DRĂGUȘENI-OSTROV, BOTOȘANI COUNTY: NEW RESEARCH AND INFORMATION

BY
CARSTEN MISCHKA*, ADELA KOVÁCS**

Abstract:

The current paper aims to present the new research conducted on the site of Drăgușeni-Ostrov, Botoşani County. Known as a result of research conducted in the 70s and 80s of the 20th century, the site of Drăgușeni-Ostrov attracts attention through a rich material culture. 20 dwellings were excavated (19 in full and one partially), which provided archaeological material from all existing categories of finds. Discovered by Aristotel Crîșmaru, amateur archaeologist and principal of the local school, the site attracted the attention of researchers from the Institute of Archeology in Bucharest. Important names of Romanian archeology are linked to the research carried out here during the last century, such as Vladimir Dumitrescu, Hortensia Dumitrescu, Silvia Marinescu-Bîlcu and Alexandra Bolomey. The results materialized in a series of studies and articles, as well as in a monograph, by Silvia Marinescu-Bîlcu and Alexandra Bolomey. As a result of a collaboration protocol between the Botoșani County Museum and Friedrich-Alexander-Universität Erlangen-Nürnberg, two non-invasive research campaigns took place in 2018 and 2020, respectively. The total area covered by geophysical research is 8.7 hectares, extending beyond the found anomalies. 68 structures have been identified on the magnetogram, that can be classified as traces of dwellings. In low-density areas, such as the eastern part of the site, some structures have been observed, which could be unburned. The plan resulting from magnetometric and geo-physical research shows that, unlike other contemporary sites, there is no clearly delimited spatial arrangement inside. The fortification system is only visible in some places, so it is difficult to decide on a precise route without conducting intrusive archaeological research.

Keywords: Drăgușeni-Ostrov; Botoșani County; Geophysics; Gradiometer survey; house plots; spatial order.

Drăgușeni-Ostrov. The beginnings

On the administrative territory of Drăgușeni commune, Botoșani County, 12 archaeological sites were registered, along with numerous tumuli, of which the archaeological sites belonging to the Cucuteni culture, attract attention. In the collections of the Botoșani County Museum there are archaeological materials from the following sites: *Ocoale, Sărături, Ostrov*, and *În deal la Lutărie*¹.

^{*} Friedrich-Alexander-Universität Erlangen-Nürnberg, carstenmischka@gmail.com.

^{**} Muzeul Județean Botoșani, adelakovacs.museum@gmail.com.

¹ KOVÁCS 2019: 60.

The settlement from Drăgușeni - *Ostrov* was discovered, according to the site file, by the director of the school in the commune, a history teacher, namely A. Crîşmaru, in 1962². The discovery was followed by a long history of excavation, but also of destruction by agriculture. Up to now, the latest step was a geophysical survey of the whole site in 2018/2020.

TOPOGRAPHICAL SETTING

Quite unusual for the majority of known Cucuteni sites, the site of Drăgușeni - *Ostrov* is located in the middle of the Podriga creek's valley, with the adjacent hills in the northeast and southwest rising nearly 100 m above this valley (Pl. I.1). In the middle of the broad and flat valley, a plateau of approx. 4.5 ha in size rises not more than 5 m above its bottom³. The plateau's western and northern borders form steep ramps, but to the Southeast, the plateau's slopes merge gently and without a clear border into the valley bottom. Today the creek passes the site in the south, but old riverbeds and still existing swamps indicate a former arm of the river north of the site (Pl. I.2).

The place of the current archaeological site has been used as a grassland for a long time, as it is today. Starting with 1964, the agricultural production cooperative started ploughing and a vegetable garden was set up. Subsequently, since 1966, arrangements have been made for a greenhouse. As a result of the clearing activities, platforms from the Cucuteni dwellings were affected. A. Crîşmaru recovered the resulting ceramic material and contacted the Institute of Archeology in Iaşi and the Institute of Archeology in Bucharest. He has the merit of recovering the archaeological information and material.

Regarding the research history, Vl. Dumitrescu states that the first information regarding the discoveries from Drăgușeni appeared in 1965, mentioning that the Research Chronicle in SCIV journal mentioned the excavations undertaken in the site *În deal la lutărie*. Here it is mentioned that some ceramic items, belonging to the Cucuteni C group, were discovered, in the pits being ceramic materials from the Cucuteni A phase⁴.

A. Crîşmaru has been carrying out archaeological excavations since 1970, publishing the information in a paper from the same year⁵.

Subsequently, Vl. Dumitrescu, impressed by the quality of the discovered pottery, included in the work plan of the Institute of Archeology from Bucharest a systematic research in Drăgușeni. In 1970 the works started, with a team led by Vl. Dumitrescu, H. Dumitrescu, S. Marinescu-Bîlcu, together with F. Aprotosoaie, the director of the Museum from Săveni. A. Crîșmaru also participated in all the campaigns that took place here. The research continued in 1971 and 1972. As a result of the excavations carried out, Vl. Dumitrescu concludes that "in the settlement on *Ostrov* there is only one unitary layer of culture".

 $^{^2}$ http://ran.cimec.ro/sel.asp?descript=draguseni-draguseni-botosani-situl-arheologic-de-la-draguseni-ostrov-cod-sit-ran-37182.02 (01.03.2021).

 $^{^3}$ A high-resolution Digital Surface Model was made by Structure from Motion, using a DJI Phantom 4 UAV from UFG-FAU.

⁴ POPESCU 1965: 587-588.

⁵ CRÎŞMARU 1970: 267-285.

⁶ DUMITRESCU 1974a: 35.

At the level of year 1974, Vl. Dumitrescu appreciated the fact that the discovery of the settlement from Drăguşeni is "among the most important discoveries made in the last decade in the area of Cucuteni culture in Moldova".

A. Crîşmaru, in the volume published on archaeological research, mentions some notable aspects⁸. He considers that the archaeological site from Drăgușeni - *Ostrov* was for a long time a swamp in the bed of the Podriga creek. Also, he remarks in the excavations carried out for the greenhouse, the fact that there is only one level of culture, which appears at a depth of 0.30-0.40 m. He observed that the dwellings have a rectangular shape, with an area between 40-60 m², oriented in the NE-SW direction, having a higher density in the NW area of the settlement. Field observations led him to conclude that some dwellings had 15-18 cm thick clay platforms, placed over a platform of thick logs that would have measured up to 25 cm in diameter⁹.

Over the platforms were pieces of burnt clay with rods imprints, from collapsed walls, mixed with ceramic fragments, complete and restorable vessels, stone and flint tools, along with animal bones. A. Crîşmaru concludes that the material traces show that "the settlement was burned by a strong fire and left in a hurry by its inhabitants"¹⁰.

In the year 2000, the archaeological research from Drăgușeni were widely published.¹¹

After resuming the discussions on the research history, the trenches and the dwellings were described. It is mentioned that a series of greenhouses with hotbeds were arranged on the *Ostrov* site. The digs were made up to 70 cm deep, destroying the dwellings. Excepting the greenhouses, several other diggings for land arrangements were made, like irrigation channels, access pathways, all contributing to a great loss. With several interruptions, the excavations took place until 1985¹². It is mentioned that "Of the 12.850 m² explored, a total of 3.200 m² was excavated"¹³. The entire surface of the site was estimated at approximately 6 hectares¹⁴.

S. Marinescu-Bîlcu considered that *Ostrov* was not occupied all at once, completely, and concomitantly, even if there is only one cultural layer. She noted that it is more likely that a small community had initially settled in the central area. During its development, after a while, the community built new dwellings, leveling on this purpose several hollows and pits. A big hollow area was excavated, which was interpreted as the fact that the terrain had several irregularities and the Cucuteni population filled up the land to produce flat surface for building the dwellings¹⁵. The pits and hollows found under the habitation level are pits for excavating the clay for the building material. The hollows were interpreted as natural surface irregularities, filled randomly with domestic waste, and leveled up for domestic purposes. Archaeological sterile soil appeared at the depth of 0.20-0.35 m. The color of the earth was yellowish-brown, very similar to clay. This layer was found in all the trenches, but at variable depths. This aspect made the discoverers wonder about

⁷ DUMITRESCU 1974a: 33.

⁸ CRÎŞMARU 1977: 18-19.

⁹ LAZAROVICI 2008: 246.

¹⁰ CRÎŞMARU 1977: 19.

¹¹ MARINESCU-BÎLCU, BOLOMEY 2000.

¹² LAZAROVICI, LAZAROVICI, ŢURCANU 2009: 108.

¹³ MARINESCU-BÎLCU, BOLOMEY 2000: 23.

¹⁴ LAZAROVICI, LAZAROVICI, ȚURCANU 2009: 108.

¹⁵ MARINESCU-BÎLCU, BOLOMEY 2000: 23.

the possibility that the Cucuteni people had deliberately adjusted the area for depositing the yellow clay on the outskirts of *Ostrov*.

S. Marinescu-Bîlcu observed that the dwellings were arranged in clusters, even if the excavation was not exhaustive. Although it was a limited investigation, its results suggest a more thorough social organization, based, possibly on kinship, if not a genuine patriarchy. She mentioned that the dwellings were arranged similarly around a common yard, together with a small number of isolated dwellings, possibly similar to the Truşeşti-*Tuguieta* site¹⁶.

This anthropic intervention could have presumably three reasons: 1. the community may have made a ritual delimitation of the area that the settlement was supposed to encompass; 2. an attempt for creating the necessary or desired defense system around the settlement; 3. the deposits could be an embankment meant to provide against floods that must have occurred in spring and autumn, the only season with an increase in the flow of the otherwise idle river. The last hypothesis was considered more plausible since trenches staked in the SE-SW area revealed no other situation than the one described in the NE-NW area of the excavation. S. Marinescu-Bîlcu wrote "Only a survey of the entire *Ostrov* periphery, which seems quite improbable, could provide a final answer to this problem"¹⁷.

In total 20 dwellings were excavated, among which 17 were investigated completely; dwelling no. 6 was partially investigated and no. 19 was also identified but it was only intersected¹⁸. 40 pits and hollows were fully or partially excavated. Most of them were interpreted as clay pits, reused as refuse pits¹⁹. The dwellings were estimated to cover between 28-30 m² and 50-60 m². In two cases the area exceeded 100 m²²⁰. In the case of Dwelling 18, an internal wall was identified, placed between the two rooms. Of course, it is possible that several of the houses had separate rooms, but in some cases the wall was either not noticed or was not preserved well enough. From the shape point of view, the dwellings were mainly rectangular, only two cases were found square²¹.

Regarding the floor arrangement, three of the houses had split trunk platforms, respectively L1, L8 and L18 (one of the two rooms). Both in the monograph and in A. Crîşmaru's book, it is mentioned that the split trunks were between 15 and 25 cm thick. No pillar pits were discovered, which led to the conclusion that the vertical construction elements were supported by wooden soles. A trace of such sole was discovered at the base of one of the dwellings. The upper structure was made of split forks of wood, in the corners of the house and poles along the walls, usually of 8-13 cm in diameter. Walls of 30-40 cm in thickness were built, and subsequently smoothed out and painted²². After putting the clay up for the walls, a smoothing of fine clay and sand was laid on the inner and outer surfaces. This was coated with white or red paint. VI. Dumitrescu considered that there may have been polychrome walls as well. Except for some fragments of walls painted white or red, no patterns similar with the ones decorating the pottery were discovered at Drăguşeni. Regarding the decoration of the dwellings, it seems that several of them were painted with white, an

¹⁹ MARINESCU-BÎLCU, BOLOMEY 2000: 24.

¹⁶ PETRESCU-DÎMBOVIȚA, FLORESCU, FLORESCU 1999.

¹⁷ MARINESCU-BÎLCU, BOLOMEY 2000: 24.

¹⁸ CRÎŞMARU 1977: 18.

²⁰ MARINESCU-BÎLCU, BOLOMEY 2000: 25.

²¹ LAZAROVICI 2008: 245.

²² MARINESCU-BÎLCU, BOLOMEY 2000: 27.

aspect interpreted as having a hygienic purpose²³. There is also an unusual situation, observed in the case of Dwelling 9, which had a clay cattle head attached to a wall²⁴.

The two authors of the monograph also proposed two graphic reconstructions of the houses: the one-room house and the two-room house $(Pl. II.1)^{25}$.

As internal features, hearths were observed in many of the houses, in a better or poorer condition, laid on the ground or on stone bed, most without a kerb. Some of them were repaired several times²⁶. In each dwelling was identified at least one hearth, either rectangular or circular²⁷. In the case of dwellings 17 and 18, the border of the hearths had in the corners a clay pillar that supported an unperforated clay plate, with arched corners and edges, with a thickness of 4-5 cm. This plate was interpreted as being used to cover the hearth or bake the seeds on it²⁸.

In many cases, traces of clay benches were observed, made on a structure formed by split tree trunks, whose diameter reaches as much as 24 cm. The thickness of the deposited clay layer has variable dimensions, varying between 6 and 10 cm. The length of the benches is between 1.50-6.50 m, the width being 1, up to 2 meters.

Inside dwelling 14 the discoverers mention the discovery of pieces of furniture made of clay: a tabletop $(18 \times 13 \text{ cm})$ and a clay leg of 10 cm in height, which could come from a table or an altartable. Another object which attracts attention is a square clay plate, with the sides 30 cm long and 5 cm thick. This was interpreted as the seat of a chair, whose backrest was broken²⁹.

Remarkable is one of the dwellings that has over 150 m². Until 2015, we know that they appeared only in Cucuteni Culture, their number being extremely reduced. Other large buildings, so-called "giant dwellings" were identified in Corlăteni - *Costișa Morii* (187 m²), Corlăteni - *Pe Țarină* (200, respectively 350 m²) Drăgușeni (158.40 m²) and Traian – *Dealul Fântânilor* (180, 210 and 212 m²)³⁰. One of the largest buildings from Cucuteni Culture is still under investigation. It was identified at Ripiceni-Holm/Telescu, Botoșani County, and it was estimated of about 1000-1500 m², after gradiometer survey³¹.

Regarding the documentation of special situations from Drăgușeni-*Ostrov*, under dwellings 2, 10 and 14, pits were observed, which were interpreted as foundation pits of the dwellings, and a series of objects were deposited as a special ritual³². The practice of depositing vessels or statuettes at the foundation of some constructions is also found in the Cucuteni- Trypillia culture, being documented not only at: Drăgușeni-*Ostrov*, but also at Vermești-*Cetățuie*, Traian-*Dealul Fântânilor*, Ghelăiești-*Nedeia*, Poduri-*Dealul Ghindaru*, Berești-*Dealul Bâzanu*³³.

²⁴ MARINESCU-BÎLCU, BOLOMEY 2000: 25-42.

²³ COTIUGĂ 2015: 230.

²⁵ MARINESCU-BÎLCU, BOLOMEY 2000: Fig. 27-28.

²⁶ MARINESCU-BÎLCU, BOLOMEY 2000: 25.

²⁷ MARINESCU-BÎLCU, BOLOMEY 2000: 25-42.

²⁸ COTIUGĂ 2015: 328.

²⁹ MARINESCU-BÎLCU, BOLOMEY 2000: 25-42.

³⁰ COTIUGĂ 2015: 342.

³¹ BOGHIAN et al. 2017: 114-115.

³² MARINESCU-BÎLCU, BOLOMEY 2000: 37-38, ALAIBA 2007: 23.

³³ MARINESCU-BÎLCU 1983: 83-84; MARINESCU-BÎLCU, BOLOMEY 2000: 25; DUMITRESCU 1959: 189-201; MONAH *et al.* 1983: 10; DRAGOMIR 1996: 64; KOVÁCS 2016: 189.

Building L9 from Drăgușeni-*Ostrov* could have served as a sanctuary, a statement we support through the discovered inventory: a burnt clay bovine head, which was probably applied to a wall³⁴, four anthropomorphic statuettes, three conical idols, a fragmentary disc, 11 clay balls representing stylized animal heads, eight flint arrowheads³⁵.

Dwelling no. 16 is a possible flint workshop, while dwelling no. 14 could have been used for producing stone axes. The variety of the material and the quality of the pottery could suggest that this settlement was an important one. It is worth mentioning that in the investigated area were found scattered human bones from individuals of various ages. This aspect could suggest that it must have been a cranium cult or an ancestors' cult³⁶.

The purpose of the new research and magnetometric investigation was to evaluate the preservation degree of the site, considering the fact that the material culture is very rich and impressive from the artistic point of view. As a result of a collaboration protocol concluded between the Botoşani County Museum and Friedrich-Alexander-Universität Erlangen-Nürnberg, geophysics research campaigns conducted by the Institute of Pre- and Protohistory from Erlangen (UFG-FAU) form the latest stage of research.

GRADIOMETER SURVEY

In two campaigns 2018 and 2020, the whole site was surveyed by gradiometer³⁷. In total, an area of nearly 8.7 ha was covered, starting on the plateau, and stretching down into the valley's flat bottom, well beyond the area with archaeological anomalies. Due to the destruction of the hill, this area is not in all directions identical with the original site's boundary (Pl. II.2).

ANOMALY VISIBILITY

Not every archaeological structure of the site appears equally clear in the magnetogram. This is mainly because the site is heavily affected by quarries, former building activities and the old excavations. Especially in the western part, a dense layer of dipoles, pointing to the former greenhouses in this area, is nearly completely obscuring the archaeological structures. A similar situation is present near the quarry at the southwestern end of the surveyed area. The old excavations disturbed areas in the southern part of the site and on the middle of the plateau (Pl. III.1,2).

Also, at the southeastern boundary of the site, the anomalies get weaker, compared to the central parts. But this is most probably not caused by destruction. As this area lies in the bottom of the valley, it is more likely that a colluvial cover is obscuring and hopefully preserving the archaeological structures in this case.

THE ARCHAEOLOGICAL STRUCTURES

The geomagnetic anomalies, which can be seen in an archaeological context, are mainly made up by large scatters of burned material, which are well known from many other Cucuteni sites as house plots, pit anomalies in all sizes, massively overlaying each other, but sometimes clearly to

³⁴ MARINESCU-BÎLCU, BOLOMEY 2000: 26, Fig. 172.9, 175.8.

³⁵ MARINESCU-BÎLCU, BOLOMEY 2000: 34, Fig. 160.1, 164.12,15, 167.4, 178.6,12,18, 181.5, 179.1-11; KOVÁCS 2016: 143; LAZAROVICI, LAZAROVICI, ȚURCANU 2009: 108.

³⁶ LAZAROVICI, LAZAROVICI, ȚURCANU 2009: 108.

³⁷ The survey was performed with the SENSYS-4-sensor gradiometer with DGPS-mapping from UFG-FAU.

identify as post holes, forming whole house plots, and the more than faint remains of a delimitation ditch system.

The traces of the old excavations, showing up as weak linear, negative anomalies, are much less distinctive, but nevertheless the excavation plan can be transferred to the magnetogram. The only deviation from the published plan is the fact that, according to the geophysical evidence, the trenches in the southeastern part of the plateau do not match exactly the orientation of the trenches in the northern part of the plateau.

Houses

At least 68 structures from the magnetogram can be classified as house plots. This classification of an anomaly or a group of anomalies as a house plot is complicated by the dense cluster of partially overlapping anomalies – pits and burned clusters – in the central part of the site. In this area only clearly confined, spacious, strong anomalies can be regarded as house plots.

In the areas with less dense anomaly scatter, especially in the eastern part of the site, also parallel rows of postholes are visible, pointing on additional, unburned house structures. Even the clearly burned structures in the central site sometimes have annexes, which show as rectangular ditch structures (**Pl. IV.1**). Sometimes, these ditches and postholes form house plots clear enough to reveal the former buildings' whole primary structure. If these structures represent unburned houses or just areas, where erosion took away the overlying layers of burned material, remains unclear. Nevertheless, without intensive agriculture and only a gentle slope, erosion should not be overrated in this case. Consequently, one must consider the number of house plots as the absolute minimum, as many more unburned houses could be hidden in the central anomaly scatter.

HOUSE PLOT SIZE

The house plots' size median is 71.5 m^2 , with an interquartile from $52.4-98.7 \text{ m}^2$. This lies well in the range of other Cucuteni sites like Ghelăiești-*Nedeia*³⁸, or in near vicinity, Mitoc-*Pârâul lui Istrate*³⁹ or Borolea-*Ocolul Vacilor*⁴⁰, and also matches the observations made during the site's excavations (Pl. IV.2). The only uncommon feature is a house plot of $31.7 \times 18.1 \text{ m}$ (approx. 525 m^2) in the center of the site. This would exceed the other buildings by far, even the two biggest houses from the excavation.

With this extraordinary size and its central position, it is alluring to think of a "megastructure", like in the site from Ripiceni-Holm/Telescu⁴¹, as well as other Trypillia sites of Ukraine or the Republic of Moldova⁴². Nevertheless, also several slightly overlapping, not contemporaneous houses can result in such kind of anomaly. The slightly protruding area in the structure's southeastern part could be seen as an indicator for this thesis, but the northeastern part of the structure is formed by clearly visible ditches and postholes. This unburned, uniform part of the house plot is at least 13.5 m in width, so perhaps one must really think of an

⁴¹ BOGHIAN et al. 2017: 114-115.

 $^{^{\}rm 38}$ Data from MISCHKA, PREOTEASA, SCHAFFERER 2019 (Ghelǎieṣti) and from still ongoing UFG-FAU-survey (Mitoc).

³⁹ Unpublished, ongoing UFG-FAU-survey.

⁴⁰ KRUCKENBERG 2021.

⁴² E.g. OHLRAU, RUD 2019.

extraordinarily large house structure – even in the smallest interpretation bigger than all excavated structures – in the center of the settlement.

DITCH SYSTEM

Following the typical picture of most Cucuteni sites, the site's outer limit is marked by a ditch system. This system is, however, only fairly visible in the magnetogram. Two parallel ditches, 10 m apart from each other, can be followed for approx. 25 m at the southern end of the settlement. At the southeastern and eastern limits, the ditch system remains invisible, most probably covered by colluvial sediments, and obscured by unclear house plots and settlement pits. Only in the northeastern part, a single ditch can be identified, surrounding the settlement up to the point where the plateau rises significantly enough over the valley bottom to render a ditch-system expendable.

SPATIAL ORDER

Different from most of the other Cucuteni settlement plots, a clear spatial order for the site of Drăgușeni-*Ostrov* is not visible. The house plots are clustered around the large central building, but neither rows nor a clearly circular order can be observed. Only the outermost houses in the southeastern limits of the site seem to be arranged in a roughly centripetal order. They follow the ditch system, but even here, the order is interrupted by several houses with different orientation. The ditch system itself does not appear as the clear, often beyond-any-necessity massive border between inside and outside, as known from so many other Cucuteni sites. Perhaps the riverbed in the southern and eastern part, as well as the steep terrace slope in the other areas, were sufficiently satisfying the settlement's inhabitants' needs for marking and securing their village's borders.

CONCLUSIONS AND PERSPECTIVES

The habitation level from Drăgușeni-*Ostrov* was framed into phase Cucuteni A4 and, respectively, the Drăgușeni-Jura aspect of phase Cucuteni A⁴³. Even after the preliminary discoveries, Vl. Dumitrescu framed the site at the end of the Cucuteni A phase and the beginning of the Cucuteni A-B phase, although he observed that some elements are of an older tradition⁴⁴. Local differences between the Northern region (Drăgușeni) and the central part of Romanian Moldova (Fedeleșeni) were noticed at the final phase of Cucuteni A period⁴⁵. Vl. Dumitrescu defined the Drăgușeni group as a regional one, spread on both shores of the Prut, but also in the territory of Ukraine. The analysis of the Drăgușeni aspect, in the entire distribution space, was continued by V. Sorokin, who named it "the regional aspect Drăgușeni-Jura"⁴⁶. We mention several sites covered by this cultural group: Drăgușeni, Berești-Žury, Brânzeni IV, Druța, Putinești II, Nezvisko II, Darabani I (Podolien) = Trypillia B1: Berezovskaja, Sabatinovka I (?), Krasnostavka⁴⁷.

⁴³ LAZAROVICI, LAZAROVICI, ȚURCANU 2009: 108.

⁴⁴ DUMITRESCU 1974a: 41.

⁴⁵ PALAGUTA 2007: 5.

⁴⁶ ALAIBA 2007: 80; SOROCHIN 2002.

⁴⁷ GOVEDARICA 2004: 221.

The phase Cucuteni A4 is characterized by trichromatic ceramics associated with a so-called "latter-type dichromatic pottery", a negative painting on white engobe background after the disappearance of incised ornamental patterns⁴⁸.

The pottery discovered in the Drăguşeni-Ostrov site is a remarkable one. The most famous object, coming from the site surface, is the so-called "Venus from Drăguşeni", a large statuette, discovered complete⁴⁹. The statuette was promoted on the cover of several books and exhibitions related to Cucuteni culture. A large part of the restored archaeological materials was classified in the national cultural heritage⁵⁰. The ceramic is colorfully painted. Trichromatic vessels are found together with dichromatic painting. Distinctive for the Drăguşeni-Jura cultural aspect is the ornamentation with grooves and incisions, associated with the paint⁵¹. The ceramic shapes, the specified ornaments, as well as the presence of new painting styles announce the transition to Cucuteni A-B phase⁵².

Ten clay scepters representing zoomorphic (bovine) heads are related in general with the religious behavior⁵³.

Besides the ceramics, the copper objects show a high technological level. The discoveries include a Vidra type hammer-axe with crossed arms (inside dwelling no. 3) and a copper awl⁵⁴.

According to the extensive investigations carried out by Gh. Gâță, the firing temperatures of the vessels were established with values between 800 and 1000° C, even above 1050° C⁵⁵.

Few radiocarbon data are available: Bln-1195: 5430 ± 100 BP; Bln-1060: 5355 ± 100 BP; Bln-1194: 5205 ± 100 BP. The data obtained so far place the settlement in the interval 4300-4050 cal. BC⁵⁶.

The beginnings of the Drăguşeni settlement classified during 5430+100=5530 BP/4360 cal. BC and 5355+100=5455 BP/4340 cal. BC, which is in good agreement with the beginning of phase A3 of Cucuteni (phase A2 partial concurrency). As for the end of the settlement, there is a date (5205±100=5305-5105 BP/4222-3827 cal. BC) which refers to a later moment, at the end of the Cucuteni A3 sites⁵⁷. Early Cucuteni A3-A4 values are framed approx. 4150-4040 B.C. For the phase Cucuteni A4-Drăguşeni-*Ostrov* (Botoşani county) there is a sample, which showed 4160-3940 BC (classified typologically as CucuteniA4)⁵⁸.

⁴⁸ DUMITRESCU 1974: 546-547.

⁴⁹ CRÎŞMARU 1967: 88, Fig. 3; CRÎŞMARU 1970: 277, Fig. 11.5; DUMITRESCU 1968: Fig. 72; DUMITRESCU 1974: 208-209, Fig. 219-220; CRÎŞMARU 1977: Fig. 52.1-1a; CONDURACHE *et al* 1972: Fig. 10; NIŢU, CHIRICA 1989: 35, Fig. 8; MONAH 1997: 313, Fig. 61.3; 345, Fig. 93.1; ŢURCANU 2011: 32, Fig. 9.4a-4b; LAZAROVICI, LAZAROVICI, ŢURCANU 2009: 276, cat. no. 264; ANTHONY, CHI 2010: 112, 126; GIMBUTAS 1989: 295, Fig. 465; LAZAROVICI 2005: 149, Fig. 6.1.

 $^{^{50}\,}http://clasate.cimec.ro/lista.asp?start=551&pageno=1&order=Det&OT=ASC&jud=8258-Botosani (12.03.2021).$

⁵¹ SOROCHIN 2002.

⁵² LAZAROVICI, LAZAROVICI, ȚURCANU 2009: 108.

 $^{^{53}}$ MARINESCU-BÎLCU, BOLOMEY 2000: 143-146, Fig. 174.1-6, 175.1-2,4-5; LAZAROVICI, LAZAROVICI, ŢURCANU 2009: 108.

⁵⁴ CRÎŞMARU 1977: 23, Fig. 15.

⁵⁵ ALAIBA 2007: 72.

⁵⁶ MANTU 1997: 121.

⁵⁷ LÁSZLÓ 2006: 21.

⁵⁸ GOVEDARICA 2004: 215, 217.

Considering both the research history and the new results offered by the gradiometer, the integration of recent data determines us to consider the resumption of archaeological research at Drăgușeni-*Ostrov*. One of the unclear aspects are the anomalies which could represent unburned houses, or just areas where erosion took away the overlying layers of burned material. Also, several houses could be hidden in the central anomaly scatter. We also notice that, compared to other Cucuteni settlements, at Drăgușeni-*Ostrov* there is not a clear spatial order. The fortification system does not appear clearly on the magnetogram, but considering other settlements framed in Cucuteni A phase, it is very possible that this one existed⁵⁹.

A great contribution would be made by the intrusive research on the fortification system, which does not appear clearly on the magnetogram. Only excavations on the ditch area could shed light on this matter.

BIBLIOGRAPHY

ANTHONY, CHI 2010	Anthony, D. W., Chi, Y. J., <i>The Lost World of Old Europe. The Danube Valley,</i> 5000–3500 BC., New York, Princeton.
ALAIBA 2007	Alaiba, R., Complexul cultural Cucuteni - Tripolie: meșteșugul olăritului, Ed. Junimea, Iași.
BOGHIAN et al. 2017	Boghian, D., Melniciuc, A., Setnic, E-Gh., Vornicu, A., Kovács A., Ciucălău, D., Enea, SC., Asăndulesei, A., Tencariu, A-F., Țerna, S., Stigleţ, DI., Pascariu, A., Ripiceni. com. Ripiceni, jud. Botoşani, Punct: Holm/Telescu, in: <i>CCAR. A LI-a Sesiune națională de rapoarte arheologice, București, 24–27 Mai 2017</i> , București, 114-115.
CONDURACHE et al. 1972	Condurache, E., Dumitrescu, Vl., Matei, M., <i>Harta arheologică a României</i> , Ed. Meridiane, București.
COTIUGĂ 2015	Cotiugă, V., Locuințele eneolitice de pe teritoriul României, Ed. Universității "Al. I. Cuza", Iași.
CRÎŞMARU 1977	Crîşmaru, A., <i>Drăgușeni - Contribuții la o monografie arheologică</i> , Comitetul Județean de Cultură și Educație Socialistă Botoșani, Muzeul Județean Botoșani.
CRÎŞMARU 1971	Crîșmaru, A., Un topor de aramă descoperit în așezarea Cucuteni A de la Drăgușeni (jud. Botoșani), in: SCIVA, 22/3, 479-483.
CRÎŞMARU 1970	Crîşmaru, A., Contribuții la cunoașterea neoliticului din împrejurimile Săvenilor (Jud. Botoșani), in: SCIV, 21/2, 267-285.
CRÎŞMARU 1967	Crîșmaru, A., Câteva piese din ceramica și plastica cucuteniană de la Drăgușeni- Săveni, in: Magazin Istoric, I, nr. 9, 88-89.
DRAGOMIR 1996	Dragomir, I. T., Săpături arheologice la Tg. Berești (r. Bujor, reg. Galați), in: Monografia arheologică a Moldovei de Sud, I, Danubius, XVI, 63-82.

⁵⁹ DRUMMER et al. 2019: 60, Fig. 2.

DRUMMER et al. 2019 Drummer, C., Lazarovici, C.-M., Mischka, C., Mischka, D., Attempt to Reconstruct a Copper Age Dwelling from Scânteia - "Dealul Bodești" / "La Nuci" (Iași County, Romania). Preliminary Results of the Geomagnetic Survey and Excavation in: Mischka, D., Mischka, C., Preoteasa, C., Beyond Excavation: Geophysics, Aerial Photography and the use of Drones in Eastern and Southeastern European Archaeology: Proceedings of the International Colloquium, Ed. "Constantin Matasă", Piatra Neamţ. **DUMITRESCU 1974** Dumitrescu, Vl., Arta preistorică în România, Ed. Meridiane, București. **DUMITRESCU 1974a** Dumitrescu, VI., Unele probleme ridicate de așezarea cucuteniană de la Drăgușeni, in: Din trecutul județului Botoșani, 1, 43-45. **DUMITRESCU 1968** Dumitrescu, Vl., Arta neolitică în România, Ed. Meridiane, București. **DUMITRESCU 1959** Dumitrescu, H., Şantierul arheologic Traian, in: MCA, V, 189-201. **GIMBUTAS 1989** Gimbutas, M., The Language of the Goddess, Ed. Harper&Row Publishers, San Francisco. **GOVEDARICA 2004** Govedarica, B., Zepterträger – Herrscher der Steppen. Die frühen Ockergräber des älteren Äneolithikums im karpatenbalkanischen Gebiet und im Steppenraum Südostund Osteuropas, Verlag Philipp von Zabern, Mainz am Rhein. KOVÁCS 2019 Kovács, A., Muluri decorative și piese masive din lut aparținând culturii Cucuteni din Muzeul Județean Botoșani, in: RAASI, 1, 59-76. KOVÁCS 2016 Kovács, A., Temple, sanctuare, altare în Neoliticul și Epoca Cuprului din sud-estul Europei, Ed. "Karl A. Romstorfer", Suceava. KRUCKENBERG 2021 Kruckenberg, C., Vorlage und Interpretation der geomagnetischen Prospektion des Cucuteni-Fundplatzes Borolea-Ocolul Vacilor (Kr. Botoşani, Rumänien) unter Berücksichtigung der zeitlichen und kulturellen Stellung des Fundplatzes und seines Umlands, unpublished BA-Thesis, Erlangen. LÁSZLÓ 2006 László, A., Az Erősd-Cucuteni kultúra időrendjéről, in: Dolgozatok az Erdélyi Múzeum érem- és régiségtárából– Új sorozat I. (XI.) kötet, 7-28. LAZAROVICI 2008 Lazarovici, C. M., Types d'habitations de la Culture Cucuteni, in: Chirica, V., Văleanu, M.-C. (eds.), Etablissements et habitations préhistoriques. Structure, organisation, symbole. Actes du colloque de Iași, 10-12 Decembre 2007, Ed. Pim, Iași, 239-261. Lazarovici, C.-M., Antropomorphic statuettes from Cucuteni-Tripolye Culture, in: LAZAROVICI 2005 Documenta Praehistorica, XXXII, 145-154. LAZAROVICI, LAZAROVICI, ŢURCANU 2009 Lazarovici, C. M., Lazarovici, Gh., Ţurcanu, S., Cucuteni. A great civilisation of the prehistoric world, Ed. Palatul Culturii, Iași. **MANTU 1998** Mantu, C.-M., Cultura Cucuteni: evolutie, cronologie, legaturi, in col. BMA, V, Piatra-Neamţ. MARINESCU-BÎLCU 1983 Marinescu-Bîlcu, S., Cercetările de la Drăgușeni (Botoșani), in: MCA, București, XV, 83-84. MARINESCU-BÎLCU, BOLOMEY 2000 Marinescu-Bîlcu, S., Bolomey, A., Drăgușeni. A Cucutenian

Community, Ed. Enciclopedică-Wasmuth Verlag, Bucureșți-Tübingen.

MISCHKA, PREOTEASA, SCHAFFERER 2019 Mischka, C., Preoteasa, C., Schafferer, G.,

Gradiometerprospektionen auf Fundplätzen der Cucuteni-Kultur im Kreis Neamț

(Rumänien), in: Eurasia Antiqua, 22 (2016), 115-131.

MONAH et al. 1983 Monah, D., Cucoş, Şt., Popovici, D. N., Antonescu, S., Dumitroaia, Gh.,

Cercetările arheologice de la Poduri-Dealul Ghindaru, in: Cercetări Arheologice, VI,

3-22.

MONAH 1997 Monah, D., Plastica antropomorfă a culturii Cucuteni-Tripolie, in col. BMA, III, Ed.

"Constantin Matasă", Piatra Neamţ.

NIŢU, CHIRICA 1989 Niţu, A., Chirica, V., Două vase cucuteniene cu caractere antropomorfe recent

descoperite, in: Hierasus, VII-VIII, 17-38.

OHLRAU, RUD 2019 Ohlrau, R., Rud, V., Testing Trypillian site development via geomagnetic survey -

New "mega-structures" and plans of smaller sites, in: Mischka, D., Mischka, C., Preoteasa, C. (eds.), Beyond excavation. Geophysics, aerial photography and the use of drones in Eastern and Southeastern European Archaeology. Proceedings of the International Colloquium 5-8 December 2016, Piatra-Neamţ, Romania, in col. BMA 40 / Erlanger Studien zur Prähistorischen Archäologie 3, Piatra-Neamţ,

87-113.

PALAGUTA 2007 Palaguta, I., Tripolye Culture during the Beginning of the middle Period (BI) The

relative chronology and local grouping of sites, BAR International series 1666.

PETRESCU-DÎMBOVIȚA, FLORESCU, FLORESCU 1999 Petrescu-Dîmbovița, M., Florescu, M.,

Florescu, A. C., Trușești, monografie arheologică, Ed. Academiei Române,

București-Iași.

POPESCU 1965 Popescu, D. O., Săpăturile arheologice din R. S. România în anul 1964, in: SCIV,

16, 3, 587-588.

SOROCHIN 2002 Sorochin, V., Aspectul regional cucutenian Drăgușeni – Jura, in col. BMA XI, Ed.

"Constantin Matasă", Piatra-Neamț.

ȚURCANU 2011 Țurcanu, S., Podoabe pentru gât reprezentate pe statuetele antropomorfe ale

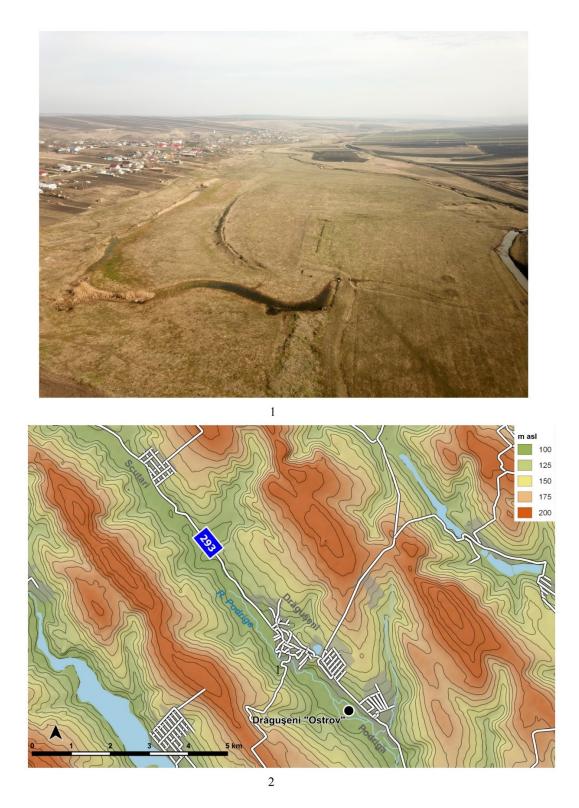
complexului cultural Cucuteni-Tripolie, in: Cercetări Istorice, XXVII-XXIX (2008-

2010), Iași, 9-36.

http://clasate.cimec.ro/lista.asp?start=551&pageno=1&order=Det&OT=AS

C&jud=8258-Botosani (12.03.2021).

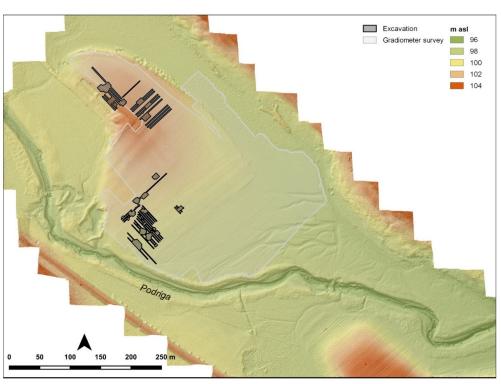
http://ran.cimec.ro/sel.asp?descript=draguseni-draguseni-botosani-situl-arheologic-de-la-draguseni-ostrov-cod-sit-ran-37182.02 (01.03.2021).



Pl. I. 1. Aerial photography with the site Dråguseni -Ostrov. Botoşani County, Romania (according to C. Mischka); 2. Podriga valley and the place of the Drăguseni -Ostrov archaeological site (graphic: C. Mischka).

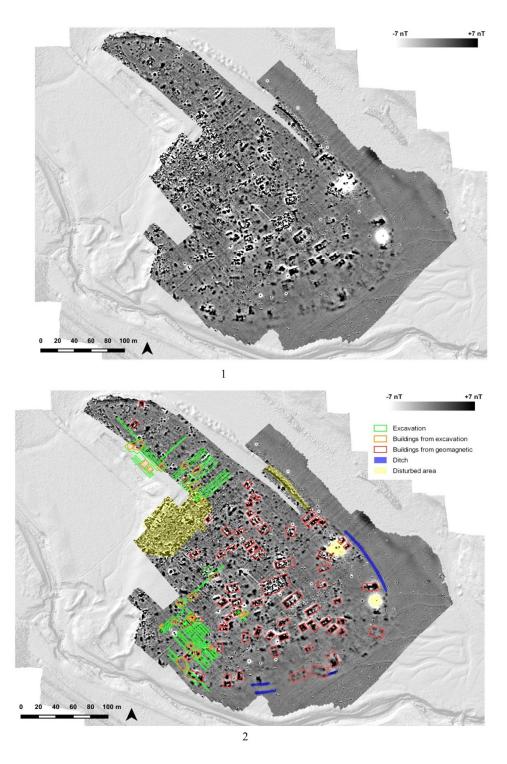


1

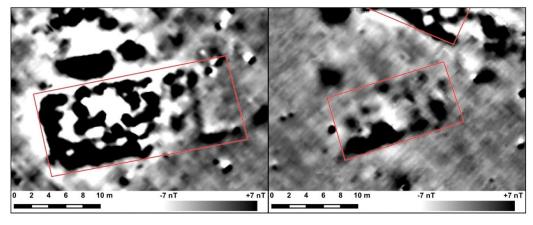


2

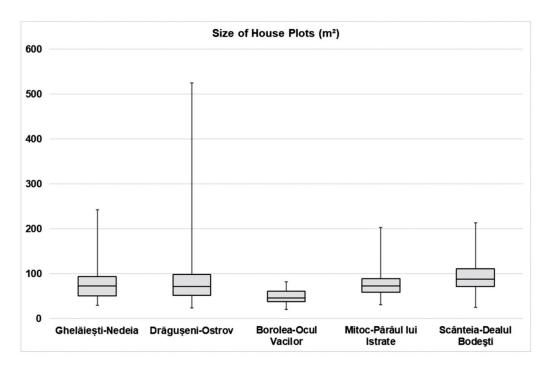
Pl. II. 1. Graphic reconstruction of two houses from Drăgușeni-Ostrov (according to MARINESCU-BILCU, BOLONEY 2000: 43); 2. Digital Terrain Model ofthe Drăgușeni-Ostrov site, with the excavation trenches (graphic: C. Mischka).



Pl. III. 1. Anomalies from the gradiometer survey on the site Drăgușeni-Ostrov (graphic: C. Mischka); 2. Interpretation of the resulting anomalies on the magnetogram from Drăgușeni-Ostrov site (graphic: C. Mischka).



1



2

Pl. IV. 1. Examples of unburned houses, visible on the magnetogram from Drăgușeni-Ostrov site (graphic: C. Mischka); 2. Comparison between house sizes from several Cucuteni sites (graphic: C. Mischka).