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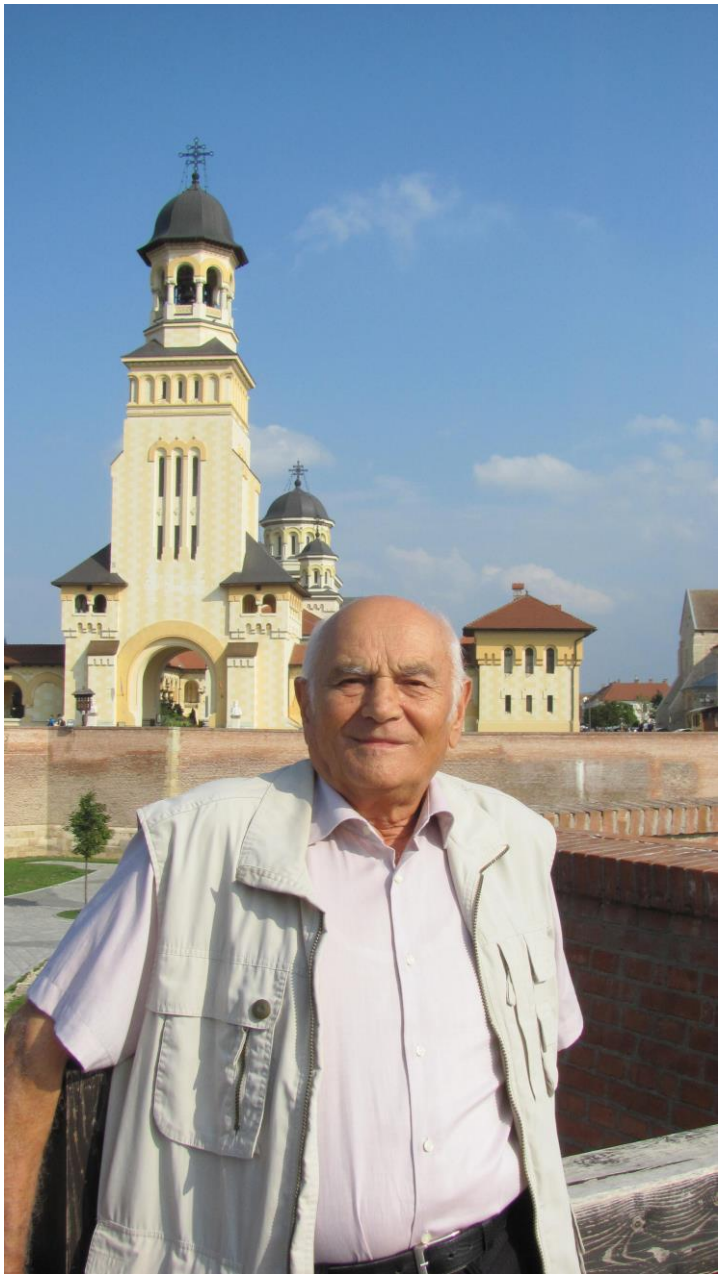

Gheorghe Anghel

S U M A R

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REVIEWS AND READER'S NOTES

Gheorghe Anghel, maestru al muzeografiei româneşti

În cei peste 125 ani de existenţă a Muzeului din Alba Iulia s-au afirmat numeroase personalităţi ale istoriografiei, arheologiei, muzeografiei şi ştiinţei restaurării din România, care şi-au adus un însemnat aport la dezvoltarea acestor domenii. Printre acestea vom aminti câteva nume de referinţă care au intrat în istoria prestigioasei instituţii de cultură: Adalbert Cserni – fondatorul muzeului, Ion Berciu – cel care a reorganizat muzeul începând cu finalul perioadei interbelice, Alexandru Popa, Nicolae Josan, Vasile Moga, Radu Ciobanu, Viorica Suciu şi Horia Ciugudean.

Volumul de faţă este dedicat domnului Gheorghe Anghel cu ocazia împlinirii frumoasei vârste de 80 de ani. Un remarcabil portret al Domniei sale a fost realizat de distinsa sa colegă, doamna Viorica Suciu, cu ocazia împlinirii vârstei de 70 ani, în numărul XLII al anuarului nostru.

Gheorghe Anghel s-a născut în satul Şard, comuna Ighiu, judeţul Alba, la 7 aprilie 1935. Fiu al Mariei şi al lui Petru Anghel, a cunoscut îndeaproape realităţile satului românesc. Părinţii sărbătoritului nostru s-au ocupat îndeaproape de educaţia fiului lor, încurajându-l să urmeze cursurile Şcolii elementare din Şard, apoi a Şcolii Pedagogice din Deva. Studiile sale au fost încununate de absolvirea în anul 1958 a Facultăţii de Istorie-Filozofie, secţia Istorie a Universităţii ”Victor Babeş” din Cluj-Napoca. Aici a avut şansa de a audia cursurile unor mari personalităţi ale istoriografiei naţionale şi europene, profesori de prestigiu precum acad. Constantin Daicoviciu, Mihail Macrea, Nicolae Lascu, acad. Virgil Vătăşianu, acad. Ştefan Pascu şi mulţi alţii.

Tânărul cercetător al Evului Mediu românesc a fost sfătuit de profesorii săi să elaboreze o teză de doctorat cu o tematică dificilă, prin care se dorea deschiderea de noi drumuri în cercetarea istoriei medievale româneşti. Eforturile sale au fost încununate prin susţinerea tezei în anul 1978, intitulată *Fortificaţii medievale din sud-vestul Transilvaniei*, al cărei conducător ştiinţific a fost acad. Ştefan Pascu. În general o teză bună de doctorat trebuie să fie publicată! Cu ajutorul editurii Dacia, în anul 1986, a văzut lumina tiparului una din cele mai valoroase monografii ale Evului Mediu românesc, ”Fortificaţii medievale de piatră din secolele XIII-XVI”. Prin această lucrare Gheorghe Anghel şi-a câştigat renumele de *fondator al castelologiei româneşti*.

Cercetările Domniei sale au atras atenţia specialiştilor de peste hotare, care l-au invitat la opt congrese internaţionale, printre care amintim cele de la Durham, Teheran, Basel şi Roma. Recunoaşterea profesională din partea lumii ştiinţifice s-a concretizat şi prin acceptarea sa ca membru al unor prestigioase organizaţii ştiinţifice internaţionale: Societatea Amicii Ceramicii Romane

(Elveţia), Societatea de Numismatică (Belgia) şi Societatea de Studii Mithraice (India).

Lista publicaţiilor ştiinţifice semnate de Gheorghe Anghel a fost întocmită de doamna Viorica Suciu în materialul amintit anterior. Vom aminti selectiv câteva cărţi şi studii care au adus un însemnat aport la dezvoltarea cercetării Evului Mediu şi epocii moderne: Gh. Anghel, *Cetăţi medievale din Transilvania*, Ed. Meridiane, Bucureşti, 1971; Gh. Anghel, *Fortificaţii medievale din piatră din sec. XIII-XVI*, Ed. Dacia, Cluj-Napoca, 1986; Gh. Anghel, *De la Mitropolia Ortodoxă a Transilvaniei la Episcopia de Alba Iulia*, Alba Iulia, 1993; Gh. Anghel, ”Trei tezaure monetare din secolul al XVII-lea, descoperite la Alba Iulia”, *Apulum*, V, 1964, p. 375-406; Gh. Anghel, ”Săpăturile arheologice de la cetatea feudală de la Piatra Craivii”, *Apulum*, V, 1964, p. 309-322; Gh. Anghel, ”Date noi în legătură cu apeductele medievale de la Alba Iulia”, *Sargetia*, V, 1968, p. 155-163; Gh. Anghel, ”Mesures de capacité medievales employées en Transylvanie au Musee d’Histoire d’Alba Iulia”, *Noesis*, II, 1974, p. 163-167; Gh. Anghel, ”Castelul de la Hunedoara”, *Sargetia*, XI, 1974-1975, p. 363-376; Gh. Anghel, ”Les forteresses moldaves de l’epoque de l’epoque d’Etienne le Grand”, *Château-Gaillard*, Caen, VII, 1975, p. 21-34; Gh. Anghel, ”Despre apariţia primelor donjoane de piatră din Transilvania”, *Apulum*, XVIII, 1980, p. 195-220; Gh. Anghel, ”Consideraţii generale privind tipologia cetăţilor medievale din România”, *Apulum*, XIX, 1981, p. 151-163; Gh. Anghel, ”Considérations sur l’architecture des fortifications romain du XIII au XVI siècles”, *Château-Gaillard*, Caen, IX-X, p. 273-292; Gh. Anghel, H. Ciugudean, ”Cimitirul feudal timpuriu de la Blandiana (jud. Alba)”, *Apulum*, XXIV, 1987, p. 170-196; Gh. Anghel, ”Despre evoluţia teritorială a oraşului antic, medieval şi modern Alba Iulia”, *Apulum*, XXXI, 1994, p. 283-302; Gh. Anghel, ”Necropola birituală, prefeudală de la Ghirbom”, *Apulum*, XXXIV, 1997, p. 255-271; Gh. Anghel, ”Vauban şi fortificaţiile bastionare din Transilvania şi Banat (sec. XVII-XVIII), *Sargetia*, XXVII/1, 1998, p. 581-631; Gh. Anghel, V. Suciu, ”Mărturii ale plutăritului în Transilvania din antichitate, evul mediu şi perioada modernă. Rolul oraşului Alba Iulia în istoria plutăritului”, *Apulum*, XLI, 2004, p. 367-386; Gh. Anghel, ”Construcţii de apărare executate de Giovanni Morando Visconti în cetatea medieval de la Alba Iulia la sfârşitul secolului al XVII-lea şi începutul celui de al XVIII-lea”, *Apulum*, L, 2013, p. 167-181.

Prin cercetările arheologice efectuate sub conducerea ştiinţifică a Domniei sale au fost aduse noi şi valoroase informaţii privind epoca migraţiilor, evul mediu timpuriu şi dezvoltat, perioada premodernă şi cea modernă din istoria Transilvaniei. Amintim săpăturile arheologice de la Piatra Craivii, Tăuţi, Cetatea de Baltă, Sânmiclăuş, Blandiana, Berghin, Ghirbom, Alba Iulia – Staţia de Salvare, Alba Iulia – ravelinul Sf. Francisc de Paola şi multe altele.

Gheorghe Anghel a fost un manager de mare valoare, conducând Muzeul din Alba Iulia 23 de ani, între 1971 şi 1994, fiind cel mai longeviv din istoria instituţiei noastre. Meritele Domniei sale sunt indiscutabile, şi au fost amintite în portretul redactat de Viorica Suciu acum un deceniu. Vom reaminti că sub conducerea sa patrimoniul mobil al Muzeului s-a îmbogăţit cu numeroase bunuri cu valoare arheologică (aici incluzând şi pe cele numismatice), bibliofilă, etnografică, documente de arhivă etc. În perioada mandatului său patrimoniul Muzeului din Alba Iulia s-a îmbogăţit cu peste 300.000 de asemenea bunuri. A fost iniţiatorul organizării sesiunii ştiinţifice anuale a Muzeului încă din primul an în care a preluat funcţia de director. A reorganizat de numeroase ori expoziţia de bază, iar sub conducerea sa a fost restaurată clădirea Sălii Unirii în anul 1993. De asemenea a pus umărul la înfiinţarea câtorva instituţii muzeale: Muzeul Pavilionar al Mineritului din Roşia Montană, Muzeul ”Avram Iancu” din Câmpeni şi Muzeul din Blaj.

Domnul Gheorghe Anghel nu şi-a uitat originile, şi ca veritabil fiu al satului a contribuit substanţial la editarea monografiei localităţii în care s-a născut şi copilărit. Astfel a văzut lumina tiparului lucrarea semnată alături de Gh. Măhăra şi M. Munteanu, *Şard – un sat din ”Ţara Vinului”*, Ed. Altip, Alba Iulia, 2006.

A susţinut în continuare apariţia a 25 noi numere ale anuarului Apulum, în ale cărui pagini au continuat să publice nume grele ale istoriografiei româneşti şi mondiale.

Domnul Gheorghe Anghel continuă să fie o persoană activă care participă la viaţa ştiinţifică a Muzeului din Alba Iulia, oferind sfaturi utile şi pertinente colegilor mai tineri. Vor rămâne în amintirile mele fructuoasele discuţii ştiinţifice despre diversele aspecte ale vieţii romane de la Apulum, dar mai ales cele cu privire la problema ”anului 1000” de la Alba Iulia, grupurile Mediaş şi Blandiana A, existenţa unui voievodat la Bălgrad, problema episcopului Hyerotheos şamd. Domnul Gheorghe Anghel, prin personalitatea sa excepţională, se constituie drept o adevărată enciclopedie. N-am să uit discuţiile pe diverse tematici avute în biroul meu sau la bibliotecă, dar şi în plimbările noastre din Cetatea Alba Carolina. Ţin minte cum mi-a povestit în detaliu procesul de fabricare a vinului spumant, apoi soiurile de struguri care se cultivă în zona sa natală. Domnia sa are un umor debordant, fiind expert în a spune bancuri. Este un om care ştie să-şi trăiască viaţa, bucurându-se de tot ceea ce-i oferă mai frumos aceasta.

Cu prilejul lansării acestui număr al anuarului *Apulum* îi urăm sărbătoritului nostru viaţă lungă, multă sănătate şi un sincer La mulţi ani!

Radu OTA, Alba Iulia

MICROSCOPY OF PREHISTORIC SYMBOLIC ARTEFACTS. *WIETENBERG* DECORATED ANTLER PLATE DISCOVERED AT ŞOIMENI, HARGHITA COUNTY (II)

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Key words: Bronze Age, microscopy, osseous materials industry, red deer antler plate, Romania, symbolism, Transylvania, use-wear analysis, *Wietenberg* Culture.

Cuvinte cheie: cultura *Wietenberg*, epoca bronzului, industria materiilor dure animale, microscopie, placă decorată de corn de cerb, România, simbolism, Transilvania, traseologie.

The archaeological site

The paper presents the data issued from the analysis regarding a special symbolic artefact made of red deer antler discovered in the well-known archaeological site of Şoimeni – "Dâmbul Cetăţii", Păuleni-Ciuc Commune, Harghita County, Romania[1]. These belong to the Middle/Late Phase of the Bronze Age in Romania, *Wietenberg* Culture (Middle Phase, II; cca 1800 – 1600 BC). The prehistoric settlement is placed at 8 km northeast of Miercurea-Ciuc and at 1-1.5 km northeast of *Şoimeni* village (*Csíkcsomortán*), Păuleni-Ciuc comm., Harghita County, in the area called "*Dâmbul Cetăţii*" („*Várdomb*")[2].

[1] The contribution of Dan Lucian Buzea to this work was possible with the financial support of European Social Fund, Operational Programme Human Resources Development 2007 – 2013, Priority no. 1 "Education and training in support for growth and development of the knowledge society", Key Area of Intervention 1.5 "Doctoral and post-doctoral research support" Title: *"MINERVA - Cooperation for elite career in PhD and post doctoral research", ID POSDRU 159/1.5/S/137832*. Drawings and photographs have been made/taken by Corneliu Beldiman. English version by Diana-Maria Sztancs.

[2] For further data related to the site, history of research as well as osseous materials industry dated from Aeneolithic and Bronze Age levels see Beldiman *et alii* 2014; Buzea 2012.

Decorated red deer antler plate

The object presented here was recovered during the 2000 excavation campaign from a complex (Hut 7) (**fig. 1**). It is a relatively small fragment of a circular decorated plate. Catalogue Code PCD/IV 3. Type: IV E2 b. Owner: National Museum of the Eastern Carpathians, Sf. Gheorghe. Inv. no. 5456. Context data: Section I Square B 8 Hut 7, Depth 0.60 m. *Wietenberg* Culture, 2nd phase. Black uniform colour resulted probably by intentional burning[3]. Red deer antler plate, probably circular, with geometric, on relief and engraved ornamentation that consists in parallel grooves and sculpted triangles, made probably with a metal blade. The triangular fragment has an irregular shape, and convex and concave edges resulted after the deliberate fracture of the object. A small sector of the upper side seems to have been recently fractured on two planes (sides A and B, at the point 1). The surfaces were affected by the corrosion (humic acids) which created small irregular ovoid holes randomly placed on the sides (**fig. 1/1-6**). The fragment represents about 1/7 from the entire piece (**fig. 1/7; fig. 8/1-6**). This has an intense black colour with metallic polish aspect on the upper side and brown on the inferior side. The colour is resulted probably by deliberate burning. The heat treatment facilitates a high risk of fracture. Consequently, the burning might succeed the manufacture. The dimensions (in mm) are: A 24.21; B 36.23; C 28.04; maximum thickness 9.17; thickness of the circumference about 5. Initial dimensions: diam about 85; maximum thickness 9.17; thickness of the circumference about 5 (**fig. 2**).

The piece was entirely manufactured using various procedures/techniques such as: direct percussion/splitting; indirect percussion/chopping, scraping, direct percussion/chopping, engraving. The upper side presents several distinctive elements whose detailed analysis allows us to hypothetically reconstruct the ornamentation of the artefact. The surfaces are concentrically placed starting from the centre to the circumference as follows: a flat surface of scraping (S 1), with fine, oblique, parallel striations; an ample circular groove (S 2) which is convex asymmetric and it marks the edge of the flat surface; an oblique surface (S 3) obtained by chopping and repeatedly applied percussion (*piquetage*), with a specific, irregular aspect (**fig. 2**).

The ornamentation: a small triangular part is preserved on the oblique surface, close to the distal end of one of the grooves (T 2), partially preserving the channelled and guttered anatomic tissue of the antler and partially modified by abrasion. This fragment indicates the probable existence of an relief isosceles triangle which was part of an ornamental assemblage comprising probably eight identical triangles (T 1 – 8) placed at equal distances on a marginal band, close to plate circumference; these elements were designed on the oblique surface at

[3] Beldiman *et alii* 2012a, p. 104, 248, pl. 34; Beldiman 2012b.

the moment of its grooving by chopping or repeated percussion (*piquetage*); within two distinct stages, two engraved, linear, parallel grooves were done on the oblique side (SG 1 – 8) (two of them are partially preserved, SG 1 – 2). These probably formed a central cruciform ornamentation (**fig. 2**). Dimensions: L crossbar A 21; L crossbar B 23; L crossbar C 18.5; L crossbar D 14; distance between the grooves of the crossbars 5.5.

The fragment is conventionally placed on the inferior sector of the entire piece circumference. The piece sides are named with A – B – C; the angles are named with the numbers 1 – 2 – 3 (**fig. 2**). The inferior side is irregular and it is made of the spongy tissue, superficially shaped by chopping; the thickness of spongy tissue is different on various sectors due to the chopping technique applied (2.30 – 4); the thickness of the compact tissue is 4.70. The aspect of the tissues (compact and spongy) was modified by probably deliberate burning (**fig. 6/5-7**). All the elements of the upper side: the flat surface (S 1), the circular groove (S 2), the triangular surface (T 2), the oblique chopped surface (S 3), the linear grooves (SG 1 – 2) preserve an intense, uniform, black colour as a result of burning. The spongy tissue is uniform dark brown and with a rounded relief as an effect of the heat factor (**fig. 6/5-7**). These details indicate that the physical changes done by heating were produced before fracture; thus, the heating treatment was applied with the aim of changing the artefact colour; it is a method of colouring osseous material artefacts by baking/deliberate burning.

According to the microscopic observations and the acceptance of the premise that the plate was initially circular and of the premise that the initial decoration based on symmetry (as the identified analogies suggest), the ornamentation was obtained by chopping and engraving and probably combined two elements (**fig. 2**): **1** a central motif: engraved cross with unequal sides (A – D) formed by eight, parallel grooves, placed at a distance of 5.5 mm of each other and joined in a right angle (SG 1 – 8); **2** a marginal motif: a circular band made from eight, on relief, isosceles triangles (T 1 – 8); the triangles angles were opposed, alternatively placed at equal distances between each other as well as the edge of the on relief flat surface (S 1) and of the piece circumference; 4 of them (= T 1, 3, 5, 7) were placed along with the distal ends of the cross parts, with the angles oriented to the inner side; other 4 (= T 2, 4, 6, 8) were placed between the crossbars, with the angles oriented to the outer side.

The ornamentation of the plate could combine the central cross, the marginal, circular band and eventually, some geometrical elements (linear or circular ones) placed in the areas between the crossbars.

The elements resulted by technical modification of the upper side (shaped surfaces, with various diameters, concentrically placed) are numbered from 1 to 3 and defined in the following manner (**figs 2-7**): **1** on relief, circular, flat surface (S 1) resulted by chopping/scraping using a metallic blade, probably

knife; there are well-preserved specific oblique striations; diameter 48; **1a** around the flat surface, an oblique surface was shaped (S 1a), finished by chopping and scraping (the surfaces of triangles are preserved, T 2); inner diameter 48; outside diameter 85; width 18; **2** circular groove (S 2) made by direct and indirect chopping has a semi-circular and concave asymmetric section which marks the circumference of the flat surface S 1; it is slightly deeper than the oblique surface; there are no traces of pigmentation; there are no traces of previous marking; inner diameter 48; outer diameter 55; width 2.5 – 3; maximum depth 1.2 – 2; **3** oblique surface (S 3) representing a marginal circular band made by chopping or *piquetage*; it has an irregular aspect; the oblique chopping at about 45° from the circumference of the flat surface S 1 towards the piece circumference; traces of impact with overlapped marks are preserved. The surface was not finished after chopping. It was not shaped by abrasion in order to create contrast with the flat surface S 1, polished; inner diameter 55; outer diameter 85; width 15; **4** circular band comprising probably eight on relief, triangular, flat surfaces (isosceles triangles) (numbered T 1 – 8), alternatively placed with the opposite points which resulted by chopping and scraping; about 1/3 of the T 2 is preserved; the sides were named with a – b – c and the points with numbers 1 – 2 – 3; the T 2 preserved sector comprises point 1 and partially the sides a and b; the triangular surfaces were not marked – there are no traces in this respect. It seems that these were directly chopped; dimensions L a 18.30; L b 12; L c 12; high about 2; **5** engraved short, wide groove (SG 1_1); it was overlapped by SG 1_2; it was probably done with a metallic blade (bronze) with the active part rounded at one of the sides; the depth is small, the distal end is asymmetric convex and it is placed parallel with the diameter of the flat surface; the edges are parallel, the profile is wide, concave, symmetric; it was done by repeated scratching starting from the piece centre to its circumference, direction from EP towards ED; **6** short groove, less wide (groove 1_2); it has a small depth; it was engraved with the help of a metallic blade (bronze) with the active part sharped on one of the sides; the edge of the blade was irregular and generated the axial striations visible on the walls of the groove; it has parallel linear edges and convex walls; the profile is in an asymmetric U, the walls are irregular, with an inclination of 45°-50°. They are covered with parallel, overlapped, well-marked axial striations, specific for scraping procedure; there are no traces of pigmentation preserved; Initial length 18; preserved length: 6.76; width proximal end 2.40; width mesial part 2.40; width distal end 1.40; maximum depth 1.00; **7** residual grooves (SR 1_1 - 5) resulted during the engraving procedure of SG 1; SR 1_1 – 4 are long grooves, placed on the flat surface (S 1), close to the edge of SG 1, oriented on oblique directions; SR 1_5 is short, placed on the S 3 oblique surface, close to ED of SG 1, being parallel to this; it has fine cutting striations which are linear and have long asymmetric V

profile; they indicate that the blade used for shaping was a bronze one (knife blade); **8** engraved short, wide groove (SG 2_1) probably made with a metallic blade with the active part rounded on one of the sides; the groove has a small depth; the end is asymmetric convex and it is placed parallel to the diameter of the flat surface; the edges are linear and parallel; the profile is wide, concave and symmetric; it was made by repeated scratching starting from the centre of the piece towards its circumference; the direction is proximal end – distal end; it is more difficult to observe it because it is partially covered by SG 1_2; there are no traces of pigmentation; initial length 18; preserved length 12.70; width proximal end 4.20; width mesial part 4.20; width distal end 1.75; maximum depth 0.5; **9** short groove less wide and deeper (groove 2_2); similar to SG 1_2; done by engraving with a metallic blade (bronze) with the active part sharped on one side, with an irregular edge which generated the axial striations which is observable on the walls of the groove; the end is convex and sharp, being longer than the diameter of the flat surface; profile in asymmetric U, with irregular walls, inclined at about 45°-50°, covered with well-marked, overlapped, parallel, axial striation specific for scraping technical procedure; there are no traces of filling with pigments; initial length 18; preserved length 12.70; width proximal end 2.25; width mesial part 2.25; width distal end 1.2; maximum depth 1.5; **10** residual grooves (SR 2_1 - 4) resulted after engraving technical procedure of SG 2; SR 2_1 – 3 are short grooves, placed on S 3 oblique surface, close to distal end of SG 2, they are parallel to these; SR 2_4 is a long groove placed on S 1 flat surface, close to the SG 2 side, being oblique oriented towards this; there are fine, linear cutting grooves, with asymmetric V elongated profiles; they indicated the blade that was used for this purpose = bronze blade of a knife.

Short grooves made by engraving (SG 1 – 2) defined the crossbar A of the central cruciform motif; there are no traces of pigmentation (limestone paste like at the motifs encrusted on ceramic pots); these grooves were probably done separately in two stages: firstly, a superficial engraving, then highlighting them with the help of a blade. The grooves join in a right angle at the EP level according to the following scheme: groove 1 + groove 8; groove 2 + groove 3; groove 4 + groove 5; groove 6 + groove 7.

As concerns the manufacture sequences of debitage and based on microscopic observations we can propose the followings (**fig. 7/1-3**): a central cylindrical segment of the antler beam was extracted (length about 100 mm and its diameter about 100 mm) at the level of the third tine (the central one). The possible technical procedures engaged in these operations were: direct percussion/chopping and direct percussion/fracture or transversal cutting and direct percussion/fracture (manufacturing chain, stages 1 – 2). The central tine was removed from its base by chopping or transversal cutting. Direct percussion/chopping were applied on the beam at about 50 mm above and below

the level of the third tine base. This beam segment was selected because it offered the widest part and an oval section more pronounced. In this respect, a rectangular or polygonal fragment with a width about 80 – 100 mm and with the sides preserving a less acute curving could have been extracted (according to the particularities of age of the animal and the parameters of beam).

As concerns the manufacture sequences of shaping and decoration and based on microscopic observations we can propose the followings (**fig. 7/4-6; figs 3-6**): **1** extracting by direct percussion/splitting of a fragment with a rectangular or polygonal shape, with a width of about 80 – 100 mm and a flat-convex section, with the upper side convex (anatomically); it is one of the wide sides of the segment obtained during the debitage stage. The inferior side is almost flat. The fragment represents about 1/4 or 2/3 from the circumference of beam (manufacturing chain, stage 3); **2** shaping the sides and the edges was done probably by direct percussion/chopping; flat-convex section (manufacturing chain, stage 3); **3** defining the general circular shape of the piece by direct percussion/chopping applied on sides and edges; flat-convex section; in this way a circular plate with a diameter of about 70-80 mm was obtained (manufacturing chain, stage 3); **4** the upper side (S 1) flat in the central part and oblique in the marginal band was obtained by scraping; a polygonal section was obtained (asymmetric octagonal) (manufacturing chain, stages 4 – 5); **5** making the circular groove (S 2) by indirect percussion/chiselling? The preserved traces allow us to define the parameters of the used tool – chisel with narrow and rounded active part (manufacturing chain, stage 6); **6** making the marginal, deep circular band with an oblique surface (S 3) and the row of on relief triangles (T 1 – 8) by indirect percussion/chiselling. The surface is lower with 2 mm than the level of the flat surface (1), approximately at the level of the S 2 circular groove (manufacturing chain, stage 7); **7** engraving the grooves (SG 1_1, SG 2_1) of the central cross motif by scraping with a knife blade starting from the centre towards the circumference (manufacturing chain, stage 8); **8** deepening the grooves (SG 1_2, SG 2_2) by intense scraping with a knife blade (manufacturing chain, stage 8); **9** scraping the superficial, residual grooves (SR 1_1-5; SR 2_1-4) by exceeding the length of the engraved grooves or as failures in positioning the knife blade. They allow us to define the parameters of the tool used for cutting – metallic blade with a fine edge = bronze knife (manufacturing chain, stage 8). The engraving of the grooves was done starting from the proximal end towards distal end; the tool was used with the right hand; **10** deliberate burning in order to colour the piece black (manufacturing chain, stage 9).

It is possible to formulate some remarks regarding the use-wear traces and function of the decorated red deer antler plate. So, the engraved edges and the inner part of the ornamentation (SG 1 – 2 grooves) do not preserved traces of bluntness and functional polish (figs 4-6); the S 1 flat surface has no use-wear

striations; *traces of bluntness, polish, metallic aspect*; the unshaped edges as well as the chopped, oblique surface preserves some traces of bluntness and functional polishing; the broken of the artefact was a deliberate one having the purpose of destruction by direct percussion using an instrument with the metallic active part narrow, with a rectangular section (chisel-type), antler artefacts being difficult to fracture in usual conditions; there are some specific traces well-preserved such as: grouped impact traces, some of them overlapped, placed at the left edge of SG 1, with the removal of the compact tissue at various thicknesses; other traces placed at right edge of SG 1 show the instrument which was used for percussion: a tool with a short and narrow active part, with a rectangular section, like a narrow chisel. We may conclude that the piece was deliberately fractured and abandoned after its destruction.

The irregular aspect of the inferior side, with ununiformed thickness of spongy tissue, with no intention for shaping (**fig. 1/2; fig. 6/5-7**) it suggest the use of the artefact as an ornamental element placed on a support such as: wall, textile object, leather, wood, metal or recessed in wood, combined with metallic elements (like the belts). No elements of a possible fixing device are preserved (perforations, notches), but the piece might have had them[4].

The absolute dating of the *Wietenberg* Culture level assures the indirect dating of the analysed piece. It is dated from 1830-1680 BC, being among rare pieces made of osseous material belonging to *Wietenberg* Culture which was associated with a radiocarbon date and among the rare such Prehistoric pieces of osseous materials from Romania[5].

Analogies

So long, no close analogies were identified for this piece; so far it seems to be a unique one. Animal with a symbolic value which has documented since the early Prehistory, the red deer generated myths and various representations over time, as the manifestations of material culture such as artefacts of common use (tools, weapons) or symbolic ones (perforated residual canines, other adornments, decorated non-utilitarian artefacts etc.). They are presented in Romania since the Upper Paleolithic[6].

Various symbolic artefacts are made of red deer antler. These are frequently decorated with geometrical elements. Pendants, bracelets, various plates, sleeves, axes etc. are only some of the pieces made of red deer antler[7].

[4] Beldiman, Sztancs 2014.
[5] Whitlow *et alii* 2013, p. 38; Whitlow 2014; Whitlow *et alii* 2014; Beldiman *et alii* 2014.
[6] For details see Beldiman *et alii* 2014.
[7] Beldiman 2000; Beldiman 2002; Beldiman 2007; Beldiman *et alii* 2010; Beldiman, Sztancs 2004; Beldiman, Sztancs 2014; Beldiman *et alii* 2012b, p. 59, 202, pl. 129; Sztancs 2011; Aldea

Within the Bronze Age cultures, there are various depositions in pits with ritual purposes and symbolic representations of the animals such as zoomorphic protomes made of clay. In a recently published work a detailed approach of the symbolism related to animals can be found; it also takes into account the red deer within *Wietenberg* Culture[8].

The incised, on relief or fretted motifs representing circles and isolated cruciform elements or combined with other geometric elements are frequent within the cultures of the Bronze Age, *Wietenberg* Culture included. It is frequent on various ceramic pots, especially on bowls – (**fig. 8/7-9**) (incised or excised motifs)[9] and on the bronze pieces such as bracelets, belts, plaques, harness pieces, swords (on relief, engraved or fretted motifs) – coming from hoards and isolated discoveries in Transylvania and Hungary[10].

Conclusions

The archaeological excavations carried out during 1999-2013 campaigns in the Prehistoric site from Şoimeni – "*Dâmbul Cetăţii*" offered the opportunity of recovering an assemblage of artefacts made of osseous materials belonging to *Cucuteni-Ariuşd*, *Jigodin*, *Costişa-Ciomortan* and *Wietenberg* Cultures. The studied assemblage comprises 108 artefacts. All of them are preserved in the collections of the Eastern Carpathians National Museum of Sfântu Gheorghe, Covasna County. Among these 17 pieces are dated from *Wietenberg* Culture. Most of the artefacts are bone awls made of long bones of large and medium-sized herbivores. There were quantify in optimal conditions all the aspects required by the complex study of the pieces. The approach supposed a systematic examination of all artefacts in optical microscopy.

The typological analysis of the osseous materials industry from Şoimeni – "*Dâmbul Cetăţii*" allowed us to add new types of objects for *Wietenberg* Culture. Among rare symbolic pieces we analyse here a circular decorated red deer antler plate. This kind of object has never been identified before within the discoveries of osseous materials artefacts from the site or from any other *Wietenberg* sites. The fragment of decorated plate was made from a red deer antler beam fragment (*compacta* tissue). The ornamentation consists in two parallel grooves, made probably with a metal blade. The possible manufacturing

1973; Dumitrescu 1974; Chidioşan 1980; Rişcuţa 1995; Andriţoiu, Rustoiu 1997; Popa, Ştefu 2009; Popa, Simina 2004; Lascu, Gheorghiu 2009; Ciută, Ciută 2013; Popescu 2013.

[8] Beldiman *et alii* 2015a; Beldiman *et alii* 2015b; Marc, Bărbat 2014; Marc *et alii* 2015; Rișcuța, Marc 2015; Savu, Gogâltan 2015; Moldovan 2009.

[9] Moldovan 2009; Rișcuța, Marc 2015, p. 166, pl. IV/a.

[10] Petrescu-Dîmboviţa 1977, plates 12-13, 20/8, 31-34, 74/51, 108/3, 6, 117/4, 118/1, 126/28, 132/2-3, 140/19, 147/7, 171, 172, 181/1-2, 192/7, 9, 252/2, 256/7, 257, 301, and especially plates 56/3, 74/29-31, 118/17, 125/20, 132/1, 159, 187, 256/6, 347/2; Gábor 2015; Popa 2015, p. 188, 190, figs 1-3.

chain includes several stages: extraction, shaping, drawing the ornamentation (circle). This decorative symbolic piece seems to have been intentionally broken and coloured by intentional burning.

The extensive microscopic study of the surfaces of the pieces allowed us to notice the traces of manufacture and wear and to propose the sequences of shaping. All the procedures were done by well-applied chopping, abrasion and grooving. The manufacturer presented strong ability for these operations, a sense of symmetry and a routine in this domain.

The *Wietenberg* osseous materials artefacts assemblage from Şoimeni – "*Dâmbul Cetăţii*" offers new benchmarks from a typological, palaeo-technological, cultural and chronological point of view. These allow the complex and extensive approach of the manifestations of civilisation and culture of the communities that lived during the Bronze Age times in Transylvania.

MICROSCOPY OF PREHISTORIC SYMBOLIC ARTEFACTS. *WIETENBERG* DECORATED ANTLER PLATE DISCOVERED AT ŞOIMENI, HARGHITA COUNTY (II)

ABSTRACT

The paper presents other data issued from the analysis regarding a unique symbolic artefact made of red deer antler discovered in the archaeological site of Şoimeni – "*Dâmbul Cetăţii*", Păuleni-Ciuc Commune, Harghita County, Romania. Thus, we continue the presentation of the discoveries from this site started in the previous issue of *Apulum* (see Beldiman *et alii* 2014). The object was recovered during the 2000 excavation campaign from a *Wietenberg* Culture complex (Hut 7). The study was done using a unitary methodology (Beldiman 2007) which takes into account all quantifiable data. Systematic microscopic examination of the piece has been performed; photos taken (general views, detailed views, and microscopic views) were added to the previous image database. A special attention was drawn to technological aspects (manufacturing, traces of use) that have been studied and defined on the basis of data issued from microscopic analyses. There are attested some specific procedures as fracturing, splitting, abrasion, chopping, grooving. The artefact: Fragment of a decorated plate. Dimensions: lenght 35 mm; initial diameter cca 50 mm. Red deer antler. Triangular fragment. Circular (?) plate made from a red deer antler beam fragment (*compacta* tissue). Black uniform colour resulted by burning. The ornamentation consists in two parallel grooves, made probably with a metal blade. The possible manufacturing chain includes several stages: extraction, shaping, drawing the ornamentation (circle). The piece seems to have been intentionally broken and coloured probably by intentional burning. This is a type of artefact which had not been found in other systematically studied Bronze Age sites and assemblages from Transylvania or other regions of Romania. This belongs to the Middle/Late Phase of the Bronze Age in Romania, *Wietenberg* Culture (Middle Phase, II; cca 1800 – 1600 BC). We have here a rare/unique red deer antler plate that have been attested for the first time in this site and are rarely

present in the area of *Wietenberg* Culture. The analysis offers new chrono-cultural, typological and paleotechnological markers for complex and extensive analysis of symbolic behaviour of Bronze Age communities from Transylvania region.

FIGURE CAPTION

Fig. 1. Şoimeni – "Dâmbul Cetăţii". *Wietenberg* Culture. Decorated red deer antler plate. **1-7** General view. **8** Hypothetic reconstitution.
Fig. 2. Şoimeni – "Dâmbul Cetăţii". *Wietenberg* Culture. Decorated red deer antler plate. Elements of description (surfaces, grooves, decoration).
Fig. 3. Şoimeni – "Dâmbul Cetăţii". *Wietenberg* Culture. Decorated red deer antler plate. Elements of description (grooves).
Fig. 4. Şoimeni – "Dâmbul Cetăţii". *Wietenberg* Culture. Decorated red deer antler plate. **1-7** Microscopic details (surfaces, grooves, decoration).
Fig. 5. Şoimeni – "Dâmbul Cetăţii". *Wietenberg* Culture. Decorated red deer antler plate. **1-7** Microscopic details (surfaces, grooves, decoration).
Fig. 6. Şoimeni – "Dâmbul Cetăţii". *Wietenberg* Culture. Decorated red deer antler plate. **1-7** Microscopic details (surfaces, grooves, decoration).
Fig. 7. Şoimeni – "Dâmbul Cetăţii". *Wietenberg* Culture. Decorated red deer antler plate. Manufacturing sequences – hypothetic reconstitution. **1-3** Debitage. **4-6** Shaping. **7-8** Decoration. **9** Intentional heating/burning.
Fig. 8. Şoimeni – "Dâmbul Cetăţii". *Wietenberg* Culture. Decorated red deer antler plate. **1-6** Hypothetic reconstitution. **7-8** Fragment of decorated ceramic bowl and decoration – Reghin-"Pădurea Rotundă", Mureş County. (Moldovan 2009, p. 292, pl. III/1). **9** Decorated ceramic bowl – Sighişoara-"Wietenberg", Mureş County (http://clasate.cimec.ro/detaliu.asp?k=EC0C4794E5974F4BAD4ECC511C1CB42C).

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Abbreviation list

Comm. – commune
ED – distal end
EP – proximal end
Inv. no. – inventory number
L – length
PCD – Şoimeni/Păuleni-Ciuc
Note: Other abbreviations are explained in context or in the legend of figures.

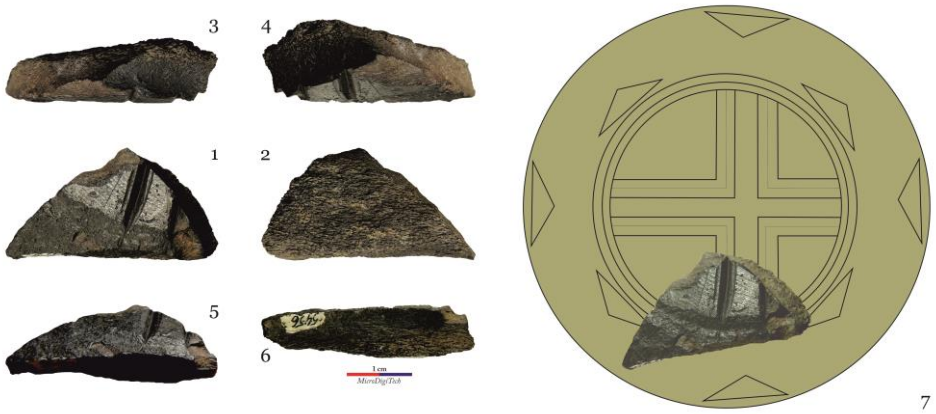

Fig. 1. Şoimeni – "Dâmbul Cetăţii". *Wietenberg* Culture. Decorated red deer antler plate. **1-7** General view. **8** Hypothetic reconstitution.

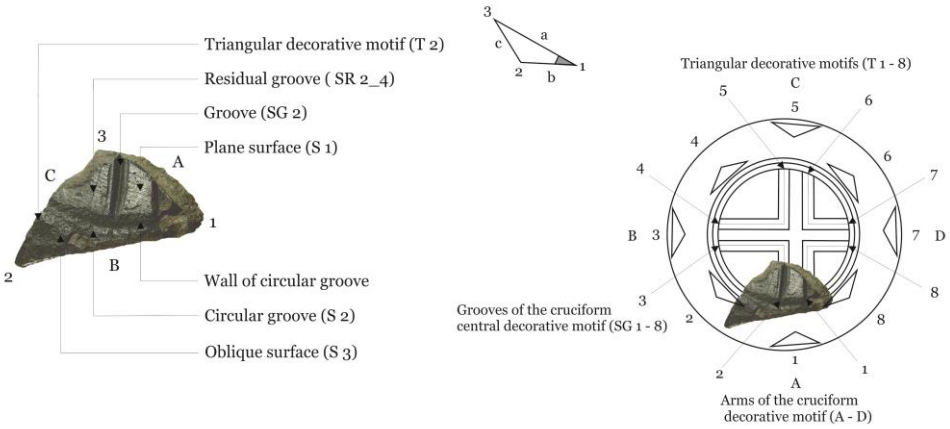

Fig. 2. Şoimeni – "Dâmbul Cetăţii". *Wietenberg* Culture. Decorated red deer antler plate. Elements of description (surfaces, grooves, decoration).

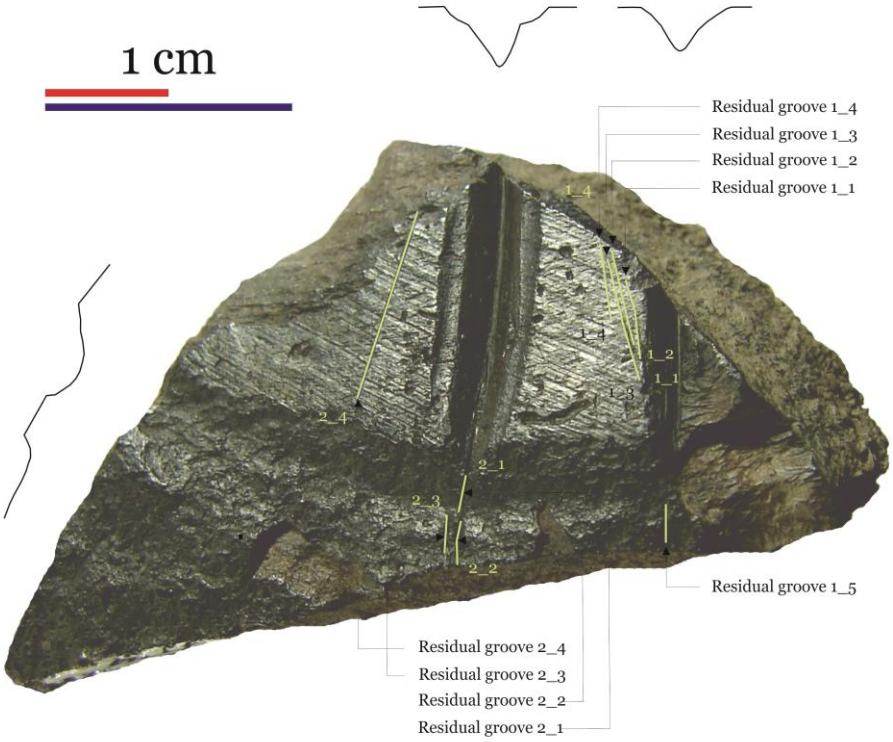

Fig. 3. Şoimeni – "Dâmbul Cetăţii". *Wietenberg* Culture. Decorated red deer antler plate. Elements of description (grooves).

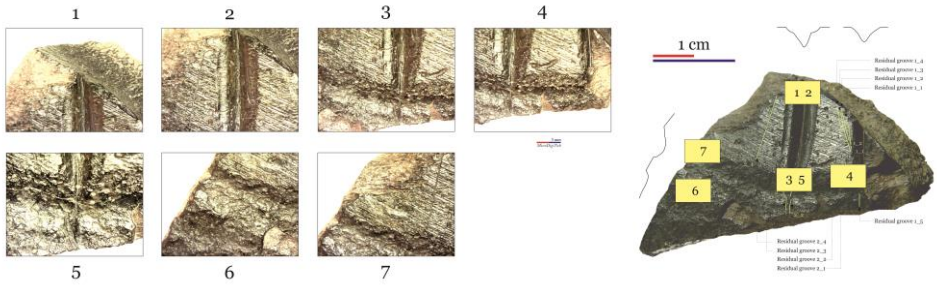

Fig. 4. Şoimeni – "Dâmbul Cetăţii". *Wietenberg* Culture. Decorated red deer antler plate. **1-7** Microscopic details (surfaces, grooves, decoration).

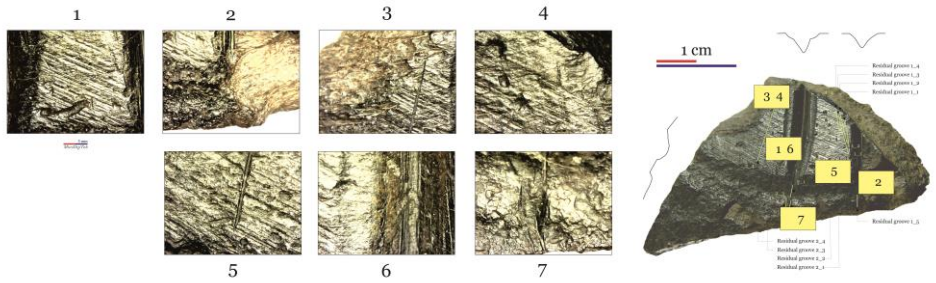

Fig. 5. Şoimeni – "Dâmbul Cetăţii". *Wietenberg* Culture. Decorated red deer antler plate. **1-7** Microscopic details (surfaces, grooves, decoration).

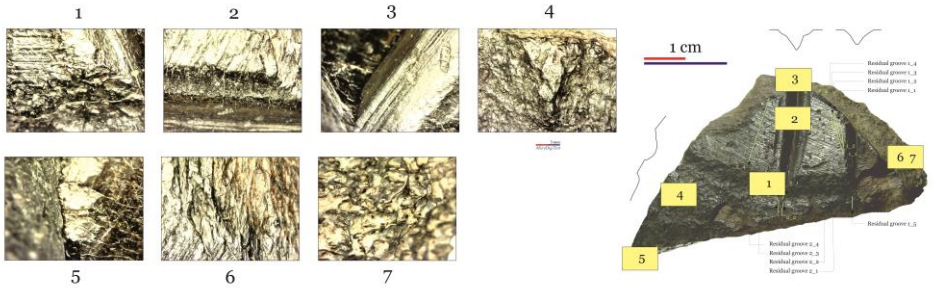

Fig. 6. Şoimeni – "Dâmbul Cetăţii". *Wietenberg* Culture. Decorated red deer antler plate. **1-7** Microscopic details (surfaces, grooves, decoration).

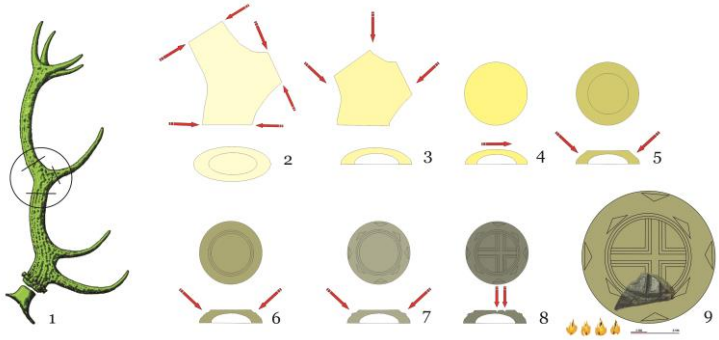

Fig. 7. Şoimeni – "Dâmbul Cetăţii". *Wietenberg* Culture. Decorated red deer antler plate. Manufacturing sequences – hypothetic reconstitution. **1-3** Debitage. **4-6** Shaping. **7-8** Decoration. **9** Intentional heating/burning.

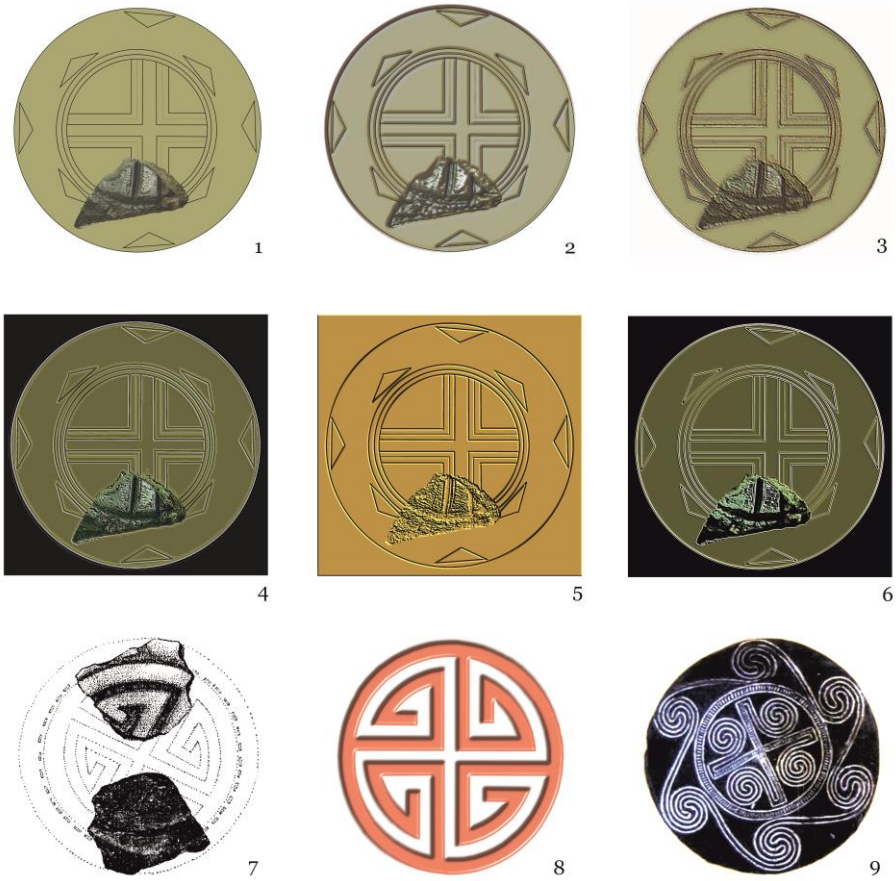

Fig. 8. Şoimeni – "Dâmbul Cetăţii". *Wietenberg* Culture. Decorated red deer antler plate. **1-6** Hypothetic reconstitution. **7-8** Fragment of decorated ceramic bowl and decoration – Reghin-"Pădurea Rotundă", Mureş County. (Moldovan 2009, p. 292, pl. III/1). **9** Decorated ceramic bowl – Sighişoara-"Wietenberg", Mureş County (http://clasate.cimec.ro/detaliu.asp?k=EC0C4794E5974F4BAD4ECC511C1CB42C).