

**Alexandru Dragoman, Sorin Oanță-Marghitu, Ștefan Roșeanu and Tiberiu Vasilescu (eds.):**

**A GRAMMAR OF THE ARCHAEOLOGICAL LANGUAGE: UNDERSTANDING THE  
ROMANIAN ARCHAEOLOGY**

*theoretical foundations of Romanian archaeology • a radiography of the Romanian archaeological texts • debate and monologue in Romanian archaeology: book reviews in context • the research stage of some archaeological problems: case studies • Internet technologies: de-constructing the dominant discourse • to parcel out the Past: intellectual property, specialization and the monopoly of problems (investiture, legacy, usurpation) • provisions for the future: the interpretation of the store-rooms for archaeological materials • stage managers, actors, figurants and audience: excavations, sessions and congresses.*

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**THE “CERNAVODA III-BOLERÁZ PHENOMENON”: AFTER 30  
YEARS**

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**"The Cernavoda III-Boleráz Phenomenon": after 30 years<sup>1</sup>**

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Romanian archaeology still understands an “archaeological culture” as a structure composed of several elements (settlement types, funerary practices, pottery forms, decorative techniques and motifs, metal objects, stone, bone/antler), which occupy a well-defined geographic space. Culture is a “concept which signifies the totality of elements that compose the social, material and spiritual frame created by man in the course of history” (Babeș 1994). Culture, conceived differently as “cultural group, aspect or facies, does have an objective value in itself, in such a measure as it groups and defines, as a structural unity, common manifestations characteristic of a period and a given space.” Attributing such a “structural unity” from here to a people is just a small step: “[...] with great probability an archaeological culture can be the expression of an ethno-linguistic community, and in some cases can even be attributed to concrete populations attested in historical sources” (Babeș 1994).

There is also the belief that the duty of the archaeologist is to "objectively" collect information, to classify it and only afterwards to interpret it. From this point of view, direct contact with the archaeological material is essential (Roman 2000-2001, 171). Theoretical discussion is absent (for the relationship of Romanian archaeology to history and positivism see: Niculescu 1997; Popovici 1999-2000): what appears self-evident is considered as truth.

The majority of Romanian archaeologists are excavating, collecting and interpreting material culture using pre-defined concepts such as “archaeological culture”, chronology, “phase”, ethnos, etc. as objective realities. The act of interpretation, based on a false familiarity with the archaeological material, is limited to the “cultural” and chronological diagnosis. I am wondering if the above-mentioned approach helps us in a better understanding of material culture.

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<sup>1</sup> Translated from the Romanian by N. Boroffka. A Romanian version of this article has been previously delivered to ‘Cercetări Arheologice’ 12. An online version is available at the address [http://www.archaeology.ro/so\\_cernav\\_eng](http://www.archaeology.ro/so_cernav_eng) htm.

## **Introduction**

The publication in 2001 of the volume *Cernavoda III-Boleráz. Ein vorgeschichtliches Phänomen zwischen dem Oberrhein und der unteren Donau*, presenting the papers of a symposium held in 1999, may be judged an important event by the value of the contributions, the effort to reunite and order a large quantity of archaeological information, and the attempt to settle some unresolved problems of this phenomenon. The meaning of this volume is higher, compared to the papers of the meeting in Nitra in 1969 and published in 1973 on the same subject. We have the rare chance to evaluate how much opinions from 30 years ago have changed, and whether they are rejected or still are sustained today. We can also see if new approaches and different questions have come up concerning the “Cernavoda III-Boleráz phenomenon”. Do we know the phenomenon better today compared to 30 years ago? I shall try to answer this question in the present article. I will critically examine the archaeological documents, with special reference to the Lower Danube basin, but also taking into account other areas. I shall try to avoid problems of chronology, since they have been thoroughly discussed in the two volumes mentioned as well as in many other studies (Bojadžiev 1992; Bojadžiev 1998; Forenbaher 1993; Görzdorf, Bojadžiev 1996; Mantu 1995; Nikolova 2000).

## **History of research**

There is an inexactitude in the naming of the period between the end of the Eneolithic and the beginning of the “classical” cultures of the Bronze Age in the basin of the Middle and Lower Danube. In Romanian research the term “transition period from the Eneolithic to the Bronze Age”<sup>2</sup> has become entrenched, while the colleagues from former Yugoslavia and Hungary prefer “Middle Eneolithic” or “Late Copper Age”. Others, especially in Bulgaria, think that the Bronze Age starts with the appearance of pottery of the Cernavoda III type. It has come to the point where the same kind of material, with a wide distribution in the Middle and Lower Danube basin, is attributed to different periods (Eneolithic, Transition period, Bronze Age). In the strange theoretical construction named “transition period from the Eneolithic to the Bronze Age”, defined and accepted by some Romanian archaeologists, the “Cernavoda III-Boleráz phenomenon” occupies an important place: it marks the beginning of this period.

Initially, the finds from Cernavoda, which were recovered during rescue excavations in 1954-1962, 1967-1968 and 1970, were ascribed to a single culture with three phases

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<sup>2</sup> In Romanian: “perioadă de tranziție de la eneolitic la epoca bronzului”.

(Cernavoda I-III). The earliest (Cernavoda I) belonged to the Late Neolithic, the “Middle Stage” (Cernavoda II) was considered contemporaneous to Horodișteea-Foltești II, while the “third phase” (Cernavoda III) was thought to last until the beginning of the Middle Bronze Age (Berciu 1960, 77). The origin of the culture was sought in the south (indicated by objects and decorations such as anthropomorphic figurines with mobile heads, anchor-shaped clay pendants, channelling) with some elements continuing from the Gumelnița substratum. The representation of a dagger on the chest of an anthropomorphic figurine discovered in the Cernavoda site was regarded as indicating relations to the shaft-graves of Mycenae, whereas the dagger found at the same site was considered to date the layer to the time of the Nitra group of Reinecke periods A2-B1. The Cernavoda culture, whose bearers practiced agriculture and stock-breeding (the horse playing an important role), would thus have a Mediterranean character and would date up to the end of Troy VI. The Cernavoda culture also was connected to Ezero (even the term Cernavoda-Ezero sometimes being used), Coțofeni and Schneckenberg (by the cord-decorated pottery), Boleráz and Baden (by the channelled ornaments) (Berciu 1960, 138; Berciu 1964).

In 1968 the three “phases” of the Cernavoda culture became separate cultures, each individualised typologically, and documented in the three excavation sectors of the eponymous site: the finds from area *a* became the Cernavoda I culture, in area *b* a settlement of the Cernavoda II culture with two cultural layers was studied, while sector *c* had a settlement of five layers of the Cernavoda III culture, which was discovered at other sites as well, such as Slobozia, Dobrotești, and Malu Roșu. The sequence of the former “phases” of the Cernavoda “culture” was changed as well, Cernavoda III being older than Cernavoda II (Morintz, Roman 1968, 92-97). In the same year the Celei “aspect” was defined on the basis of finds from excavations at Celei and Siliștioara and was thought to have close ties to the so-called middle phase of the Cernavoda III type finds (Morintz, Roman 1970, 560 note 9). For the “younger stages” of the group or cultural aspect a possible contemporaneity to the Coțofeni culture was not excluded (Morintz, Roman 1970, 561 note 12).

The 1969 symposium at Nitra succeeded in ordering the problems of dating and cultural attribution, and offered a coherent picture of the entire period for a large area (from Germany up to the Dobrudja). After 1969 new archaeological sites, mostly poorly studied through small soundings<sup>3</sup> or even less systematically explored ones<sup>4</sup>, were added to the repertoire of Cernavoda III settlements. This did not, however, alter or specify the problems

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<sup>3</sup> Almăj, Almăjel, Carei, Gornea.

of this culture (definition, pottery repertoire, periodisation, chronology), as they had been established in 1968 and in further studies (Morintz, Roman 1970; Morintz, Roman 1973; Roman, Némethi 1978; Roman 1981). Two facts should be retained: on the one hand the documentation of the Cernavoda III culture in the area of former Yugoslavia and Bulgaria, and on the other hand, its connection with finds of Boleráz type – which is considered as a separate cultural group or an early phase of the Baden culture – from the basin of the Middle Danube.

### **30 years later**

In 1969 the discoveries of Cernavoda III and Boleráz type were discussed in a wider context, centred on the Baden culture, Boleráz being considered the first phase of that culture. There were attempts to establish the Cernavoda III-Boleráz repertoire of pottery in southern Romania, Slovakia, Hungary, and Austria (Morintz, Roman 1973; Nemejcová-Pavúková 1973; Ruttkay 1973; Torma 1973); the state of research and the origin of such finds (Nemejcová-Pavúková 1973; Neustupný 1973; Pavelčík 1973; Torma 1973); a periodisation of the material from Poland, Moravia, the Czech Republic (Kozłowski 1973; Pavelčík 1973; Pleslová-Stiková 1973), and the entire basin of the Middle Danube river. It was also tried to define regional variants (Neustupný 1973). A major part of the discussion concentrated on the chronological relations with other cultures: Funnel Beakers (*Trichterbecher*), Salzmünde (Behrens 1973; Pavelčík 1973), Funnel Beakers from Czechia (Pleslová-Stiková 1973), finds of Ezero and Ezerovo type in Bulgaria (Merpert, Georgiev 1973; Tončeva 1973), and Usatovo in the north-Pontic area (Zbenovich 1973). A large number of studies treated the relations to cultures of the preceding period: Balaton (Kalicz 1973), Bodrogkeresztúr (Patay 1973), Lengyel, Polgár (Kozłowski 1973), Lasinja (Leben 1973), Lažňany (Šiška 1973), Ludanice and Furchenstichkeramik (Němejcová-Pavúková 1973; Torma 1973). Some authors sought to place the phenomenon in a wider chronological and cultural context (Morintz, Roman 1973; Neustupný 1973; Renfrew 1973, Torma 1973), occasionally by making use of radiocarbon dates (Neustupný 1973; Renfrew 1973, Tončeva 1973). Hachmann mentions the difference between the Baden culture and Baden pottery in the closing remarks of the volume on the necessity of a cultural theory (Hachmann 1973, 530-533). Generally however, an empirical approach was preferred, collecting and arranging the archaeological material, and attributing it chronologically and culturally. An image of a more or less uniform phenomenon was

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<sup>4</sup> Cârcea , Locusteni.

created occupying an area stretching from Germany to the Dobrudja (as shown in the map published at the end of the volume), and characterised by specific types of settlement and funerary practices (known especially from the study of the cemetery at Pilismárot) (Torma 1973), and by a definable ceramic repertoire. The culture was considered to be later than Balaton type finds, Lengyel, Lasinja, Bodrogkeresztúr, Lažňany, Furchenstichkeramik, and to have connections with the final phases of the Funnel Beaker culture (TRB) and the Ezero, Ezerovo and Usatovo groups.

**30 years later**, the ceramic repertoire is still under discussion (Roman 2001), as, likewise, the state of research in Bulgaria (Lichardus, Iliev 2001; Zmeykova 2001), Oltenia (Nica 2001), northwestern Romania (Németi 2001), the Ialomița and Călărași counties (Parnic 2001), Poland (Zápotocky, Zápotocky 2001), the area of former Yugoslavia (Govedarica 2001; Jevtić 2001; Tasić 2001) and Hungary (Bondár 2001). The origins of the phenomenon (Nikolova 2001; Roman 2001), and its relation with the Aegeo-Anatolian region are still unclear (Aram-Stern 2001; Gabriel 2001; Seferiadés 2001). Also still unresolved are the connections with the preceding period: with finds from the settlement of Hotnica (Ilčeva 2001), the Cernavoda I culture (Harțuche 2001), Furchenstichkeramik (Pavúk 2001) or *Trichterbecher* (Pavelčík 2001; Šmid 2001; Zápotocky, Zápotocky 2001). Problems of chronology still occupy an important place, especially concerning some groups defined after 1969, e.g. Orlea-Sadovec (Roman 2001), Junacite or Dubene (Nikolova 2001). New aspects can be seen in a shift of gravity from the discussion of chronology to the publication of new material (Roman 2001; Ruttkay 2001) and the summarizing of previously published finds from certain areas (Németi 2001; Nica 2001), and in a better dating by more radiocarbon dates as well as the appearance of dendrochronological ones (Aram-Stern 2001; de Capitani, Leuzinger 2001; Gabriel 2001; Ilčeva 2001; Kalicz 2001; Matuschik 2001; Nikolova 2001; Stadler 2001). New information on funerary practices (Govedarica 2001) and the definition of a Proto-Cernavoda and Protoboleráz "horizon" have also been published (Kalicz 2001; Roman 2001). The archaeological materials from various areas have been collected in a more coherent image: a widely spread archaeological phenomenon, a pottery repertoire somewhat better known, a larger number of finds, a specific funerary standard known from a few more sites; new cultural groups and facies (Proto-Cernavoda with the facies Radovanu and Renie II, Protoboleráz). The descriptive aspect still dominates (state of research, repertoires, descriptions of settlement types, houses, burials, pottery forms, relative and absolute chronology), with few critical accents, leaving very little space for interpreting. Basically,

how can the spread of an archaeological phenomenon over such a large area be explained? By the intense circulation along the Danube valley (Govedarica 2001), by the appearance of technical innovations (carts) (Maran 2001), or do we simply have to accept a diffusionist explanation by which the phenomenon is responsible for the spread of channelled pottery from the Middle Danube basin towards the Lower Danube (Nikolova 2001, 245)?

### **Interpretations**

In 1973 finds of the Boleráz type were included in the first phase of the Baden culture, some links to the Cernavoda III group also being recognised. At present, these finds occupy a rather ambiguous place, simultaneously being attributed to the first phase of the Baden culture and the "Cernavoda III-Boleráz phenomenon". A border between finds of Boleráz type and of Cernavoda III type has been fixed along the Tisza river. The unity of the phenomenon is said to be assured by the ceramic repertoire and by other objects, especially anthropomorphic figurines with mobile heads. The difference consists in the practice of cremation only in the Boleráz area.

The interpretations of the phenomenon refer to the causes for the distribution over such a large area of cultural elements. They also relate to explanations for the cultural changes taking place, either from a processualist point of view (stressing the transformation of different economic, social and/or religious systems), or from a historicising perspective (material culture reflects a historical process marked by migrations, movement of populations).

For Roman the Cernavoda III-Boleráz phenomenon is a cultural unity which may reflect an ethno-cultural mixture or uniformisation (Roman 1996, 13) – a stage in the process of Indo-Europeanisation and the formation of the Thracian peoples (Roman 1989, 54). The Indo-Europeanisation process is thought to begin in the Late Eneolithic along two lines: "by the assimilation of ethno-cultural elements into the mass of local tribes", and by "the adoption of the Balkan-Danubian way of life – then the most important centre of culture in Europe – by the bearers of the Cernavoda I culture, who become aboriginalised consequently" (Roman 1981, 24)<sup>5</sup>. The following stage of this process is characterised by the "deepening of the process of Indo-Europeanisation" through "the dispersion of the Cernavoda I communities into the mass of the local Eneolithic ones, and by the penetration of some new ethno-cultural

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<sup>5</sup> „prin asimilarea elementelor etno-culturale infiltrate în masa triburilor locale" and "adoptarea modului de viață balcano-dunărean - pe atunci cel mai important centru de cultură din Europa - a purtătorilor culturii Cernavoda I care în cele din urmă vor fi autohtonizați"

groups" (Roman 1981, 29)<sup>6</sup>. As a consequence of this process there appear "archaeological complexes of the Transition Period to the Bronze Age"<sup>7</sup>, the beginning being marked by the Cernavoda III culture (Roman 1981, 30; Roman, Némethi 1978, 60). The mobility of "certain groups" could "easily transport cultural achievements" favouring this process (Roman 1981, 31). This "cultural unity" still hides an "ethnic conglomerate" because the funerary rites differ in the Boleráz and Cernavoda III areas (Roman 1981, 31; Roman 1996, 13). Roman also explains the mechanism by which this "cultural unity" appears. "North-Pontic elements" which "infiltrated" to the south of the Danube acted as a "filter": they accept, filter and transmit "cultural achievements" produced by certain "centres of cultural irradiation" towards the north and northwest (Roman 1981, 32; Roman, Némethi 1978, 74).

Roman is presenting a historic scenario sparked by an incident: the migration of herding populations from the north-Pontic steppes. The spread of some objects, in his view, would reflect the expansion or movement of certain communities (Roman 1981, 32). What appears self-evident is considered true. Material culture and funerary practices, then, are seen as expressions of ethnoi and tribes; they document migrations, historical incidents connected to the presupposed process of Indo-Europeanisation, which in its turn is presented as something self-evident, but which in fact is a problem still largely unsolved (see, for example, Renfrew 1995). For Roman the Cernavoda III "culture" is a passive structure, truly a "filter" only accepting, filtering and further transmitting "cultural achievements" from Anatolian centres of "Trojan" or "intermediate" type (from Thrace). But this is a construction that does not stand, even not chronologically: finds of Cernavoda III type are, in fact, older than Troy (Maran 1997; Maran 1998; Maran 2001, 734). The "cultures" give birth to other "cultures", just like the "tribes" behind them.

An historical process is defined, which is determined by two factors: "The movement of population from the north-Pontic steppes" and the "continuous cultural waves from the south in a northern direction" (Roman 1973). As in billiard, these factors determine the "scattering towards the Middle Danube of cultural elements called Boleráz there". Each cultural change is, at the same time, an effect of some incident (migration or diffusion process) but also a cause leading to further change. The result is an unending chain of relations of causality, whose end is Indo-Europeanisation and, later, the constitution of the Thracian peoples. The end of the Cernavoda III "culture" is explained, of course, by a "new

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<sup>6</sup> "adâncirea procesului de indoeuropenizare"; "dispersarea comunităților Cernavodă I în masa celor eneolitice locale și prin pătrunderea unor noi grupe etno-culturale"

<sup>7</sup>"complexele arheologice ale perioadei de tranziție spre epoca bronzului"

southern influx" which "gradually leads to the Coțofenisation of some areas and the Badenisation of others" (Roman 1973, 76).

There are other attempts to explain the "Cernavoda III-Boleráz phenomenon". Vulpe refutes the idea of cultural change caused by migration. The changes are, according to this interpretation, due to "economic-social [transformations] of the old population through a rising importance of stock-breeding against agriculture, a fact which also explains higher mobility of the tribes and the preference for a new type of settlements". These changes probably also reflect "some climate changes and demographic modifications" but could also be the result of "revolutions on the spiritual level, of the religious beliefs". The possibility of some local migrations is not excluded either (Vulpe 1995, 17-18). The "decadence" of metallurgy and pottery during this period would reflect a different attitude towards metals and vessels, a consequence of their "rather" more utilitarian function (Vulpe 1997, 38, 43-44).

According to yet other opinions, the spread of the "Cernavoda III-Boleráz phenomenon" over such a large area was the result of more intense circulation along the Danube valley (Govedarica 2001, 361), due to, or at least supported by the rapidly adopted technical innovation of wheeled vehicles (Maran 2001). Similarly, what Sherratt named the "traction complex", occupies an important place in the explanation model of the major changes in this period: the relative development of a herding economy and of the system of secondary animal products, the appearance of a warrior elite, "male domination" in the productive system. The "drinking complex" characterises the warrior elite and is the expression of the formation of hospitality conventions, of connections between huge areas (Sherratt 1997, 380-387).

In these interpretations, the particularity of the archaeological material is reduced to generalisations concerning "social processes" or of other kinds. Culture is a dynamic system helping human communities to adapt to the surroundings or it is "fossilised" behaviour. Cultural change becomes a process of natural selection of the best-suited system. Some of these interpretations are general, that is to say, they can be applied to any cultural change from various periods.

### **"Cultures", "cultural aspects", "complexes" and ceramic styles**

In the Lower Danube basin, the interpretations presented above are based on the archaeological material discovered in 53 locations (pl. 1), of which 15 are settlements and 38 are isolated finds (pl. 2). They are a result of rescue excavations (19 sites) and surveys (29

sites) (pl. 3); only 5 settlements have been studied systematically, another eight only by soundings or rescue excavations (pl. 4). Archaeological material is known from publications for 12 settlements and 11 isolated finds (pl. 5). Most of the sites have been published as drawings of 1 to 15 sherds, a few others with somewhat more (20-60 sherds) (pl. 6). The surroundings are hardly known: the settlements are "disposed" near waters, naturally protected, on terraces (Cernavoda, Dobrotești, Drama). The houses are badly documented and only mentioned in literature (Drama, Cernavoda, Șimnic), without offering details of construction. Due to the character of research and the way in which the material is presented, regional differences are difficult to establish. The phenomenon also appears uniformly when mapped, because of a certain perspective on the notion of culture.

The defining mechanisms of an archaeological culture, e.g., Cernavoda III, are simple enough: first the distribution of a ceramic style is sketched by formal analogies, by an inherent process of selection in which only the "culturally" or chronologically (*Leitfossil*) relevant types are retained (Franken 1985, 45-46); next, in the thus defined area, the contexts in which such pottery appears are mapped (settlements, funerary contexts, isolated finds) as well as other categories of objects discovered (for example anthropomorphic figurines).

This theoretical construction cannot be interpreted; only the elements included can be described (types of settlement, funerary practices, etc.). Discussion is limited to the typology of the objects, especially pottery, from the entire distribution area ("ceramic repertoire" of the "culture"), their variation in different sites usually being the result of chronological stages. Thus new "phases" (e.g., Proto-Cernavoda) or "cultural facies" are defined whenever materials do not fit the picture (e.g., Radovanu and Renie II, with the documentary basis reduced to one settlement and 3 isolated finds from Radovanu) (Roman 2001, 18, pl. 15-16). Discussions concentrate around relative and absolute chronology, the conclusions are general, referring specifically to the "occupations" ("practice" of agriculture, stock-breeding and some handicrafts). The lack of some "manifestations" (especially of graves) from this structure raises questions as to the existence of a "culture". Thus, ceramic styles accompanied by the other elements are "cultures"; the others (which, for example, do not appear in funerary contexts) remain ceramic styles which either await further research in order to attain the characteristics of a culture, or must be included into better (or differently) defined cultures.

This "unity", defined in such a manner, leads to a reduced understanding of the organisation and social structure of the past. The "cultural" approach would be satisfactory if the aim of archaeology was only the definition and description of the traits of the "structural

entities". It stems from the idea, however contradicted by ethnographic examples (Hodder 1978), that the identity of a human group has to be expressed territorially by the traits of the material culture (Shennan 1978). The various associations of cultural traits depend only on the position of the archaeological site in relation to the spatial distribution of certain objects.

In the traditional approach cultures become uniform distribution areas on maps, which hide the differing dynamics of objects, the exchange network of goods or ideas, and become passive realities which can only be described. Therefore it is necessary to deconstruct the conglomerate of traits which are an archaeological culture into the composing elements (Hodder 1978a, 111; Shennan 1978, 134). Pottery is the defining element of the period discussed here. The Cernavoda III "culture" represents either a single ceramic style, in the measure in which we equate its traits with the Cernavoda III "ceramic repertoire" defined on account of the formal analogies of some pottery types from a certain space, selected according to the criteria of their "cultural" and chronological ("Leitfossil") relevance, or a notion, which in fact hides several pottery styles, that are to be established respecting the typological variation of each archaeological site. The variability in the distribution of a pottery type depends on the model and localisation of the production centre, the hierarchical complexity of the centre and the differences concerning the exchange mechanism (Hodder 1978b, 225-226).

There are ceramic forms and ornaments, which appear in several sites: the conical bowl, sometimes decorated by channelling on the inside (Cârcea, Locusteni, Radomir, Slobozia, Cernavoda, Drama, Durankulak); the hemispheric bowl (Drama, Radomir, Slobozia); bowls with hemispherical body, cylindrical neck and out-turned rim, sometimes with channelling on the body (Dobrotești, Șimnic, Malu Roșu, Slobozia, Cernavoda, Radomir); hanging vessels (Dobrotești, Malu Roșu, Șimnic, Locusteni, Drama); globular pots, sometimes with 2 lugs on the shoulder (Malu Roșu, Șimnic, Locusteni); cups (Slobozia, Malu Roșu, Cernavoda, Dobrotești). In contrast, some types are documented only in one site each: vessels with high foot and lids (Cârcea); certain cups (Cernavoda).

Examples of decorative techniques and ornaments are: channelling (Dobrotești, Șimnic, Malu Roșu, Radomir, Cârcea, Locusteni, Slobozia, Cernavoda, Drama); plastic decoration in the form of a rib on the vessel rim (Cernavoda, Șimnic, Dobrotești, Drama, Durankulak) or a system of 2-3 ribs under the rim (Durankulak); point-shaped impressions (Drama, Dobrotești, Durankulak, Cârcea); incised decoration: notches on or under the rim (Slobozia, Dobrotești, Malu Roșu, Almăjel, Șimnic); spiral motifs in the Bratislava style

(Dobrotești, Cârcea, Radomir); "plaited" motifs (Cârcea, Dobrotești, Slobozia, Cernavoda, Drama, Durankulak).

However, the present state of publication of pottery raises doubts about this uniform image. It is, for instance, hard to observe differences on the basis of only 25 complete or reconstructed vessels and some 400 sherds published as drawings, from which the 60 vessel profiles from Locusteni and others from Durankulak must be subtracted. The selection of material for publishing has been done according to the criteria of usefulness for the "cultural and chronological attribution". However, elements contradicting the unitary image may be observed as well; basically they represent the differences in the ceramic repertoire of those settlements, which are better represented by published material. At Drama hemispherical bowls with rows of dot-shaped impressions dominate. The site of Cârcea belongs to the Cernavoda III "culture" only because of some fragments of tunnel-shaped lugs, bowls with channelled decoration and a lid in the Bratislava style. Incised pottery with motifs that lead to the Coțofeni I "phase" and incised or cord-impression motifs with analogies in the Orlea-Sadovec "complex", however, dominate. Zmeykova attempts to illustrate the similarities between pottery forms from Durankulak, Mirovci and the Cernavoda III repertoire, but their differences become rather more evident in the typological table (Zmeykova 2001, 224-234).

Although pottery should really be studied on a small regional scale in order to identify production centres, the state of research forces us to regard wider areas with the purpose of finding the variety of contexts in which it appears. The Cernavoda III pottery has been connected to the repertoire of the Boleráz group from the Middle Danube basin, with a centre of distribution in Transdanubia and southwestern Slovakia, however, also well represented in the peripheral zones (Moravia, Czechia, Silesia, Little Poland, the northeast of former Yugoslavia, eastern Austria). The connecting elements to the Cernavoda III style are similarities of form for some vessel types (conical bowls, sometimes with channelling inside), channelled decoration, incised ornaments of the Bratislava style, "plaited" motifs. The differences, however, are great. The pottery repertoire is much more varied, with a large diversity of forms (cups, jugs, bowls, large vessels), most of them without analogies in the basin of the Lower Danube (for example, compare Morintz, Roman 1973, 269 fig. 5 with Nemejcová-Pavúková 1984, 126-127). There is equilibrium between incised and channelled decoration. Some special forms occur only in the basin of the Middle Danube – gynaekomorphic vessels, a *rhyton* found at Pilismarót (Torma 1973, 491 fig. 5/1, 494) and a "pseudo-*kernos*" with 7 mouths discovered at Mödling-Jennyberg (Pittioni 1954, 199 fig. 132;

Ruttkey 1995, 152) – as well as pots with zoomorphic representations (Pilismarót) (Torma 1973, 491 fig. 5/2; 494). While the ceramics in the basin of the Lower Danube come exclusively from settlements, in the Boleráz surroundings pottery was deposited in graves - Pilismarót (Torma 1973), Fonyod (Banner 1956, 28-32, pl. XI-XII), Šošari-Saç, Tolisavac (Govedarica 1997, 150-154), Praga-Bubeneč, Praga-Dejvice (Pleslová-Štiková 1973, 397), Zillingtal, St. Margarethen (Ruttkey 1995, 148, 151 pl. 16/1; 157 no. 12), Grub an der March (Hahnel 1993, 82-84, pl. 6) – or in so-called vessel-hoards: Polska Cerekiew (Kozłowski 1973, 170; 172 fig. 3) and Donnerskirchen (Ruttkey 1995, 146, 154). In some cases the Boleráz type pots belong to contexts of a special character. Under one mound at Šošari-Saç, in the northwestern part, a feature was studied, which had a rectangular form and consisted of burnt earth, a 10 cm thick layer of ash, covered by a layer of stones. Several sherds and a female figurine belong to the feature (Govedarica 1997, 150-154). At Kétegyháza, under mound 5, the remains of five fireplaces arranged in a circle were studied; on one of them the skeleton of a bovid without skull and without the extremities had been deposited (Ecsedy 1979, 27-28). Even within the Boleráz style there are regional variants in pottery distribution. There is, for example, a Slovak variety differing from the finds from Moravia characterised by the higher frequency of lugged cups and the pottery decorated with successive impressions (Nemejcová-Pavúková 1973, 300). From north to south marked differences may be observed concerning the presence of cups with funnel-shaped mouth and "collared" vessels.

In Transylvania this period is considered to be characterised by "phase Coțofeni I" type pottery, the arguments used being typological (analogies with Boleráz type pottery) as well as stratigraphic criteria, but also the association of such pottery with channelled ceramics (Ciugudean 2000, 52-53; Oanță 2000; see also Roman 2001, 17). The connecting threads between the Boleráz and the Coțofeni I styles are some vessel forms (cups, mugs, sack-shaped pots), the channelled and incised decoration.

The diversity of the Boleráz style ceramic repertoire compared to that of Cernavoda III, far from reflecting a migration from the basin of the Lower to the Middle Danube, rather suggests a relationship of centre-periphery. The area of the Boleráz style represents a centre from which certain pottery types spread to Transylvania and the basin of the Lower Danube. These types, or ideas connected to given forms or ornaments, are parts of a mechanism of exchange. The quantitative and qualitative presence of specific types in a peripheral zone depends on the distance from the centre. For example, the cups, differentiated typologically and frequent in the Boleráz area, appear in a reduced number in the Coțofeni I style repertoire

and occur only sporadically in the basin of the Lower Danube. The same dynamics can be observed for some incised motifs. In contrast, the channelled ornaments are more present in the basin of the Lower Danube, in the Cernavoda III style, than in Transylvania. However, we must take into account the different states of research in these regions. It is necessary to define the type of pottery production: whether each site produces its own pottery, sharing the same traditions, or whether specialised centres exist in which each potter produces a limited repertoire of vessels, the association of forms in a given site being by chance, as a function of the exchange mechanisms and local tastes. Unfortunately, the studies concerning the pottery technology are still missing.

The dominating use of formal analogies in defining "cultural boundaries" has caused an ambiguous position for some regions during this period. Transylvania was long treated as a white patch. Only after the discovery of incised pottery of "Coțofeni I" type together with channelled material of Cernavoda III type this void was filled. At present, the Danube valley section between Giurgiu and the Iron Gates, and north-western Bulgaria represent a white patch, and attempts to fill it are based on the site of Orlea-*Răcarul Mare* only, yielding some Cernavoda III material discovered in surveys and as yet unpublished (pl. 1) (Morintz, Roman 1969, 63 note 9). Until recently, finds of the "Celei aspect" and the "Orlea-Sadovec" complex were thought to occupy this area, but some elements, such as the occurrence of askoidal cups/jugs of Zimnicea type in the tell at Celei, indicate a later date for these layers (a summary of the Zimnicea type discoveries in Motzoi-Chicideanu, Olteanu 2000, 23-25). The repertoire of the Celei "group" or "aspect" has a reduced material base: 3 settlements (Celei, Locusteni, Siliștioara) and 6 isolated discoveries only mentioned in literature. It is conceivable, that they all belong to the Orlea-Sadovec group, since many decorative elements are common to both groups. Besides, the settlement at Locusteni, of which one pit has been excavated, is now attributed to the Celei "aspect", then to the Orlea-Sadovec "complex". The Celei settlement, studied systematically on the preserved tell surface (35 x 10 m), is known from two short excavation reports with little published material (Bujor 1967; Nica 1982). The documentation of the Orlea-Sadovec "complex" is similarly thin: 4 settlements (Grojdibodu, Orlea, Kozloduj, Sadovec), one funerary discovery (mound 1 at Tărnaava) and 5 isolated finds (*Cârna-Măgura Fircanii*, *Cârna-Nasta*, *Orlea-Grindul Cremenari*, Orlea-site unspecified, Zimnicea). The material from the settlements of Orlea and Sadovec, excavated in limited soundings in 1947 and 1934-1937 respectively, was separated only typologically from a mixed assemblage of many periods. The stratigraphic observations from Grojdibodu and

Kozloduj are limited by the restricted area studied and the small amount of material published. The ceramic repertoire of these sites is characterised by some forms (hanging vessels, *askoi*) and decorative elements (plastic motifs of 2-3 ribs under the rims, lentil-shaped applications, cord impressions, a large variety of incised motifs) which differ from Cernavoda III. At the present state of research, it is difficult to establish the differences between the Celei and Orlea-Sadovec styles, which occupy the same geographic area (pl. 7). The differences rather consist of varying quantitative relationships between incised pottery and such with plastic ornaments. The first dominates in the Orlea-Sadovec style, while the proportion is inversed in the Celei style. At Celei both styles are associated beginning from the lower level, but the weight of the Orlea-Sadovec style gradually grows in the following layers. Either there are two ceramic styles in chronological succession, or we have a single style in this restricted area, there being no obligatory reason that every site must have the same proportional representation of the two categories. On account of the state of publication of the material from Celei no better solution can be offered at present.

There are several possibilities of filling the gap in this region: either we can wait for better documentation of Cernavoda III type pottery (like the above mentioned material from Orlea), or what we now call the Celei and Orlea-Sadovec styles appear during this time and evolve for a longer period afterwards, or else we need to look for more elements of the "Coțofeni I" kind in the area, such as, for example, the vessel from Ostrov. However, it is also possible that a large variety of forms and ornaments come together in this reduced area, which we today classify typologically into different groups (Cernavoda III, Celei, Orlea-Sadovec, Coțofeni I). The association of these styles in some sites (Celei, Cârcea, Locusteni, Bechet) would support such a conclusion.

The "Cernavoda III-Boleráz phenomenon" is thus still far from reflecting a "cultural unity". The mechanisms of defining this construction are the same as those used to define "cultures". On the basis of "guide fossils (*Leitfossilien*)" (some ceramic forms, tubular lugs, decoration techniques, a few motifs, anthropomorphic figurines), an uniform area was defined on maps and then other elements of the culture were mapped, which could only be described, the only interpretation concerning explanations of the causes why the phenomenon appeared. The wide distribution of some vessel types creates the impression of a "horizon" covering an immense space like a blanket. It is forgotten that this "horizon" also has chronological depth. The "Cernavoda III-Boleráz phenomenon", as observed from radiocarbon dates, lasts for a long time. Some pottery centres may have continued producing vessels which were already

out of use elsewhere. In a pit from the settlement at Gladnice a bowl decorated in the Bratislava style typical of Boleráz was associated with pottery, including a sauceboat, from the classical phase of the Baden group (Govedarica 1997, 154 fig. 5. 155). In the "cultural" uniformity of the basin of the Lower and Middle Danube a diversity of pottery centres is hidden. The vessels, which we include in different "types", are products of potters, some more innovative, others more conservative, over a long period of time. In the same vessel type there are variations depending on the ability of the potter, the temper used or the firing technique. Franken has suggested that the production stages of vessels should be considered when proposing typologies (Franken 1985, 47).

Beyond this "cultural unity" several ceramic styles exist, which we conventionally name "Cernavoda III", "Boleráz", "Coțofeni I", "Celei" or "Orlea-Sadovec", but in which we include a large variety of forms and decorative motifs which sometimes differ from one site to another. Basically, what similarities can be found between the material from Cernavoda and that from Mödling? Or between the pottery from Slobozia and the vessels from the deposit at Donnerskirchen?

### **Conclusions**

Do we know the "Cernavoda III-Boleráz phenomenon" better after 30 years? If the aim of archaeology is to accumulate material and to classify it chronologically and culturally, the answer is positive. Today we do know more about this "phenomenon": the documentary basis has grown, we know more settlements and funerary discoveries, new phases and facies have been defined, the methods of absolute dating offer more information.

However, if we wish to know who used the objects and in which social context, who produced and who "consumed" the pottery, anything about the production centres or exchange mechanisms, then the response is negative. A vessel can be regarded as a culturally or chronologically diagnostic element, but if we know its context it can also obtain a meaning. If we understand material culture as a text with a system of meanings and significance, which must be read (Hodder 1993, 126-128; Shanks, Tilley 1989, 2-4), then the few hundred vessels and sherds known from literature and diagnosed as "Cernavoda III", mostly lacking context, can only be seen as a sum of incoherent words transmitting absolutely nothing. They have been put together only on account of their similar pronunciation.

In Romanian archaeological research there is the belief that the duty of the archaeologist is to "objectively" collect information, to classify it and only afterwards to

interpret it. However, there is an interdependence between information and theory. We excavate materials, but also ideas. We perceive, register, classify and publish archaeological information according to theoretically fixed criteria. A theoretical approach to the notion of culture is beginning to appear here too (Curta 2001, 6-35; Niculescu 2000; Vulpe 2002), either concerning the ethnic-material culture relationship, or alternative definitions, from the processualist or post-processualist perspective. Unfortunately, for Romanian archaeology pottery still means chronology, culture and, too often, ethnos (Ellis 1996, 76-77).

## Catalogue of sites

### Abbreviations

com. = comuna (parish)

jud. = județul (county)

mun. = municipiu (municipality)

unpubl. = unpublished

### Finds of Cernavoda III type

**1. Almăj** (Romania, jud. Dolj)

Site unspecified; sounding 1957; 1964; Coțofeni or Cernavoda III pottery fragments; (Galbenu 1972, 267 fig. 2/1; 268 fig. 3/2-5);

**2. Almăjel** (Romania, city of Filiași, jud. Dolj)

Site unspecified; sounding 1967-1969; Cernavoda III materials; unpubl.; (Galbenu 1972, 263, 267 fig. 2/3, 6-7);

**3. Almăjel** (Romania, com. Vlădaia, jud. Mehedinți)

*Valea seacă*; rescue excavation 1967-1971; settlement; 1 layer with Cernavoda III materials overlying a Sălcuța III layer; unpubl.; (Galbenu 1983);

**4. Bălănești** (România, jud. Olt)

Sounding; Cernavoda III material; unpubl.; (Nemejcová-Pavúková 1973, no. 300; Roman 1981, 31 note 48);

**5. Bechet** (Romania, jud. Dolj)

*Ghețarie ICIL*, on a sand bar; sounding 1978; disturbed layer with mixed Coțofeni, Cernavoda III and Celei material; unpubl.; (Bujor 1970, 478; Stoia 1979, 356 no. 12; Leahu et al. 1979, 411; Ulanici 1981, 191-192);

**6. Borcea** (Romania, jud. Călărași)

Cernavoda III find; unpubl.; (Parnic 2001);

**7. Bucșani** (Romania, jud. Giurgiu)

*Pod*; systematic excavation 1998-2001; isolated find; some tubular lugs of Cernavoda III type found in the vegetation layer; (information from C. Bem);

**8. Cârcea** (Romania, com. Coșoveni, jud. Dolj)

*Viaduct*; systematic research 1966; 1968; 1982; 1987; 1989-1994; settlement with materials of Sălcuța IV and Cernavoda III type; in 1993 a pit-house with Dudești material was studied, which had been perforated by a "cultic pit" with Cernavoda III material; (Roman 1976, no. 79; Nica 1989, 252-253; Chronique 1993-1994, 17; Popilian 1994, 263; Nica 1999, 14 fig. 5/15; Nica 2001);

**9. Cârcea** (Romania, com. Coșoveni, jud. Dolj)

*Hanuri*; systematic research; settlement; Cernavoda III; (Nica 2001)

**10. Cerăt** (Romania, jud. Dolj)

Tell in the floodplain of the Desnățui, 3 km from the locality; sounding 1967; one layer with Coțofeni material overlying a Sălcuța settlement; Cernavoda III sherds; (Popescu 1968, 678-679; Galbenu 1972, 267 fig. 2/8; Nemejcová-Pavúková 1973, no. 298; Roman 1976, no. 146);

**11. Cernavoda** (Romania, jud. Constanța)

*Dealul Sofia*; rescue excavations 1917; 1936; 1954-1962; 1967-1968; 1970; site *a* is a tell settlement of Gumelnița culture and a Cernavoda I settlement; site *b* settlement with 2 levels; Cernavoda II culture; site *c*, Cernavoda III settlement with 5 levels (2 m thick); nearby the settlement 11 skeleton graves in supine position (Berciu, Morintz 1957; Berciu, Morintz 1959; Berciu et al. 1959; Berciu 1960; Berciu 1961, 135-138; Berciu et al. 1961a; Berciu 1964; Morintz, Roman 1968, 92-97; Condurachi et al. 1972, map no. 6; Berciu et al. 1973; Nemejcová-Pavúková 1973, no. 318; Roman 2001);

**12. Cuza-Voda** (Romania, jud. Călărași)

Cernavoda III finds; unpubl. (Nemejcová-Pavúková 1973, no. 316)

- 13. Dalgopol** (Bulgaria)  
Cernavoda III finds; unpubl. (Zmeykova 2001, 213)
- 14. Dobrotești** (Romania, jud. Teleorman)  
*Lacul lui Cremene*; sounding 1964; Cernavoda III settlement with 3 layers (0.80 m thick) (Roman 1966; Păunescu 1966; Morintz, Roman 1968, 81, 82-84 fig. 27-29; Dumitrescu 1969, 91-92 no. 28; Nemejcová-Pavúková 1973, no. 301);
- 15. Dorobanțu** (Romania, jud. Călărași)  
Survey; isolated find; Cernavoda III; (Nemejcová-Pavúková 1973, no. 315);
- 16. Drama** (Bulgaria, okr. Jambol)  
*Merdžumekja*; systematic research 1997-1999; Cernavoda III settlement with one layer (0.35-1.35 m thick) on the Eastern slope of the hill; it contains sherds, burnt clay pieces (probably from pits) and traces of post-holes belonging to a rectangular structure made of burnt clay (Lichardus et al. 2000, 40-45; Lichardus, Iliev 2001, 166-198);
- 17. Drăgănești-Olt** (Romania, jud. Olt)  
*Corboaica*; systematic research 1992-1994; tell-settlement; in the upper layer mixed materials were found: Coțofeni, Glina, Verbicioara and a few Cernavoda III sherds (Nica et al. 1995; Nica 2001, 279, 285 pl. 1/1, 291 pl. 7/12-15);
- 18. Dubova** (Romania, com. Plavișevîța, jud. Mehedinți)  
*Adăpostul Mic (Moara Dracului)*; sounding; now lost Cernavoda III sherds found in a layer (1 m thick) (Păunescu 1979, 55; Petrescu 2000, 19 no. 4);
- 19. Dubova** (Romania, com. Plavișevîța, jud. Mehedinți)  
*Cuina Turcului*; systematic research 1964-1969; Cernavoda III sherds; unpubl. (Nemejcová-Pavúková 1973, no. 297; Roman, Németi 1978, 41; Petrescu 2000, 19 no. 4);
- 20. Durankulak** (Bulgaria, okr. Tolbuhin)  
*Goljam Ostrov*; soundings 1977-1978; settlement; Cernavoda III type pottery found in the layer IIa (disturbed by Middle Age structures) overlying the Karanovo VI layer (Draganov 1990);
- 21. Fărcașu de Jos** (Romania, jud. Olt)  
Sounding; isolated find; Cernavoda III; unpubl. (Nica 2001, 279);
- 22. Fărcașu de Sus** (Romania, jud. Olt)  
*Pe Coastă*; isolated find; Cernavoda III (Nica 2001, 279, 285 pl. 1/1, 295 pl. 11/4, 6, 296 pl. 12/11);
- 23. Fărcașu de Sus** (Romania, jud. Olt)  
*Cimitir*; isolated find; Cernavoda III; (Nica 2001, 296 pl. 12/3)
- 24. Gâldău** (Romania, jud. Călărași)  
Cernavoda III finds; unpubl. (Parnic 2001);
- 25. Ghimpețenii Noi** (Romania, com. Nicolae Titulescu, jud. Olt)  
Survey; Cernavoda III sherds found on a tell-settlement (Trohani, Zorzoliu 1982, 65; 66 fig. 1/1);
- 26. Ghizdaru** (Romania, jud. Giurgiu)  
Systematic research; a few Cernavoda III sherds (Berciu et al. 1961; Morintz, Roman 1968, 92; Condurachi et al. 1972, map 6; Nemejcová-Pavúková 1973, no. 313);
- 27. Gornea** (Romania, com. Sichevița, jud. Caraș-Severin)  
*Bișteag*; Survey 1969; Coțofeni and Cernavoda III-Boleráz sherds (Nemejcová-Pavúková 1973, no. 296; Lazarovici 1978, 27; Németi 1989, 231);
- 28. Gornea** (Romania, com. Sichevița, jud. Caraș-Severin)  
*Locurile Lungi*; settlement; two pits containing Cernavoda III-Boleráz and Coțofeni I materials were excavated (Lazarovici 1978);
- 29. Hârșova** (Romania, jud. Constanța)  
Systematic research; Cernavoda III sherds found in a Roman period pit (Galbenu 1979);
- 30. Hotărani** (Romania, jud. Olt)  
*La turn*; Cernavoda III finds (Nica 2001, 279, 285 pl. 1/1, 296 pl. 12/4);
- 31. Koprivec** (Bulgaria)  
Settlement; destroyed Cernavoda III layer overlying Neolithic and Cernavoda I levels (Zmeykova 2001);

- 32. Kragulevo** (Bulgaria, okr. Tolbuhin)  
Cernavoda III finds; unpubl.; (Draganov 1990, 160; 162; Zmeykova 2001, 213);
- 33. Locusteni** (Romania, com. Daneş, jud. Dolj)  
*Dealul Predeştilor*; systematic research 1969-1973; two pits (Cernavoda III and Celei respectively) found beneath the Coţofeni layer (Tătulea, Nica 1974; Roman 1976, no. 186, pl. 59-61; 62/1-4; Roman 1976a, 160; Popilian et al. 1979, 207; Popilian et al. 1980, 254; Nica 1980; Nica 1987; Nica 2001, 279, 285 pl. 1/1, 292-293 pl. 8-9);
- 34. Malu Roşu** (Romania, jud. Giurgiu)  
Sounding 1965; settlement; Cernavoda III layer (0.25-1.00 m thick); (Morintz, Roman 1968, 89-91; Condurachi et al. 1972, map 6; Nemejcová-Pavúková 1973, no. 314);
- 35. Mirovci** (Bulgaria, okr. Tolbuhin)  
Sounding 1987-1988; Cernavoda III settlement (Draganov 1990, 162; Zmeykova 2001);
- 36. Mozacu** (Romania, jud. Argeş)  
Survey; Cernavoda III finds (Nemejcová-Pavúková 1973, no. 302);
- 37. Ograda** (Romania, jud. Ialomiţa)  
Cernavoda III finds; unpubl.; (Parnic 2001);
- 38. Orlea** (Romania, jud. Olt)  
*Răcarul Mare*; Survey 1968; Cernavoda III sherds (Morintz, Roman 1969, 63 note 9);
- 39. Ostrov** (Bulgaria, okr. Vraca)  
*Blatoto*; one pot assigned to "Cernavoda III-Coţofeni I horizon" (Nikolov 1964, 71 fig. 5/1; Alexandrov 1993, 47-48, fig. 1/3; Nikolova 1994, 133);
- 40. Pietra-Olt** (Romania, jud. Olt)  
*Nucet*; Cernavoda III sherds (Lazăr 1997, 13; Nica 1989, 253; Nica 2001, 279, 285 pl. 1/1, 296 pl. 12/2);
- 41. Pietra-Olt** (Romania, jud. Olt)  
*Vadul Codii*; Survey; Cernavoda III and Coţofeni materials; unpubl.; (Lazăr 1997, 13);
- 42. Pietroi** (Romania, jud. Călăraşi)  
Cernavoda III finds; unpubl.; (Parnic 2001);
- 43. Platoneşti** (Romania, jud. Ialomiţa)  
Cernavoda III finds; unpubl.; (Parnic 2001);
- 44. Radomir** (Bulgaria)  
*Vahovo*; settlement located on the Struma terrace, 40 km W of Sofia; sounding 1991; settlement with "5 [so-called] *building horizons*": a pit which contains Cernavoda III materials; a second one containing materials similar to Orlea-Sadovec and Baden pottery; the third "horizon" has Kostolac type materials; the fourth and the fifth horizons contain Vučedol type materials (Alexandrov 1992; Alexandrov 1994);
- 45. Râmnicelu** (Romania, jud. Brăila)  
Sounding; Cernavoda III sherds (Nemejcová-Pavúková 1973, no. 317);
- 46. Roşeşti** (Romania, jud. Călăraşi)  
*Ferma 7 IAS*; rescue excavations 1987; a few Cernavoda III sherds found in a Cernavoda I settlement (Munteanu 1995);
- 47. Sălcuţa** (Romania, jud. Dolj)  
*Piscul Cornişorului*; systematic research 1916-1920, 1947 and 1951; settlement with 8 layers: layer 1 (Starčevo-Criş); layers 2-6 (Sălcuţa I-III); layers 7-8 (Sălcuţa IV; in these layers some Coţofeni and Orlea-Sadovec sherds and a Cernavoda III bowl were also found) (Berciu 1961, 135-138; 139 fig. 142/9; 314 fig. 136);
- 48. Slobozia** (Romania, jud. Ialomiţa)  
*Râpa Bulgarilor*, Cernavoda III settlement (one layer: 1-2 m thick) located on the lowest terrace of the Danube river; soundings 1959-1960, 1965 (Morintz, Roman 1968, 81-89; Condurachi et al. 1972, map 6; Nemejcová-Pavúková 1973, no. 312);
- 49. Stelnica** (Romania, jud. Ialomiţa)  
Cernavoda III finds; unpubl.; (Parnic 2001);
- 50. Şimnicu de Jos** (Romania, mun. Craiova, jud. Dolj)  
*Staţiunea Experimentală*; sounding 1967-1972; settlement with two layers; the Cernavoda III layer overlying two Sălcuţa III dwellings; here one disturbed dwelling and a hearth were excavated (Popescu 1968, 678; idem 1969, 472; Galbenu 1970; Galbenu 1972, 265; 266 fig. 2/2-7; 267 fig. 2/4-5; 268 fig. 3/1; 269 fig.

4; Nemejcová-Pavúková 1973, no. 299; Galbenu 1975; Nica 2001, 279, 285 pl. 1/1, 291 pl. 7/1-11);

**51. Tuzla** (Romania, jud. Constanța) Cernavoda III finds; (Nemejcová-Pavúková 1973, no. 319);

**52. Vădastra** (Romania, jud. Dolj) *Dealul Cișmelei*; Cernavoda III finds; (Nica 2001, 279, 285 pl. 1/1, 290 pl. 6/12-13)

**53. Vlădeni** (Romania, jud. Ialomița) Cernavoda III finds; unpubl.; (Parnic 2001);

### Finds of Celei and Orlea-Sadovec types

**54. Bechet** (Romania, jud. Dolj) *Ghețarie ICIL*; sounding 1978; disturbed layer with mixed Coțofeni, Cernavoda III and Celei materials; unpubl. (Bujor 1970, 478; Stoia 1979, 356 no. 12; Leahu et al. 1979, 411; Ulanici 1981, 191-192);

**55. Cârna** (Romania, com. Goicea, jud. Dolj) *Măgura Fircanii*; one *askos*, one complete and one fragmented bowls (Orlea-Sadovec type) were collected in 1956 on the shore of Lake Bistreț (Bichir 1958; idem 1959, 276-278);

**56. Cârna** (Romania, com. Goicea, jud. Dolj) *Nasta (Bazinul 4)*; fieldwalking 1983-2000; Orlea-Sadovec and Coțofeni finds (Motzoi-Chicideanu et al. 2000);

**57. Celei** (Romania, or. Corabia, jud. Olt) Partially destroyed tell-settlement located on the lower terrace of the Danube river; systematic research 1957-1958, 1976-1977; the settlement belongs to the Celei "group" and has 11 (?) levels (2.50 m thick); several dwellings and pits were excavated; near the dwelling no. 4 (at 2.00 m depth) a hoard containing an *askos* with a gold crescent-pendant and two silver lock-rings inside (Bujor 1967; Morintz, Roman 1968, 98-100; Comșa 1967, 218; Bujor 1970; Condurachi et al. 1972, map 6; Nemejcová-Pavúková 1973, no. 307; Roman 1974, 163 fig. 5/1-2; 164; Nica 1982; idem 1988);

**58. Corabia** (Romania, jud. Olt) Celei finds (Bujor 1970, 479; Nemejcová-Pavúková 1973, no. 308);

**59. Dăbuleni** (Romania, jud. Dolj) Celei finds (Bujor 1970, 479; Nemejcová-

Pavúková 1973, no. 303);

**60. Gârcov** (Romania, jud.) Celei finds (Bujor 1970, 479; Nemejcová-Pavúková 1973, no. 310);

**61. Ghidici** (Romania, com. Piscu Mare, jud. Dolj) Celei sherds found in a settlement with Gârla Mare and Basarabi materials; unpubl.; (Nica 2001, 279);

**62. Grojdibodu** (Romania, jud. Olt) *Coasta lui Cuzma*; sounding 1978; 1980; settlement with two Orlea-Sadovec levels: one pit-house (level 1) and three pits (one in the first level and two in the second one) were excavated (Chicideanu 1983);

**63. Grojdibodu** (Romania, jud. Olt) Site unspecified; Celei finds (Bujor 1970, 479; Nemejcová-Pavúková 1973, no. 305);

**64. Ianca** (Romania, jud. Olt) Celei finds (Bujor 1970, 479; Nemejcová-Pavúková 1973, no. 304);

**65. Islaz** (Romania, jud.) Celei finds (Bujor 1970, 478);

**66. Kozloduș** (Bulgaria, okr. Vraca) *Kilera*; sounding 1985; Orlea-Sadovec finds (Alexandrov 1990, 64; 66; pl. 46/9)

**67. Locusteni** (Romania, com. Daneș, jud. Dolj) see **no. 33**

**68. Orlea** (Romania, jud. Olt) *Grindul lui Iancu Mușat*; soundings 1947, 1960; disturbed settlement which contains Orlea-Sadovec type pottery (Comșa, 1967, 218; Morintz, Roman 1968, 103; Bujor 1970,

479; Condurachi et al. 1972, map 6; Roman 1976a; Nemejcová-Pavúková 1973, no. 306, 311);

**69. Orlea** (Romania, jud. Olt)

*Grindul Cremenari*; sounding 1947; settlement with Celei type materials (Berciu 1939, 76; Comşa 1967, 218; Morintz, Roman 1968, 104; Bujor 1970, 479; Condurachi et al. 1972, map 6; Roman 1976, 147-149)

**70. Orlea** (Romania, jud. Olt)

Site unspecified; Orlea-Sadovec: one cord-decorated bowl, one hanging vessel and one askos (Morintz, Roman 1968, 104-105);

**71. Sadovec** (Bulgaria, okr. Pleven)

*Golemanovo Kale*; settlement located on the Northern bank of the Vit river; systematic research 1934-1937; Sălcuța, Early and Late Bronze Age and Orlea-Sadovec mixed materials (Todorova-Simeonova 1968, 15-63, pl. 3-19; Roman 1976a, 163; Alexandrov 1990, 64, 66; pl. 46/1-8);

**72. Sălcuța** (Romania, jud. Dolj) see **no. 47**

**73. Siliștioara** (Romania, or. Corabia, jud. Olt)

Sounding 1964; Celei settlement with two layers (1 m thick) (Comşa 1967; Morintz, Roman 1968, 100-103; Dumitrescu 1969, 91 no. 25; Comşa 1970, 476; Nemejcová-Pavúková 1973, no. 309; Parzinger 1993, 88-90);

**74. Târnavă** (Bulgaria, Vraca okr.)

Systematic research 1964-1969; three mounds; mound no. I contained 8 skeleton graves and two cremation graves); Grave no. 1 and Grave no. 5 had Coțofeni and Orlea-Sadovec type pots as inventories (Nikolov 1976; Roman 1981, 33; Panajotov 1989, 84-94);

**75. Zimnicea** (Romania, jud. Teleorman)

*Sectorul C18*, site located 1 km N of the Danube terrace; systematic research 1970-1973; Zimnicea group cemetery with 53 skeleton graves; another skeleton grave was found in another part of the large site (C 19); Orlea-Sadovec type materials were found near the cemetery during a survey (Alexandrescu 1974; Roman 1976a, 163).

## Literature

- Alexandrescu 1974 Alexandrina Alexandrescu, *La nécropole du Bronze Ancien de Zimnicea (dép. de Teleorman)*, Dacia N.S. 18, 1974, 79-93.
- Alexandrov 1990 Stefan Alexandrov, *Cultura Coțofeni în Bulgaria*, rezumatul tezei de doctorat, Universitatea din București, Facultatea de Istorie-Filosofie, 1990.
- Alexandrov 1993 Stefan Alexandrov, *Date noi despre epoca bronzului timpuriu în Bulgaria de vest*, Thraco-Dacica 14, 1993, 47-50.
- Alexandrov 1994 Stefan Alexandrov, *The Prehistoric site of Radomir-Vahovo: some problems of the Early Bronze Age in south-western Bulgaria (northern connections)*, Relations Thraco-Illyro-Helléniques, București, 1994, 117-129.
- Alram-Stern 2001 Eva Alram-Stern, *Kontinuität und Diskontinuität im Chalkolithikum und der beginnenden Frühbronzezeit Südgriechenlands*, in *Cernavoda III-Boleráz*, 89-108.
- Babeș 1994 Mircea Babeș, *Cultură*, In: Enciclopedia arheologiei și istoriei vechi a României, I, București, 1994, 390.
- Banner 1956 János Banner, *Die Pécelér Kultur*, Budapest, 1956.
- Behrens 1973 Hermann Behrens, *Die Salzmünde Gruppe der mitteldeutschen Trichterbecherkultur und die nordwestlichen Ausstrahlungen der Badener Kultur*, SympBaden, 23-30.
- Berciu 1960 Dumitru Berciu, In: *Istoria României*, I, București, 1960, 71-82.
- Berciu 1961 Dumitru Berciu, *Contribuții la problemele neoliticului în România în lumina noilor cercetări*, București, 1961.
- Berciu 1964 Dumitru Berciu, *Quelques données préliminaires concernant la civilisation de Cernavodă*, SlovArch 12.1, 1964, 269-280.
- Berciu, Morintz 1957 Șantierul arheologic Cernavoda (reg. Constanța, r. Medgidia), Materiale 3, 1957, 83-92.
- Berciu, Morintz 1959 Dumitru Berciu, Sebastian Morintz, *Săpăturile de la Cernavoda*, Materiale 5, 1959, 99-114.
- Berciu et al. 1959 Dumitru Berciu, *Săpăturile de la Cernavoda*, Materiale 6, 1959, 95-105.
- Berciu et al. 1961 Dumitru Berciu et al., *Săpăturile de informare de la Gostinu și Ghizdaru (Giurgiu)*, Materiale 7, 1961, 291-296.
- Berciu et al. 1961a Dumitru Berciu, Sebastian Morintz et al., *Șantierul Cernavoda*, Materiale 7, 1961, 49-55.
- Berciu et al. 1973 Dumitru Berciu, Sebastian Morintz, Petre Roman, *Cultura Cernavoda II. Așezarea din sectorul b de la Cernavoda*, SCIV 24.3, 1973, 373-405.
- Bichir 1958 Gheorghe Bichir, *Un mormânt cu ocru la Cârna*, SCIV 9.1, 1958, 101-109.
- Bichir 1959 Gheorghe Bichir, *Cercetări arheologice pe grindurile din apropierea comunei Cârna (r. Gura Jiului, reg. Craiova)*, Materiale 5, 1959, 275-282.
- Bojadžiev 1992 Javor Bojadžiev, *Probleme der Radiokohlenstoffdatierung der Kulturen des Spätäneolithikums und der Frühbronzezeit*, StPraehistSofia 11-12, 1992, 299-406.

- Bojadžiev 1998 Javor Bojadžiev, *Radiocarbon dating from Southeastern Europe*, M. Stefanovich et al. (eds.), James Harvey Gaul-in memoriam, In the steps of James Harvey Gaul, I, Sofia, 1998, 349-370.
- Bondár 2001 Mária Bondár, *L'état des recherches sur la culture de Baden en Hongrie (les découvertes récentes concernant la période ancienne)*, In: *Cernavoda III-Boleráz*, 437-458.
- Bujor 1967 Expectatus Bujor, *Așezarea de la Celei din perioada de tranziție spre epoca bronzului*, RevMuz 4.3, 1967, 211-216.
- Bujor 1970 Expectatus Bujor, *Contribution à l'étude de la période de transition du néolithique à l'âge du bronze, d'après les fouilles archéologiques effectuées à Celei*, Actes du VIIe Congrès International des sciences préhistoriques et protohistoriques, Prague, 477-479.
- Capitani, Leuzinger 2001 Annick de Capitani, Urs Leuzinger, *Arbon-Bleiche 3. Eine jungsteinzeitliche Seeufersiedlung am Schweizerischen Bodenseeufer aus dem frühen 34 Jh.v.Chr.*, in *Cernavoda III-Boleráz*, 721-732.
- Cernavoda III-Boleráz* Petre Roman, Saviana Diamandi (eds.), *Cernavoda III-Boleráz. Ein vorgeschichtliches Phänomen zwischen dem Oberrhein und der unteren Donau*, Studia Danubiana, Series Symposia, București, 2001.
- Chicideanu 1983 Ion Chicideanu, *Săpăturile arheologice de la Grojdibodu (jud. Olt)*; Materiale 15, 1983, 98-102.
- Chronique 1993-1994 *Chronique des fouilles et des découvertes 1993-1994*, Bulletin de Thracologie 3, 1996, 7-44.
- Ciugudean 2000 Horia Ciugudean, *Eneoliticul final în Transilvania și Banat: cultura Coțofeni*, Bibliotheca Historica et Archaeologica Banatica 26, Timișoara, 2000.
- Comșa 1967 Eugen Comșa, *Unele date cu privire la sfârșitul perioadei de trecere de la epoca neolitică la epoca bronzului în sud-estul Olteniei (în lumina săpăturilor de la Siliștioara)*, SCIV 18.1, 1967, 207-221.
- Comșa 1970 Eugen Comșa, *La période de transition du néolithique à l'âge du bronze sur le territoire roumaine*, Actes du VII<sup>e</sup> Congrès International des sciences préhistoriques et protohistoriques, Praga, 1970, 474-476.
- Condurachi et al. 1972 Emil Condurachi, Vladimir Dumitrescu, Mircea D. Matei, *Harta arheologică a României*, București, 1972.
- Curta 2001 Florin Curta, *The Making of Slavs. History and Archaeology of the Lower Danube Region c. 500-700*, Cambridge, 2001.
- Draganov 1990 Veselin Draganov, *Kulturata Černavoda III na teritorijata na Bălgaria i po zapadnoto černomorsko krajbrejje*, Dobrudža 7, 1990, 156-179.
- Dumitrescu 1969 Vladimir Dumitrescu, *Fouilles archéologiques en Roumanie-1965*, Bulletin d'Archéologie Sud-Est Européenne 1, 1969, 83-114.
- Ecsedy 1979 István Ecsedy, *The People of the pit-grave kurgans in Eastern Hungary*, Budapest, 1979.

- Ellis 1996 Linda Ellis, *Cultural boundaries and human behaviour: method, theory and Late Neolithic ceramic production in the Carpathian-Pontic region*, Gh. Dumitroaia, D. Monah (eds.), Cucuteni aujourd'hui, Piatra-Neamț, 1996, 75-87.
- Forenbaher 1993 Stašo Forenbaher, *Radiocarbon dates and absolute chronology of the Central Europe Early Bronze Age*, *Antiquity* 67, 1993.
- Franken 1985 H.J. Franken, *Pot making in antiquity and the "ceramic horizon" in archaeology*, A. Van As et al., Contributions to the study of pottery technology, Leiden, 1985.
- Gabriel 2001 Utta Gabriel, *Eine neue Schichtweise des "Vor-Trojanischen Horizontes". Ergebnisse der Ausgrabungen am Kumtepe 1993-1995*, in *Cernavoda III-Boleráz*, 84-87.
- Galbenu 1970 Doina Galbenu, *Un aspect al perioadei de trecere de la neolitic la epoca bronzului descoperit la Șimnic*, *Aluta* 1, 1970, 45.
- Galbenu 1972 Doina Galbenu, *Câteva probleme ale perioadei de trecere de la neolitic la epoca bronzului în Oltenia*, *SCIV* 23.2, 1972, 263-270.
- Galbenu 1975 Doina Galbenu, *Așezările neolitice de la Șimnic*, *CAMNI* 1, 1975, 9-43.
- Galbenu 1979 Doina Galbenu, *Săpături în tell-ul de la Hârșova, jud. Constanța*, *CAMNI* 3, 1979, 3-9.
- Galbenu 1983 Doina Galbenu, *Așezarea de tip Sălcuța de la Almăjel, jud. Mehedinți*, *CAMNI* 6, 1983, 143-158.
- Görsdorf, Bojadžiev 1996 J. Görsdorf, J. Bojadžiev, *Zur absoluten Chronologie der bulgarischen Urgeschichte. Berliner 14C-Datierungen von bulgarischen archäologischen Fundplätzen*, *Eurasia Antiqua* 2, 1996, 105-173.
- Govedarica 1997 Blagoje Govedarica, *Cernavoda III-Boleráz Funde im Westbalkan*, Cornelia Becker et al. (eds.), *Xpovoç. Beiträge zur prähistorischen Archäologie zwischen Nord-und Südosteuropa. Festschrift für Bernhard Hänsel*, *Studia honoraria* 1, Espelkamp, 1997, 149-156.
- Govedarica 2001 Blagoje Govedarica, *Die Funde vom Typ Cernavoda III-Boleráz im ehemaligen Jugoslawien*, In: *Cernavoda III-Boleráz*, 358-368.
- Hachmann 1973 Rolf Hachmann, *Am Ende eines Symposium über die Badener Kultur, SympBaden*, 527-537.
- Hahnel 1993 Bernhard Hahnel, *Spätneolithische Gräber in Österreich*, *Fundberichte aus Österreich* 31, 1993, 79-87.
- Hartuche 2001 Nicolae Hartuche, *L'établissement de Râmnicelu dans la problématique de la fin de l'énéolithique et du début de la transition au Bas-Danube*, In: *Cernavoda III-Boleráz*, 262-276
- Hodder 1978 Ian Hodder, *Simple correlations between material culture: a review*, Ian Hodder (ed.), *The Spatial Organisation of Culture*, London, 1978, 3-24.
- Hodder 1978a Ian Hodder, *The spatial structure of material 'cultures': a review of some of the evidence*, Ian Hodder (ed.), *The Spatial Organisation of Culture*, London, 1978, 93-111.
- Hodder 1978b Ian Hodder, *Social organisation and human interaction: the development of some tentative hypotheses in terms of material*

- culture*, Ian Hodder (ed.), *The Spatial Organisation of Culture*, London, 1978, 199-269.
- Hodder 1993 Ian Hodder, *Reading the past. Current approaches to interpretation in archaeology*, Cambridge, 1993.
- Ilčeva 2001 Valka Ilčeva, *Le village préhistorique de Hotnica-Vodopata*, in *Cernavoda III-Boleráz*, 199-212.
- Jevtić 2001 Miloš Jevtić, *On the stratigraphy of the Cernavoda III-Boleráz finds from the Djerdap area*, In: *Cernavoda III-Boleráz*, 330-341.
- Kalicz 1973 Nándor Kalicz, *Über die chronologischen Stellung der Balaton-Gruppe in Ungarn*, SympBaden, 131-165.
- Kalicz 2001 Nándor Kalicz, *Die Protoboleráz-Phase an der Grenze von zwei Epochen*, In: *Cernavoda III-Boleráz*, 385-435.
- Kozłowski 1973 J.K. Kozłowski, *Le probleme de la périodisation de la civilisation de la céramique cannelée en Pologne*, SympBaden, 167-185.
- Lazarovici 1978 Gheorghe Lazarovici, In: Gh. Lazarovici, N. Tasić (eds.), *Comori arheologice în regiunea Porțile de Fier*, București, 1978.
- Lazăr 1997 Simona Lazăr, *Câteva considerații cu privire la așezările preistorice de la Piatra Olt, jud. Olt*, ArhOlt 12, 1997, 13-21.
- Leahu et al. 1979 Valeriu Leahu et al., *Raport asupra cercetărilor arheologice din anul 1978 ale MIRSR în cadrul Șantierului Național Turnu-Măgurele*, Materiale 13, 1979, 411-412.
- Leben 1973 Franc Leben, *Zur Kenntnis der Lasinja-Kultur in Slowenien*, SympBaden, 187-197.
- Lichardus et al. 2000 Jan Lichardus, Alexander Fol, Ljudmil Getov, François Bertemes, Rudolf Echt, Rumen Katinčarov, Ilija Krāstev Iliev, *Forschungen in der Mikroregion von Drama (Südostbulgarien). Zusammenfassung der Hauptergebnisse der bulgarisch-deutschen Grabungen in der Jahren 1983-1999*, Bonn, 2000.
- Lichardus, Iliev 2001 Jan Lichardus, Ilija Krāstev Iliev, *Die Cernavoda III-Siedlung von Drama-Merdžumekja in Südostbulgarien und ihre Bedeutung für Südosteuropa*, In: *Cernavoda III-Boleráz*, 166-198.
- Mantu 1995 Cornelia-Magda Mantu, *Câteva considerații privind cronologia absolută a neo-eneoliticului din România*, SCIVA 46.3-4, 1995, 213-235.
- Maran 1997 Joseph Maran, *Neue Ansätze für die Beurteilung der balkanisch-ägäischen Beziehungen im 3 Jt.v.Chr.*, *The Thracian World at the crossroads of civilisations I*, Bucharest, 1996, 171-192.
- Maran 1998 Joseph Maran, *Die Badener Kultur und der ägäisch-anatolische Bereich. Eine Neubewertung eines alten Forschungsproblems*, Germania 76.2, 1998, 497-525.
- Maran 2001 Joseph Maran, *Zur Westausbreitung von Boleráz-Elementen in Mitteleuropa*, In: *Cernavoda III-Boleráz*, 733-752.
- Matuschik 2001 Irenäus Matuschik, *Boleráz und Baden aus Sicht des südbayerischen Spätneolithikums, zugleich ein Beitrag zur Genese der Chamer-Kultur*, In: *Cernavoda III-Boleráz*, 673-720.

- Merpert, Georgiev 1973 Nikolai Merpert, Georgi Georgiev, *Poselenie Ezero i ego mesto sredi pamjatnikov rannego bronzovogo veka vostočnoi Evropi*, SympBaden, 215-257.
- Morintz, Roman 1968 Sebastian Morintz, Petre Roman, *Aspekte des Ausgangs des Äneolithikums und der Übergangsstufe zur Bronzezeit im Raum der Niederdonau*, Dacia N.S. 12, 1968, 45-128.
- Morintz, Roman 1969 Sebastian Morintz, Petre Roman, *Über die Chronologie der Übergangszeit vom Äneolithikum zur Bronzezeit in Rumänien*, Dacia N.S. 13, 1969, 61-71.
- Morintz, Roman 1970 Sebastian Morintz, Petre Roman, *Cu privire la cronologia perioadei de tranziție de la eneolitic la epoca bronzului în România*, SCIV 21.4, 1970, 557-570.
- Morintz, Roman 1973 Sebastian Morintz, Petre Roman, *Über die Übergangsperiode vom Äneolithikum zur Bronzezeit in Rumänien*, SympBaden, 259-279.
- Motzoi-Chicideanu, Olteanu 2000 Ion Motzoi-Chicideanu, Gheorghe Olteanu, *Un mormânt în cistă din piatră descoperit la Văleni-Dâmbovița*, SCIVA 51.1-2, 2000, 3-70.
- Motzoi-Chicideanu et al. 2000 Ion Motzoi-Chicideanu, Monica Șandor-Chicideanu, Sorin Oanță, *Cercetările arheologice din zona Lacului Bistreț. Campaniile 1983-1996*, European Archaeology-online, 2000, www.archaeology.ro.
- Munteanu 1995 Mircea Munteanu, *Urme materiale ale culturii Cernavoda I din punctul "Ferma 7 IAS Roșeți" (jud. Călărași)*, Cercetări arheologice în aria nord-tracă 1, 1995, 59-61.
- Nemejcová-Pavúková 1973 Viera Nemejcová-Pavúková, *Zur Ursprung und Chronologie der Boleráz-Gruppe*, SympBaden, 1973
- Nemejcová-Pavúková 1984 Viera Nemejcová-Pavúková, *K problematike trvania u konca bolerázskej skupiny na slovensku*, SlovArch 32.1, 1984, 75-146.
- Németi 1989 Ioan Németi, *Descoperiri de tip Cernavoda III- Boleráz din nord-vestul R.S. România*, SympThr 7, 1989, 231.
- Németi 2001 János Németi, *Cernavoda III-Boleráz finds in North-West Romania*, in *Cernavoda III-Boleráz*, 299-329.
- Neustupný 1973 Evžen Neustupný, *Die Badener Kultur*, SympBaden, 317-352.
- Nica 1980 Marin Nica, *Contributions à la connaissance de la civilisation de Verbicioara en Oltenie*, Actes CIT 1, 1980, 89-93.
- Nica 1982 Marin Nica, *Locuirea preistorică de la Sucidava-Celei din perioada de trecere de la neolitic la epoca bronzului*, Oltenia 4, 1982, 15-37.
- Nica 1987 Marin Nica, *Noi dovezi de continuitate în evoluția civilizațiilor epocii bronzului în Oltenia*, SympThr 5, 1987, 109.
- Nica 1988 Marin Nica, *Date noi despre tell-ul preistoric de la Sucidava-Celei din perioada de trecere de la eneolitic la epoca bronzului*, SympThr 6, 1988, 26-27.
- Nica 1989 Marin Nica, *Noi descoperiri ale epocii bronzului în Oltenia*, SympThr 7, 1989, 252-253.

- Nica 1999 Marin Nica, *Câteva date despre sistemul de protecție și apărare al așezărilor preistorice de la Cârcea, "Hanuri" și "Viaduct"*, Oltenia 11, 1999, 5-17.
- Nica 2001 Marin Nica, *Zur Cernavoda III-Kultur in Oltenien*, in *Cernavoda III-Boleráz*, 279-298.
- Nica et al. 1995 Marin Nica, Christian Schuster, Traian Zorzoliu, *Cercetările arheologice în tell-ul gumelnițeano-sălcuțean de la Drăgănești-Olt, punctul "Corboaica", campaniile din anii 1993-1994*, Cercetări arheologice în aria nord-tracă 1, 1995, 11-45.
- Niculescu 1997 Gheorghe Alexandru Niculescu, *Interpretarea fenomenelor etnice de către istorici și arheologi. Pericolele argumentației mixte*, In honorem emeritae Ligiae Bârzu. Timpul istoriei I, Memorie și patrimoniu, București, 1997, 63-69.
- Niculescu 2000 Alexandru Niculescu, *The material dimension of ethnicity*, New Europe College Yearbook (1997-1998), București, 2000, 203-262.
- Nikolov 1964 Bogdan Nikolov, *Selišta i nekropoli ot bronzovata epoha vav Vračansko*, ArheologijaSofia 6.2, 1964, 69-77.
- Nikolov 1976 Bogdan Nikolov, *Mogilni pogrebenija ot rannobronzovata epoha pri Tărnava i Kneža, vračaiski okrag*, ArheologijaSofia, 1976, 38-51
- Nikolova 1994 Lolita Nikolova, *On the Early Bronze Age burial rites in the Bulgarian lands*, Relations Thraco-Illyro-Helléniques, Bucarest, 1994, 130-140.
- Nikolova 2000 Lolita Nikolova, *The Yunatsite culture. Periodization, chronology and synchronizations*, K. Leshtakov (ed.), Reports of Prehistoric Research Projects 2-3 (1999), Sofia, 2000, 33-97.
- Nikolova 2001 Lolita Nikolova, *Approach to the genesis and initial development of the Early Bronze Age cultures in the Lower Danube Basin and the Southern Balkans*, in *Cernavoda III-Boleráz*, 236-260.
- Oanță 2000 Sorin Oanță, *Probleme ale eneoliticului târziu din bazinul Dunării mijlocii și inferioare*, Romanian Journal of Archaeology 1, 2000, www.archaeology.ro.
- Panajotov 1989 I. Panajotov, *Jamnata kultura v bulgarskite zemi*, Razkopki i proučvanija 21, 1989.
- Parnic 2001 Valentin Parnic, *Découvertes Cernavoda III dans le département de Călărași*, in *Cernavoda III-Boleráz*, 278.
- Parzinger 1993 Hermann Parzinger, *Studien zur Chronologie und Kulturgeschichte der Jungstein-, Kupfer- und Frühbronzezeit zwischen Karpaten und mittlerem Taurus, Mainz am Rhein*, 1993.
- Patay 1973 Pál Patay, *Probleme der Beziehungen der Bodrogeresztúrer und der Badener Kultur*, SympBaden, 353-365.
- Pavelčík 1973 Jiří Pavelčík, *Zur Problematik der mährischen kannelierten Keramik*, SympBaden, 367-391.
- Pavelčík 2001 Jiří Pavelčík, *Die Kerne der Boleráz-Stufe in Ost-und Südmähren*, in *Cernavoda III-Boleráz*, 623-640.

- Pavúk 2001 Juraj Pavúk, *Hausgrundriß und Furchenstichkeramik der Gruppe Bajč-Retz aus Čataj in der Slowakei*, In: *Cernavoda III-Boleráz*, 563-578.
- Păunescu 1966 Alexandru Păunescu, *Considerații asupra materialului litic din complexul cultural de la Dobrotești*, SCIV 17.3, 1966, 465-471.
- Păunescu 1979 Alexandru Păunescu, *Cercetările arheologice de la Cuina Turcului-Dubova (jud. Mehedinți)*, Tibiscus 5, 1979, 11-56.
- Petrescu 2000 Sorin M. Petrescu, *Locuirea umană a peșterilor din Banat până în epoca romană*, Timișoara, 2000.
- Pittioni 1954 Richard Pittioni, *Urgeschichte des österreichischen Raumes*, Wien, 1954.
- Pleslová-Štiková 1973 Emilie Pleslová-Štiková, *Die Kultur mit kannelierter Keramik in Böhmen*, SympBaden, 393-425.
- Popescu 1968 Dorin Popescu, *Săpăturile arheologice din Republica Socialistă România în anul 1967*, SCIV 19.4, 1968.
- Popescu 1969 Dorin Popescu, *Săpăturile arheologice din Republica Socialistă România în anul 1968*, SCIV 20.3, 1969, 575-586.
- Popilian 1994 Gheorghe Popilian, *Activitatea filialei din Craiova a Institutului Român de Tracologie*, Thraco-Dacica 15.1-2, 1994, 263-264.
- Popovici 1999-2000 Dragomir Popovici, *Note pentru o viitoare și necesară istoriografie a arheologiei românești (I)*, Buletinul Muzeului "Teohari Antonescu" 5-6, Giurgiu, 17-22.
- Renfrew 1973 Colin Renfrew, *The Aegean and the Balkans at the close of the Neolithic period (the evidence of Sitagroi)*, SympBaden, 427-440.
- Renfrew 1995 Colin Renfrew, *L'Énigme indo-européenne. Archéologie et langage*, Paris, 1995.
- Roman 1966 Petre Roman, *Un nou aspect cultural de la începutul epocii bronzului (complexul de la Dobrotești)*, SCIV 17.3, 1966, 445-463.
- Roman 1973 Petre Roman, *Modificări structurale ale culturilor eneoliticului final din regiunea carpato-danubiană*, Banatica 2, 1973, 57-77.
- Roman 1974 Petre Roman, *Das Problem der "schnurverzierten" Keramik in Südosteuropa*, Jahresschrift für mitteldeutsche Vorgeschichte 58, 1974, 157-174.
- Roman 1976 Petre Roman, *Cultura Coțofeni*, București, 1976.
- Roman 1976a Petre Roman, *Complexul Orlea-Sadovec*, SCIVA 27.2, 1976, 147-169.
- Roman 1981 Petre Roman, *Forme de manifestare culturală din eneoliticul târziu și perioada de tranziție spre epoca bronzului*, SCIVA 32.1, 1981, 21-42.
- Roman 1989 Petre Roman, *Fenomenul indoeuropenizării și constituirii neamului tracic la Dunărea Inferioară în lumina cercetărilor arheologice*, SympThr 7, 1989, 49-55.
- Roman 1996 Petre Roman, *Kulturelle Erscheinungen aus Südost-und Mitteleuropa im Entstehungsprozeß der Protothraker*, P. Roman (Ed.), *The Thracian world at the crossroads of civilisations*, București, 1996, 12-13.
- Roman 2001 Petre Roman, *Die Cernavoda III-Boleráz-Kulturerscheinung an der unteren Donau*, in *Cernavoda III-Boleráz*, 13-59.

- Roman, Némethi 1978 Petre Roman, Ioan Némethi, *Cultura Baden în România*, București, 1978.
- Ruttkay 1973 Elisabeth Ruttkay, *Über die Badener Kultur in Niederösterreich und im Burzenland*, In: SympBaden, 441-452.
- Ruttkay 1995 Elisabeth Ruttkay, *Spätneolithikum*, Eva Lenneis et al. (Eds.), *Jungsteinzeit im Osten Österreichs*, Wien, 1995, 108-209.
- Ruttkay 2001 Elisabeth Ruttkay, *Jennyberg I-eine Siedlung in Mödling bei Wien*, In: *Cernavoda III-Boleráz*, 516-540.
- Séfériadès 2001 Michel Séfériadès, *Dikili Tash et Cernavoda III-Boleráz: contribution aux recherches archéologiques européennes récentes sur la période de transition et le début de l'Âge du Bronze (Europe centrale et orientale)*, In: *Cernavoda III-Boleráz*, 109-164.
- Shanks, Tilley 1989 Michael Shanks, Christopher Tilley, *Archaeology into the 1990s*, Norwegian Archaeological Review 22.1, 1989, 1-12.
- Shennan 1978 S.J. Shennan, *Archaeological 'cultures': an empirical investigation*, In: Ian Hodder (ed.), *The Spatial Organisation of Culture*, London, 1978, 113-139.
- Sherratt 1997 Andrew Sherratt, *Cups and cheered: the introduction of alcohol to Prehistoric Europe*, In: A. Sherratt, *Economy and Society in Prehistoric Europe. Changing Perspectives*, Edinburgh, 1997, 376-402.
- Šiška 1973 Stanislav Šiška, *Die Lažňany-Kulturgruppe in der Ostslowakei*, SympBaden, 453-464.
- Šmid 2001 Miroslav Šmid, *Der Kulturkomplex Boleráz und sein Einfluß auf die Entwicklung der Trichterbecherkultur in Mähren*, in *Cernavoda III-Boleráz*, 604-622.
- Stadler 2001 Peter Stadler, *Absolute chronology for early civilisations in Austria and Central Europe using <sup>14</sup>C dating with Accelerator Mass Spectrometry with special results for the absolute chronology of the Baden culture*, In: *Cernavoda III-Boleráz*, 541-562.
- Stoia 1979 Adriana Stoia, *Les fouilles archéologiques en Roumanie (1978)*, Dacia N.S. 23, 1979, 335-370.
- SympBaden Symposium über die Entstehung und Chronologie der Badener Kultur, Bratislava, 1973.
- Tasić 2001 Nikola Tasić, *Die Cernavoda III-Boleráz-Kultur im westlichen Teil der jugoslawischen Donauniederung*, In: *Cernavoda III-Boleráz*, 342-357
- Tătulea, Nica 1974 Corneliu-Mărgărit Tătulea, Marin Nica, *Contribuții la cunoașterea perioadei de trecere de la neolitic la epoca bronzului în Oltenia*, Oltenia. Studii și comunicări 1, 1974, 9-24.
- Todorova-Simeonova 1968 Henrietta Todorova-Simeonova, *Die vorgeschichtlichen Funde von Sadovec(Nordbulgarien)*, JahrbRGZM 15, 1968, 15-63, pl. 1-19.
- Tončeva 1973 Goranka Tončeva, *Les palafites des environs de Varna*, SympBaden, 471-482.
- Torma 1973 István Torma, *Die Boleráz-Gruppe in Ungarn*, SympBaden, 483-512.

- Trohani, Zorzoliu 1982 George Trohani, Traian Zorzoliu, *Cercetările arheologice din com. Nicolae Titulescu, jud. Olt*, CAMNI 5, 1982, 65-71.
- Ulanici 1981 Augustin Ulanici, *Un cioplitor din paleoliticul inferior descoperit la Bechet, jud. Dolj*, CAMNI 4, 1981, 191-192.
- Vulpe 1995 Alexandru Vulpe, *Epoca bronzului în spațiul carpato-dunărean. Privire generală*, In: Comori ale epocii bronzului din România, București, 1995, 17-23.
- Vulpe 1997 Alexandru Vulpe, *Considerații privind începutul și definirea perioadei timpurii a epocii bronzului în România*, In honorem emeritae Ligiae Bârzu. Timpul istoriei I, Memorie și patrimoniu, București, 1997, 35-50
- Vulpe 2002 Alexandru Vulpe, *Epoca bronzului*, In: Tratat de istorie a României, I, București, 2002.
- Zápotocký, Zápotocký 2001 Milan Zápotocký, Marie Zápotocký, *Die Boleráz-Stufe der Badener-Kultur in Böhmen*, In: *Cernavoda III-Boleráz*, 579-603.
- Zbenovich 1973 Vladimir Zbenovich, *Chronology and cultural relations of the Usatovo group in the USSR*, SympBaden, 513-525.
- Zmeykova 2001 Ilka Zmeykova, *The Cernavoda III culture in North-Eastern Bulgaria*, In: *Cernavoda III-Boleráz*, 213-235.

## Abbreviations

ActesCIT	Actes de IIe Congr�s International de Thracologie, Bucureşti 1980.
ArhOlt	Arhivele Olteniei, Craiova
ArheologijaSofia	Arheologija. Organ na Arheologiĉeskija Institut i Muzej, Sofia.
CAMNI	Cercetări Arheologice, Muzeul Naţional de Istorie, Bucureşti
Dacia N.S.	Dacia. Revue d'Arch�ologie et Histoire Ancienne, Nouvelle S�rie, Bucureşti
Materiale	Materiale Ńi cercetări arheologice, Bucureşti
RevMuz	Revista Muzeelor, Bucureşti
SCIV(A)	Studii Ńi cercetări de istorie veche (Ńi arheologie), Bucureşti
SlovArch	Slovensk� Archeol�gia, Nitra
StPraehistSofia	Studia Praehistorica, Sofia

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