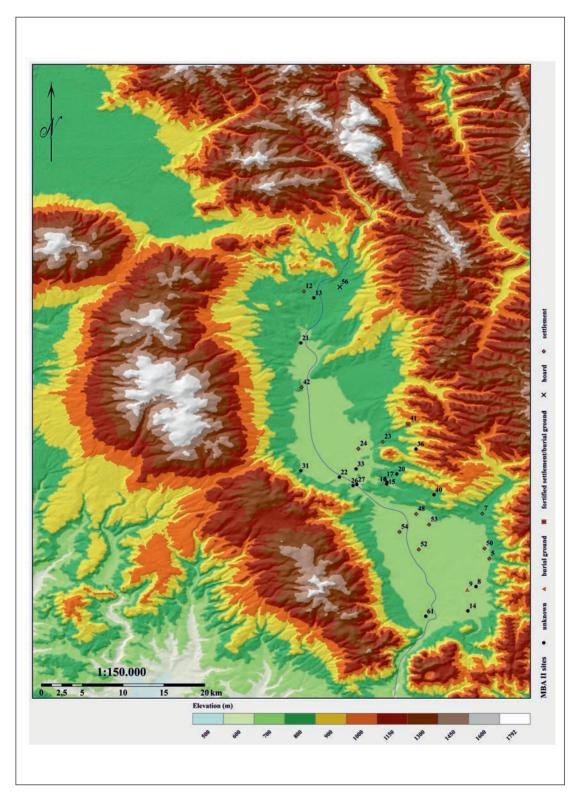
Pl. III. Statistics of the BA sites from the Ciuc depression: 1. Above sea level elevation of sites in each documeted phase of the BA; 2. Micro-location of sites in each of the documented BA phases.



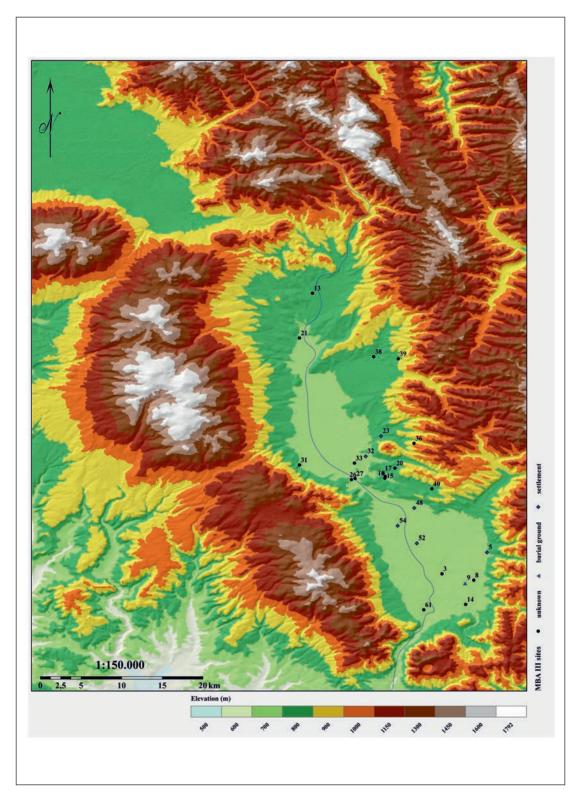
Pl. IV. EBA II sites in the Ciuc depression (medallion-location of the Ciuc depression in the Eastern Carpathian Basin).



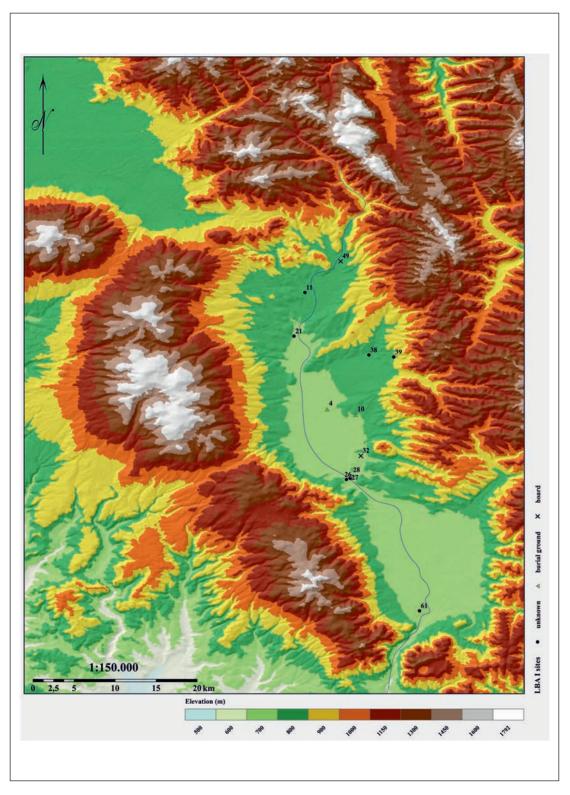
Pl. V. MBA I sites in the Ciuc depression.



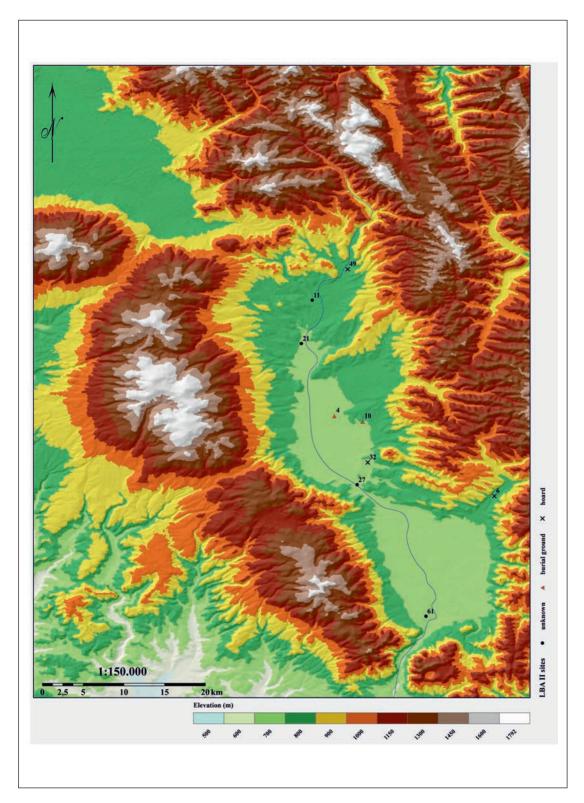
Pl. VI. MBA II sites in the Ciuc depression.



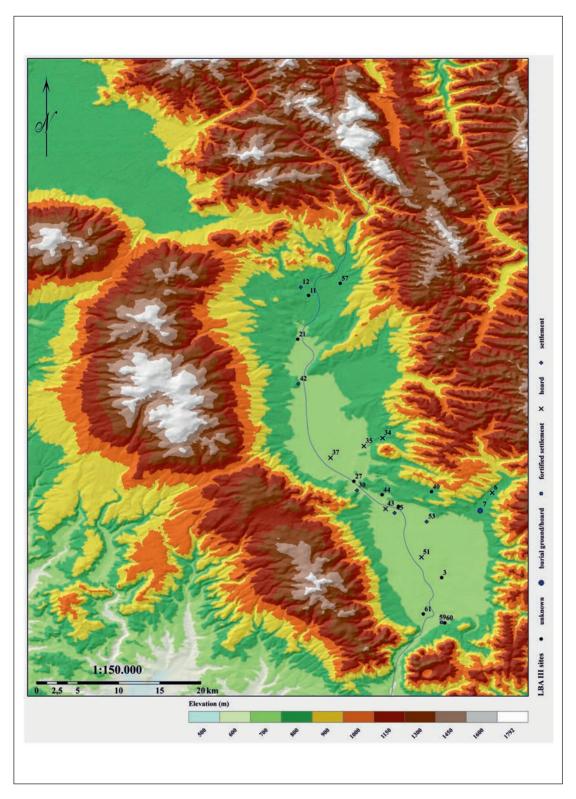
Pl. VII. MBA III sites in the Ciuc depression.



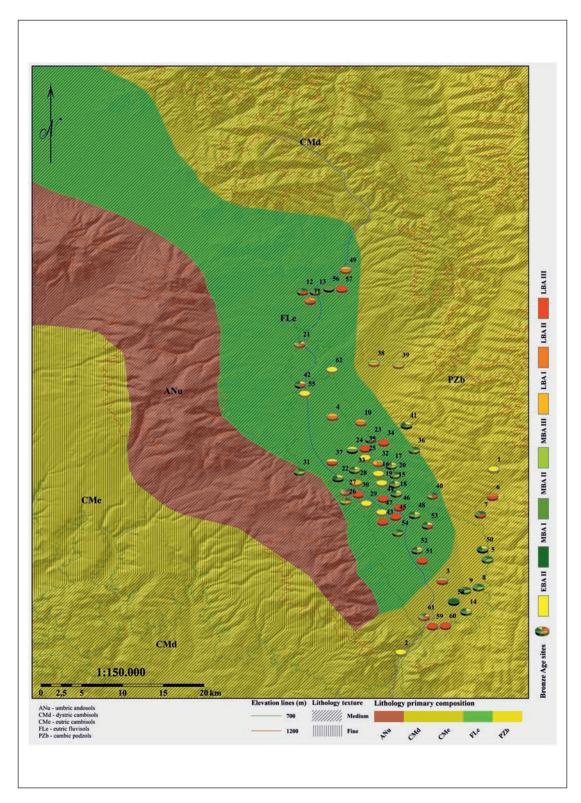
Pl. VIII. LBA I sites in the Ciuc depression.



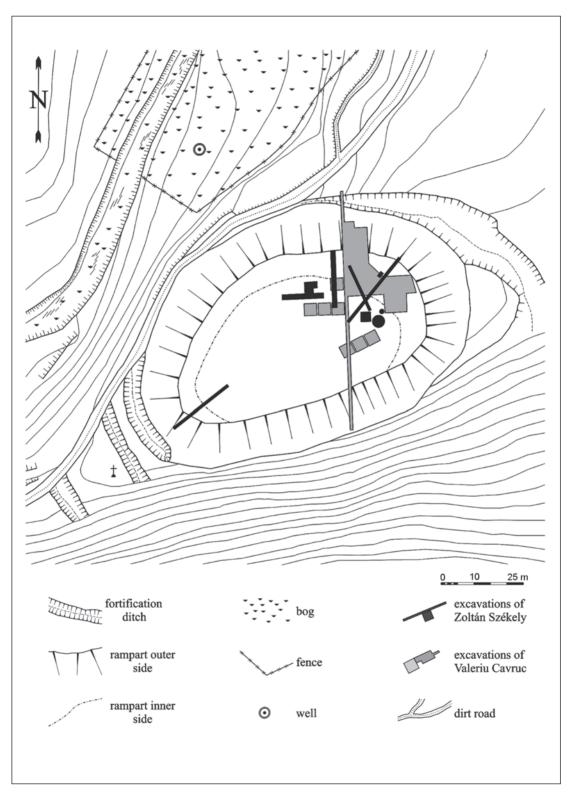
Pl. IX. LBA II sites in the Ciuc depression.



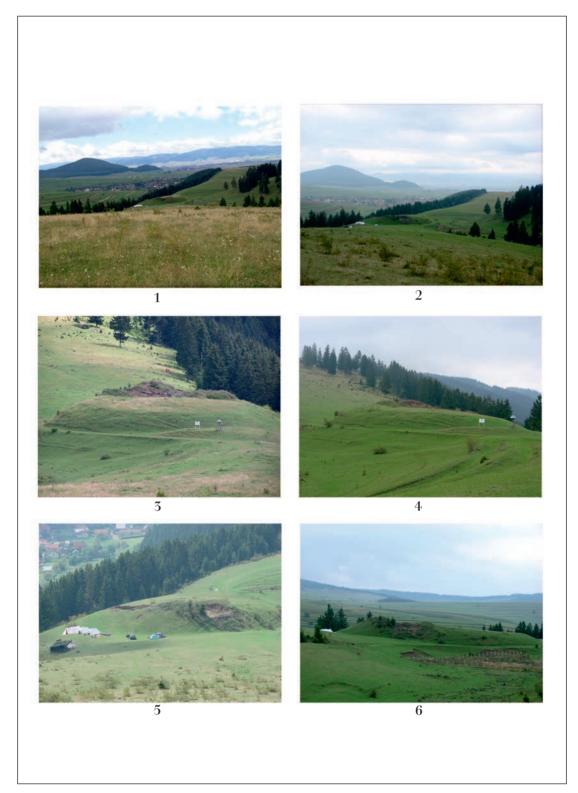
Pl. X. LBA III sites in the Ciuc depression.



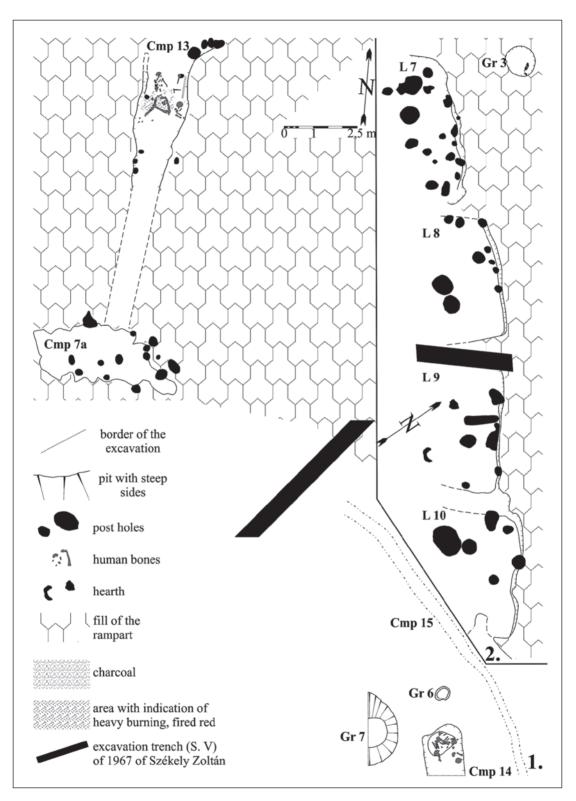
 ${\bf Pl.~XI.~}$ BA sites relation to the dominant subsurface lithology in the Ciuc depression.



Pl. XII. The fortified MBA I-II settlement of Păuleni-Ciuc - Dâmbul Cetății/Várdomb (after Cavruc, Buzea 2002, Pl. I).



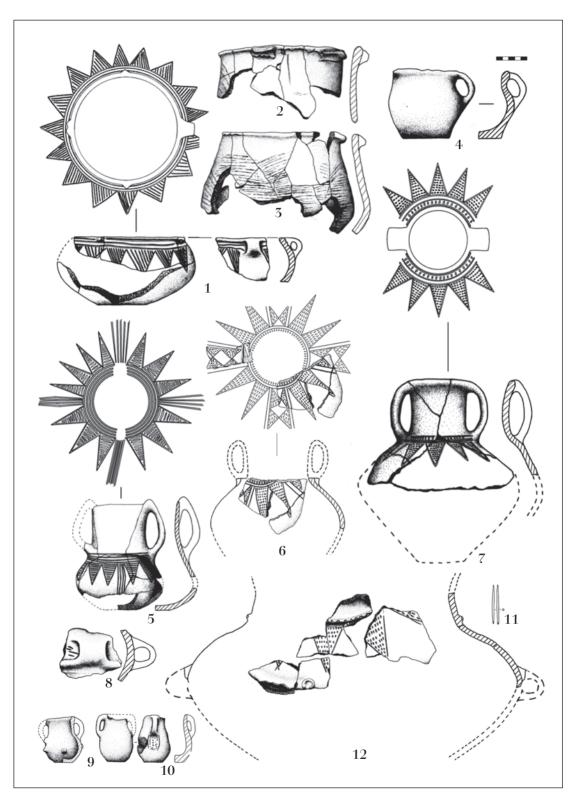
Pl. XIII. The site of Păuleni-Ciuc - Dâmbul Cetății/Várdomb (after Buzea, Lazarovici 2005, Pl. I; Kavruk et alii 2008b, Pl. I): 1. View from northeast of the site of the Ciuc depression and the Şumuleu Mare peak in good weather; 2. View from northeast of the site, of the Ciuc depression and the Şumuleu Mare peak in bad weather; 3. View from southwest of the site in good weather; 4. View from southwest of the site in bad weather; 5. View from northeast of the site and the valley below; 6. View from the nortwest of the site and the bog.



Pl. XIV. MBA I-II features from Păuleni-Ciuc - Dâmbul Cetății/Várdomb (after Cavruc, Buzea 2002, Pls. II/1, IV, XI-XII, XV, XVIII; Cavruc, Rotea 2000, Pls. III-IV).



Pl. XV. Remains of the MBA Ib-II houses from Păuleni-Ciuc - Dâmbul Cetății/Várdomb (after Cavruc, Buzea 2002, Pls. XXVII/1, XXIX/1): 1. Remains of the MBA Ib-II house L7; 2. Remains of the MBA Ib-II house L7 with excavated postholes; 3. Remains of the MBA Ib-II house L8; 4. Remains of the MBA Ib-II house L9; 5. Remains of the MBA Ib-II houses L8-10; 6. Remains of the MBA Ib-II house L32.



Pl. XVI. MBA la finds from Păuleni-Ciuc - $D\hat{a}mbul$ Cetății/Várdomb (after Cavruc, Buzea 2002, Pls. II/2; III/1; 5–8; V).



Pl. XVII. MBA Ib-II finds from Păuleni-Ciuc - $D\hat{a}mbul$ Cetății/Várdomb (after Cavruc, Buzea 2002, Pls. VIII/1, 2, 5–9; X/1–3; XIII/2–3; XIV/1–4; XVI/5–6, 8; XVII/2).