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LUXURY BOARD GAMES FOR THE NORTHERN GREEK ELITE

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ABSTRACT

Board games were played in ancient Greece since at least the Bronze Age. Written sources distinguish between two main types of board games, πεττεία (games with counters only) and κυβεία (games with dice, that can also be played with counters). Their archaeological traces are found in various places, such as engraved on the marble floors and benches of sanctuaries, or on theater seats. In funerary contexts, sets of counters were most likely accompanied by wooden boards that usually did not survive. This paper discusses the finds from northern Greece (boards, dice, and counters) that attest to the prac-

natory use.

tice of gaming from the archaic period onwards and throw light on its social and religious dimension. The luxury versions of gaming sets with glass counters are exclusively found in graves of the male elite. In some contexts, such as the tomb of the high priest and doctor in Derveni grave B (4th century BCE), ludic material belongs to high status as well as imply a possible divi-

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Les jeux de pions sont attestés en Grèce ancienne depuis l'âge du Bronze. Les sources écrites distinguent deux principaux types de jeux, πεττεία, les jeux de pions, et κυβεία, les jeux de dés qui peuvent aussi utiliser des pions. Leurs traces archéologiques proviennent de différents contextes. Des plateaux de jeux sont ainsi gravés dans le sol en marbre et sur les bancs des sanctuaires ou les sièges de théâtre. En contexte funéraire, les pions ou jetons étaient probablement associés à des plateaux en bois qui n'ont pas été conservés. Cet article présente les trouvailles de Grèce du Nord (plateaux, dés et jetons) qui témoignent de pratiques ludiques dès l'époque archaïque. Les versions luxueuses de

ce matériel, avec des jetons en verre, proviennent exclusivement de tombes masculines de l'élite. Dans certains contextes, comme pour le prêtre et médecin de la tombe B de Derveni (IVe s. av. J.-C.), le matériel ludique témoigne non seulement d'un statut social élevé, mais peutêtre aussi d'un usage à des fins divinatoires.

Mots-clés

Jeu de plateau, dé, divination, élite, jeu des cinq lignes, jetons en verre, guérisseur, Macédoine, jeu de *polis*,

KEYWORDS Board game

Board game, die, divination, elite, game of five lines, glass counters, healer, Macedonia, polis game, Thrace.

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GAMES IN GREEK ANTIQUITY

Many ancient Greek written sources refer to board games. [1] Their invention was usually attributed to the mythical hero Palamedes, [2] or to the Egyptian god Thoth, alongside geometry and astronomy. [3] The earliest archaeological finds in Greece date to the Bronze Age. A luxury inlayed board of the middle to late Minoan period was found in the palace of Knossos with conoid counters. [4] Stone spheres, 35-45 mm in diameter, found inside and outside the houses in Akrotiri (Thera) may also be identified as counters. [5] On Cyprus, stone slabs with hollows in a circle or in three rows of ten, intended for pebbles or seeds used as counters, have been associated with the Egyptian games Mehen and Senet. [6]

Gaming could take place in different spaces, as evidenced by boards of uncertain date incised on marble floors, benches, and tables in sanctuaries and theaters. [7] Most likely people of all social classes also enjoyed playing with pebbles on a board simply scratched on the ground.

In antiquity an important distinction seems to be based on the use, or not, of dice that introduces a chance factor in the game. Two main types of board games can be differentiated, $\pi \epsilon \pi \epsilon \epsilon \alpha$, games with counters only, and $\kappa \iota \beta \epsilon \epsilon \alpha$, games with dice, that can also be played with counters. [8]

[1] The author presents here her research on board games in Macedonia, and Thrace, areas which have yielded several relevant finds from the extensively excavated Classical and Hellenistic cemeteries. During those periods, comparable finds from other mainland Greek areas seem to be limited; perhaps due to different burial customs and religious beliefs. On ancient board games, see LAMER 1927; SCHÄDLER 2012; KOUKOULES 1948: A 1, 185-219, pl. B-C; on Minoan games, HILLBOM 2005 (non vidi).

- [2] E.g. Sophocles, Fr. 479; LASER 1987: T124, nº 623-624.
- [3] Plato, Republic, 333b and 487b; Phaedrus, 274d.
- [4] KARETSOU 2000: 149-151, cat. 127 (M. Panagiotaki); ten similar conoid counters were found together in the Bronze Age settlement of Akrotiri, Thera; MICHAILIDOU 2006: 248, fig. 14.

GAMES IN CLASSICAL AND HELLENISTIC MACEDONIA AND THRACE

Many finds in northern Greece (boards, dice, and counters) attest to the widespread practice of boardgames from the archaic period onwards. The type of game, however, is usually very difficult to identify.

PETTEIA GAMES

Πεττεία games require the use of board and counters and comprise διαγραμμισμός or γραμμαί (lines), according to Hesychius, [9] and πόλεις (cities), according to Pollux. [10] The details of διαγραμμισμός remain obscure. Πόλις or πόλεις was played on a board with grid (πλινθίον... χώρας ἐν γραμμαῖς ἔχον διακειμένας·) with many counters of two colors (διῃρημένων δὲ εἰς δύο τῶν ψήφων κατὰ τὰς χρόας), each called dog (κύων).

The evidence for such games in northern Greece is scarce. Only three identified boards, still unpublished, come from non-burial finds. Two are of the grid type. The first one is a grid with numerals (n° 1) which was found in an archaic or classical context in ancient Fagres. The second is a turquoise faience plaque with a plain grid of 11x11 squares, from Pella (n° 2); it is exhibited with twelve glass counters that may or may not belong together. An approximately similar board (11×12 squares) is incised on a marble block

- [5] TZACHILI 1987: 144.
- [6] SWINY 1980.
- [7] On boards carved in the sanctuaries of Epidaurus, Oropus, Delos, and Didyma, see WIDURA 2015; see also her article in this volume: KENDRICK PRITCHETT 1968; HÖCKMANN 1996. For DAVIDSON 1952: 218, finds in theatrical venues suggest that the audience could play during intervals, or before the beginning of the performances. However, the boardgames found on the seats may have been carved in different circumstances, or in later periods.
- [8] KOKOLAKIS 1965: 109-115.
- [9] AUSTIN 1940: 266-267.
- [10] Pollux, Onomasticon IX, 97-98.

in the Hera sanctuary, Samos. [11] Boards of this type with n:n or n:n+1 grids are usually associated with the game of πόλις or πόλεις which was played on a board with a grid with many counters of two colors, each counter being called "dog" (κύων). [12] It seems to have developed into the Roman Ludus latrunculorum. [13] The third example is a marble gaming table from Abdera with engraved boards; the incised grid is 3 x 5 squares (n° 22; fig. 1). To those we can possibly add the burial board from Derveni (no 8), of which only the iron corners survive without any indication of its surface. It was found with counters in three colours but without dice, although it is possible that the latter were simply not collected. A later, Roman find, unearthed in the Agora of Thessaloniki is a brick incised on both sides with the board of the game known today as Nine Men's Morris. [14]

KUBEIA GAMES

Kuβεία games require the use of dice, either alone or with board and counters, and comprise the practice of "casting the dice" and the board game of *five lines* (πέντε γραμμαί).

DICE

The early Greek word for a die (κύβος) is the word κίνδυνος, which later acquired the meaning "danger". The same applies to the Latin *Alea* and to the byzantine κόττος. [15] The act of casting a die (κύβον ἀναρρίπτειν [16]) is originally termed κύβον ἀναρρίπτειν, a risky and dangerous act. In modern Greek this ancient word means danger and the word for a die (ζάρι) is a medieval version of the term for a chunk of wood (ὄζος, ὀζάριον).

Since the 4th century BCE, a special cup was used for casting the dice, whether in the course of a board game, or not. The Greek names for the cup were the (wicker) $\kappa \dot{\eta} \theta iov$, or the $\phi i \mu \dot{o} \zeta$, or $\sigma \dot{\kappa} \dot{\rho} \alpha \phi \dot{o} \zeta$, or $\mu \dot{o} \delta io \dot{o} \zeta$; the Roman ones, when it also took the shape of more complex constructions, were called *fimus*, *fritillus*, *turricula* or $\pi \dot{\nu} \dot{\rho} \dot{\rho} \dot{o} \zeta / \pi \dot{\rho} \dot{\rho} \dot{\rho} \dot{o} \zeta$ (the tower). [17]



Figure 1:
Abdera, Thrace. Marble gaming table with *five lines* and poleis boards. After IGNATIADOU 2013: pl. 36.

REGULAR DICE

Extant pre-Hellenistic dice are very rare. [18] The 7th century BCE clay die with spots from a tomb in Anagyrous (Vari, Attica) has also a painted decoration; the find was unearthed together with a clay gaming table. [19] A similar clay die of the first half of the 6th century BCE was found in the Kerameikos. [20]

In burial contexts in Macedonia and Thrace the surviving dice associated with counters (nos 11, 13, 14, 15, 17, 20, 21) are always of the regular type **(fig. 2)**: cubic or rectangular with marks from 1 to 6; the sum of the opposite sides is always 7. They are made of bone, with rounded edges and corners; the sides measure

[11] SCHÄDLER 2013: 64.

[12] Pollux, Onomasticon IX, 97-98; SCHÄDLER 2002.

[13] SCHÄDLER 1994; SCHÄDLER 2007: 361.

[14] MTH 9878; IGNATIADOU 1996: 516, fig. 9.

[**15**] On κόττος see Koukoules 1948: 204.

[16] Aeschines, Against Timarchus, I, 59.

[17] For the Greco-Roman antiquity, see WARRE CORNISH 1898: 326, fig. 592. For the Byzantine period, see KOUKOULES 1948: 203 and 217, pl. C2 a. For the Latin names, see HILGERS 1969 (fritillus, phimus, pyrgus).

[18] On early dice, see Karusu 1973; Schädler 1999.

[19] They were found in the pyre of tombs 2 and 3 (675-650 BCE); KALLIPOLITIS 1963: 124, pl. 55.

[20] KÜBLER 1970: 514, nº 132 (inv. 47), pl. 102.

8 to 20 mm. The spots are circular hollows about 1-2 mm in diameter. The 3 and 4 marks are always placed on the smaller sides, which are more difficult to cast, and thus more rewarding. [21] Each gaming set usually includes three dice, [22], but there are also sets with fewer dice, and one with five dice (n° 20). The dice have features indicating a local production with special characteristics such as the rounded edges and corners, [23] the oblong shape [24] and the plain dot marks. [25] The only exception is the set of three cubic dice from Kitros-Alykes, marked with dots inside circles (fig. 3; grave 80, n° 10). Most of them indicate the production of a workshop in central Macedonia, perhaps in the milieu of a rich local tradition of bone and ivory carving during the Late Classical Period.



▲ Figure 2: Sevaste, Pieria. Gaming set with glass counters and rectangular dice with dots. After Ignatiabou 2013: pl. 35.

➤ Figure 3: Kitros-Alykes (ancient *Pydna*). Gaming set with glass counters and cubic dice with dots inside circles. After Ignatiadou 2013: pl. 34.

[21] This view was expressed by Davidson for similar dice from Roman Corinth: DAVIDSON 1952: 218.

[22] Three dice are mentioned in the sources as τρίς $\xi\xi$, the favourable combination Aeschylus, *Agamemnon*, 33.

[23] Also known from: 1) The stone die of Lindos, with rounded edges 20 mm. However, it is a chance find (perhaps from the acropolis) and its dating is uncertain; BLINKENBERG 1931: 157 cat. 475, 2) The bone die from Athens: PARLAMA & STAMPOLIDIS 2000: 230, cat. 203.

[24] Oblong dice have been found in Italy but those are not rounded.

[25] Unlike the Etruscan ones with dot in circle. See the article in this volume of Ulrich Schädler.

IRREGULAR DICE / CASTING THE DICE

In "casting the dice", points are achieved by throwing the dice. Any kind of dice could probably be used, but it is also possible that unusual irregular dice were intended for this use. Irregular dice are either rectangular with more than six marks or with special marks, or non-rectangular dice. Those are rarely associated with sets of counters.

A luxury irregular die was retrieved from an archaic male burial in the cemetery of Sindos. It was fabricated from a wooden die covered with gold sheet, which survives now. The sheet was punched with 8x7 or 7x6 marks in an x-shaped arrangement on each side. [26] Two irregular clay dice were found in Methone, in Pieria, in a public building complex. They have nine, instead of six marks. [27]

Rhomboid dice of the late 4th-early 3rd century BCE are very rare. They are made of bone with regular marks but with sharp edges and corners. The sides thus differ in size and have acute and obtuse angles. One such die was found without counters in Aiginion, Pieria (n° 4) (fig. 4). Two more were found in Koukkos, Pieria, along with the usual set of three regular dice (n° 11). It is possible that the rhomboid dice were meant to be singly cast. "Casting the dice" was an act sharing aspects of both gambling and divination, as suggested by the rhomboid die found among thousands of knucklebones in the Korykeion Cave. [28]

[26] MTH 8018. Grave 25 (c. 540 BCE); DESPINI et al. 1985: 126, cat. 196; of the same type are two dice of the Classical period from Corinth, with 9 marks instead of 6 and irregular semantic sequence, see DAVIDSON 1952: cat. 1737 (inv. 1504) and 1738 (inv. 1540).

[27] Pers. comm. with the excavator M. Bessios.

[28] JACQUEMIN 1984: 170, n° 13 (inv. MD 8662); in the Korykeion Cave were also found four clay regular dice; one of them additionally marked with numerals A to F, the D corresponding to the 6 marks and the F to the 4 marks; JACQUEMIN 1984: 170-171, n° 14 and 16-19 (n° AC 2529, AC 2527, AC 2528, AC 2530); on the Roman rhomboid die was found in Boscoreale, see DRAKE BOEHM & BARDIÈS-FRONTY & DUNN-VATURI 2012: 98, n° 80.



Figure 4: Aiginion, Pieria. Rhomboid die. After Ignatiadou 2013: fig. 187.2.

Knucklebones could also be used as dice. Each of their four sides had a special name [29] and corresponded to one side of a regular die, excluding 2 and 5. The knucklebones' gambling game was usually played with four pieces and the optimum throw (usually called Aphrodite/Venus) required that every item was showing a different side.

COUNTERS / GLASS COUNTERS

The earliest reference to counters is in Homer. In the Odyssey, the suitors of Penelope "were taking pleasure at playing with counters / playing board games in front of the doors". [30]

A luxury set of crystal counters was found in Treasure L of Troy. The 41 plano-convex counters (24-25 mm across and 7.5-8.5 mm high) are sometimes interpreted as lenses or inlays and are dated from 2500 to 2250 BCE. [31] Similar objects come from Crete; dozens in Knossos and the neighbouring cemetery, and two at the Idaion Cave. [32] Several sets of counters were placed in 4th century BCE burials in Macedonia and Thrace (appendix B). Most are formed by luxury glass counters and/or pebbles or shells. They are often associated with one to three bone dice. In one case the board was found with the counters (n° 8).

[29] SCHÄDLER 1996.

[30] Homer, *Odyssey,* 1.107: πεσσοῖσι προπάροιθε θυράων θυμόν ἔτερπον.

[31] TOLSTIKOW & TREJSTER1996: 153-176, 223-225.

[32] SINES & SAKELLARAKIS 1987; BECK 1928.

[33] For a short list of Italian finds, see IGNATIADOU 2013: 227-228; DUGGAN 2015; see also the article in this volume of Ulrich Schädler.

[34] LIERKE 1999: 22-23, figs 34-36; LIERKE 2001: 181, figs 1-4.

The glass counters are circular plano-convex objects measuring 10-18 mm in diameter and 5-8 mm high. Sets include usually two or three colours (figs. 2-3). The counters frequently have the natural pale greenish tint of colourless glass but were also made in a variety of colours to be used by multiple players: blue, green, bluish green / greenish blue, olive-green, amber/brown (fig. 5). Unlike the earlier Etruscan counters, which are decorated with eyes and spirals, [33] the northern Greek ones are undecorated.

The counters were made by firing chunks or crushed glass, on a flat plaster surface. The circular shape was achieved without tooling and is merely due to the surface tension of the viscous glass. [34] A find in Rhodes confirms the use of the technique. There, among the waste of a Hellenistic glass workshop were found reject counters showing that the glass was fired on trays in rows in such close order that some counters were accidentally joined to an elongated mass with two "peaks". This simple technique produces counters with irregular circular shape and a natural, non-polished surface. Variations in size are of no importance for the conduct of the game, thus they show absence of intent to control the amount of glass to be fired. Variations in the same colour seem to be equally unimportant. The main colours, however, correspond to those of other contemporary glass articles. It is therefore probable that counters were made from leftovers; colourless counters were made from leftovers from the manufacture of colourless inlays and vessels, and coloured counters from leftovers from the manufacture of coloured vessels and beads.

Figure 5: Olynthus. Glass counters.

After Ignatiadou 2010: cat. 430.





The only four Macedonian counters of a different shape are conical (n° 13; fig. 6.1-2) and the only blue one among them has at its base a ring which looks like an overflow; as if a mould had been used. The different shape cannot be explained and perhaps this is an attempt to create counters of special value.

The counters differ from the colourless glass eyes, which were inlayed in wooden furniture. Those were made of excellent quality clear glass and in moulds that created a perfect round shape with bevelled edges. In some cases, eyes were used to substitute counters in game sets (nos 13, 15) and vice versa. [35] Quite

[35] IGNATIADOU 2013: 304, MI 41, fig. 219.2.

[36] Ibid.: chapters Inlays and Seals respectively.

[37] This was not understood when I wrote my old paper on the counters (IGNATIADOU 1996), which therefore has an erroneous title. In the last few decades it became clear to the researchers in Macedonia that the expensive Early Hellenistic burials of the late 4th century BCE are remnants of the luxurious Late Classical life of their owners; see IGNATIADOU 2012a: 223-225.

often the counters are interpreted as inlays for use in jewellery, but the glass gems of the classical period are always flat rounded ovals with bevelled edges, to facilitate setting, and are of exceptionally fine quality, made in a mould. [36]

Most gaming sets come from the vicinity of Pydna, in Pieria where they were probably made. The rounded dice accompanying the sets were probably also made in Pydna as they have not been found elsewhere. The sets are mainly found in burials of the middle and the second half of the 4th century BCE. The only set (with counters and dice) that was found in a burial dating to before the middle of the century has pebbles instead of glass counters. However, this first Greek production of glass counters must not be regarded as Hellenistic. [37] The sets were produced and used mainly during the Late Classical period and were interred immediately after that, at the death of their owners.

It is very difficult to match the sets of counters to particular games. The number of the pieces rarely matches that supplied by the sources and the variety of colours poses problems, too. [38] Sets with three colours led earlier researchers to conclude the presence of a third player. It is more probable that the sets were compiled as multi-sets, addressed to the requirements of various games, according to the suggestion of Ulrich Schädler. [39]

Isolated glass counters of the Late Classical or Early Hellenistic periods in Macedonia are not known. Later those were probably carried by their owners for simple games played with a small number of counters and without dice (appendix D). The only Roman set in Macedonia, from the early 2nd century CE, was found in a tomb in Philippi. It comprises one large dark counter, 16 smaller ones and three mosaic glass and some bone counters. [40]

BOARDS / FIVE LINES BOARDS

The *five lines* board game is attested in northern Greece with certainty by tile boards retrieved from elite male burials, from a banquet room and from a cultic context.

The name Πέντε γραμμαί (*five lines*) is based on Pollux **[41]**. Two players move each five counters (ψῆφοι, πεσσοί) on a board (πίναξ, ἄβαξ) with five lines. The loser reaches last the central one, called "sacred" (ἰερά). The number of lines does not appear to be strictly limited to five, although this is usually the norm.

The earlier Greek find of *five lines* is that of the 7th/ 6th century BCE from Anagyrous in Attica. It is a small clay gaming table, the horizontal surface of which is decorated with four figurines of mourning women. The same surface carries five parallel, straight grooves ending in small hollows, thus supplying an early form of the game with 2+1+2 lines. Counters were not found but a clay die was unearthed. **[42]** A later 6th-century BCE



Figure 7. Stageira. Marble slab with incised *five lines* board. After Ignatiadou 2013: fig.183.

clay gaming table from Athens, now in Copenhagen, shows 4+1+4 lines with ovoid counters at their extremities, and dice. Two survive, stuck on the surface. The possible trace of a third one is preserved in the centre. The surviving dice indicate the throw of six. [43]

On the extant stone gaming tables, most preserve 5+1+5 lines. [44] The largest and best preserved ones were unearthed in Epidaurus. [45] A fragmentary slab of a marble gaming table was also found in Stageira, the birth place of Aristotle (n° 24; fig. 7). A well-preserved example of a marble gaming table was also found in Abdera, Thrace (n° 22; fig. 1).

Several depictions of the board survive. A series of over 160 Attic archaic vases ranging from ca 540-500 BCE depict Ajax and Achilles playing on a gaming table. [46] On a kyathos in Brussels the board is seen from above, revealing five parallel lines and the ten counters. [47] A lekythos with the same subject has been found in Aiane in upper Macedonia. [48] Similar examples come from Etruria, [49] such as an Etruscan

[38] On similar difficulties with Etruscan and Roman finds, see also the articles in this volume of Yves Manniez, Ulrich Schädler, and Anne Widura.

[39] SCHÄDLER 2007: 368: "With so many game-boards being scratched into the pavements of public places, it is obvious that anyone wanting to play had to bring his own dice and counters, which had to be sufficient in number to play different games. With three counters one could play three men's morris, with fifteen a game of *Duodecim scripta* was possible and seventeen counters, for example, made sure that there were still enough in case a counter got lost, or stuck between two slabs of the pavement".

[40] D 1447. Krenides, Eastern cemetery of Philippi, V. Lazarides property, grave 80. Archaeological Museum of Philippi; IGNATIADOU 2010: cat. 485 (M. Nikolaidou-Patera, K. Amoiridou).

[41] Pollux, Onomasticon, IX, 97-98; Schädler 1999; Schädler 2009.

[42] KALLIPOLITIS 1963: 123-124, pl. 53-55.

[43] BREITENSTEIN 1941: cat. 171; SCHÄDLER 1999; SCHÄDLER 2009: 180, fig. 5 interpreted the trace of the middle die as the position of a figurine.

[44] KENDRICK PRITCHETT 1968.

[45] BLINKENBERG 1898.

[46] PFISTERER-HAAS 2004; DASEN 2015.

[47] SCHÄDLER 2009: 176-177, fig. 2.

[48] Exhibited in the Archaeological Museum of Aiane.

[49] On depictions in Etruscan tombs, see the board suspended in the Tomb of the Reliefs in Cerveteri (the lines are 5+1+5); from the same nail a small leather pouch supposedly contains the counters and dice; BLANCK & PROIETTI 1986: 25-28, pl. II, Vb, XVI; see also the article in this volume of Ulrich Schädler. A similar pouch is held by a boy depicted with his mother on a 5th century funerary stele from Pydna; see KOSTOGLOU-DESPINI, 1988: 181-183.

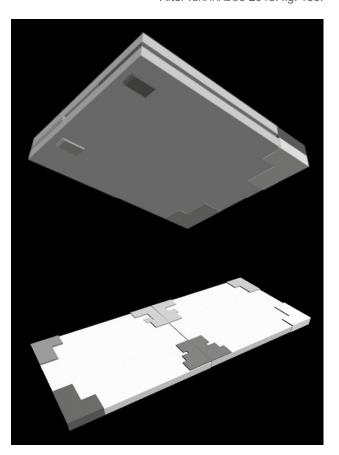
mirror with the two heroes supporting on their knees a portable board with seven lines. [50]

Remains of a folding board were found in Derveni grave B, the very rich grave containing the Derveni Krater (nº 8; fig. 8.1). [51] The board was originally made of wood reinforced at the corners with iron plates. It had been placed in the tomb folded, and the iron corners were stuck together by corrosion faceto-face. Additionally some of those iron parts seem to have served as folding legs and the two parts of the board were connected by means of bronze hinges. The reconstruction that was drawn when the find was first published [52] is now replaced by an attractive digital reconstruction (fig. 8.1). The surviving sections were digitized using CAD software; restoring to full length the broken and corroded iron nails and also adding nails at places where traces of missing nails were detected by the transformation reflectance imaging technique (RTI). The thickness of the non-surviving wooden plank was restored according to the length of the nails. Subsequently, the iron parts were placed in different positions, creating a number of possible digital representations. The double corner counters were hypothetically placed on the outer corners and the single ones at the inner corners, and vice versa. Additionally, the curved iron elements, which were identified as possible movable legs, were hypothetically placed in various positions in an attempt to illustrate their operation. [53]

The type of board may have been the *five lines* because roof tiles with that game are found in contemporary sites, burials, sanctuaries and settlements. Near Pydna, a few roof tiles thus preserve five incised lines that run parallel but are not very carefully done. The characteristic triangles between the lines, which are explicitly seen on stone gaming tables, appear also here. The most complete example is a Corinthian-type (flat) tile (nº 23; fig. 9). It was found in a residential area of the first half of the 4th century BCE, in a room identified as an andron with a plain mosaic and a continuous wooden bench in place of banqueting couches. It is important as it allows to suggest that the game was being played in Macedonia from as early as the first half of the 4th century BCE during banquets, on makeshift tileboards and possibly with pebbles in place of counters. [54] A Laconian-type (i.e. curved) tile, incised with the outline of five lines, was retrieved in the main room of the sanctuary (no 25) just across the border of Macedonia to Thessaly, at the Tembi pass. A few incomplete Laconian-type tiles were also found in the same region, some in burials (e.g. nos 12 and 16; fig. 10).



▲ Figure 8. Derveni, grave B. 8.1. Glass counters and iron reinforcements of folding board. After Ignatiadou 2013: fig. 175.5.
 ▼ 8.1. Digital reconstruction by E. Kotoula. After Ignatiadou 2013: fig. 185.



[50] BLANCK & PROIETTI 1986: 27, fig. 17, with bibliography; GERHARD 1843: no 109; SCHÄDLER 2009: 177-179, figs. 3a and 3b.

[51] On folding boards, see also KOUKOULES 1948: 202, note 1.

[52] IGNATIADOU 1996: 513, figs. 10-12, drawings 1-3. **[53]** KOTOULA *et al.* 2011; KOTOULA & IGNATIADOU 2018.

[54] Bessios & Athanassiadou 2001: 365.



◄ Figure 9. Makrygialos (ancient Pydna). Corinthian-type roof tile with incised five lines board. After Ignatiadou 2013: pl. 38.

▼ Figure 10. Makrygialos (ancient *Pydna*). Laconian-type roof tile with incised *five lines* board. After IgnaTiaDou 2013: pl. 37.



THE PLAYERS

The luxury versions of gaming sets from Macedonia have been exclusively found in male graves of the elite. Most of the men were accompanied to the grave by their weapons and armour that ascribe them to the elite class of the ἐταῖροι, "royal companions". Thus the pictorial and textual evidence agrees with excavation data indicating that board games were an exclusively male pastime. Additionally, the recent identification of the deceased in Derveni grave B (n° 8) with a high priest and doctor [55] revealed an unexpected link between that burial and the Stanway druid and surgeon's burial in 1st century CE England. [56] Highstatus members of the society, entrusted with cultic and healing duties, they both owned a luxury set of glass counters and a folding wooden board with iron corner reinforcements. The divinatory aspect of the board games, already proposed for exceptional finds of earlier periods, [57] emerges here in connection

with healing and the prognosis of the patients' health, perhaps corresponding to the idea that games be played on the marble gaming tables of the Asclepius sanctuary in Epidaurus.

[55] IGNATIADOU 2012b; IGNATIADOU 2015: esp. 111-112.

[56] CRUMMY et al. 2007, esp. SCHÄDLER 2007: 359-375. [57] BECKER 2007; see also the article in this volume of Anne Widura.

[58] Unfortunately without an available picture. Pers. comm. with the excavator M. Nikolaidou-Patera. NIKOLAIDOU-PATERA 1993: 501.

APPENDIX: LIST OF GREEK FINDS (ALPHABETICALLY BY SITE)

A. *IETTEIA BOARDS IN MACEDONIA AND THRACE*

- 1. Orphani (ancient Fagres), deposit D, trench 3, 1993. Archaic or Classical period. [58] Laconic-type roof tile with incised lines forming a grid. The squares are marked with the numerals Δ , Λ , B, Λ , E, I, Γ , underlined by 1 or 2 engraved lines.
- 2. Pella. Hellenistic (?). Archaeological Museum of Pella. Turquoise faience plaque with a plain grid of 11x11 squares. See also below board no 22 (Abdera).

B. GAMING SETS, DICE, OR BOARDS UNEARTHED IN 4TH AND 3RD CENTURY BCE BURIALS IN MACEDONIA AND THRACE

3. Abdera, male burial. 3rd-2nd century BCE. Archaeological Museum of Abdera. [59]
Counters: 51 glass counters in various colours, MA 7000. They were found gathered to the left of the head.
Dice: -

The burial contained coins of the 5^{th} - 2^{nd} century BCE, other Early Hellenistic items, and pottery of the 2^{nd} century BCE. It is possible that the counters were an heirloom.

 Aiginion in Pieria, Highway excavation, grave 38, right palm. Burial dated by the pottery to c. 275 BCE. Archaeological Museum of Thessaloniki. [60]
 Counters: -

Die: 1 rhomboid die, Py 5579 (fig. 4).

5. Aiginion in Pieria, Highway excavation, grave 61, square cist grave, male burial. 350-340 BCE. Archaeological Museum of Thessaloniki. [61] Counters: 3 glass (two blue and one colorless - Py 6654), 18 pebbles (seven gray and eleven black - Py 6703-Py 6705), and 17 (plus fragments) of cowrie shells (Py 6705-Py 6707). Dimensions in mm: glass counters: d 13, 16, 19, h 7. Pebbles: 10x17 to 20x25, h 3-10. Shells: approx. 122.
Dice: -

6. Amphipolis, Macedonian tomb 1, burial A, male burial. 350-300 BCE. Archaeological Museum of Amphipolis. [62]

Counters: 25 glass (12 colourless greenish - 7 green and 5 yellowish green – and 13 blue. D 1136, D 1138. Dimensions in mm: glass counters: d 9-14, h 6-7. Dice: -

- 7. Amphipolis, grave 318, child burial (?). End of 4th century BCE. Archaeological Museum of Amphipolis. [63] Counters: 2 glass (1 colourless greenish and 1 blue). The counters are too few to have formed a set but it is probable that they were complemented by pebbles that were not collected. D 1121. Dimensions in mm: glass counters: colourless d 13, h 6, blue d 11, h 6. Dice: -
- 8. Derveni, near Thessaloniki, grave B, male burial, 320-300 BCE. Archaeological Museum of Thessaloniki. [64] Counters (fig. 8.1): 21 glass (B 126, B 145) in 3 colours (6 colourless greenish, 6 olive-green and 9 blue). Dimensions in mm: glass counters: d 15-19, h 7-8. Dice: -

Board (fig. 8.1-2): in the grave were found also rectangular iron sheets (B 118) with wood remains underneath, obviously revetments of a wooden board. Some were found in facing pairs stuck by corrosion; thus indicating a folding board. 3 bronze hinges (B 123) were perhaps connecting the two parts of the board.

Edessa, Longos, rock-cut tomb II, male (?) burial. Early Hellenistic period. [65]
 Counters: 8 glass counters in 2 colours. They were found scattered within the looted tomb. Among the finds were 1 coin of Philip II and 1 of Cassander.
 Dice: -

10. Kitros-Alykes (ancient Pydna), in Pieria, Chrysochoides field, grave 80, cist grave. 350-300 BCE. Archaeological Museum of Thessaloniki [66] (fig. 3).

Counters: 24 glass in 2 colors (12 blue and 12 colorless) Py 12891.

Dice: 3 bone dice, cubic with dots inside circles.

11. Koukkos, in Pieria, field 28, grave 5. Makrygialos excavation house. [67] Counters: 52 glass in 4 colors (21 colourless, 14 light blue, 10 yellow, and 7 blue).

Dice: 3 regular bone dice and 2 rhomboid bone dice.

The large number of counters and the 2 different kinds of dice perhaps indicate that this more than 1 gaming sets.

[59] For the burial see KALLINTZI 2000: 267.

[60] IGNATIADOU 2013: fig. 187.2.

[61] Ibid.: MGC 1, fig. 172.1-2.

[62] Inv. Archaeological Museum of Kavala. ROMIOPOULOU 2002: 76, fig. 21; IGNATIADOU 2013: MGC 2, fig. 173.

[63] Inv. Archaeological Museum of Kavala. ROMIOPOULOU 2002: 76, fig. 22; IGNATIADOU 2013: MGC 3, fig. 174.

[64] THEMELIS & TOURATSOGLOU 1997: 87 and 91-92, figs 100, 105; IGNATIADOU 1996: 508 and 513-514 1,

figs 1, 10-12, drawings 1-3; IGNATIADOU 2010: cat. 350 (D. Ignatiadou); KOTOULA *et al.* 2011; IGNATIADOU 2013: MGC 4, fig. 175.1-2; IGNATIADOU 2015; KOTOULA & IGNATIADOU 2018..

[65] PETSAS 1966: 345, pl. 363 e.

[66] Bessios *et al.* 2001: 383; Ignatiadou 2010: cat. 90; Ignatiadou 2013: MGC 5, fig. 176.

[67] Mentioned in Ignatiadou 2013: MGC 6; for the excavation see Bessios & Noulas 2010: 139; Noulas forthcoming.

- 12. Makrygialos (ancient Pydna), in Pieria, field 486, grave 7, 4th century BCE. Archaeological Museum of Thessaloniki.
 - Board: Laconian-type tile with incised board of the fame of five lines. Fragmentary.
- 13. Makrygialos (ancient Pydna), in Pieria, field 937, grave 25, pit grave, possibly male burial, 357-300 BCE. Archaeological Museum of Thessaloniki [68] (fig. 6.1-2).

Counters: 28 glass in 2 colours (14 blue and 14 colourless greenish - Py 133 a,b,d). The second group is formed by 12 colourless greenish (2 fragmentary) and 2 greenish (1 fragmentary). Also 15 pebbles (Py 133 c - 11 off-white, 1 "black", 1 brown) and 2 shells (abraded to resemble pebbles), which possibly formed the third-colour group. Among the plano-convex glass counters are 4 conical ones (1 blue and 3 colourless) with a tapering periphery. They could be counters of another, non common, type, or of special value (fig. 6.2). The biggest regular colourless counter is chipped on the periphery and is perhaps a furniture "eye" in second use. Dimensions in mm: glass counters: d 11-14 or 15-18, h 6 or 9. Pebbles: 9 x 13-15 x 23, h 3-7. Shells: $10 \times 13-14 \times 17$, h 3-5.

Dice: 3 regular bone dice (Py 133 e, one fragmentary). Dimensions in mm: 13x13x15, 13x surv. 14x15.

14. Makrygialos (ancient Pydna), in Pieria, field 947, grave 62. 4th century BCE. Archaeological Museum of Thessaloniki. [69]

Counters: 11 shells (Py 3542) and 13 pebbles (12 off-white and 1 grey). Dimensions in mm: shells: d 10 and 13, h 8. Pebbles: d 6 and 20, h 5.

Die: 1 regular bone die. Dimensions in mm: 13x13x15.

15. Makrygialos (ancient Pydna), in Pieria, field 951, grave 147. 350-300 BCE. Archaeological Museum of Thessaloniki. [70]

Counters: 14 glass (Py 3543 - in 4 colours: 5 blue, 7 colourless (6 plus 2 fragments), 1 colourless blue-green and 1 olive-green). Also 6 pebbles (5 off-white and 1 dark). The biggest colourless counter is conical and chipped on the periphery. It is perhaps a furniture eye in second use. Dimensions in mm: glass counters: d 11-17, h 6-9. Pebbles: d 15-20, h 5-10.

Dice: three 3 regular bone dice in 3 sizes. Dimensions in mm: 19x19x19, 19x20x20, 13x13x15.

16. Makrygialos (ancient Pydna), in Pieria, field 951, grave 880. 350-300 BCE. Archaeological Museum of Thessaloniki.

Board (fig. 10): Laconian-type tile with incised outline of the game (Py 8879). The curved tile is broken on three sides and only part of one long side preserves the edge. It bears 9 parallel incised lines, carelessly made. One of them (the sacred line?) is marked at the center by an X, with up and down horizontal strokes up turning it into a set of 2 opposite triangles. On one side of the marked line are preserved 6 lines and on the other at least 2.

17. Methone, Paliokatachas, in Pieria, grave 1, cist grave, male burial, 350-325 BCE. Archaeological Museum of Thessaloniki. [71]

Counters: 11 glass (Py 521- in 3 colours: 5 blue, 1 opaque yellow, [72] fragments of 1 fire-deformed olive green, tiny fragments of 1 colourless light blue, 2 colourless and 1 green (1 fire-deformed, the other in tiny fragments)). The whole set was collected from the cremation area outside the grave and the items are fire-blackened. Dimensions in mm: Glass counters: d 10-17, h 7-8.

Dice: 3 fire-blackened regular bone dice (Py 520). Dimensions in mm: 12x13x15, 11x13x15, 10x11x13.

- 18. Olynthus. Unknown findspot. Before 354 BCE (?). Archaeological Museum of Thessaloniki. [73] Counters (fig. 5): 18 glass game counters in 3 colours: 9 colourless, 6 blue-green, and 3 blue. MTH 23814. D 8-15, h 4-7 mm. They were found among the Olynthus finds, perhaps retrieved from the residential area, and thus dated before the destruction of the city. Dice: -
- 19. Samothrace, South necropolis, grave S130. 275-250 BCE. [74]

 Counters: 35 glass counters: 20 blue, 2 colourless greenish, 11 colourless or light blue and 1 opaque white. D 10-20 mm.

 Dice: -

In the same tomb were also found 82 natural knucklebones, 2 of which were inscribed and 3 more perforated (with 1 or more holes). Inscribed with IN or NI (one) and A or Δ (the other).

[68] Bessios 1987a: 365; IGNATIADOU 1996: 508 and 515 n° 5, figs. 6-8; IGNATIADOU 2002: fig. 12; IGNATIADOU 2010: cat. 88 (D. Ignatiadou); IGNATIADOU 2013: MGC 7, fig. 177.1-2.

[69] The pebbles differ from the usual round flat ones and are interpreted as counters, with reservations; IGNATIADOU 1996: 508 and 515 n° 6; IGNATIADOU 2013: 219 no 1.

[70] IGNATIADOU 1996: 508 and 515 n° 7; IGNATIADOU 2010: cat. 89; IGNATIADOU 2013: MGC 8, fig. 178.1-2.

[71] BESSIOS 1986: 73, fig. 4-5; IGNATIADOU 1996: 508-509, 514 n° 2, fig. 2; IGNATIADOU 2013: MGC 9, fig. 179.

[72] Chemical analysis confirmed that this is an intentionally opacified yellow or off-white counter.

[73] IGNATIADOU 2010: cat. 430 (A. Dimoula).

[74] DUSENBERY 1998: 1135-1136 (n° S130-32) and 1145-1147 (n° S130-31A to -31E); DUSENBERY 1967: 49. 20. Sevaste, Pappas mound, in Pieria, grave 3, pit grave, male burial, 350 BCE. Archaeological Museum of Thessaloniki [75] (fig. 2).

Counters: 49 glass (Py 495 - in 2 colours, 28 blue and 21 colourless) and 1 grey pebble. 11 of the latter are colourless with a bluish tinge and 10 are colourless with a greenish tinge. It is not clear whether this differentiation indicates the existence of 3 instead of 2 colours. Dimensions in mm: glass counters: d 12 and 18, h 5 and 8.

Dice: 5 regular bone dice (Py 494). Dimensions in mm: 13x13x13.

21. Sevaste, Pappas mound, in Pieria, grave 1. 380-370 BCE. Archaeological Museum of Thessaloniki. [76] Counters: 13 fire-blackened pebbles (Py 3540). Dimensions in mm: pebbles: d 15 and 30, h 5.

Dice: 2 regular bone dice (Pv 497). Dimensions in mm: dice: 8x8x10 and 10x10x10.

C. CLASSICAL AND HELLENISTIC NON-BURIAL HENTE FPAMMAI BOARDS OR GAMING TABLES FROM MACEDONIA AND THRACE

- 22. Abdera, Thrace, Ilanli ancient Abdera. Archaeological Museum of Abdera. [77]

 Marble gaming table with incised boards for 2 games: πέντε γραμμαί and διαγραμμισμός or πόλεις, MA 3498 (AGK 1766) (fig. 1). The πέντε γραμμαί board is well engraved and offset to half the available surface. The incised lines are 5+1+5; the third, sixth and ninth lines are marked with a centrally placed X. The διαγραμμισμός or πόλεις board is carelessly engraved in continuation to the previous one, covering the length but not the width of the rest of the surface. The incised grid is 3x5 squares outlined with shallow and irregular lines. Dimensions in cm L 55, W 26-27 Th 7. Length of lines 155-175 mm, distance between them 20-25 mm. The plaque was handed in to the Archaeological Museum of Komotini in 1973, by a local inhabitant and was transferred later to the Archaeological Museum of Abdera.
- 23. Makrygialos (ancient Pydna), in Pieria, field 951, trench 62. 400-350 BCE. Archaeological Museum of Thessaloniki. [78]

 Corinthian type roof tile with incised outline of the game (Py 8899). The flat tile bears 5 parallel incised lines, running obliquely to the sides of the tile (fig. 9).
- 24. Stageira, in second use, built in the city walls. [79]

 Marble gaming table. Almost half is preserved, with 5 incised parallel lines. Ovoid hollows are carved at the extremities of the lines (fig. 7).
- 25. Tembi, Chani Kokkonas, small Late Classical sanctuary, perhaps dedicated to Cybele. [80]
 In the main cultic room were found 2 fragments of a Laconian-type roof tile with parallel incised lines and 2 incised X marks between them. From the same excavation was retrieved 1 light blue glass counter.

D. HELLENISTIC SETS OR ISOLATED GLASS COUNTERS FROM GREECE [81]

- 26. Athens, Kerameikos, grave in Akademias Street. 2nd century BCE. Archaeological Museum of Kerameikos. 70 glass counters: 31 blue, 28 green (27 standard and 1 small) and 11 pale green glass counters.
- 27. Corfu, sanctuary at Mon Repos, temple of Apollo. Hellenistic or Roman period. Archaeological Museum of Corfu.

Three glass counters: 2 light blue and 1 blue.

28. Corinth. Hellenistic or Roman period. Archaeological Museum of Corinth. [82]
4 glass counters: 1 light blue, 1 colourless and 2 greenish ones. Exhibited along with jewellery, but stated that the Roman ones were found together with dice or other counters.

[75] BESSIOS 1986: 145; BESSIOS 1987b: 212; IGNATIADOU 1996: 508 and 514-515 n° 3, figs 3-4; IGNATIADOU 2010: cat. 94 (D. Ignatiadou); DESCAMPS-LEQUIME 2011: cat. 232/1-2 (D. Ignatiadou); IGNATIADOU 2013: MGC 10, fig. 180.

[76] Bessios 1987a, 365-366; Bessios 1987b, 211, fig. 4; IGNATIADOU 1996, 508 and 515 n° 4, fig. 5; IGNATIADOU 2013: 219 n° 2.

[77] TRIANTAPHYLLOS 1973-1974.

[78] IGNATIADOU 2013: 223, fig. 186.2, pl. 38.

[79] Pers. comm. with the excavator K. Sismanidis.

[80] www.archaiologia.gr/blog/2012/07/30/η-κοιλάδατων-τεμπών-μέρος-γ'/ visited 23.4.2017.

[81] This is a tentative list of relevant finds. No doubt many more exist. Some are discussed as counters or inlays in IGNATIADOU 2013: 316-317.

[82] DAVIDSON 1952: 223 and 226 $\rm n^{\circ}$ 1781-1784, pl. 101, fig. 39.

- 29. Delos. 2nd-1st century BCE.
 - The counters found in the archaeological site of Delos are more than 700 and are encountered in a variety of colours: 139 green, 120 brown, 124 blue-green, 123 colourless, 82 dark blue, 76 yellow, 13 violet, 8 opaque blue, 7 opaque green, and 4 opaque yellow. D c. 20 mm. In addition, bi- or multi-coloured objects are called "pastilles en verre" and are identified as gems, counters, or inlays. [83] Besides, gaming tables for five lines and and δ_{I} are been found on Delos. [84]
- 30. Dion, Demeter sanctuary. Archaeological Museum of Dion. 1 greenish blue glass counter.
- 31. Elis, Western necropolis, cist grave, female burial. 250-225 BCE. [85]
 1 dark blue glass counter. D 14, h 5 mm. In the publication, the find is associated with the remains of an iron box and is considered an element of its decoration. This is not unlikely, but it could also be part of its content.
- 32. Larissa, Military airport, grave P 14b. 200-150 BCE. [86]
 48 counters of glass and natural pebbles. They were found in a rich burial that contained also 77 natural knucklebones, 1 more with 2 perforations, and 7 glass knucklebones.
- 33. Makrygialos 30.7.1998, Water supply network. 1 greenish blue glass counter. D 13, h 7 mm.
- 34. Minoa, Amorgos. Second half of 2nd-1st century BCE. [87]
 Glass counters have been found at various locations in the lower city. They measure 8-18 mm across and are colourless (greenish or yellowish), brown, blue or blue-green. They are thought to have been inlays or counters.
- 35. Pella, Thesmophorion. 325-150 BCE. [88] 1 greenish blue glass counter.
- 36. Pella. Hellenistic (?). Archaeological Museum of Pella. 12 glass counters: 1 blue, 5 amber, 6 green.
- 37. Rhodes, Patriarch Athenagoras Street, G. Kakoulas plot. End of 3rd-early 2nd century BCE. [89]

 In the waste of a Hellenistic glass factory are included hundreds of glass counters of 3 types: A) Approximately 850 flat counters in various sizes. Most of them are monochrome: about half are dark blue, more than one third are turquoise and the rest are in shades of brown, green, yellowish, light blue, and colourless. Some are stained or striped or have embedded different colours. [90] B) Approximately 200 flat discs 10 mm across. Half of those are either bluish green or blue. The rest are green opaque, yellow opaque, colourless, yellowish green and few light blue opaque and greenish blue. Some are stained or striped and 1 is colourless with embedded gold leaf. [91] C) Approximately 30 pairs of different shapes: conical, "vase-shaped" or other. Additionally, there were also found, among the reject products of the manufacturing process, disfigured or stuck together counters; proof of their local manufacture. [92]
- 38. Samos, Western necropolis, rock-cut tomb VI. Middle of 2nd-beginning of 1st century BCE. [93] 5 glass counters in various colours and fragments of 3 others. The tomb contained many burials and it is possible that the counters are not one set.
- 39. Samos, Western necropolis, rock-cut tomb a3. Beginning of 1st century BCE. **[94]**5 glass counters "green, pale and brown", in different sizes. The tomb contained many burials and, as the counters were found in the inner corridor, those are likely to belong to more than one small set.
- 40. Samos, Western necropolis, rock-cut tomb III. Late Hellenistic period. [95] 1 green and 1 light blue glass counter.

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[83] DEONNA 1938: 308-309, pl. 794, 796-8, 801, 825;
                                                         [88] LILIMBAKI-AKAMATI 1996: 95 cat. 391, pl. 41z.
where the finds are interpreted as jewelry; NENNA 1999:
                                                         [89] AA.VV, Ancient Rhodes 1993: 46, fig. 30; WEINBERG
148-152, pl. 55, 66, esp. E 241-246 counters, E 247-254
                                                         1969, 146; WEINBERG 1983.
chatons bichromes, E 255-261 pastilles polychromes.
                                                         [90] WEINBERG 1969, 146, pl. 80b.
[84] DEONNA 1938: 336-337.
                                                         [91] Ibid., 146, pl. 80c.
[85] THEMELIS 1991: 156, pl. 83.
                                                         [92] Ibid., 150, pl. 87b.
                                                         [93] TSAKOS 1977, 398, no 14 (inv. 2500, 2517, 2499).
[86] TZAFALIAS 1980: 282.
                                                         [94] Ibid.: 360, no 19, pl.123d (inv. 2439).
[87] TRIANTAPHYLLIDIS 1998; TRIANTAPHYLLIDIS 1999:
109 and 111, fig. 12.
                                                         [95] Ibid.: 386, n°15 (inv. 2492).
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- 41. Tembi, Chani Kokkonas, small Late Classical sanctuary, perhaps dedicated to Cybele. [96]
 1 light blue glass counter was found in the main cultic room; also 2 fragments of a Laconian-type roof tile incised with a *five lines* board.
- 42. Thessaloniki, International Trade Fair ($\Delta E\Theta$), grave 165 (5.2.1993, trench 13). [97] 1 colourless glass counter, deteriorated. D 13, h 6 mm.
- 43. Thessaloniki, International Trade Fair ($\Delta E\Theta$), (8.2.1993, sector 2, trench 19). [98] 29 glass counters in various colours.
- 44. Tragana in Trifylia, Tsopani Rahi, Hellenistic mound, grave 3. Around 200 BCE. Archaeological Museum of Pylos. [99]
 2 colourless glass counters.
- 45. Vergina (ancient Aegae), Acropolis, North section. Strata dated by Greek coins to 350-150 BCE. [100] 2 glass counters; 1 dark and 1 light coloured.
- 46. Veroia, building block 47, Mavromichali-Sanopoulou-Theodoridis streets, rock-cut chamber tomb, theke B, burial of a boy. 150-140 BCE. [101] 5 glass counters in 2 colours (M 935), 3 blue and 2 olive green. D 10-15 mm. They were found near the skull along with gold sheets (M 936) so the excavators concluded that they belonged to a gold wreath. [102]
- 47. Veroia, building block 280, Thomoglou plot, chamber tomb, chamber A, eastern couch, female burial. After 239-227 BCE, dated by an Antigonus Gonatas coin. [103] 1 colourless glass counter (M 945).
- 48. Veroia, building block 280, Thomoglou plot, chamber tomb, chamber A, southern couch, female burial. After 187-168 BCE Dated by a Pella coin [104] 1 colourless glass counter (M 953a), 12 mm across.

[96] www.archaiologia.gr/blog/2012/07/30/η-κοιλάδατων-τεμπών-μέρος-γ' / visited 23.4.2017.

[97] Pers. comm. with the excavator K. Kousoulakou.

[98] Pers. comm. with the excavator K. Kousoulakou.

[99] For the excavation see PAPATHANASSOPOULOS 1961. The grave was dated from a silver coin of the Achaian League, issued in 280 or 251-146; PAPATHANASSOPOULOS 1966.

[100] FAKLARIS 1994: 121, fig. 14; FAKLARIS 1997: 199.

[101] DROUGOU & TOURATSOGLOU 1980: 19-43.

[102] *Ibid*.: 25 and 41, pl. 15, dr. IV, B1, with erroneous diameter 4-9 mm.

[103] N 17.6 ; DROUGOU & TOURATSOGLOU 1980: 69, pl.45.

[104] N 17.11. The counters were found with a (furniture) glass eye (M 953b), but since there is no evidence for a piece of furniture in the tomb it could be a second use as a counter; the distinction between a and b is mine, as both finds were given a common inv. no and identified as beads; DROUGOU & TOURATSOGLOU 1980: 70, pl. 44.

BIBLIOGRAPHIE

AA.VV., 1993, Ancient Rhodes. 2400 years, Exhibition Catalogue, Athens (in Greek).

AMANDRY Pierre, 1984, « Os et coquilles, L'Antre Corycien II », *Bulletin de correspondance hellénique,* Supplément IX, p. 347-380.

Austin, Roland G., 1934, « Zeno's Game of $\tau\dot{\alpha}\beta\lambda\eta$ », *Journal of Hellenistic Studies* 54, p. 202-205.

AUSTIN, Roland G., 1940, « Greek Board Games », Antiquity 14, p. 257-271.

BECK, Horace C., 1928, « Early Magnifying Glasses », Antiquaries Journal, p. 327-330.

BECKER, Andrea, 2007, « The Royal Game of Ur », dans Irving L. Finkel (éd.), *Ancient Board Games in Perspective:* Papers from the 1990 British Museum colloquium with additional contributions, London, p. 11-15.

BESSIOS, Matthaios, 1986, Archaiologikon Deltion 41 B, p. 142-146 (in Greek).

BESSIOS, Matthaios, 1987a, Archaiologikon Deltion 42 B, p. 364-366 (in Greek).

BESSIOS, Matthaios, 1987b, « Excavations in North Pieria », *Archaeological Work in Macedonia and Thrace* 1, p. 209-218 (in Greek).

BESSIOS, Matthaios & ATHANASSIADOU, Athena, 2001, « Pydna North Cemetery. Makrygialos, Field 951 », *Archaeological Work in Macedonia and Thrace* 15, p. 363-368 (in Greek).

BESSIOS, Matthaios & ATHANASSIADOU, Athena & GOURTZIOUMI, Ioanna & KARANIKOU, Zoi & NOULAS, Kostas & CHRISTAKOU-TOLIA, Maria, 2001, « Excavations in North Pieria », Archaeological Work in Macedonia and Thrace 15, p. 379-384.

BESSIOS, Matthaios & Noulas, Kostas, 2010, « Chora of Pydna. Excavation at Koukkos in Pieria », *Archaeological Work in Macedonia and Thrace* 24, p. 135-142.

BLANCK, Horst & PROIETTI, Giuseppe, 1986, La tomba dei rilievi di Cerveteri, Roma (Studi di Archeologia I).

BLINKENBERG, Christian, 1898, « Epidaurische Weihgeschenke », *Mitteilungen des Kaiserlich Deutschen Archäologischen Instituts* 23, p. 1-23.

BLINKENBERG, Christian, 1931, « Les petits objets », Lindos, Fouilles de l'acropole I, 1902-1914, Berlin.

Breitenstein, Niels, 1941, Catalogue of Terracottas, Cypriote, Greek, Etrusco – Italian and Roman, Danish National Museum, Copenhagen.

CRUMMY, Philip et al. (éd), 2007, Stanway: an Elite Burial Site at Camulodunum, London.

DASEN, Véronique, 2015, « Achille et Ajax : quand l'agôn s'allie à l'alea », Revue du Mauss 46, p. 81-98.

DAVIDSON, Gladys R., 1952, *The Minor Objects (Corinth* XII), Princeton.

DEONNA, Waldemar, 1938, Le mobilier délien (Exploration Archéologique de Délos XVIII), Paris.

DESCAMPS-LEQUIME, Sophie (éd.), 2011. Au royaume d'Alexandre le Grand. La Macédoine antique, Paris.

DESPINI, Aikaterini & VOKOTOPOULOU Julia & MISAELIDOU Vassiliki & TIVERIOS Michalis, 1985, *Sindos,* Exhibition Catalogue, Archaeological Museum of Thessaloniki, Athens.

DRAKE BOEHM, Barbara, BARDIÈS-FRONTY, Isabelle & DUNN-VATURI, Anne-Élisabeth & (éd.), 2012, Art du jeu, jeu dans l'art, de Babylone à l'Occident médiéval, exposition au musée de Cluny 28 novembre 2012 au 4 mars 2013, Paris. DROUGOU, Stella & TOURATSOGLOU, Ioannis, 1980, Hellenistic Rock-cut Tombs in Veroia, Athens (in Greek).

Duggan, Eddie, 2015, « Strange Games: Some Iron Age Examples of a Four-Player Board Game? », Board Games Studies Journal online 9, p. 17-40.

DUSENBERY Elsbeth B., 1967, « Ancient Glasses from the Cemeteries of Samothrace », *Journal of Glass Studies* 9, p. 34-49. **DUSENBERY Elsbeth B., 1998**, *Samothrace 11*, *The Nekropoleis, 1. The Nekropoleis and Catalogues of Burials, 2. Catalogues of Objects by Categories*, Princeton.

FAKLARIS, Panagiotis, 1994, « Vergina Acropolis. Excavation 1994 », *Archaeological Work in Macedonia and Thrace* 8, p. 119-124 (in Greek).

FAKLARIS, Panagiotis, 1997, « Workshops on the Vergina Acropolis », *Ancient Greek Technology*, 1st International Conference, Thessaloniki, p. 193-200 (in Greek).

GERHARD, Eduard (éd.), 1843/1897, Etruskische Spiegel, Berlin.

HILGERS, Werner, 1969, Lateinische Gefässnamen, Düsseldorf.

HILLBOM, Niklas, 2005, Minoan Games and Game Boards, Lund.

HÖCKMANN, Olaf, 1996, « Brettspiele im Didymeion », Istanbuler Mitteilungen 6, p. 251-262.

IGNATIADOU, Despina, 1996 (1999), « A Hellenistic Board-Game with Glass Counters », *Ancient Macedonia* 6, p. 508-522 (in Greek).

IGNATIADOU, Despina, 2002, « Colorless Glass in Late Classical and Early Hellenistic Macedonia », *Journal of Glass Studies* 44, p. 11-24.

IGNATIADOU, Despina (éd.), 2010, Glass Cosmos, Exhibition catalogue, Archaeological Museum of Thessaloniki, Thessaloniki.

IGNATIADOU, Despina, 2012, « Pottery, Metalware, and Glassware », dans Stella Drougou & Ioannis Touratsoglou (éd.), *Topics on Hellenistic pottery in Macedonia*, Thessaloniki, p. 214-246.

IGNATIADOU, Despina, 2013, *Colorless Glass for the Elite in Ancient Macedonia*, Thessaloniki (in Greek, English summary). **IGNATIADOU, Despina, 2014**, « The Symbolic Krater », dans Juliette de La Genière (éd.), *Le cratère à volutes. Destinations d'un vase de prestige entre Grecs et non Grecs*, Actes du colloque international du Corpus Vasorum Antiquorum AIBL - Institut national d'Histoire de l'Art (INHA), Paris, 26 octobre 2012, *Cahiers du Corpus Vasorum Antiquorum, France* 2, Paris, p. 43-59. **IGNATIADOU, Despina, 2015**, « The Warrior Priest in Derveni Grave B was a Healer too », dans Véronique Dasen (éd.), *Agir, Histoire, médecine et santé* 8, p. 89-113.

JACQUEMIN, Anne, 1984, « Petits objets divers », *L'antre Corycien* II, *Bulletin de correspondance hellénique*, Supplément IX, p. 166-175.

KALLINTZI, Konstantina, 2000/2004, « Closed Contexts from the Cemetery in Ancient Abder », *VIth Conference on Hellenistic Pottery*, Volos-Athens, p. 259-268 (in Greek).

KALLIPOLITIS, Vassilios G., 1963, « Excavation of Graves in Anagyrous », *Archaiologikon Deltion* 18, p. 115-132 (in Greek). **KARETSOU, Alexandra (éd.), 2000**, *Crete and Egypt. Cultural Relationships over Three Millennia*, Exhibition Catalogue, Heraklion (in Greek).

KARUSU, Semni, 1973, « Der Erfinder des Würfels Das älteste griechische mythische Porträt », *Mitteilungen des Deutschen Archäologischen Instituts* 88, p. 55-65.

KENDRICK PRITCHETT, William, 1965, « Gaming Tables and IG I², 324 », Hesperia 34, p. 131-147.

KENDRICK PRITCHETT, William, 1968, « "Five Lines" and IG I² 324 », *California Studies in Classical Antiquity* 1, p. 187-225. **KOKOLAKIS, Minos M., 1965**, *Morphology of the Dicing Metaphor*, Athens (in Greek).

Kostoglou-Despini, Aikaterini, 1988, « Eine Grabstele aus Pydna », *Kanon, Festschrift Ernst Berger, Antike Kunst* 15, p. 180-186.

KOTOULA, Eleni & IGNATIADOU, Despina & EARL, Graeme, forthcoming, « The Ancient Board Game From Derveni Revisited », *History, Technology and Conservation of Ancient Metals, Glasses and Enamels*, International Symposium, November 16-19 2011, Athens.

KOTOULA, Eleni & IGNATIADOU, Despina, forthcoming, «A sketch and image-based 3D representation of the Derveni board game using the CHER-ish software», *Spreading Excellence in Computer Applications for Archaeology and Cultural Heritage*. Proceedings of the 3rd Conference on Computer Applications and Quantitative Methods in Archaeology Greek Chapter (CAA-GR) Limassol, Cyprus, 18-20 June 2018 (2019). Cyprus University of technology, 85-93.

KOUKOULES, Phaedon, 1948, Byzantine Life and Culture, Athens A 1, p. 185-219 (in Greek).

KÜBLER Karl, 1970, Kerameikos VI, 2, Die Nekropole des späten 8. bis frühen 6. Jahrhunderts, Berlin.

LAMER, Hans, 1927, s.v. Lusoria tabula, *Paulys Realencyclopädie der Classischen Altertumswissenschaft* 13, 2, p. 1900-2029. **LASER, Siegfried, 1987**, *Sport und Spiel, Archaeologia Homerica* T, Göttingen.

LIERKE, Rosemarie, 1999, Antike Glastöpferei, Ein vergessenes Kapitel der Glasgeschichte, Mainz.

LIERKE, Rosemarie, 2002, « With "Trial and Error" through Ancient Glass Technology », dans George Kordas (éd.), *Hyalos-Vitrum-Glass: History, Technology and Conservation of Glass and Vitreous Materials in the Hellenic World*, 1st International Conference, Rhodes, Athens, p. 181-186.

LILIMBAKI-AKAMATI, Maria, 1996, The Pella Thesmophorion, Athens (in Greek).

DESCAMPS-LEQUIME, Sophie (éd.), 2011, Au royaume d'Alexandre le Grand. La Macédoine antique (catalogue exposition Louvre 2011-2012), Paris.

MICHAILIDOU, Anna, 2006, « Stone Balance Weights? The Evidence from Akrotiri on Thera », *Studi e Materiali* 13, p. 233-263. **MOHR Merilyn Simonds, 1993**, *The Games Treasury*, Shelburne.

NENNA, Marie-Dominique, 1999, Les verres (Exploration Archéologique de Délos XXXVII), Paris.

NIKOLAIDOU-PATERA, Maria, 1993, « Excavation Research in Ancient Fagres », *Archaeological Work in Macedonia and Thrace* 7, p. 499-503 (in Greek).

Noulas, Kostantinos, forthcoming, « The grave of a warrior in the chora of Pydna », *Ancient Macedonia* 8, Thessaloniki (in Greek).

PAPATHANASSOPOULOS, George, 1961-1962, « Hellenistic Mound in Tsopane Rache, Tragana in Triphyllia », *Archaiologikon Deltion* 17, B2, p. 98-99 (in Greek).

PAPATHANASSOPOULOS, George, 1966, « Hellenistic Glass Vessels in the Pylos Museum », *Archaiologikon Deltion* 21 A, p. 184-197 (in Greek).

PARLAMA, Liana & STAMPOLIDIS, Nicholas (éd.), 2000, The City Beneath the City. Antiquities from the Metropolitan Railway Excavations. Athens.

PETSAS, Photios, 1966, « Longos, Edessa. Hellenistic Cemetery », Archaiologikon Deltion 21B, p. 343-345 (in Greek).

PFISTERER-HAAS, Susanne, 2004, « Helden beim Brettspiel », in R. Wünsche et F. Knauß (éd.), *Lockender Lorbeer. Sport und Spiel in der Antike*, Ausstellung Staatl. Antikensammmlungen München, München , p. 381-385.

ROMIOPOULOU, Katerina, 2002, « Glass Finds from Graves at Amphipolis », dans George Kordas (éd.), *Hyalos-Vitrum-Glass: History, Technology and Conservation of Glass and Vitreous Materials in the Hellenic World*, 1st International Conference, Rhodes, Athens, p. 71-77.

SCHÄDLER, Ulrich, 1996, « Spielen mit Astragalen », Archäologischer Anzeiger 1, 1996, p. 61-73.

SCHÄDLER, Ulrich, 1999, « Damnosa alea – Würfelspiel in Griechenland und Rom », dans Günther G. Bauer *et al.* (éd.), 5000 Jahre Würfelspiel. Katalog zur Ausstellung, Salzburg, p. 39-58.

SCHÄDLER, Ulrich, 2002, « The Talmud, Firdausi, and the Greek Game "City" », dans Jean Retschitzki & Rosita Haddad-Zubel (éd.), *Step by Step. Proceedings of the 4th Colloquium Board Games in Academia*, Fribourg, p. 91-102.

SCHÄDLER Ulrich, 2007, « The Doctor's Game: New Light on the History of Ancient Board Games », dans Philip Crummy et al. (éd.), Stanway: An Elite Burial Site at Camulodunum, London, p. 359-375.

SCHÄDLER, Ulrich, 2009, « Pente grammai. The Ancient Greek Board Game Five Lines », dans Jorge Nuno Silva (éd.), Board Game Studies Colloquium XI, Proceedings, p. 173-196.

SCHÄDLER, Ulrich, 2012, « Games, Greek and Roman », dans Roger S. Bagnall *et al.* (éd.), *The Encyclopedia of Ancient History*, Malden MA, col. 2841-2844.

SCHÄDLER, Ulrich, 2013, « Les jeux de pions », Archéothema 31, p. 64-65.

SINES, George & SAKELLARAKIS Yannis A., 1987, « Lenses in Antiquity », *American Journal of Archaeology* 91, p. 191-196. **SWINY, Stuart, 1980**, « Bronze Age Gaming Stones from Cyprus », *Report of the Department of Antiquities, Cyprus*, p. 54-78. **THEMELIS, Petros, 1991**, « The Grave of Philemena From Elis », *III*rd *Conference on Hellenistic Pottery*, Thessaloniki (Athens 1994), p. 146-158 (in Greek).

THEMELIS, Petros & TOURATSOGLOU, Yiannis, 1997, *The Derveni Tombs*, Athens (in Greek, English summary). **TOLSTIKOV, Wladimir P. & TREJSTER, Michail J., 1996**, *Der Schatz aus Troja*. *Schliemann und der Mythos des Priamos-Goldes*, Ausstellungskatalog, Moskau 1996/1997, Stuttgart – Zürich.

TRIANTAPHYLLIDIS, Pavlos, 1998, Glass Find from Minoa, Amorgos. Contribution to the Study of Glassworking in Cyclades During the Hellenistic and Roman Periods, Unpublished dissertation thesis, Ioannina (in Greek).

TRIANTAPHYLLIDIS, Pavlos, 1999, « Glass find from Minoa, Amorgos. Contribution to the Study of Glassworking in Cyclades During the Hellenistic and Roman Periods », *The World of glass* 32, p. 102-114 (in Greek).

TRIANTAPHYLLOS Diamantis, 1973-1974, « Komotini Museum », *Archaiologikon Deltion* 29, B3, p. 791-792, pl. 582d (in Greek). **TSAKOS, Konstantinos, 1977**, « Hellenistic Rock-Cut Tombs in Samos », *Archaiologikon Deltion* 32, p. 344-420 (in Greek). **TZACHILI, Iris, 1992**, « Small Finds from the Akrotiri Excavation », *Akrotiri, Thera. 20 Years of Research (1967-1987)*, Athens, p. 139-148 (in Greek).

TZAFALIAS, Athanasios, 1980, « Larissa Military Airfield », *Archaiologikon Deltion* 35 B1, 1980, p. 281-282 (in Greek). **WEINBERG, Gladys D., 1969**, « Glass Manufacture in Hellenistic Rhodes », *Archaiologikon Deltion* 24 A, p. 143-151.

WEINBERG, Gladys D., 1983, « A Hellenistic Glass Factory on Rhodes », *Journal of Glass Studies* 25, p. 37.