

Worked astragali in ritual contexts of Cucuteni Civilisation

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In the deposits of various Chalcolithic settlements in Romania we notice the discovery of numerous astragals coming from different animals. Rather few of them have use traces, being polished, perforated or incised. Nevertheless, the astragals used in ritualistic contexts are really rare.

Cucuteni, part of the Cucuteni-Tripolye cultural complex, is one of the most important Chalcolithic cultures of South-East Europe (in the area of modern-day Romania, Moldova, and Ukraine).

The Cucuteni culture appeared and spread in the East of Romania, evolving along three chronological phases (A, A-B and B), between 4600-3500 Cal BC (Mantu, 1998).

Cucuteni	years BC
Cucuteni A1-A4	4600-4050
Cucuteni A/B	4050-3800
Cucuteni B	3800-3500



Figure 1. Map showing the extent of the Cucuteni-Tripolye culture (1 - Poduri-Dealul Ghindaru; 2 - Ghelaiesti Nedeia).

The *Tell* of Poduri-Dealul Ghindaru (Bacau County) has the following position: 46°27'59" North latitude and 26°32'10" East longitude, with an absolute altitude of 429 m (Figure 1). The *Tell* is situated on a fragment of the terrace of 30 m on the right bank of the Tazlau Sarat River and it currently has a surface of around 1.2 ha. The high complexity of the stratigraphy was emphasized along the 27 archaeological excavations campaigns that took place so far. There were reported levels belonging to the Precucuteni and Cucuteni Chalcolithic cultures and to Bronze Age (Monah *et al.*, 2003).

In the Cucuteni A level of the *Tell* from Poduri-Dealul Ghindaru (Bacau County, Romania) a deposit of astragals was found below the clay platform of a house (Figure 2): 21 of cattle (*Bos taurus*), three of red deer (*Cervus elaphus*) and one of sheep/goat (*Ovis aries/Capra hircus*). The astragals were more or less altered, 13 of them have traces of polishing (blunting) on the anterior face. We mention obvious traces of red ochre on astragals, and the contact of certain pieces with copper artefacts may be suggested by the specific coloration (greenish) identified in the case of four astragals.

Could the polishing traces found on many astragals be explained through their use within certain games? We think not, because of the piece sizes that are not suitable for such an interpretation. Moreover, among the refuse bone material there were found another eight bovine astragals polished on the anterior face, probably used to process the animal skins (Cavaleriu & Bejenaru, 2009).

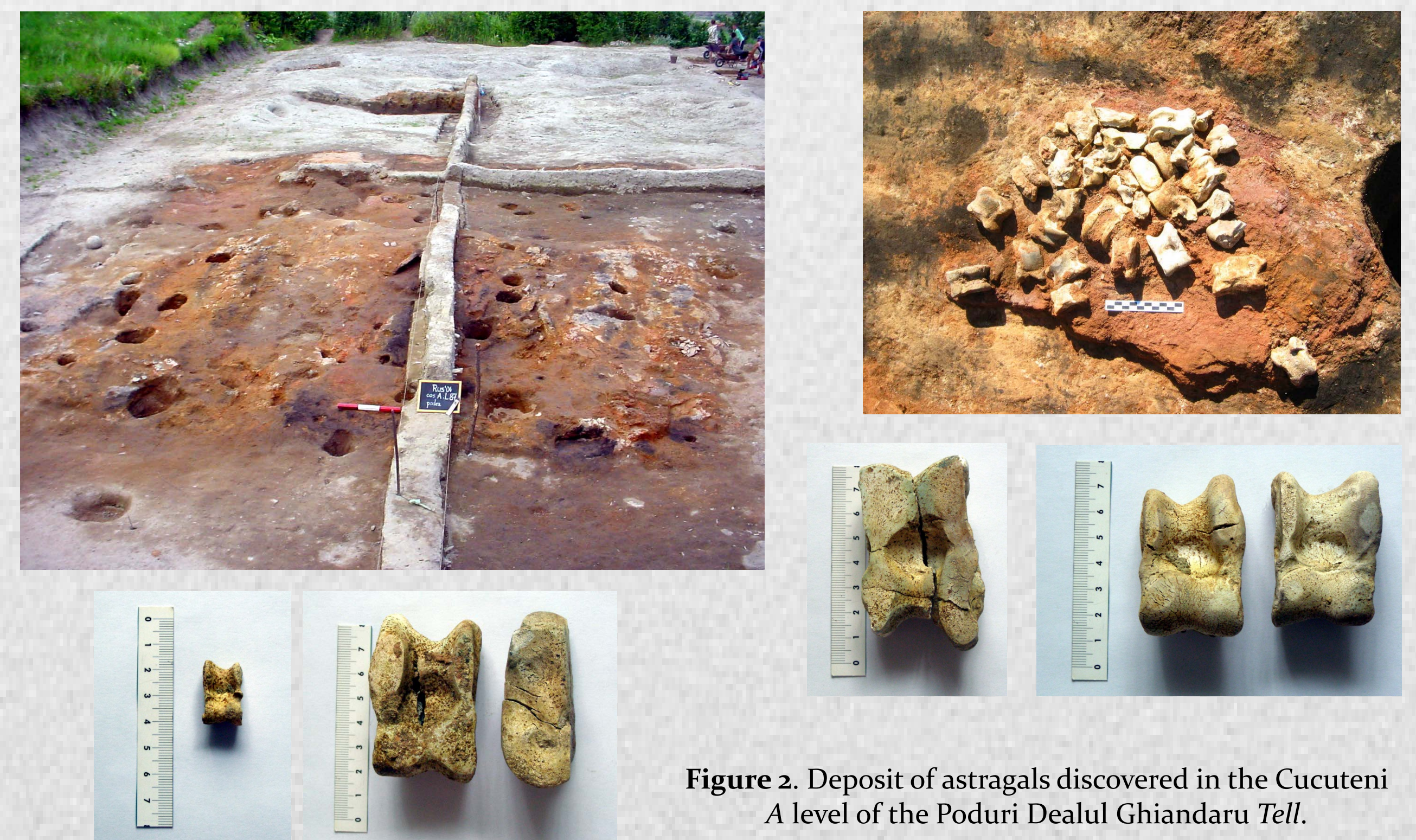


Figure 2. Deposit of astragals discovered in the Cucuteni A level of the Poduri Dealul Ghiandaru *Tell*.

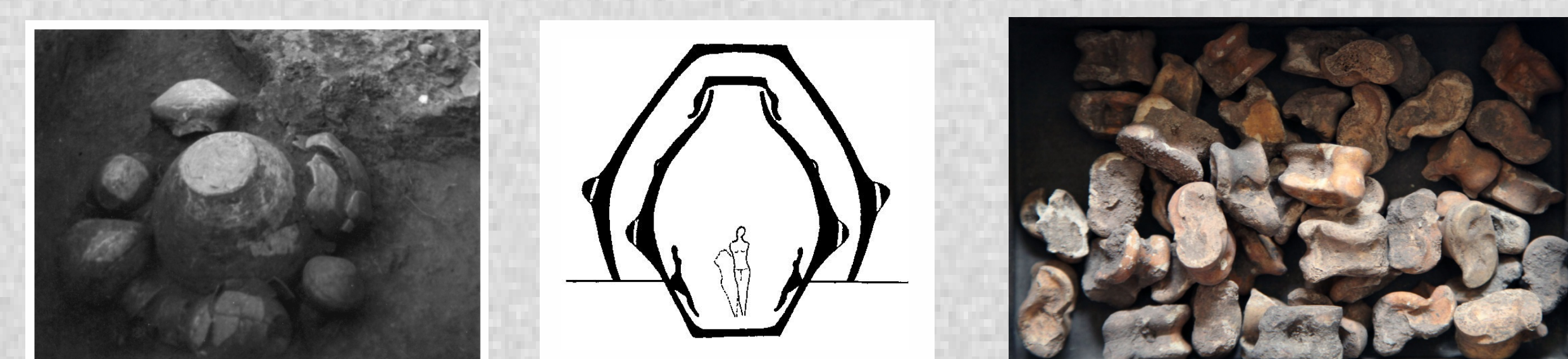


Figure 3. Deposit of astragals discovered in the Cucuteni B level of the Ghelaiesti-Nedeia site.

A deposit of 497 sheep, goat and pig astragals was found in the Cucuteni B, settlement in Ghelaiesti-Nedeia in a large recipient within a sanctuary. The site in Ghelaiesti-Nedeia, situated in Neamt County (Figure 3), was studied between 1969-1972, 1975 and 1982-1984. The stratigraphy of the settlement comprises three Chalcolithic levels (Precucuteni III, Cucuteni A₂ and Cucuteni B₁, a level belonging to Bronze Age and another level to the medieval period (Cucos, 1999).

The astragals were analyzed by Olga Necrasov (1999), being attributed as follows: 8 coming from pigs (*Sus scrofa domestica*), and 489 from sheep (*Ovis aries*) and goats (*Capra hircus*). Many pieces were polished, especially on the medial face; the lateral face also seems to be smoothed, but only in the case of a few pieces. Some astragals were incised more or less regularly, on the contour of the lateral face or on that of the medial one; two astragals, belonging to two distinct individuals, present a perforation in the proximal trochlea; others were burned.

Two hypotheses, use in divination and use in ritualistic games, could be valid for the Chalcolithic astragals. The astragals found in ritual deposits together with another deposit having cultic character seem to support their interpretation as objects loaded with supernatural powers permitting one to read the future and having a beneficent effect on their users and for the constructions in which were included.

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