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STUDIA ARCHAEOLOGICA

36

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Tel. 0040–257–281847.

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Layout: Francisc Baja, Florin Mărginean, Victor Sava

ISSN 2392–8786

editura MEGA

Editura Mega | www.edituramega.ro
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Archaeological Materiality of Chess Playing in the Middle Ages. A Few (Possible) Examples from the Current Territory of Romania

Dan Băcueț-Crișan, Aurel-Daniel Stănică, Timea Keresztes

"A găsi pe un șantier arheologic o piesă de șah
înseamnă a deschide portița spre imaginar"
("A chess piece discovered on an archaeological site
opens the door to the imaginary world")
M. Pastoureau

Abstract: Admittedly, from its emergence in Europe until present, the game of chess's history was complex and interesting as it underwent a series of changes in both the formal features of its pieces and the game rules. This study discusses an older find, known in the Romanian archaeological literature since 1984, whose functionality we propose to reinterpret here. It is also known that in the Romanian academic literature, the issue of medieval date games (implicitly of chess) was almost entirely overlooked, therefore one may argue this is uncharted territory. The archaeological excavations conducted on various occasions have yielded varied artefact classes, among which a few pieces (obviously, we strictly refer here to already published items!) exhibit formal characteristics indicative of chess playing. The artefacts discussed here originate from both archaeological excavations and stray finds. Some could not be chronologically interpreted. Stylistic/formal comparisons with exemplars discovered in various European locations and cultural environments underlay the proposition of framing the finds here in the chessmen class. Since their identification was rather difficult, some of the artefacts addressed in this article remain uncertain chess pieces. Nevertheless, this approach may be the start of examining archaeological evidence related to chess practice on the current territory of Romania in medieval times.

Keywords: archaeological materiality, chess playing, the Middle Ages, possible examples, the territory of Romania.

Introduction. Motivation

Admittedly, from its emergence in Europe until present, the game of chess's history was complex and interesting as it underwent a series of changes in both the formal features of its pieces and the game rules. This study discusses an older find, known in the Romanian academic literature since 1984[1], whose functionality we propose to reinterpret below.

The archaeological find of Isaccea/*Noviodunum* and its possible function

The artefact addressed here is made of clay and it was discovered by chance at Isaccea/*Noviodunum*, therefore it has no clear archaeological context. The find was firstly published in 1984 (by Gh. Mănucu-Adamești eanu), the suggested chronological framing being that of the 11th century[2]. Respective find was also mentioned in 2020 (in a theme catalogue), under the head of *Beliefs* and chronologically framed still in the 11th century[3].

Unfortunately, the piece of Isaccea/*Noviodunum* (inv. no. 2073/ICEM Tulcea) survived fragmentarily (Fig. 1–2). The artefact is an anthropomorphic figurine (male) modelled of fine clay, degreased with sand and small pebbles. It was fired in oxidizing atmosphere, the clay colour in the broken parts'

1 Mănucu-Adamești eanu 1984, 247–248, 638/Pl. V (47- 49).
2 Mănucu-Adamești eanu 1984, 247–248, 638/Pl. V (47- 49).
3 Paraschiv-Talmațchi *et al.* 2020, 138, catalogue no. 94.

area being "reddish yellow" (Munsell colour code: 5YR716). The piece (currently weighing 122, 727 g) was covered with olive-green glaze. When published, the artefact was described as representing "..... a male bust with a band in relief on top of the head, slightly notched on the edges, which may be interpreted as halo. Facial features are well marked and seem to be indicative of an Eastern origin: eyebrows are much elongated, while the eyes are slightly tapering towards the ends. The face oval is elongated and ends with a pointed beard. L – 6.8 cm, l – 6.2 cm"[4], the male figure depicting "a saint"[5]. In terms of its functionality, respective item was included in the series of zoomorphic and anthropomorphic depictions applied on certain glazed wares[6], assuming it was "attached to a handle and set beneath a vessel rim"[7]. Said item was mentioned in 2020 as well, in a theme catalogue (under the *Beliefs* head) and chronologically dated still to the 11th century, with the same description as when firstly published[8]. In terms of its description, beside the details specified by the author of the publication, the following must be also added: the figure's head cover is decorated with a simple, wavy line made by incision in the soft fabric, prior firing. Furthermore, the coat that dresses the figure wraps under the beard in a V-shape, its hems being decorated with incised dots set in parallel to the fabric sides. Unfortunately, only a small portion of the upper bust part has survived, the head cover being broken on the back side.

Fig. 1. Isaccea/*Noviodunum*. Pottery figurine (photo G. Dincu, ICEM Tulcea).

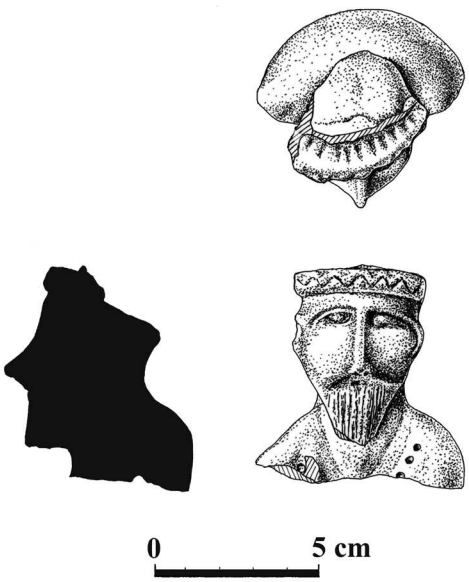

Fig. 2. Isaccea/*Noviodunum*. Pottery figurine (drawing C. Geanbai, ICEM Tulcea).

We believe that the item's stylistic and formal parallels compose a different class of artefacts, namely, that of chess pieces dated to the early medieval period. Arguably, from a formal standpoint,

4 Mănucu-Adameșteanu 1984, 247.
5 Mănucu-Adameșteanu 1984, 247.
6 Mănucu-Adameșteanu 1984, 247–248.
7 Mănucu-Adameșteanu 1984, 247.
8 Paraschiv-Talmațchi *et al.* 2020, 138, catalogue no. 94.

medieval chess pieces discovered in various European locations and cultural settings divide into two large classes: figured pieces (that render male/female figures and animals) and non-figured (geometric/abstract). Given this classification, our focus is directed to chess pieces in the first class, to which belong a series of exceptional finds, very well known in the academic European literature.

First stylistic comparison references the pieces in the Lewis chess set (which in fact contains chess pieces from several chess sets!) discovered in the 19th century, made of whale and walrus teeth[9]. In this case too, pieces depicting the king render bearded enthroned male figures wearing a crown. King sizes vary from 73 mm to 102 mm[10]. It was assumed that this lot of artefacts was made sometime by late 12th century – early 13th century[11].

Fig. 3. The Lewis chessmen pieces (a-i). King variants (after Caldwell *et al.* 2009).

Still to the series of figured chess pieces belongs the ivory piece (?) from Krakow, dated to the first half of the 13th century[12]. Other two chess pieces (kings), rendering still bearded male figures are found in the collections of the Louvre (late 12th century)[13] and the Metropolitan Museum (ca.

[9] Caldwell *et al.* 2009, 168, 187.

[10] Caldwell *et al.* 2009, Fig. 1/a-i.

[11] Caldwell *et al.* 2009, 197; Caldwell, Hall 2018, 102.

[12] Niemiec 2018, 53.

[13] Khamaiko 2018, 151, Fig. 2/1.

1200–1250)[14]. These examples may be completed by the chess piece (king) discovered at Brest in Belarus, dated to the 12th–13th centuries[15].

Fig. 4. Possible reconstruction of the Isaccea/*Noviodunum* figurine form (A) and a few examples of chess pieces with figured features (kings): (B) Lewis (after Khamaiko 2018), (C) the Louvre Museum (after Khamaiko 2018), (D) the Metropolitan Museum (after Khamaiko 2018), (E) Slutsk (after Khamaiko 2018), (F) Brest (after Niemiec 2018).

On the basis of the formal and stylistic characteristics of above artefacts, one may assume that the piece of Isaccea depicts a male figure (layman), whose head in not topped by a halo, but by a crown, of which only its base has survived. Also, with reference still to the mentioned examples, it is most likely that the male figure discovered at Isaccea/*Noviodunum* was enthroned, a part of the figurine that unfortunately did not preserve. All these specificities make us infer that the Isaccea/*Noviodunum* artefact was part of a chess set, the item representing (most likely) a king. Given the dating of the presented stylistic parallels (the 12th–13th centuries), it is not excluded that the piece of Isaccea/*Noviodunum* had belonged to the same chronological framework too, being most likely a copy of the ivory specimens.

Other possible examples discovered on the current territory of Romania

Arguably, in the Romanian archaeological literature, the topic of medieval date toys and games (implicitly, chess as well) was almost entirely overlooked[16], therefore this may be uncharted territory. The archaeological excavations conducted on various occasions yielded varied classes of artefacts, among which also a few pieces (evidently, we refer here strictly to those published!) which, by their formal specificities, could evidence their use in the chess game. These finds shall be discussed below.

From the Benedictine monastery of Frumușeni (Fig. 5) comes an artefact (made of antler) presumed to be a piece from a chess set[17]. Respective piece (whose chronological date remained unspecified) has formal geometric/abstract features, its top being pointed. Most likely, it could be a pawn. The academic literature makes no further mention of a piece identical in shape with that of Frumușeni, however, by its formal specificities it may be framed in the series of chess pieces with geometric/abstract features, like the exemplars discovered at Saint Denis[18] or the Hungarian pieces (dated to the chronological timeframe between late 14th century – second half of the 16th century made of red deer antler[19] or that from Slovakia dated to the 15th–16th centuries made of wood[20].

From Suceava (Fig. 5) was published a bone piece discovered by chance in the St. George's (Mirăuți) church courtyard. Neither chronological nor functional specifications were made in the case of this find as well. The piece has a flat base, is thinned midway, while the upper part is provided with a sphere[21]. It is possible this artefact too was a pawn.

14 Khamaiko 2018, 151, Fig. 2/3.
15 Khamaiko 2018, Fig. 3/6; Niemiec 2018, Fig. 8/C; Medvedeva 2018, Fig. 1/2.
16 A first approach in Rusu, Mărginean 2005, 113–173; other approaches in Rusu 2016, 352–357 and Rusu 2019, 769–775.
17 Rusu 2019, 771, pl. 87/e.
18 Grandet, Goret 2012, 145.
19 Petényi 1994, 52–53.
20 Petényi 1994, 53.
21 Batariuc 2008, 280, Fig. 4/2.

From the Râșnov fortress (Fig. 5) was published a 3.9 cm long bone piece in the "shape of a screw thread", believed recipient head/flask neck, without chronological specifications[22]. Formally/stylistically, respective item resembles very well two of the chess pieces (still in a geometric/abstract shape and made of red deer antler) discovered in Hungary at Nagyvázsony (the 15th–16th centuries)[23] or some identified in Belarus (the 16th–17th centuries)[24].

In the Oradea fortress (Fig. 5) a bone piece (without suggested chronological framing and sized 6 × 2 cm) was interpreted as a possible candlestick head (?)[25], however, its formal features also suggest a possible chess game piece.

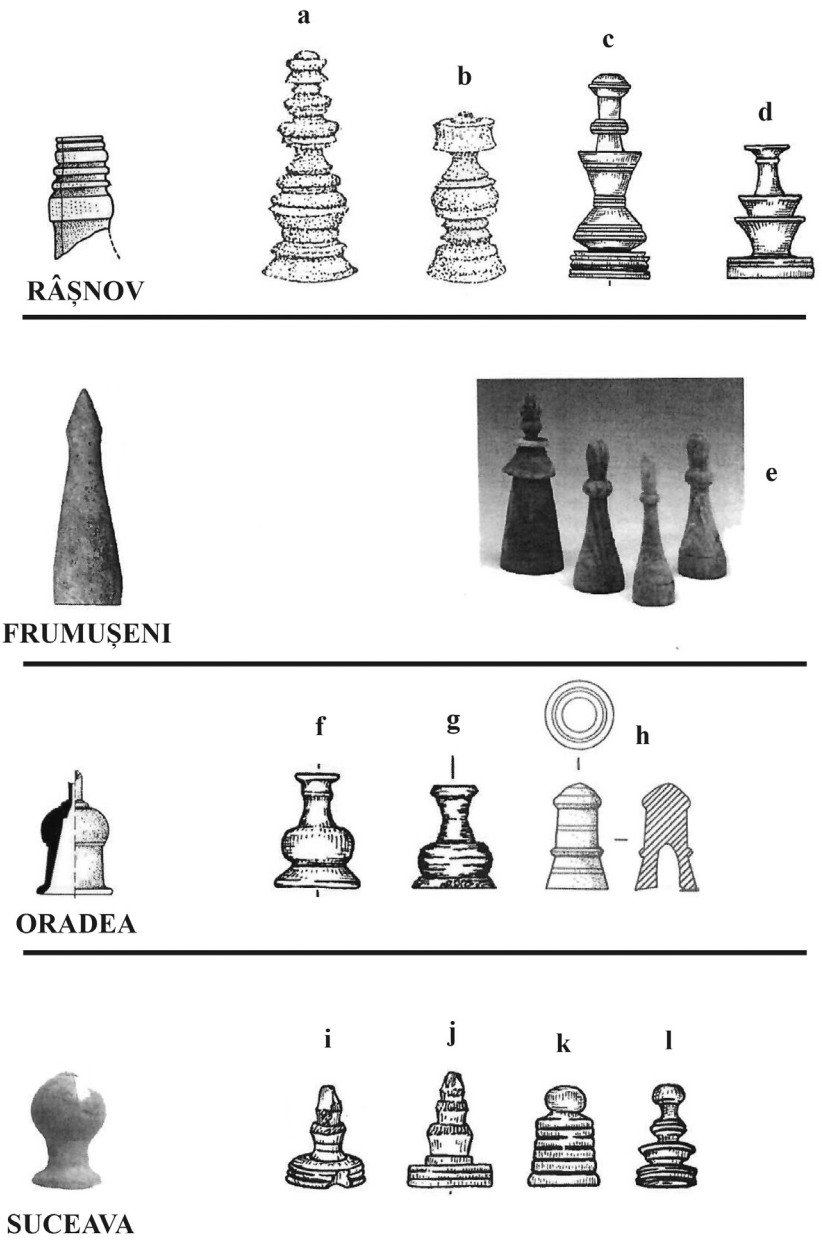

Fig. 5. The artefacts of Râșnov (after Rusu, Mărginean 2005), Frumușeni (after Rusu 2019), Oradea (after Rusu 2002; Rusu, Mărginean 2005) and Suceava (after Batariuc 2008). Examples of chess pieces with geometric/abstract forms: (a-b) Nagyvázsony (after Petényi 1994), (c) Polotsk (after Medvedeva 2018), (d) Drutsk (after Medvedeva 2018), (e) Salzburg (after Rusu 2019), (f) Kopys (after Medvedeva 2018), (g) Minsk (after Medvedeva 2018), (h) Isle-Jourdain (after Grandet, Goret 2012), (i-j) Polotsk (after Medvedeva 2018), (k) Zaslavl (after Medvedeva 2018), (l) Vitebsk (after Medvedeva 2018).

22 Rusu, Mărginean 2005, 129, 151, Pl. XI/98.
23 Petényi 1994, 53, Fig. II/2–3.
24 Medvedeva 2018, Fig. 3/4–5.
25 Rusu 2002, 176, Pl. LXXII/i; Rusu, Mărginean 2005, 137, 151, Pl. XII/105.

An ivory, 10.4 cm tall statuette discovered at Comloșu Mare (Fig. 6) was described as depicting a kneeling/praying male figure (Jesus?) and framed in the class of cult artefacts, without chronological specifications[26]. Interpreting this piece as exhibiting male features is erroneous given the figure's physical features and garments: long hair, beardless and without a moustache, delicate facial features, sleeved dress, which undoubtedly evidence a female figure! This find could be included in the series of figured chess pieces, with possible stylistic parallels at Trondheim, where, in a 12th century grave (from the Saint Olaf church) an ivory (fragmentary) chess piece[27] was discovered.

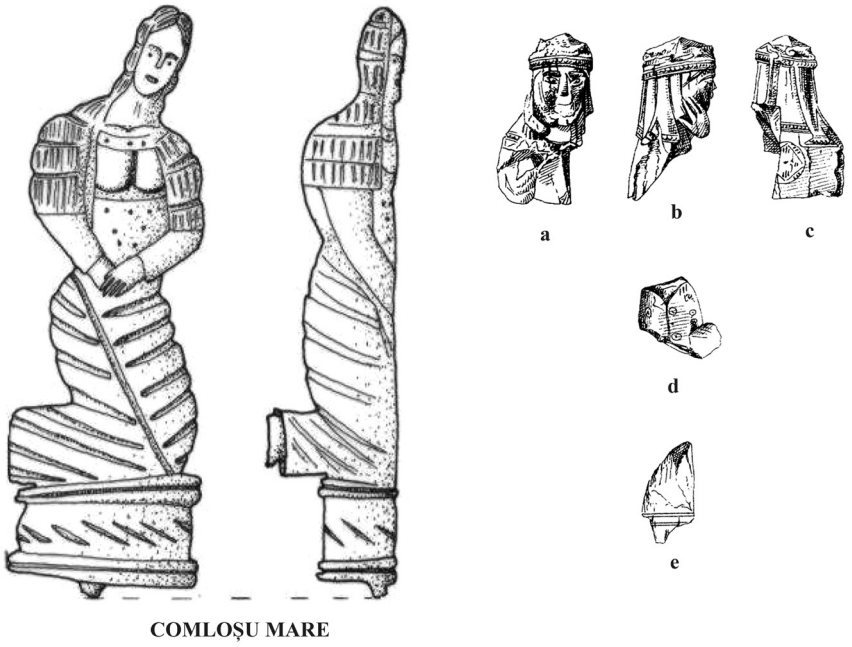

Fig. 6. The statuette of Comloșu Mare (after Rusu, Mărginean 2005) and one example of chess piece (queen, in the class of those figured) from Trondheim, the 12th century (a-e, after McLees, Ekroll 1990).

A few notes on the development of the game of chess in medieval Europe and its materiality in the Romanian archaeological environment

Until the game of chess (whose origins are in India, by all account) reached Europe, it travelled several, long routes. In Western Europe (Spain, Sicily, Italy), the chess game more likely arrived by mid 10th century via the Arabs[28]. In Eastern and Northern Europe, the Vikings diffused chess playing once with the 11th century from the Byzantine Kingdom. Byzantium at its turn, adopted the game from the Islamic world where it had been already practiced for a long time[29]. Therefore, despite their rareness, the presence of a chess piece at Isaccea/*Noviodunum* (during the middle Byzantine period) should not be surprising, since the game was practiced in the Byzantine world[30].

The oldest European mention on the game of chess emerged in a 1008 text[31]. In Europe, during the 11th century, chess pieces were rare, increasing in numbers only in the 13th century[32]. If by its beginnings (in Europe), chess pieces were of both types (figured and geometric/abstract), once with the 13th century geometric/abstract chess pieces were preferred, made not only of bone/antler but also

[26] Rusu, Mărginean 2005, 151, Pl. XII/104.

[27] Originally, the statuette was erroneously interpreted as rendering Virgin Mary with Jesus Christ child. Nonetheless, a recent study revealed strong stylistic similarities with the chess pieces of the Lewis chess set (McLees, Ekroll 1990).

[28] Known as *shatranj* in the Muslim world, game adopted from the Persians, where it was known as *chatranj* (http://history.chess.free.fr/shatranj.htm, site accesed on 11.03.2022).

[29] Pastoureau 2004, 309–310.

[30] Known as *zatrikion* (see https://www.chess.com/blog/introuble2/zatrikion-chess-in-byzantium-eastern-roman-empire#a01, site accesed on 11. 03. 2022).

[31] Pastoureau 2004, 309.

[32] Pastoureau 2004, 331.

in wood[33]. After the use of geometric/abstract chess pieces became general, it was noted that formal features did not change much from the medieval period until the pre-modern age, which evidences a somewhat conservatism[34]. Also, during its early times in Europe, on the chess board there also was a "battle" of colours of the two "armies" (white pieces fought against the red or black pieces), however, from the 13th century onwards, the battle on the game board was given only between white and black[35].

From the medieval period until that modern, the game board underwent (at its turn) several changes, including the establishment of today's two official colours (white and black)[36]. A series of game boards survived in some locations from Europe (like the case of the Krakow collection[37]), while from the territory of medieval Hungary, only a single find is known, a fragment of a 15th century game board from Diósgyőr[38].

Fig. 7. Krakow. Chess board that belonged to Polish king Sigismund III Waza (after Kusina, Kusina 2018).

Beside these material changes (shape/colour), the chess game suffered a series of rule changes, with the goal of increasing the game pace and shortening the time of a game match. The most important changes of the game occurred in the second half of the 15th century, when the first European professional players appeared. In 1497, the first book strictly discussing chess was published (written by Spaniard *Lucena*), the game rules and piece movements being almost identical with today's game[39].

Admittedly, chess was banned by church almost throughout the Middle Ages (*ludus inhonestus et illicitus*)[40], however, this did not hamper its preservation/hoarding within ecclesiastic establishments[41]. The importance of this game (which by its beginnings was accessible only to the elites, later, once it became increasingly popular, it became available to also other social classes and was played by both genders, regardless the age) in the medieval world it is unequivocally proven by the multitude of visual representations: in architecture, heraldry, painting, fabrics, literature/prints etc[42]. Concurrently, chess started to hold an important philosophical meaning, so that by late 13th century – early 14th centuries, it was compared with the social organization of the time[43].

Medieval chess pieces discovered in Europe show that beside their formal diversity there was also a diversity of the material in which these were made: ivory, antler/bone, stone/rock crystal/gems, glass,

33 Pastoureau 2004, 321.
34 Petényi 1994, 54.
35 Pastoureau 2004, 325–328.
36 Pastoureau 2004, 327–328.
37 Kusina, Kusina 2018, 219–227.
38 Petényi 1994, 54.
39 Ștefaniu 1982, 11.
40 Bubczyk 2015, 23–43.
41 Pastoureau 2004, 309, 313–317.
42 On the impact of the chess game on the medieval society see volumes edited by D. E. O'Sullivan in 2012 (*Chess in the middle ages and early modern age. A fundamental thought paradigm of the premodern world*) and A. Classen in 2019 (*Pleasure and leisure in the Middle Ages and early modern age. Cultural-historical perspectives on toys, games and entertainment*).
43 Adams 2000, 6.

Fig. 8. Chess board squares and colours adopted in the chivalry heraldry. Medieval miniature (after Grandet, Goret 2012).

metal, wood[44]. Documentary sources from Western Europe record as early as the 12th century existing specialized artisans (*eschequetier/chessmaker*) in the making of chess piece sets[45]. Nevertheless, despite the significant number of exemplars discovered until present in Europe, such artefacts remain a *rara avis* of the archaeological sites.

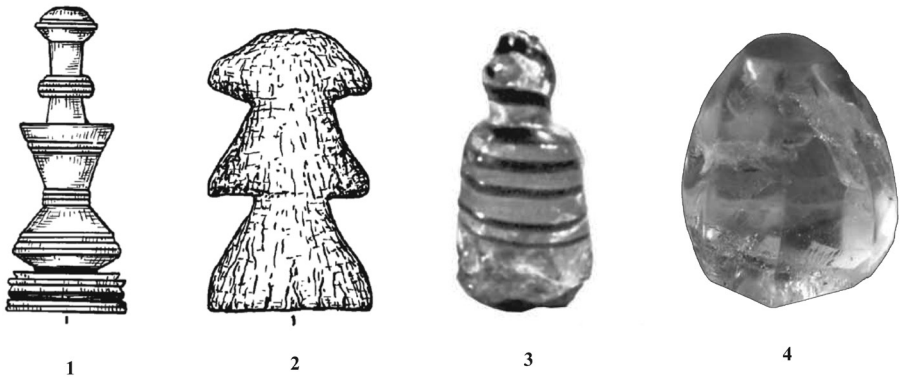

Fig. 9. Examples of chess pieces made of various materials: (1) Polotsk/antler (after Medvedeva 2018), (2) Polotsk/wood (after Medvedeva 2018), (3) Shestovytsia/glass (after Khamaiko 2016), (4) Boves/rock crystal (after Grandet, Goret 2012).

[44] Medieval documentary sources also speak of existing chess pieces made of wax, therefore, the emergence of chess pieces made of glazed clay (designed for certainty to the elites) should not be a surprise!

[45] Stempin 2018, 32.

Such artefacts are further difficult to identify in the archaeological inventories originating from various archaeological excavations, their framing in the class of chess game components being possible only through stylistic/formal parallels or the find of several identical exemplars (in the same site/context), which would be indicative of a set. The fact that many of the discovered exemplars have rather simplified/abstract forms increases the difficulty of understanding their role on the chess board. Still the archaeological facts have shown that some pieces were made of several components that were later assembled/joined. To this adds the possibility that, beside known medieval pieces, other sets of pieces with different stylistic/formal specificities were also produced, which makes the understanding/agreeing of a chess game related function even more difficult.

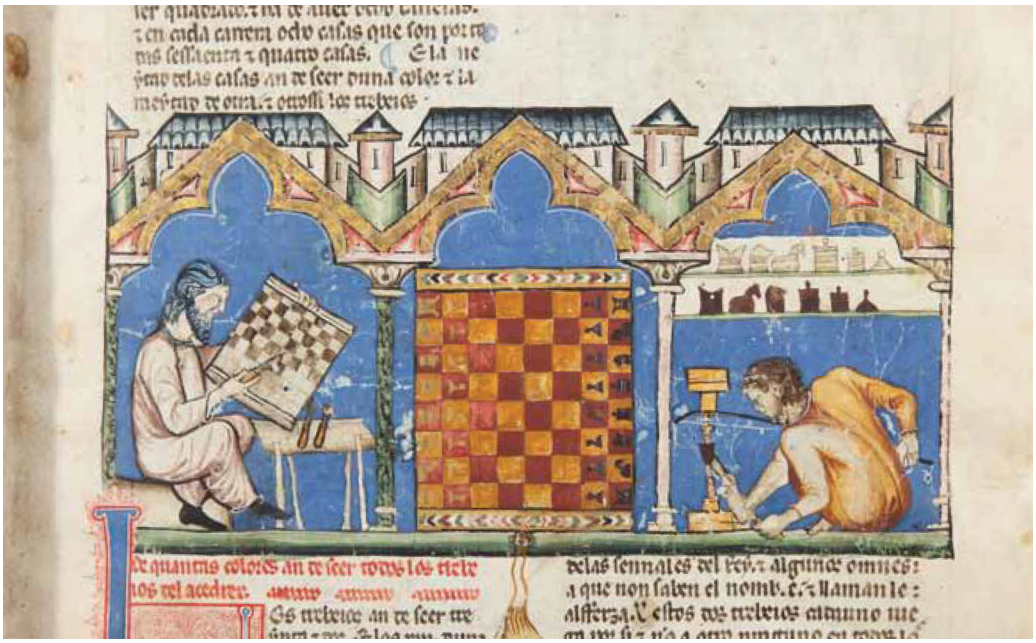

Fig. 10. The making of pieces (right) and chess boards (left). Medieval miniature (after Grandet, Goret 2012).

The artefacts object herein, were yielded by both archaeological excavations and stray finds. They originate from lay (an urban centre and fortresses) and ecclesiastic (a monastery and a church) locations, where the local elites could play this game[46]. In the case of some, no chronological specifications could be made. The stylistic/formal comparisons with exemplars discovered in various locations and cultural environments from Europe underlay the framing proposition of these finds in the class of chess pieces. Given the above listed difficulties, some of the analysed artefacts remain uncertain chess pieces. Nevertheless, this study may represent a starting point for addressing archaeological evidence on chess playing on the current territory of Romania during the medieval period.

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[46] As previously specified, the presence of chess sets in monasteries/churches is firstly due to their hoarding/preservation, while on the other hand, despite bans, even some of the church officials played chess (Pastoureau 2004, 309). In fact, the church banned this game because in its Indian version, the game was played by using dices (with the aid of which pieces and the number of squares on which these could be moved were established), the dice game being deemed (by the church) gambling/diabolical. Over the course of the Middle Ages, the rules of the chess game evolved and dices were discarded, so that the church was no longer so categorical in banning the game (Pastoureau 2004, 313–317).

REFERENCES

Adams 2000 — J. Adams, *Gender, play and power: the literary uses and cultural meanings of medieval chess in the thirteenth and fourteenth centuries*. Chicago 2000.

Batariuc 2008 — V. Paraschiva Batariuc, *Obiecte de os medievale păstrate în colecțiile Muzeului Național al Bucovinei*. ArhMed VII, 2008, 273–290.

Bubczyk 2015 — R. Bubczyk, *"Ludus inhonestus et illicitus?" Chess, games and the church in medieval europe*. In: S. Patterson (Ed.), Games and gaming in medieval literature. New York 2015, 23–43.

Caldwell *et al.* 2009 — D. H. Caldwell, M. A. Hall, C. M. Wilkinson, *The Lewis hoard of gaming pieces: a re-examination of their context, meanings, discovery and manufacture*. Medieval Archaeology 53, 2009, 155–204.

Caldwell, Hall 2018 — D. Caldwell, M. A. Hall, *The hoard of gaming pieces from Lewis, Scotland: the context and meaning*, In: A. Stempin (Ed.), The cultural role of chess in medieval and modern times. 50th anniversary jubilee of the Sandomierz chess discovery. Poznań 2018, 97–108.

Grandet, Goret 2012 — M. Grandet, J-F. Goret, *Échecs et trictrac. Fabrication et usages des jeux de tables au Moyen Âge*. Paris 2012.

Khamaiko 2016 — N. Khamaiko, Кам'яні гральні фігурки з Шестови-цького городищ. Археологии и древней истории Украины 1 (18), 2016, 51–57.

Khamaiko 2018 — N. Khamaiko, *Gaming pieces from recent excavations of the Kyiv Podil*. In: A. Stempin (Ed.), The cultural role of chess in medieval and modern times. 50th anniversary jubilee of the Sandomierz chess discovery. Poznań 2018, 149–156.

Kusina, Kusina 2018 — E. Kusina, J. Kusina, *Chess collections in Krakow's Museums*. In: A. Stempin (Ed.), The cultural role of chess in medieval and modern times. 50th anniversary jubilee of the Sandomierz chess discovery. Poznań 2018, 219–227.

Mănucu-Adameșteanu 1984 — Gh. Mănucu-Adameșteanu, *Descoperiri mărunte de la Isaccea (sec. X-XIV)*. Peuce IX, 1984, 237–254.

McLees, Ekroll 1990 — Ch. McLees, Ø. Ekroll, *A drawing of a medieval ivory chess piese from the 12th–century church of St Olav, Trondheim, Norway*. Medieval Archaeology 34, 1990, 151–154.

Medvedeva 2018 — O. Medvedeva, *The spread of chess in medieval Belarus*. In: A. Stempin (Ed.), The cultural role of chess in medieval and modern times. 50th anniversary jubilee of the Sandomierz chess discovery. Poznań 2018, 113–132.

Niemiec 2018 — D. Niemiec, *Did Conrad of Mazovia play chess on Wawel?*. In: A. Stempin (Ed.), The cultural role of chess in medieval and modern times. 50th anniversary jubilee of the Sandomierz chess discovery. Poznań 2018, 55–65.

Paraschiv-Talmațchi *et al.* 2020 — C. Paraschiv-Talmațchi, A. D. Stănică, C. Șova, G. Custurea, *Mixobarbarii din Dobrogea în contextul lumii bizantine (secolele VI-XIII)*. Cluj-Napoca 2020.

Pastoureau 2004 — M. Pastoureau, *O istorie simbolică a Evului Mediu occidental*. București 2004.

Petényi 1994 — S. Petényi, *Games and toys in medieval and early modern Hungary*. Krems 1994.

Rusu 2002 — A. A. Rusu, *Cetatea Oradea. Monografie arheologică (Vol. I). Zona Palatului Episcopal*. Oradea 2002.

Rusu 2016 — A. A. Rusu, *Jetoanele medievale din ceramică: utilități cu multiple dubii de interpretare*. AB XXIV, 2016, 337–378.

Rusu 2019 — A. A. Rusu, *Castelul și spada. Cultura materială a elitelor din Transilvania în evul mediu târziu*. Cluj-Napoca 2019.

Rusu, Mărginean 2005 — A. A. Rusu, Fl. Mărginean, *Prelucrarea osului și cornului în Transilvania medievală (început de abordare tematică)*. ArhMed V, 2005, 113–173.

Stempin 2018 — A. Stempin, *An archaeology of chess pieces in medieval Poland: problems and posibilities*. In: A. Stempin (Ed.), The cultural role of chess in medieval and modern times. 50th anniversary jubilee of the Sandomierz chess discovery. Poznań 2018, 31–54.

Ștefaniu 1982 — C. Ștefaniu, *Șah. Cartea de aur*. Bucharest 1982.

Abbreviations

AB	Analele Banatului, I-IV 1928–1931; S.N. I 1981-, The Museum of Banat/The National Museum of Banat, Timişoara.
ACTA	Yearbook of the Székely Museum in Csík and the Székely National Museum, Miercurea Ciuc – Sepsiszentgyörgy.
ActaArchHung	Acta Archaeologica Academiae Scentiarum Hungaricae, Budapest.
AÉ	Archaeologiai Értesitö, Budapest.
Acta Historica	Acta Universitatis Szegediensis (Szeged).
ArchHung	Archaeologia Hungarica.
ArhMed	Arheologia Medievală.
AM	Mitteilungen des Kaiserlich Deutschen Archaeologischen Instituts, Athenische Abteilung (Athenische Mitteilungen), Athen, (1876-).
AMM	Acta MoldaviaeMeridionalis (Vaslui).
AMN	Acta Musei Napocensis, The National History Museum of Transylvania, Cluj – Napoca.
AMP	Acta Musei Porolisensis, County History and Art Museum of Zalău.
ArhMold	Arheologia Moldovei, Iași.
BCH	Bulletin de Correspondence Hellénique, Paris, 1 (1877-).
BerRGK	Berichte der Römisch-Germanischen Kommission.Roman-Germanic Commission. Frankfurt am Main.
EphNap	Ephemeris Napocensis, Cluj-Napoca.
CCA	Cronica Cercetărilor Arheologice din România, Ministry of Culture.
CCCA I	M. J. Vermaseren, Corpus cultus Cybelae Attidisque (CCCA), I. Asia Minor, Leiden, New York, København, Köln, 1987.
CIG	Corpus Inscriptionum Graecarum, I-IV, (ed. A. Boeckh), Berlin, 1828–1877.
CIL	Corpus Inscriptionum Latinarum, consilio et auctoritate Academiae litterarum regiae Borussicae editum. (1863-).
Dacia	Dacia. Recherches et découverts archéologiques en Roumanie, S.V. I-XII; N.S. Revue d´archéologie et d´histoire ancienne, I. 1957 şi urm., Vasile Pârvan Institute of Archaeology, Bucharest.
DAGR	Dictionnaire des Antiquités grecques et romaines, I-X, sous la direction de Ch. Daremberg et E. Saglio, Paris, 1877–1929.
DolgSzeged	Dolgozatok a Szegedi Josef Tudomanyegyetem Archaeologiai Interzetbol (I, 1925…XIX, 1943).
IGB V	Inscriptiones Graecae in Bulgaria repertae, (ed. Georgi Mihailov), vol. V: Supplementum, addenda et corrigenda. Sofia, 1997.
IGDOP	Inscriptions grecques dialectales d'Olbia du Pont, (ed. L. Dubois), Genève, 1996.
IGRR IV	Inscriptiones Graecae ad Res Romanas Pertinentes, IV (ed. G. Lafaye), Paris, 1927.
ISM I, II	Inscriptiones Scythiae Minoris – Inscripţiile din Scythia Minor, I: Histria şi împrejurimile (ed. D. M. Pippidi), Bucharest, 1983; II: Tomis şi teritoriul său, (ed. Iorgu Stoian), Bucharest, 1987.
LIMC	Lexicon Iconographicum Mythologiae Classicae, I–VIII + index vol., (eds. J. Ch. Balty, E. Berger, J. Boardman, Ph. Bruneau, F. Canciani, L. Kahil, V. Lambrinoudakis, E. Simon), Zürich, München, Düsseldorf, 1981–1999.
LSJ	Liddell H. G., Scott R., Jones H. S., A Greek-English Lexicon, with a revised supplement. Oxford, 1996.
MAA	Monumenta Avarorum Archaeologica.
OM	*Orbis Mediaevalis*.
PBF	Prähistorische Bronzefunde, München.

RA	Revue Archéologique, Paris (1844-).
RAC	Rivista di archeologia cristiana, Rome (1924-).
RevBistr	Revista Bistritei, Bistrița-Năsăud Museum Complex, Bistrița.
RH	Revue historique, Paris, (1876-).
RIG	Recueil d'inscriptions grecques, par Ch. Michel, Bruxelles, 1900.
Sargetia	Sargetia. Acta Musei Devensis, Deva.
SCIV(A)	Studii şi Cercetări de Istorie Veche, tom 1–25, Bucharest, 1950–1974; începând din 1974 (tom 25): Studii şi Cercetări de Istorie Veche şi Arheologie, Bucharest.
SCN	Studii *şi* Cercetări de Numismatică, Bucharest.
SEG	Supplementum epigraphicum graecum, Lugdunum Batavorum, Leiden, 1923–1971; Alphen aan den Rijn 1979–1980; Amsterdam, 1979–2005; Boston, 2006-.
StCl	Studii Clasice, Bucharest.
Syll^3	Sylloge inscriptionum Graecarum, (3rd edition), (ed. W. Dittenberger), 1915–1924.
Terra Sebus	Terra Sebus, Sebeș.
ThesCRA	Thesaurus Cultus et Rituum Antiquorum, I–V + index vol., (eds. J. Ch. Balty, J. Boardman, Ph. Bruneau, R. G. A. Buxton, G. Camporeale, F. Canciani, F. Graf, T. Hölscher, V. Lambrinoudakis, E. Simon), Basel, Los Angeles, (2004–2006).
UPA	Uiversitätsforchungen zur Prähistorischen Archäologie, Institut für Ur-und Frühgeschichte der Universität Kiel.
ZSA	Ziridava. Studia Archaeologica, Arad Museum, Cluj-Napoca.