Games in the Ancient World: Places, Spaces, Accessories

edited by:

Alessandro Pace,
Tim Penn,
Ulrich Schädler

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Introduction

Where the study of games comes from…

ON THE PATH TO *LOCUS LUDI*

This volume arises from research undertaken during the ERC Advanced Project *Locus Ludi. The Cultural Fabric of Play and Games in Classical Antiquity*, based at the University of Fribourg.[1] The aim of *Locus Ludi* project is to reconstruct the history of games and game equipment in Classical antiquity, from the birth of the city-state in the Greek world, ca. 800 BCE, to the Roman conquest in 146 BCE, and in the Roman world from the Republican period, ca. 500 BCE, to the end of the Western Roman Empire, ca. 500 CE. The extant evidence is abundant, but varied, fragmentary, and scattered, often lying forgotten in museum stores. This neglect is due to the modern Western view of games as the pastime of children, or even a waste of time altogether. For the first time, an interdisciplinary team engaged in a wide-ranging program of diachronic research into the written, archaeological, and iconographic evidence. This research was fostered by a regular flow of exchanges, workshops, and publications with associated specialists of different fields (philology, art history, religious history, ancient economics, gender studies, and so on and so forth).

The history of games and game equipment has now reached a turning point, as this collective volume exemplifies, based on the session at the Board Game Studies Colloquium 2018 at Athens[2] and a series of workshops that took place in Fribourg and online in 2019, 2020, and 2021, which brought together many researchers.[3] During the five years of the project, an extensive collection and study of material was achieved. Thanks to a detailed study of evidence in their materiality and in their historical and archaeological contexts, methodological issues were addressed to develop scientific tools for identifying, categorising, reconstructing, and contextualising ancient games.

Our five-year program of research was necessary given that gaming had long been seen as a "minor" or "trivial" field of study in comparison with other subjects. Game studies have often been side-lined

* This research is part of the ERC Advanced project "Locus Ludi. The Cultural Fabric of Play and Games in Classical Antiquity" based at the University of Fribourg-CH. This project has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (grant agreement No 741520). The authors of this volume presented their papers at the international conference *Toys as Cultural Artefacts in Ancient Greece, Etruria and Rome* which took place at the University of Fribourg (remote) in June 22-23, 2021, as well as at the webinar of Locus Ludi in 2021. Warm thanks are due to Robin Bertherin and Samuel Sottas for their help in the editorial work for this volume.

1 This project has received funding from the European Research Council (ERC) under the European Union's
Horizon 2020 research and innovation programme (grant agreement No 741520)" <www.locusludi.ch>.

2 Carè, Dasen, Schädler (2021).

3 In Fribourg: 19-20.2.2019. *Reconstructing Ancient Games*; 1.5.2019. *Tabulae Lusoriae. From Ancient Egypt to Late Antiquity*; 17.5.2019. *Play, Games and the Cultural Patrimony of South Italy*; 18.12.2019. *Boardgames in context*; 17.1.2020. *Mapping Antiquity*; 21.1.2021. *The Archeology of Play and Games* I; 8.3.2021. *Jouer dans l'Antiquité. Contextualisation et interprétation du mobilier ludique;* 26.3.2021. *The Archaeology of Play and Games II* (Further details available online at https://locusludi.ch/locusludi-conferences/).

due to perceptions they are concerned with folklore rather than being a serious academic subject, and a minor topic compared to sports with their institutional training, organisation, prestigious prizes, and religious contexts.[4] The main result of the ERC project is therefore to have demonstrated that play and games are an important dimension of cultural heritage, partly immaterial, and an intimate part of the cultural fabric of ancient communities, especially on a multicultural level. These results also cast new light on religious shifts, whether ones that encouraged or were opposed to play

THE PIONEERS

Past scholarly indifference explains why, despite a tradition stretching back to the 17th century, most researchers have been uninterested in games. In 1694, Thomas Hyde had published the first scientific study on the history of games.[5] In 1734, Francesco Ficoroni published his often read study about knucklebones.[6] However, it took about 150 years for Louis Becq de Fouquières' *Les jeux des Anciens* (1869), and Edward Falkener's, *Games Ancient and Oriental and How to Play Them* (1892) to appear. These pioneers had to base their knowledge on authors such as Daniel Souter, Johannes van Meurs, Jules-César Boulenger, Andreas Senftleben, Celio Calcagnini – all reassembled by Jacob Gronovius –, Claude Saumaise, James Christie and Johann Christian Wernsdorf, who discussed ancient games nearly exclusively in the light of the written sources.[7] As a difference to Becq de Fouquières, Falkener also took into account recent archaeological finds and ethnographical information including own practical experience in board games he played with local people. Still, in Classical studies, games remained a topic that was only sporadically addressed. Archaeological material began to be published at this time, but ancient games received attention mainly when connected with epigraphy, as is shown by Antonio Ferrua's catalogues of inscribed game boards, largely drawn from the Roman catacombs.[8] Often authors admitted that they did not understand the kind of game being mentioned in texts, what games looked like, or how they were played.[9] When Hans Lamer published his extensive entry "*lusoria tabula*" in the *Realencyclopädie* in 1927[10], which is still a very useful reference, he was the first to acknowledge the importance of archaeological finds for understanding the written sources. However, English-speaking scholars still today prefer to refer to Roland Austin's articles published in the 1930s, which are based exclusively on written sources.[11] Today, gaming equipment mostly remains a sub-category of the often-neglected catchall 'small finds', scattered in excavation publications; these objects are still often only subject to sporadic discussion or analysis. Many items are unpublished, not properly identified, or 'sleeping' in museum stores — even finds from famous sites like Pompeii, Herculaneum, and Ostia.[12]

NEW DEVELOPMENTS IN THE 20TH CENTURY

How and why did research on the material culture of ancient gaming undergo new developments? A new surge of interest can be identified in the second half of the 20th century. In the 1970s, this was partly due to the growing use of games, especially boardgames, in archaeological museums' didactic programs for schools, at the same time as there was a new turn in the history of childhood in antiquity.[13] In 1976, Jutta Väterlein's study of ancient Roman games and players mentioned in the Latin sources was an important step, because she also drew particular attention to adult players.[14] Even more important, from an archaeological point of view, was Anita Rieche's *Römische Kinder- und Gesellschaftsspiele*, published in 1984. In this booklet, in addition to the main written sources, she also included and stressed the diversity of the archaeological evidence (counters, dice, and game boards, as well as sculpture in the round, reliefs, mosaics, and wall painting), thus emphasizing the informative potential of these material sources.[15]

In 1990, Irving Finkel organized the first international conference *Ancient Board Games in Perspective* at the British Museum, but the conference proceedings were only published 17 years later.[16] In 1991, the following year, the landmark exhibition *Jouer dans l'Antiquité* took place in Marseille.[17] Although both events made it clear that archaeologists had shown little interest in the gaming culture of ancient Mesopotamia, Egypt, Greece, and Rome for decades, they provided a fresh

4 On the emic definition, see Dasen, Vespa (2021).

5 Hyde (1694).

6 Ficoroni (1734).

7 Souter (1622); van Meurs (1625); Boulenger (1627); Senftleben (1667); Calcagnini (1544), p. 286-300; Gronovius (1699); Saumaise (1620); Christie (1801); Wernsdorf (1780).

8 Ihm (1890); Ihm (1891). Ferrua (1943); Ferrua (1946); Ferrua (1947); Ferrua (1948); Ferrua (1964); Ferrua (2001).

9 e.g. Marquardt, Mau (1886).

10 Lamer (1927).

11 Austin (1934); Austin (1935); Austin (1940).

12 See e.g. the publication of small finds in the Sanctuary of Demeter and Kore at Corinth with a chapter on "toys", Klinger (2021), as well as Tutilă, Rişcuţa, Ferencz (2017). See also the publication of a rigged die from a Roman villa, found in 2000 but not published until much later; Daniaux (2022).

13 On the historiography of the history of childhood, with insights on children's games, e.g. Dasen, Lett, Morel, Rollet (2001); Vuolanto (2015); Golden 2016; Lafargue (2017), 257-294.

14 Väterlein (1976).

15 Rieche (1984).

16 Finkel (2007).

17 May (1991).

impetus for future research. This new concern for the study of games in the past was embodied by the creation of the informal *International Association for Board Game Studies* with regular international colloquia first held in 1995, and with its own *Board Game Studies Journal*, published in print from 1998 to 2004 (vols. 1-7), and online since 2014 (vol. 8).[18] This interdisciplinary group brings together scholars from various disciplines, games historians, game designers, games collectors, as well as museologists. This cross-cultural, interdisciplinary and diachronic approach has also been fruitful for the study of ancient games. Ulrich Schädler pioneered the study of Greek and Roman games through a series of articles dedicated to board games such as *ludus latrunculorum*,[19] *ludus XII scriptorum*,[20] *polis*,[21] *pente grammai*,[22] to dice games,[23] and knucklebones,[24] as well as to marbles.[25] He gained new insights by combining written sources and archaeological material with ethnographical information. This ongoing work allowed him to lead the digital reconstructions of the main ancient games (*Pente grammai, XII Scripta/Alea, Latrunculi, Three Men's Morris, Astragaloi*) which are available open access for research as well as for wider audience in museums and schools.[26]

Another influential undertaking was Charlotte Roueché's work at Aphrodisias, where she drew attention to game boards engraved into the marble pavements, followed by an attempt to classify these pavement signs.[27] In 2007, Ulrich Schädler started a complete survey of ancient Roman, Byzantine, and Arab games at Ephesus, preliminary results of which he presented at the *11th Board Game Studies Colloquium* in Lisbon (2008) and now in this volume[28]. In the meantime, similar documentation from various sites has been published.[29]

A NEW IMPETUS

The swell in recent attention on gaming studies is evidenced by the convergence and synergy between several relevant working groups. 2012 saw the foundation of the research team *Il gioco e I giochi nel mondo antico tra cultura materiale e immateriale* led by Claudia Lambrugo and Fabrizio Slavazzi of the University of Milan, focused on the study of the gaming-related material preserved in the Giulio Sambon collection (the former Museum of the Teatro della Scala).[30] The same year also saw the elaboration of a Swiss National Science Foundation (SNSF) project Agora "Veni, Vidi, Ludique. Ancient Games and Toys", born out of the 2011 diachronic exhibition *Des jeux et des hommes* in Paris, Grand-Palais, where Véronique Dasen acted as curator of the sections on Classical Antiquity.[31] The exhibition *Veni, Vidi Ludique* opened with the presentation of material and literary evidence around different themes in three Swiss museums (May 2014 - February 2016), placing artefacts back into their cultural context.[32] The exhibition toured several French and German Museums (Bavay, Cholet, Nuremberg, Vieux-la-Romaine) and developed into the larger exhibition *Ludique! Jouer dans l'Antiquité* in Lyon in 2019.

In France, this newfound focus on games as a historical and social phenomenon has now found institutional support. Associations dedicated to the study of the field were created, such as the GIS *Jeu et Sociétés* Ludo corpus (2013) which brings together academic researchers, promotes projects and informed public debates.[33] *Game in Lab*, a collaboration between the Asmodée Research Foundation and the Innovation Factory at the Sorbonne University Paris supports research projects about games, which contribute to the recognition and visibility of analog games.

This research trajectory resulted in the multidisciplinary *Locus Ludi* project, which began in October 2017. Soon after, it was followed by the ERC CoG project *Digital Ludeme. Modelling the Evolution of Traditional Games*, directed by Cameron Brown at the University of Maatstricht, which paves the way for understanding the 'DNA' of traditional boardgames through cutting-edge artificial intelligence techniques and applications.[34]

OBJECTIVES OF THIS VOLUME

This volume is part of the output of the *Locus Ludi* project team on various aspects of gaming and play-related culture. The aim of this book is to pay specific attention to the analysis and decoding of material culture related to gaming (and it should be noted at this juncture that as a result of the vast geographical and chronological scope of this volume, some of the contributions propose divergent terminologies and

18 See also the creation in 1993 of the International Toy Research Association (ITRA).

19 Schädler (1994).

20 Schädler (1995).

21 Schädler (2002a).

22 Schädler (2009a).

23 Schädler (2000).

24 Schädler (1996).

25 Schädler (2013).

26 https://locusludi.ch/play-ancient-online-games/.

27 Roueché (1993), 249-252; Roueché, Bell (2007).

28 ee Schädler in this volume.

29 See for example Talloen (2018); Durnagölü/Sögut (2022). Francesco Trifilò has unfortunately abandoned his work on the Basilica Iulia; but did publish one article: Trifilò (2011).

30 Lambrugo, Slavazzi, Fedeli (2015).

31 Dasen (2011).

32 Dasen (2019).

33 https://ludocorpus.org/ (Université Paris Cité, l'Université Sorbonne Paris Nord, l'Université Paris Nanterre, Sorbonne Université).

34 http://ludeme.eu/

interpretations for some of the same practices and/or forms of material culture). Past approaches to games and play in the ancient world have drawn on textual, archaeological, and iconographic evidence in order to understand how ancient games were played. This research has laid important foundations for future research but attempts to understand ancient boardgames are limited by the fragmentary nature of the textual record, and because ancient texts were seldom written with a view to explaining exactly how to play.[35] Questions surrounding who played games in the past, where people played, and why they played have received considerably less attention. This volume aims to bridge this gap in our knowledge in a discipline long dominated by isolated publications in specialist or far-flung venues, little served by thematic volumes and monographs.

This volume above all focusses on the materiality of games, not taking into account play in a generic sense, therefore neither dealing with its immaterial aspects nor with toys. In the Oxford English Dictionary, materiality is defined as "the quality of being composed of matter: material existence; solidity; material or physical aspect or character."[36] In this sense, we want to follow the latest research perspectives, according to which scholars are now focusing on the ways that analysis of material culture – broadly defined as "the objects produced by human beings, including buildings, structures, monuments, tools, weapons, utensils, furniture, art, and indeed any physical item created by a society" – can contribute to our understanding of past societies.[37]

THE STRUCTURE OF THIS BOOK

Before leaving the reader, we will set out the structure of this volume. In this introductory section, Tim Penn, Alessandro Pace, and Ulrich Schädler explore the rules of key ancient games, particularly Roman ones, and set out current and future considerations for the study of the materiality of play. This chapter acts as a methodological and theoretical introduction to the volume and aims to situate some of the concepts which permeate the book within wider scholarship in the humanities and social sciences.

Part I deals with contributions discussing game boards (whether fixed in position, movable, complete, or fragmentary), from a wide range for periods and places. Marie-Lys Arnette analyses gaming materials (including boards for the game of Senet) from the settlement of Deir el-Medina dating to the New Kingdom (15th-11th centuries BCE). Ian Stern deals with the analysis of the material coming from the Late Hellenistic site of Maresha (present day Israel) from which numerous fragments of gaming boards (used for leisure or divination?) have been recovered. We then move into the Roman period. Walter Crist et al.'s computational approach offers new data which can help us to better understand the game mechanics of *ludus latrunculorum*. Luca Dal Monte offers an important overview of the gaming boards in Rome's Imperial Fora, much of which he publishes for the first time. Our next three papers focus on Anatolia, a key region in the study of ancient games and gaming because of the large numbers of sites with gaming boards. Peter Talloen synthesises gaming boards at urban sites in the Lycia, Pamphylia, and Pisidia. Ben Russell, Angelos Chaniotis, and Andrew Wilson provide a granular examination of the numerous gaming boards identified in the recently excavated Place of Palms (formerly known as the South Agora) at Aphrodisias in Caria and Ulrich Schädler presents his city-wide survey of game boards from Ephesus. Finally, Mark Hall and Ulrich Schädler draw together the evidence for gaming material such as boards, counters and dice found beyond the borders of the Roman Empire, in the *barbaricum,* demonstrating that the Empire's borders were permeable and gaming material — and sometimes also gaming culture — could cross beyond them.

Part II is dedicated to the analysis of "portable" evidence for gaming, that is, the wider range of object assemblages which are linked to board games in the past. These contributions were primarily collected by region (and after this in chronological order). We begin with Raimon Graells i Fabregat and Miguel Pérez Blasco's extensive analysis dedicated to games from the Iberian cemeteries and then we move on to the new data gathered offered by Ilaria Truzzi at Empúries. Leaving the Iberian Peninsula and moving to present-day France, Yves Manniez offers an exhaustive analysis of gaming-related finds from Roman Nîmes (*Nemausus*) and its territories. Next, a substantial group of contributions examine the British Isles: Natasha Harlow focuses on the analysis of the graffiti on bone counters from Roman Britain, while Frances McIntosh addresses the complex and intriguing question of the function of tokens obtained from recut potsherds, found in large numbers at the Roman site of Corbridge (ancient *Coria*). Mark Hall and Katherine Forsyth analyse the social and cultural values of a peculiar game with pegged gaming pieces widespread among the elites of the Early Medieval Celtic fringe, with special reference to finds from the Irish site of Lough Sewdy. Moving south, Regine Fellmann Brogli proposes an interesting case study for the spread of gaming in a military context at the legionary camp of *Vindonissa* (Windisch), where a large number of gaming objects have been found. Crossing the Alps into Northern Italy, Chiara Bianchi

35 Schädler (2019); Dasen (2018), 29.

36 As noted in DeMarrais, Gosden, Renfrew (2004), 2.

37 As defined in Darvill (2008). The material turn has generated an enormous bibliography which cannot be replicated here. Key introductory works can be found in: Gerritsen, Riello (2015); Tilley *et al.* (2006); Hicks, Beaudry (2010).

provides an updated picture of material culture for gaming from Lombardy during the Roman period. Alessandro Pace addresses some intricate issues related to the Pompeian gaming culture, with special attention to the question of glass counters and *fritilli* (dice-shakers). Tim Penn examines the urban-centric biases in textual mentions of gaming and explores the contribution that material evidence can make to our understanding of play and games in the countryside of Roman Italy. In the last paper of the volume, Francesca Dionoso, Federica Grossi, and Loredana Lanciani analyse the play-related objects from the sanctuary of Diana at Nemi.

This volume makes no claim to be the last word on the material evidence for gaming in the ancient world, and we freely admit that more of the contributions are concerned with the Roman period than with other periods in the ancient world. Nevertheless, the rich range of contributions published here represent one of the largest collections of papers which has yet been dedicated to the material evidence for ancient games. We hope that these studies provide both much-needed data, and food for thought, for those interested in taking forward this fascinating, and still very young, field of study.

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More than just fun and games: the past, present, and future of the materiality of play

INTRODUCTION

Studying play in the past is a serious matter and games are about far more than just having fun ;[1] there is now a need to explore the materiality of play. In *the Oxford English Dictionary*, materiality is defined as "the quality of being composed of matter: material existence; solidity; material or physical aspect or character."[2] However, since the material turn of the early 2000s, the term has taken on new and still developing meanings in the Humanities. The uniting theme of recent scholarship inspired by the material turn has been a renewed interest in the meaning of objects, focusing on the ways that analysis of material culture — broadly defined as "the objects produced by human beings, including buildings, structures, monuments, tools, weapons, utensils, furniture, art, and indeed any physical item created by a society" — can contribute to our understanding of past societies.[3] The materiality of gaming and related activities, has, however, not yet been subject to detailed study. In this chapter, we outline what we know about how ancient games were played. We then review methodological challenges facing archaeologists who study the material culture of play, before highlighting some of the ways that approaches interrogating the materiality of play can bring something new to ancient boardgame studies and our understanding of ancient societies more broadly. The contributions which make up this volume cover a chronological framework between Pharaonic Egypt and the Early Middle Ages and are distributed geographically between the Celtic fringe in the West and the Levant in the East. Coverage is far from exhaustive, but it is our hope that the papers presented here will set the agenda for future research into the material culture of board games and play in antiquity and beyond.

1. ANCIENT GAMES: THE STATE OF PLAY

Before turning to a detailed consideration of the materiality of play, it is necessary to outline the state of our understanding concerning how ancient games were played (though reconstructions of rules are often partial or problematic). In what follows, we attempt to provide a concise outline of the most common types of games (and not only boardgames) attested by ancient textual and material sources (other games and associated sources are listed in Appendix I). This brief overview cannot do justice to the rich and ongoing scholarly debates concerning the finer points of the rules for the games discussed here, but it is intended to provide both a resource to orient the reader and a means to avoid excessive

1 Dasen (2019), 15-16.

2 As noted by Demarrais, Gosden, Renfrew (2004), 2.

3 See Hodder, Hutson (1986, [2003]). As defined in Darvill (2008). The material turn has generated an enormous bibliography which cannot be replicated here. Key introductory works can be found in: Gerritsen, Riello (2015); Tilley, Keane, Kuechler, Rowlands, Spyer (2006); Hicks, Beaudry (2010).

repetition within the contributions that form this book. Games appearing only in one contribution, like Senet (discussed by Arnette, this volume), are discussed in their respective chapter. It should be stressed that not all of designs and motifs which *could* have been used for gaming — like so-called "round merels" — are universally accepted as gaming boards. We will, where possible, seek to outline these shortcomings in our knowledge. The description of these games is complemented by a typology of pavement signs including possible gaming boards, which updates the pioneering work of Charlotte Roueché and Robert Charles Bell.[4] This typology can be found at the end of this book (Appendix II, this volume).

Five Lines (*pente grammai*):[5] this game, attested archaeologically as early as the 7th century BCE,[6] is named for its board design which features five parallel lines terminating in playing spaces or boxes at either end (Figure 2.1). To win the game each player used one or two dice to move their five counters (*pessoi*) through the playing spaces positioned at the end of each line with an aim to land on the central-most line (called the 'sacred line'). The number of lines that made up the playing field could vary, and boards are known with an odd number of lines ranging from 5 to 11. In the Roman period, the game board could simply appear as a double row of five (or more) squares or circular depressions (often shaped like small dimples). It cannot be ruled out that the same type of gaming board was used in Late Antiquity to play mancala.[7]

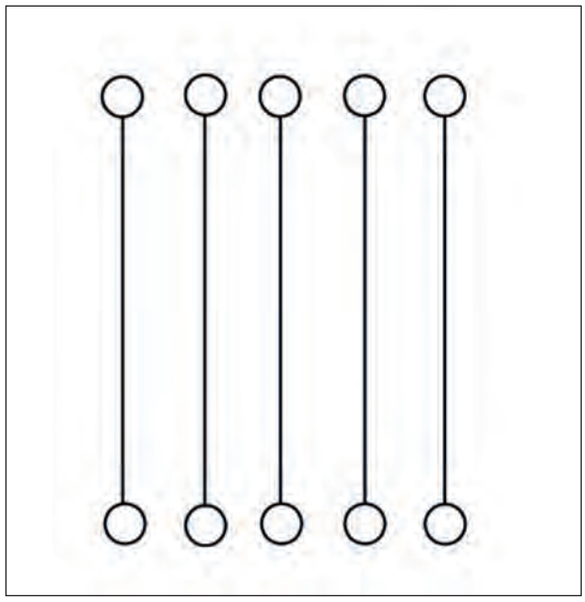

Fig. 1. A board for pente grammai (author's drawing).

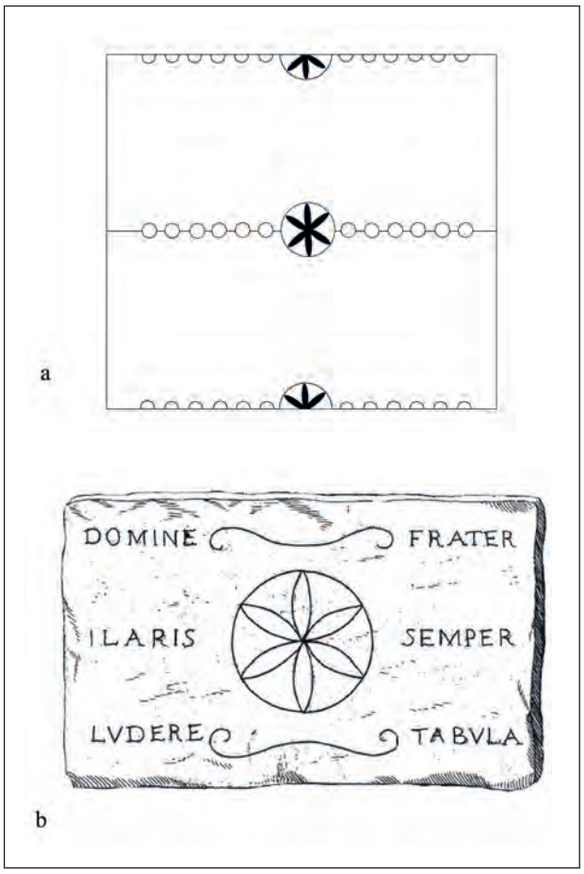

Fig. 2. a) A board for the ludus duodecim scripta (author's drawing). b). An inscribed board for the ludus duodecim scripta from the catacombs of Saint Agnes, Rome, after Boldetti (1720), 447.

Duodecim scripta/Alea:[8] A race game akin to the modern backgammon, known since at least the Late Republican period (Cicero, *De Oratore*, 1, 217). The name of the game derives more likely from the maximum number that could be rolled, 12, with two dice, than from the design of the board used to play, which usually comprises three lines of 12 playing spaces (see Figure 2.2a).[9] Many stone *duodecim scripta* boards from the Western Roman Empire are made up of phrases comprised of six words of six letters each, which conveyed amusing sentiments (often directed at the players) (Figure 2.2b).[10] Each player moved 15 counters along the board with the help of two dice; as with modern backgammon, the game ended when one of players managed to get all their counters off the board. In the Late Antiquity the same game was named *alea* and three dice were used instead of two.

Ludus latrunculorum:[11] the *polis*, in the Greek world, was characterised by a grid-like board with

4 Roueché, Bell (2007), see also Roueché (1993), 249-252.

5 Schädler (2009); Kidd (2017); Schädler (2019c), 127.

6 Kallipolitis (1963), 123-124, 173; Paleothodoros (2021).

7 Schädler (1998).

8 Schädler (1995); Schädler (2019c).

9 Schädler (1995), 84.

10 On epigraphic game boards see Ferrua (2001). On *XII scripta*, Schädler (1995, 2017); Purcell (2007); Torre (2015), 19; Lambrugo (2015a), 26-27.

11 Schädler (1994a); Schädler (2019c), 128.

a variable number of squares. The aim of the game was to capture all the opponent's pieces by trapping them between two of your own or to leave the opponent unable to make any further moves. In the Roman world, the same game was called *ludus latrunculorum* ("the game of the little soldiers"). Archaeological evidence and texts (Varro, *De lingua latina*, 10, 22) indicate that this was widespread by the Late Republican period.[12] In the Roman period the grid was often composed of 8 x 8 squares (Figure 2.3), but boards are known in a variety of configurations, ranging from between 6 x 6 up to 13 x 16 squares (though see Crist et al., this volume, on other uses of these boards). The number of pieces available to each player likely varied according to the size of the board.

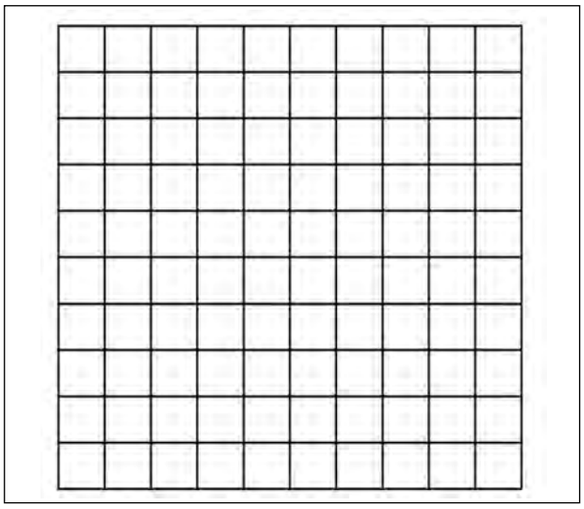

Fig. 3. A board for polis/ludus latrunculorum (author's drawings).

Merels:[13] This game, played on a board comprising a square intersected by two perpendicular lines, was mentioned by Ovid, who noted that it could be won by aligning three counters in a row (Figure 2.4a).[14] A more complex (and probably post-antique) version of this game, known as Merels or Nine Men's Morris, was played on a board made up of three inscribed squares, intersected by four lines arranged along the sides of the squares (Figure 2.4b). A similar motif consisting of a circle intersected by two or more lines has been posited to represent a merels board, but this possibility remains unproven (for further discussion see Appendix II, this volume).[15]

12 Rodrigo Redquena, Romaní Sala (2021), 6-11.

13 Torre (2015), 18.

14 Ovid, *Tristia*, 2.481-482 ("parva sit ut ternis instructa tabella lapillis, in qua vicisse est continuasse suos", how the small/simple board is made with three pebbles each, where you win by putting yours in a row). row). In some modern versions, like Three-, Six- and Nine-Men's Morris, pieces can be moved after being placed; in others, like Tic-Tac-Toe, they cannot.

15 See also Behling (2013b); Schädler (2018); Carè (2021), 214-215.

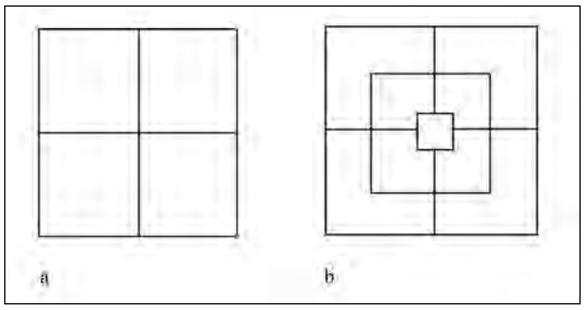

Fig. 4. Boards for: a) Merels/Three men's morris. b) Merels/Nine Men's Morris (author's drawings).

Marbles games:[16] ancient marbles, like their modern counterparts, are spheres – generally made of stone but also in various other materials – typically, but not exclusively used on specific playing surfaces or marble lanes marked with hemispherical depressions or pockets (Figure 2.5). These can take a variety of forms, rendering the aim of the game unclear, but in some cases players may have needed to throw or roll their marbles into specific pocket(s) or into an area defined by two parallel lines in order to win.[17]

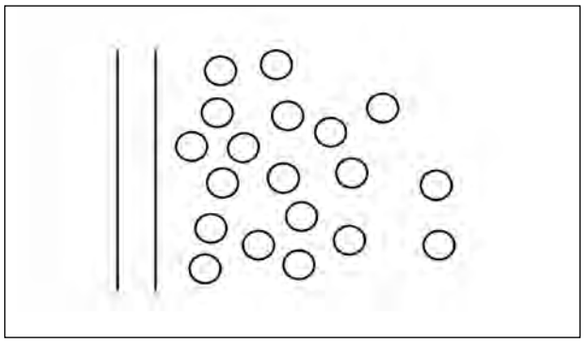

Fig. 5. A schematic plan of a marble lane (drawing by Summer Courts).

Knucklebones: Knucklebones were used for a variety of games, i.e. games of skill such as *Five stones* and *Omilla*, guessing games such as *Odd and Even*, and dice games. For playing at dice with knucklebones, or two bones were used and the higher score won ("pleistobolinda") or four knucklebones were rolled with a number of particular combinations of the faces having their own specific names and values. The highest roll, when all four astragals landed on a different side, was called "Venus" or "Basilicus iactus", the lowest (one) was called "dog".[18]

Games of skill: In many games of skill (such as *Omilla*, *Tropa* or *Delta*) from the Greek and Roman world, knucklebones, pebbles, nuts or other objects were thrown in order to hit a target (and this kind of game could utilise some pavement signs and

16 Schädler (1994b); Schädler (2013a); Schädler (2019b).

17 For further discussion see Penn, Courts, Schädler (2023).

18 Schädler (1996).

markings, most of which are collected in Appendix II). In the Roman period, children used nuts for a variety of games of skill, among which *nuces castellatae* represented on a number of children's sarcophagi.[19] Other games popular among Greek and Roman children involved hoops, wheels or bobbins, moved along with the help of a stick.

2. MATERIAL CHALLENGES

Information about ancient Greek and Roman games comes to us from four major types of sources:

i) texts, whether allusions and descriptions by Greek and Roman writers, or epigraphic sources, like inscriptions or graffiti;

ii) iconography, including depictions of players, games, and gaming paraphernalia in paintings (vase paintings, wall paintings, on papyrus), mosaics, sculpture in the round or reliefs, gems, or even on coins and similar objects (tesserae);

iii) material remains, e.g. game boards (wooden or stone boards, or engraved into pavements), playing surfaces (that are not for board games), counters, dice, dice towers, dice cups, astragals, pebbles, tesserae, marbles, balls, etc.

iv) ethnographical information about games practiced outside the Graeco-Roman world or after Antiquity and maybe even until the present day. This can include observations about actual play.

In this book, we will mainly deal with material aspects of games, which means that we neither cover the whole range of games we know to have existed in ancient Greece and Rome (see Appendix I) nor play in general, be it with toys or without. The consequence of this focus on the materiality of games is that the games discussed in this volume are mainly, but not only, board games: games played with marbles or tossing games are also included by this material approach.

Studying the material culture of gaming is hindered by complex challenges arising from survival bias, the epistemological uncertainties of studying objects which could have been used for purposes unconnected to play, and the limited number of large-scale datasets available today. The first of these problems means that we are forced to study the materiality of games through surviving objects which we can credibly link to gaming. But we know from anthropological studies, travellers' accounts, and personal experience that a range of different objects—coins, pebbles, bottle caps, or even camel dung—can be used in lieu of dedicated counters for playing games.[20] An ancient parallel is presented

Fig. 6. Pompeian fresco with a gaming scene from the caupona of Salvius. 1st c. CE. Naples, MANN inv. 111482. After Preshun *(1882), 4, plate VI.*

by a passage in Petronius' *Satyricon* in which Trimalchio ostentatiously plays games in front of his dinner guests using not counters, but gold and silver coins.[21] This is surely an exaggerated case, but it neatly illustrates the way in which the materials used for play were so flexible that in many cases objects could be used for gaming without archaeologists ever being able to tell.

It is also very likely that gaming boards (often called *tabulae lusoriae*) could be scratched into the dirt or drawn onto durable stone pavements with charcoal or paint, lasting far shorter than examples presented in this volume.[22] None of these forms of gaming board are likely to survive in great numbers. The available evidence suggests that many portable gaming boards were carved from wood, rendering them visible only when set up in, for example, funerary contexts, where *in situ* gaming pieces make their precise purpose clear, or in anaerobic conditions which prevent the wood from decaying (see e.g., examples discussed by Ulrich Schädler and Mark Hall, this volume). To overcome this evidential vacuum, we must turn to the indirect testimony provided by the iconographic record. From Pompeii, for example, there are frescoes showing gaming schemes, and crucially, the boards themselves are depicted in some detail. Probably the most famous is the example from the *caupona* of *Salvius* (VI 14, 35-36) where a series of vignettes show episodes of tavern life. In one of these, a fight breaks out between two players over a contested roll of the dice; it is interesting to note that the two players, seated opposite each other, hold a game board on their

19 Rieche (1984); Behling (2010); Behling (2013a).

20 Pebbles: Hall (2019), 201. Bottle caps: Shah (2006), 245. Dung: Wood (2015), 250.

21 Petronius, *Satiricon*, 33.

22 For boards scratched in the dirt in modern times see: e.g. Hall (2019), 201. For charcoal or paint see Lavan (2021), 241. For a boardgame in charcoal see e.g. the otherwise unpublished board in the Villa of Hadrian at Tivoli, mentioned by Bruno, Carboni, Manderscheid (2011), 518.

knees (a custom that can still be observed today in several parts of the world), probably made of wood, on which the counters are clearly visible (Fig. 2.6). In another Pompeian *caupona* (VI 10, 1.19), a lively gaming scene is portrayed, with a group of people arranged around a three-legged table (easily recognisable as a *mensa delphica*) on which rests a gaming board (again probably made of wood).[23] But even glass or bone objects — like dice or counters — may disappear from the archaeological record under certain environmental conditions, with both particularly vulnerable to acidic soils. As a result, it is important to acknowledge from the very outset that we are dealing only with a modest proportion of the gaming boards and other paraphernalia ever made and used in antiquity, even at the sites where they are well-attested and well-documented.

The second, and perhaps more complex problem, is that much of the material which we traditionally associate with gaming could have been used for other purposes.[24] The theoretical concept of 'affordances' is particularly valuable in elucidating this problem. Affordances are the characteristics of an object which facilitate certain uses, and which lead people to utilise them in certain ways.[25] Recent archaeological research has stressed that affordances need to be considered in light of overlapping or contrasting uses for the same object.[26] Here, it is useful to highlight the distinction between proper (or normative) function and system function.[27] The former is linked to the function which an object's maker intended, while the latter reflects other uses enabled by its affordances. The distance between these two types of functions is fluid, and it is possible that over time a system function can become the proper function. The broader implications of these theoretical observations are that we must interpret gaming-related material culture with due care and attention to its other potential uses.

In light of these theoretical considerations, none of the four main kinds of gaming-related material culture — gaming boards, counters, dice, and astragals — are unambiguous. The identification of gaming boards is often disputed. It has been proposed, for example, that gaming boards with a simple grid design could also have served as abaci and the same may have been true for *pente grammai* boards.[28] Ulrich Schädler has suggested that some presumed gaming boards from funerary contexts, especially catacombs, around Rome could instead have played a symbolic role in commemorating the dead.[29] Similarly, the circular design with spokes, once thought to have been used for playing merels, has been interpreted as fulfilling a range of different functions, only some of them connected with gaming (see Appendix II, this volume).[30]

The small glass discs with a plano-convex section are also methodologically problematic. These are often interpreted as gaming pieces that our textual sources indicate were moved on gaming boards (especially when playing *ludus latrunculorum* or *duodecim scripta*).[31] There can be little doubt about their use in gaming when found in funerary contexts together with game boards or dice, though this occurs only rarely.[32] However, this interpretation is much more complicated when they come from a settlement context. In this respect, the case of Pompeii is emblematic: thousands of specimens come from the city and not all of these can be considered to be gaming pieces: other non-gaming uses have been proposed in the scholarly literature. These include accounting tokens and, in some instances — especially when made of brightly coloured glass — inlays to be used in furniture, architectural adornment, or jewellery.[33]

In practice, a contextual approach to objects from Pompeii means that the gaming-related function of certain classes of materials (such as glass counters or the *fritilli* mentioned below) can only be securely identified when these are documented together with objects with a primary gaming-related function (dice, *tesserae lusoriae,* and sometimes knucklebones). This allows us to define the function an object had in its last phase of life, a function that can of course be different from its "proper function" or the one for which it was produced. While even dice and knucklebones can be used for other purposes, such

23 Giacobello (2015), 37-38, figs 1-3. A wooden board is engraved on the table in slope house 2 in Ephesus, see Schädler (2013a), 39.

24 Crawford (2009).

25 Gibson (1977); Gibson (1979); Norman (2002); Risatti (2007), 25-28.

26 Hodder (2012), 50.

27 Recently discussed in the context of Roman archaeology by Swift (2017), 9-10; for the philosophical literature see Preston (2000); Preston (2013), 161-187; Cummins (1975); Milikan (1984); Milikan (1989); Milikan (1993).

28 Pritchett (1968), 200; Eckardt (2017), 201 with further references. On the possible use of *pente grammai* boards as *abaci* see, Dasen, Gavin 2022.

29 Schädler (2013d) and (2021/2022).

30 Schädler (2018).

31 For example: Martial, *Epigrams*, 14.17 ("calculus hac gemino discolor hoste perit", a counter of a different colour is lost to two enemies); Ovid, *Ars Amatoria*, 2.208 ("sive latrocinii sub imagine calculus ibit, fac pereat vitreo", if you make a counter walk in the war game, make your counter be won by the glass enemy); Ovid, *Tristia*, 2.477 ("discolor ut recto grassetur limite miles", how the differently coloured soldier proceeds straightly); *Laus Pisonis*, 192-194 ("calculus et vitreo peraguntur milite bella, ut niveus nigro, nunc et niger alliget albos", wars are fought between glass soldiers, so that white captures black and black captures white).

32 For a partial survey of some possible sets, many of which come from graves see Penn, Courts (2022).

33 Tokens: Olesti Vila (2021), 122 n. 142; St Clair (2003), 111. Furniture and architectural inlays: Cool (2016). Jewellery: Olson (2001), 136-138.

as divination (as we shall see shortly), this approach nevertheless provides the best means, as yet available to us, to sidestep a circular argument about the ways in which counters were used. Naturally, we must also consider the exceptional nature of the evidence from Pompeii: when there is insufficient data to reconstruct artefact assemblages, one is often forced to adopt a traditional approach, using typological and morphological criteria. It is up to the sensitivity of individual researchers to gauge how far one can go in this process (as is attempted in a balanced way in the respective contributions by Ilaria Truzzi, Frances McIntosh, and Tim Penn in this volume). The observations presented in this latter sort of study must be tempered, as indeed each of these authors does, by paying due care to acknowledge the limitations of the available evidence.

Finally, astragals and dice may have been used not just for gaming but also for divination. This is clearest when we examine astragals — the astragalus joint of sheep, goats (ovicaprids), or more rarely cattle— as epigraphic evidence provides details of how to use these objects in an oracular fashion.[34] However, it must be remembered that the astragalus itself is a common form of butchery waste and as a result astragals are most clearly associated with gaming activities when they have been modified to aid play. Most commonly this takes the form of a smoothing on the lateral and medial surfaces of

Fig. 7. A bone knucklebone showing the different faces. Pompeii, 1st c. CE. Pompeii inv. 13284. After Pace *(2023), fig.3.*

the astragals (i.e. the longer sides), but sometimes a hole can be drilled in the convex plantar surface of the bone, to alter its weight, and therefore the way it falls; this is sometimes filled with lead to change the astragal's centre of gravity (Figure 2.7).[35] Cubic dice are less explicitly connected to divination, but it has been suggested that outcome of rolls was linked with the will of the gods, in which case they too could be put to work to divine the future.[36] As a result, both astragals and dice are suggestive of gaming activity; we must handle these classes of object carefully and consider the other possibilities.

There are several other less common paraphernalia related to gaming, which deserve brief mention,

Fig. 8. Different kinds of tesserae lusoriae: a) A bone Alexandrian tessera, from Pompeii, 1st c. CE. Pompeii inv. 13292A. After Pace *(2023), fig. 58; b) A bone paralellepiped tessera from Pompeii, 1st c. CE. Pompeii inv.11493A. After* Pace *(2023), fig. 56; c) A bone configured tessera, from Pompeii, 1st c. CE. Pompeii inv. 1881C. After* Pace *(2023), fig. 78.*

34 Divination with dice: Graf (2005). For relevant recent work in Asia Minor see Talloen (2018); Nollé (2007). However, the rules of the knucklebone oracles in Roman Imperial Asia minor demonstrate that they are based on the astragal used as a die.

35 Caré (2009-10).

36 Swift (2017), 123-124.

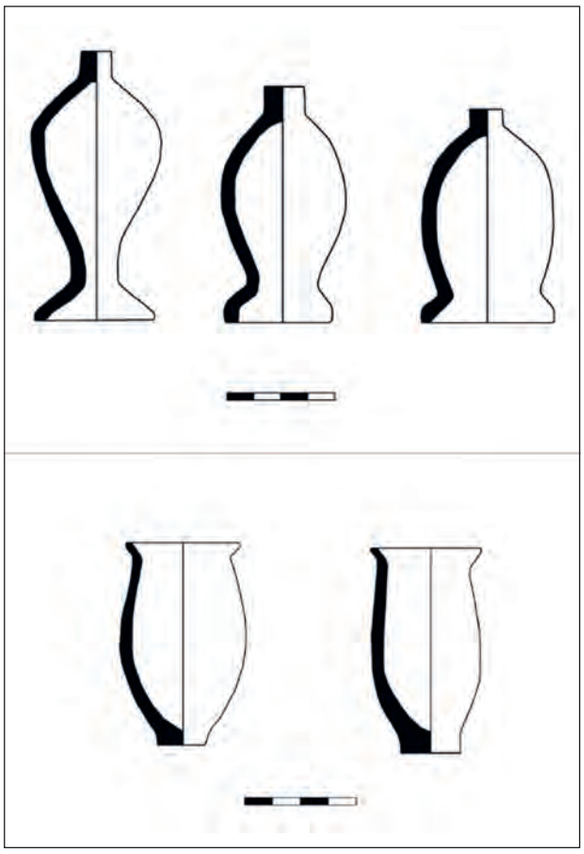

Fig. 9. Different kinds of fritilli (author's drawings).

but these appear less frequently in the pages of this volume. The term *tesserae lusoriae* generally refers to a range of objects believed to relate to gaming, but whose functional interpretation is challenging. Foremost among these are the so-called 'Alexandrian' counters, which are disks in bone or ivory (Figure 2.8a).[37] These objects generally have an obverse decorated in bas-relief, with subjects that can range from the monuments of Alexandria, Egypt, to the portraits of Hellenistic rulers or Roman emperors. On the reverse a bilingual numeral (in Roman and Greek numerals) was generally accompanied by a Greek word related to the figural decoration on the opposite side. Another type of *tesserae* '*lusoriae*' comprises a bone or ivory rectangular object with a small circular end bearing a numeral in Roman characters and a (often, but not always, offensive) Latin word on two of the four faces (Figure 2.8b).[38] Finally, another group of figural counters or tokens, again in bone or ivory, take the shapes of animals (fish, rabbits, plucked geese, etc) or food (e.g. almonds or hams) usually bearing a Roman (Latin) numeral on one face (Figure 2.8c).[39] All these types of objects are united by the fact that they are generally considered to belong to the gaming sphere, although no convincing proposal as to the game played with these objects has been suggested so far.

37 Bianchi (2021).

38 Baratta (2019).

39 Lambrugo (2015b).

Fig. 10. A bronze turricola from the Roman villa of Vettweiß-Froitzheim, Germany, 4th c. CE. Bonn, Rheinisches Landesmuseum 85.0269 (©LVR, Landesmuseum Bonn).

Fritilli — dice-shakers or dice cups — are another highly problematic class of gaming-related object.[40] In archaeological reports, some types of small cylindrical or pyriform ceramic containers have previously been interpreted as fulfilling this role (Figure 2.9). But the matter is far more complex and Alessandro Pace (this volume) demonstrates that it is better to avoid a purely morphological approach; he instead emphasises the importance of harnessing contextual data. The evidence from Pompeii indicates that, at least in this town, the term '*fritillus*' does not correspond to a specific category of objects, but should, if anything, be understood in a flexible, functional sense. In other words, various objects could be used as *fritilli*, even if their primary function was not linked to gaming. Whatever form they took, *fritilli* were used to prevent disputes from arising over dice throws (as evocatively represented in the *caupona* of Salvius, mentioned above); a more prestigious and elaborate solution was the *pyrgus* or *turricula* (dice tower) (Fig. 2.10). These were small towers (as the name itself suggests) into which players threw dice; a series of inclined plates or stairs would cause the dice to tumble randomly before exiting, resulting in a tamper-free roll.[41]

40 Pace (2022b).

41 Cobbett (2013); Cobbett (2008).

3. DATA COLLECTION

There are still very few large scale datasets available for the study of gaming across the ancient world. The focus on reconstructing games in earlier scholarship has meant that the laborious process of documenting and collating the evidence — much of which remains unpublished — is still ongoing. The contributions presented in this volume represent a first step to bridging this gap and aim to supplement the few notable exceptions to this general picture. Foremost among these exceptions are Antonio Ferrua's catalogue of gaming boards for playing the backgammon-like games *XII Scripta/Alea,*[42] the Rural Settlement of Roman Britain, which provided a list of sites with gaming paraphernalia,[43] and Giulia Baratta's catalogue of the Late Republican so-called *tesserae lusoriae*.[44] Several new syntheses are under way, for example, on Pompeii, Gaul, and Britain by members of the ERC *Locus Ludi* project team and external collaborators.[45]

One of the other key outputs of the *Locus Ludi* project is the creation of the *Ludus* database (available online at https://locusludi.ch), curated by Alessandro Pace. This database was conceived as a major new tool for gaming research. The *Ludus* database, now in the implementation phase, has been structured to accompany each record (i.e., each gaming board recorded within it) with descriptive information (design, dimensions, material, positioning with absolute coordinates, etc), as well as an interpretation of its function, attributing it (whenever possible) to a specific game. A wide range of fields in the database are searchable, and the platform is capable of visualising, for example, the diffusion of a specific type of game through time and space.

4. MATERIALITY AND THE MATERIAL TURN

In 1986, Ian Hodder claimed that material culture is "meaningfully constituted".[46] Since then, the so-called material turn has led to increasing emphasis on the 'materiality' of objects; this remains an ongoing process, as indeed this book symbolises. Understandings of the term 'materiality' vary substantially in the scholarly literature, but it has come to denote a "sense of the intricate cultural nexus between artefact and person."[47] In particular, recent research perspectives (i.e. materiality studies) emphasise the importance of the objects but stress the need to move beyond analysing "representation" (i.e. the position that objects simply reflect human practices) to think about the complex ways that the material nature of objects shaped lives of individuals and communities in the past.[48]

The material turn and associated concepts of materiality have only recently been brought to bear in Classical Archaeology. Scholars of the Roman period have been at forefront of this research.[49] In the introduction to *Materialising Roman Histories,* Astrid Van Oyen and Martin Pitts called for material culture to be leveraged to "[produce] a better understanding of the Roman world rather than merely adding texture to existing narratives."[50] Other scholars have gone further: in the same volume, Miguel John Versluys calls for scholars to write history as a story of objects *and* their people.[51] Approaches to the materiality of the Classical World have examined and explored myriad themes. To name but a few, studies of the spatial distribution of objects have hinted at when, where, and by whom they were used. Object biographies have been employed to reveal the lives and "experiences" of the objects themselves and open a dialogue revolving around agency in the past. Objects have also become a tool through which to examine the immaterial world through object-driven literacy studies and practice theory approaches. Modern concerns about manufacture and market interconnectivity have also impacted archaeological studies of material culture, manifesting in the rise of globalisation theory in scholarly literature as well as careful investigations into decisions which affected the manufacture of physical objects in the past. The entire sweep of themes encompassed by material culture studies in the ancient world cannot be outlined with any justice here, but in the sections which follow, we explore some of the ways in which studying play from a material perspective can enhance our understanding of games and how they were experienced by ancient societies. In doing so, we aim both to highlight the varied and — we hope — important contributions presented in this volume and highlight opportunities for future research.

5. PLACES AND SPACES

The material turn outlined above has also been influenced by the so-called 'spatial turn' in the Humanities. This trend is concerned with how

42 Ferrua (2001).

43 Smith, Brindle, Fulford Lodwick (2018), 66-69. The data from the project can be consulted online at https://doi.org/10.5284/1030449

44 Baratta (2019).

45 Pompeii: Pace (2022b), Pace (2022d); Pace, this volume. Britain: Courts, Penn (2019) with more work projected. Gaul: at thesis is currently being undertaken by Thomas Daniaux at the University of Fribourg under the supervision of Veronique Dasen. For earlier work in Spain see also: Jiménez Cano (2014).

46 Hodder, Hutson (1986, [2003]), 1 and passim.

47 Taylor (2009), 299. See also for example papers in Hicks, Beaudry (2010).

48 Van Oyen, Pitts (2017); Swift (2017).

49 On materiality in Roman archaeology see e.g. Van Oyen, Pitts (2017); Pitts, Versluys (2014); Swift (2017); Eckardt (2017).

50 Van Oyen, Pitts (2017), 18.

51 Versluys (2017).

considering the ways that space is created, used, and experienced.[52] The implications for gaming studies are clear: the spatial turn invites us to interrogate where and when games were being played in the past, and consider who the players might have been.[53] In this volume, considerations of space are approached at several distinct but interconnected scales. At the sub-site level, we are invited to examine how granular analysis of the use of specific spaces for play-related activities can inform us about play in the past.[54] Francesco Trifilò's study of carved gaming boards in the Forum Romanum at Rome as well as in public spaces at Timgad has already highlighted the important way that playing in a visible location allowed gamers to show off their skill and claim social prestige.[55] Several contributions in this volume interrogate similar themes. For example, in this volume Ben Russell, Andrew Wilson, and Angelos Chaniotis explore the spatial distribution of gaming boards in the Place of Palms (formerly the South Agora) at Aphrodisias. This urban park contained many floor markings (but not all of these are game boards) — over 500 in total — probably because it was a uniquely shaded and cool part of the city centre. At a regional scale, Peter Talloen, this volume, examines the spatial setting of gaming boards across Lycia, Pamphylia, and Pisidia, building on his earlier work at Sagalassos, and demonstrating the important place of gaming in public spaces across these regions.[56] Another case history is proposed by Ulrich Schädler who focusses the attention on Ephesus, where the distribution of the game boards in different parts of the city could be interpreted from a social perspective.

At a site level, analysing the spatial distribution of gaming paraphernalia provides access to insights about where play took place. The completeness of such insights is complicated, as noted above, by the ambiguities of the many of the classes of evidence, but if handled delicately, can still provide insights about the spaces in which people chose to play as is achieved by Alessandro Pace's work on gaming materials from Pompeii.[57] In this volume, the same author stresses the importance of a contextual approach to the archaeological evidence. His work on the gaming-related material from Pompeii demonstrates the benefits of adopting a traditional typological approach in favour of one which draws on contextual evidence. Since some objects, like dice, astragals, and some types of so-called *tesserae lusoriae* are very likely to be associated with games, other objects found together with them are more likely to have been used for playing too — and together these form a "playing assemblage." Since we have already seen that other objects, like glass counters, could be used for play but also for decoration or accounting, a methodology which adopts a contextual approach and validates gaming assemblages through the items which are more closely linked to play can strengthen the security of our conclusions about which objects were used for play and which were not.

6. THE SOCIAL TOPOGRAPHIES OF GAMING

Artifactual studies in other areas have increasingly demonstrated the value of a "social distribution" approach, but such an approach has so far only been partially utilized in gaming studies. Analyses of social distribution seek to examine who within past societies had access to specific kinds of material culture and interrogate what this tells us about lived experiences in the past.[58] Such an approach is often best undertaken on a regional scale, which allows for the collation of large amounts of the evidence from a region or province. In gaming studies, such an approaches has already proved effective in Roman Britain, where work by the Rural Settlement of Roman Britain Project has emphasised the strong correlation between urban and/or military settlements and the presence of gaming materials.[59] Hilary Cool has examined the distribution of gaming paraphernalia in graves in Britain, showing that such objects are found in both elite graves, as well as burials which may belong to individuals of more modest social station.[60] A range of other work has also shown that gaming related finds, especially dice and counters, strongly correlate with military communities across the Roman Empire.[61]

Further, and ongoing, work by Summer Courts and Tim Penn has shown that gaming boards in Britain are predominantly found on military sites, in part due to the availability of durable materials like stone. Soldiers were familiar with working stone, and could therefore make durable gaming boards, but mobility inherent in military communities, also lead to a degree of social mixing and knowledge exchange.[62] In this book, Penn provides a first look at gaming evidence from the countryside of Roman Italy,

52 On the spatial turn in general see e.g. Guldi (2011).

53 Schädler (2012); Schädler (2013B). See also Pace (2023), 302-319.

54 See Widura (2015).

55 Trifilò (2011). However, some of his identifications of the patterns engraved in the pavement of the Basilica Iulia are erroneous. See also Schädler (2013a).

56 Talloen (2018).

57 Pace (2020a); Pace (2022a); Pace (2022b); Pace (2022d); Pace (2022e).

58 E.g. Eckardt (2017); Eckardt (2005); Eckardt, Crummy (2008); Derks, Roymans (2002).

59 Smith et al. (2018), 66-69.

60 Cool (2008), 105-109.

61 E.g. Mulvin, Sidebotham (2004); Jilek, Breeze (2007); Widura (2015), 96-100.

62 Courts, Penn (2019); Courts, Penn, in preparation.

demonstrating that a social distribution approach shows that gaming practices were likely prevalent throughout the social spectrum, from the occupants of monumental villas down to those who lived in modest huts. So far, however, studies of the social distribution of gaming in other parts of the ancient world are lacking, and more are sorely needed.

Material culture studies alone cannot always provide a complete view of who played board games in the past. For example, until recently, Roman women were essentially written out of studies of play and gaming. Recent work by Summer Courts draws on the textual and iconographic record to demonstrate that women from a range of social backgrounds engaged in gameplay in the Roman world.[63] It is to be hoped that our understanding of gameplay in ancient society can be further enhanced by intersectionally informed studies of grave goods alongside osteologically-sexed and aged human remains in future.

7. GAMING, GLOBALISATION, AND ROMANISATION

Globalisation has been among the most powerful lenses applied to the study of the humanities and social sciences in recent decades.[64] Precise definitions of the term itself remain keenly debated — with some scholars seeing it as a process, others as a system or a discourse — but it is nevertheless widely acknowledged that globalisation involves a "wide-scale flow of ideas and knowledge alongside the sharing of cultural customs, civil society, practices and the environment."[65] Common interpretations of globalisation see the term as encompassing a closer economic integration through greater movement of goods, services, capital and labour, often as a result of political considerations, but these movements can be accompanied by the movement of ideas and cultural habits, which are adopted, adapted, or rejected at a local level, resulting in rich hybridisation and local variability. Other work also emphasises the degree to which common practices through time (and space) create an experiential sense of shared culture.

While for earlier scholarship, globalisation could only be discussed in a truly "global" setting, after the discovery of the New World, more recent research has emphasised the applicability of this concept to earlier periods which experienced complex connectivity.[66] In Roman archaeology, the term has been employed by scholars seeking to explore themes as diverse as mobility, networks, and consumption.[67]

Two concepts are particularly relevant here. The first is provided by Miguel John Versluys' conception of a *koine,* originally used to denote a shared language, but here expanded to mean a shared visual (and material) culture.[68] Secondly, Versluys along with Martin Pitts, has developed the concept of objectscapes to describe the flow of material culture and its impacts on the lived experiences in the past.[69]

The study of the material evidence for gaming in antiquity has much potential as a laboratory to explore globalisation in the pre-modern world. A key theme of gaming studies has been the mechanisms through which games came to be played across the ancient world. The essential background to this discussion is a broader debate on the sociology of gaming. In the middle of the 20th century, John Huizinga argued that playing (in a general sense) is a natural human activity, which organically arises in almost all societies.[70] However, this conception of play was soon criticised by others, like Roger Caillois and Joffre Dumazadier, who argued that board games are a specific social practice which originated in Egypt and the Fertile Crescent in the mid-4th millennium BCE, before spreading across the Mediterranean and beyond.[71] According to this model, the globalising impact of the Roman Empire is to be credited with a key role in the transmission of games and gaming, and it is the extent of the empire which allowed the free flow of information northwards through Northern Europe and eventually into Scandinavia.[72] This process of transmission could be through extra-regional elite contact and exchange, and was driven by a desire to demonstrate skills and knowledge to gain social cache, as Mark Hall, Ulrich Schädler and Katherine Forsyth have convincingly argued happened in Britain and in the Barbaricum.[73]

Local communities within and beyond the Roman Empire were not all necessarily bound to play games the same way.[74] The wider Romanisation debate has moved beyond assuming the Empire's subjects passively accepted Roman culture and now accepts that local communities were instead active participants in complex processes of adoption, adaption, integration, and rejection.[75] These broader perspectives on reactions to Rome's Empire pose

63 Courts in press.

64 For an introduction to globalisation see papers in Hodos (2017b) and particularly Hodos (2017a).

65 Hodos (2017a), 4.

66 Hodos (2017a), 3; Knappett (2017), 29 with further bibliography.

67 Pitts, Versluys (2014).

68 Versluys (2014a).

69 Pitts, Versluys (2021).

70 Huizinga (1950), followed in an archaeological context by Sterckx 1970.

71 Caillois (1958); Dumazadier (1962); Dumazadier (1967). See also Schädler (2019c) about the transmission of games from Greece to the West.

72 Murray (1951), 226-238; Whitaker (2006); Sødberg (2007).

73 Hall, Forsyth (2011).

74 See the contribution by Mark Hall and Ulrich Schädler in this volume.

75 For a recent review of the Romanisation debate, see Versluys (2014b) with earlier references.

specific problems for gaming: not only are gaming rules difficult to recover, but broadly recognisable Roman games may have been played according to considerably different rules at a regional or sub-regional level. Much ancient gaming material was itself highly portable. For example, small objects like dice and counters could travel far and easily, as is embodied by the presence of gaming paraphernalia well outside the boundaries of the Roman Empire, whether in the Celtic fringe, free Germany,[76] and beyond to the north, or in Nubia to the south.[77] Indeed, gaming kit could even be used while on the move, as is perhaps most evocatively implied by the gaming set recovered on the Comacchio shipwreck.[78] Finding a gaming set in a given area of the ancient world therefore requires reflections on the ways in which it could have been used, especially allowing for local variations on the play of specific games within a given household, gaming group, or local community, within the broader context of a loose cultural *koine*.[79]

Moreover, when gaming material was manufactured locally according to models drawing on the Roman tradition, there is no guarantee that it was used in the same way in all places (as suggested by the case of the Doctor's Grave at Stanway).[80] Few texts from classical antiquity specifically dedicated to this topic have come down to us and we are therefore forced to reconstruct the rules using the information, often incidental and unclear, which can be recovered from Greek and Latin literary texts.[81] These are typically authored by an elite male demographic and in the Roman period the literary class centred on the City of Rome. The limited iconographic data available from across the Empire can hardly help us reconstruct the rules of games (think of the Pompeian frescoes, discussed above, the Mosaic in the House of the Horses at Carthage (Fig. 2.11), or the Megalopsychia mosaic from Antioch on the Orontes), but these too are affected by the same problems that afflict the textual sources. In other words, these representations are not particularly useful to us because the purpose of the painter or mosaicist was not to show clearly what the game mechanics were, but simply to depict a gaming scene in a broadly schematic way.[82] These limitations complicate our understanding of games within a global context; even where we can (partially)

Fig. 11. Mosaic emblema with gaming scene from the House of the Horses in Carthage, 4th-5th c. CE. Tunis. (Photo by Rais67, 2011, Wikimedia Commons)

reconstruct the rules of a given game, it is difficult to relate these rules to much of the material evidence as it is found across the ancient world.[83] Studying the materiality of play in antiquity therefore requires us to recognise that gaming is flexible and adaptable to local realities, meaning that it is challenging yet rewarding to interrogate the archaeological evidence for play across different regions.

It is increasingly acknowledged that populations in the ancient world were highly mobile, with major implications for interregional knowledge exchange. While precise levels of mobility within specific communities remain to be clarified, a range of traditional archaeological techniques and scientific methods of analysis increasingly demonstrate that considerable numbers of people moved over long distances.[84] Within this wider context, it is clear that under the Roman Empire, the army was a major vehicle for population mobility, causing soldiers — and sometimes their dependents — to relocate, sometimes over very vast distances. A growing body of work is demonstrating that in the Roman world, this mobility meant that the army was a significant vector for the diffusion of games and gaming even to the edges of the Empire.[85] The massed forces of the army were a formidable war machine, but the army also fulfilled a wide range of economic, policing, and other service roles within the Empire's borders. Soldiers brought with them new material culture(s) and new lifestyles that could be (partially) adopted by communities living in newly occupied territories.

76 See the contribution by Mark Hall and Ulrich Schädler in this volume.

77 Celtic fringe: Hall, Forsyth (2011); free Germany: Krüger (1982), Widura (2015), 65-70. Nubia: De Voogt (2019).

78 Berti (1990), 269, no. 251.

79 Schädler (2019a).

80 About the difficulty to identify the game even when counters are found still placed on the board see the Stanway case, Schädler (2007).

81 Dasen (2018), 29.

82 Dasen (2018), 29.

83 Dasen, Schädler (2019), 73.

84 E.g. Eckardt (2010); Handley (2011).

85 E.g. Courts, Penn (2019), in preparation; Pace (2015); Pace (2022c).

In addition, auxiliary soldiers, enlisted as *peregrini* (non-Romans), received Roman citizenship at the end of their service and some veterans may have brought new customs and habits learned in the army back to their native lands, becoming vectors for the spread of Roman gaming culture into peripheral regions.[86]

It is evident that gaming was very often among the practices learned during the long years of military service, as is clearly demonstrated by the frequent appearance of gaming kit on military sites in all areas of the Empire. However, we must not understand this phenomenon as a simple passive reception or acceptance of Roman material culture and soldiers from different cultures and social horizons, could give life to new variations in gaming practice.[87] These new hybrid ways of using material culture can sometimes be glimpsed in the material data for gaming, as Walter Crist et al. (this volume) suggest in their contribution on *ludus latruncolorum* boards. Yet soldiers were not the only mobile groups in ancient society, and we must also explore the possibility of others – including but not limited to merchants, economic migrants, elites with landholdings in multiple regions, exiles (like Ovid), hostages, and pilgrims – contributing to the transfer of gaming-related knowledge around the ancient world.

8. THE OBJECT BIOGRAPHIES OF GAMING

Object biographical approaches which seek to explore the lifecycle of things have long been a key weapon in the arsenal of archaeologists seeking to explore materiality but have only recently started being brought to bear to the study of games. This approach emphases the ways that the accumulated histories of objects contribute to wider meanings and significances beyond any innate material value.[88] The core theoretical assumption is that objects are 'born', lead 'lives' through their various relations with people and other objects, before eventually 'dying', when they are removed from use through, for example, breakage, loss, or deliberate deposition. In the gaming sphere, Tim Penn and Summer Courts have explored the biography of gaming 'sets' across the western provinces, finding that gaming sets need to be considered as composite objects or collections made up of multiple individual units, each with their own biographies which contribute to the collective whole.[89] These pieces could each acquire associated memories and connotations among the individuals and users who used them.

Much more work remains to allow us to fully benefit from the insights which gaming studies can draw from fuller utilisation of object biographical approaches. Much gaming kit, after all, was the product of careful but pragmatic selection, modification, or repurposing of materials primarily or originally intended for other purposes. For example, gaming boards deposited in the rubble core of Hadrian's Wall and on vertical surfaces in Hadrian's Villa at Tivoli appear to reflect the short-term playing of board games by masons who then abandoned their boards when it was time to move on.[90] Similarly, though some scholars have posited short inscriptions or pictographical graffiti are 'integral' to the counters on which they appear, and therefore presumably therefore executed at the point of manufacture, this may not always have been the case.[91] It is just as easy to see the graffito reading "IUSTI SUM" ("I belong to Iustus") on a counter in 1st-century CE hoard found in Lausanne (ancient *Lousonna*), Switzerland, as a subsequent modification made by the owner—quite likely, but not necessarily, Iustus himself.[92] The same may be true of many of the counters discussed by Natasha Harlow (this volume) in her analysis of graffiti on counters in Britain. More or less roughly cut disks made of stone or ceramic are common finds on many sites and are sometimes interpreted as gaming counters.[93] Leaving aside the functional ambiguity of these objects, which we have already dealt with above, these objects were made through careful selection of materials. Ben Russell, Andrew Wilson, and Angelos Chaniotis (this volume) posit that polychrome marble counters from the Place of Palms at Aphrodisias were deliberately chosen for contrasting colours which permitted players to differentiate their own pieces. Similarly, Frances McIntosh (this volume) interrogates terra sigillata counters from Corbridge (ancient *Coria*), just south of Hadrian's Wall and demonstrates that gamers made a conscious choice of the imagery or vessel portion which they repurposed into counter.

There are certainly limits to these approaches. Ulrich Schädler has recently challenged earlier notions that gaming boards for playing *alea,* a large number of which have been found in the catacombs of Roman Italy, were originally gaming boards that were later

86 Pace (2015); Pace (2020b); Pace (2022c). Another practice that may have allowed the spread of the Roman gaming habits beyond the limes is the habit of the Romans taking as hostages members of noble families of the barbarian populations, as perhaps shown by the case of the Barbarian princes buried in Poprad. See, Lau, Pieta, Štolcová (2022).

87 De Voogt (2019), 90-92. For a synthesis on gaming boards, mostly in Roman military contexts, in Britain, see Courts, Penn (2019).

88 Key contributions are provided by Gosden, Marshall (1999); Joy (2009); Kopytoff (1996).

89 Penn, Courts (2022).

90 Hadrian's Wall: Crow (1984), 3. Hadrian's Villa: Bruno, Carboni, Manderscheid (2011), 518.

91 Woolf (2011), 55.

92 Flutsch (2019).

93 E.g. From the Athenian Areopagos see Kurke (1999), 264, fig. 1. From *Amorium*: Witte (2012).

repurposed for funerary purpose.[94] Instead, he suggests that many, if not all, of these boards were purpose-made pastiches of gaming boards which were instead fashioned with a funerary purpose in mind. This may be true in some cases, and Schädler's scholarship offers an important corrective to assumptions that all apparent gaming boards from funerary contexts were used for play.

9. LITERACY, NUMERACY, AND GAMING

The connection between board games and other skills, such as literacy, has long been acknowledged. Nicholas Purcell's wide-reaching article on the topic of games in urban settings underlined the significance of literacy and numeracy as skills concomitant with board gaming.[95] Broader scholarship into literacy in the Roman world has increasingly recognised the access to differing skill levels among different parts of the population, though relatively few members of society were probably capable of immersive engagement with the full breadth and depth of Latin and Greek literature.[96] Of course, playing a game did not necessary require the same literacy as reading, say, Virgil. Antonio Ferrua's foundational work on the study of gaming boards, for example, demonstrates the substantial number of gaming boards which featured provocative, and often amusing, combinations of words.[97] Yet boards of this kind were limited to the 36 characters required for the spaces of an *Alea* or *XII Scripta* board: playful though they may be, only a basic level of literacy was needed to understand the words on these boards. And even then, their monumental lettering meant they could still be used for playing even by those who could not read at all. Natasha Harlow (this volume) extends this concept of limited literacy through her interrogation of graffiti on bone counters from Roman Britain, asking whether the population of the province could appropriate the skills of literacy and numeracy, so intimately linked with imperial administration, for personal leisure activities like gaming.

Literacy was not simply a gateway to playing but was also actively manipulated as a tool to convey messages related to gaming. For example, a famous exhortation next to a marble run in Cherchell, Tunisia reads: "Set aside business and come let us play" ("Sepone iuria et veni ludamus").[98] This playful inscription clearly derives its efficacy from the — at least partial — literacy of those who could read it and understand it was calling them away from their daily business, towards relaxation. This very same literacy could even be used to boast about a player's skill.[99] One of the most famous from graffiti about play at Pompeii feature boasts about its author's skill and success: "I won at Nuceria, playing alea, 855 ½ denarii – honestly!" ("Vici Nuceriae inalia [sic] DCCCLVS fide bona").[100] So too do we hear about boasts of skill among the soldiers of Vindonissa on the German *limes,* as one tablet reveals: "by the most powerful spirits of gaming, I'm going to swing the dice cup like a sword" ("cras per genios potissimos ludi crispo orcam sicut gladium").[101] Ben Russell, Andrew Wilson, and Angelos Chaniotis (this volume) highlight the important juxtaposition of gaming graffiti and boards in the Place of Palms at Aphrodisias, and this juxtaposition indicates that play was not just about enjoyment, but also a way to boast about one's skill as a player—provided the tools of literacy were available to do so.

CONCLUSIONS

This book is part of a recent, and very much still developing, wave of research which seeks to establish a coherent approach to the material culture of games and play. Indeed, the study of material culture linked to play in the past is still very much an emerging field; while our focus is the ancient world, parallel developments are also taking place, for example, in Medieval studies.[102] Accordingly, we cannot, and do not seek to, offer a unitary vision of how the available evidence should be handled and interpreted. Instead, the papers presented here are intended to offer a range of methodological approaches to be explored further in future work. Nevertheless, several key considerations emerge from the themes discussed in this chapter, as well as throughout the book.

First, as Ulrich Schädler has shown in a series of studies dedicated to ancient games published in the 1990s,[103] trying to understand games and gaming practice and culture in general on the basis of textual sources alone is a futile endeavour. However, the material evidence can be challenging or even misleading if not handled carefully. Wherever possible, material evidence for play in the past — whether inscriptions, graffiti, or portable material culture that could be linked to play — needs to be interpreted through the lens of context. Many objects can be used for play (even if only temporarily), and it is often only by considering find contexts that we can understand how they were actually used.

Secondly, our approach to material culture must avoid

94 Schädler (2021).

95 Purcell (1995).

96 Woolf (2011), with earlier references.

97 Ferrua (2001).

98 Waille (1893).

99 For all the boards with "ludere nescis idiota recede" (you don't know how to play, idiot, go away) or "vincis gaudes perdis plangis" (you win, you rejoice, you lose, you cry) see Schädler (2012).

100 CIL, 4, 2119, trans. Purcell (1995), 21.

101 Speidel (1996), 188-190, nr. 45. English trans. by Brandon Conley.

102 E.g. Kopp, Lapina (2021).

103 See a.e. Schädler (1994a, 1995, 1996, 2009), in comparison to Lamer (1927) and Austin (1934, 1935, and 1940).

anachronistic modern notions like standardised sets and not side-line local habits, traditions, and practices to overemphasise notions of globalisation, for example, under the Roman Empire. To interrogate these local traditions and their significance, we urgently need greater quantities of data. The papers in this volume broaden the material evidence base for the study of games in antiquity, and we hope that it will inspire more studies which gather and critically analyse large scale gaming-related datasets of different kinds across the ancient world.

Thirdly, and perhaps most importantly, archaeological analysis needs to use gaming-related material culture to interrogate gaming practices in ancient societies. In other words, we need to use material culture and to study cultures of play. By moving beyond typological and quantitative analysis will we be able to answer broader questions: what was played? who played? what did they use to play? where did they play? when? and what can we say about the experiences of playing in the past? Only through answering these questions will we make the most of the enormous potential of material evidence for play in the past to be used as a heuristic tool for socio-cultural analysis.

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A community of players. Board games at Deir el-Medina (Egypt)[1]

INTRODUCTION: DEIR EL-MEDINA

The site of Deir el-Medina – a village, a necropolis associated and cult spaces – is located in Upper Egypt, in a small valley of the Theban region.[2] On the west bank of the Nile, it lies a short distance from the Valley of the Kings and the Valley of the Queens, which house the burials of New Kingdom rulers, their wives, children, and some of their relatives. The people who lived in the village between the beginning of the 18th Dynasty and the end of the 20th Dynasty, from 15th c. to 11th century BC, were the artists, craftsmen, and workers – all men – in charge of digging and decorating these prestigious tombs, accompanied by their families.[3] Halfway between Deir el-Medina and the Valley of the Kings is a grouping of huts known as the "Station du Col", or "Station de Repos", that was also used by the men of the village.[4]

"Witness of the civil, profane, professional and private life of the ancient Egyptians",[5] the site has delivered an incredible quantity of monuments and documents of all kinds, dated for the most part to the Ramesside period, between 13th and 11th century BCE, and informing about all aspects of life and death of its inhabitants.[6] In this respect, the documentation from Deir el-Medina is particularly valuable for the study of gaming practices and the beliefs that surround them, which can be placed in an extremely well-documented socio-cultural context: it is, however, a subject that has remained largely in the shadows,[7] may be because there was so much to do, and so much to say, about other topics concerning Deir el-Medina.

The first excavations at Deir el-Medina were Italian, then German, but since 1917, the teams of the French Institute of Oriental Archaeology, in collaboration with numerous institutions, have been carrying out work there.[8] Many objects resulting from these excavations, notably those directed by Bernard Bruyère from 1922 onwards, are today housed in various Egyptian and European museums. But

1 This research was carried out within the framework of the European Research Council (ERC) funded project *Locus Ludi. The Cultural Fabric of Play and Games in Classical Antiquity* directed by Véronique Dasen at the University of Freiburg (European Union Horizon 2020 research and innovation program, funding contract no 741520) <locusludi.ch>. It is also placed in the framework of the field operation 17148 Deir el Medina, Institut français d'archéologie orientale (Cairo), directed by Cédric Larcher (https://www.ifao.egnet.net/recherche/archeologie/deir-el-medina/). I am deeply grateful to Cédric Larcher, Audrey Crabbé, Mélie Louys and Aliénor Roussel for their help in studying the documentation preserved on the site, as well as to Manon Lefèvre and Mohamed Youssef Sedik for the restoration of the objects; to Kyra van der Moezel and Elina Paulin Grothe for having so generously shared their documentation with me; and to Anne-Elizabeth Dunn-Vaturi for the richness of the exchanges around this documentation.

2 For a synthesis on Deir el-Medina and its inhabitants, see in particular Černý (1973); Valbelle (1985); Andreu (2002); Demarée (2016), 75-86; Gaber *et al.* (2017). For a systematic bibliography on Deir el Medina, see https://dmd.wepwawet.nl/bibliography.htm.

3 On women at Deir el-Medina, see especially Toivari-Viitala (2001); Sweeney (2016), 243-254.

4 See below.

5 « Témoin de la vie civile, profane, professionnelle et privée des anciens Égyptiens ». Andreu (2002), 19.

6 See most recently Haring (2006), 107-109; Desmarée, Valbelle (2011).

7 For example, in Dominique Valbelle's otherwise comprehensive study of the tomb workers, games are mentioned only in connection with children and with toys, see Valbelle (1985), 244. The material from Deir el-Medina is, however, present in studies of Egyptian games: for example, several boards from the site are mentioned in Crist, Dunn-Vaturi, de Voogt (2016), 97.

8 On the history of excavations at Deir el-Medina, see especially Andreu (2002), 36-41; Driaux, Arnette (2016), passim; Gobeil (2017), 315-324.

thousands of others are still stored in the site's storehouses, and remain unpublished; among these are most of the boards and game pieces presented in the second part of this article. The latter offers a synthesis of the gaming scenes from Deir el-Medina, not only in a funerary context but also on two secular documents, as well as a presentation of the unpublished archaeological material[9] that attests to, for most part, everyday practices.

1. THE ICONOGRAPHIC DOCUMENTATION

As far as games are concerned, the vast majority of the iconographic documentation from Deir el-Medina seems to refer to *senet*,[10] a board game of 30 squares organized, most of the time, in three lines of ten squares. It combines strokes of luck, dictated by the throwing of randomization devices[11] (astragals and/or throwing sticks), with strategy, and is played with five to seven pawns per player.[12] *Senet*, attested in Egypt since the 4th millennium,[13] seems to be of particular importance in funerary beliefs. In the New Kingdom, it is quoted in the title of spell 17 of the *Book of the Dead*, and sometimes appears in one of the vignettes that accompany it.[14] It is also the subject of the *Great Game Text*, a composition with a visibly funerary and ritual significance, which survives in three Ramesside versions, two of which certainly come from Deir el-Medina (the Turin P. 1175 and the text from the tomb of Inherkhau).[15] In the New Kingdom, the funerary meaning of the game is complex, and it is not the purpose of this paper to explore it in detail. It could be summarized as follows: the game of *senet* constitutes a meeting point between the world of the dead and that of the living; playing *senet* is a wish expressed by the dead, in the same way as leaving the necropolis, which is manifested in the title of the spell 17; finally, *senet* would be played by the deceased - perhaps by his *ba* - in the suspended time of his funeral, when the body is prepared by the thanatopractors and before the *ba* undertakes its journey in the hereafter.[16] The decorations of the tombs and coffins of Deir el-Medina clearly express these three aspects, in addition to more specific elements.

1.1. Decorations of tombs and coffins: gaming scenes in a funerary context

Several painted tombs of Deir el-Medina have, among the decorations of their chapel or vault, scenes including board games. These tombs are the following, in chronological order: the chapel of the tomb of Nebnefer and Neferhotep (TT 6, between the reigns of Horemheb and Rameses II);[17] the chapel of the tomb of Penbuy and Kasa (TT 10, reign of Rameses I);[18] the vault of Amenemopet (TT 265, reign of Rameses II);[19] the door of the Sennedjem vault (JE 27303, TT 1, reign of Rameses II),[20] a door that clearly underlines the preliminary moment that the game represents and the point of contact that it embodies between the world of the dead and that of the living;[21] the tomb of Nebenmaat (TT 219, between the 19th and 20th dynasties);[22] the tomb of Inherkhau (TT 359, reigns of Rameses III and IV).[23] Two coffins from the tomb of Sennedjem (TT 1), exhibited in the Egyptian Museum in Cairo, also show game scenes: the outer coffin of Sennedjem (JE 27301)[24] and that of his son, Khonsu (JE 27302).[25] Finally, although not located in the necropolis of Deir al-Medina, the game scene from the tomb of Nefertari in the Valley of the Queens (QV 66, reign of Rameses II) could be included in this corpus, as it was made by the craftsmen of the village.

It is not my intention here to describe all of these well-known representations, but to highlight a few of their salient points:

1) Almost all the scenes of play take place under the mummification tent, *seh*, and belong to an iconographic sequence of a solar character, responding to spell 17 of the *Book of the Dead* (fig. 1). An exception is to be found in the tomb of Nebenmaat: the scene is at the center of a sequence which has the adoration of the gods of Deir el-Medina as its main theme (fig. 2). It is also situated next to the tree-goddess who pours water over the raised hands of the *ba*-birds of the deceased and his wife. A small monkey sitting at the foot of the trunk makes *exactly* the same gesture, perhaps in

9 This material will be presented in an exhaustive manner in a catalog, which is currently being prepared.

10 Some scenes are however doubtful, for morphological reasons: for example, in the tomb of Inherkhau (TT 359), see below.

11 See most recently Crist, Dunn-Vaturi, De Voogt (2016), 5-12.

12 Major studies on this game were conducted by Kendall (1978); Pusch (1979); Piccione (1990). For more recent syntheses, the reader may refer to the following publications: Piccione (2007), 54-63; Crist, Dunn-Vaturi, De Voogt (2016), 41-77; Romano *et al.* (2018), 74-76; Crist (2020), especially 1-3; Arnette (2021a), 36-44.

13 See Arnette (2021a), 36, n. 80.

14 On the vignettes that accompany this formula and their evolution, see especially Milde (1991), 31-54.

15 See especially Piccione (1990), 96-118 and 191-200, with references.

16 See Arnette (2021a), especially 36-41, with references.

17 Wild (1979), pl. 2; Pusch (1979), I, 72 and II, pl. 21b and pl. 22. On this tomb, see Wild (2022).

18 Pusch (1979), I, 89-92 and II, pl. 26; Meurer (2015), 18-20, fig. 1, and pl. 6. For a proposal regarding wall decoration, see PM I/1, 21.

19 See in particular Sauneron (1972), 198 and pl. 48; Puch (1979), I, 95-102 and II, pl. 28. The restitution of the checkerboard, which is not actually represented, should be ignored.

20 See especially Pusch (1979), I, 103-105 and II, pl. 28.

21 See also the remarks of Piccione (1990), 85-86.

22 Maystre (1936), pl. VI;

23 See especially Puch (1979), I, 124-125 and II, pl. 33; see also Cherpion, Corteggiani (2010), 67-69.

24 See the game scene in Cooney (2010), 231, fig. 8.

25 Pusch (1979), I, 122-123 and II, pl. 33.

Fig. 1. Amenemopet playing the senet alone under the seh-tent, accompanied by his wife Hunra, New Kingdom, 19th dynasty, reign of Rameses II, Deir el-Medina, TT 265. © Ifao.

Fig. 2. Nebenmaat playing the senet against his wife Meretseger, under a register of four seated divinities, New Kingdom, XIXth-XXth dynaty, Deir el-Medina, TT 219. © Ifao.

a deliberately comic effect;[26] as long as an ostracon from the site also depicts a Guenon (*cercopithecus,* "green monkey") holding a pawn in one paw, and a possible pawn found on the site also takes the form of a small monkey,[27] it is possible that this animal could be associated with games.

2) In all the game scenes, one or more piles of food and floral offerings are found under the tent, or even directly on the game table (coffins of Sennedjem and Khonsu). In some tombs, for example that of Penbuy and that of Inherkhau, the wall where the game scene is located is also occupied by representations of the family making offerings. This is because a particular link unites, in one way or another, game boards with the sustentation of the dead.[28] Let's remember that it is an image of the deceased in front of his offering table that replaces the deceased in front of his game board, in the vignettes of spell 17 subsequent to the 21st dynasty;[29]

3) Among these offerings, grown lettuces are represented on the doorway of Sennedjem, on his coffins, and in the game scene of Amenemopet. Associated with the fertility of the god Min and undoubtedly with his erect member,[30] this plant could constitute a discreet allusion to the sexual scope of *senet*. This would already be present in spell 405 of the *Coffin Texts*,[31] in which the Great Tribunal wishes the deceased "to have sexual pleasure" and to "play *senet* with those that are on earth", as well as in two game scenes from Medinet Habu, where Rameses III is playing games of *senet* with naked girls, again in an erotic context (obviously ritualized and part of the royal decorum);[32]

4) If the dead can play *senet* alone, against an invisible opponent, in the context of spell 17, the deceased is much more often accompanied by his wife. Most of the time, she is seated behind him and is not taking part in the game: this is the case for Nebnefer, for Amenemopet,[33] for Sennedjem on the door of his vault and on his coffins, and for Khonsu. But it also happens that the woman plays a visually active role in the course of the game: thus, in the chapel of Penbuy and in that of Nebenmaat, the deceased plays against his wife seated in front of him, each one extending a hand towards the board. The two genders can thus play together and playing board games does not appear to be an activity reserved for men - at least, in the context of the afterlife, but there is no reason to believe that it was otherwise in real life. Remarkably, in the tomb of Inherkhau, it is not the deceased who plays, but only his wife, Uabet, seated in front of him and preparing to seize a pawn (fig. 3a-b):[34] this woman holds a singularly important place in the decoration of this tomb, and this prominent role is also reflected through that game.[35]

1.2 Ostracon and papyrus: scenes in a humorous, parodic and/or satirical context

Two documents stand out from those mentioned so far, because they do not belong to the funerary sphere. They depict, in a humorous tone, or one of parody and/or satire,[36] animals engaged in human activities. Animals mimicking humans is a form of representation that is common at Deir el-Medina,[37] and is readily interpreted as mocking the social hierarchy.[38] In those scenes, the natural behaviors of the animals are reversed, acting contrary to their instincts.[39] The gaming scenes in which animals are involved are:

- An ostracon housed at the Ifao (O. Ifao 3628, fig. 4),[40] that bears a substantially erased drawing. This drawing depicts a small green monkey sitting (perhaps on the game table?) and holding in one paw

26 See the remarks on this motif by Vandier-d'Abbadie (1966), 158-160 and fig. 20. Humor is not absent from the decoration of the tombs at the site: for example, on the tomb of Nakhtamon (TT 335), Servajean (2017), 268-269; see also Arnette (2022), 131-134.

27 See below.

28 The connection between playing and drinking has already been highlighted in Crist, Dunn-Vaturi, De Voogt (2016), 57.

29 Arnette (2021a), 39, n. 116. See for example P. BM 10554 (Papyrus Greenfield), 21st-22nd dynasty.

30 On this topic, see in particular Norris (2015).

31 *Spell* 405 (CT V, 209n-210e) is known from two coffins from Meir, but only one of which contains an allusion to *senet* (M1C). See especially Piccione (1990), 82; for translation, Carrier (2004), II, pp. 1000-1001; Arnette (2021a), 37.

32 See, for example, The Epigraphic Survey 1970, pl. 639-640; Pusch (1979), I, 112-116 and II, pl. 31a-b; Kendall (1978), 34-35, fig. 26. On this gaming scene, see Arnette (2022), 134-137; on erotic language in Egyptian art, see especially Manniche (2002), 34-44.

33 The wife, however, speaks in the text above the scene (cols. 10-12): "Come, my partner/husband, and the three men will move into the House of the Three Men, so that your limbs may be transformed into a god!" The three men are presumably pawns, and the Three Man House clearly refers to square 28 of the board. Text and comments in Pusch (1979), 96-103.

34 The scene is now very damaged, see for earlier evidence, *Denkmäler* III, 294 and Cherpion, Corteggiani (2010), 67-69.

35 On the subject of women players, see Arnette (2022).

36 On the subject of humor in ancient Egypt, see especially Van de Walle (1969); Houlihan (2001); Lazaridis (2013). On animals playing games in Egyptian iconography, see Dunn-Vaturi (2016).

37 See especially Vandier D'Abbadie (1937), pl. 37-48 (cat. 2264-2315) and (1959), pl. 117-119 (cat. 2844-2853); Meskell (2004), 148.

38 See especially Brunner-Traut (1956), 91-92, and Brunner-Traut (1968); Meskell (2004), 154-157; Vernus (2013), 102-107; Gasse (2017), 113-117.

39 See especially Morenz (2012), 99-112.

40 Vandier d'Abbadie (1937), 58-59 and pl. 42 (cat. 2285); Pusch (1979), II, pl. 36 (incorrectly numbered 3626); Brunner-Traut (1968), 12 and n. 57; Dunn-Vaturi (2016), 21-24.

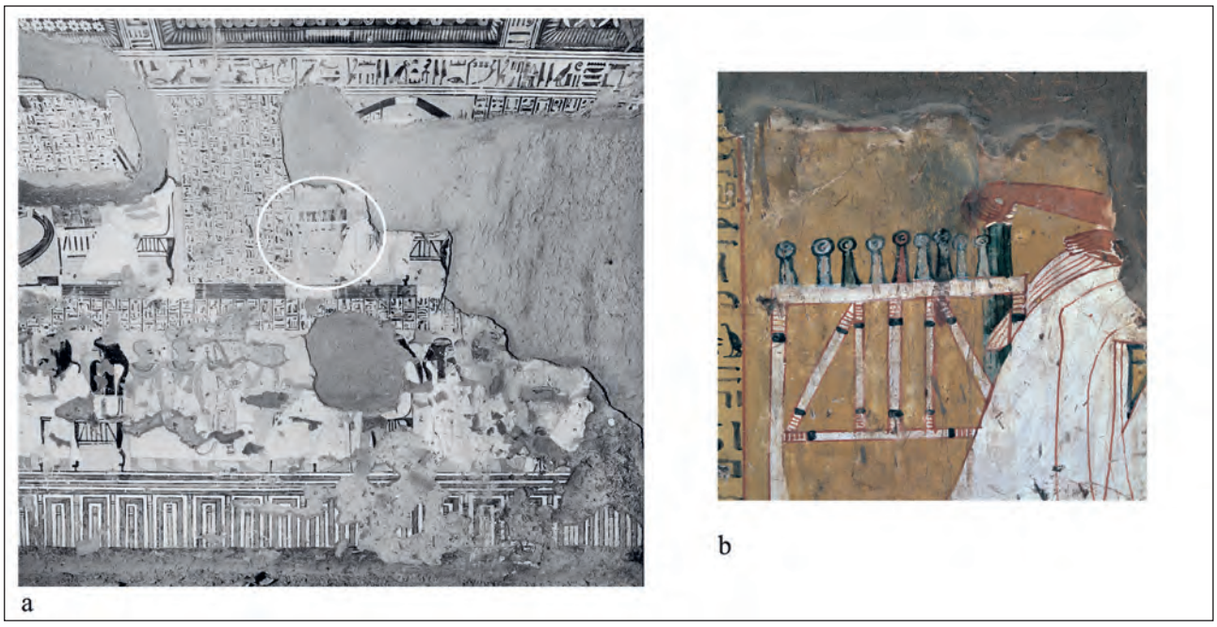

Fig. 3a-b. Ouabet playing the senet (?) alone under the seh-tent, accompanied by her husband Inherkhau, New Kingdom, 20th dynasty, reigns of Rameses III and IV, Deir el-Medina, TT 359. © Ifao.

Fig. 4. Ostracon with a drawing of a monkey touching a halma-playing piece, with a scorpio, (7.3 x 7.5 cm), New Kingdom, 19th-20th dynasty, Cairo, Institut français d'archéologie orientale, (O. Ifao 3628). © Ifao.

a gaming piece-*halma*.[41] In the other, raised in front of its mouth, the monkey grasps what seems to be a scepter.[42] This association between the pawn and the scepter is reminiscent of the *senet* scene in the tomb of Nefertari (QV 66), the playing queen holding a *sekhem*-scepter as Anne Dunn-Vaturi rightly points out, or again, that of the tomb of Nebenmaat (TT 219), where the wife of the deceased is depicted in the same pose.[43]

Below the monkey, a scorpion is represented stinging the Guenon's tail. Through this scene, two aspects that the Egyptians fundamentally attributed to primates are to be found: intelligence (or at least, the ability to learn and to accomplish tasks), here staged through the board game,[44] and pettiness, with the motif of the sting.[45] Louis Keimer interprets the motif as follows, and writes of the monkey: "quite busy with the game, a nasty scorpion, the plague of Upper Egypt, sticks its sting in his tail! Moral: avoid the game!"[46] This interpretation seems to me doubtful, since nothing proves that gaming practices, that were widespread among the villagers, as I intend to demonstrate, had a bad reputation at Deir el-Medina.[47] For Emma Brunner-Traut, the scorpion would punish the little monkey not for having played, but for having lost, or even for having cheated.[48] This last solution seems to me particularly attractive: indeed, the cheating of the monkeys would also be illustrated by another object, a statuette of unknown provenance (British

41 See below.

42 On monkeys parodying human activities, see in particular Vernus, Yoyotte (2005), 618-620. On dancing and musical monkeys in the New Kingdom, see in particular Vandier d'Abbadie (1966), 185-193; a text from El-Kab which mentions teaching these animals to dance may not necessarily be a question of parody, but could refer to a real activity (188). According to Elian, *On the Personality of Animals*, 6, 10, the Egyptians of the Ptolemaic period taught monkeys how to write, dance, sing and play music, but not to play games. For Classical culture, however, see Pliny the Elder, *Natural History*, 8.215-216, quoting Mucianus, who is said to have seen monkeys playing *ludus latrunculorum* and able to distinguish the pawns; in Plautus, *The Little Carthaginian*, vv. 1070-1075, there is mention of a monkey bite occurring during a game, but the nature of this game is not specified. Thanks to Marco Vespa and Renaud Pietri for these references, and for the exchanges around this theme.

43 On these scenes, see Arnette (2022), 127-140.

44 On the topic of play and intellectual activities, see Volokhine (2016), 846-848.

45 See Vandier d'Abbadie (1964); Vandier d'Abbadie (1965); in particular for the New Kingdom, Vandier d'Abbadie (1966).

46 «Tout à fait occupé par le jeu, un vilain Scorpion, la plaie de la Haute-Egypte, lui enfonce son dard dans la queue ! Morale : évitez le jeu !». Keimer (1948), 23.

47 On the positive or negative value of ancient gaming practices, see Dasen, Vespa (2020), 13-20.

48 Brunner-Traut (1968), 12, n. 57.

Fig. 5. Fragment of a papyrus (13 x 59 cm) with animals involved in human activities, including a lion and a gazelle playing the senet (?) against each other, New Kingdom, 19th-20th dynasty, London, British Museum, EA10016,1. © The Trustees of the British Museum.

Museum, EA 11888)[49] and difficult to date. It shows two green monkeys on either side of a game table, with a third monkey - or maybe a child? - crouching on the side, not taking part in the game. The taller of the two monkeys puts his paw on the head of the crouching monkey/child, probably in order to hide him from its opponent: I cannot explain this gesture other than with the aim of staging a kind of cheating system.[50] Finally, for A. Dunn-Vaturi, who notes that the scorpion is clearly associated with board games in Near Eastern iconography, this scene "perhaps represents the threat of playing a game of foreign origin whose predominance could eclipse *senet*", i.e. the game of twenty, named after the number of its squares.[51] As we shall see later, the game of twenty was very much in vogue among the craftsmen of Deir el-Medina, who moreover readily adopted cultural traits from abroad (deities, names, etc.). I do not believe that it could have been perceived by the inhabitants of Deir el-Medina as a danger of any kind.

♦ A fragmentary papyrus also bearing representations of animals mimicking humans, probably from Deir el-Medina (British Museum, EA10016,1, fig. 5).[52] Here, a lion and a gazelle, i.e. predator and its prey, are sitting around a parallelepiped game box, that is a form typical from the New Kingdom combining both *senet* and the game of twenty squares.[53] The gazelle holds a pawn, while the lion holds another pawn and an astragal; behind the gazelle is a basket full of small red balls, presumably fruit, and a bird – is this a parodic allusion to the heap of offerings and the *ba*-bird in some funerary game scenes,[54] while the lion and gazelle mock those in which the deceased plays against his wife?[55] The animals are probably not chosen randomly: lions and gazelles belong to the repertoire of some game boxes of the Late Bronze Age, whether they come from Egypt[56] or from other regions of the Near East and the Aegean.[57] They belong to an "international style" that was particularly in vogue on luxury objects used and exchanged among the elites of these regions.[58] This, I believe, attests to both the visual culture of the artist who painted that scene, and the subtlety of the themes he chose, addressing an audience sharing this same culture, a refinement supported by the use of papyrus.[59] Thus, it does not contradict the fact that the scene is both amusing and salacious, as we shall see.

Next to the lion, another animal scene unfolds, but it is difficult to link it to the gaming scene:[60] two foxes standing on their hind legs, one of which plays the double flute, seem to be leading a flock of goats, while a shepherd-cat leads a group of geese, and holds a chick in one of its paws. At the other end of the fragment, the lion is shown this time having intercourse with a quadruped: the lion stands up and takes hold of the back legs of the other animal lying on its back. It is often suggested that this quadruped would be a gazelle[61] and that the lion, winner of the game of *senet*, would here collect his winnings from

49 Brunner-Traut (1955), pl. 1, fig. 3; Pusch (1979), I, 60 and II pl.17a.

50 The crouching character is only visible when looking at the figure from one side; from the other, the observer cannot guess his presence, and one can imagine an amusing surprise effect when he is discovered.

51 «(…) représente peut-être la menace de pratiquer un jeu d'origine étrangère dont la prédominance pourrait éclipser le *Senet*». Dunn-Vaturi (2016), 23.

52 For example, Brunner-Traut (1968), 4-5 and fig. 6; Kendall (1978), p. 23, fig. 17; Pusch (1979), II, pl. 36; May (1991), 153, fig. 138; Houlihan (2001), 64-66, figs. 59-61; Dunn-Vaturi (2016), 19-21. The papyrus can be compared to the so-called "satirico-pornographic" papyrus of Turin (Torino, Museo Egizio, Cat. 2031 = CGT 55001). See Vernus (2012), with bibliography.

53 The board is not visible, and one wonders which game is in progress: *senet* or the game of twenty. Dunn-Vaturi (2016), 19.

54 See above. On religious allusions in this type of scene, see Gasse (2017), 116.

55 See above. Peck (1978), 144-46. For B. Van de Walle - Van de Walle (1969), 18 - the gaming scene could parody the theme of the playing king, known mainly from the Medinet Habu scenes (see above), with the queen, or even a princess, then depicted with the traits of the gazelle, Dunn-Vaturi (2016), 20. For Jennifer Babcock - Babcock (2014), 67 - this type of scene does not specifically belong to royal funerary iconography, and there is therefore no reason to see it as an allusion to the king.

56 For example, a wooden and ivory game box from the Assassif, dated to the 18th dynasty and housed in the Metropolitan Museum of Art (MMA, 16.10.475a), see Pusch (1979), I, 199-201 and II, pl. 46, and most recently Crist, Dunn-Vaturi, De Voogt (2016), 90, and fig. 4.5.

57 For example, from Cyprus, see the Enkomi game box, also made of ivory and held in the British Museum (1897, 0401.996). See most recently Crist, Dunn-Vaturi, De Voogt (2016), 76-77 and 89-91.

58 See Caubet (1998), 105-113; Feldman (2006).

59 P. Houlihan - Houlihan (2001), 62, see also 73 - notes that the costly medium represented by the papyrus shows that it is not a spontaneously sketched object, but rather that it was intended to be kept and, presumably, to be shown, for example to colleagues and friends.

60 I have chosen to present the flow from left to right, but it is quite possible that it was to be understood from right to left.

61 For example Vernus (2013), 106-107 or Dunn-Vaturi (2016), 20.

her: the open mouth and the wide eyes of the animal would express, for Peter Houlihan, pleasure, and the joy of victory.[62] However, emotions are generally not expressed through the face in Egyptian art; moreover, the lion opens its mouth in the same manner on another fragment of the same document (EA 10016,2),[63] whereas the animal is this time depicted passing flour or beer.[64] I therefore believe that these very particular features of its face betray a more simple comical intent, adding a touch of humor to the whole. Finally, the coat of the animal with which the lion is mating is not brown, like that of the gazelle, but gray, a characteristic shade of donkeys[65] whose sexual reputation is well known in ancient Egyptian culture.[66] Also, the two scenes, showing respectively a game against a gazelle and mating with a donkey, do not seem to be linked by a cause and effect relationship, and one cannot say who - the gazelle or the lion - is the winner of the game.

1.3. The gaming material in iconography: aspects of the boards, pawns,[67] and the randomization devices

In art, game boards are divided into three main groups: first, game boxes shown in profile, so that the board is not visible.[68] The edge of the box may be delicately worked,[69] which clearly underlines the luxurious aspect of the object and, perhaps, of the gaming activity itself.[70] Secondly, boards might be represented in folded perspective, with the board clearly visible this time:[71] if the squares of *senet* are sometimes represented, their number can vary,[72] depending on the limited space - 3 x 6 squares on Sennedjem's coffin - or, on the contrary, the space to be occupied - 3 x 12 squares in Penbuy's tomb. We can therefore suppose that the number 30 is not a fundamental criterion in the representation of the game, that is to say, in the very way of conceiving it. If in most cases, the squares are not colored, but in the tomb of Nebenmaat, they are on the contrary alternately red or black in the manner of our modern checkerboards, which is quite exceptional in Antiquity.[73] Finally, in two cases, the gaming pieces are represented directly on the table, the board not being represented at all:[74] it seems to me that the pawns are more significant than the board to designate the act of playing.[75] Like the *pente grammai*, the *duodecim scripta* or *latrunculi* in the Greek and Roman worlds, Egyptian games would rather be perceived as "game of counters" (*petteia* in the Greek terminology), rather than a "board games", a modern category unknown in Antiquity.

- The pawns are divided into two teams and are distinguished by their shape: gaming pieces with a tapered profile bearing a bulb at the top (round or conical), the *halma,*[76] which are opposed to spool-shaped gaming pieces (the tall ones) or pulley-shaped gaming pieces (the short ones). The colors sometimes make it possible to recognize them, without one shade being particularly favored for one or the other shape.[77] The pieces of the two teams, usually five in number,[78] may follow one another on the board,[79] or more often, be organized in two distinct teams.[80] In this respect, the scene from the tomb of Inherkhau is noticeably different (fig. 3b): there are not the right number of pawns - there are nine - nor do they have the usual appearance. Eight are green and blue, and all have the same shape: they have a tapered profile and a perfectly circular bulb, but which seems to be perforated in the center, an extremely rare detail among the *halma*.[81] A ninth piece, in the center of the board, is red and thus does not seem to belong to either of the two teams: this is

62 See, for example, Houlihan (2001), 65.

63 See especially Houlihan (2001), 65, fig. 61.

64 Houlihan (2001), 66.

65 Suggested by Houlihan (2001), 66. The legs of the gazelle are very different from those of the animal lying on the bed. Jonathan Maître, whom I thank, also proposes a donkey, and refutes that it could be a gazelle. He draws a parallel with P. Bâle BSAe 1081 - Wiese (2001), 140, fig. 39 - where a donkey is lying on a bed, probably in a mating scene, but with a mouse.

66 See in particular Vernus, Yoyotte (2005), 464-466.

67 The word "pawn" is used in this article to define any game piece that the player moves on the board. The use of the term here has nothing to do with chess, to which it is sometimes associated.

68 TT 6, TT 265, JE 27303, BM EA 10016, 1 + QV 66.

69 TT 6.

70 In Old Kingdom and Middle Kingdom tombs, subordinates may be shown playing; this is no longer the case in the New Kingdom, which means that the status of gaming may have changed.

71 TT 10, TT 219 and JE 27301.

72 As pointed out in relation to the gaming scenes of the New Kingdom by Piccione (1999), 122 and n. 21. See also the remarks of Pusch (1979), I, 91-92.

73 See below.

74 TT 359 and JE 27302.

75 *Senet* can be represented without its pieces when the game is not in progress, for example when the game box is transported to the tomb (TT 100) or when it is represented under the seat of its owner (TT 96B), Piccione (1990), 265 ff.

76 From the name of a game from the second half of the 19th century, in which all the pieces had this shape.

77 Sometimes the pawns are not distinguished by color: on papyrus BM EA 10016, 1 and in the tomb of Nefertari (QV 66), the two teams are uniformly black.

78 Only the coffin of Khonsu (JE 27302) displays four *halma*-pieces and three spool-pieces (the fourth being visibly hidden by the skirt of the dead man), for lack of space. In TT 6, there are five *halma*-pieces, but one cannot be sure of the number of spool-pieces, the representation being very incomplete. In TT 10, the number is uncertain because of the state of the scene but seems to be 2 x 5.

79 TT 265, JE 27303.

80 TT 219, TT 6 and TT 10.

81 I know of only two parallels: two earthenware pawns found in Tanis and preserved in the Louvre Museum (E 15760 and E 15761, see https://collections.louvre.fr/ark:/53355/cl010025501# and https://collections.louvre.fr/ark:/53355/cl010025500).

a situation for which I know of no parallel, neither at Deir el-Medina nor elsewhere, and which brings into question the nature of the game being represented.

The randomization devices are not represented consistently: in one case, an astragalus is on the ground, under the game table;[82] in another, two astragali are represented above the pawns arranged on the board.[83] Male players - but never female - can be represented taking hold of the astragali, as if ready to throw them: this is the case for Khonsu, and for the lion of the humorous papyrus. In the tomb of Penbuy, an astragal is pinched between the fingers of the player, above the board, in the manner of a pawn that is moved, and not an object that is thrown.[84]

2. THE ARCHAEOLOGICAL DOCUMENTATION FROM DEIR EL-MEDINA

Previously, to my knowledge, 11 game boards from Deir el-Medina were known. Four of these are clearly funerary and/or votive, based on their find context, or the funerary formulae written on the objects.[85] Three other boards, engraved or drawn in ink on ostraca, are part of the daily life in the village:[86] all of these three are games of twenty squares. Four other ostraca from the Valley of the Kings can be added, this time bearing *senet* with a very particular morphology, organized vertically, and potentially used by the inhabitants of Deir el-Medina in their workplace, maybe during their break.[87] Some gaming pieces[88] and a few astragals were also known,[89] as well as two wooden cubic dice.[90] However, the archaeological context for the last of these is not clear, and cubic dice are only attested in Egypt with certainty in the second half of the 1st millennium,[91] and its use only became truly widespread in the Greek period. Caution is therefore called for when dealing with these dice, which could be linked to the later periods, and not to the gaming practices of the villagers.

Recent work carried out by the Mission for Study and Restoration of Deir el-Medina (Ifao) has allowed for a very significant increase in the archeological gaming-related material. 33 new boards and fragments of boards[92] have been rediscovered in the site's storehouses during the 2020 and 2021 missions, and eight more in the Archives and Collections Department of the *Institut français d'archéologie orientale*, in Cairo. Nearly 200 new gaming pieces (potential or proven) complete a corpus that is now exceptional in the archaeology of Egypt. Unfortunately, the vast majority of these objects are not cited in the publications of B. Bruyère, nor in his excavation journals, so that they have no precise find context.

82 TT 1/ JE 27303.

83 TT 219.

84 TT 10. E. Pusch - Pusch (1979), I, 91-92 - supposes that the deceased is about to place it on the board among the pawns.

85 Acacia bifacial game box from the tomb of Kha and Merit (TT 8), bearing a *senet* and a game of twenty board, 18th dynasty, Museo Egizio di Torino, S. 8451/01; see Pusch (1979), I, 233-238; Piccione (1990), 408; Vassilika (2010), 96-99; Russo (2012), 13-19, pl. I). A fragment of limestone, found in a village house but presumably from the tomb of Neferhotep (TT 6), bears one board on each of its side, a *senet* and a game of twenty; see Pusch (1979), I, 295-296; Bruyère (1930), 158-159. Two fragments of a limestone bifacial board, of unknown date and provenance, but presumably Ramesside and belonging to the private collection of H. Wild, now lost: Pusch (1979), I, 297-298; Piccione (1990), 431. A fragment of a bifacial board in "faience"(?) bearing a *senet* board, with a duck's head on the short side, of unknown date and provenance, preserved in the Egyptian Museum in Cairo, JE 52502; see Pusch (1979), I, 297-298; Piccione (1990), 438.

86 A complete game of twenty board engraved on an ostracon, preserved in the Louvre Museum, E 14449; for example Andreu (2002), 129. A game of twenty board of which only the "tail" remains, engraved on an ostracon, and over which a very beautiful image of a naked female musician was then drawn in black ink, once again linking game and eroticism (see *above*), is preserved in the Ägyptisches Museum in Berlin, 21445; see Brunner-Traut (1956), 63-64, pl. 23; Andreu (2002), cat. 68. A game of twenty board of which only three squares of the "tail" remain, one of which is marked with a double *nfr* sign, and the start of the block, traced in ink on an ostracon preserved at the Ifao, Inv. 4116 ; Crist, Dunn-Vaturi, De Voogt (2016), 98 and fig. 4.6.

87 This is a large ostracon with a *senet* drawn on one of its faces, from the tomb of Rameses V and VI under the 20th dynasty, three of whose squares are occupied by the groups *nfr.w*, and preserved in the Egyptian Museum in Cairo, CG 25183 ; see Crist, Dunn-Vaturi, De Voogt (2016), 58-59. Two *ostraca* from one of the "workmen's hut" around the tomb of Rameses X (KV 18), one of which is a biface bearing a *senet* on each of its faces ; see Dorn (2011), 322, and pl. 314-315; Crist, Dunn-Vaturi, De Voogt (2016), 58. And a final *ostracon* on which a *senet* is also painted (Hawass 2011, 70; Crist, Dunn-Vaturi, De Voogt (2016), 58-59.

88 Of particular note is a set of pieces from Deir el-Medina, 11 pawns and 1 astragal, which entered the Louvre Museum during the 1935 excavation division of finds (E 14660, see https://collections.louvre.fr/recherche?q=E+14660).

89 Notably, five stone knucklebones (limestone, sandstone, black stone), now in the Louvre Museum (E 14659 a-b; E 21565, see Drake Boehm, Bardies-Fronty, Dunn-Vaturi *et al.* (2012), 57 and 93.

90 The first, with an astonishing distribution of 1-1, 4-9, 6-8, is in the Louvre Museum (E 14450) ; Bruyère (1930), 7 and fig. 2; Andreu (2002), 129. The second, numbered 1-6, but with an unknown distribution, is on display in the Egyptian Museum in Cairo (JE 63749); Bruyère (1939), 339, 345, pl. XLI.

91 Among many examples, see at Tell el-Dafana, Leclère, Spencer (2014), 87 and pl. 30. Other cubic dice found in Egypt and assumed to predate these - see e.g. Schädler (2007a), 13 - come from very early excavations, and their contexts are not precisely defined, i.e. the dating of these dice has not been established with certainty. Note, however, a toton found with a bifacial box in a tomb dated to Dynasty 18 (Museum of Fine Arts, Boston, 11.3096). See Dunham (1978), 72-73, pl. LIX; Crist, Dunn-Vaturi, De Voogt (2016), 11. It should be linked to the practice of the game of twenty, and not *senet*, insofar as it is attested with this game in the Near East, notably in the royal tombs of Ur, as we read for example in Schädler (2007a), 9.

92 To which could be added 14 *possible* boards – unless they are grids of proportions, or tables useful for calculations, especially accounting.

2.1. Rediscovered funerary and/or votive boards (?)

In the absence of inscriptions on the objects and of a precise archaeological context, two types of evidence may suggest - without any certainty - the funerary and/or votive destination of the game boards: the care taken in their manufacture, with meticulously engraved squares, a carefully cut stone, a well-smoothed surface, etc.; the parallelepiped shape of the block, visibly imitating the game boxes known mainly in funerary contexts.[93]

Among the boards recently rediscovered at Deir el-Medina are two imitation limestone game boxes, one two-sided with a *senet* board and a game of twenty squares board,[94] and the other[95] with only a game of twenty. A wooden box preserved at the Institute for the Study of Ancient Cultures, Chicago (EA 371A)[96] has also no *senet* board on its reverse, and it has so far remained without parallel. Four slab fragments are very fragmentary boards of the game of twenty,[97] while eight other fragments of boards[98] are too small to tell which game they are. At Ifao, the unpublished fragments of funerary and/or votive boards correspond, in five cases, to the game of twenty,[99] and in two others, to undetermined games. Since they do not present any notable morphological particularity, there is no need to dwell on them; it should be noted above all that the boards used to play the game of twenty seem a priori more numerous than the ones used to play *senet*.

Three other fragments of limestone slabs, very carefully smoothed and painted with bright colors, are quite exceptional. Two of them[100] are painted on both sides, with a checkerboard presenting an alternation of red, blue, and green squares, whose colors are remarkably preserved. For one of them,[101] the opposite side shows the start of four lines of rectangular squares, a checkerboard with only two colors – green and blue – with an *udjat* eye in the middle of one of these squares (fig. 6). The eye is a motif that is also represented in a square of a votive board from Deir el-Medina,[102] but the four rows of squares raise questions about the nature of the game represented: is it a *senet* board with an additional row of squares, or is it a completely different game, otherwise unknown? A third fragment,[103] painted on one side only, also shows a two-colored checkerboard, blue and red, with some squares perhaps decorated or inscribed. A checkerboard with colored squares is represented in the tomb of Nebenmaat,[104] but no archaeological object showing this particularity has, to my knowledge, ever been found before in Egypt.

Fig. 6. Fragment of a limestone slab (10.2 x 5.9 x 2 cm), with a board-game, New Kingdom, 19th-20th dynasty (?), Deir el-Medina, DeM_2021_M12_002. © Nu_2022_01700. Ihab Mohamed Ibrahim, Ifao.

2.2. Boards from daily life (?)

When on ostraca or, more rarely, on blocks cut in stone, the game boards a priori belong to the practices of daily life. They are characterized by the fact that they are quickly incised with a pointed tool, and the lines that form them are often multiplied one on top of the other, showing that the person who drew the board repeated the same gesture several times, without any particular aesthetic concern. Other boards, less numerous, are traced with black or red paint, or even with charcoal, for an even faster execution — a few seconds are enough in this case. They are probably part of a spontaneous gaming practice and were perhaps meant to be used only once.

14 boards and fragments of 'everyday' boards have (for the moment) been identified in the site's storehouses, and two in the Archives and Collections

93 For example, on the box deposited in the tomb of Kha (TT 8), but which is visibly earlier (Museo Egizio di Torino, S. 8451/01).

94 DeM_2021_M12_005.

95 DeM_2021_M12_001.

96 See Crist, Dunn-Vaturi, De Voogt (2016), 88; Evans *et al.* (2019), 97.

97 DeM_2021_M12_006; DeM_2021_M12_009 to 011.

98 DeM_2020_M25_423; DEM_2021_M12_007 ; DeM_2021_M12_016 to 021.

99 With, in two cases, a square of the "tail" marked with a double, or triple, *nfr* sign, in the manner of ostracon CG 25183 (see *supra*, n. 83).

100 DeM_2020_M25_463 and DeM_2021_M12_002, which could belong to the same individual.

101 DeM_2021_M12_002.

102 The object, which has not yet been found, is known through a drawing on tracing paper by Henri Wild kept at the Archives and Collections Department of the Ifao (H. Wild 57, envelope 5 – scan GS_2015_00047).

103 DeM_2020_M25_492.

104 See above.

Department of the Ifao. Among them, four seem to be *senet* games,[105] two[106] of which are particularly remarkable (fig. 7): the three rows of squares are indeed organized in columns, and not in lines, each topped by a cupule in the manner of the ostraca of the Valley of the Kings.[107] This vertical reading, that is "unseen on manufactured senet boards",[108] would be "a divergence from the canonical representation of *senet* as seen among the upper classes of Egyptian society", according to Walter Crist, Anne Dunn-Vaturi and Alex de Vogt.[109] It seems to me that social class is not the issue here, since other *senet* boards from Deir el-Medina are perfectly "canonical". It is the purpose and the context of the object's manufacture that seem to me to be decisive: in everyday life, the board would adapt to the reality of use as well as to variations in rules that all games undergo. In this case, these vertically-organized boards could suggest that *senet* was played not only by moving the pieces along the long sides, but also along the short sides. This is what Philippe Collombert has proposed based on the *senet* boards carved into the temple pavements in the necropolis of Pepi Ist in Saqqara.[110]

Fig. 7. Fragment of a limestone slab (9.3 x 8.9 x 2,5 cm), with a senet-game, New Kingdom, 19th-20th dynasty (?), Deir el-Medina, DeM_2021_M12_013. © Nu_2022_01751. Ihab Mohamed Ibrahim, Ifao.

A third *senet* board should be pointed out:[111] engraved on a very imposing block of stone, roughly cut, its weight and size (currently 24.5 cm x 18.5 cm x 9.5 cm thick) make it very difficult to handle, even though the object is not complete. It seems doubtful to me that this object was made for the grave, because it was made without any special care, and suggesting a use in daily life; moreover, the difficulty in handling and moving it would suggest the existence of a place especially dedicated to play and games, that would be, if not permanent, at least long-term – inside a house, for private games, or in some public space?

Among boards that were obviously used for daily life, ten are games of twenty,[112] so more than twice as many as *senet* boards: it seems that this Near Eastern game was favored by the players of Deir el-Medina. This preference is not surprising since the game of twenty, in the very same period, was the most common, and therefore the most fashionable, among the games in the Near East.[113] This also underlines the extent to which funerary representations, in which *senet* is really omnipresent, and practices, where another game is clearly favored, can be out of sync.

Among these boards of the game of twenty, two are particularly worthy of note.[114] The first is a complete board,[115] quickly drawn on a large-sized ostracon (fig. 8). On one of the outer edges of the object, a group of nine small strokes have been drawn, as well as another isolated stroke. This is quite exceptional, and only one Egyptian parallel is known, thanks to the *senet* boards engraved in the necropolis of Pepy Ist; however, at Saqqara, the series of strokes are presented very differently, being accumulated in the alignment of the squares, and obviously correspond to their alternative numbering (i.e. the game could be played horizontally following the usual numbering of the squares, but also horizontally, following the numbering noted on the sides).[116] Concerning the ostracon, I believe that the strokes would be accounts of results, that were perceived

105 DeM_2021_M12_012 and 013; DeM_2021_M12_015; finally, a *senet* board drawn in red and black ochre on ostracon belongs to the "unusable ostraca" lot of the Archives and Collections Department of the Ifao, and does not yet have an inventory number.

106 DeM_2021_M12_012 and 013.

107 One, CG 25183, found in the tomb of Rameses V and VI, two others found in one of the workers' huts near the tomb of Rameses X, see *supra*, n. 83. The games are drawn in ink and charcoal respectively.

108 Crist, Dunn-Vaturi, De Voogt (2016), 58.

109 Crist, Dunn-Vaturi, De Voogt (2016), 58.

110 Collombert (2021), 81-92.

111 DeM_2021_M12_015 . 21 of its squares are preserved, and one of them, square 15, in the middle line, is crossed out with an X. I know of only one parallel, a board of the 12th dynasty found at Kahun and now housed in Manchester (University Museum, n° 262), which presents the same cross crossing the same square. See Pusch (1979), I, 186-187 and II, pl. 43; Piccione (1990), 391; Crist, Dunn-Vaturi, De Voogt (2016), 51.

112 DeM_2018_M25_153; DeM_2020_M25_400; DeM_2020_M25_464; DeM_2021_M12_003; DeM_2021_M12_004; DeM_2021_M12_014; DeM_2021_M12_032 and 033; C. 2377 (I thank Julian Posch for pointing this out to me); a "tail" of a game of twenty squares board traced in black ochre on ostracon, which belongs to the batch of "unusable ostraca" of the Archives and Collections Department of the Ifao, does not yet have an inventory number.

113 Most recently, Crist, Dunn-Vaturi, De Voogt (2016), 101.

114 See the detailed publication of these objects in Arnette (2021b).

115 DeM_2021_M12_003.

116 Collombert (2021).

Fig. 8. Ostracon (34.5 x 23.8 x 7 cm) with a game of twenty and an account, New Kingdom, 19th-20th dynasty (?), Deir el-Medina, DeM_2021_M12_003. © Nu_2022_01747. Ihab Mohamed Ibrahim, Ifao.

as sufficiently important to be recorded, certainly by the players themselves.[117] The first idea would be to interpret them as a count of the points scored by the two opponents during a game. However, no score, nor need for counting anything, is attested with certainty for the game of twenty.[118] Another solution is possible and should perhaps be preferred: the strokes could represent the tally of games won by each player. These games could have been played on the same occasion, one after the other – that is to say that the time devoted to non-productive activities could have been quite long – or, between two opponents that would meet regularly around the same board, but on different occasions.[119] In any case, the marking shows the importance of the count, especially that they cannot be erased: it could suggest the existence of a wager, the nature of which cannot be determined, whether material or not. Indeed, scoring points would suppress any dispute between the opponents after the end of the game.

Another board of the game of twenty requires particular attention: it is quite exceptional, because it is engraved on a piece of furniture.[120] Indeed, this board is carved on the seat of a tripod stool in limestone,[121] of which two fragments[122] are preserved (fig. 9). Here also, there are five small black-painted lines on the inside of the hanger of the seat, and it is possible that another grouping of lines was originally in the missing part. In contrast to the previous object, the counting lines seem to be more easily erased on this smooth surface, in the manner of stuccoed school tablets that were wiped clean with a damp cloth,[123] which is to say that this board could have been used several times.

Fig. 9. Two fragments of a limestone seat with a game of twenty and an account, New Kingdom, 18th dynasty (seat), XIXth-XXth (? game and account), Deir el-Medina, DeM_2021_M12_032 (17.3 x 22.5 x 6.6 cm) and DeM_2021_M12_033 (15.8 x 13 x 9 cm). © Nu_2022_01725. Ihab Mohamed Ibrahim, Ifao.

Under the seat, two other engravings can be seen, of a completely different nature: they are identity marks attested under the 18th dynasty,[124] perhaps designating the owner(s) of this seat, as can be seen on many personal objects of the community of Deir el-Medina.[125] In this case, the seat was obviously

117 Arnette (2021b), 16-17.

118 See however the proposals of Irving Finkel on the game in Babylonia, on the use of tokens to count points won through special moves as well as on the existence of penalties retained against the loser, Finkel (2007), 29 and 33.

119 Keeping score on the edge of a game board is attested, for example, for backgammon through Flemish paintings of the 17th century. Many thanks to Ulrich Schädler for sharing with me references and information on the subject, see Arnette (2021b), 16-17. On backgammon and its history, see especially Schädler (2007b), 31-42.

120 There is also a painted *senet* board, dated from the Middle Kingdom, on the inside of a domestic chest from Kahun (Manchester, Owens College Museum, 73, see especially Pusch (1979), I, 181-182 and II, pl. 41; Crist, Dunn-Vaturi, De Voogt (2016), 50; Arnette (2021b), 15-16.

121 Of the same type as the tripod stools illustrated in Bruyère (1939), pl. XXIV, 5-7.

122 DeM_2021_M12_032 and DeM_2021_M12_033.

123 See Venturini (2007), 24-29. I thank Isabelle Venturini for kindly sharing her doctoral thesis with me.

124 II 028, and perhaps II 032, according to the typology established -by Kyra Van der Moezel, whom I warmly thank for her help on the subject. See Van der Moezel (2016), 30.

125 See Van der Moezel (2016), especially 41 and 252. At Deir el-Medina, seats bearing such identity marks come from the cemetery (e.g., from the tomb of Pached, a seat bearing the mark of Kha, Bruyère (1925), pl. 25, no. 11) and from the Pass Station (e.g., a seat bearing the mark of Baki, Bruyère 1939, 355 and pl. 40). On the subject of the seats of Deir el-Medina, see Valbelle (2020), 449-478.

reused, probably in the Ramesside period, to become a playing table: the surface of the seat, very smooth and soft to the touch, betrays a repeated use of the object, and the engraving of the board, which is on the contrary always vivid, shows that it was only made during the "second life" of the object. This low seat has practical advantages that could justify this gaming-related reuse: its small legs raise it slightly and make it an ideal table for playing, while the noticeably curved aspect of the seat would prevent the gaming pieces and randomization devices from falling. Around such a table, as around the imposing *senet* board DeM_2021_M12_015, which I believe is too heavy to be placed on the light furniture known in the village,[126] the players are necessarily seated on the floor: this is what we see in the scenes of the tombs of the Old and Middle Kingdom, but absolutely no longer in the New Kingdom. Indeed, the players in the tombs of Deir el-Medina are always seated on a chair,[127] that is to say that the funerary imagery is once again distinguished from practice.

Finally, a raw clay fragment of a board[128] could correspond to the game of 58 holes, another game attested throughout the Near East[129] and maybe also of foreign origin.[130] Here again, the very rough execution suggests daily use. In Egypt, it is extremely rare to find this game outside of tombs, and the only other example I know is the Middle Kingdom's clay board found at Kahun.[131]

2.3. Rediscovered gaming pieces

The storehouses of Deir el-Medina and, to a lesser extent, the reserves of the Archives and Collections Department of the Ifao are rich in potential pawns. The difficulty lies in the possibility, or not, of understanding them as such, apart from their context (i.e. the proximity of a game board at the time of discovery, or the fact that they belong to a set, in particular). Gaming pieces are thus easily confused with jewels and small tools: the *halma*-pieces are frequently mixed with stud earrings, so common in the New Kingdom;[132] conical pawns can be confused with weaving weights and plumb bobs,[133] and when made of wood, with polishers;[134] spool-shaped pawns are hardly distinguishable from technical objects, as well as from the large inserts to be placed in the earlobes;[135] flat circular counters blend into batches of vase lids, miniature offering dishes and all types of tokens with a purpose other than play,[136] while domed circular counters can be confused with furniture knobs;[137] finally pawns with zoomorphic or anthropomorphic shapes, having the appearance of animals, of humans,[138] and of deities (mainly Bes, usually the head)[139] are hardly distinguishable from small ex-voto type figurines, and from amulets. I therefore suggest the following criteria to try to recognize the game pieces: comparison with gaming iconography, but this should not be a limitation because the pawns are visibly prototypical there, and with the material in context; the small size of the object, i.e. the diameter of the base should be able to fit in the squares of the boards, and the height should not exceed a few centimeters; the fact of standing on a circular base;[140] the absence of any other visible use; possibly, a luxurious and/or aesthetic character, either arising from by the material used, or by the presence of decoration on the object.

Halma-pawns are uncommon among the gaming materials still preserved on the site, although they are very common in New Kingdom game scenes and often found in funerary contexts.[141] There are only three: one in wood,[142] and other two in terracotta.[143] However, this does not mean that they were not in use at Deir el-Medina: *halma*-pawns from the site can be found in museums, probably because they are

126 El-Gabry (2017), 51-57.

127 See above.

128 DeM_2020_M23_567 (the identification to a gameboard is uncertain).

129 De Voogt, Dunn-Vaturi, Eerkens (2013), 1724-1725, table 2.

130 See ultimately Dunn-Vaturi (2019), 80-85, with the earlier bibliography on this game.

131 Dunn-Vaturi (2019), 77, fig. 1.

132 Among multiple examples, see a blue glass buckle, in the Louvre Museum, E 2287 B(?), Bryan *et al.* (1993), 385, no. 135.

133 Plumb bobs or weaving weights are distinguished by the small groove they have on their base, used to hang them to a string, see e.g. Andreu (2002), 197. They are however very often mixed with gaming pieces: among many cases, see for example Petrie (1927), 54 and pl. 48, n. 132, still classified as a "gaming piece" on the museum database, https://petriecat.museums.ucl.ac.uk/detail.aspx#28755.

134 See for example Andreu (2002), 198: small wooden cones, up to 6 cm high, are interpreted as "small tools" or "pawns".

135 See, for example, the wig-bearing head, with large black inserts in the earlobes, in the Imhotep Museum at Saqqara, Zivie (1990), 83-86, figs. 39-42. In the Louvre Museum, pieces N 1850 and N 1854, for example, made of earthenware and probably of the New Kingdom, seem to me to be ear inserts because of their decoration, but they are also interpreted as pulley-shapped pawns, see https://collections.louvre.fr/ark:/53355/cl010020880 and https://collections.louvre.fr/ark:/53355/cl010020882.

136 On the problem of tokens, see Brissaud, Cotelle (1987), 103; Giddy (1999), 324-30; Spencer (2008), 67.

137 For example, in the Louvre Museum, a curved circular object in bone or ivory, E 326 A, see https://collections.louvre.fr/ark:/53355/cl010028498.

138 See, for example, earthenware pawns in the form of Nubian and Libyan prisoners with their arms tied behind their backs, probably from the New Kingdom and preserved in the Musée du Louvre (E 8396, E 1660, E 1661), Bardiès-Fronty, Dunn-Vaturi (2012), 120). In the Musée Suisse du Jeu, see Dunn-Vaturi (2007), 20, with illustrations.

139 See for example at the Musée Suisse du Jeu, Dunn Vaturi (2007), 24, with illustrations.

140 As far as I know, all Egyptian pawns have a circular base, except for the lions and lionesses of the *mehen*, and the pegs of the game of 58 holes/ Hounds and Jackals.

141 For example, with the box of Kha, Torino, Museo Egizio, S. 8452 to S. 8458.

142 DeM_2020_M23_552.

143 DeM_2020_M23_553 and DeM_2024_M23_679.

more easily recognizable than other types of playing pieces.[144]

Pulley-shaped (short) and spool-shaped (tall) pawns are known from iconography, and numerous finds attest to the existence of both forms in the Theban region during the New Kingdom,[145] some of them from the site of Deir el Medina itself.[146] In the storehouses, there are 40 black pulleys,[147] made of extremely fine clay and baked,[148] which could be pawns. The Archives and Collections Department of the Ifao also houses 16 potential pulley-shaped pawns, identical in every respect.[149] However, two[150] of these pulley-shaped objects are noticeably different: larger (3.9 and 3.7 cm in diameter), they also have numerous lines in the groove, which could betray a technical function (fig. 10a), rather than a gaming one. On the site, seven very curved spool-shaped pawns are also to be found, six that are quickly made in raw or baked clay (fig. 10b) and one, very elegant, that is carve in limestone.[151]

Tubular pawns do not appear clearly in iconography, but are attested by archaeology. They could be a simplified form of the pulley-shaped and the spool-shaped pawns. They are well known in the Theban region in the period we are concerned with,[152] and Deir el-Medina is no exception: the site's storehouses preserve 23 tubular pawns[153] made of unbaked or baked clay, while seven are housed at Ifao.[154] Conical pawns, which are so common in scenes from the Old and Middle Kingdom,[155] have completely disappeared in those of the New Kingdom. However, archaeology clearly shows that they are still used, from the simplest specimens, made of rapidly pinched raw clay, to extremely delicate pieces made of earthenware and elegantly decorated.[156] Among the unpublished pieces from Deir el-Medina, there are three roughly modeled cones,[157] and 12 much finer pieces, made of terracotta or stone.[158] One of them is distinguished by colored decoration, made of yellow and orange vertical bands (fig. 10c), attesting to the attention that could be paid to these small objects.[159] Finally, in the storehouses, there are 52 wooden cones, the largest of which measures 10.5 cm in height: while it is clear that the larger pieces are not pawns, but technical objects, the smaller ones could well fall into the category of game pieces.[160]

Circular gaming pieces are absent from Egyptian game scenes; however, they are present in the archaeological record, in the form of small flat or domed pieces. In other cultural areas and even today, these pieces are not only pawns, but also tokens, useful for counting points. However, the practice is not attested with certainty in Pharaonic Egypt,[161] so they are more likely to be seen as pawns; it should also be borne in mind that their use in a gaming context is far from exclusive, and therefore difficult to determine with certainty when the precise context is not known.[162]

144 See, for example, five *halma* from Deir el-Medina in the Louvre Museum, E 14660, https://collections.louvre.fr/ark:/53355/cl010079025, see Bardiès-Fronty, Dunn-Vaturi (2012), 57, n° 18.

145 For pulley-shaped pawns, compare for example two pale blue glass Ramesside gaming pieces marked with the name of Prince Suty and housed in the Louvre Museum (E 3271, https://collections.louvre.fr/ark:/53355/cl010027779), or an ivory pulley-shapped pawn marked with the name of Ay (N 1783, https://collections.louvre.fr/ark:/53355/cl010006694).

146 The spool-shaped pawns faced the *halma* in the game of Kha, Torino, Museo Egizio, S. 8459 to S. 8463.

147 DeM_2020_M23_452 to 478 and then, perhaps, DeM_2020_M23_495 and 496. See two exact parallels in the Louvre Museum (AF 11831 and AF 11832), also interpreted as game pieces, https://collections.louvre.fr/ark:/53355/cl010034548.

148 If the diameter of the largest pieces may seem imposing for a pawn, they nevertheless fit — by protruding very slightly — in the squares of the largest board found on the site, *senet* DeM_2021_M12_015 (see *above*).

149 Without their own inventory number at the time of writing this article, they belong to a lot with the number C. 5681.

150 DeM_2020_M23_495 and 496.

151 From DeM_2020_M23_503 to 505, DeM_2020_M25_303 and DeM_2020_M23_527, incised with dots on the top; DeM_2024_M23_668 and DeM_2024_M23_678.

152 The tubular form is attested, for example, through the pawns that accompanied the wooden and ivory game box from the Assassif, now in the Metropolitan Museum of Art (16.10.475 B-K, see *supra*, n. 54).

153 DeM_2020_M23_479 to 494, DeM_2020_M23_497 to 501 and DeM_2024_M23_657.

154 They belong to lot C. 5681.

155 See for example Pusch (1979), II, pl. 1-15. They are found in the tomb of Ibi and on the Ankhefensekhmet relief from the Walters Art Museum in Baltimore, in the context of clearly archaizing scenes, see Pusch (1979), II, pl. 37. Conical pawns, however, seem to remain in practice until the Ptolemaic period: noteworthy is a conical faience pawn from Tell el-Dafana, dated to the 26th dynasty - Leclère, Spencer (2014), 188, pl. 30, BM EA 18463 - or another made of clay, at Naucratis and dated to the beginning of the Ptolemaic Period (BM, NCM 1888-41), Villing *et al.* (2013-2015), TH.35, see https://www.britishmuseum.org/collection/object/X__2162).

156 See, for example, a conical blue faience pawn with a black top (Musée du Louvre, AF 6798), Bardiès-Fronty, Dunn-Vaturi (2012), p. 48-49.

157 DeM_2020_M23_528, 529 and DeM_2020_M23_549.

158 DeM_2020_M23_530 to 539, DeM_2020_M23_549 and DeM_2024_M23_658; they can be compared to another conical pawn from Deir el-Medina made of sandstone, now kept in the Louvre Museum (E 14660, see https://collections.louvre.fr/ark:/53355/cl010079011). We can add a pawn kept at the Carter Storehouses (DeM 35, no. 138), discovered in February 1975, during surveys carried out on the site by Dominique Valbelle and Charles Bonnet. The shape of this last pawn, a limestone cone with a deeply incised line of decoration running along its circular base, is reminiscent of two pawns found at Ras Shamra-Ugarit (Musée du Louvre, AO 19119), see Bardiès-Fronty, Dunn-Vaturi (2012), p. 55, n° 15.

159 DeM_2020_M23_530.

160 These pieces, which have not yet received inventory numbers, are being studied by the team led by Gersande Eschenbrenner-Diemer, an Egyptologist specializing in wood and a member of the Deir el-Medina mission.

161 However, see above, the game of twenty board DeM_2021_M12_003,

162 See above.

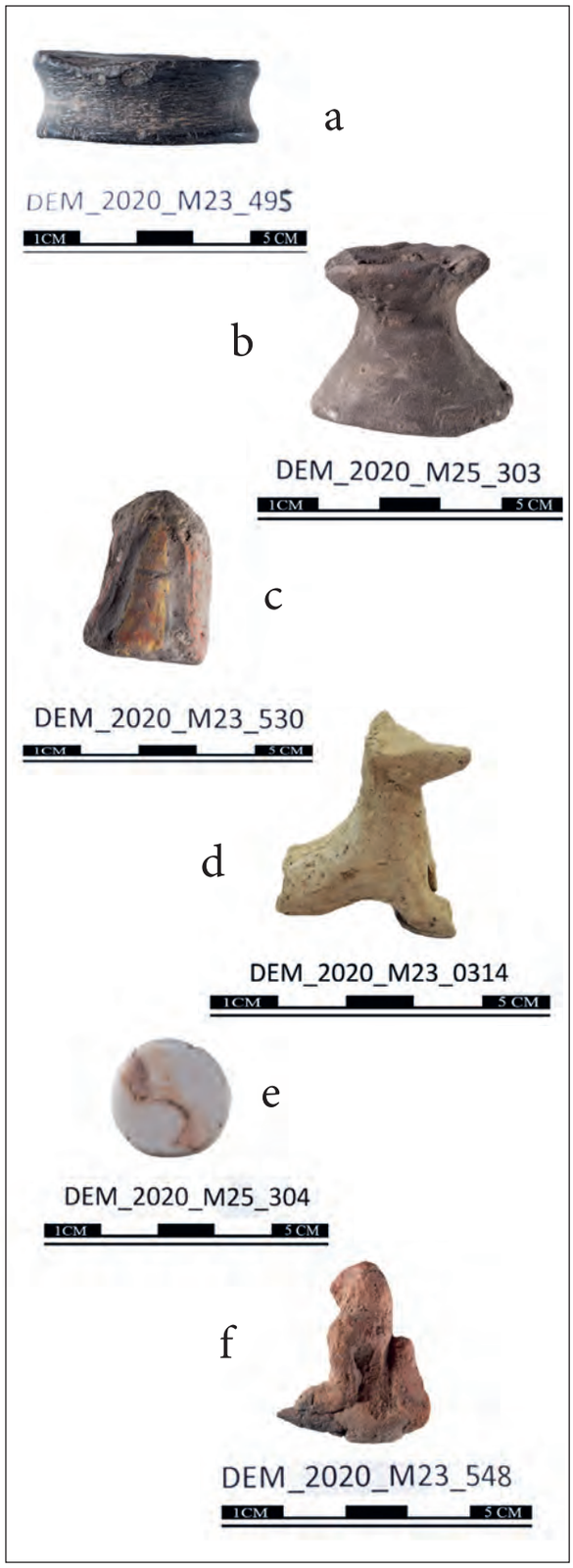

Fig. 10a-f. Playing pieces (?) in various shapes and materials : A) diam. 3,9 x ht. 1,4 cm, New Kingdom, Deir el-Medina, DeM_2020_M23_495, B) diam. 3,3 x ht. 2,6 cm, New Kingdom, Deir el-Medina, DeM_2020_M25_303, C) diam. 3,2 x ht. 2,1 cm, New Kingdom, Deir el-Medina, _2020_M23_530, D) 3,4 x 1,5 cm, New Kingdom, Deir el-Medina, DeM_2020_M23_314, E) diam. 2,1 x ht. 0,3, New Kingdom, Deir el-Medina, DeM_2020_M25_304, F) 2,8 x 2,7 cm, New Kingdom, Deir el-Medina, DeM_2020_M23_548. © Nu_2022_01287, nu_2022_03901, nu_2022_01362, nu_2022_03905, nu_2022_01425. Ihab Mohamed Ibrahim, Ifao (except DeM_2020_M23_314, Audrey Crabbé).

There are 22 potential flat circular counters (?), 16 in terracotta and raw clay[163] - some are re-cut sherds,[164] others are modeled and pitted with dots - and six in stone, limestone and nicely veined calcite (fig. 10e).[165] The smallest pieces would fit for a gaming use, while the largest pieces (more than 4 cm in diameter) could just as well be vase stoppers. One of them[166] is distinguished by its incised decoration, a four-pointed cross accompanied by four dots. Such a motif is known on some Roman counters from Egypt[167] or, later still, on randomizing tokens - albeit made of bone and ivory - used for a typical Byzantine board game,[168] to which the one from Deir el-Medina may be related, that is to say that its date would in reality be very late.

The site's storehouses also revealed four circular domed counters (?), one in limestone, very delicate,[169] and the other three in earthenware, coarser and whose gaming function is much more uncertain.[170] They can be compared to a series of earthenware pawns housed at University College London, which William Flinders Petrie dates tentatively to the 19th dynasty.[171] However, when the context is known, circular domed counters always turn out to be later than the middle of the 1st millennium:[172] this may be the result of increased cross-cultural connections with the Classical world, where this form of counters is well attested, especially in the 1st century.[173] So

163 DeM_2020_M23_511 to 526; DeM_2020_M25_304 and 305; DeM_2024_M23_655, 656, 675 and 677.

164 For this type of counter, Brissaud, Cotelle (1987), 101-106; Giddy (1999), 324-330; Spencer (2008), 67, 70-71 and pl. 183-192. Four counters of the same type dated to the 26th dynasty were found at Tell el-Dafana (British Museum, EA 23835 to 23838), evidently in association with the engraved *senet* boards on pottery (BM EA 22323, EA 23802, EA 23803), see Petrie (1888), 74, § 71; Leclère, Spencer (2014), 87, and 188, pl.30.

165 DeM_2020_M25_304.

166 DeM_2020_M23_518.

167 Two examples of the Roman glass counters in the Rikjsmuseum van Oudheden (F 1934/10.88, see *below*, n. 160); however, they have a hole in the center, and I wonder if they are not beads.

168 Drioton (1940), 181-183; May (1991), 164 and fig. 160; Crist, Dunn-Vaturi, De Voogt (2016), 122-124.

169 DeM_2020_M23_505.

170 DeM_2020_M23_506 to 507 and DeM_2020_M23_510.

171 UC59112, Petrie (1927), 53, no. 13-25 and pl. 48, no. 13-14. Without a provenance, this dating is hypothetical - and one may wonder to what type of Egyptian game such a series of 13 identical counters could correspond. See also two domed circular counters decorated with a canid, this time dated by Petrie of the 18th dynasty, UC59112, Petrie (1927), 53, n°33-34.

172 Notably at Naucratis, were several domed counters dated to the 1st-2nd century were found, now housed in the British Museum (2509.01 to 08, Accession Numbers). See Villing *et al.* (2015), Th. 23 to 30, https://www.britishmuseum.org/collection/object/X__6781. See also a series of very fine hemispherical glass counters, made in *millefiori* indicating a Roman date, housed in the Rijksmuseum van Oudheden (F 1934/10.88, https://www.rmo.nl/en/collection/search-collection/collection-piece/?object=5089).

173 See, for example, May (1991), 37, fig. 3. These objects are particularly well documented at Pompeii, see Cool (2016), 231-239; Pace (2020), 24, fig. 3, c-e.

here again, it is difficult to attribute with certainty the domed counters to the gaming practices of the inhabitants of the village during the New Kingdom, and not to a later period.

Finally, 19 potential "plastic" pawns, or "figural pawns", were rediscovered in the storehouses. Only the dog-shaped gaming pieces are known by iconography and archaeology, from the New Kingdom and, much later, by two texts, the demotic tale of Setne II and P. Oxy. 470.[174] It is indeed with pawns in the shape of lying canids that king Merenptah plays, in a *senet* scene of the Osireion of Abydos;[175] among numerous examples resulting from archaeology, one can quote a team of six earthenware gaming pieces taking the shape of dogs' heads, perhaps Ramesside, now housed in the British Museum.[176] At Deir al-Medina, there are eight such pawns. While seven of them - six made of baked alluvial clay, one of limestone - represent only the neck and head of the animal,[177] the eighth[178] is made of marl clay (fig. 10d) and is modeled in the shape of a lying dog, that makes it an exact replica of the pieces from Merenptah's gaming scene.

Pawns in the shape of leopards and lions are, under the New Kingdom, attested only in the archaeological record: the most famous example is undoubtedly the red jasper gaming piece in the shape of a leopard's head[179] bearing the cartouche of Hatshepsut between its ears, house at the Metropolitan Museum of Art.[180] At Deir al-Medina, a lion protome made of unbaked clay,[181] whose mane is carefully incised and painted in blue, green and yellow, is probably a pawn; six ram heads held on the neck are modeled either in marl clay or Nile silt,[182] may also belong to this category. Their size varies considerably, from 1.8 cm to 5.9 cm. Pawns with ram heads, and lion bodies, were indeed discovered in the tomb of the Nubian king Shabaqa, under the 25th dynasty; [183] however, they could also be ex-voto type figurines, especially the largest ones.[184] Finally, were also found a sited Cercopithecus shaped in terracotta (fig. 10f),[185] that might be a pawn,[186] and three other broken potential "plastic" pawns, whose initial form cannot be established for lack of comparisons.[187]

3. THE UNPUBLISHED ARCHAEOLOGICAL DOCUMENTATION FROM THE *STATION DU COL*

The "Station du Col" or "Station de Repos" is a group of 78 dry stone huts, located halfway between the Valley of the Kings and the village of Deir el-Medina and erected from the reign of Rameses II. These huts can be distinguished into three groups, according to their orientation — east, west, and north.[188] The precise role of the site remains open to debate, but it is likely that it represented the lodgings of the teams during their work time, notably in order to reduce their morning and evening commute: the presence of masonry beds and headrests for sleeping, or written documents mentioning grain deliveries, would support this view.[189] Various daily activities occupied the workers (making different objects, such as small votive steles, molds, wicks for lamps, etc.), [190] and the practice of board games was obviously part of their time there. B. Bruyère earlier discovered, in two huts in the eastern group, two boards, one for the game of twenty, and the other for *senet*.[191] These objects, like all of the finds at the "Station du Col", were mixed in the storehouses with finds from the site of Deir el-Medina itself, and it is therefore generally not possible to recognize them precisely. This is not the case, however, with the recent discoveries made by the Finnish mission led by Jaana Toivari-Viitala, within the framework of the *The Workmen's Huts in*

174 In the Demotic tale of Setne II, the pawns are "dogs" (*jwjw*), see Piccione (1990), 345, as in P. Oxy. 470 (*kunoi*), see lastly Arnette (2021a), p. 31. Pawns are also called "dogs" in the Near East -Finkel (2007), 23 - and in the Classical world, in Juliux Pollux (*Onomasticon* 9.99) and in Cratinos (Fr 61 K-A) for *polis*.

175 See for example Kendall (1978), 37, fig. 28; 69, fig. 3.7.

176 EA 24661 to EA 24666. Three examples are discussed in May (1991), 147, fig. 133.

177 DeM_2020_M23_320, DeM_2020_M23_322 (?), DeM_2020_M23_540 (?) to 543, and DeM_M23_587.

178 DeM_2020_M23_314.

179 Oppenheim (2010), 36, no. 19; Bardies-Fronty, Dunn-Vaturi (2012), 107. See also a team of five pawns in the shape of the head and neck of a leopard, housed in the British Museum (Inv. 1893, 0514 - 1887, 1203.7), see Falkener (1961), 22-35; May (1991), 144.

180 Inv. 26.7.1452, Towry-White (1902), pl. I; Kendall (1978), 18, fig. 13; Bardies-Fronty, Dunn-Vaturi (2012), 107. Five other examples, depicting the head and neck of a leopard, in the British Museum (Inv. 1893, 0514 - 1887, 1203.7), Falkener (1961), 22-35; May (1991), 144.

181 DeM_2020_M23_544.

182 DeM_2020_M23_321, DeM_2020_M23_323, DeM_2020_M23_593 to 596.

183 See Dunham (1950), I, pl. 24A; Kendall (1978), 36, fig. 27; Crist, Dunn-Vaturi, De Voogt (2016), 68.

184 They can be compared, for example, to a very similar ram's head in unbaked clay, now in the British Museum (EA 61671). Between the New Kingdom and the Third Intermediate Period, objects of this type are common in temples, but also in funerary and domestic contexts, see for example Spencer (2008), 64-67, with numerous comparisons.

185 DeM_2020_M23_548.

186 On the links between monkeys and board games, see *above*. The pawn (?) is to be compared with two supposedly Ptolemaic baboon-shaped astragals in the Metropolitan Museum of Art (66.99.75 and 68.3), see especially Fischer (1967), 262, fig. 13.

187 From M_2020_M23_545 to 547.

188 See Bruyère (1939), 345-356 and pl. XXXV; updated plan in Toivari-Viitala (2014), 194, fig. 1 and 195, fig. 2.

189 Dorn (2017), 161.

190 Toivari-Viitala (2014), 196-197; Dorn (2017), 161.

191 Bruyère (1939), 364: «un jeu de brette [...] un jeu de trente décans», i.e. a *senet*, and «un jeu de *Dad*», probably a game of twenty.

the Theban Mountains (WHTM) project,[192] which unambiguously reflect the gaming practices at the Station.[193]

Twelve new boards have been found: in the eastern group area, two *senet* boards on blocks, one complete, without morphological variants, but with squares of varying sizes[194] and the other, fragmentary, very roughly incised with slanted lines and irregular squares.[195] In addition, there are four fragmentary boards for the game of twenty engraved in limestone blocks,[196] and five other boards that cannot be attributed to one game or another, most of which coming from the eastern and western zones that seem to be favored for playing at the Station.[197] A fifth board for the game of twenty was carved on the floor of room R in the western group, directly into the rock, which has no equivalent, to my knowledge, in a domestic context in Egypt (fig. 11).[198] Finds also included 10 game pieces,[199] all from the eastern zone of the "Station du Col": two spool-shaped pawns, perfectly cut in limestone,[200] three *halma*-pawns also in limestone and colored with red ochre,[201] three circular domed stone counters,[202] and two conical pawns, [203] one in limestone and the other in wood (fig. 12). Thus, the types of boards and gaming pieces found in Deir el-Medina itself are also present at the Station, either because the players took them with them when leaving for work, or because they made them identically on the spot. A notable feature is that some pieces seem so delicate that their destination could well be funerary,[204] even though the "Station du Col" is not a place of burial: as J. Toivari-Viitala has suggested, they may be the remains of the sharing of lootings from the neighboring tombs.[205]

Fig. 11. Game of twenty engraved on the ground, New Kingdom, "Station du Col", West Group, Room R. © The Workmen's Huts in the Theban Mountains project.

Fig. 12. Some of the limestone playing-pieces and knucklebones found at the "Station du Col", New Kingdom, WHTM_127 (North Group, T11), WHTM_517 (East Group, J), WHTM_240 (East Group, U), WHTM_272 (East, T25), WHTM_250 (East, T24). © Matjaz Kacicnik, The Workmen's Huts in the Theban Mountains project.

Finally, the "Station du Col" has yielded numerous astragals, 17 pieces made of stone, limestone and sandstone,[206] and one of wood.[207] Five of these astragals could perhaps form a set (fig. 13):[208] made of sandstone, very schematic, they were all found in the debris of Hut O, west of the Station. However, when used as randomization devices, astragals are always shown alone or in pairs, but never so numerous. Here, this possible set of five pieces could suggest a game of knucklebones in the strict sense – i.e. they would be gaming pieces, rather than randomization devices, which is not attested elsewhere for the Pharaonic period - or divinatory and oracular

192 Toivari-Viitala (2014), 191-198.

193 Toivari-Viitala *et al.* (2012), 7; Toivari-Viitala (2014), 197 for games (only mentioned). I am very grateful to Elina Paulin-Grothe for providing me with a wealth of unpublished material from the *WHTM* project, and to the entire mission for allowing me to publish it.

194 WHTM_0321 (T25). T. stands for "trench excavation".

195 WHTM_0326 (T25).

196 WHTM_154 (north, T 11), WHTM_595 (east, T24), WHTM_317 (east_T24), WHTM_598 (west, T32).

197 WHTM_0849 (north, debris), WHTM_66 a and b (north, T24), WHTM_510 (east, T24), WHTM_613 (west, room U), WHTM_863 (east, surface).

198 As is known for funerary and cultic contexts, see most recently Arnette (2021a), 41, and Collombert (2021).

199 Some other pieces could be added, but their function is uncertain, for example nodules of marked flint, perhaps with identity marks, and small parallelepiped-shaped pieces of stone, the size of a sugar.

200 WHTM_0176 (east, T17) and WHTM_0250 (east, T24).

201 WHTM_0206 (east, T room), WHTM_0240 (east, U room) and WHTM_0272 (east, T25).

202 WHTM_0165 (cut in black stone, west, T11), WHTM_0242 (flat-bottomed flint nodule, east, T24), and 0393 (east, T27); the latter, made of alabaster, has a diameter of 2.5 cm, which seems very large for a gaming piece of this type. It is therefore possible that it is a vase cover.

203 WHTM_0378 (east, T27) and 0802 (north, T9).

204 In particular, WHTM_0317.

205 Toivari-Viitala (2014), 197.

206 WHTM_0127 (north, T11), WHTM_0151 (north, T11), WHTM_0449 (east, room W), WHTM 0517 (east group, hut J, entrance), WHTM_0596 (west, T32), WHTM_0615 (west, T36), WHTM_0639 (west, room Q), WHTM_0647 (?, west, Room F), WHTM_0680 (west, T39), WHTM_0694 (west, T38, debris), WHTM_0792 (west, Room C), WHTM_0816 (west, T31), WHTM_0818a-e (west, Room W, debris), WHTM_0842 (east, T24), WHTM_0846 (east, T17), WHTM_847 through 849 (north, T12).

207 WHTM_0816.

208 WHTM_0818a-e.

Fig. 13. Set of limestone knucklebones found at the "Station du Col", West Group, Room O, New Kingdom, WHTM_0818a-e. © The Workmen's Huts in the Theban Mountains project.

practices,[209] though the possibilities are not mutually exclusive. Finally, the original shape of the bone is not imitated on some of these pieces, in particular on an almost perfect parallelepiped astragal made of limestone whose faces are distinguished only by lines, or a point:[210] they seem to be halfway between the figural astragal, imitating a real bone, and the abstract cubic die.

It should be kept in mind, however, that the "Station du Col" was reoccupied in the Coptic period, at least in its western part: indeed, B. Bruyère,[211] as well as the *WHTM* project team, report finds of ceramics typical of this period.[212] Perhaps that late playing pieces (such as the circular domed counters?) could have been mixed with objects clearly attributable to the New Kingdom, such as the *halma*-pawns and the spool-shaped pawns.

Whatever the case, and as G. Andreu writes, the Station is "a universe without women or family",[213] so the gaming objects found there are strictly masculine practices. Thus, the use of the astragals, which is not very common on the site but is common at the "Station du Col", could be mainly a matter for men - and the representations never show women handling them.[214] This is not the case for the other games, *senet* and the game of twenty, played everywhere and, without doubt, by everyone, perhaps even together.

CONCLUSIONS

The inhabitants of Deir el-Medina were not only a "community of workers," to use Jaroslav Černý's famous expression, but also a community of players. The gaming material is as abundant as it is varied, betraying the importance of play not only in the funerary sphere, but even more so, in everyday practices. These practices seem to be mainly oriented towards the game of twenty, a game of Eastern origin that was particularly popular during the Late Bronze Age, which helps to show that the inhabitants of the village were not radically separated from the rest of the world – at least, culturally speaking. Games from Deir el-Medina also raise the question of free time: this was not only occupied with activities related to the domestic economy, but also with leisure activities, which were in essence unproductive, such as playing games. It should be remembered that the discovery of game boards in the very place where craftsmen worked, i.e. in the Valley of the Kings, suggests that the strict division between professional and leisure activities was probably much more fluid in ancient Egypt than it is today in most Western societies. The archaeological material oscillates between quality pieces, which were undoubtedly preserved and perhaps used on the occasion of organized games between colleagues and friends, and much simpler objects, which testify to spontaneous practices, in their places of life and work, and were perhaps used only once. Finally, while the "Station du Col" reveals a high number of astragals whose use may well have been reserved for men, images from tombs also show women playing, who may have been able, like the men and perhaps with them, to take an active part in the recreational activities of the village.

ABBREVIATIONS

PM I

Porter, Bertha, Moss, Rosalind, *Topographical Bibliography of Ancient Egyptian Hieroglyphic Texts, Reliefs and Paintings. The Theban Necropolis*, Oxford (1927, reed. 1960).

Denkmäler III

Lepsius, Karl, *Denkmäler aus Aegypten und Aethiopien, Text. Herausgegeben von Eduard Naville, unter Mitwirkung von Ludwig Borchardt. Bearbeitet von Kurt Sethe. Dritter Band. Theben*, Leipzig (1900).

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Games boards from Hellenistic Period Maresha: predicting the future or simply passing the time?[1]

INTRODUCTION

The ancient city of Maresha is located in the Judean foothills 22 miles (c. 35 km) east of Ashkelon and 25 miles (c. 40 km) southwest of Jerusalem (Fig 1. Map of Israel with Maresha). The city consists of an upper city on the tel and a lower city surrounding the tel. The homes were constructed by quarrying chalk bricks from a depth of 1-1.5 m beneath a hard upper crust of rock. This resulted in the creation of thousands of man-made caves beneath the homes and courtyards of the lower city. Over time, some of these quarries were repurposed into cisterns, olive presses, columbaria, storage rooms, and stables. Many were later deliberately used as dumps by the inhabitants of the city. It is within the debris of these subterranean complexes that the finds described in this paper were discovered. The city was abandoned following the conquest by the Hasmonean king, John Hyrcanus I in ca. 112/111 BCE providing a terminus ante quem for all the boards.During the Hellenistic period, the city's multicultural population included Idumeans, Sidonians, and Nabateans, along with various other ethnic groups. Excavations have revealed a city with an eclectic material cultural that reflects mercantile connections as far afield as Italy, Athens, Egypt, Cyprus, Asia Minor, and the Black Sea Region. The material finds discovered over the years suggest a culture that combined both Hellenistic *koine* with distinct local Idumean traditions. These influences no doubt effected architecture, ceramic culture, language, religion, and cult, and most likely also games. Recent excavations at Maresha have uncovered 16 stone fragments identifiable as portable game boards. These can be added to those Frederik Jones Bliss and Robert Alexander Stewart Macalister[2] discovered at Tel Sandahannah (Maresha – not illustrated in their report) and nearby Tel Zecharia that are similar to the ones in this report.[3] No public game boards, usually found engraved into pavements or within architectural contexts, have been discovered. The fragmentary nature and poor state of preservation of most of these portable boards limits us to only tentative identification of the specific games. However, many of the game boards were discovered in contexts that contained astragals, pessoi, shell counters, as well as divination material.

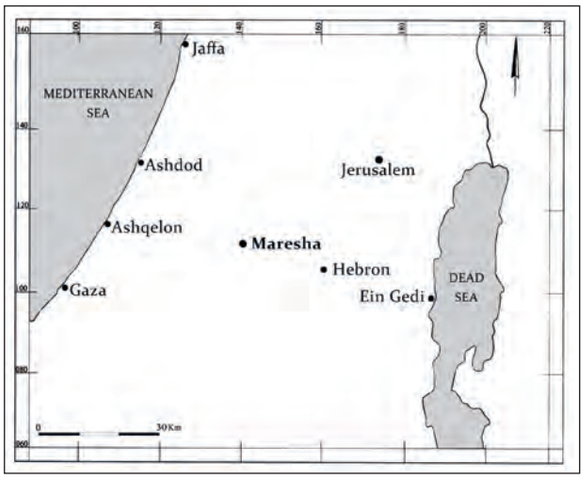

Fig. 1. Location Map of Maresha.

1 Much of this is a rework and expanded version of my chapter "Game Boards" in Stern (2019), 127-131.

2 Bliss, Macalister (1902), 144.

3 Bliss, Macalister (1902), 144, fig. 56.

Games in antiquity are understood to have been both a means of entertainment as well as a tangible medium through which to communicate with the gods. This paper will discuss the numerous game boards and other "gaming" items discovered at Maresha and suggest their possible functions within the different contexts they were unearthed.The 15 stone board game fragments and one full game board resemble portable game boards and more specifically graffito boards. All of the game boards are made of local chalk that is easily worked. In some the squares were incised carelessly into slabs of soft chalk with little effort made regarding symmetry or precision. The rows are not necessarily the same size or shape, nor are they always parallel. Two of the slabs contain game boards on two sides. Two fragments are questionable as game boards but have been included due to their enigmatic appearance as well as the context within which they were discovered. Due to the broken or poorly preserved nature of most of these stone slabs it is difficult to determine the exact number of squares or depressions and the identity of the respective games remains unresolved. Possible identifications will be suggested for some albeit with reservations. Many of the game boards were discovered in the same vicinity in Maresha. Six were discovered in Subterranean Complex (hereafter SC) 169 and three were found in nearby SC 57. SC 169, and 57 contained a large quantity of cultic material and both are close to Area 800, a structure identified as a temple. Many figurines, altars, astragals, stone phalli, kernos lamps, divination texts, and votive stamps were amongst the finds in these systems suggesting their possible use in divination. Six other game boards were discovered in debris within SC 89 and one within SC 84 (Fig. 2 Plan of Subterranean complexes with SC 169, 57, 84, 89, and 800). The assemblages there were more of a domestic, non-cultic nature and therefore it is more probable that they reflect recreational usage.

1. GAME BOARDS FROM SC 169 AND SC 57 – RITUAL CONTEXTS

The following are brief descriptions of the slabs of chalk discovered. Boards 1-3 (Figs. 3.1-2) appear to be rectangular in shape and contain grid-like patterns that were made with little attention given to uniformity or aesthetics. The number of squares leaves the actual game types a mystery. Board 4 (Figs. 3.3a-b), from SC 57, also contains a grid but

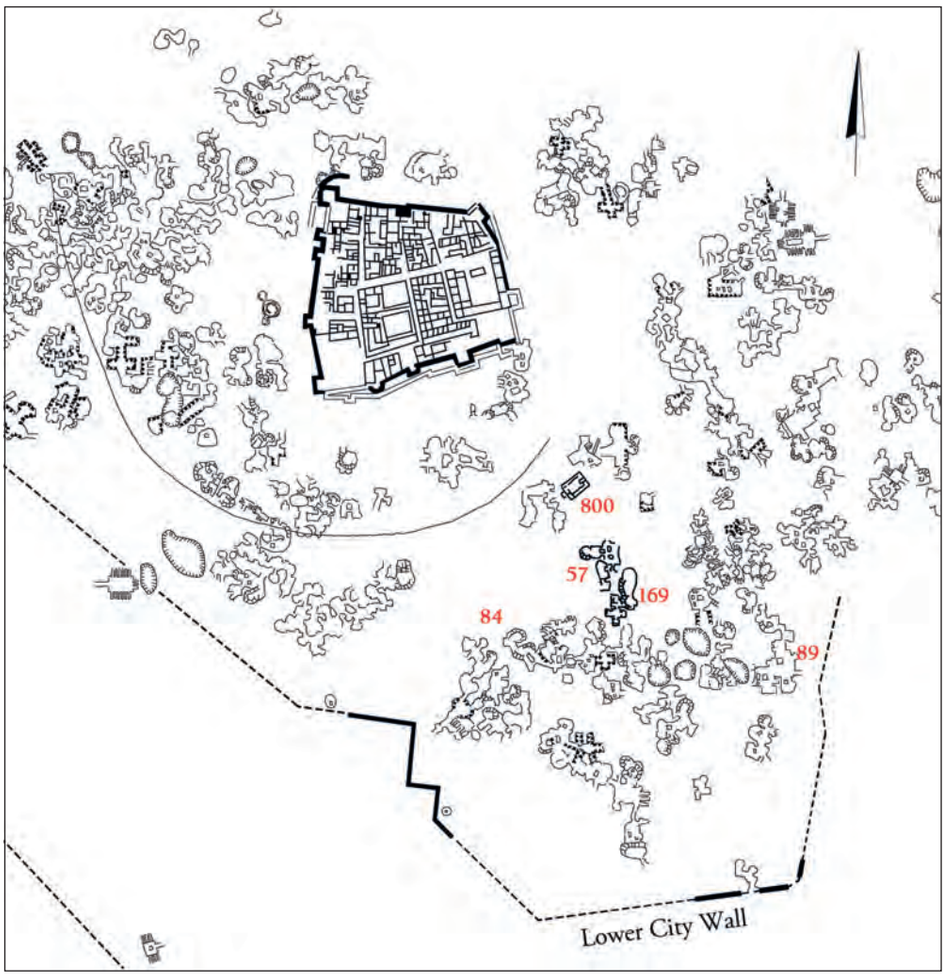

Fig. 2 General plan of subterranean complexes (courtesy of the Israel Antiquities Authority).

with a bit more precision. It is rounded (although this may reflect secondary use of the stone) with graffito of a woman carved into its side. These four slabs bare a resemblance to boards for *latrunculi* believed to be a variant of an earlier Greek game, *petteia*. The boards 5 (Figs. 3.4a-b) and 6 (Fig. 4.5) both appear to contain different variations of the game mentioned by Pollux as *Pente grammai* or "*Five Lines.*"[4] Board 7 (Figs. 4.9a-b) is also two-sided, bearing a resemblance to the game Senet. The last two (Figs. 4.7-8) are questionable as game boards but due to the cultic context in which they were discovered as well as possible parallels cited below have been included.

1. (Fig. 3.1) The preserved portion of the first game board (IAA Reg. No. 7015/14–169–189–2681-S2) measures 14.8 x 8.5 x 4.7 cm. It appears to be rectangular, made of local chalk and contains uneven squares carelessly incised into the stone. Approximately 11 rows of 8 or more squares are partially visible but due to its poor state of preservation it is difficult to determine the original number.
2. (Fig. 3.2) The second chalk slab (IAA Reg. No. 5343/08–169–142–2200-S2) is rectangular and divided by approximately five to six rows of ten squares and measures 23.0 x 13.5 x 1.5 cm. The incisions in the stone are very shallow and made with little regard for precision or symmetry. The rows are not parallel nor are the squares the same size or shape. The center of the board appears to have been deliberately smudged.
3. The third board (not illustrated) (IAA Reg. No. 3/19 169-505-2970-S1) resembles board 2, also made of local chalk, with shallow incisions showing 3 or more rows of possibly 11 squares. It measures 22.9 x 15.9 x 11.4 cm. It is clear that there were more rows and squares in the grid as the sides are all broken. Here too the work was done with little attention to precision and the squares are also different sizes.
4. (Fig. 3.3a-b) The fourth board (IAA Reg. No. 57-41-313 S-6) measuring 29.0 × 25.0 × 14.5 cm was found in SC 57. The preserved portion of the slab is rounded, with squares slightly more even than boards 1-3. A round female face with long hair, framed within a halo or head covering (possibly representing a goddess?) is carved on the upper portion of one side. This image intrudes into the edge of the game board suggesting that it may have been a later addition to the slab. The Greek letter α is incised on one side of the slab.[5]
5. (Figs. 3.4a-b) The fifth game board (IAA Reg. No. 4687/06-57-41-302-S1) is also from SC 57 and measures 14.5 x 10.5 x 4 cm. Despite its small size it is almost complete and is two sided. The edges are slightly worn or partially broken. On Side A the grid was evenly engraved, with more care than the other boards, each small square measuring ca.

Fig. 3. Game Boards (photos by A. Stern).

4 For in depth review of the game *Pente grammai* in the sources as well as archaeological parallels see Schädler (2009), 173-196; Ignatiadou (2019), 146,150.

5 Young (2018), 45-60.

1.0 cm. Side B of the slab has five thinly engraved parallel lines baring a strong resemblance to the game *Pente grammai* or *Five Lines*.

6. (Fig. 4.5) The sixth board (IAA Reg. No. 4687/06-57-41-315-S4) is the third game board from SC 57 and measures 23 x 16 x 13 cm. It is broken but enough is preserved to determine that it was an enlarged variation of the game *Penta grammai*. It contains 11 lines with a center line and three places are demarcated by an "X." There are indistinguishable markings next to the board as well as a round indentation or pit, possibly for pessoi, on one side.

7. (Fig. 4.9a-b) The seventh game board (IAA Reg. No. 4997/07–169–111–1605-S1) is two sided and measures 17. x 6.0 x 4.6 cm. Side A is a rectangular slab, containing two rows of five or more incised squares. This graffito board is damaged at the end of the row leaving an irregular shaped hole with an unknown function. Due to the damage, it is difficult to determine if there were more squares in the grid. The carelessly incised grid on Side B appears to contain three rows of ten squares. Side B bears a likeness to the Egyptian game Senet also referred to as the game of "thirty squares"[6] the most popular Egyptian game known from the First Dynasty (ca. 3050 BCE) to the Roman period. Senet boards have been discovered in local sites such as Level III Lachish[7] as well as a two-sided board in Hazor, albeit from the 9th century BCE. The second side of the Hazor board contained the "Game of Twenty Squares."[8]

8. (Fig. 4.7) The eighth slab (IAA Reg. No. 5343/08–169–125a-1976-S2) is more difficult to define and its designation as a game board is tentative. It has been categorized as such due to the context within which it was discovered and because other explanations are lacking. The chalk slab measures 32.0 x 26.5 x 12.0cm. Only the corner is preserved and it contains a row of five small, round indentations, large enough for small marble-shaped objects or pegs. On the right side a faint remnant of a frame is barely visible.

9. (Fig. 4.8) The ninth slab (IAA Reg. No. 52/02–169–06–322-S1) measures 14.5 x 11.0 x 3.7 cm, like Slab 8, has been only tentatively identified as a game board. It contains a small, round cup-like depression and the fragmented portion of a second depression. This pitted board bears a very slight resemblance to mancala. This identification is tentative as there is no literary or archaeological record of mancala boards this early in history. While Ulrich Schädler raised the possibility that a predecessor or early variant of mancala may have existed in the Greco-Roman period, after viewing a photo of this particular fragment concluded that it was too small to be even categorized as part of any game board.[9] A second possible explanation for this piece may be a discovery made in the Juktas Peak Sanctuary.[10] The excavator there defined a stone libation vessel with cup-like holes as a stone

Fig. 4. Game Boards (photos by A. Stern).

6 Sebanne (2001), 213–230.

7 Sebanne (2004), 690–694.

8 Yadin (1960), 34, Pl. 78:6; Sebanne (2012), 56.

9 Schädler (1998), 10–25; also Crist, Dunn-Vaturi, de Voogt (2016a), 131; Kurke (1999), 256–258.

10 Karetsou (2012), 93 Fig. 10.16.

kernos table. Many of the finds in this sanctuary are understood to have been ritual equipment and the cup like holes utilized for offerings of agricultural goods possibly linking the activity to ceremonies of the Eleusinian Mysteries. The excavator suggests that these finds may have been connected to either gaming, cultic use, or both, since the two activities were many times interrelated.[11] While the actual usage of the vessels at Juktas Peak is debated, their discovery within a sanctuary strongly suggests a cultic purpose.[12]

2. GAME BOARDS FROM SC 89 AND SC 84

The finds within these two subterranean complexes resemble the debris discovered within other excavated areas around the lower city. It is important to bear in mind that the contents of these subterranean complexes reflect the lifestyles of the inhabitants of the dwellings that once existed on the surface above. It was within SC 84, for example, that along with the abundance of domestic materials such as cooking pots, serving vessels and utility vessels, a marriage contract in Aramaic, dating to 176 BCE was discovered.[13] Both assemblages include tableware and as well as utility vessels, local material, and a significantly large assortment of valuable imported ware from workshops in Egypt, Athens, Aegean/Asia Minor, Cyprus, and Italy. In SC 89 the assemblage also included commercial and administrative items, including an archive containing 1027 sealings[14] and ca. 400 Greek ostraca.

10. (Fig. 5.10) The tenth board (IAA Reg. No. 46/91-84-40-A) is a small fragment of chalk, measuring ca. 5 x 4 cm. The board contains a grid, that was carelessly incised like the others with little consideration given to aesthetics.

11. (Fig. 5.11) The eleventh board (IAA Reg. No 7015/14-89-605-1079-S1) is a fragment of chalk measuring 15 x 12 x 6 cm. The squares are carelessly made with shallow incisions, very small and uneven, averaging ca. 1.3 cm. in size.

12. (Fig. 5.16) The twelfth board (IAA Reg. No. 5574/09-89-38-383-S5) is a tiny fragment of chalk measuring 7 x 6 x 4 cm and only 2 parallel lines lightly incised are preserved.

13. (Fig. 5.12) The thirteenth board (IAA Reg. No. 3/19-89-842-2146-S1) is a small fragment of chalk measuring 8 x 8 x 3.5 cm. It contains a grid with small, unevenly shaped squares, incised with a shallow intaglio whose average size is 1.4 cm.

14. (Fig. 5.13) The fourteenth board (IAA Reg. No. 1/18-89-828-1793-S4) measures 15 x 8.5 x 4.5 cm. Two of the original sides are preserved, the 9 squares in the grid are large (ca. 3.5 cm), clearly incised, evenly distributed and close to equal size. This board, also of chalk, was done with more care than most of the others.

15. (Fig. 5.14) The fifteenth board (IAA Reg. No. 5808-89-203-488—S1) measures 18 x 11 x 5 cm. The squares in the grid are large (2.5-3 cm) and were carefully incised into the chalk with a clear sense of aesthetics. Four to five rows of squares were preserved.

16. (Fig. 5.15) The sixteenth board (IAA Reg. No. 3/19-89-842-2131-S1 measures 20 x 11 x 5 cm.

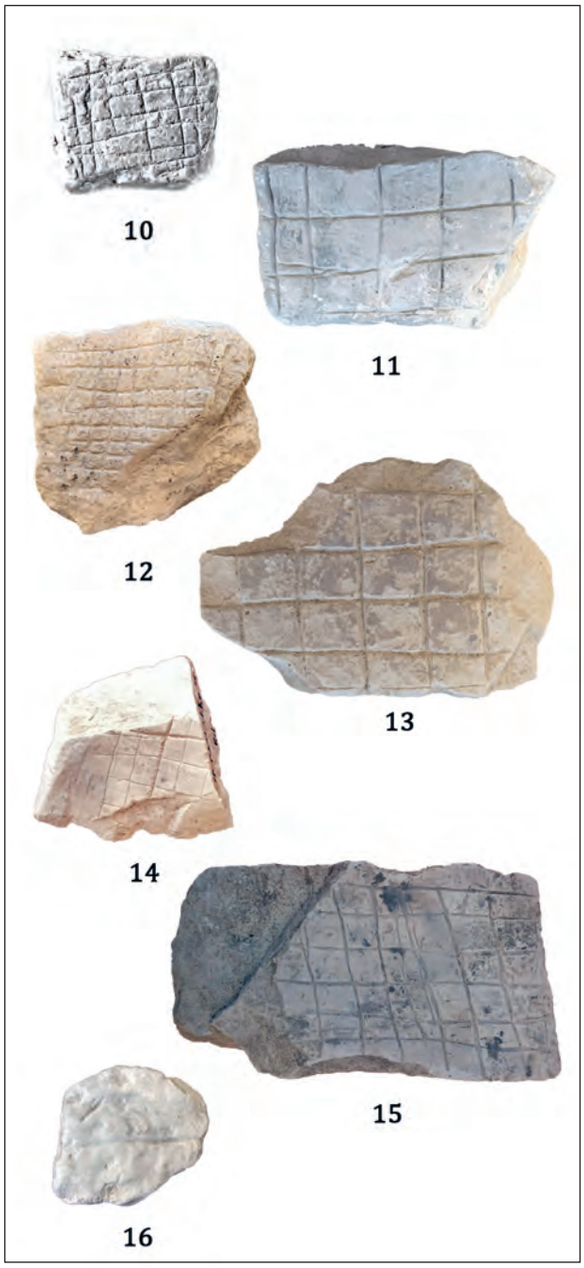

Fig. 5. Game Boards (photos by A. Stern).

11 Karetsou 2012, 90–94.

12 Karetsou 2012, 90–94.

13 Eshel, Kloner (1996), 1-22.

14 Stern, Ariel (2020), 46-51.

The shallow incisions that make up the grid were carelessly made and uneven. The squares are not equal in size.

3. DISCUSSION

The 16 game boards vary and represent a diverse arrangement of grids and indentations that potentially belong to a variety of games. Most were carelessly incised into the local chalk slabs with little attention given to precision or symmetry. While in most cases their poor state of preservation and fragmentary nature prevents conclusive classification, it is still possible to explore tentative connections for some. The assemblage cannot be dated with absolute precision as the finds were all discovered within fill that was dumped into these subterranean complexes during the Hellenistic period. Nevertheless, this anthropogenic debris can be typologically dated based upon *comparanda* to the 3rd-2nd centuries BCE and no later than 112/111 BCE when the city was abandoned.Among other things, board games functioned as tools that facilitated social interaction across borders.[15] Due to the close cultural and economic ties that existed between Egypt and Maresha during the Hellenistic period, it may be inferred that board games would have been directly or indirectly influenced. Walter Crist, Anne-Elizabeth Dunn-Vaturi, and Alex de Voogt suggest that the familiarity with board games with incised squares in the Levant may reflect an indirect local adaptation of Egyptian games, possibly via non-Egyptian Levantine sources.[16] Many of the boards contain grids and bare a resemblance to boards for *latrunculi* although many other options exist. Board 6 contains 11 lines with three of the lines marked with an "X." On one side there is a cuplike indentation that may have been for counters. Game board number 5 (Fig. 3.4b) contains five distinct lines. Both of these boards resemble *Penta Gammai* or *Five Lines*. Game board 7 (Fig. 4.9a-b) is two sided. Side A appears to have originally contained 20 squares and may be a version of the game "Aseb" while Side B resembles the Egyptian game Senet also referred to as the game of "thirty squares."[17] Double-sided boards with these two games were not uncommon. The "thirty squares" board has also been associated with the days of the month, an association also noted by Petrie (Martinez 2014: 266) in relation to a board discovered in a tomb in Beth Pelet (Tel Far'a) that contained Egyptian finds from the period of the XXII Dynasty. Irving Finkel (2007: 26) referred to a fragment of a Greek papyrus discovered in Oxyrhyncus dated from the 3rd-late 2nd century BCE that comments on a 30-square board game that may have been a late form of the Egyptian game Senet. He relates the 30 squares, also referred to as "houses," to the 30 days of the lunar month.

Religious literature of ancient Egypt including Pyramidal Texts, Coffin Texts, and the Book of the Dead contain clear references to games.[18] There was no distinction between ritual and recreation in ancient Egypt where religious celebration and worship could take the form of sports, games, and play. The religious nature of Senet is also evident in the *Great Game Text*.[19] It is clear that Senet had developed a deeply religious significance by this time. In the New Kingdom two forms of Senet existed simultaneously: a secular recreational game played by two people and a ritual game probably performed by only one person.[20] Maria Martinez believes that Senet contained astronomical symbolism and the board was utilized for travel in the afterlife. It should be noted that some of the Aramaic ostraca discovered in SC 169 contain astrological references.[21] W. Crist, A.E. Dunn-Vaturi, and A. de Voogt put it succinctly: "As with most aspects of Egyptian life, board games were imbued with meaning connected with journey into the afterlife."[22] Cultic usage of game boards however was not limited to Egypt. The game boards discovered at the Hill of Agios Georgios in Nicosia for example, are believed to reflect cultic practice.[23] Perhaps the clearest example of cultic usage of game boards is in a Babylonian cuneiform tablet, dated to the second century BCE, containing rules related to a game now referred to as the Royal Game of Ur or "the Game of Twenty Squares." The second side of this tablet contained a playing grid that related to a board game.[24] The tablet mentions that the playing grid was sometimes used in divination exercises. In the 1920s, Sir Leonard Wooley discovered, in the Royal Cemetery of Ur, the first examples of such board games, dated to the mid-3rd millennium BCE. Among his observations was that astrological interpretations were applied to traditional Egyptian board games, as they were in the Royal Game of Ur. It is interesting to note that the game of "Aseb" has certain common features with the "Royal Game of Ur." According to I. Finkel, the rules of the game in the cuneiform tablet also applied to "Aseb."[25] Scholars have connected games with 20 squares to Babylonian omens that involved asking 20 questions

15 Crist, Dunn-Vaturi, de Voogt (2016b), 179.

16 Crist, Dunn-Vaturi, de Voogt (2016b), 179–181.

17 Sebanne (2001), 213–230.

18 Crist, Dunn-Vaturi, de Voogt (2016a), 2; Piccione (1990), 43–52.

19 Piccione (2007), 60.

20 Piccione (2007), 58.

21 Martinez (2014), 267.

22 Crist, Dunn-Vaturi, de Voogt (2016a), 2.

23 Piledes 2009, 55.

24 Finkel (2007), 22–32.

25 Finkel (2007), 16-32.

Fig. 6. Inscribed Astragals (photos by C. Amit).

in liver divination.[26] The most common and popular divination in Mesopotamia was liver omens using sheep's liver. Andrea Becker goes on to mention that three of the five graves that contained game boards in the Royal cemetery in Ur also contained saws, the symbol of the deity, Shamash who is identified as the supreme judge of the underworld and the lord of divination.[27] In addition, within the Mesopotamian mystery of numbers the number "twenty" is associated with Shamash. Becker suggests that it was believed that these game boards as well as the actual saw would accompanied the dead who were about to meet this deity.

So, what was the function of the Maresha "game boards"? Harold Murray clearly expressed the general conundrum regarding the use of these boards: "Implements of chance by themselves establish nothing, since they have been used from the earliest times for divination or simple gambling."[28] Or, to put it differently, "game boards" could certainly be used for entertainment purposes but their actual use in any particular situation can be better understood from their context. The discovery of an extraordinary number of cultic finds such as astragals, altars, stone phalli, votive stamps, *kernos* lamps, divination ostraca, and figurines, in the same archaeological context along with many of these game board fragments, points to a cultic connection for those discovered in SC 169 and SC 57.

Astragals or knucklebones, whether in their natural state or reproduced with other materials have been discovered throughout the southern Levant in Hellenistic period contexts. They have been found in domestic settings, used by children and adults for simply recreational purposes as well as in burial contexts, cultic areas, and as votives.[29] Of the 361 astragals discovered in SC 169, 63 were modified and 11 were inscribed. The complete assemblage of astragals discovered at Maresha include names of

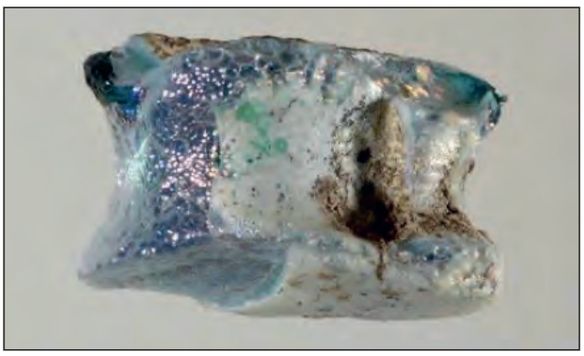

Fig. 7. Glass astragal (photos by C. Amit).

26 Becker (2007), 11-15.

27 Becker (2007), 14.

28 Murray (1952), 2.

29 Erlich (2017), 44-46.

gods and goddesses such as Nike, Aphrodite, Hera, and Eros (Fig. Fig.6).[30] Others included words such as "robber/snatcher," "burning," as well as letters, numbers, and esoteric markings[31]. Some were polished and others were drilled. Four were of glass (Fig.7) and one of bronze. The significance of so many astragals lies in the fact that in the ancient Near East, astragals were largely associated with gaming and divination.[32] Their association with divination exercises during this period is evidenced in the writings of Pausanias who wrote:

"When one descends from Bura towards the sea, there is the Buraikos river and a not large image of Herakles in a grotto; he too is called Buraikos, and he offers an oracle from a list and from astragaloi. Whoever intends to consult the divinity, prays in front of the image, and after the prayer, he takes up four astragaloi (plenty of them are lying around Herakles) and rolls them on the table. For any combination of the astragaloi, the inscription in the list gives an easily accessible explanation of the combination."[33]

Greaves persuasively argues that the astragals discovered in Branchidai-Didyma in Anatolia had a strong connection to various aspects of the divinatory process.[34] This included the use of astragals in both divination by mantic trance as well as cleromancy. His three criteria for their use in divination are: context, modification, or production in alternate materials and inscriptions; criteria that are all met in our assemblage.

In all, 127 Aramaic ostraca discovered within this assemblage have been interpreted as divination texts. Many include formulas that utilize "yes-no questions." While the texts are varied, Esther Eshel and Michael Langlois suggest that these may be connected to the world of divination.[35] Many contain names of gods, both local such as Qos, the Idumean god as well as Nanaya, a Mesopotamian goddess of love. They also point out that there are similarities between the conditional omens in the Maresha divination ostraca and those within the Mesopotamian world. They maintain that "the use of astragals fits the "either/or" syntax attested by the ostraca, while cases of multiple answers might fit the use of grids. It is even possible that terms denoting locations, such as "the house," (referenced above) may actually refer to various squares on the grid, as they are also found in the Babylonian parallels."[36]

In addition, seven glass, plano-convex counters, often termed *pessoi* (Fig. 8) were discovered. These were usually made by reshaping leftovers from the production of glass objects and the dominant colors were generally blue, colorless, and green.[37] The different colors may have designated different players. Numerous small seashells that could have been utilized as counters were discovered as well.

While the contexts of SC 169 and SC 89 point to a ritual setting, cultic, and secular/entertainment were not mutually exclusive, and simply recreational use should not be dismissed. A Senet board discovered on the roof of an Egyptian sanctuary in Dandera and another on the roof of the Temple of Khonsa at Karnak, despite their context, are interpreted as

Fig. 8 Glass counters (photos by A. Stern).

30 Korzakova (2010), 155-157.

31 I want to thank Dr. Avner Ecker for deciphering and reading the astragals.

32 Southern Levant: Gilmour (1997); Anatoly: Greaves (2012); Greece: Prummel (2005); Turkey: Young (1962), Erlich (2017):44 notes 24, 26, 27, 31, 32, 34).

33 Pausanias, *Description of Greece,* 7.25.10).

34 Greaves (2012), 177-206.

35 Eshel, Langlois (2019), 213-219.

36 Eshel, Langlois (2019), 221.

37 Ignatiadou (2002), 22-23.

examples of recreational games.[38] This raises the possibility that some game boards could have been used by individuals associated with the cult but were nonetheless simply utilized for recreational purposes. Game boards from SC 84 and SC 89, along with the many seashells discovered there that may have functioned as counters, were unearthed in non-cultic contexts suggesting a recreational function.

In conclusion, the game boards of Maresha, due to their poor state of preservation, cannot be connected either to the Royal Game of Ur, nor is it possible in most of the cases cited here to make absolute connections to other specific games. The haphazard and sloppy workmanship on most of these graffiti boards, may reflect a more extemporaneous, profane convention rather an organized cultic function and therefore their usage, even in SC 169, as simply a recreational, secular diversion cannot be dismissed. Nevertheless, the explanations and examples given above, as well as the ritualistic archaeological context within which the game boards from SC 169 and SC 57 were discovered underline a strong relationship between these game boards and cult in Hellenistic Maresha.

We must also consider the fact that the material finds such as high-quality imports, from Maresha in general and SC 84 and SC 89 more specifically, indicate that many of the residents of the city enjoyed a relatively high standard of living. This would have afforded them with a lifestyle that provided ample opportunities to engage in leisure time pursuits such as gaming.

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38 Piccione (2007), 55.

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Computational approaches for recognising and reconstructing ancient games: the case of ludus latrunculorum

1. INTRODUCTION THE DIGITAL LUDEME PROJECT

1.1 Approaches to Game Reconstruction

The existence of board games in the ancient world has been documented from the early days of archaeology, and along with the discovery of boards and their identification with games known from written texts, archaeologists and others interested in games have sought to produce playable rulesets to bring these ancient practices back to life. Some authors who have attempted to reconstruct the rules for ancient games have paid very close attention to the ancient sources,[1] while others have been more creative in their interpretations.[2] Usually, there is a degree of playtesting involved, to produce a game that seems to play well. Nevertheless, these reconstructions are subjective to varying degrees, and it is not always clear whether the rules that have been included in a particular reconstructed game are inspired from games that may be reasonably connected to their ancient counterparts or chosen for other reasons. This paper uses the example of the ancient Roman game Ludus Latrunculorum to demonstrate the ways that a computational approach can contribute to the processes of identifying games in the archaeological record and reconstructing playable rulesets.[3]

1.2 The Digital Ludeme Project

The Digital Ludeme Project was a five-year research project that sought to improve our understanding of the development of (primarily) board games throughout recorded human history, through computational analyses of the available evidence. This task is made challenging by the paucity and incomplete nature of evidence for ancient games and the unreliable nature of much of the information that is available about them, which is often based on interpretations of the source material filtered through a modern (Western) lens. Another factor is that the rules for games are typically carefully crafted and fragile to change, and there is no guarantee that even well researched reconstructions of ancient rules that are entirely plausible within their historical and

1 e.g., Schädler (2001); Schädler (1994).

2 e.g, Becq de Fouquières (1869): 454–456; Bell (1979): 86–87.

3 Browne *et al.* (2019).

cultural contexts will actually play well *as games*.

The Digital Ludeme Project promotes a new field of research called *Digital Archaeoludology*[4] in which games are digitally modelled as accurately as possible from the available evidence, then missing information about them is interpolated probabilistically based on how well the candidate rulesets function as games in addition to their authenticity within the given historical and cultural contexts.

This chapter demonstrates these principles in action. Using the historical and cultural context to identify plausible rule combinations for the reconstruction of Ludus Latrunculorum, we then apply computational self-play analyses of the resulting candidate rulesets to identify those that work more successfully as games. While this approach may not necessarily reveal how the game was actually played, it can indicate with some confidence how it was *not* played, which can be just as useful to know.

1.3 Ludii

Ludii is a computer program that was developed as part of the Digital Ludeme Project that constitutes a complete general game system for modelling, playing, evaluating and reconstructing the full range of games required for the project. Games are modelled digitally as structured sets of *ludemes*[5] to provide a playable database of both complete games and partial descriptions requiring reconstruction, suitable for computer self-play by *artificial intelligence* (AI) agents which can playtest candidate rulesets much more quickly than human players.

The Digital Ludeme Project games database[6] compiles what is known about traditional games from the past five thousand years, including geographic, chronological, social, and rules data for 1,006 games at the time of writing.[7] Compiling all of this data facilitates comparison between games, particularly in connecting games which are close to each other geographically, chronologically, and with respect to game concepts. In the future, the process of connecting games according to these measurements will be automated, but for this study with a limited scope an *ad hoc* approach must be taken and is sufficient to make the necessary connections.

1.4 Game Concepts

Game concepts[8] are features designating high-level aspects of games which can be shared between different games. Each concept is expressed in game-terms commonly used by players and designers. They can be related to the equipment (board or pieces), or rules (game setup, ending condition(s), or movement of the pieces), but also to more general aspects such as properties (e.g., time model, information type, symmetries). The current list of all identified concepts used through Ludii is available on our website.[9]

Thanks to the ludeme representation of games in Ludii, during the compilation process, the existence of specific ludemes or combinations of ludemes trigger each of these concepts. Binary concepts are activated by the existence of ludemes while numerical concepts instead have their values set when the game is compiled. Consequently, all concepts are computed in a few milliseconds. For this reason, they are a powerful tool to identify similar games.

2. LUDUS LATRUNCULORUM: THE EVIDENCE

2.1 Documentary Evidence for Rules

Ludus Latrunculorum, or the "Game of Little Soldiers", is one of the games played by the Romans about which we have the most documentary evidence, since several authors seem to have been familiar enough with the game to mention portions of the rules. A complete recounting of the textual references to the game is beyond the scope of this paper, and has been covered extensively elsewhere.[10] Nevertheless, there are four aspects of the game that can be gleaned from the sources.

Placement phase: Two ancient sources confirm that the board is empty at the beginning of the game. In *Laus Pisonis*, by an anonymous author, there is a passage which praises Piso in the context of a game that holds the same military symbolism as other descriptions of the game.[11] It is explicitly stated that the pieces are cunningly placed on an open board.[12] Isidore, writing in the late 6th or early 7th century CE, indicates three kinds of pieces or, more precisely, the states of movement of three kinds of pieces: *ordine*, which move regularly, *vagi*, which move anywhere, and *inciti*, which cannot move.[13]

Orthogonal movement: Ovid, in his *Tristia*, indicated that the pieces on the board are moved in a straight line.[14]

Custodial capture: The next phrase in Ovid's *Tristia* states that a piece between two enemies is lost.[15] Ovid also makes this clear in *Ars Amatoria*, where he says

4 Browne *et al.* (2019).

5 A *ludeme* is a game-related concept that can be expressed as a functional unit. See Parlett (2016).

6 Accessible at https://ludii.games/library.

7 Stephenson, Crist, Browne (2020).

8 Piette *et al.* (2021).

9 Accessible at https://ludii.games/searchConcepts.php.

10 Schädler (1994).

11 Anonymous, *Panegyric on Piso*, 192–193.

12 Austin (1934), 30; Schädler (1994), 55–54.

13 Isidore, *Origins,* 18.67; Schädler (1995), 82.

14 Ovid, *Sorrows*, 2.477; Schädler (1994): 52.

15 Ovid, *Sorrows*, 2.477; Schädler (1994): 52.

that one counter perishes between twin foes.[16] This form of capture is commonly known as custodial capture in games literature.[17]

Quadrangular board: Varro, writing about the Latin language in the 1st century BCE, describes a declination table for the word *albus*, with horizontal and vertical lines, as similar to the game board used to play Ludus Latrunculorum.[18] This indicates that the game was played on a rectangular or square board (i.e., Types 29 and 30—see Appendix to this volume), but does not specify its size. Schädler points out that a declination table would have six lines for the six cases of Latin nouns, and six columns for the singular and plural for masculine, feminine, and neuter genders.[19]

2.2 Archaeological Evidence for Boards

Despite Varro's implication, only one six-by-six board has been found at a Roman site. Therefore, we must assume that Varro's description refers generally to a square or rectangular board, rather than one of a specific size. Archaeological evidence, then, must be consulted to provide information about the size of the quadrangular grid that likely formed the board of Ludus Latrunculorum.

Quadrangular boards within the *limes* of the empire have been found in many different kinds of archaeological contexts (Figure 1). A considerably large number have been found at fortresses and military installations, particularly in the provinces of Britannia,[20] Hispania Terraconensis,[21] and Aegyptus,[22] as well as in urban contexts, such as within Rome itself, Athens,[23] and the cities of Asia Minor,[24] in spaces devoted to leisure such as the Antonine Baths at Carthage,[25] as well as rural sites such as Gebel el-Silsila in Egypt[26] and Thornham, England.[27]

The boards that have been preserved are made of stone or ceramic. Ludus Latrunculorum tends to appear as secondary use on stone surfaces, whether as graffiti or as a reappropriated object on which the board is carved. Only one example, formerly held in Zurich,[28] appears to have been manufactured as a board for Ludus Latrunculorum. It is questionable whether all of the grids on ceramic tiles were meant to have functioned as game boards; it has also been noted that ceramic tiles may have been scored in the same manner to aid in fixing them to vertical surfaces.[29] Wooden boards may also have been used to play Ludus Latrunculorum, but they have not survived in the archaeological record.

Fig. 1. Four Roman Ludus Latrunculorum boards held at Dover Castle. Clockwise from top left: Intact 8 x 8 chalk board (14.5 x 26 x 10 cm), from Dover, 2nd c. CE?, Dover Castle DV2000; fragmentary marble board with 8 or 9 x 7+ squares (26 x 28 x 4.5 cm), from Richborough Fort, Roman in date, Dover Castle 78305715; fragmentary marble board with 10+ x 5+ squares (19.2 x 23 x 4.2 cm), from Richborough Fort, Roman in date, Dover Castle 78305708/478; fragmentary sandstone board with 6+ x 5+ squares (14.5 x 10.3 x 2.6–3.3 cm), from Richborough Fort, after 280 CE, Dover Castle 78303093. Photos by Summer Courts.

In addition to artifacts used for playing, there are two terracotta models of quadrangular boards which appear to represent Ludus Latrunculorum. One comes from Athens, with a group of players sitting around a six-by-seven board.[30] Another, found in Egypt's Fayyum Oasis, shows a six-by-seven board with pieces arrayed on it.[31]

Judging from the boards with an intact gaming pattern, it is apparent that there is a wide range of sizes for quadrangular boards from Roman sites. The twenty-five known intact boards (see Figure 2) show that they range in size from six-by-six to eleven-by-

16 Ovid, *The Art of Love,* 358.

17 Bell (1979), 78; Parlett (1999), 199; also called interception capture, Murray (1951), 10.

18 Varro, *On the Latin Language*, 10.22.

19 Schädler (2007), 361.

20 Austin (1934), 26–27; Schädler (1994), 50; Pace 2015; Pace 2020; Pace 2022; Courts, Penn (2019).

21 Carretero Vaquero (1998); Fernández Pintos (2017), 234–240.

22 Mulvin, Sidebotham (2004), 611–612.

23 Schädler (1994), 49–50.

24 Bell (2007), 98; Ersoy, Erdin (2015), 151.

25 De Voogt (2019), 91.

26 De Voogt, Nilsson, Ward (2020), 127–128.

27 Gregory, Gurney (1986), 13.

28 May (1991), 174–175.

29 Courts, Penn (2019): 6–7.

30 Michaelis (1863); Schädler (1994), 53.

31 Petrie (1927), 55.

Location	Size	Reference
Aventicum	6x6	Roman Museum of Avenches 13/15890-01
Athens (model)	6x7	SCHÄDLER (1994): 53
Monte de Santa Tegra	6x7	FERNÁNDEZ PINTOS (2017): 235-236
Aventicum,	6x8	Roman Museum of Avenches X/02924
Qasr Ibrim	7x8	ROSE (1996): 160
Chesters Fort	7x8	AUSTIN (1934): 27
Villa Adriana	7x8	MANDERSCHEID et al. (2011): 514-518
Corbridge	7x8	MURRAY (1913): 30
Gebel el-Silsila	7x8	DE VOOGT et al. (2020): 127
Parthenon, Athens	8x8	KARAKITSOU (2009): 24
Chedworth	8x8	BADDESLEY (1925)
Exeter	8x8	HOLBROOK and BIDWELL (1991): 278
Miletus	8x8	BELL (2007): 98
Smyrna	8x8	ERSOY and ERDIN (2015)
Smyrna	8x8	ERSOY and ERDIN (2015)
Brescia	8x8	MOSCA and PUPPO (2012): 274–275, 278
Basilica Iulia, Rome	8x8	SCHÄDLER (1994): 49-50
Xanthus	8x8	BELL (2007): 98
Kom Ombo	8x9	CRIST et al. (2016): 140-141
Gebel el-Silsila	8x9	DE VOOGT et al. (2020): 127
Carthage	9x10	DE VOOGT (2019): 91
Dover	10x10	PHILIP (1981): 167
Samos	11x12	SCHÄDLER (2007): 361
Puig Castellar de Bosca	11x16	RODRIGO REQUENA and ROMANÍ SALA (2021)

Fig. 2. Intact quadrangular boards found within the borders of the Roman Empire.

Location	Preserved Grid	Reference
Singidunum	2x2	JANKOVIC (2009): Fig. 11
Cemenelum	2x5	MOSCA and PUPPO (2012): 274–275
Saldum	3x3	JEREMIC (2009): 50–51
Didymoi	3x3	BRUN (2011): 126, 153
Cumidava	3x4	GUDEA and POP (1971): Pl. LII.3
Singidunum	3x4	JANKOVIC (2009): Fig. 12
Didymoi	3x4	BRUN (2011): 121, 143
Petavonium	4x1	CARRETERO VAQUERO (1998): Fig. 2.6
Petavonium	4x2	CARRETERO VAQUERO (1998): Fig. 2.4
Conimbriga	4x4	DA PONTE (1986): 138-139
Halpići	4x4	BUSULADŽIĆ (2017): Pl. 3
Petavonium	4x4	CARRETERO VAQUERO (1998): Fig. 2.3
Abu Sha'ar	4x5	MULVIN and SIDEBOTHAM (2004): Fig. 9.3
Abu Sha'ar	4x7	MULVIN and SIDEBOTHAM (2004): Fig 9.2
Didymoi	4x7	BRUN (2011): 126, 153
Petavonium	5x3	CARRETERO VAQUERO (1998): Fig. 2.5
Vindolanda	5x5	PENN and COURTS (n.d.)
Krokodilo	5x7	MATELLY (2003): 594, 605
Abu Sha'ar	5x9	MULVIN and SIDEBOTHAM (2004): Fig. 9.1
Exeter	6-7x8-9	HOLBROOK and BIDWELL (1991): Fig. 135
Abu Sha'ar	6-8x8-9	MULVIN and SIDEBOTHAM (2004): Fig. 9.5
Bearsden	6x4	BREEZE (2016): 93–94
Aventicum	6x6	DANIAUX (2019): Fig 3
Richborough	6x7	BUSHE-FOX (1928): Fig. 1.3
Aquis Querquennis	6x7	AVELAIRA (2015): 66
Noville	6x7	PÉREZ LOSADA (1993): 1058, Fig. 3
Buciumi	7x3	GUDEA (1971): Pl. LVI.4
Vindolanda	7x9	PENN and COURTS (n.d.)
Carthage	8x10-11	DE VOOGT 2019: 91
Richborough	8x5	BUSHE-FOX (1928): Fig. 1.2
San Chuis	8x5	VILLA VALDÉS (2010–2012): 109–110
Abu Sha'ar	8x6	MULVIN and SIDEBOTHAM (2004): Fig. 9.4
Petavonium	8x7	CARRETERO VAQUERO (1998): Fig. 2.1
Abu Sha'ar	9–10x10–11	MULVIN and SIDEBOTHAM (2004): Fig . 9.1
Birrens, England	9x15	ROBERTSON (1975): 33, 58, 100
Castiellu de Llagú	9x5	BERROCAL et al (2002): 128–129
Richborough	9x7	BUSHE-FOX (1928): Fig. 1.1
Petavonium	9x7	CARRETERO VAQUERO (1998): Fig. 2.2
Abu Sha'ar	9x9/9x10	MULVIN and SIDEBOTHAM (2004): Fig. 9.1
Viladonga	11x12	FERNÁNDEZ PINTOS (2017): 236–237
Chao de Samartín	12x17	VILLA VALDÉS (2000): Fig. 8.1
Inverarvon	13x16	DUNWELL and RALSTON (1995): 562, 564

Fig. 3. Fragmentary quadrangular boards found within the borders of the Roman Empire.

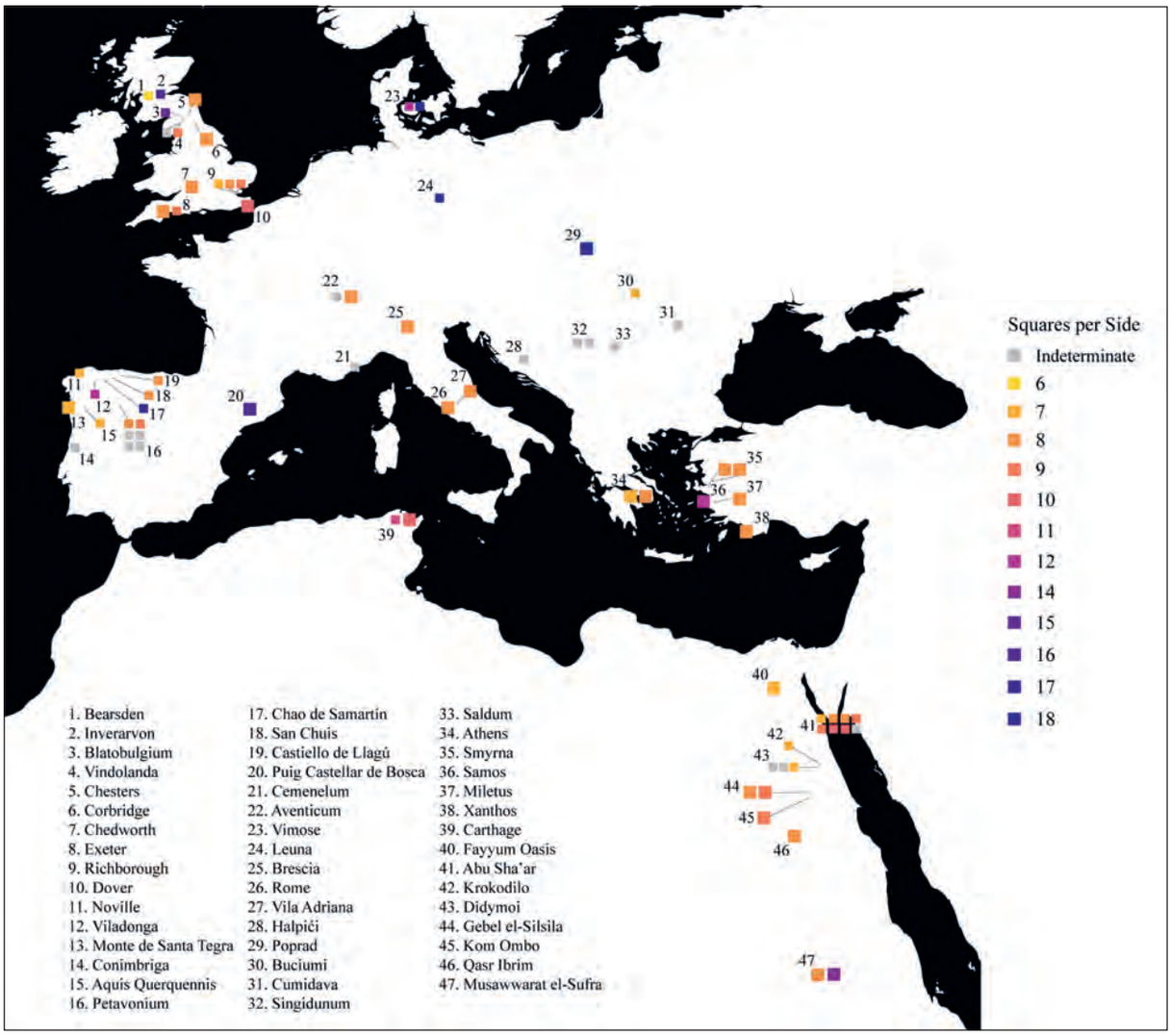

Fig. 4. Map of quadrangular boards contemporary with the Roman Empire. Large squares are complete boards; small squares are fragmentary boards.

sixteen. Nine of these boards were eight-by-eight, the most frequent size in the sample, with multiple examples of six-by-seven, seven-by-eight, and eight-by-nine boards. The boards with grids larger than this are unique examples of their respective patterns.

Information about the size of boards may also be inferred from the remains of fragmentary boards, in which the grid of squares is incompletely preserved and the exact pattern cannot be known (Figure 3). Many of these are too small to make any conclusions about their original size, but others clearly demonstrate that large boards existed in some places, with up to seventeen squares in a row.

Looking at the geographic distribution of the boards, it becomes apparent that the common board sizes are found throughout the empire, while the larger, uncommon board sizes are further away from the core of the Empire, defined as Italy and major urban centers (Figure 4).

2.3 Contemporaneous Quadrangular Boards

The archaeological record also presents examples of boards which are contemporary with, but found outside of, the Roman Empire. These boards have been found at sites in Central and Northern Europe, well beyond the *limes* of the Empire, but certainly from areas which were in contact with the Romans. These boards all appear to have been quadrangular, like those seen in the Roman Empire. Indeed, the remains of one of these boards, found at Vimose in Denmark, bears the distinct pattern of the Roman game Duodecim Scripta on the opposite side of the grid,[32] demonstrating that Roman games existed outside the Empire (see discussion on globalisation in Chapter 1). The preferred material for these boards seems to have been wood, and few of them are preserved though there are indications that, at least sometimes, these boards were placed in graves with counters on them, which may provide hints as to the original configuration, such as the one found at Leuna in Germany.[33] These boards are contemporary

32 Krüger (1982), 162, 222.

33 Schulz (1953), 29, 63–66, Pl. XXVII–XXVIII.

with the Roman Empire.[34] Only one example is intact: a wooden board with a seventeen-by-seventeen or seventeen-by-eighteen grid found in a 4th century CE elite tomb in Poprad, Slovakia.[35] A seven-by-fourteen board found at Musawwarat el-Sufra, a Meriotic site in Sudan,[36] also points to quadrangular boards of larger size outside the Empire.

The influence of Rome on the board games of temperate Europe is clear, especially with respect to game pieces, which were often imported from places within the Empire.[37] Indeed, the evidence for these games and the Roman influence that can be traced has been used as evidence for a connection between Ludus Latrunculorum and the medieval game Hnefatafl and other games which are probably related to it, such as Brandubh and Tawlbwrdd.[38] Aside from the material evidence for Roman games and Roman-style gaming materials in Northern Europe, the connection between Ludus Latrunculorum and Hnefatafl is made because it is thought that Hnefatafl also employed the custodial capture mechanism. This is inferred from the documentation of the game of Tablut among the Sámi people in what is now Finland during the 18th century CE by Linnaeus, which features custodial captures.[39] Tablut is thought to be a game derived from, or somehow related to, Hnefatafl, based on the board and the presence of a "King" piece for one player and not the other.[40] However, none of the sources which discuss Hnefatafl or its contemporary medieval games confirm that custodial capture was part of these games.

The archaeological evidence of quadrangular game boards found within the Roman Empire and in adjacent regions clearly demonstrate that boards ranging from six-by-seven to seventeen-by-seventeen or -eighteen were used to play games. This very wide range of board sizes presents the question of whether the same game can be played on such disparate boards, or if the different board sizes could indicate the presence of games other than Ludus Latrunculorum that were also played on quadrangular boards.

3. METHODOLOGY

3.1 Identifying Candidate Rulesets

In order to determine whether a game can be played on the wide range of quadrangular boards found in and around the Roman Empire, a reasonable set of rules must be applied to these boards to be able to implement them in the Ludii software to calculate metrics that can indicate how the difference in board sizes changes the experience of the game. Candidate rulesets should contain all of the rules that are known to have been a part of Ludus Latrunculorum as described by the ancient sources, and have been documented geographically close to the region where the game was played. Ideally, contemporary rules would be chosen over rules which are further distant with regard to time, but since there are no completely documented game rules contemporary with the Roman Empire in the Ludii database, this is impossible.

To identify which games in the Ludii database contain the rules known for Ludus Latrunculorum, a search was made for the following game concepts: 3.3.2.6 Custodial Capture; 3.3.4.1.3 Orthogonal Direction (movement); 2.1.1.1.1 Square Shape (board); 2.1.1.2.1 Square Tiling (square spaces on the board); and 3.2.2 Pieces Placed Outside Board (indicates pieces begin off the board and must be placed on it, i.e. there is a placement phase in the game).[41] This search produced five games that contain all of those rules: two types of Gala,[42] Kharebga,[43] Seega,[44] and Shantarad.[45] Of these games, the only ones which were played in places that at one time were part of the Roman Empire are Kharebga, documented in El Oued, Algeria, and Seega, played in Egypt and Sudan. Gala is played on the island of Sulawesi in Indonesia, and Shantarad is played in Somalia, and thus far beyond the borders of the Roman Empire. Nevertheless, Seega was documented in the 19th century, and Kharebga in the 20th century, so the chronological distance between these games and that of Ludus Latrunculorum is greater than a millennium. Despite this, Kharebga and Seega are the most likely candidates for games that could be similar to Ludus Latrunculorum.

In addition, Tablut is the only game from Europe for which the complete set of rules have been documented that also contains the custodial capture mechanism, and there is reason to examine it on these boards as well. If Tablut is indeed related to Hnefatafl, as the evidence seems to suggest, this connects the evidence to a period in time much closer to the end of the Roman Empire, as evidence for Hnefatafl appears in the late 8th or 9th century CE. Nevertheless, Tablut does not have the placement phase known to exist in Ludus Latrunculorum, but has custodial capture, orthogonal movement, and a quadrangular board. However, it also has differentiated pieces, with one player playing with a "King" piece. There are also different numbers of pieces per player, a central

34 De Voogt (2019), 92–93.

35 Staneková (2020), 56–57.

36 Crist *et al.* (2016a): 140.

37 Hall, Forsyth (2011), 1326–1330

38 Hall (2019), 204–207, Hall, Forsyth (2011), 1333.

39 Linnaeus (1732), 147–148.

40 Murray (1913), 445.

41 Piette *et al.* (2021).

42 Matthes (1859), 899; Matthes (1874), 71–72.

43 Bellin (1964), 53–54.

44 Davies (1925), 138–139; Lane (1836), 356–357.

45 Marin (1931), 595–596.

square which affects capturing mechanisms, and different winning conditions for the two players—one attempts to move the King piece to the edge of the board, while the opponent attempts to capture the King piece. Despite these differences, and in light of the suggestions that Hnefatafl—and, therefore, Tablut—is derived from, inspired by, or in some way connected to Ludus Latrunculorum, it is worthwhile evaluating the Tablut rules on quadrangular boards as well.

3.2 Applying Rulesets to Boards

To measure behaviour metrics on the different board sizes of quadrangular board, and thus evaluate whether they all might have been used for the same set of rules, the rulesets for Kharebga, Seega, and Tablut were applied to boards with the dimensions of the intact quadrangular boards from within the Roman Empire, as well as the board from Poprad. These rulesets were implemented in the Ludii software so they could be played.

Kharebga is played on either a five-by-five board or a seven-by-seven board. Players alternate turns placing two pieces on the board, leaving the central space empty. When all the pieces have been placed, the players alternate turns moving their pieces over any distance in an orthogonal direction—also known as the slide move. Captures are made when an opponent's piece is between two of the player's own pieces (i.e., custodial capture). Captures are not made during the placement phase. The first player to capture all of their opponent's pieces wins.

Seega is very similar to Kharebga; it is played on a five-by-five, seven-by-seven, or nine-by-nine board. The other main difference is that pieces move one space at a time, rather than at a distance—known as the step move.

Tablut is very different from the other two. There is no placement phase; the pieces start in a fixed position, with the "King" piece beginning on the center spot, with its eight allied pieces surrounding it, and the opponent's sixteen pieces are arrayed toward the edge of the board. Players alternate turns moving a piece orthogonally any distance. Captures are custodial, but if the "King" is still in the central space, it can only be captured by surrounding it with four pieces, and if it is next to the central space, it must be surrounded on three sides. The central space cannot be entered by any piece including the "King" once it has left it. The player with the "King" wins by moving the "King" to the edge of the board; the opponent wins by capturing the King. It was played on a nine-by-nine board.

Adapting the rules to the known quadrangular boards contemporary with the Roman Empire immediately presents some issues. Only one of the known board sizes—seventeen-by-seventeen—provides a central space. Since the central space features in the rules for all three games, the rules must be adapted for a board with an even number of spaces. For Kharebga and Seega, the rule that the central space must be left empty is discarded, and play begins when only two spaces are left empty on the board; with each player placing one piece on the final turn of the placement phase. It should also be noted that increasing the board size for these games implicitly introduces more pieces to the board: (n/2)-1 for each player, with n being the total number of spaces on the board.

For Tablut, the central space is more crucial, as it is required for the "King" piece's starting position which, in turn, imposes symmetry on the starting position of the pieces. The central space also imposes capturing and movement restrictions. Because of the many changes that would be required to adapt Tablut rules to a board with an even number of spaces, it was not applied to these boards, as it would effectively be a different game. Tablut rules were therefore only applied to the seventeen-by-seventeen board, and it was tested with two different versions: one with the original number of pieces—eight plus the "King" for one player; sixteen for the opponent— and one with the number of pieces increased in proportion and configuration to the larger board size—sixteen plus the "King" for one player, forty for the other.

3.3 Artificial Intelligence Agents

Once these rules were implemented on the different boards in Ludii, it was necessary to choose the parameters for the AI to conduct experiments to generate behavioural game-play metrics. Two basic tree search approaches were considered to provide the AI engines for automated game-playing; UCT[46] and Alpha-Beta[47] search. Both of these tree search approaches perform lookahead searches, in which they "look ahead" into various different future game states that may be reached through different

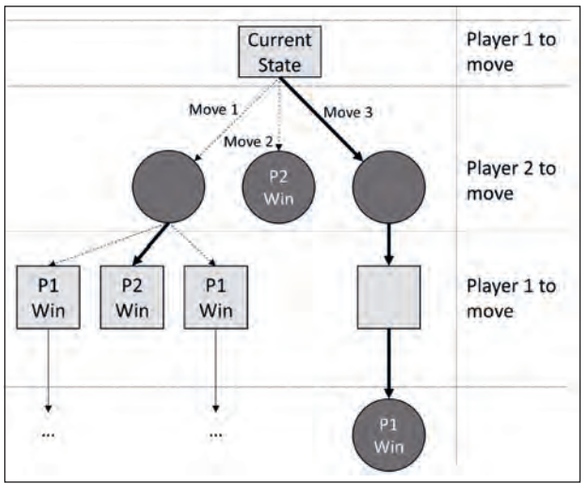

Fig. 5. Example game tree for lookahead tree search algorithms. Thick arrows correspond to moves that tree search algorithms would end up playing after sufficient analysis.

46 Kocsis, Szepesvári (2006).

47 Knuth, Moore (1975).

sequences of moves from the current game state (Figure 5), but they use different strategies for deciding which parts of their search spaces to explore or prioritise. UCT was found to barely play better than a random player, if at all, in all but the smallest of boards. This is a common issue for UCT in games where long sequences of random play—of which the algorithm uses many to estimate how valuable different game states are—are unlikely to lead to a variety of outcomes. This is the case in particular for the Seega and Kharebga rulesets, where random play on large boards is highly unlikely to ever lead to a victory for either player.

Alpha-Beta search was evaluated with a variety of different heuristic state evaluation functions, which it can use to compare states to each other without relying on such rollouts of random play. A straightforward "Material" heuristic, which incentivises the program to attempt capturing more opposing pieces than it loses, was found to produce an effective player. The program also used iterative deepening[48] to automatically tune its search depth for any given time constraint, and a transposition table[49] to improve the efficiency of the algorithm. The Alpha-Beta program can perform deeper tree searches if it is given more "thinking time" per move, and deeper searches usually lead to a stronger level of play. Hence, the amount of thinking time per move may be tuned to run different experiments between different players with different levels of playing strength.

One risk with AI-based players is that they will never get "bored"; if they fail to find a line of play that improves their position or leads to a win, but do find a line of play that simply stalls the game, they are likely to prefer indefinitely stalling the game over a more risky, aggressive move. This is arguably not representative of how humans would have played a game. In an attempt to address this, experiments were also run with variants of the Alpha-Beta program that were either restricted to solely even search depths, or solely odd search depths. When a program with a material heuristic searches only to odd search depths, it may typically be expected to play more aggressively, because it will focus on evaluating states in which it was allowed to make the final move—without considering a final reply by the opponent. Conversely, a program that searches only to even search depths may be expected to have a more defensive playstyle. This allows for experiments to be run in which it is expected that there will be at least some variety in playstyles between the two players, where the presence of at least one player with a more aggressive playstyle can help to reduce the likelihood of games that are stalled indefinitely.

48 Korf (1985).

49 Greenblatt, Eastlake, Crocker (1967).

3.4 Behaviour Metrics

By allowing these AI programs to play multiple games against each other, it is possible to measure certain gameplay properties that may give an indication about how the game is experienced by humans. These are called behaviour metrics, and can reveal interesting properties about a game which may not be apparent from just a casual observance of the rules—for example, measuring how long a game typically takes to play, the percentage of games which end in a draw, how many moves a player has to decide between each turn, etc. While there are over one hundred behaviour metrics currently implemented in Ludii, this paper is only concerned with three of them which produce interesting results:

- Duration: The average number of turns needed to complete a game. This metric can be used to tell if a game finishes in a reasonable number of turns, or will likely take thousands of turns to complete.
- Completion: The percentage of games which did not finish before reaching the 2,500 turn limit. Similar to duration, this metric can be used to tell if a game finishes in a reasonable number of turns.
- Branching Factor: The average number of different possible moves that a player can make during their turn. Games with a higher branching factor mean that each player has more options to consider on their turn, often indicating a more complex game.

3.5 Experiments

To compute all the metrics of each proposed ruleset, one hundred playouts are run between two Alpha-Beta agents, one using even search depths and the other using odd search depth alternately playing player one and player two after each game. Ten seconds are allocated to each agent to make a decision at each move. Each playout is limited by 1,250 moves per player; if that limit is exceeded the game is considered to be incomplete.

Every process was run on a single CPU core @2.2 GHz. 20,480MB of memory was allocated per process, of which 16,384 MB was made available to the Java Virtual Machine (JVM). Each process was also limited to four days of computation.

Concerning the largest board sizes (seventeen-by-seventeen, seventeen-by-eighteen for Seega and Kharebga rulesets), most of the playouts are extremely lengthy to run due to the high number of pieces and playable sites (~ 7.4 hours per playout). For this reason and due to the limit of four days, the decision was taken to run only ten playouts for these rulesets.

As a separate process to track the evolution of the number of pieces owned by each player after each move, one single playout for each ruleset was run and the total number of pieces placed on the board and

the number of pieces owned by each player placed on the board at each state were stored.

4. RESULTS

4.1 Completion

The Kharebga, Seega, and both Tablut rulesets demonstrate different trends with respect to board size. As board size increases, the percentage of playouts which played to completion before reaching the turn limit decreased for both Kharebga and Seega rulesets (Figure 6). Completion for Seega rulesets plummeted with increasing board size, with only the six-by-six, six-by-seven, and six-by-eight boards completing over 75% of the time. Boards larger than eleven-by-twelve completed less than 13% of the time. The seventeen-by-seventeen and seventeen-by-eighteen Seega rulesets never played to completion. In comparison, for the Kharebga rulesets, only the seventeen-by-eighteen board completed less than 75% of the time, with a gradual decrease with increasing board size. Both Tablut rulesets—only implemented on the seventeen-by-seventeen board— completed 100% of the time.

4.2 Duration

The number of turns for Kharebga, Seega, and Tablut rulesets showed results that mirror those for the completion metric (Figure 7). The length of the game increased steeply for Seega rulesets, with boards greater than eleven-by-twelve in size at nearly 2,500 turns—the timeout limit. Kharebga rulesets also increased in duration with respect to board size, but the increase was more gradual. It should be noted that the rate of increase appears to be more drastic up to the eleven-by-sixteen board size, with the seventeen-by-seventeen and seventeen-by-eighteen boards having lower duration than expected in comparison to the trend on boards smaller than this. This could be attributed to sampling error with a sample of only ten playouts. The Tablut rulesets were shorter than any of the others, even though they were played on the second-largest board, lasting 26.04 turns for the unmodified Tablut rules and 73.17 turns for the ruleset with added pieces.

These results show that increasing board size has a greater effect on the duration of games played with Seega rules than for Kharebga rulesets. Nevertheless, though the increase in duration of Kharebga may be more gradual, increased board size does increase the duration of games to over one thousand turns. Meanwhile, Tablut rulesets, even though they are played on a large board, are played in a fraction of the amount of time as the Seega or Kharebga rulesets.

4.3 Branching Factor

Branching factor also increases for the Kharebga and Seega rulesets (Figure 8). The Kharebga rulesets all have greater branching factor than Seega rulesets

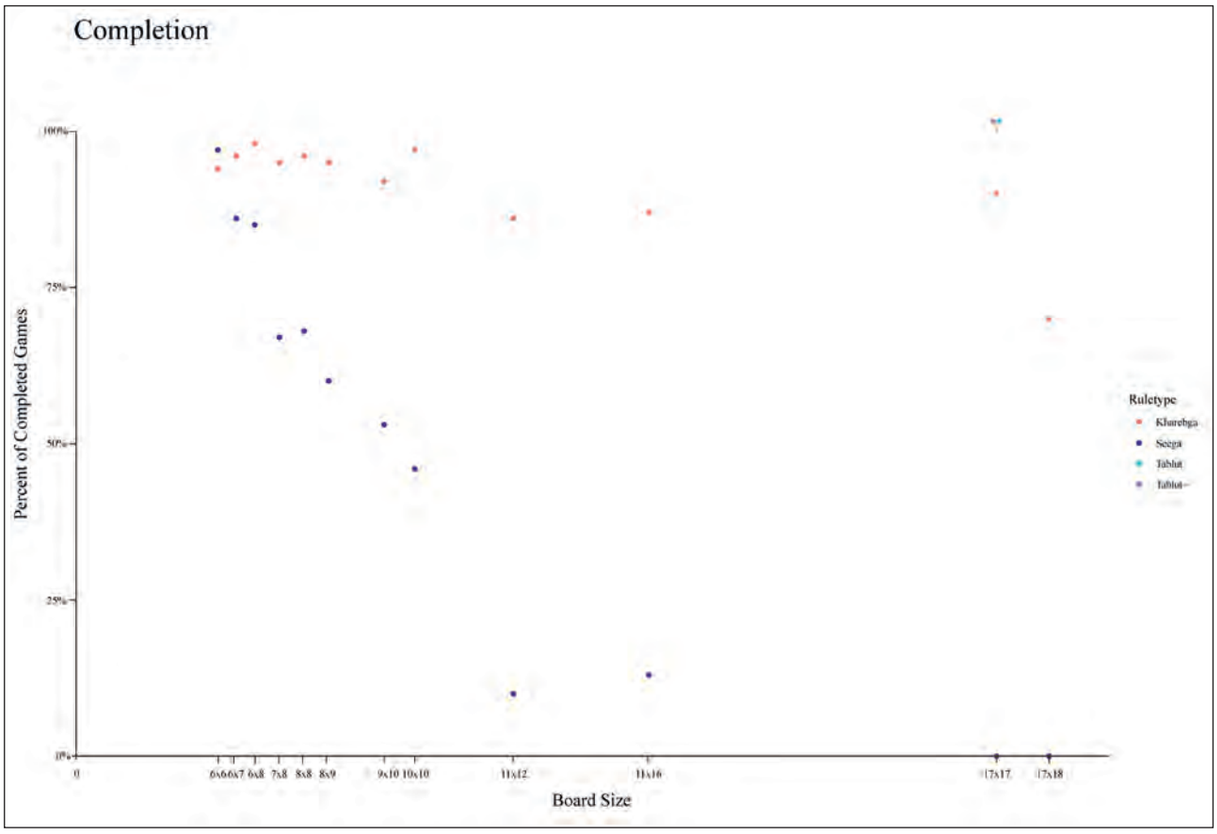

Fig. 6. Percent completion of playouts for different board sizes.

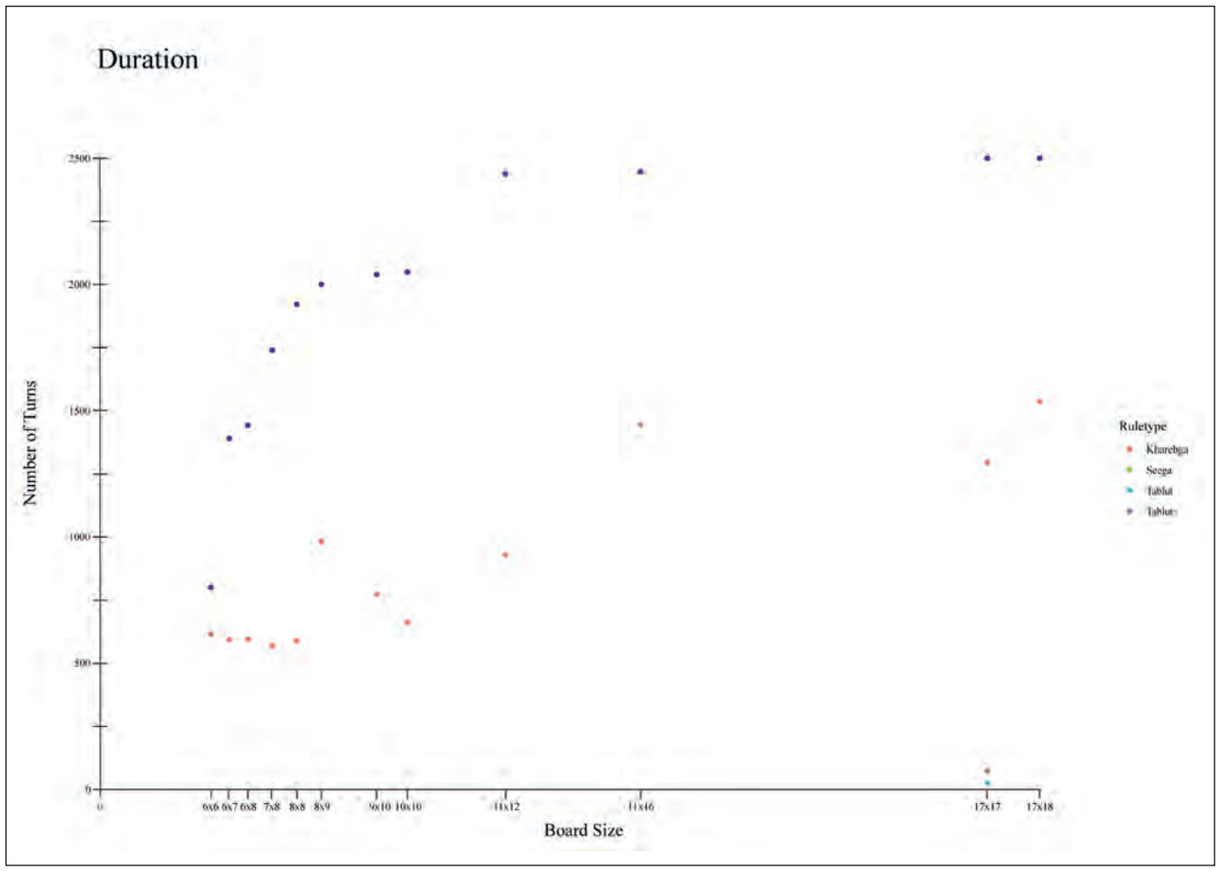

Fig. 7. Duration of playouts for different board sizes.

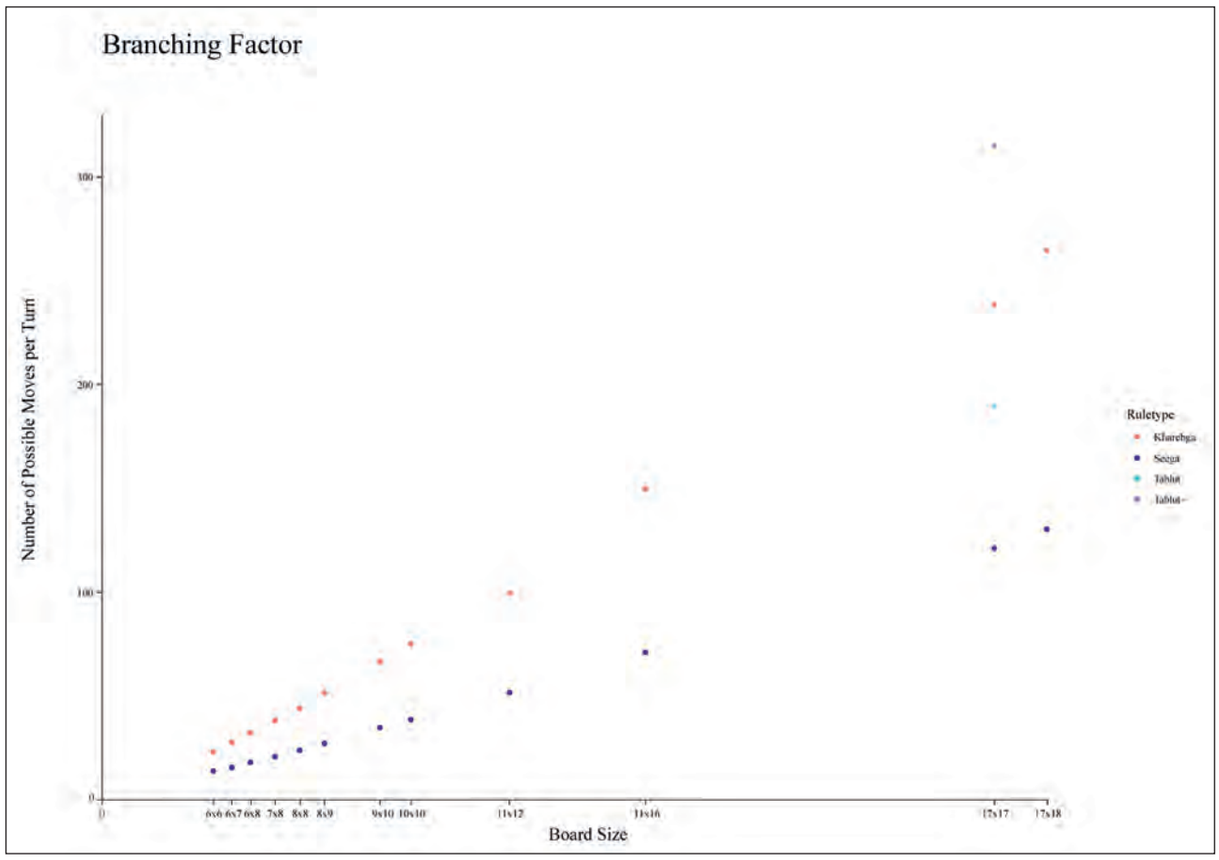

Fig. 8. Branching factor for different board sizes.

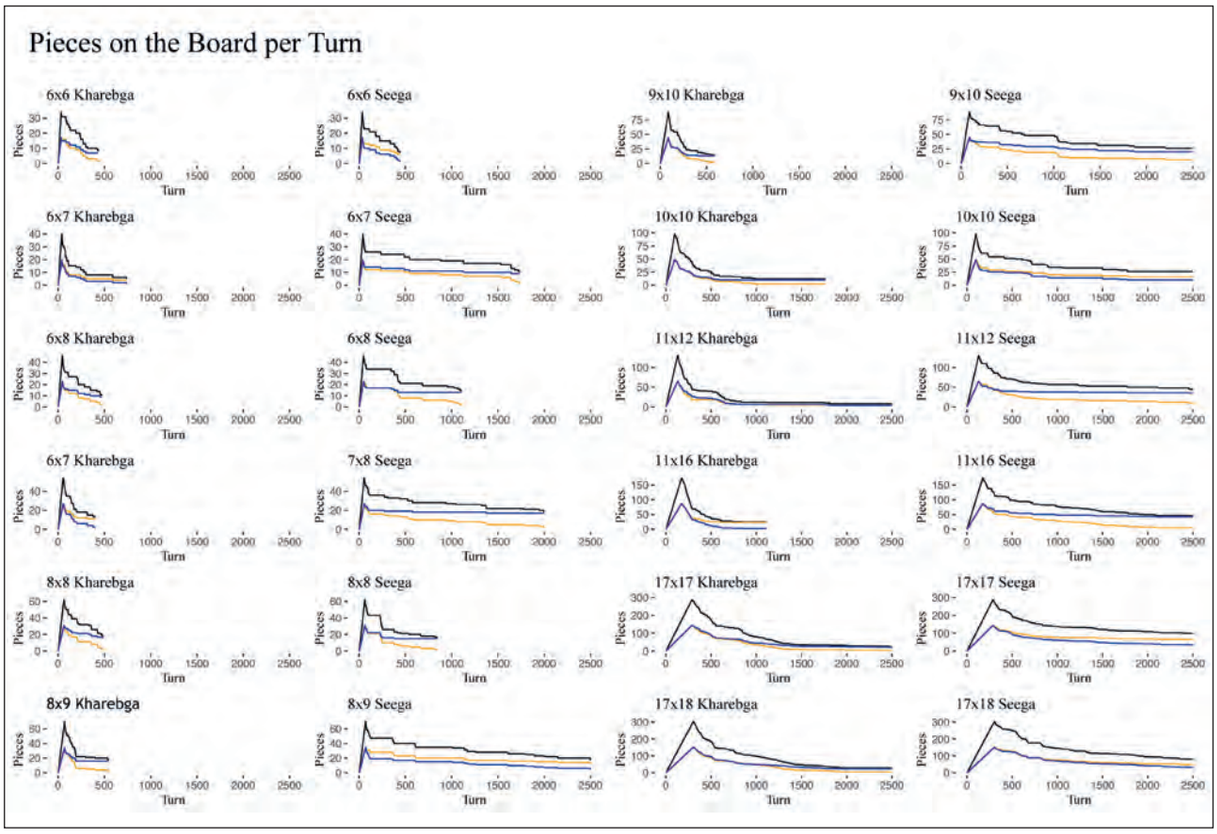

Fig. 9. Number of pieces per player at each turn for different board sizes.

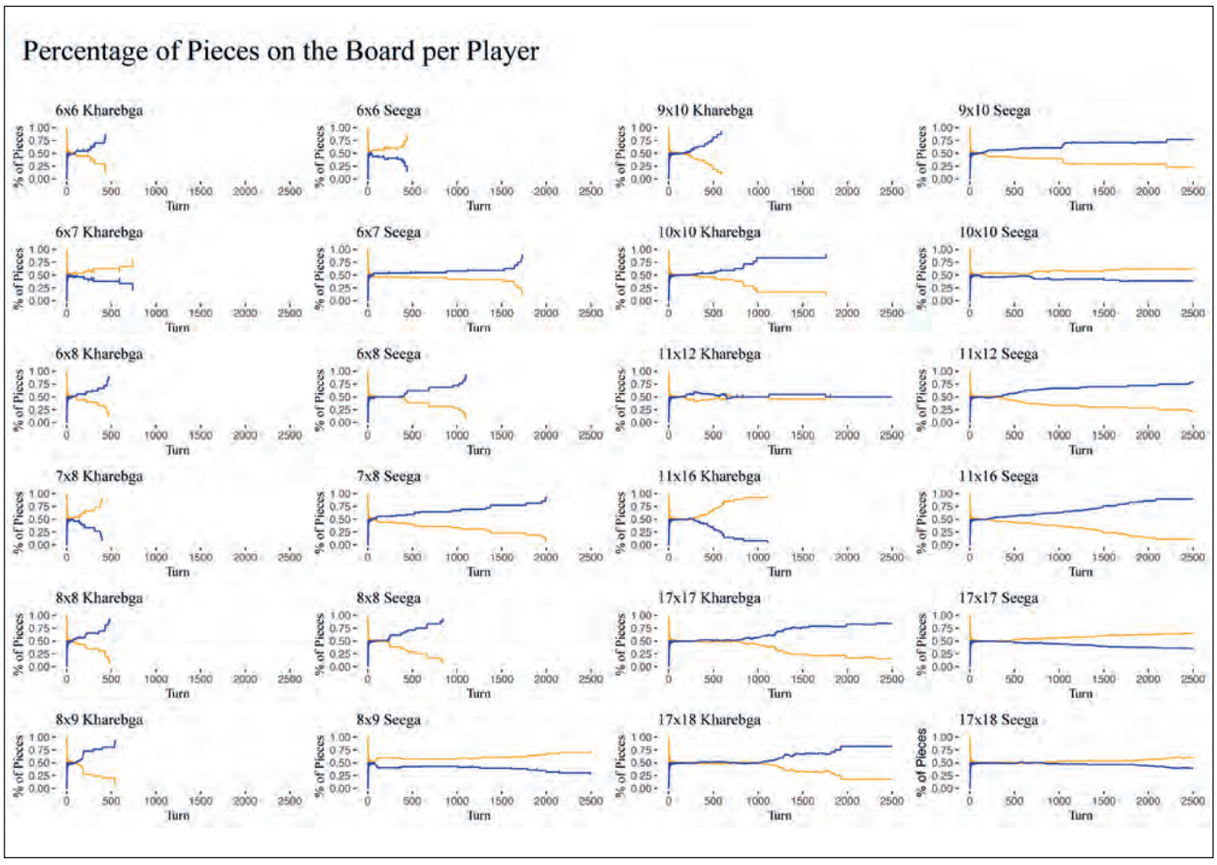

Fig. 10. Percent of pieces on the board for each player at each turn for different board sizes.

on the same board, and the difference increases with increasing board size. This is logical, since the sliding move of Kharebga gives more movement options for the players than the step move of Seega. Furthermore, the values for the Tablut rulesets show that these rules also have large branching factors, though they have fewer pieces than the Kharebga or Seega rulesets, but increasing the number of pieces (i.e., the difference between the Tablut and Tablut+ rulesests) also increases the branching factor.

4.4 Pieces per Turn

Examining the number of pieces on the board at every turn gives a sense of the gameplay for the Kharebga and Seega rulesets, and how that changes with increasing board size (Figure 9). The plots corroborate the duration metric results—that Kharebga rulesets play more quickly than the Seega rulesets. For all of the board sizes, and for both rulesets, the game tends to follow a similar pattern. After the initial placement phase, when the number of pieces on the board increases linearly, there is a period where captures can be made in fairly rapid succession. After this phase, there is a long tail where one player has more pieces than the other, but captures happen with decreased frequency, sometimes with hundreds of turns between captures. This tail lengthens more quickly with increasing board size in Seega rulesets, mirroring the more rapid increase in duration seen in this ruleset.

Examining the percentage of pieces owned by each player at each turn throughout the game provides more detail about gameplay (Figure 10). These results show more clearly that after the initial phase of rapid capturing, one player gains an insurmountable lead over their opponent. In the larger boards, hundreds of turns can be played where one player has twice or thrice the number of pieces of their opponent. In the one case where one player does not gain an advantage over the other (eleven-by-sixteen Kharebga), the game still continues for hundreds of turns without captures.

5. DISCUSSION

5.1 Playing on Large Boards

The playout data indicate some of the gameplay consequences of increasing board size for particular sets of rules. Based on what we know about Ludus Latrunculorum, the rulesets for Kharebga and Seega contain all of the rules that are known about the Roman game, and also are played in places where the Roman Empire once existed. Evaluating the playout results of these rulesets on the different board sizes found within the Roman Empire, as well as the board found at Poprad, can help us to recognize which rulesets may be closer to the original rules of Ludus Latrunculorum, and, when coupled with the archaeological evidence, may indicate whether all of these boards were likely to have been used for Ludus Latrunculorum, a similar game, or a completely different one.

The clear results of the playouts were that both games increased in duration as board size was increased. This is not surprising, because increasing the size of the board also increases the number of pieces on the board, all of which need to be captured to win. However, the pieces per turn data show that increasing the board size also makes it more difficult for the AI agents to make captures, particularly in Seega rulesets. This likely happens for a couple of reasons. For Seega rulesets, which employ the step move, the AI may have difficulty detecting a move that brings it closer to an opposing piece in order to make a capture if they are distant from one another on the board because of the time limit imposed on the tree search. For Kharebga rulesets, the slide move allows the player more movement options, and therefore it is easier for an AI agent to avoid capture for a long time.

For these reasons, it is difficult to exactly translate the number of turns played by the AI agents into real-life turns of a game played by humans. Nevertheless, the trend of increased number of turns and board size is consistent across both rulesets, and constraints which compel the agents to to play in a more human-like fashion do not eliminate the problem. Despite this, the problem is not only with the way AI agents play, but is a problem with having a large amount of empty space with few pieces remaining on the board, requiring the coordinated movement of two pieces to make a capture. This is alluded to in previous work refuting the hypothesis that the so-called "Doctor's Game" from Stanway, England was a Ludus Latrunculorum board because there were too few pieces included with the board.[50] Furthermore, the difficulty in making the final captures has been observed in classroom settings,[51] indicating that this is a real-world problem with the game and not merely a limitation of the AI agents.

The fact that the Tablut rulesets play much more quickly on a large board than the Kharebga and Seega rulesets shows that a large board itself is not the problem, nor is it the number of choices that the player has to make, since the branching factor for the Tablut and Tablut+ rulesets also have high values for this metric. It may be, though, that having a large number of decisions to make, over hundreds of turns without captures, would be exhausting and indicates a game that would likely not be played. For these reasons, Seega is a less convincing candidate ruleset for the larger boards. Since we know that

50 Schädler (2007), 368–369.

51 Marco Tibaldini, personal communication.

Seega was played on nine-by-nine boards, it cannot be ruled out as a possibility for the smaller boards—but the fact that it was played on boards ranging from five-by-five to nine-by-nine but not larger may be indicative of the fact that larger boards make the game interminable with these rules.

Furthermore, the slide move employed in Kharebga is more in line with Ovid's description of the pieces moving in a straight line than a step move. It is also important to note a passage in the *Historia Augusta*, which provides a second-hand account of Proculus being declared *imperator* after winning ten games of Ludus Latrunculorum in a row,[52] indicating the game must have been of sufficient brevity to play so many in succession. For all of these reasons, it appears to be more likely that Kharebga was a more suitable ruleset because the slide move allows for a game that can more frequently be played to a conclusion, and which can be played faster on the greatest number of boards. Neither Seega nor Kharebga appear to play in a reasonable fashion on larger boards. The Tablut and Tablut+ playout data indicate that other rules can be more amenable to large boards.

5.2 Games with Large Boards

It is useful to look at games that were played on large boards to examine whether people played games similar to Kharebga and Seega on large boards. The sample of games documented as part of the Digital Ludeme Project allows for such comparison. In the sample of 1,007 games at the time of writing, 17 war games[53] have boards with more than 100 playing sites. These can largely be divided into four separate categories: Draughts games, multiplayer games, enlarged versions of existing games with added pieces with new movement properties, and Konane. Each of these categories features something about their rules that either requires a large board or speeds up the game. Draughts games only use half of the sites. Multiplayer games have three or more players, requiring more space than a game with two players. Enlarged games, which are largely versions of Chess and Shogi, add pieces which both necessitate a larger board for the starting position and introduce more powerful movement for these pieces. Finally, the number of moves in Konane is capped by the number of spaces on the board because each move must involve a capture.

In addition, there is archaeological and historical evidence for other large games, for which the rules have been lost. Hnefatafl, and games which may be related to it such as Alea Evangelii, fall into this group. Hnefatafl could apparently be played on a thirteen-by-thirteen board, while Alea Evangelii was depicted on an eighteen-by-eighteen board.[54] The playout results for the Tablut rules are relevant here, since it is likely that Hnefatafl and Alea Evangelii had similar rules. When applied to larger boards, Tablut rules play much faster than the Seega or Kharebga rules, which may be attributable to the fact that winning the game is focused on the capture or escape of the "King" piece. It is expected that Hnefatafl and Alea Evangelii would play similarly.

The game at Stanway may have been a nine-by-thirteen board. Though Roman in date, it is thought to have been a Celtic board game.[55] The aforementioned boards from Vimose include one which has eighteen squares per row and another with fourteen or more per row.

Other boards, for which the names of the games are unknown, have been found at pre-Roman sites in the Mediterranean basin. At Tell Zakariya in the Levant, a complete twelve-by-twelve board was found in the upper layers of the site, post-Iron Age but pre-Roman in date, as well as a fragment of a stone gaming table that had at least ten rows of squares.[56] Another, at nearby Maresha, has at least ten spaces per row, and is Hellenistic in date.[57] Other large pre-Roman boards have been found in Greece at Rhamnous, where a nine-by-nine and an eight-by-ten board were found inscribed on a block dating to the 3rd century BCE,[58] as well as an eleven-by-eleven Hellenistic board from Pella.[59]

These boards show that other games were played on larger boards before and after the Roman Empire. The Hellenistic boards above could be for the game Polis, which is mentioned in Greek sources but not described in great detail. It is thought to be similar in some ways to Ludus Latrunculorum, but the candidate boards are larger than the commonly-found Ludus Latrunculorum boards and, perhaps indicatively, tend to have an odd number of spaces while Ludus Latrunculorum strictly has an even number. Less is known about the rules for Polis, so there is likely something missing from these rules to make a playable game on a larger board.

5.3 Archaeological Context of Boards

The archaeological context of the boards provides further evidence for the interpretation of quadrangular grids. Looking at the geographical distribution of board size, it is clear that the most common board sizes, six-by-seven, seven-by-eight,

52 Flavius Vopiscus Syracusanus, *Four Tyrants*, 12.1–3.

53 Defined as games in which capturing the opponent's pieces is the primary criterion for determining a win.

54 Duggan (2021); Schulte (2017) for recent surveys of the evidence for these games.

55 Schädler (2007), 368–369.

56 Bliss, Macallister (1902), 144.

57 Stern (2019), 127–128; Stern this volume.

58 Fachard (2021).

59 Ignatiadou (2019), 142, 152.

and eight-by-eight, are widely spread throughout the empire. These are also found in major cities of the empire, such as Athens, Rome itself, and the cities of western Asia Minor. These games exist as graffiti in urban contexts, such as at the Basilica Iulia and the Parthenon, but others were also found in military contexts, particularly in Britain, Spain, and Egypt (e.g., Chesters, Monte de Santa Tegra, Abu Sha'ar). The widespread use of these particular grid patterns, and the fact that the seven-by-eight and eight-by-eight boards are the only ones found intact in Italy, follows the pattern that would be expected in the Roman Empire—that the game would appear both in the central core of the Empire as well as in the places the Romans occupied.

The fact that the larger boards are not found in Italy, but typically in forts on the fringes of the empire, could be explained in two ways. The simplest argument is that troops stationed at forts have a lot of idle time, and therefore the presence of larger boards at these places might explain an attempt to take up this time. The playout data indicates, though, that the rules known for Ludus Latrunculorum played on these boards are probably not amenable even for people who are trying to waste a considerable amount of time.

Perhaps a more compelling explanation is that these larger game boards are not for Ludus Latrunculorum, but other games about which we know nothing concerning the rules. Pre-Roman quadrangular boards indicate that Ludus Latrunculorum was not the first such game to exist in the Mediterranean basin. Indeed, Polis, which was played in the Greek world, seems to have been played on larger boards, and it is possible that the board from Samos is this game, rather than Ludus Latrunculorum. But other boards, such as one from the Late Period Sacred Animal Necropolis at Saqqara in Egypt,[60] as well as several in northwest Spain[61] cannot be tied to any known games. Coupled with the conclusion that the Stanway game was a Celtic board game of unknown type, and that other larger boards found at Vimose, Leuna, and Poprad were also probably indigenous rather than Roman games,[62] it is plausible that these larger boards were not Ludus Latrunculorum, but other games which existed in a suite of games played on quadrangular boards stretching from Britain and Scandinavia to the Meroitic Kingdom in Sudan. Auxiliary troops were drawn from the indigenous populations of the Empire and beyond,[63] so the presence of indigenous games at Roman military sites is not surprising, particularly since games function as social lubricants which can be used to acquaint people with one another and to form the basis for other social interactions.[64]

6. CONCLUSIONS AND FUTURE WORK

Computational methods can add another line of evidence to traditional archaeological and philological methods to help identify board games and test plausible rulesets. For Ludus Latrunculorum, playout analysis shows that a game in which pieces move with a slide movement such as Kharebga fits the description of the Roman authors and is reasonably playable on the boards known from the archaeological record. Furthermore, larger boards seem to be less amenable to these rules, and traditional games with similar rules on large boards have not been recorded in human history. This leads to one of two conclusions: that there are key rules missing from the written record of Ludus Latrunculorum that would allow these rules to work on large boards, or that there are other games with unknown rules that were played on large boards. The archaeological record supports the presence of pre- and non-Roman games on large boards, so the latter argument is favoured.

Future work can improve the utility of computational methods in the study of games. Developing improved AI agents by introducing heuristics and features to the agents can help them to play more effectively. The development of game distance metrics can help to quantitatively analyze the ludemic similarity of games to one another, allowing for better identification of candidate rulesets. In addition, a social network approach can add the cultural dimension to measurement of game distance. At press, this is being developed by the Digital Ludeme Project to potentially automate the identification of candidate games for analyzing and reconstructing traditional games of the past. These innovations can be used not only to bring new insight into antiquity, but also to make the past interactive and to preserve this intangible cultural heritage by providing playable games that more closely replicate the way ancient peoples played board games.

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60 Martin (1981), 30, Pl. 39.

61 Berrocal-Ranger *et al.* (2003), 103–104; Llanos Ortiz de Landaluze (2002), 191–193.

62 Schädler (2007), 369–373.

63 Haynes (2013), 95–142.

64 Malaby (2003), 59–74; Crist *et al.* (2016b).

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Su alcune tavole lusorie dai Fori Imperiali

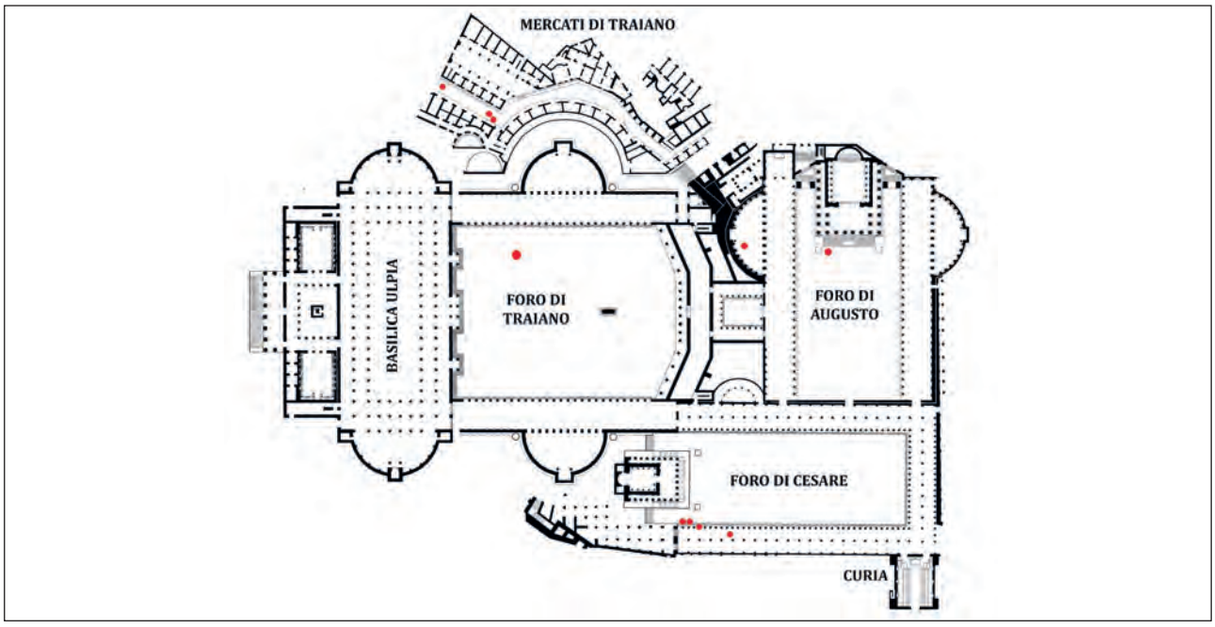

Fig. 1. Pianta ricostruttiva dei Fori Imperiali, in evidenza l'ubicazione delle tavole lusorie discusse nel testo. Rielaborazione grafica da Meneghini *(2009), 40, tav. II.*

INTRODUZIONE

Nell'area archeologica dei Fori Imperiali, nello spazio più monumentale dell'Impero destinato a funzioni pubbliche ufficiali, è interessante notare la presenza di alcune testimonianze di gioco, legate ad attività di svago e interazione sociale[1]. Si tratta di *tabulae lusoriae* realizzate sui resti pavimentali dei portici e delle piazze forensi, sui basolati delle strade ad esse adiacenti, su alcuni blocchi marmorei reimpiegati come soglie o gradini, le quali sono riferibili a diversi tipi di giochi praticati nell'antichità[2]. Dal momento che questi esemplari rappresentano verosimilmente solo una parte di quello che doveva essere il *corpus* originario, seppure decontestualizzati e inadatti a restituire un quadro preciso dell'attività ludica da un punto di vista topografico e cronologico, essi richiedono da parte degli studiosi una attenzione particolare e maggiore di quella rivolta finora. Le tavole lusorie prese in esame in questa sede, infatti, risultano finora inedite oppure sono state oggetto solo di brevi riferimenti sommari (v. *infra*). Il presente contributo intende pertanto mettere in luce la presenza di questo tipo di testimonianze nell'area dei Fori Imperiali attraverso l'esame unitario di un gruppo di tavolieri provenienti da distinti complessi forensi, offrendo contestualmente una serie di spunti di riflessione per ulteriori approfondimenti da parte degli studiosi (fig. 1).

1 Desidero ringraziare la Prof.ssa Véronique Dasen e il Dott. Alessandro Pace per avermi proposto di condurre tale studio, per l'opportunità di pubblicarlo in questa sede e per i preziosi suggerimenti.

2 Per una sintesi sui giochi da tavola di epoca romana e sulla letteratura relativa ad essi si veda ad esempio: Rieche (1984); May (1991), 166-189; Salza Prina Ricotti (1994), 48-85; Fittà (1997), 108-179; De' Siena (2009), 123-166; Schädler (2013c), 2841-2844; Lambrugo (2015), 25; Dasen (2018), 23-50. Per le testimonianze di ambito letterario: Torre (2015), 15-23 (con annessi riferimenti bibliografici).

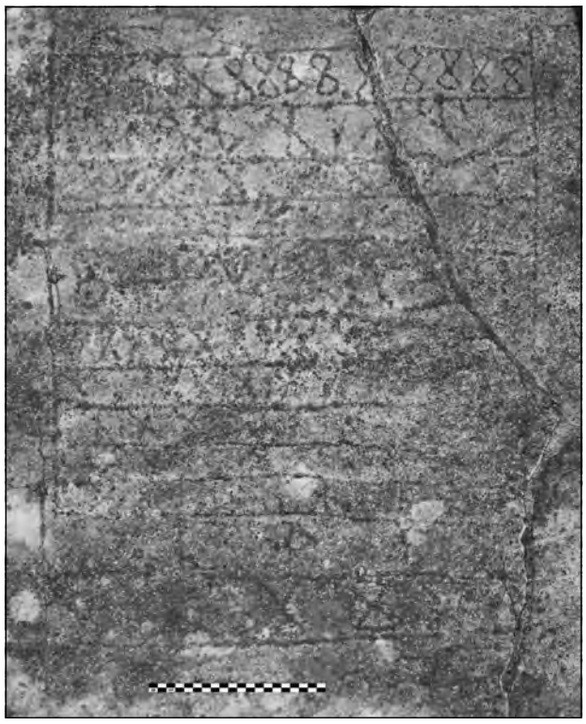

Fig. 2. Lastra pavimentale con incisione, dall'area antistante la gradinata del Tempio di Marte Ultore nel Foro di Augusto. (Foto dell'Autore).

1. Attestazioni dal Foro di Augusto

In primo luogo, il *focus* dell'attenzione viene rivolto al Foro di Augusto. In particolare, nel lastricato pavimentale antistante la gradinata del Tempio di Marte Ultore, nel settore occidentale del tempio situato grossomodo davanti alla seconda colonna da sinistra della fronte dell'edificio, si nota una lastra caratterizzata da una incisione di forma rettangolare alta 67 e larga 56 ca. percorsa al centro da 11 linee parallele (fig. 2). Il disegno è molto danneggiato e in alcuni tratti quasi completamente eraso, tale da permettere una lettura solo parziale, mentre il tipo di resa risulta alquanto corsiva, dato l'andamento piuttosto irregolare delle linee.

Il campo centrale è formato da 12 riquadri sovrapposti alti 4-7 cm. segnati all'interno da motivi cruciformi. Questi ultimi sono distribuiti in numero piuttosto disomogeneo, dato che, ad esempio, il primo riquadro dall'alto sembra comprenderne 12 mentre il terzo 7-8. Il quinto riquadro presenta uno schema differente dagli altri[3], in quanto è dotato di un'altezza maggiore, pari a 10 ca., e all'interno è contraddistinto da due simboli fallici affrontati alle estremità, con l'esemplare di sinistra preceduto da un elemento fogliaceo. Un simbolo fallico sembra comparire anche nel penultimo riquadro in basso, in questo caso sovrapposto ai segni cruciformi.

Tale incisione non è mai stata finora accuratamente analizzata e nei brevi riferimenti presenti in letteratura è stata sempre identificata come una *tabula lusoria*[4]. Questa interpretazione, al pari mai adeguatamente argomentata, deve tuttavia essere considerata ancora incerta, dato che lo schema del campo centrale non coincide infatti con i tavolieri da gioco tradizionalmente noti, come ad esempio quelli destinati al *ludus latrunculorum,* sia per la presenza di linee parallele anziché quadrettature, che per il tipo di segni realizzati all'interno[5]. A tal riguardo, inoltre, è opportuno evidenziare come le incisioni formate da campi caratterizzati da sole linee parallele e diversi tipi di simboli all'interno, risulti piuttosto inconsueto e che la sua funzionalità non sia ancora del tutto chiara in letteratura. Secondo Schädler, infatti, i sette disegni noti di questo tipo, in mancanza di uno studio approfondito, possono essere solo ipoteticamente ricondotti a tavolieri da gioco che prevedevano l'utilizzo di dadi-pedine[6]. Rispetto a questo ristretto nucleo di incisioni, tutte provenienti da Roma, quella del Foro di Augusto risulta peraltro differente, poiché i segni che compaiono tra le linee sono di un unico tipo.

Sempre nel Foro di Augusto, tra i gruppi di elementi architettonici di recente sistemati presso l'esedra settentrionale e distinti dal resto dei blocchi presenti nell'area archeologica perché verosimilmente riconducibili all'età tardo antica o perlomeno successiva a quella medio-imperiale, si ritrova una lastra di incorniciatura che conserva sul piano di attesa i resti di una incisione, in questo caso interpretabile invece quasi certamente come una tavola da gioco (fig. 3)[7]. Il tavoliere è conservato solo parzialmente presso un segmento angolare, misura 15 max. x 33 max. di lato ed è caratterizzato da una griglia quadrettata formata da linee orizzontali e verticali che si incrociano ad angolo retto, con caselle di 4 x 4 di lato, di cui restano 8 esemplari massimo per fila. Sulla base dello schema, l'incisione

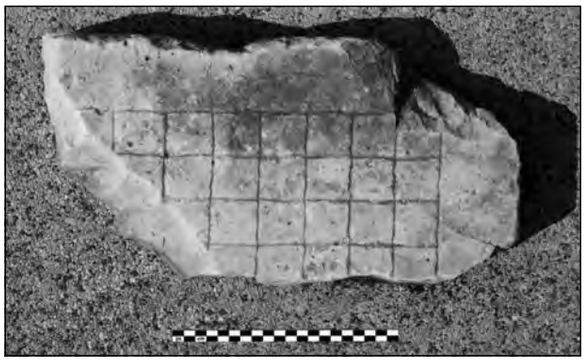

Fig. 3. Lastra di incorniciatura con incisione, dall'esedra settentrionale del Foro di Augusto. (Foto dell'Autore).

3 A causa dello stato di conservazione delle superfici non è tuttavia possibile definire il numero esatto dei segni iscritti entro ogni riquadro.

4 Nista (1994), 114; Nuzzo (2018), 179, tav. XXI, fig. 51.

5 Per questo tipo di gioco si vedano i seguenti riferimenti in nota relativi al secondo tavoliere del Foro di Augusto preso in esame.

6 Schädler (1999), 52-54. Cfr. Nuzzo (2018), 179, tav. XVIII fig. 46.

7 La lastra, apparentemente inedita, è alta 8 ca., larga 21 e profonda 43, è decorata sul lato anteriore da una gola rovescia interamente lisciata, mentre sul piano di posa, lavorato con una gradina più corsiva rispetto al piano di attesa, conserva un incasso di forma rettangolare stretto e allungato, di incerta interpretazione.

è interpretabile con una *tabula lusoria* destinata al *ludus latrunculorum*[8], di cui si conservano numerose attestazioni, tra cui alcune presso le gradinate della Basilica Giulia nel Foro Romano[9].
Nonostante lo stato molto frammentario, la tavola da gioco è piuttosto significativa in quanto, allo stato attuale, rappresenta verosimilmente l'unica testimonianza materiale di attività ludica nel Foro di Augusto, sebbene riferibile all'età tardo antica[10]. La stessa lastra, infatti, è stata rinvenuta nel Foro di Augusto, ma come suggerito dall'attuale sistemazione nell'area archeologica, per il profilo della fronte e il tipo di lavorazione, non è riconducibile ad alcuna delle partiture originarie del complesso ed è dunque attribuibile ad un periodo post-augusteo. Di conseguenza, la realizzazione del tavoliere, avvenuta a seguito di un diverso riutilizzo della lastra, deve essere considerata posteriore a quest'ultima.

2. Attestazioni dal Foro di Cesare

II complesso forense che conserva il maggior numero di testimonianze di gioco è tuttavia il Foro di Cesare[11]. In particolare, nel settore del portico occidentale della piazza forense si ritrova un nucleo consistente ed eterogeneo di *tabulae lusoriae*[12].
In primo luogo, a partire dal lato nord-occidentale del portico, si menzionano due piste per biglie incise su due lastroni delle gradinate inferiori, rispettivamente antistanti la prima e la seconda colonna di anastilosi (fig. 4)[13]. I due campi da gioco sono differenti tra loro. Il tavoliere posto in corrispondenza della prima colonna da nord, infatti, presenta uno schema rettangolare allungato e un numero maggiore di fossette, di cui una posta a netta distanza dalle altre (20 ca.)[14]; l'esemplare visibile dinanzi alla colonna, invece, presenta un campo più ridotto di forma

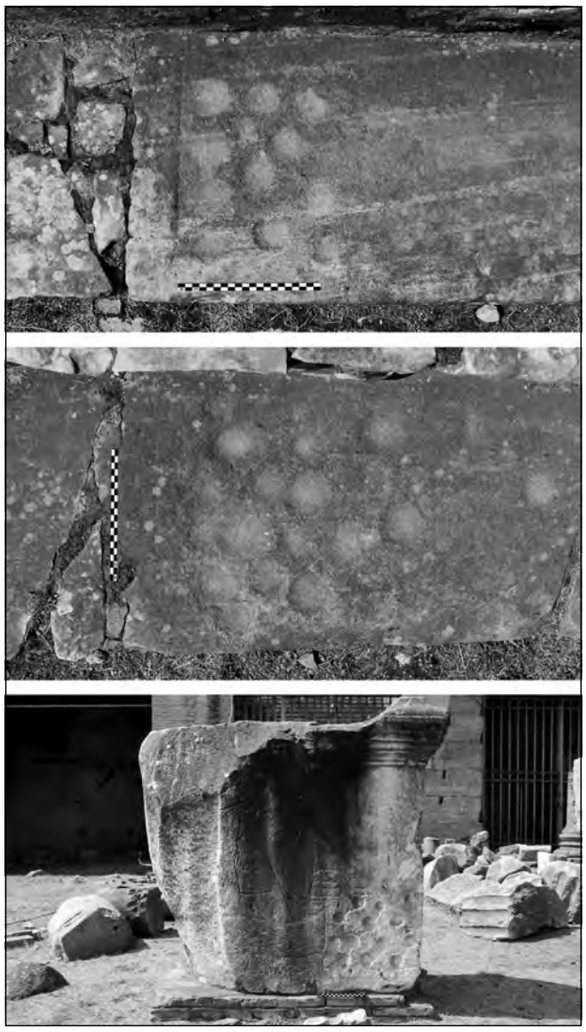

Fig. 4. Due piste per biglie incise sulle gradinate del portico e una terza pista per biglie incisa sul retro di una base per statua, dal portico occidentale del Foro di Cesare. (Foto dell'Autore).

quasi quadrata, con 10 ampie fossette poste a breve distanza tra loro e una lunga incisione ortogonale alla base identificabile con il punto di partenza da cui venivano tirate le biglie[15]. Ad eccezione di questo ultimo tavoliere, in cui la prima fila di fossette è perfettamente allineata, in entrambi i campi da gioco le singole caselle, oltre a presentare un diametro vario, pari a 3-6 ca., sono sfalsate tra loro e disposte in modo irregolare[16].
A questi due esemplari si aggiunge una terza pista per biglie ricavata, in questo caso, sul retro di una base marmorea di statua posizionata lungo il centro del portico occidentale (fig. 4)[17]. Il campo

8 Il tavoliere è fratturato su entrambe le estremità e non è dunque possibile definire il numero originario delle file quadrettate e dei singoli quadrati compresi in ognuna di esse; rispetto alla tipologia definita nell'*Appendice* di questo volume, sembra tuttavia possibile includere il reticolo nel *tipo 29* (*grids*). Per un approfondimento di questo tipo di *tabulae lusoriae* e una proposta ricostruttiva delle regole del gioco si veda inoltre il capitolo metodologico in questo volume; Schädler (1994a); Rieche (1984), 21, 49, 71.

9 Schädler (1994a), 49-52. Per un interessante confronto rinvenuto nel complesso di Villa Adriana a Tivoli: Manderscheid, Carboni, Bruno (2011), 514-518.

10 Per un inquadramento generale del Foro di Augusto in età tardo antica e altomedievale: Meneghini (2000), 83-89; in generale sui Fori Imperiali: Meneghini (2008).

11 In questa sede il focus dell'attenzione è rivolto esclusivamente agli esemplari attualmente visibili presso il portico occidentale, ma si consideri la presenza di ulteriori tavolati da gioco nella limitrofa Basilica Argentaria.

12 Ad eccezione di alcuni generici riferimenti - Nuzzo (2018), 179 - si tratta di *tabulae lusoriae* mai finora attentamente documentate.

13 Per un quadro di sintesi sulle piste per biglie si faccia riferimento a: Schädler (1994b), 54-57; Schädler (2013), 54-55.

14 Sulla base del profilo sempre circolare e non rettangolare, quest'ultima non sembra tuttavia essere identificabile con l'ultima fossetta in cui i giocatori dovevano riuscire a imbucare la biglia. Per l'ipotetico funzionamento di tale gioco si veda l'*Introduzione* in questo volume; ulteriori riferimenti in Schädler (1994b).

15 Nuzzo (2018), tav. XX fig. 50.

16 Data la disposizione sfalsata e irregolare delle fossette, i due tavolieri sono riconducibili al tipo 64 di *rows of holes* della tipologia definita nell'*Appendice* di questo volume; per alcuni confronti di questo tipo di tavole da gioco conservate a Roma si veda Schädler (1994b), 54-57; Schädler (2019), 66-67, figg. 1-2; da Ostia: Dasen (2020), 311.

17 Il blocco (FC 4) fa parte di un cospicuo gruppo di basi di statue rinvenute durante gli scavi eseguiti nel Foro di Cesare tra il 1932 e il 1933, edite inizialmente da Paribeni - Paribeni (1933), 431-455- e di recente analizzate in modo unitario da Corsaro – Corsaro

Fig. 5. Incisione circolare incisa su un basamento di colonna, dal portico occidentale del Foro di Cesare. (Foto dell'Autore).

da gioco è delimitato alle estremità da una linea incisa, parzialmente visibile sul lato lungo interno e quello corto in basso, ed è dotato all'interno di tre file allineate di larghe fossette, di 5 ca. di diametro, seguite da ulteriori caselle posizionate in modo sfalsato; alla base, inoltre, restano le tracce di una risega probabilmente identificabile con il punto di partenza da cui venivano lanciate le biglie[18].

In prossimità del margine sinistro del tavoliere, grossomodo lungo il centro del retro della base, compare parte di una iscrizione: IN (- - -) AST seguita al di sotto e in caratteri maggiori, da PORTIDIAN (- - -)[19]. Sul lato anteriore della base, invece, lo specchio epigrafico presenta una iscrizione dedicata da *Virius Nicomachus Flavianus*, *praefectus urbi* tra il 399 e il 400 o nel 408 d.C., all'imperatore Arcadio (*CIL* VI 40798)[20].

Questa dedica potrebbe suggerire per la tavola da gioco una datazione all'età tardo antica e posteriore al IV sec. d.C., quando la base di statua, ormai capovolta a terra e probabilmente riutilizzata come crepidine oppure soglia, divenne per l'appunto anche supporto per il gioco[21]. Dal momento in cui è verosimile che i tavolieri presenti nel Foro di Cesare sono riconducibili ad uno stesso arco cronologico, l'iscrizione dedicata a Arcadio può ipoteticamente essere ritenuta un *terminus post quem* di ognuno di essi.

Le piste per biglie non costituiscono tuttavia l'unico tipo di *tabula lusoria* proveniente da questo settore del portico. Uno dei blocchi ricomposti nel basamento della quarta colonna posta a partire da nord, conserva, lungo il lato rivolto verso la piazza, la metà circa di un tavoliere circolare, verosimilmente destinato al gioco del mulino (fig. 5)[22]. La ruota presenta un diametro di 46 ca. ed è caratterizzata dallo schema più frequente di questo tipo di incisioni, formato da otto raggi tramite quattro linee che si intersecano al centro[23].

(2010), 474-537 - a cui si rimanda per un approfondimento delle caratteristiche architettoniche e decorative dell'esemplare in questione, Corsaro (2010), 485-486.

18 Come per i due esempi precedenti, per un approfondimento di questo tipo di incisione si veda il capitolo metodologico e l'*Appendice* (tipo 64) all'interno di questo volume.

19 Paribeni (1933), 434-436, n. 7; Corsaro (2010), 486.

20 Per la trascrizione e la lettura del testo dell'iscrizione si rimanda a Corsaro (2010), 476 (con annessi riferimenti bibliografici in nota 27), 486, fig. 16a.

21 Come proposto già in Corsaro (2010), 486.

22 La funzione di questo tipo di incisioni è ancora oggetto di discussione e come evidenziato di recente da Schädler - Schädler (2018), 87-98) - a cui si rimanda per una sintesi esauriente sulle varie proposte interpretative finora avanzate in letteratura, non sembra riferibile con certezza, oppure esclusivamente, al gioco, ma avrebbe potuto servire ad esempio anche da "topos marker", simbolo di felicità o di vittoria, elemento apotropaico. Su questo tema si veda anche: Schädler (2012), 21-22; Behling (2013), 47; Heimann (2014), 51-61; Dasen (2019). In generale sulle caratteristiche tipologiche: Bell, Roueché (2007), 106-109; Schädler (2014), 61-71.

23 Per un approfondimento di tale tipo di incisioni e le eventuali modalità

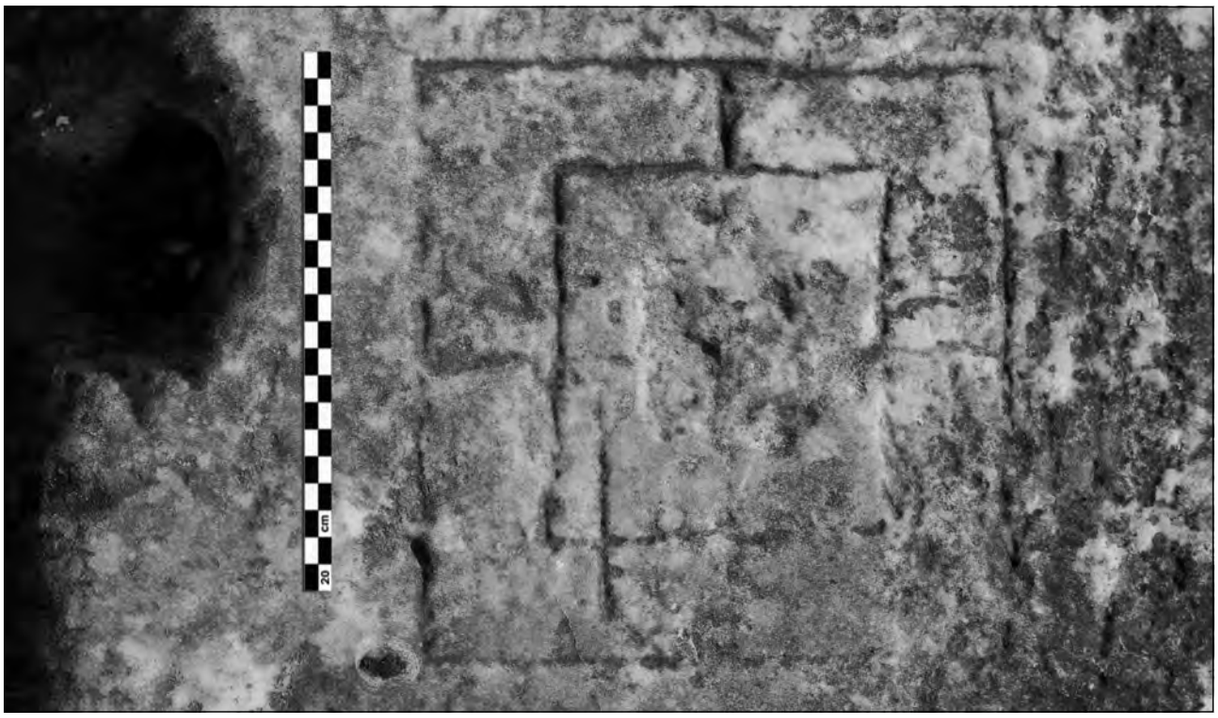

Fig. 6. Tabula incisa sul piano di attesa di un architrave, dall'area nord-orientale della piazza del Foro di Traiano. (Foto dell'Autore).

Il numero di *tabulae lusoriae* provenienti da questo settore circoscritto del Foro di Cesare è molto indicativo, in quanto tende a suggerire come il gioco fosse una attività particolarmente comune durante l'età tardo antica lungo la piazza e i portici[24].

3. Attestazioni dal Foro di Traiano

Un diverso tipo di tavoliere attestato nell'area dei Fori Imperiali proviene dal Foro di Traiano ed è costituito da un'incisione formata da tre quadrati concentrici uniti tra loro nei segmenti mediani tramite linee di congiunzione (fig. 6)[25]. Il tavoliere, 23 x 23 ca. di lato, è ritagliato sul piano di attesa di un architrave bifronte riconducibile al primo ordine libero dei portici ed è caratterizzato da superfici molto deteriorate, con diffuse abrasioni che insistono soprattutto sullo spazio centrale, dove attualmente resta solo l'impronta del quadrato più interno. La *tabula* è realizzata abbastanza grossolanamente, come si nota dall'andamento irregolare delle linee che corrono alle estremità, ed era verosimilmente destinato al gioco del mulino o filetto, identificabile genericamente come una versione più elaborata del gioco del tris, che prevedeva l'uso di 9 pedine anziché 3[26]. L'incisione è databile solo approssimativamente all'età tardo antica, quando a seguito del crollo e degli interventi di destrutturazione degli elevati marmorei, il blocco di architrave fu probabilmente reimpiegato come soglia e destinato anche al gioco.

4. Attestazioni dai Mercati di Traiano

Un ultimo settore dell'area dei Fori Imperiali da cui provengono interessanti testimonianze materiali di gioco è la Via Biberatica. Lungo il lato occidentale della strada antica che attraversa il complesso dei Mercati di Traiano, in prossimità del muro di sostruzione della attuale via IV Novembre, sono visibili sul basolato alcune incisioni[27]. In particolare, presso il segmento meridionale della strada rivolto verso il Grande Emiciclo, si nota una coppia di segni circolari incisi su due distinti basoli, i quali sono separati tra loro da un solo altro lastrone e distanti appena 50 ca.[28]: in particolare, il primo, posto più a sud, presenta uno schema a 4 raggi e un diametro di 46 cm; il secondo, invece, è caratterizzato da uno schema a 8 raggi e da un diametro maggiore di 53 cm (fig. 7)[29].

di gioco, si rimanda al capitolo metodologico e all'*Appendice* (tipo 4 di *circles*) in questo volume. Tra i numerosissimi confronti, si menzionano in particolare gli esemplari conservati nella Basilica Giulia - Trifilò (2011), 315-316; Nuzzo (2018), 179, fig. 48; Schädler (2018), 88, 92 -, oppure nelle Terme di Traiano, Manderscheid, Carboni, Bruno (2011), 518-522, figg. 5-7. Per ulteriori confronti: Roueché (2007), 100-105.

24 Per il Foro di Cesare in età tardo antica: Santangeli Valenzani (2000), 79-82.

25 Rispetto alla tipologia proposta nell'*Appendice* di questo volume, tale incisione è riferibile al tipo 27 di *squares*.

26 Per questo tipo di incisioni e le proposte ricostruttive delle modalità del gioco si veda il capitolo metodologico di questo volume; ulteriori riferimenti in Bell, Roueché (2007), 106-109; Schädler (2018), 87-88, fig. 3.

27 A causa delle abrasioni e del deterioramento delle superfici del basolato, lo stato di conservazione delle incisioni è piuttosto compromesso.

28 Gli unici brevi riferimenti a proposito di tali incisioni si ritrovano in Sommella (1961-62), 130-135, fig. 7 (v. *infra*).

29 Rispetto alla tipologia definita nell'*Appendice* di questo volume, sulla base dei differenti schemi, le due incisioni possono rispettivamente essere riferite ai tipi 2 e 4 di *circles*.

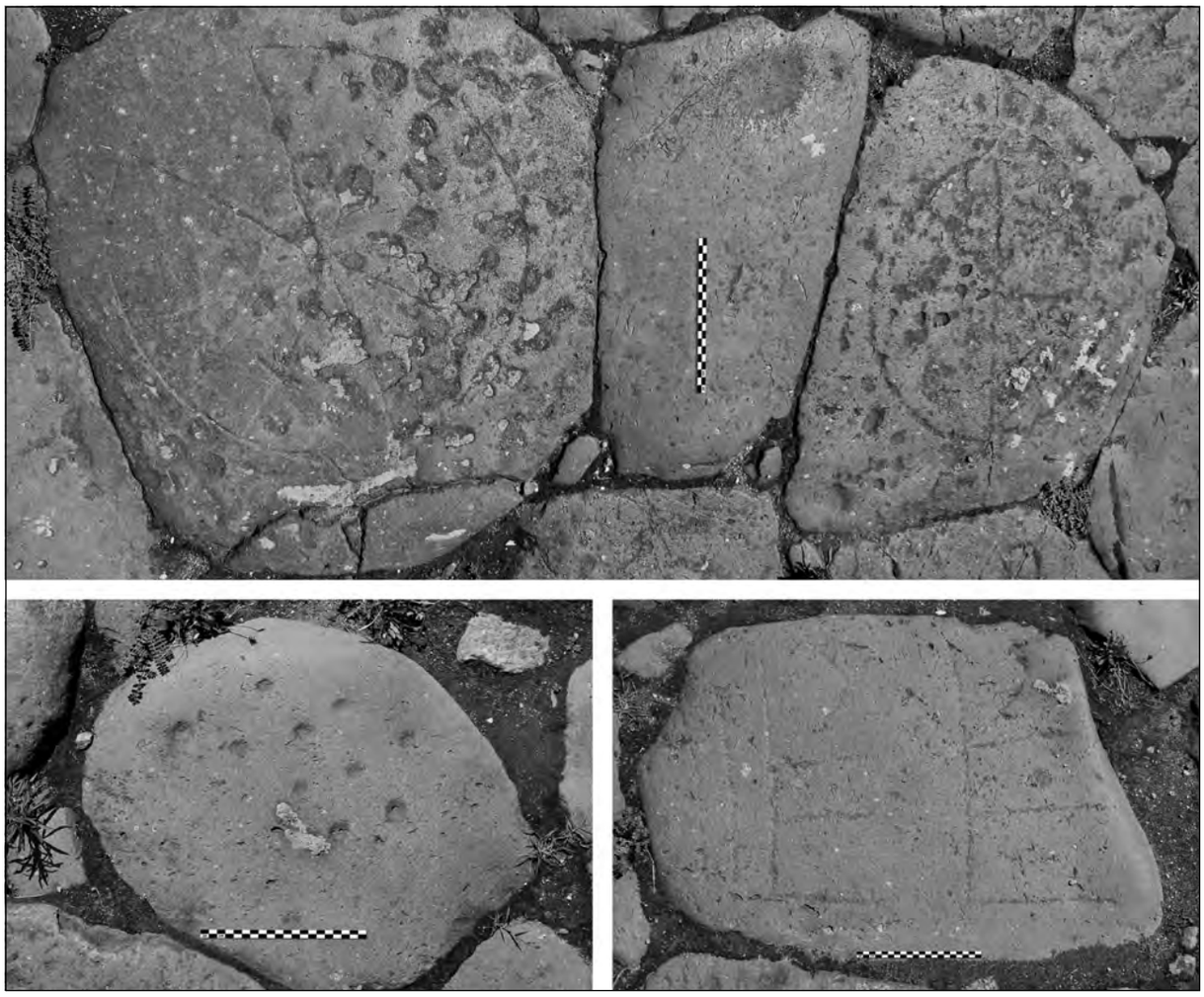

Fig. 7. Due incisioni circolari (in alto); una pista per biglie (in basso a sinistra) e un monogramma (in basso a destra), dalla Via Biberatica nei Mercati di Traiano. (Foto dell'Autore).

In aggiunta, sul limite settentrionale dello stesso tratto di via Biberatica, a ridosso di via IV Novembre, un basolo reca le tracce di una pista per biglie, dotata di 8 strette fossette di 2,5 di diametro, disposte in modo abbastanza irregolare (fig. 7). Presso questo settore, inoltre, è opportuno segnalare come siano conservati anche sei grandi esemplari del noto monogramma PE, di cui alcuni accoppiati sugli stessi basoli altri invece ritagliati singolarmente; tali simboli sono accompagnati da una o due linee verticali parallele, oblique o incrociate, realizzate sui medesimi basoli recanti i monogrammi oppure su lastroni distinti (fig. 7).

Paolo Sommella, in un breve saggio edito negli anni Sessanta dello scorso secolo, suggerisce che i monogrammi e le incisioni identificabili come *tabulae lusoriae* siano tra loro correlati e interpretabili come parte di un unico grande gioco scompaginato nel tempo[30]. L'ipotesi dell'A. appare verosimile, dato che la presenza di questo epigramma nei tavolieri da gioco è già attestata e comunemente interpretata come simbolo di vittoria e di buon augurio[31].

La scarsa documentazione di scavo relativa a questo segmento della Via Biberatica impedisce un preciso inquadramento topografico e cronologico dei tavolieri. A seguito del suo rinvenimento effettuato nel corso degli scavi del Governatorato degli anni Trenta, la strada ha subito ampie integrazioni e restauri, specialmente lungo il settore in questione, e in assenza di informazioni a proposito di tali interventi, non è possibile definire se i basoli interessati dalle incisioni siano elementi di rifacimento già *in situ* oppure esemplari di reimpiego provenienti da altri cantieri in corso di demolizione a Roma[32]. Per tal motivo, le *tabulae lusoriae* possono essere solo ipoteticamente identificate come importanti testimonianze di gioco legate ad una strada di carattere principalmente

30 Sommella (1961-62), 134-135. In merito alle tavole da gioco iscritte di provenienza romana: Ferrua 2001.

31 Questa abbreviazione si ritrova in diversi tipi di incisioni e viene generalmente associata con acclamazioni trionfanti di carattere benaugurante, come ad esempio P(alma) e(t) L(aurus) oppure P(alma) F(eliciter); per una sintesi generale si vedano gli stessi riferimenti in Sommella (1961-63). Per i confronti connessi con le tavole da gioco, che sembrano principalmente riguardare le piste per biglie, in particolare: Schädler (1995), 55-56; Nuzzo (2018), tav. XVIII, fig. 46.

32 Meneghini (2009), 173.

commerciale, da inquadrare in un arco cronologico ampio, compreso tra l'età medio-imperiale e quella tardo-antica.

OSSERVAZIONI CONCLUSIVE

Le tavole da gioco documentate in questa sede molto verosimilmente sono solo una piccola parte degli esemplari che componevano il *corpus* originario delle evidenze presenti nell'area dei Fori Imperiali. Tali attestazioni sono tuttavia molto significative, in quanto offrono un quadro tipologico, topografico ed esecutivo eterogeneo, composto da diversi tipi di *tabulae lusoriae* provenienti da complessi forensi distinti. La loro presenza, inoltre, è un indicatore importante del tipo di utilizzo di questi spazi in età tardo antica, all'interno di cui il gioco doveva costituire una pratica ampiamente diffusa che verosimilmente univa cittadini di età e classi sociali diverse. Come il Foro Romano oppure altri complessi pubblici dell'Urbe, anche i Fori Imperiali sono dunque identificabili come un ulteriore contesto di studio per indagare gli aspetti dell'attività ludica antica e, contestualmente, per far luce sulle forme di interazione sociale e di quotidianità.

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Games and gaming in southwestern Asia Minor

INTRODUCTION

This contribution focusses on board games, and particularly on their material manifestation as game boards, as attested in the wider region of Southwestern Asia Minor. Other games were surely played in this area, but their identity and nature are far more difficult to establish on the basis of the available material evidence. Dice and counters that have been found in archaeological excavations are rarely associated with boards and could therefore have been used in a wide range of games or may even have served other, ritual purposes. Knucklebones or *astragaloi*, for example, were commonly used in *astragaloi* oracles, a popular way of fortune-telling in the area.[1] For this reason, these types of gaming pieces will not be considered here. Instead, this contribution will focus on those kinds of games that are known because the boards on which they were played are more readily identifiable. Moreover, they inform us about the social context of the game through their location and material form.

Although boards were most often made of wood and therefore rarely preserved[2], there were also numerous examples carved on stone, frequently found as casually carved graffiti. Many ancient cities are littered with evidence of board games scratched in the slabs and steps of streets, squares, and public buildings, as a typical material manifestation of this popular practice. The aim of this contribution is to present an overview of such game boards as attested in some of the better documented sites in Southwestern Asia Minor, broadly encompassing the area of the Roman province of Lycia-Pamphylia which consisted of the ancient regions of Lycia, Pamphylia, and Pisidia.[3] In Lycia the boards documented in the cities of Xanthos/Letoon and Patara, in Pamphylia the examples at Perge, and in Pisidia those of Sagalassos will be studied. Xanthos is the old capital of the region of Lycia; the nearby sanctuary site of the Letoon is considered here as part of it.[4] Patara, located on the south coast of Lycia, became the provincial capital of the region after its incorporation into the Roman Empire, before the merger with Pamphylia.[5] Perge was, like Patara, an important harbour town and the capital of the province of Lycia-Pamphylia, and later of Pamphylia Secunda.[6] Finally, Sagalassos was the main city of the inland region of Pisidia.[7] All these sites have been under excavation for several decades and numerous

1 Nollé (2007); Talloen (2017).

2 For two notable exceptions from Nubia see de Voogt *et al.* (2017). Schädler (2007) gives an overview of Roman period graves with remnants of wooden game boards.

3 The important and, in terms of ancient gaming, very rich cities of Ephesos and Aphrodisias are covered by other contributions to this volume. Other regions (and cities) in Asia Minor where game boards have been reported include: Caria, Stratonikeia: Kürüm-Durnagölü (2015); Galatia, Amorium: Witte (2010); Ionia: at Smyrna, Ersoy and Erdin (2015) and at the sanctuary of Apollo at Didyma near Miletos, Höckmann (1996); Lydia, Sardis, along the so-called Marble Street: Bell (2007), 99; Phrygia: at Kibyra, Demirel (2015), Laodikeia, Şımşek (2014), 48-50 and Fig. 20; Tripolis, Duman, Baysal (2017), and in a village in the territory of Kotiaion/Kütahya, Levick and Mitchell (1993), 107 n° 330); Pontus, Sinope: Yıldırım (2020). These cities are beyond the scope of this contribution but some examples from these locations will be used for comparison.

4 Des Courtils (2003).

5 İşkan (2016).

6 Çokay-Kepçe *et al.* (2019).

7 Poblome *et al.* (2019).

Fig. 1. Series of Type 23 Square boards incised on the limestone bench of the early Roman Imperial period SW honorific column on the Upper Agora at Sagalassos (Photo P. Talloen).

game boards have come to light as a result. Yet in spite of this, only limited research has been done on the topic of gaming so far. In most cases, games are only briefly mentioned in excavation reports or as part of the description of an architectural structure, and are only rarely the topic of a study in themselves.[8] The discussion of the 84 game boards presented here is based on these published data, augmented by observations on site.[9]

The paper will start with a presentation of the different types of game boards found in the region. The analysis of these boards and their specific formal design will not only allow us to identify the type of game these were used for, but will also provide information on their materiality, spatial context and distribution. This in turn will prove important for establishing a chronology of the games as graffiti boards in particular are notoriously difficult to date.[10] Finally, attention will be paid to possible regional characteristics of these game boards.

1. TYPES OF GAMES

The games were categorized according to the morphological typology at the end of this volume (see Appendix 2), based on the pioneering work of Bell and Roueché.[11] This allowed the boards to be classified into six broad groups and where possible to identify the individual board types. The rules for playing these games can be found in Penn, Pace, and Schädler's contribution in this volume.

1.1. Squares

The first group consists of merels (mill) games of alignment and configuration which comprise squares with spokes.[12] The most simple form, a square crossed by two lines, vertically and horizontally, has four spokes (Type 23). This simple board game was one of the most popular and widespread games in the region. Its 'square' boards are of modest size (5-15 cm wide by 6.5-16 cm long) and could easily be carved, scratched or pecked, not requiring any professional skills. They have been found as graffito at all of the investigated sites: with 26 documented examples (or 31%) out of a total of 84 boards, they are the most common game board in Southwestern Asia Minor. At Sagalassos, 10 examples have been documented so far, eight of which were carved on the bench of the southwest honorific column (Fig. 1); singular examples are present on the podium of

8 For Patara see Aktaş (2016); for Perge see Selvi-Bener (2008); for Sagalassos see Lavan (2013b) and Talloen (2017).

9 Thanks are due to excavation director Assoc. Prof. Erdoğan Arslan (Selçuk University – Konya) for giving kind permission to discuss the examples from Xanthos, while Diether Schürr generously shared his study of the 'Schälchenkreise' in the same city prior to publication; see Dönmez, Schürr (2022).

10 See Bell, Roueché (2007), 106.

11 Bell, Roueché (2007); further developed by Roueché (2014).

12 Parlett (1999), 116-119.

Fig. 2. Type 31 Rectangle board (L. 37.4 cm, W. 20.8 cm) incised on the limestone steps of the Hadrianic Nymphaeum at Sagalassos (Photo P. Talloen).

the Doric Temple and at the Theatre. At Xanthos, 13 instances of this game board are attested, especially on the entrances and doorsteps of the shops of the West Agora (#5), but also along the Decumanus (#3), inside the Mansion on the so-called Lycian Akropolis (#1), and on the stylobate of the temple of Leto (#3). Finally, two boards of this type are known at Patara (Propylon: #1; shop in west portico of Colonnaded Street: #1) and one at Perge.[13]

Less frequently attested (2% of the boards) are boards made up of two or three concentric squares (Types 26 and 27), possibly forming a mill design (22-29 cm wide by 24-29 cm long) used for the game of Six or Nine Men's Morris.[14] They are illustrated by two very worn examples documented on the upper tiers of the theatre of Sagalassos.

1.2. Rectangles

Among this group of boards consisting of two rows of incised squares, two rows of five squares (Type 31; 9.5-22 cm wide by 24-38 cm long) are most common. They should most probably be identified as a version of *Pente Grammai* or the game of Five Lines, a race game popular in the Greek world played on a board consisting of five lines.[15] During the Roman era the board layout changed to consist of two rows of five squares.

With nine examples (or 11%), this is another important group of game boards, attested particularly at Xanthos where there are seven examples, mainly situated on the steps of the Decumanus portico and one inside the Mansion on the Lycian Akropolis. Sagalassos has two examples, both carved on the steps of the Hadrianic Nymphaeum (Fig. 2).[16]

Yet other forms of rectangle boards are also known in Southwestern Asia Minor: the board type with two rows of seven squares (Type 33; measuring 11-12.5 x 30-34 cm) has two examples at Xanthos, inside the portico of the West Agora and on the stylobate of the temple of Leto; a badly worn board with two rows of eight squares (Type 34) is attested on the *propylon* of the Baths of Nero at Patara; and the type of two rows of nine squares (Type 35; 16 x 35 cm) has one example on the steps of the Hadrianic Nymphaeum at Sagalassos.[17] These were perhaps enlarged versions of Five Lines.

13 Patara: Aktaş (2016), 2 and Fig. 13; Perge: Selvi-Bener (2008), 158 cat. n° 1.

14 Murray (1978), 37-50.

15 Schädler (2009); https://locusludi.ch/lexicon/ (last accessed dd. 17/09/2021).

16 Lavan (2013b), 339.

17 For the example of Type 34 at Patara see Aktaş (2016), 2 and Fig. 14; the rectangle on the steps of the Hadrianic Nymphaeum at Sagalassos is mentioned by Lavan (2013b), 339 as a 2 x 10 (Type 36) board but closer inspection only revealed 2 x 9 squares (Type 35).

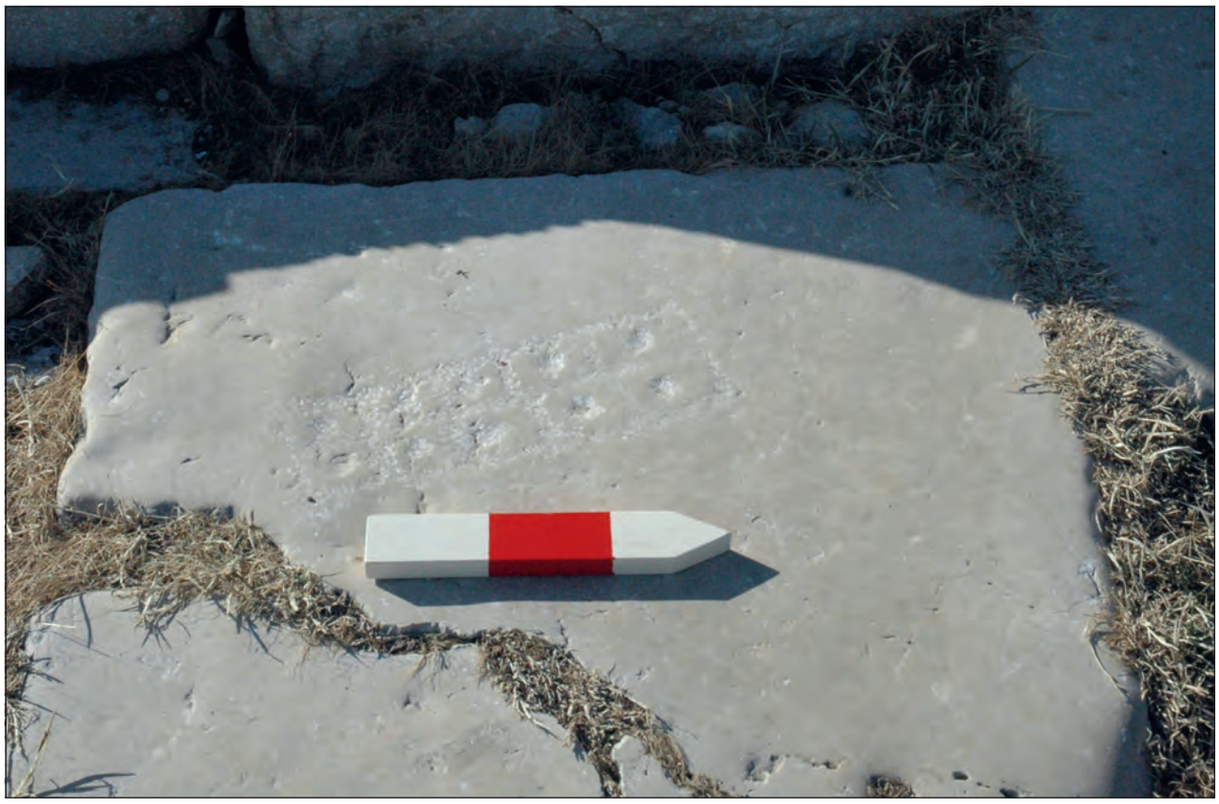

Fig. 3. Type 38 Rectangle board with scoops (L. 36.5 cm, W. 8.9 cm) carved into the limestone slabs of the junction of the Roman Decumanus and Cardo Streets at Xanthos (Photo P. Talloen).

1.3. Holes

Probably related to the rectangle boards are the boards with two rows of shallowly (0.5-1 cm deep) carved scoops (diameter of 2-5 cm). Most frequently attested are two rows of five scoops (Type 42) with twelve examples (or 14%). Although often identified in literature as mancala boards[18], most recently analysis of these graffiti boards suggests that the five-scoop game board is a particularly Roman phenomenon, significantly pre-dating the development of mancala in these regions. Most probably they too should be identified as a variation of Five Lines.[19] The fact that in Xanthos a game board on a pavement slab of the plaza at the intersection of Cardo and Decumanus consisted of a series of 2 x 5 scoops set inside the squares of a rectangular board (Type 38; Fig. 3) can perhaps be considered as corroborating evidence for the relation between the two types of boards.

Examples of Type 42 are attested at Sagalassos (#1; on the east side of the podium of the Doric Temple), Patara (#2; on the staircases of the west portico of the Harbour Street; Fig. 4), and especially at Perge. In the latter city, no less than nine examples of the board have been documented of which four in the *propylon* and east portico of the *palaestra* of the South Baths, three in the Macellum, and two in the courtyard of the Hellenistic Gate.[20] A different version of the board with 2 x 4 holes (Type 40) was also documented in the same courtyard.[21]

A board of 2 x 12 holes from the same city may have been used for a different type of game and will therefore be discussed below. Circular series (diameter 18-33 cm) of 10 (or more rarely 11) shallow cup-shaped cavities surrounding a central hole are recorded at Xanthos. They are concentrated in the area of the so-called Lycian Acropolis where seven boards of this type have been recorded by Diether Schürr on the steps of the base of the so-called Pillar Sarcophagus, a funerary monument dating to the Hellenistic period (Fig. 5).[22] Another example was found nearby, reused in the back wall of the stage building of the local theatre of the Roman Imperial period. Again the board is composed of a circle of ten holes surrounding a central hole, this time with a Psi-sign as part of the circle. These boards are not part of the Typology of Appendix 2, but resemble its Type 51 which has twelve holes surrounding a central one, as attested at Aphrodisias.[23] Outside Asia Minor, they are attested on Crete where they were probably used for games of capture.[24]

18 For examples from Izmir (ancient Smyrna) see Ersoy, Erdin (2015); for Stratonikeia in Caria see Kürüm-Durnagölü (2015).

19 Schädler (1998), 16.

20 Selvi-Bener (2008), 161-164 cat. n° 4-7 (South Baths), 165-167 cat. n° 8-10 (Macellum) and 168-169 cat. n° 11-12 (Hellenistic Gate)

21 Selvi-Bener (2008), 160 cat n° 3.

22 Dönmez, Schürr (2022).

23 See http://insaph.kcl.ac.uk/iaph2007/iAph100019.html (last accessed dd. 17/09/2021).

24 Dönmez, Schürr (2022).

Fig. 4. Type 42 Holes board (L. 21 cm, W. 5 cm) carved into the lower limestone step of the staircase leading to the Roman Imperial period west portico of the Harbour Street at Patara (Photo P. Talloen).

Fig. 5. Series of "Schälchenkreise" carved into the limestone base of the Hellenistic period Pillar Sarcophagus at Xanthos (Photo P. Talloen).

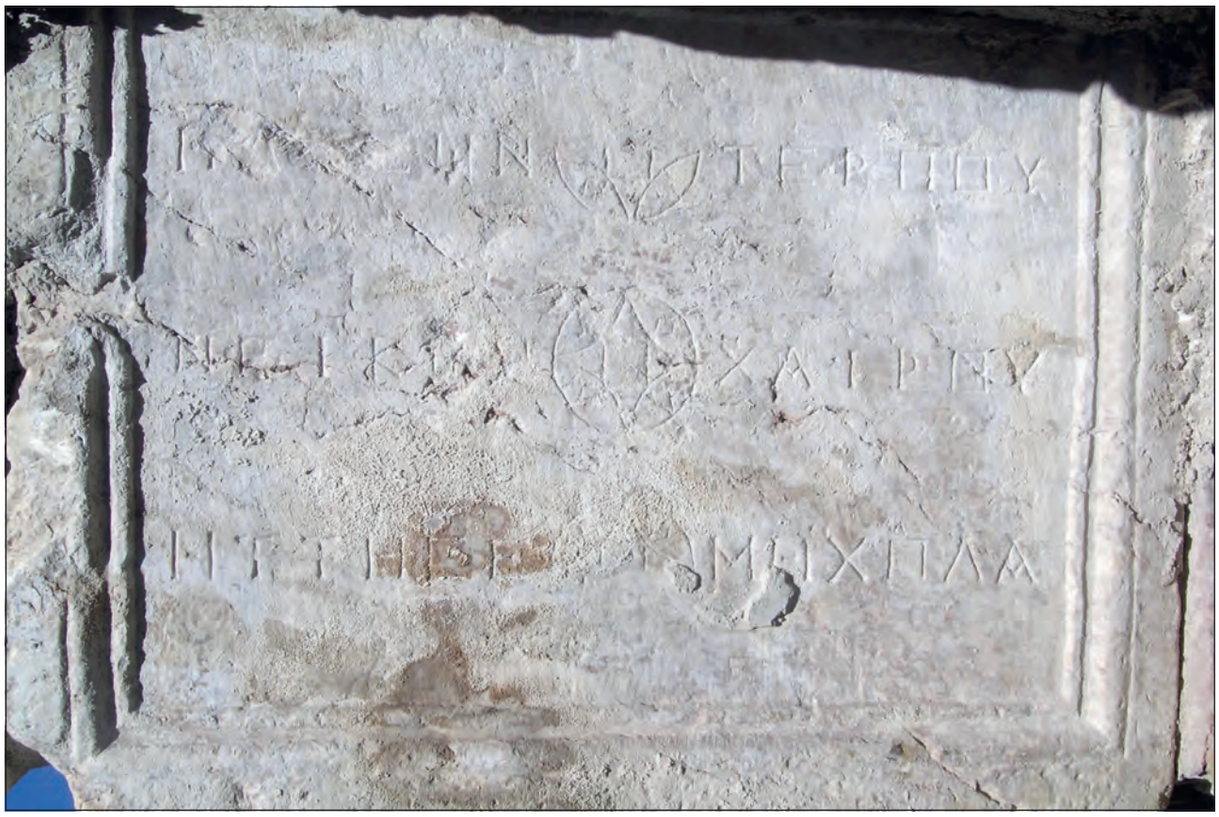

Fig. 6. Limestone monumental Type 61 lettered Duodecim Scripta or Alea board (L. 91 cm, W. 74 cm, T. 31 cm) reused in the wall of a late antique shop of the west portico of the Upper Agora at Sagalassos (Photo Sagalassos Archaeological Research Project).

1.4. Rows

The boards gathered here all belong to the Rows type of the typology presented in Appendix 1, but some differences allow for subdivision. They consist of two or three rows of twelve spaces divided into half by a bar. The spaces may be circles, squares, holes, or letters, and the bar formed by a line, circles, rosettes, geometric devices, or crosses. Moreover, other than impromptu graffito boards this group also features monumental game boards that were professionally carved on large blocks of stone. They were not only more carefully made than the pavement varieties, but have a surrounding rim to prevent dice from falling off the playing surface. Within this group, three main types can be distinguished based on the number of rows and the form of their markers. They are therefore considered separately here.

• Lettered *Duodecim Scripta* or *Alea* (Type 61)

The *tabula lusoria* of *Duodecim Scripta* employs letters of the alphabet to represent a set of 36 positions, in three parallel rows of 2 x 6 letters separated by (half) circles, for moving playing pieces, usually combining to form phrases with a bearing on the attitudes of the players to the game.[25] This was not a very common game in Southwestern Asia Minor, with only one example known in the region, namely at Sagalassos. There it was found in the west portico of the Upper Agora where it had been reused as a wall block in one of the rooms built at the back of the portico in the early 6th century CE (Fig. 6).[26] The letters were arranged to spell out the following phrases:

Π Α [Ι] Ζ Ш Ν ◊ Τ Ε Ρ Π Ο Υ
("Enjoy when you play")
Ν Ε Ι Κ Ε Ν ◊ Χ Α Ι Ρ Ο Υ
("enjoy the victory")
Η Τ Τ Η Σ Ε ◊ Μ Η Χ Ο Λ Α
("don't let defeat make you melancholic".)

Ludus Duodecim Scriptorum was especially popular in the western, Latin part of the Roman Empire.[27] The 150 or so known examples derive overwhelmingly from Rome itself; for the rest, Italy and Northern Africa account for almost all the instances, while few are known from the northwest frontier zone.[28] The almost total absence of examples from the Eastern Mediterranean is striking. Apart from the example found at Sagalassos, only a few other game boards are known from the Greek East: a board from Ephesos with the hexagrams written into the square markings

25 Purcell (2007), 90; https://locusludi.ch/lexicon/ (last accessed dd. 17/09/2021).

26 For a detailed discussion of the board see Talloen (2018), 102-110.

27 For an overview see Purcell (1995), 18-19; Schädler (1995), 81; Ferrua (2001).

28 Purcell (2007), 91.

Fig. 7. 3-Rows Duodecim Scripta or Alea graffito board (L. 59 cm, W. 47.5 cm) incised into the limestone stylobate of the Roman Imperial period south portico of the Decumanus Street at Xanthos (Photo P. Talloen).

of the field is one of them.[29]

Unlike most of the western boards, the example from Sagalassos was professionally carved, with detailed execution of the letters and the surrounding mouldings. Furthermore, this was done on the surface of a large block with a weight of ca. 500 kg, indicating that it was not a portable board but part of a permanent installation. Like other examples of monumental writing meant for public display, these characteristics would situate the board in the public sphere.

The hexametric word lines are part of an inscribed slogan which offers direct contact with the world of the people who used it. These hexagrams tended to spell out clever sentences, mostly related to daily life and the circus, gambling, and good fortune, or matters with military overtone.[30] The example from Sagalassos expresses the good and bad sides of luck: the unpredictability of games as a symbol of the unpredictability of human life.

• Non-lettered *Duodecim Scripta* or *Alea*

Far more commonly found in cities throughout the Roman Empire are row boards where the 36 letters forming three rows of two hexagrams were replaced by three rows of 2 x 6 squares, circles or holes, separated by circles or inscribed rosettes. Schädler identifies this type as the *Alea* or "dice" game mentioned in literary sources, which he considers a late antique variant of the *Duodecim Scripta*.[31]

With 14 examples (or 16.5 %), it was one of most common types of game boards in the region, attested both as graffito-boards and as professionally carved, monumental boards. Graffiti boards (measuring 37-63 cm wide by 61-70 cm long) have been noted at Xanthos and Letoon (#2), at Sagalassos (#1), and at Perge (#2). At Xanthos, the casually inscribed 3Rows board (3 x 12 squares divided by an X in square) was documented on the eastern extremity of the south portico of the Decumanus; two Latin crosses were inscribed in the two fields between the rows (Fig. 7). An impromptu board of the same type was found in the east *pteron* of the temple of Leto. The board on the stylobate of the west portico of the Colonnaded Street at Sagalassos belongs to Type 62 with 3 x 12 holes, divided by a line.[32] A Type 56 board (3 x 12 circles divided by an X) was documented in the west portico of the Macellum of Perge and a board of 3 x 12 squares divided by circles in the south portico of the *palaestra* of the South Baths.[33]

Of the four monumental versions of the *Alea* board

29 See Merkelback (1978) and Börker, Merkelbach (1979), 226 n° 556 who wrongly interpret it as a *Ludus Latrunculorum* board.

30 Purcell (1995), 24-27.

31 Schädler (1995); *idem* (2013); https://locusludi.ch/lexicon/ (last accessed dd. 17/09/2021).

32 Jacobs, Waelkens (2013), 238.

33 Selvi-Bener (2008), 177 cat. n° 20 and 179 cat. n° 22.

Fig. 8. Limestone monumental 3-Rows Duodecim Scripta or Alea board (L. 82 cm, W. 82 cm, T. 27 cm) in the north portico of the Macellum at Perge (Photo W. Sauber on Wikimedia Commons: CC-BY-SA-3.0,2.5,2.0,1.0).
https://commons.wikimedia.org/wiki/File:Perge_-_Brettspiel.jpg

recorded at Perge, one, carved on the top part of a reused statue base, was found in its original set-up with accompanying seats in the north portico of the Macellum/agora (Fig. 8); two others, carved on rectangular stone blocks, were found in porticoes along the colonnaded street.[34] All of these boards feature a lozenge within a circle as the dividing element between the rows of squares.

The city of Sagalassos yielded no less than five monumental examples of *Alea* boards. A professionally cut game board was installed in the western portico of the Upper Agora, in front of the so-called *Prytaneion*, which functioned as a public dining hall in late antiquity; the bar between the circles was formed by an inscribed Maltese cross.[35] Another *Alea* board with inscribed Maltese crosses as dividing elements from the area of the Upper Agora was later recut and will be discussed below. Two professionally carved game board of the *Alea* type were also found on the plaza in front of the Hadrianic Nymphaeum, above the city's Lower Agora, one of which (a Type 58 board with 3 x 12 squares divided by rosettes in a circle) was carved on a reused statue base; of the very worn second example only the square places can be discerned.[36] Finally, a small limestone fragment of a fourth professionally cut board with rows of squares places separated by an inscribed club, was found on the Colonnaded Street where it had been reused in a post-6th century CE encroachment wall built across the street.[37] Although the fragment cannot be securely provenanced, the board may have come from the porticoes along the Colonnaded Street where a similar graffito board has been recorded (see above).

• Rows: *Tabula?*

A fragmentarily preserved *Alea* game board was found in the central part of the Upper Agora at Sagalassos. The game board originally consisted of three rows of 2 x 6 round markers separated by inscribed Maltese crosses (see above), but at some point in time the stone was recut, leaving only two of the rows (Fig. 9).[38] This modification was not coincidental as seems to be corroborated by erasure of lines of graffiti game boards in the stadium at Aphrodisias, and the presence of a badly preserved board at Sardis with two rows on a stone along the so-called Marble Street.[39] Rather, it was done to create a

34 Selvi-Bener (2008), 180 cat. n° 23, 181-182 cat. n° 24-25. The exact provenance of a fourth professionally carved board, kept in the Antalya Museum - Selvi-Bener (2008), 183 cat. n° 26 - is not known.

35 Talloen (2018), 110-111.

36 Lavan (2013b), 336 and 339; Talloen (2018), 113-114.

37 Lavan (2008), 207; Talloen (2018), 115.

38 For a discussion of the board see Talloen (2018), 112-113 and 121.

39 Bell (2007), 99.

Fig. 9. Limestone monumental 2-Rows Tabula (?) board (L. 155 cm, W. 60 cm, T. 28 cm) from the late antique period on the Upper Agora of Sagalassos (Photo P. Talloen).

two-row game board – perhaps named *Tabula* and the ancestor of backgammon with two rows of twelve markers that appears to have come into existence during the 5th century.[40]

A game board carved on top of a block lying in front of an exedra in the west portico of the Colonnaded Street at Perge consisted of two rows of 12 (or 2 x 6) holes[41]; it may therefore represent the same type of board. A board of 2 x 12 squares is also reported in the *pronaos* of the temple of Apollo at Didyma.[42]

1.5. Grids

Grid boards consist of a grid formed by intersecting lines. They were probably used for the *Ludus Latrunculorum* or "game of small soldiers", a game of strategy for two players.[43] This game was particularly popular in the western part of the Roman Empire, with several examples attested in army contexts. It can perhaps be identified with *Polis* or "game of the city" known in the Greek East during the Classical period, or at least it was a similar game of strategy.[44] The only examples of this type (Type 29), four in total, are all registered at the sanctuary of Leto in the territory of Xanthos, on the steps of the *krepis* of the main temple; three of them had already been reported by Robert Charles Bell.[45] They all display different configurations: 8 x 8 squares (33 x 34 cm), 10 x 10 squares (30 x 33.5 cm; Fig. 10), 12 x 12 squares (23 x 24 cm) and finally one example with 15 x 15 squares (29.5 x 30.5 cm).

1.6. Circles

Finally, a group of circular carvings often interpreted as game boards deserves special attention as the identification of this type is somewhat contested. They are commonly identified as the spherical *Trias* or triodim game, a sophisticated and more complex version of the simple alignment game *Trias* mentioned above.[46] Yet, scholars are increasingly reluctant to identify them as actual game boards.[47] Recent research has shown that the circular game board with four spokes (Type 2) simply does not work, while in the case of those with the eight spokes (Type 4), the outcome of the game would have been determined by the person that could start the game and therefore probably also did not exist.[48] These wheel patterns would then have had other functions. Indeed, the circular carvings in Southwestern Asia Minor display several characteristics that suggest a different function, as *topos* or place signs indicating where groups or individuals might be located for public events.[49] Firstly, unlike most other game boards, these wheels are normally present in open-air

40 Schädler (1995), 85-89; Schädler (2013); https://locusludi.ch/lexicon/ (last accessed dd. 17/09/2021). A backgammon-type game on a 24-squares board is described by the 6th-century author Agathias Scholasticus (*The Greek Anthology*, Epigram 9.482).

41 Selvi-Bener (2008), 173 cat. n° 16.

42 Höckmann (1996).

43 Schädler (1994); https://locusludi.ch/lexicon/ (last accessed dd. 17/09/2021).

44 Schädler (1994), 50, 59; https://locusludi.ch/lexicon/ (last accessed dd. 17/09/2021).

45 Bell (2007), 98.

46 Parlett (1999), 116-119.

47 Roueché 2007; Schädler (2013). Some studies, however, suggest a connection of these floor markings with nut or pebble throwing games; see Behling (2014).

48 Heimann, Schädler (2014); Schädler (2018).

49 See also Roueché 2007.

Fig. 10. Type 29 Ludus Latrunculorum board (L. 28.6 cm, W. 35 cm) incised into the second step of the south, limestone krepis of the Hellenistic temple of Leto at Letoon (Photo P. Talloen).

areas, such as the pavement slabs of squares (f.i. the Upper and Lower Agora at Sagalassos) or streets (the Decumanus street at Xanthos), and far less in covered or shaded places that were generally preferred for the creation of boards (see below). Moreover, their size (with a diameter of at least 40 cm) is often too large for what would be essentially a simple game of *Trias*; in comparison, three men's morris boards (square *Trias,* Type 23) are on average only 10 by 11 cm. Furthermore, they were also often accompanied by symbols, such as crosses, or texts. One example with four spokes from Xanthos on the slabs of the Decumanus is accompanied with the genitive case of the name Nikaratos. A similar example set within a rectangle on a slab of the Upper Agora at Sagalassos has the text "*NIKA H TYXH*" inscribed under it, a common acclamation used for political and religious associations in the city and elsewhere. In fact, the spoked wheel is directed towards the Prytaneion which served as a public dining hall in late antiquity. In front of this hall, two *topos* inscriptions of the circus faction of the *Benetoi* or "Blues" are recorded. Such associations are also elsewhere in the city epigraphically attested in the immediate vicinity of these carvings: a round wheel with four spokes was found on the stylobate of the *palaestra* of the Roman Baths, known as the meeting place of the *Michaelitai* or adherents of Saint Michael, and the *Benetoi*, while two wheels with four spokes are present on the north side of the pavement of the Macellum courtyard, a meeting place of the *Neoteri* ("the younger ones") as suggested by an acclamation carved on one the columns of the portico surrounding the square.[50] On the southern edge of the city's Lower Agora a circle with four spokes was found near an acclamation for one of the seven city districts[51], again identifying the square as an area for social gathering. A similar function can be suggested for the three eight-spoked wheels (Type 4; diameter of 40 to 60 cm) in the area of the former *pronoas* of the temple of Leto, as the former sanctuary is known to have been a place of gathering of the *Marianoi*, probably an association of adherents of Mary, the Mother of Christ.[52] In the light of these observations, such wheels will therefore not be considered as game boards here.

2. SPATIAL DISTRIBUTION

Game boards can give us an understanding of the use of the places where they have been found.[53] Conversely, the location of these game boards within the urban context can inform about the role and status of gaming in local society. When considering

50 On the late antique associations of Sagalassos see Talloen (forthcoming).

51 *Supplementum Epigraphicum Graecum* 62 n° 1341 (consulted online dd. 17/09/2021).

52 See http://csla.history.ox.ac.uk/record.php?recid=E00864 (last accessed dd. 17/09/2021).

53 For a recent overview of the spatial context of games in the Early Byzantine period see Crist (2020).

their locations, it is also important to be sensitive to the different types of markings which can observed. Professionally-cut game boards imply a very different set of social relationships than do casually inscribed ones.[54]

2.1. Agoras and Plazas

As locations of game boards, public gathering spaces like the agora and other types of squares and plazas, and especially the porticoes surrounding them, stand out: 35.5% of all documented boards (30 out of 84 boards) have been found in these types of spaces. The southwest corner of the Upper Agora at Sagalassos, for example, is littered with evidence of board games, scratched on the steps of monuments, or set up in the porticoes surrounding the square. At least eight Type 23 boards were carved on the bench of the southwest honorific column (Fig. 1). They are present on the north and east side of the monuments, the sides that are shaded from lunch time onwards. The close proximity of several identical game boards – not enough apart to allow them to be used by different couples of players at the same time – may have been the result of the movement of shade as the sun turns, with the game boards on the north side being shaded at noon, and those on the east side being shaded in the late afternoon. The erasure of one of them suggests that not everybody found this pastime appropriate.

The Upper Agora also features three monumental boards, belonging to different types. The original setting of the Type 61 board with letters can no longer be ascertained, yet its current location in the west portico of the square provides us with some clues (Fig. 6). The wall of the shop at the back of the portico in which it was incorporated is part of a range of constructions around the Upper Agora which were (re)built in the first half of the 6th century CE and to a large extent consisted of *spolia*. Earlier studies indicated that many of these reused blocks originally belonged to monuments which embellished the square and its immediate surroundings. They were removed as part of a large clean-up operation of the agora area in the early 6th century, of monuments which were no longer considered relevant to contemporary society.[55] Therefore, it seems likely that the *Duodecim Scripta* board too was part of a civic installation on or surrounding the square. This hypothesis finds corroboration in the presence of another monumental 3-Rows game board with 3 x 12 squares divided by crosses that was excavated in the same portico in its original setting, in front of a public dining hall, with seats for the two players still *in situ*. Finally, a similar, professionally cut 3-Rows board, which had been recut and thus became a 2-Rows board, was found in the middle of the Upper Agora (Fig. 9). A small opening in the rim of one of the long sides was most probably cut to drain (rain) water from the recessed field which would suggest that the board was originally intended to be placed in the open air.

Somewhat surprisingly, no game boards were documented on the second public square of the city, the Lower Agora, in spite of a detailed study of the square.[56] Yet, at the Hadrianic nymphaeum facing a small plaza above the Lower Agora, at least three casually inscribed game boards are attested on the steps leading to the drawing basin: two examples of 2 x 5 rows (Type 31; Fig. 2) and one 2 x 9 rows (Type 35).[57] Furthermore, two monumental *Alea* boards were found on the same plaza, identifying it as a favourite spot for socialising.[58] The fact that one of them was again provided with an opening in the rim around the playing field indicates that this example too was most probably set up in the open air.

In the Macellum or food market of Perge – sometimes also identified as an agora – a professionally carved 3-Rows game board was found in its original set-up in the north portico (Fig. 8), together with the accompanying seats, while a graffito example of a Type 56 board (3 x 12 circles divided by an X) is also attested in the portico to the west.[59] Furthermore, three holes boards (Type 42) were found in the entrances to this market place.[60] Such presence of game boards, as also attested at the southern and western entrances to the West Agora of Xanthos, must have hindered access to these spaces, but also indicates that such activity was socially accepted there.

Far fewer boards could be documented on the pavement slabs of the squares themselves. Only on those of the plaza at crossing of the Cardo and Decumanus at Xanthos could one Type 31 and one Type 38 (Fig. 3) be discerned. Unsurprisingly, they are present on slabs that are shaded by the nearby west portico and the gate of the Decumanus in the late afternoon.

54 Lavan (2013a), 62; Talloen (2018).

55 Lavan (2013b); Talloen, Poblome (2016), 140.

56 None of the three boards listed by Lavan (2013b), 336 can be positively identified as a game board: one is a circle with four spokes, which probably served as a *topos* marker (see above); the other two are cross graffiti. The professionally carved game board he mentions (*ibid.*) was in fact found on the plaza above the Lower Agora, and is therefore discussed here as part of that public square.

57 Lavan (2013b), 327, Fig. 10c and 339 mentions a total of eight graffiti boards but no traces of the other five could be discerned upon closer inspection in the summer of 2021.

58 Lavan (2013b), 336 and 339; Talloen (2018), 113-114.

59 Selvi-Bener (2008), 177 cat. n° 20 (graffito) and 180 cat. n° 23 (monumental board).

60 Selvi-Bener (2008), 165-167 cat. n° 8-10.

2.2. Colonnaded Streets

Serving as the backbone and representing the main avenues of the ancient city, colonnaded streets and especially their roofed porticoes sheltered an amalgam of commercial and social activities.[61] Numerous boards have been recorded on the steps and stylobates of the porticoes of these street, as attested at Sagalassos (#1), Patara (#3), Perge (#5), and Xanthos (#9) (21.5% of all boards), but none on the actual street slabs. The presence of shade appears to have been of primary importance in their location, as also indicated by the fact that several examples have been documented on the steps of the south portico of the Decumanus at Xanthos (Fig. 7) but none on those of the north portico, which was exposed to the sun. Here, as on the Upper Agora at Sagalassos, people obviously avoided the sun when engaging in board games. Moreover, the boards show a concentration at the southeast end of the street, near the entrance to the East Agora, suggesting that they were used by people on their way to or from the public square.

While most players will have been seated on the steps or benches of the porticoes, the graffito *Alea* board (Type 62) carved on the stylobate of the west portico of the Colonnaded Street at Sagalassos is situated 1.10 m above the level of the pavement of the street, indicating that players could have been standing on the street, leaning against the stylobate that carried the board.

On the steps of two small staircases leading from the street to the western portico of the so-called Harbour Street at Patara, two examples of Type 42 boards are attested (Fig. 4). Also on the door steps of the shops at the back of the portico, game boards are present, like the Type 23 board on the doorstep of a shop at Patara. Together with the examples noted on the doorstep of the northern row of shops of the West Agora at Xanthos, one could easily imagine shopkeepers playing while waiting for customers.[62]

2.3. Baths

Roman baths were leisure buildings, built not only for bathing, but also to provide a place for social life, news, gossip, lectures, and games.[63] At Patara (#2) and Perge (#5) instances of game boards have been noted at the *propylon* or entrance to the complex, as well as in the colonnades surrounding the exercise area or *palaestra* (8% of all documented boards). In the *propylon* and *palaestra* of the South Baths of Perge a total of four holes boards (Type 42) were recorded, while a 3-Rows game was casually inscribed inside the southern portico of the *palaestra*. At Patara, on the stylobate of the late 2nd-century CE *propylon* of the Baths of Nero, a square with four spokes (Type 23) and a rectangle of 2 x 8 squares (Type 34) have been recorded.[64]

2.4. Theatres

Another major venue in the ancient city was the theatre, but only few boards are noted there. At Sagalassos, three boards (one Type 23 and two Type 26 or 27) have so far been documented on the upper tiers of the *cavea*, carved by a waiting or uninterested audience. While the stage building of the theatre at Xanthos has also produced a board, the block with a circular series of holes was reused as *spolia* in its back wall, and can therefore not be related to gaming at that location. It should be noted, however, that these are chance identifications and that systematic surveys of the theatres (and other spectacle buildings) are bound to produce many more examples, as they did, for example, at Aphrodisias.[65]

2.5. City Gates

Inside the horseshoe-shaped courtyard of the Hellenistic city gate of Perge, which was re-arranged during the early 2nd century CE into a honorific monument for the Plancii dynasty with benches along its inner walls[66], three game boards are found, belonging to the holes type Type 40 (#1) and Type 42 (#2).[67]

On the east side of the podium of the Doric Temple of Sagalassos, which served as a tower flanking the late antique city gate[68], a cross-in-square (Type 23) and 2 x 5 holes board (Type 42) are attested. The Type 42 board is present on top of the 1.28 m high podium of the Early Roman Imperial Doric Temple. This would mean that players were again standing/leaning against the podium to play. For the Type 23 board on the stepped *krepis* below the podium of the temple, players could have been seated. While both boards are present to the north of the *temenos* wall and therefore outside of the sacred area of the Roman Imperial period, it is perhaps more likely to place them in the late antique period after the closure of the Doric Temple and its conversion into a watch tower. This area then became an enclosed and shaded location between the tower, the former *temenos* wall and the new fortification wall, where people could have waited near the gate.

2.6. Sanctuaries

A somewhat surprisingly high concentration of game boards (#9 or 11% of all boards) is found at the sanctuary of Leto near Xanthos. The federal

61 Burns (2017).

62 Boards in front of shops have also been recorded at Kibyra, Laodikeia and Tripolis in Phrygia (see footnote n° 3).

63 See e.g. the *Latrunculi* boards in the Antonine Baths at Carthage mentioned by De Voogt (2019).

64 Aktaş (2016), 2.

65 Schädler (1998), 12-15 and Fig. 3.

66 Çokay-Kepçe *et al.* (2019).

67 Selvi-Bener (2008), 160 cat. n° 3 and 168-169 cat. n° 11-12.

68 Talloen, Vercauteren (2011), 361-362.

sanctuary of Lycia, with a water source at its heart as well as three Greek-style temples from the Hellenistic period, went out of use in the 4th century CE, but remained a sacred spot through the construction of a church at site in the 6th century.[69] Unlike the temples of Apollo and Artemis, where only one small Type 23 board was noted, the temple of Leto was not dismantled for the construction of 6th-century basilica. Instead the temple was used as an auxiliary structure of the church, until its destruction in the 7th century CE. The eight game boards are concentrated in the area of the *pronaos* on the southern side of the temple, facing the church. The relatively high number of boards identifies the former temple as a popular venue.[70] An acclamation graffito on the doorjamb of the temple of Leto mentions the association of *Marianoi*, probably worshippers of Mary, who appear to have gathered here (see above). The members of the association may have used the time they were waiting playing games.[71]

2.7. Graves

The steps of the base of the so-called Pillar Sarcophagus at Xanthos (Fig. 5) may seem a somewhat peculiar location for the seven circular boards discussed above, but we should not forget that such prominent elite tombs were often situated in the heart of Lycian settlements.[72] As a result this tomb was only a few meters from major social venues such as the theatre and the West Agora. The elaborate size of the monument will also have provided ample shade for those sitting on its benches.

2.8. Houses

Inside homes these scratched and carved stone boards are far less attested for the simple reason that portable, wooden boards will most probably have been used there.[73] For the region under study here, only at Xanthos are impromptu stone examples known. One Type 23 and one Type 31 board are present on the step of the northern portico of the peristyle of the late antique mansion on the Lycian acropolis. They may have been used by staff or visitors/clients lingering in the courtyard, as the inhabitants of this opulent mansion will surely have had more outstanding game boards, befitting members of the urban elite.

69 Des Courtils (2003), 140-153; Talloen, Vercauteren (2011), 364-366.

70 This situation is somewhat comparable to that of the temple of Apollo at Didyma where many board games were found engraved on front side of the temple, see Höckmann (1996).

71 See Crist 2020 for the presence of Byzantine graffiti games in (semi-) public spaces where people were required to wait.

72 Hülden (2016), 382.

73 For an exceptional *Alea* board carved on a stone table from the *Hänghauser* in Ephesos see Schädler (2016).

3. CHRONOLOGY

Game boards, in particular graffito examples, are notoriously difficult to date, especially as board games are characterized by continuity in both shape and playing practice.[74] Yet, several clues for establishing a general chronological framework can be discerned. Sometimes this can be done on the basis of internal criteria such as the type and style of certain features of the board (f.i. letters and crosses). More often, though, they can be dated through combining observations with contextual information relating to the construction on which they appear (including those derived from the study of *spolia*), or from examining their distribution patterns, which usually relate to an architectural frame, of a particular phase.

3.1. Circle of holes

The earliest known instances of game boards in Southwestern Asia Minor come from Xanthos in the form of the "Schälchenkreise". They could be given a provisional date between the middle of the 3rd century BCE (the date of the erection of the Pillar sarcophagus where most of the boards were documented) and the end of the 1st century CE (the construction date of the stage building of the Roman theatre in which the block carrying one defunct example of the board was reused as *spolia*).[75] Elsewhere, on Crete, these boards were dated to the Hellenistic period, yet a similar circular hole board at Aphrodisias (Type 51) was found carved on the seats of the local stadium, constructed in the 1st century CE.[76]

3.2. Ludus Latrunculorum / Polis

There are no clear indications for the date of the grid boards (Type 29) attested on the *krepis* of the main temple at the Letoon. Although possible related, the *Polis* game has a far more limited spatial and chronological distribution (i.e. the Greek mainland during the Classical period) than the "game of small soldiers"[77], and is therefore perhaps less likely as identification. *Ludus Latrunculorum* is first mentioned by Varro in the 1st century BCE and most literary references belong to the early Roman imperial period.[78] The temple of Leto is dated to the 2nd century BCE, providing us with a *terminus post quem* for the game boards carved on its stylobate and *krepis*. Yet, given the sacrosanctity of temples, it is unlikely that the graffito boards on the steps

74 De Voogt (2019).

75 See Dönmez, Schürr (2022) for a more detailed argumentation of the date.

76 For the Cretan examples see Lefèvre-Novaro (2016). For the stadium of Aphrodisias see Welch (1998), 550 Fig. 3; https://locusludi.ch/aphrodisias/ (last accessed dd. 21/09/2021).

77 For the *Polis* boards in Attica see the contribution in this volume.

78 Varro, *On the Latin Language*, 10.22 (trans. R.G. Kent, Loeb); Schädler (1994), 58.

and inside the peristyle of the temple were carved when the sanctuary was still in use. A date after its abandonment and conversion into an annex of the nearby church (see above) seems far more plausible, which would result in a late antique date for these game boards.

3.3. Square boards

The game played on board Type 23 is already described by Ovid (43 BCE-18 CE)[79] but some boards documented in Southwestern Asia Minor can be dated securely to late antiquity such as the one present in the courtyard of the Mansion on the Lycian Akropolis of Xanthos. The peristyle was built around the middle of the 4th century CE and abandoned in the 7th century[80], providing us with a closed date for the arrangement of the game boards on its stylobate. Other examples from the city, such as those on the West Agora and along the Decumanus, can only be assigned a *post quem* date in the Roman Imperial period, based on the construction date of the surfaces on which they are carved.

The same is true for the examples from Patara and Sagalassos: at Patara the arrangement of the *propylon* of the Baths of Nero at the end of the 2nd century CE provides us with a *terminus post quem*, while the eight boards on the bench of southwest honorific column at Sagalassos should be dated after its erection around beginning of our era. The board present on the *krepis* of the Doric Temple in the latter city can be dated after its construction in the early 1st century CE, but as argued before, the presence near the late antique city gate suggests a later date.

The existence of boards made up of three concentric squares (Type 27) possibly used for the game of Nine Men's Morris in the Roman period is a matter of debate; all known examples date to the Byzantine period, probably reflecting the introduction of this game by the Arabs.[81]

3.4. Rectangles

Although the game of Five Lines, for which this board was probably used, is already archaeologically attested in the 7th century BCE, the rectangle boards were most probably a later development.[82] This is also brought out by the boards of Southwestern Asia Minor: a Type 31 board at Xanthos could be dated to late antiquity on the basis of its presence in the Mansion. The location of the Type 38 board incised beside the arch at the crossing of the Decumanus and Cardo appears to have been determined by the shade the monument provided (see above). As this arch was constructed in the later 4th century CE[83], the board should be dated afterwards. The examples from Sagalassos can only be given a *post quem* date as they are scratched on the steps of the Hadrianic nymphaeum, built ca. 129-132 CE.[84]

3.5. Holes

Holes boards, often referred to as Mancala, are generally considered a product of the Roman Imperial period in Asia Minor.[85] This also appears to be the case in the southwestern part of the subcontinent. The examples at Perge in the *propylon* (built during the reign of Septimius Severus) and in the *palaestra* of the South Baths (dating to the reign of Hadrian) obviously follow the construction of their respective monuments, while the examples inside the Hellenistic gate can be dated after the rearrangement of the gate (and the addition of seats along its inner courtyard) in the first half of the 2nd century CE.[86] The lay-out of the Harbour Street during the reign of Trajan at Patara provides a *terminus post quem* for the examples on the staircases leading to its west portico.[87]

If the boards on the Doric Temple at Sagalassos are indeed related to the presence of the late antique city gate, then the construction of the gate in the late 5th - 6th century CE provides us with a *terminus post quem* for the Type 42 board on top of its podium.

3.6. Rows

The different types of Rows game boards documented in Southwestern Asia Minor appear to belong to different periods, though chronological overlap cannot be excluded.

• Lettered *Duodecim Scripta* or *Alea*

The mention of Quintus Mucius Scaevola (d. 88 BCE) as a formidable player of the *Ludus Duodecim Scriptorium* by Cicero[88] indicates that it was already played during the Republican period. For the only known example from Sagalassos, a 3rd century CE date has been suggested on the basis of its lettering.[89] At some point in time between the 3rd and 6th century CE, the board was removed from a public space and eventually reused in the 6th century as building material in the walls of one of the shops at the back of the western portico of the city's Upper Agora, where it was carefully plastered over.

• Non-Lettered *Duodecim Scripta* or *Alea*

The non-lettered *Alea* board type appears to originate in the 3rd century CE. One of the earliest dated examples is the game board incised on a marble

79 Ovid, *Art of Love,* 3. 365-366 (trans. J.H. Mozley, Loeb).

80 Manière-Lévêque (2007), 477.

81 Personal communication by U. Schädler.

82 Schädler (1998).

83 Des Courtils (2003), 83.

84 Mägele *et al.* (2007).

85 Schädler (1998).

86 For the dates of these monuments see Çokay-Kepçe *et al.* (2019).

87 İşkan (2016), 154.

88 Cicero, *On the Orator*, 1.217 (trans. E.W. Sutton, H. Rackham, Loeb).

89 Talloen (2018), 102-104.

table found in the peristyle of Unit 7 in *Hanghaus* 2.[90] The board found inside the west portico of the Upper Agora at Sagalassos can intrinsically only be broadly dated to the 5th-6th century CE on the basis of the inscribed Maltese cross at its centre, but the fact that the whole western portico was rebuilt in the first half of the 6th century CE, as well as the fact that the board was found in front of the Prytaneion that remained in use until the early 7th century, clearly situates its installation and use in the portico in the 6th century.[91] A second *Alea* board from Sagalassos, found on the plaza in front of the Hadrianic Nymphaeum, was carved on the shaft of a reused statue base for an unidentified emperor which had been set up by a late 3rd- or early 4th-century CE governor of Pamphylia.[92] Consequently, the late 3rd- or early 4th-century CE date of the statue base constitutes a *terminus post quem* for the creation of this board. The thorough reconstruction of the west portico of the Colonnaded Street during the 6th century CE and its eventual destruction during the 7th century[93] equally suggests a late antique date for the graffito example recorded on its stylobate.

The Christian crosses carved on the graffito *Alea* board of the Decumanus at Xanthos also give it a late antique date, while an identical board in the eastern *pteron* of the nearby temple of Leto should be dated after the closure of the temple in the 4th century CE and prior to the earthquake that destroyed the complex in the 7th century CE (see above).

The graffito examples at Perge can be broadly dated to the Roman Imperial-Early Byzantine period, based on the construction date and abandonment of the buildings – the Macellum and the South Baths – where they have been documented, though the installation of the monumental board in the northeast corner of the portico of the Macellum can probably be attributed to the late antique period, given that it was carved on the top part of a reused statue base (see above).

• *Tabula*:

The re-carved *Alea* board found *in situ* in the middle of the Upper Agora at Sagalassos was originally of the same type as that found in front of the Prytaneion, thus allowing for a 5th- or 6th-century CE date. Yet, by the middle of the 7th century CE, when an earthquake struck the city and caused its monumental centre to be abandoned, it had been re-modelled into a 2-rows board. Such a late antique date can also be argued for the 2-rows board documented at Perge, as it too was found in its original set-up, in front of an exedra along the Colonnaded Street that remained in use until the 7th century CE.[94]

90 Schädler (2016).

91 Talloen (2018), 110-111.

92 Talloen (2018), 113-114.

93 Jacobs,Waelkens (2013).

94 Çokay-Kepçe *et al.* (2019).

4. REGIONALITY

Generally speaking, the game boards documented in Southwestern Asia Minor are attested throughout the Roman world. They add to the characterization of the region as part of the vast cultural zone created under Rome, and thus provide another indication for the integrative force of empire. Nevertheless, some regional trends can be ascertained. The so-called "Schälchenkreise" or circular series of scoops (eight examples at Xanthos), for instance, and the *Ludus Latrunculorum* (four examples at Letoon) are boards for games only attested in Lycia. The latter, though, is a well-known game, attested in several regions of the ancient Mediterranean and in its *Polis* form already since the Classical period; its limited appearance may therefore be a matter of coincidence. Yet, the "Schälchenkreise" appear to be a more restricted phenomenon, attested outside Lycia only in Crete. It may therefore well be a socio-cultural characteristic of this area.

While the rules of the game and configurations of the boards remain largely unchanged, certain aspects of board games can be sensitive to their socio-cultural environment.[95] For example, variation is possible in board game design. As mentioned above, rectangle and hole boards may both have served (variants) of the game of Five Lines. Yet, while Type 42 boards with 5 x 2 scoops were very popular in Perge (nine instances) and also attested at Patara (two instances), only one example was documented at Sagalassos and none at Xanthos. Conversely, the latter city has numerous Type 31 boards (seven examples of 2 x 5 squares), which are not known from Perge.

Such variation in design is also possible in the carving of elaborate game boards such as the row boards, which may consist of a few lines of dots or of elaborate rows of markings. The tendency for adding textual elements to gaming objects was not as widespread in Southwestern Asia Minor as it was in the west part of the Roman Empire where the most common appearance of *Duodecim Scripta* is as a set of letters that together read as a hexameter. Yet, as far as the non-lettered *Alea* boards are concerned, the presence of different designs for the same board within the community of Sagalassos already indicates that variations in design are unlikely to be a socio-cultural characteristic that points to regional appropriation and/or adaptation of the board.[96]

The materiality of boards, on the other hand, is an aspect that is relevant for understanding the cultural and socio-political significance of the people associated with the game. Particularly striking for Southwestern Asia Minor is the prominence of professionally carved, public game boards for the games of *Duodecim Scripta* / *Alea*. In several cities

95 De Voogt (2019), 90.

96 See also De Voogt (2019), 96.

of the region – including Aphrodisias and Ephesos discussed in other contributions – boards for these games were carved on large stone blocks which due to their considerable weight – generally between 400 and 600 kg – must have been part of a permanent set-up or installation. Together with their formal attributes, as carefully carved boards created by professional stone cutters, and their prominent locations in public spaces – set up in the porticoes of city squares, streets or public buildings – these can be considered a form of urban amenities. While these monumental examples undoubtedly served the same purpose as the *ad hoc* graffiti boards casually scratched on pavements, steps, and seats, their shape and location suggest a wholly different public attitude towards gaming in those cities, with communities investing in their monumental form. In other words, large, professionally carved game boards imply a very different set of social relationships than do casually inscribed graffiti.[97]

These professionally carved boards tell us about the status of this game in these cities, where it was obviously considered a game of some standing and awarded a monumental form by local authorities. This stands in contrast to the general disdain with which all forms of gaming were regarded by the official morality of Roman political circles.[98] People could play dice in taverns and private houses throughout the year, but public space does not appear to have been one of those places nor that a civic amenity would provided for it. All of this makes the boards of Southwestern Asia Minor even more exceptional. What is more, the decorative schemes of some boards from Sagalassos (and also from Aphrodisias and Ephesos) even hint at a Christian sanction for the boards in spite of the protest by Church Fathers and other Christian officials against gaming.[99]

Four instances of monumental boards have been documented at Perge, and no less than six are attested at Sagalassos, where it was apparently a major urban amenity, yet none are not known from the Lycian sites discussed here. In a previous study this phenomenon has been tentatively related to the spread of monumental forms of *astragaloi* oracles, which show the same geographical distribution.[100] Given that both practices are closely related by the central role of chance[101], the important social role of these oracles and the official public attention they received in the region may have instituted a form of path dependency that brought about this exceptional monumentalization of board games.

CONCLUSION

On the basis of instances recorded at four well-documented cities in Southwestern Asia Minor, this paper presented an overview of the different game boards attested in the region. Several kinds of game boards, used for board games commonly played throughout the ancient Mediterranean, could be identified: *Trias*, variations of *Pente Grammai*, and *Alea* boards proved most common; *Ludus Latrunculorum* and an unidentified game played on a board consisting of a circular series of scoops were limited to Xanthos. The large number of boards characterize gaming as a popular element of daily life in those cities.

As the game boards were either graffiti or large objects, they generally did not move from the location where the games were played, providing us with crucial information concerning the context and status of games in communities of Southwestern Asia Minor. Unsurprisingly, game boards have been recorded in all major public areas: they were an especially common feature in the shaded porticos bordering the city squares and colonnaded streets. Moreover, game boards are often found in clusters, indicating nodes of sociability, places in the urban fabric where people would meet and engage in social practices, gaming being one of them.

With the possible exception of the "Schälchenkreise" at Xanthos, the game boards of Southwestern Asia Minor are very much a phenomenon of the (late) Roman Imperial period. Investigation of the cultural transmission of games has indicated that imperial conquest was but one of a variety of transmission channels through which most games were transmitted spatially.[102] Nevertheless, the appearance of these board games during the Roman Imperial period as well as their consistency, belonging to types found throughout the Mediterranean, suggest that the increased connectivity made possible by the incorporation of Southwestern Asia Minor into the Roman Empire will at least have stimulated their spread. Having said that, one should also not forget that the large-scale building programs which occurred during the Roman Imperial period at many cities provided the necessary stone surfaces on which these boards could be carved or scratched. A late antique date seems certain for many of the boards in Southwestern Asia Minor. According to Luke Lavan, there appears to have been a slight loosening of control over what was inscribed on public stone

97 See Lavan (2013a), 62; Talloen (2018).

98 Purcell (2007), 90. Purcell (1995) analyses at greater length the Roman hostility to *Alea*, against the background of attitudes to various sorts of play.

99 The presence of the cross as a simple decorative apparatus, as contended by Lavan (2021) 254, seems out of the question for this age.

100 Like monumental game boards, oracles are equally absent from Lycia; only Kibyra to the north and Kitanaura to the east have such oracles (see Talloen (2018) 123 and fig. 11) but neither were part of Lycia proper.

101 Purcell (1995), 4; Purcell (2007), 95.

102 De Voogt *et al.* (2013).

surfaces in Asia Minor during the 5th-6th century[103], something which may also explain the observed increase in the number of game boards to some extent.

Generally, high fidelity in the transmission of board games can be discerned, with configurations and therefore possibly rules remaining largely unchanged.[104] Yet, certain aspects of board games proved sensitive to their socio-cultural environment. In the case of Southwestern Asia Minor, the materiality of the boards was a factor of cultural identity and specificity. Like elsewhere, most of the recorded boards (74 out of 84 or 88%) are impromptu graffiti, carved by city dwellers with too much time on their hands, looking for an exciting way to spend their idle time. But the exceptional prominence given to the *Alea* game in the region resulted in professionally carved game boards, speaking not only to the status of the game in contemporary society but also revealing social and cultural values.

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103 Lavan (2012), 63.

104 De Voogt *et al.* (2013).

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Gaming in the Place of Palms at Aphrodisias

The Place of Palms at Aphrodisias was an elaborate urban park modelled on the imperial *porticus* of Rome (Fig. 1). Recent excavations—combined with architectural, epigraphic and sculptural analysis—have shown that this remarkable complex, while conceived in the early 1st c. CE, was progressively monumentalized, maintained, and reconfigured over the course of the next six centuries until its dramatic destruction in the 7th c. CE.[1] Careful survey of the stone surfaces of the various structures constituting this complex has also revealed hundreds of inscriptions.[2] Some of these are monumental, official texts.[3] However, the majority are more informal and testify to the intense, everyday use of this space by the ordinary citizens of Aphrodisias. These inscriptions include textual and pictorial graffiti, short functional texts identifying places (*topos* inscriptions) or naming sponsors of building work, as well as masons' marks. More than half of these documents, however, a total of 532, are gameboards.[4] This is the highest concentration of gameboards recorded anywhere in the Roman world, by quite a considerable margin. For the study of Roman gaming, therefore, the Places of Palms is an exceptional complex.[5]

1. THE PLACE OF PALMS

The complex that by late antiquity was known as the Place of Palms evolved into a unified public space over 500 years (Fig. 2; Fig. 3). Its first elements were laid out in the early 1st c. CE when the decision was made to build over the previously empty (and probably marshy) area between the Agora, to the north, and the Theatre, to the south. The cutting back of the northward projection of the Theatre hill and the construction of a substantial masonry retaining wall—with a staircase through it to the Theatre—delineated the southern edge of this new space. A stoa probably ran at least part of the way along this retaining wall, to judge from cuttings for roof beams preserved in its elevation. To the north, another stoa divided the space from the Agora. This North Stoa was dedicated by a Diogenes son of Menandros to Aphrodite, the deified Augustus, the current emperor Tiberius, Livia, and the People.[6] This inscription

1 The excavations in the Place of Palms between 2012 and 2017 were generously funded by the Mica and Ahmet Ertegun South Agora Pool Project as part of the New York University excavations at Aphrodisias, directed by Bert Smith. Prior to this project, work in this area of Aphrodisias was undertaken in 1904–1905, in 1937, and in various locations between 1969 and 1991.

2 This survey work was undertaken by Angelos Chaniotis, with the assistance of various colleagues, between 1996 and 2019.

3 These include the building inscriptions on the North Stoa, West Stoa, and Propylon; the Diocletianic Edict of Maximum Prices and Currency Edict from the façade of the Civil Basilica; and the three commemorative epigrams inscribed on the base of the Propylon in the late 5th c. CE. On these texts, see Chaniotis (2024 a); on the Aphrodisian copies of the Diocletianic edicts, see Erim *et al.* (1971); Erim, Reynolds (1973); Crawford (2002); Crawford (2023); Chaniotis, Fujii (2015); Stinson (2016), 73–75.

4 Chaniotis (2024b). This total of 532 includes all those examples that are certainly or probably gameboards; others that may well be gameboards but are either very faint or fragmentary have been excluded from this count. This should be regarded as a minimum count of the gameboards still present in the Place of Palms, therefore. For a brief earlier discussion of the gameboards in the complex (then identified as the Portico of Tiberius), see Roueché (2007), 103–104.

5 For a wider contextual overview of the late antique and Byzantine evidence from Asia Minor, see Crist (2021).

6 *IAph2007* 4.4. The mention of the emperor Tiberius led to this building

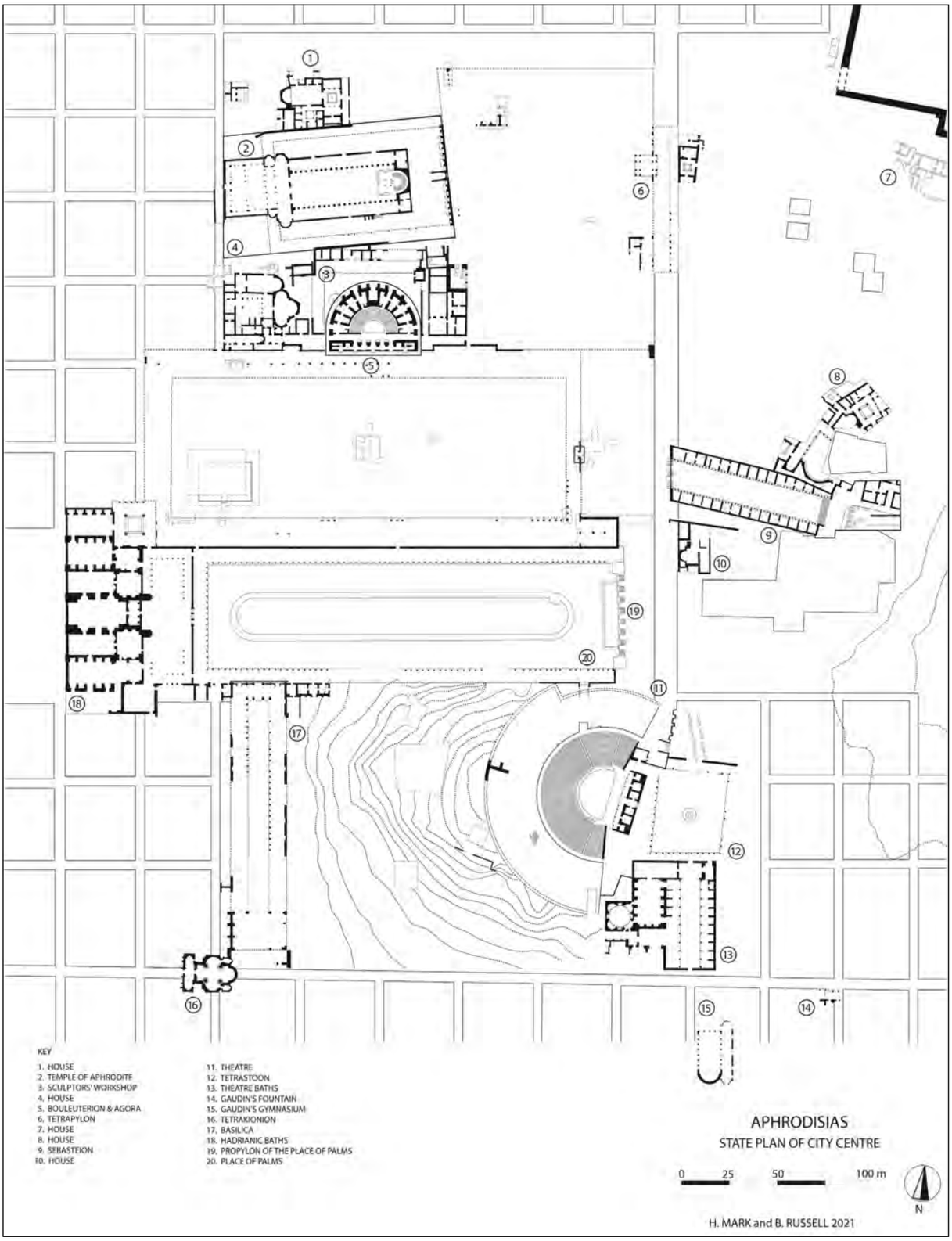


Fig. 1. State plan of the city centre of Aphrodisias, with the Place of Palms marked (20)

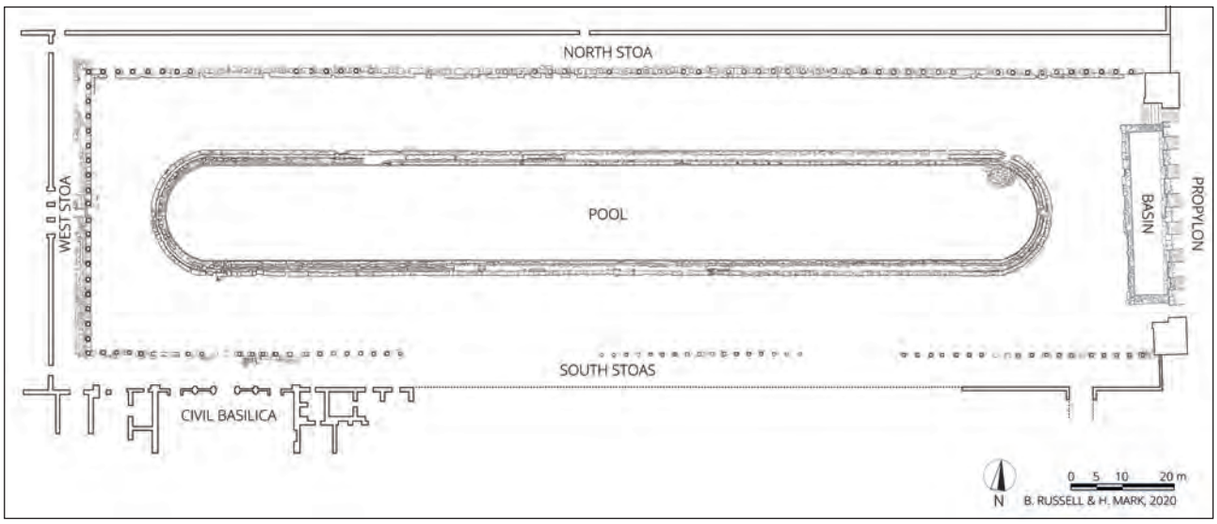


Fig. 2. State plan of the Place of Palms

Fig. 3. The Place of Palms following excavation, looking west

provides us with the most reliable date for the initial phase of construction of the complex; since Livia is named Iulia Augusta, the building must have been erected between 14 and 29 CE. The North Stoa in its current form is 204 m long and contains 70 Ionic columns but originally it would have been at least 74 columns long.

Probably also part of this first phase of construction is the new complex's most striking feature, the nearly 175-m long monumental pool running down its centre (see Fig. 3). The walls of this pool contained a ring drain, which collected ground water and fed it into the city's drainage network, a feature vital to ensuring this area was kept dry enough to be useable. The pool itself is one of the largest known anywhere in the Roman world at this date. Its walls were adorned with seating facing both inwards and outwards, and similar seating ran along the front of the North Stoa. A marble-paved path ran around the pool but most of the open area of the complex was unpaved. Excavations between 2012 and 2014 confirmed that this space, at least on the north side but probably elsewhere, contained parallel rows of planting trenches for greenery. Like the contemporary *porticus* of imperial Rome, therefore, this new civic space combined monumental architecture, lavish water features, and gardens.

being labelled the 'Portico of Tiberius', but since the structure is called a *stoa* in the text and was in fact dedicated to various individuals and groups, we refer to it as the North Stoa.

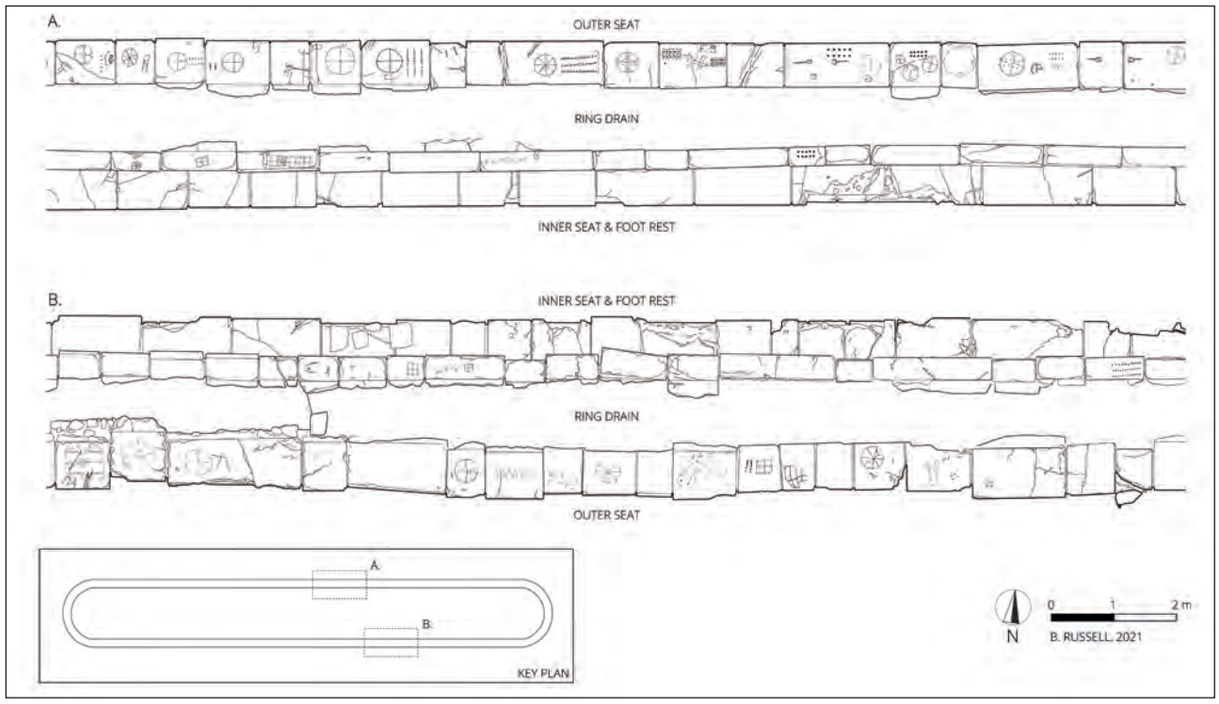


Fig. 4. Concentrations of gameboards on two areas of the pool walls, north (A) and south (B)

At this date the name of this grand new complex is unknown. However, what is clear is that it was highly connected—to the Agora, Theatre, and streets east and west—and quickly attracted further monumental construction. In the Flavian period the new Civil Basilica was added to south of the complex, its northern façade opening on to it.[7] The Propylon of the Place of Palms, a major two-storey columnar façade monument, was constructed across its eastern end by the late 1st c. CE.[8] Between these buildings the southern stoa also seems to have been reconstructed at some point in the 1st c. CE. Early in the 2nd c., the Hadrianic Baths—the largest in the city—were built immediately to the west,[9] and a new West Stoa was constructed, encroaching slightly on the western end of the complex but connecting to the North Stoa.

The long history of this public space is confirmed by later evidence. In the 4th c. the Basilica was restored and furnished with new mosaic floors, while further work took place in the West Stoa. This previously open colonnade was enclosed; doors, indicated by cuttings on the stylobate, were fitted into its intercolumniations and a mosaic installed in its interior. Finds of imperial statuary from the space suggest it was turned into a grand hall, furnished with statues, perhaps as a new entrance portal to the baths beyond. Cuttings on the North Stoa suggest some similar interventions here, though not every intercolumniation was filled. Slots on the north side of some columns suggest that some of the stoa was divided into separate units, while other stretches of it probably remained open. *Topos* inscriptions from some of the columns of the stoa suggest it was used by various individuals and groups at this date: a sophist, a teacher of rhetoric or lawyer, a retailer or tavern keeper, a possible chairman of a guild, and maybe a food-seller are all attested, while other texts just give names.[10]

The key evidence for the final phase of major investment in the Place of Palms comes from a series of epigraphic texts—three epigrams on the façade of the Propylon and a set of acclamations on the columns of the West Stoa.[11] These tell us that in the late 5th c. CE, and probably following an earthquake, the complex was rebuilt or restored. Close analysis of the architectural and stratigraphic evidence from the site confirm the scale of this project. The West Stoa was re-erected by Albinos, a member of the local elite. The North Stoa was repaired, as was the pool, and the ground level between them raised by 30–40 cm. This work seems to have been undertaken jointly by a certain Ampelios, who is referred to as 'father of the city' (πατὴρ τῆς πόλεως) and probably supervised the city's finances and construction works, and the provincial governor Doulkitios. Also at this date a set of stoas, probably two, were constructed along the entire southern edge of the complex, including in front of the Basilica, which was not itself refurbished.

7 On this building, Stinson (2016).

8 This structure has previously been called the 'Agora Gate' and dated to the Antonine period, but a reassessment of the epigraphy from the building suggests that it must be earlier in date than this; see Chaniotis (2024a), no. In2.

9 Wilson (2016a).

10 Chaniotis, Wilson, Russell (2024).

11 *IAph2007 4.*202 i-iii = Chaniotis (2024a), nos. In10–12 (epigrams); *IAph2007* 4.21 = Chaniotis (2024b), nos. WS1, WS4–WS6, WS8–WS10, WS13–WS18, WS20–WS25, WS28 (acclamations).

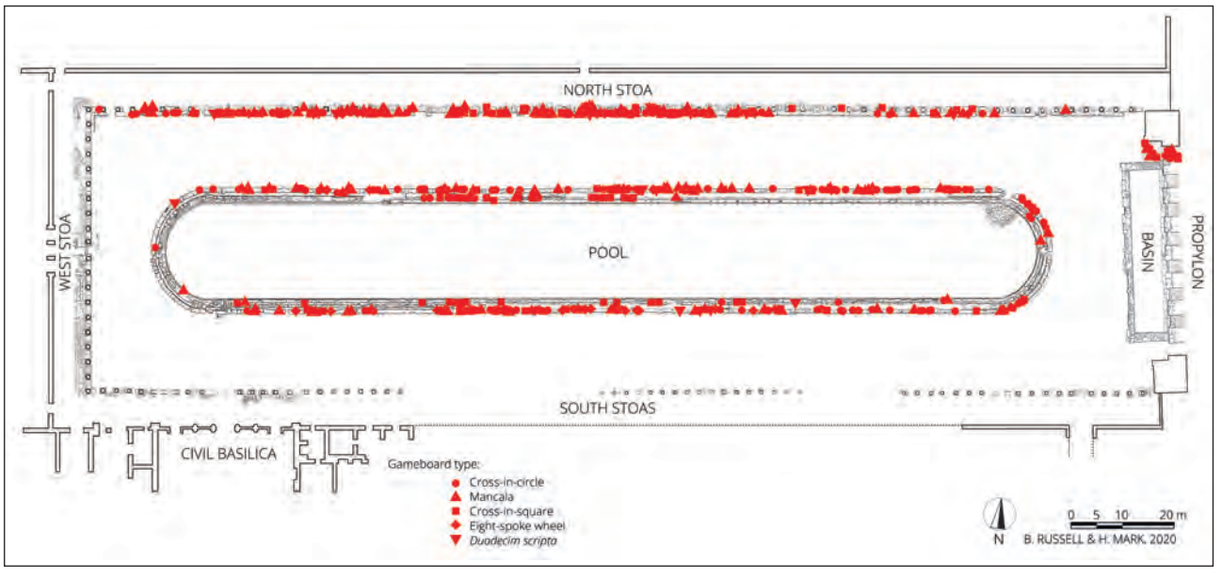


Fig. 5. Distribution of gameboards in the Place of Palms

One of these commemorative epigrams from the Propylon also provides us, for the first time, with a name for the complex. The text in question gives thanks to Ampelios for giving "wonder and splendid beauty to this place of palms (χῶρος φυνικόεις), so that anyone who, among our waters, turns his glance around, may always sing the praise both of him, and of the place, and of the Nymphs as well."[12] By this date, therefore, this nearly 500-year old complex was known as a palm grove. This is not the only reference to a palm grove at Aphrodisias: a 1st- or 2nd-c. CE text, found re-used in the city wall, mentions the construction of a palm grove (here called a φοινεικοῦς).[13] And urban palm groves are not unparalleled: a monumental example is referred to in an early 2nd-c. CE inscription from Smyrna.[14] Given the evidence for planting trenches contemporary with the first phase of the complex, it is reasonable to assume that this complex was always intended to be a sort of garden *porticus* in the metropolitan mould, planted with exotic trees, furnished with an extensive water display, and equipped with seating for hundreds. That this was a public amenity designed from its inception to provide shade and coolness in the heart of the city is vital for understanding the numbers of gameboards identified here.

2. DISTRIBUTION OF GAMEBOARDS

The 532 gameboards documented to date in the Place of Palms are perhaps the most obvious archaeological indication of the popularity of this space with the citizenry of Aphrodisias. Close attention to the carved marble surfaces of the complex has revealed the striking concentration of these features (Fig. 4). Despite their numbers, however, these boards are not spread evenly through the complex (Fig. 5). In fact, there are whole areas where no gameboards have been found at all: on the West Stoa (which is fully excavated), as well as the South Stoa (though only around half of this has been excavated and very little of its stylobate or seat blocks have either been exposed or survive). No gameboards have been found on any of the surviving marble-paved path that ran around the pool. Over half of the gameboards in the Place of Palms, 291 of them, are on the seats around the pool. The bulk of the rest, 226, come from the stylobate and seat blocks of the North Stoa, while 15 were also documented on the steps of the Propylon. The individuals responsible for inscribing these gameboards, therefore, were making specific decisions about where to place them—they were not simply inscribing them wherever they could.

Some insight into the decision-making behind the placement of gameboards can be seen in the specific location of boards on the North Stoa and around the pool. On the North Stoa just over 75% of the recorded gameboards come from the outward-facing seat blocks rather than the stylobate (Fig. 6). Since many of the stylobate blocks in the North Stoa have been removed, this percentage is probably not an accurate representation of the ancient reality. However, even where the stylobate blocks remain in place, gameboards on the seat blocks typically outnumber those on the stylobate by a ratio of two or three to one.

This pattern is even clearer on the walls of the pool. As noted above, the pool was ringed by a double set of walls, between which was a ring drain covered by marble slabs (see Fig. 4).[15] Each wall was topped by a seat block, with the interior one also provided with a

12 Roueché (1989), 68 no. 38.

13 Chaniotis (2008), 74.

14 *IGR* IV 1431; *I.Smyrna* 697; for discussion, Bowie (2012); Hallmannsecker (2017), 120–122.

15 See Wilson (2016b) for a preliminary description and discussion.

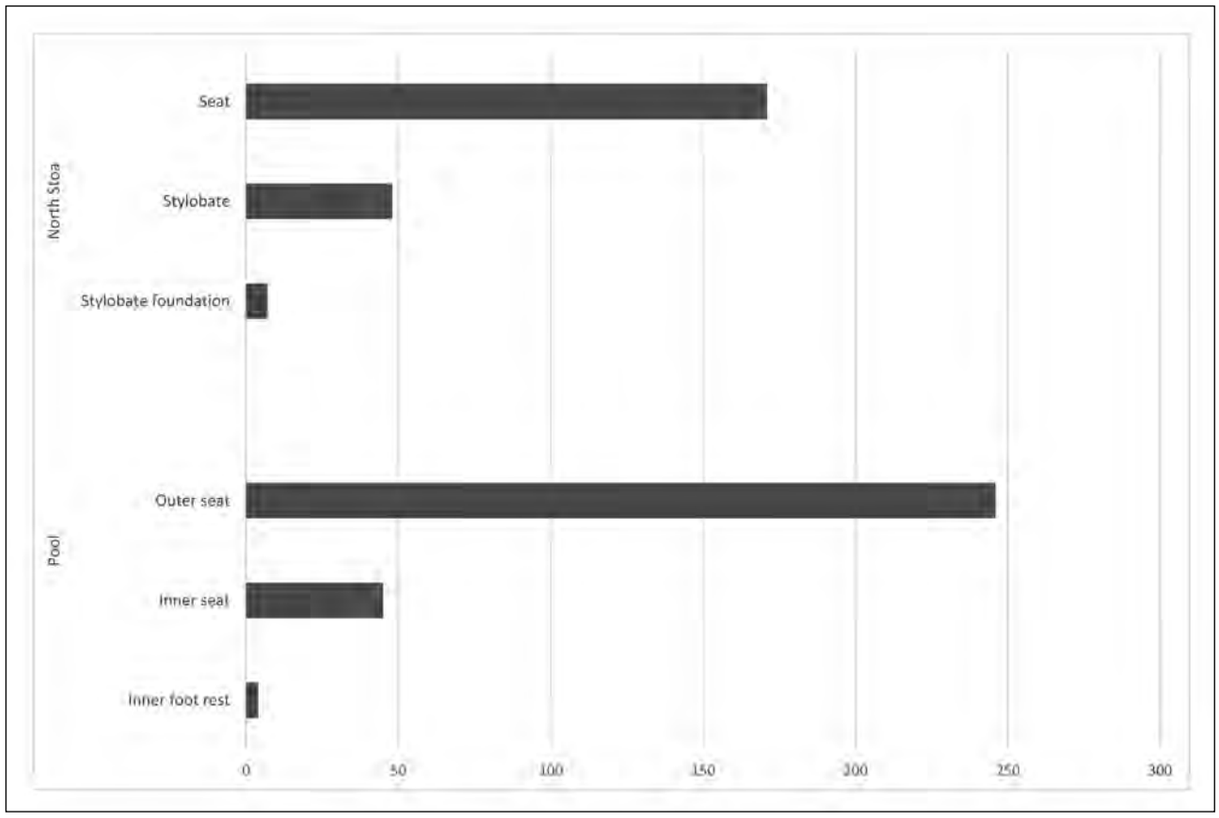


Fig. 6. Graph showing the number of gameboards in different locations on the North Stoa and pool walls

footrest. The drain cover slabs, all now lost, originally ran between a pair of corresponding rebates carved into the back of the seat blocks. On the interior wall, it would have been possible to sit on the seat block, feet on the foot rest, overlooking the water, or on the foot rest itself—but only then by dangling one's feet in the pool. On the outer wall, in contrast, one could have sat comfortably on the seat block, feet on the paved surface of the circumferential path. The majority of gamers clearly favoured this outer seat, since 80% of the 291 gameboards documented on the pool are carved into its surface (Fig. 6). Of those gameboards inscribed on the inner wall, all but four are on the top of the seat block rather than the foot rest; evidently dangling one's feet in the pool, at least while gaming, was not desirable. More boards were presumably carved on the cover slabs over the drain, though perhaps not as many as on the seat blocks, since it would have been harder to sit comfortably on the seat blocks and play on boards located behind them.

Since the Place of Palms was already equipped with hundreds of metres of purpose-built seating, around the pool and along the front of the stoas, there was no need for the users of this space to spread out to other flat surfaces, like the paving of the path and the interiors of the stoas. This is quite different from the picture at Rome, where in the *Forum Romanum* the extant gameboards, although much fewer in number, are concentrated in the open area of the forum and on the floors of the Basilica Julia.[16] There was no need for the Place of Palms' gamers to squat on the floor around their boards. Indeed, at Aphrodisias generally, this was avoided: there are hardly any gameboards on the pavement of the avenue that leads from the Tetrapylon, the gate of Aphrodite's sanctuary, to the Theatre.

Beyond the positioning of gameboards on the structures they adorn, their clustering in particular areas of the Place of Palms is also worthy of note. A heatmap of the gameboards in the North Stoa and around the pool highlights a number of patterns (Fig. 7). The highest concentration of gameboards is found in the central section of the North Stoa, immediately in front of the doorway through the rear wall of this structure, which connected the Place of Palms to the Agora. The seats in front of the seven or eight intercolumniations either side of this middle point also have high numbers of gameboards on them. It is tempting here to suggest that gamers favoured this location due to its high visibility. Indeed, in his analysis of the distribution of gameboards at Rome and Timgad, Francesco Trifilò proposed visibility as the key factor in determining where gamers chose to play.[17] This explanation does not seem to extend to elsewhere in the Place of Palms, however: other areas where we might expect there was significant traffic do not show comparable clusters of gameboards. The

16 Thédenat (1923); Trifilò (2011).

17 Trifilò (2011).

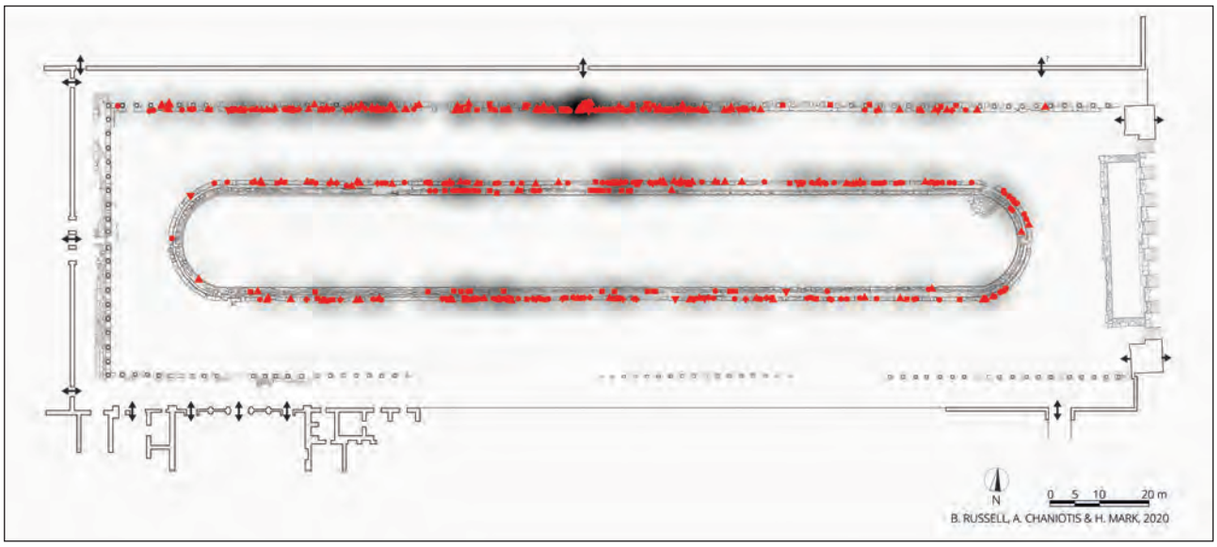


Fig. 7. Heatmap of gameboards on the North Stoa and pool walls, with entrances to Place of Palms also marked

western end of the North Stoa, for instance, close to the other known doorway through to the Agora, as well as the northern of the three entrances to the East Court of the Hadrianic Baths, contains very few gameboards. The eastern end of the stoa has even fewer boards, despite the fact that there was probably another doorway (now lost) to the Agora here and access through the Propylon to the Tetrapylon Street, one of the city's main thoroughfares. Equally, where significant numbers of people must have passed around the western end of the pool, between the Agora and the Civil Basilica, we also find a notable gap in the distribution of gameboards: there are just five on the western curved end of the pool. At the eastern end of the pool, where again one might imagine a steady flow of passers-by between Agora and Theatre, and entering the complex through the Propylon, there are only slightly more boards: 22. The 15 gameboards on the northern steps of the Propylon suggests that perhaps this was a preferred spot for people watching in this part of the complex. The general lack of a clear correspondence between the distribution of gameboards and the main entrances into, and routes through, the Place of Palms suggests that another factor, or multiple ones, was driving the pattern of gaming. What the heatmap clearly demonstrates, for the pool especially, is that the gameboards inscribed here were not evenly dispersed. Rather than spreading themselves out, the gamers who frequented these locations tended to cluster together. A desire for conviviality, for social and competitive engagement, might account for this clustering, but there is perhaps a simpler explanation. The Place of Palms, as noted above, was an urban park, planted from its first phase. The planting trenches identified by excavation in the imperial-era levels were re-cut as planting pits during the 5th-/6th-c. renovation of the complex, suggesting its open area remained a garden even at this late date.[18] While we do not know the exact composition of this planting, the reference to palm trees in the epigraphy and the size of the excavated planting pits (1–1.10 m in diameter), strongly suggests that there were trees. These may well have had shrubs and smaller plants arranged between them (as reconstructed in Fig. 8). Trees, especially mature palm trees, planted in two rows to the north and south of the pools, would have provided vital shade along its long walls. Unless they were very closely spaced, however, these trees would not have provided unbroken shade. What the clusters of gameboards might reflect, therefore, are those areas of the pool walls provided with maximum shade. While gamers would also have frequented the Place of Palms in the evening or at night-time,[19] it makes sense that gameboards are concentrated in those areas where they would also have been useable during the hottest hours of the day, when nobody would have wanted to sit on an exposed white marble seat baking in the sun.[20] Trees planted in the open area north of the pool would also have shaded the seats in front of the North Stoa.[21]

This desire for shade might also explain the relative paucity of gameboards on the eastern and western extremities of the pool. The western end would have been exposed to the full glare of the sun from the moment it appeared above the Theatre hill through

18 Wilson, Russell (2024a).

19 The remains of glass lamps have been recovered from the space and traces of fixtures for suspending them identified on the columns of the North Stoa, Penn, Jeffery (2024a); portable lamps could have been used on the pool walls.

20 For a similar point about the importance of shade for gaming, see Crist (2021), 348.

21 de Chaisemartin (1989), 64 previously argued that the number of gameboards on the North Stoa was a result of the shade offered by the roof of this building; while it is probably true that shade was vital, in practice these steps could only have been shaded for most of the day by trees to the south of them.

Fig. 8. Reconstruction of the Place of Palms, showing detail of east end of pool, looking north-west (image: L. Aguilar)

to the early evening; even if trees were planted along the western end of the complex, they would have added little if any shade until the late afternoon at the very earliest. At the eastern end, some shade would have been provided by the Theatre hill and the Propylon, but only a row of trees in front of the latter structure could have provided significant protection from the sun, and then they would have obscured the columnar façade of this monument and its extensive display of statuary. If the patchy distribution of gameboards along the northern and southern pool walls does reflect the spacing of trees and the shade they cast, then it would seem reasonable to assume that the northern and southern ends of the complex were not planted or were planted differently.

3. VARIETIES OF GAMES ATTESTED

Five gameboard types have been recorded in the Place of Palms: cross-in-circle (Type 2 according to the typology in the Appendix II of this volume), mancala or *pente grammai* boards (Type 42), cross-in-square (Type 23), eight-spoke-wheel (Type 4 and

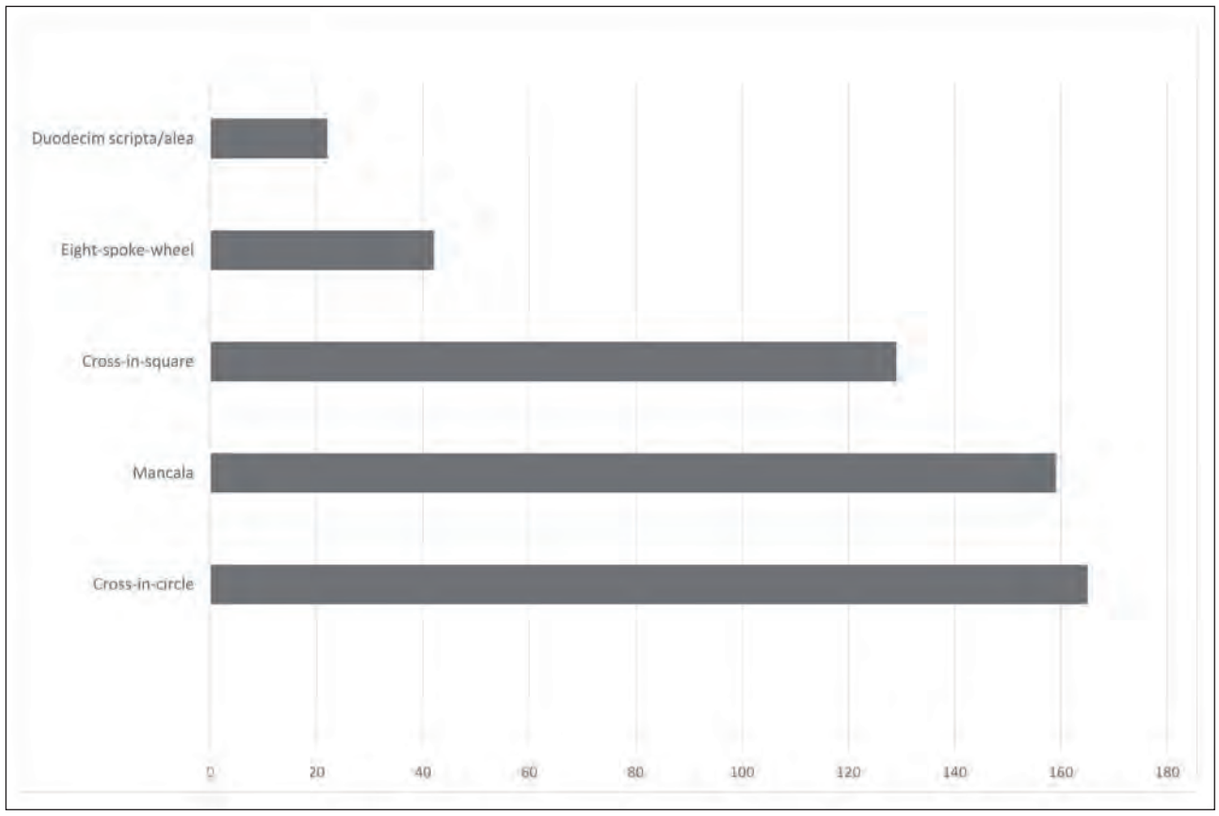


Fig. 9. Graph showing number of gameboards of different types

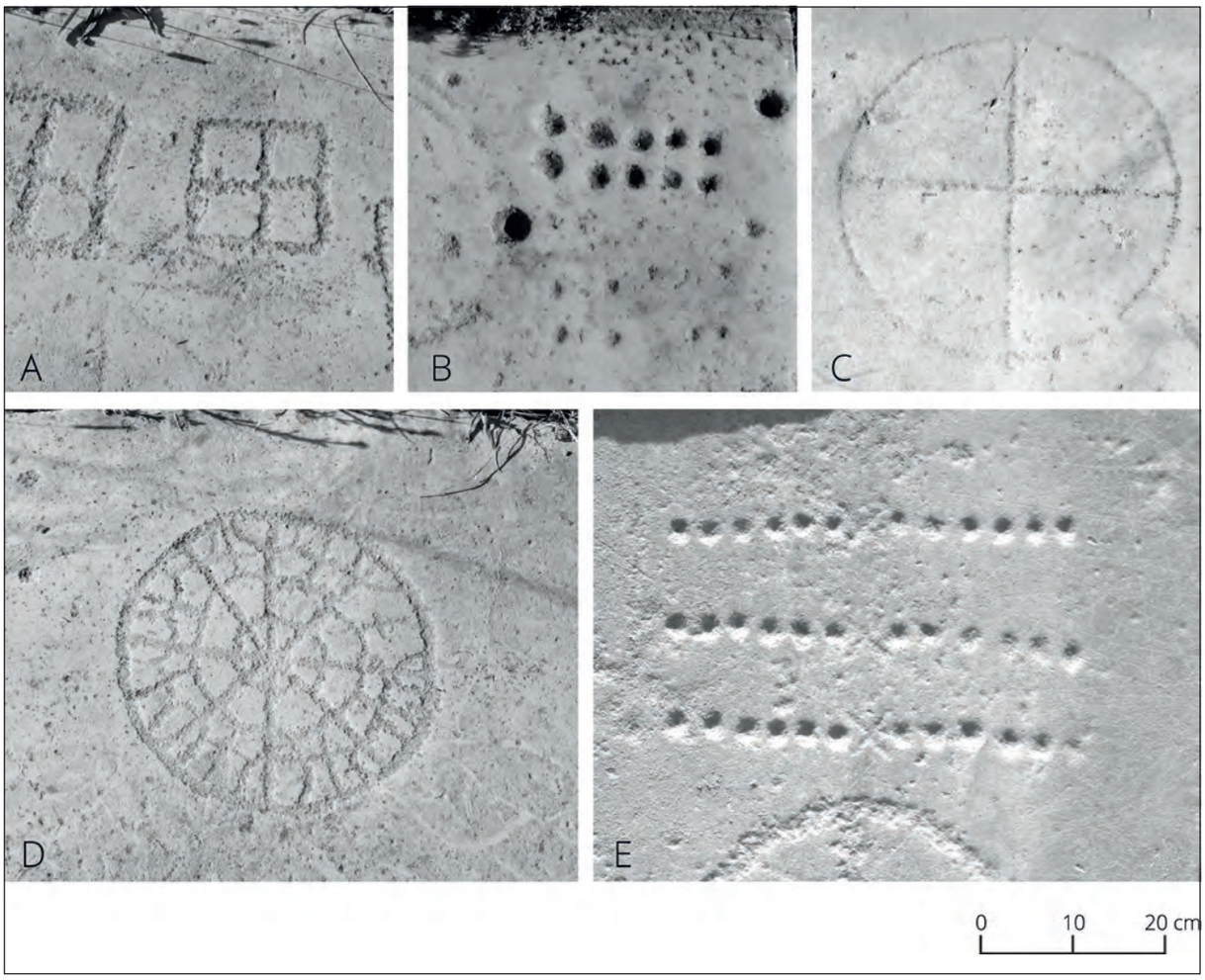


Fig. 10a-e. Gameboards types attested in the Place of Palms: A. Cross-in-Square (Type 23); B. Mancala or pente grammai (variant of Type 42); C. Cross-in-Circle (Type 2); D. Eight-Spoke-Wheel (here a variant of Type 19); E. Duodecim scripta *(here Type 56)*

variants), and *duodecim scripta* or *alea* boards (Type 52 and variants).[22] Of these boards, however, 88% belong to the first three types (Fig. 9).

The most common board type attested is the simple cross-in-circle, Type 2, of which there are 172 examples (Fig. 10a). The game played on these boards is not known and it has even been suggested these might be place markers or religious symbols and not gameboards at all.[23] However, a range of variants of the typical cross-in-circle format found in the Place of Palms—including one with a square within the circle and another with hollows marking four points on the circle and no cross—do suggest that these marks are connected to a game of some form and are not just cross symbols. It is also the case that all examples of this type are inscribed on horizontal surfaces; none of the hundreds of Christian crosses inscribed on vertical surfaces in the Place of Palms is set within a circle. Rather than a version of tic-tac-toe/noughts and crosses, as proposed in the past, it is perhaps more likely that these crosses-in-circles were used for a game that involved tossing counters ('franc du carreau'). Ulrich Schädler has identified a scene depicted on a mosaic from Piazza Armerina as representing just such a game.[24]

The second most commonly attested gameboard type is the mancala or *pente grammai* board, Type 42 (162 examples). These consist of two rows of five holes (sometimes more), which are occasionally set within a grid, like Type 38.[25] These holes were made to contain the pieces that the game was played with. Some of the mancala boards—perhaps as many as 13—have larger hollows at the end of the rows for the players to place their captured pieces in (Fig. 10b and 15). The addition of these receptacles seems to have been a later innovation and boards with seven holes in each row, similar in overall appearance to this type, have been found at Palmyra in contexts dated to

22 It is worth noting that no grid-based games have been found in the Place of Palms.

23 On these suggestions, Roueché (2007), 100; Fear (1991); Behling (2013); Jacobs (2013), 618–619. This possibility was even initially suggested by some of the present authors for the Place of Palms examples; see Wilson *et al.* (2016), 84.

24 Schädler (2018), 89–90; also Behling (2013).

25 On the identification of these as mancala boards, see Schädler (1998), 19–21; though Schädler also notes that some of these boards could also have been used for playing a different game, called 'five lines'.

the 7th c. CE and later.[26] At Palmyra these expanded boards have been considered an Arab introduction but at Aphrodisias they must date to the early to mid 7th c. or earlier, probably as early as at least the 4th c. CE.

The third most common gameboard is of the cross-in-square form, Type 23 (134 cases). These boards were for playing a simple tic-tac-toe/noughts and crosses game (Fig. 10c). More complicated versions of these boards with diagonal lines (Type 25) are found elsewhere in the Roman world but not in the Place of Palms.[27]

Less common, though still attested in comparatively high numbers, are eight-spoke-wheel boards (42) and *duodecim scripta* or *alea* boards (22). The former, Type 4, were probably used to play either a version of a three-in-a-row game or alternatively for tossing pieces on to, as proposed above for the cross-in-circle game (Fig. 10d).[28] The *duodecim scripta* boards are rectangles with three parallel rows of holes, each made up of 12 holes, six on each side of a feature in the middle. This central feature is marked out as a larger circle or a different shape entirely—compare Types 52–59 (Fig. 10e). Monumental *duodecim scripta* gameboards carved on re-purposed statue bases are known from the Hadrianic Baths at Aphrodisias and have been identified at other sites in Asia Minor, as Peter Talloen has shown.[29] *Duodecim scripta* seems to have been developed into the game *alea* or *tabula* in the early Byzantine period, with this game requiring only two rows of holes rather than three. Only one possible *alea*/*tabula* board is known from the Place of Palms but even this one was more likely originally a *duodecim scripta* board inscribed on a block that was later cut down to be re-used in the northern pool wall.[30] In the absence of purpose-made *alea*/*tabula* boards, the Aphrodisian gamers in the Place of Palms presumably made use of the various existing *duodecim scripta* boards, simply ignoring the middle rows of holes.[31]

The range of gameboards from the Place of Palms echoes the findings from other public spaces in the city. All five types of gameboard are also found in the Theatre, the Stadium, on paving near the Tetrapylon and in the Sebasteion.[32] Indeed these gameboards are common throughout the cities of Asia Minor.[33] What is exceptional in the Place of Palms, therefore, is not the range of gameboards attested but their quantity. Since few sites in the Roman world have produced more than a handful of *duodecim scripta* or *alea* boards, even the comparatively low numbers of these boards from the Place of Palms are impressive.

4. GAME COUNTERS

All of the games listed above require counters or pieces to play. At other sites, glass, bone, and ceramic counters have been identified,[34] but there may have been counters in perishable materials as well. While no game counters of this sort were found in Place of Palms, hundreds of flat marble discs, most under 4-5 cm in diameter, were recovered, especially in the deposits at the bottom of the pool (Fig. 11).[35] These are cut-down marble revetment panels. Their colour range reflects the decoration of the back wall of the North and West Stoas, which were furnished with elaborate wall revetment in the early 2nd c. CE.[36] The back walls of these stoas were damaged during the 5th-c. earthquake that prompted the grand re-building of the Place of Palms.[37] Second-hand, and no longer serviceable, marble revetment from these walls was repurposed for various uses after this point, including for repairs to the pool floor. Surplus material appears also to have been cut down to be used as counters. It is even possible that the supply of marble counters developed into a cottage industry in late antique Aphrodisias. Although the process of cutting panels of marble into small discs might appear laborious, marble quarrying and carving was one of the dominant industries at Aphrodisias; many of the gamers probably already had sufficient skill, and the tools, to shape a handful of marble counters with little fuss themselves. The hardness of the local white marble certainly failed to put them off inscribing the gameboards themselves in their hundreds.

These discs could have been used on many of the gameboards described above as traditional counters—moved around the boards by the players—but they could also have been used as throwing pieces in other versions of games. This might explain the high number of these items that eventually made their way into the pool, ricocheting off the marble surfaces into the water, from where the majority were never recovered.

26 de Voogt (2010).

27 Austin (1935), 79–80.

28 For the debate over these boards, see Blümlein (1918); Schädler (2012); Behling (2014); Heimann, Schädler (2014); Schädler (2018).

29 *IAph2007* 5.10, 5.13, 5.14, 5.15, 15.351; Roueché (2007), 101; Roueché (1989), 111–112; Talloen (2018), 117.

30 Chaniotis, (2024b), no. P455.

31 This is how Austin (1934), 203 suggests the game was originally played anyway.

32 Roueché (2007); on the evidence from the Theatre and Stadium, see also Crist (2021), 339–40, 343–4.

33 For other examples from Asia Minor, see Schädler (1998), 11 (various sites); Şimşek (2013), 121, fig. 145 (Laodikeia); Schädler (2016) (Ephesos); Talloen (2018) (Sagalassos); Crist (2021) (Constantinople).

34 For examples from Ephesos, see Pülz (2020), no. B211–228, pl. 104–105, colour pl. 111; from Pompeii, Cool (2016), 166–169; Pace (2022); from Britain, see Schädler (2007), 366–367, Table 55. For inscribed gaming counters (*tesserae*) see *SEG* XXVI 1715; XLVII 1522; LXV 586.

35 On these finds, see Penn, Jeffery (2024a).

36 On these displays, see Kidd, Russell (2023).

37 On this earthquake, see Wilson (2018).

Fig. 11. Marble game counters from the Place of Palms

5. DATE

While we have a good grasp of the basic chronology of the main architectural structures of the Place of Palms due to the rich epigraphy from the site, dating the gameboards is less straightforward. The North Stoa and the pool of the Place of Palms, on which the gameboards were inscribed, were both built in the first half of the 1st c. CE but had long lives. The former was extensively repaired more than once but stayed standing largely unchanged for at least 600 years; its roof and some of its architecture came down in the early to mid 7th c., with the rest following in the 10th or 11th c. CE.[38] The pool too remained in use until the 7th c., when it was partly filled by debris from whatever event damaged the North Stoa. Prior to this, it had been extensively repaired, its ring drain filled in, and its walls raised slightly in the late 5th or early 6th c. CE. All the gameboards in the Place of Palms, therefore, date to before the mid 7th c. CE. At what point between the 1st and 7th c. they started to be inscribed on these structures is not easily pinpointed, but there are various strands of evidence that suggest it was relatively late.

In the case of the gameboards inscribed on the pool wall, at least 20 of these certainly date to after this structure was restored in the late 5th or early 6th c. CE. At this date various areas of the pool walls were rebuilt, and patched up, using blocks recycled from other structures, such as architrave blocks from the stoas (removed as part of further restoration work) or seats from the Theatre or Bouleuterion, and in one case a length of column drum.[39] The 20 gameboards in question are found on these blocks, or crossing between these blocks and earlier ones from the original structure.[40] Two gameboards inscribed with the name Eusebios, which are examined further below, probably also date to after the late 5th-c. restoration, since one references the provincial governor of this era, Doulkitios.[41] In the North Stoa, five gameboards were carved over cuttings made for features, probably doorways, which were inserted into the colonnade, probably in the 4th c. CE.[42] These gameboards can only have been carved once these features were removed, which probably occurred when the area was restored in the late 5th c. CE. At least seven gameboards were also

38 For the 7th-c. destruction, see Wilson (2019), 215–218.

39 Wilson (2018), 476–481.

40 Chaniotis (2024b), nos P24, P26, P27, P55, P56, P130, P131, P144, P145, P146, P231, P285, P351, P352, P361, P362, P363, P378, P379, and P455.

41 Chaniotis (2024b), nos P110, P111.

42 Chaniotis (2024b), nos NS5, NS30, NS31, NS148, NS149.

carved in intercolumniations which had had their stylobate blocks removed, a phase of intervention probably contemporary with the wider late 5th-c. CE restoration of the Place of Palms.[43]

A total of 34 gameboards, therefore, can certainly be dated to the late 5th c. CE or later. This is a relatively small portion of the total, however, and there are good reasons to think that many more of the boards date to an earlier period. In the North Stoa, the vast majority of the gameboards found come from the seat blocks and those stylobate blocks still in place, while only seven were found on the surfaces from which stylobate blocks were removed. This implies that considerable numbers of gameboards were inscribed in this stoa before the late 5th c. CE. The general preference for the seat blocks over the stylobate noted above also supports an earlier date. When the ground between the pool and its surrounding stoas was raised in the late 5th or early 6th c. its upper surface became level with the top of the North Stoa seat blocks. This intervention, in other words, effectively took these seats out of action, even if their upper surfaces were still visible. The seat blocks around the outer wall of the pool, in contrast, were slightly raised at this date to ensure they could still be sat on comfortably.

A more precise indication of when large-scale gameboard incising might have begun in the Place of Palms is provided by a comparison between the North Stoa and the West Stoa. Up until the 4th c. CE, these two stoas were both open colonnades and seem to have functioned in a similar way—even though the latter was only built in the early 2nd c. CE it joined the former at its northern end and architecturally the two formed a single building. In the 4th c., however, the West Stoa was turned into the long hall described above. While some intercolumniations in the North Stoa were also filled in at this date (as mentioned above), here these modifications were not extended along the entire length of the structure. The West Stoa was only opened up again in the late 5th c. or early 6th c. CE when it was restored by Albinos. The period between the 4th and the late 5th c., therefore, is the only one in which the North and West Stoas differed substantially. The fact that the former has hundreds of gameboards and the latter none would seem to indicate that these features date to this period. The North Stoa was an open, high traffic area in which gaming was tolerated, while it was off-limits in the more controlled, enclosed West Stoa. While this is not clear-cut evidence, it is suggestive, and would seem to imply that at least the bulk of the gameboards on the North Stoa date to the 4th and 5th c. CE, when the seat blocks could still have been sat on. There is also evidence from the pool walls to support a pre-restoration date for at least some gameboards. The single example of a possible *alea*/*tabula* board, for example, seems to have originally been inscribed on a larger block that was then cut back as part of the repairs to the pool; it must date to before the late 5th c. CE as a result, though where it was originally positioned is unclear.

One final piece of evidence that can be brought to bear on this question of dating are the game counters. As already noted, the marble revetment from which these counters were cut probably only became available in substantial quantities after the earthquake of the 5th c. CE, when the stoas were damaged and repaired, and when the pool floor was patched. These counters belong to the period between the 5th and 7th c., therefore. They provide no indication of the date of the boards but they do reveal the scale of gaming activity in this complex in these last centuries of its use.

Overall, it is likely, though ultimately unprovable, that the majority of the gameboards inscribed in the Place of Palms date to between the 4th and 7th c. CE. Interestingly, the same is largely true of the other informal inscriptions catalogued to date. Aside from a series of inscriptions on architectural elements of the North Stoa—that probably document the financing of repairs to the building—all the informal texts that can be dated seem to belong to the 4th to 6th c. CE.[44] These are dominated by Christian graffiti and crosses and include occasional celebrations of circus factions. The bulk of names documented in the inscriptions from the Place of Palms make most sense in a late antique context.[45] Prior to the 4th c., therefore, the public structures of the Place of Palms seem to have been carefully managed, with graffiti and all forms of other informal inscriptions being kept to an absolute minimum. This supports Luke Lavan's general observations that there seems to have been "a progressive loosening of civic toleration of inscribed signs' and more 'casual chiselling' in public spaces in late antiquity."[46]

6. THE USE AND ABUSE OF GAMEBOARDS

Gameboards like those found inscribed in the Place of Palms would have taken time to inscribe; some of them that have decorative elements (see below) perhaps several hours. The North Stoa and pool walls are built of white marble and the gameboards on them can only have been inscribed with metal tools.[47] Even if many adult Aphrodisians had access to chisels it would have been considerably easier to paint a gameboard or draw one in charcoal. Ephemeral boards of this sort might originally have existed, but

43 Chaniotis (2024b), nos NS61, NS183, NS192, NS193, NS221, NS266, NS294.

44 Chaniotis, Wilson, Russell (2024).

45 Chaniotis, Wilson, Russell (2024).

46 Lavan (2020), 241–242.

47 A part-worked cross-in-circle, with the circle inscribed using a compass, is preserved on the North Stoa; see Chaniotis (2024b), no. NS347.

Fig. 12. Cluster of gameboards, a menorah, and a phallus, from the north side of the pool

none have been found, even in newly excavated areas (and *dipinti* do survive elsewhere at Aphrodisias). Likewise, it may well have been cheaper and easier to use a portable board, in wood or ceramic. Indeed, a fragment of tile on which is inscribed with a Nine Men's Morris board (Type 27) was recovered from a later context in the Place of Palms, proving that such things existed.[48] Considering this, we can only assume that inscribers of the boards around the Place of Palms were intending them to last; they meant to return to them. This is further suggested by that most noticeable feature of the gameboards in the Place of Palms, the extraordinary density of them. There are so many gameboards in this complex that numerous examples of exactly the same type are often found immediately next to each, in some cases even overlapping (see Fig. 4). There would not have been space for all these boards to have been used at the same time. Individuals routinely inscribed new gameboards, therefore, rather than using existing ones.

These observations raise a number of questions: why did gamers in the Place of Palms inscribe gameboards when they could have created less permanent ones; and why did they add new ones rather than use existing ones? It is possible, of course, that the newness of a board affected its usability. Many of the gameboards on the seat blocks of the pool and North Stoa are certainly worn. They were clearly walked on, sat on, well-used, but also naturally eroded over time. It might have been important to ensure that the lines on boards were crisp and clear and that they consisted of grooves or hollows that could not have been achieved with paint or charcoal. Even then, however, it would surely have been simpler to simply re-carve an existing board to improve its condition rather than inscribe a new one. A second possibility—and one that is worth seriously considering—is that particular gamers preferred to have their own boards, as if the process of inscribing a board gave one ownership of it. Perhaps playing on one's own board was thought to give one 'home advantage.'

That certain groups within the city reserved gameboards or clusters of them—or routinely played in particular areas—could be argued. Three gameboards on the north side of the pool, on the inward-facing seat blocks, are clustered around a carving of a menorah, which potentially marks them out as belonging to a group within the city's significant Jewish community; one of the gameboards is even integrated with the menorah (Fig. 12).[49] A phallus was later inscribed next to this cluster, probably as an insult directed at the wider Jewish population.

Some gameboards have extra detailing added to them in the form of additional circles at the intersections of lines, other decoration, and occasionally texts, which would seem to suggest long-term engagement of some individuals with particular boards. These include a *duodecim scripta* board on the North Stoa with neatly carved circles and a central rhombus (similar but not identical to Type 55) (Fig. 13);[50] an elaborate eight-spoke-wheel board on the south side of the pool (Fig. 14, a combination of Types 6 and 15, and for another example see Fig. 10d, a variant of Type 19);[51] and a mancala or *pente grammai* board with two deep holes at either end of it, probably for players to keep their counters in, also on the south side of the pool (Fig. 15).[52] Other gameboards had graffiti inside them or next to them, including a cross-in-square board on the south side of the pool with the text "The Fortune of Agathokles prevails" (Fig. 16).[53]

One of the most elaborate gameboards, and one on which a number of the features noted above are combined, is a *duodecim scripta* board on the southern wall of the pool (Fig. 17). The corners of this rectangular board are decorated with diagonal

48 Penn, Jeffery (2024b).

49 Chaniotis (2024b), no. P405–408. On the Jewish community of Aphrodisias, see Chaniotis (2002).

50 Chaniotis (2024b), no. NS147.

51 Chaniotis (2024b), no. P140.

52 Chaniotis (2024b), no. P235.

53 Chaniotis (2024b), no. P227: Νικᾷ ἡ | τύχη τ|οῦ Ἀγ|αθοκλῆ.

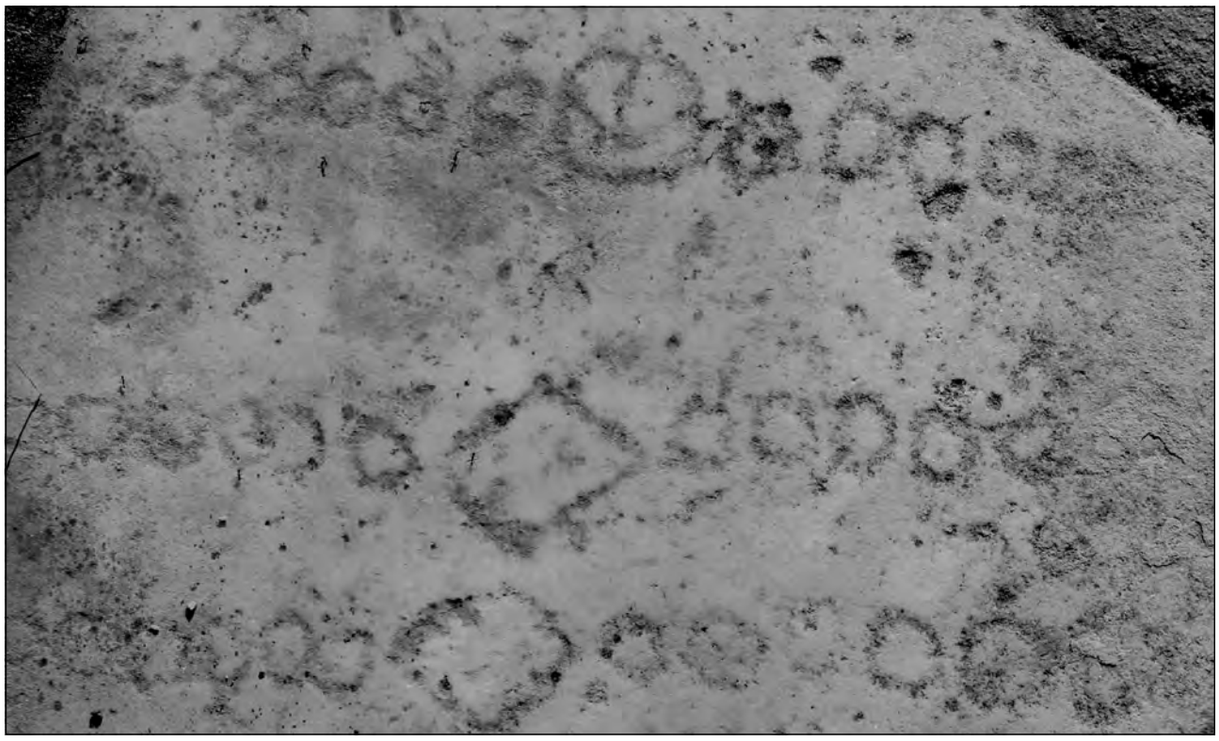


Fig. 13. Elaborately carved duodecim scripta *board from the North Stoa*

Fig. 14. Elaborately carved eight-spoke-wheel board from the south side of the pool

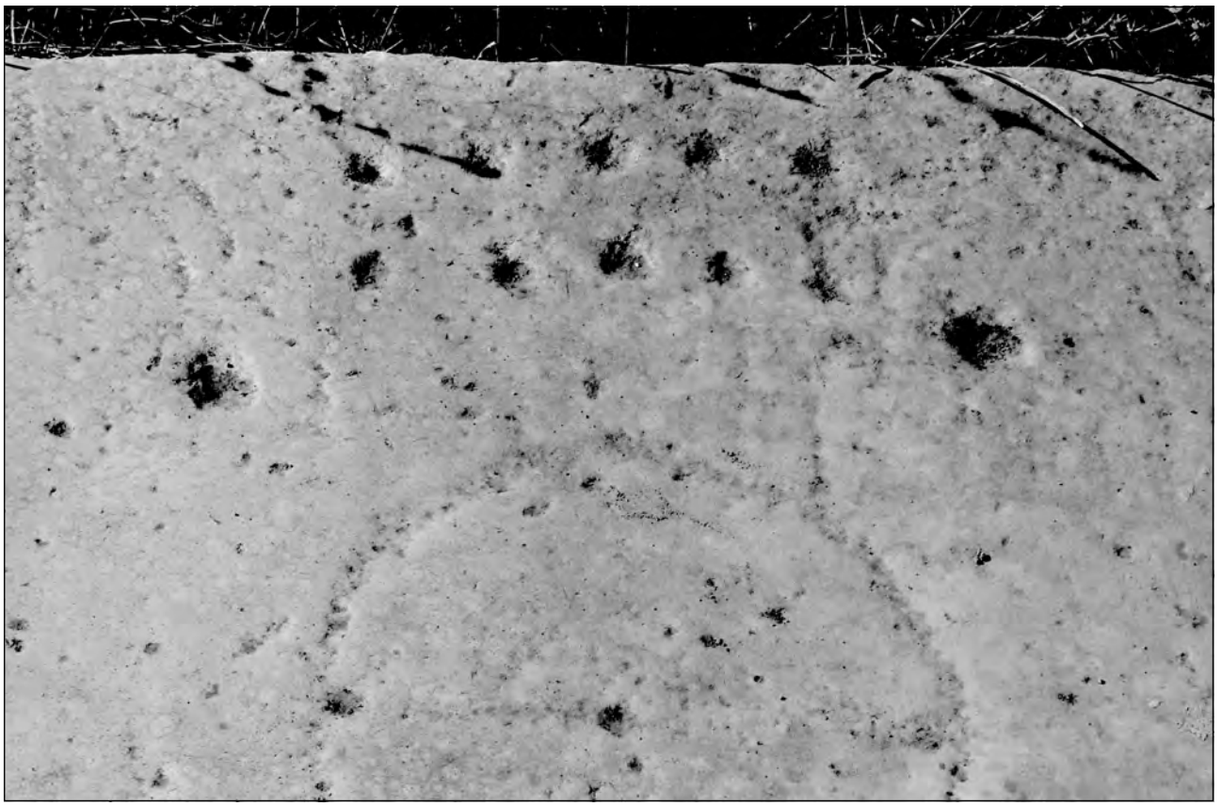


Fig. 15. Mancala board with players' stores from the south side of the pool

Fig. 16. Cross-in-square with graffiti inside it and under it from the south side of the pool

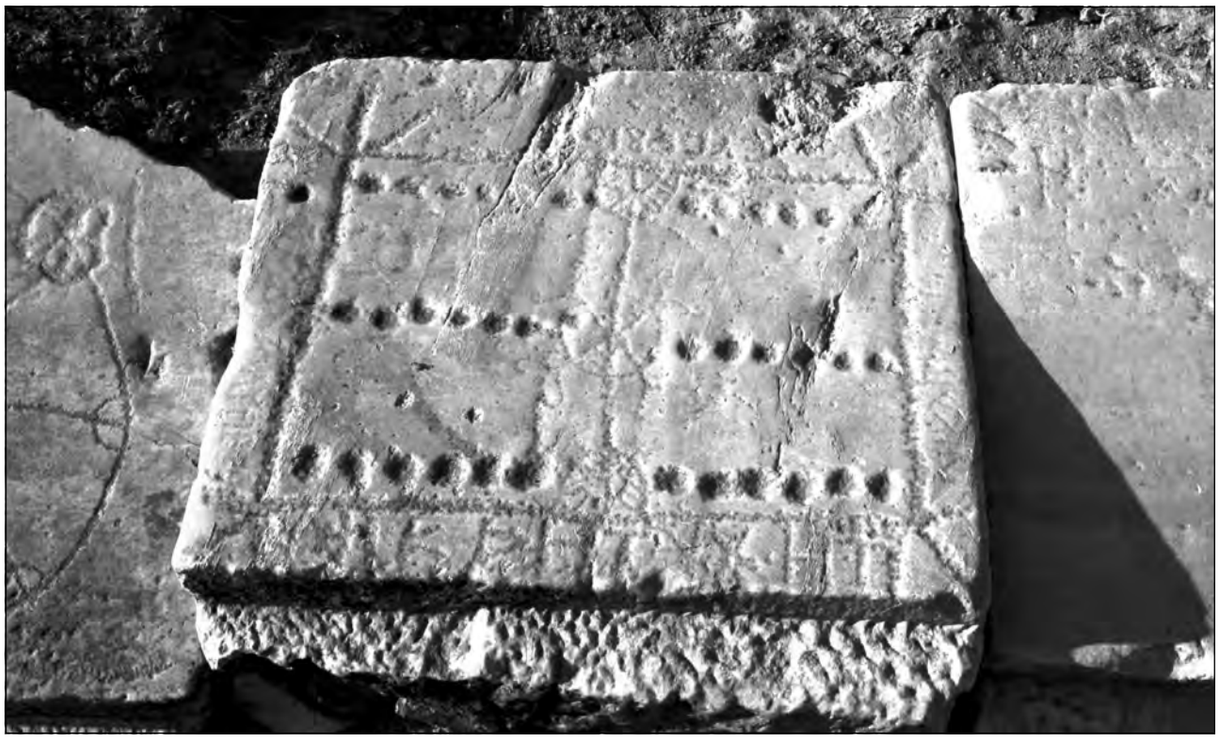


Fig. 17. Duodecim scripta *board with additional decoration and graffiti from the south side of the pool*

lines to form crude stars, while the central feature of the lateral rows of holes is carved as a semi-circle, that of the middle one as a spoked wheel. Texts are inscribed around all four sides, seemingly forming a pair of acclamations aligned across the board.[54] The legible one of these reads "The Fortune of Eusebios prevails"; the other presumably refers to a different individual.[55] A Eusebios is in fact named on an inscription on another gameboard, this time an eight-spoke-wheel, on the block immediately to the east of the one described above. This text reads "Eusebi(o)s buggers/buggered Doulkiti(o)s" (Fig. 18a-b).[56] It is tempting, given the proximity of the boards, to see this Eusebios as the same person named on both boards. He might have been the individual who inscribed the texts and played in this area of the Place of Palms; this was perhaps his 'patch'. But he could also have been somebody else entirely, perhaps even a political figure. Doulkitios is not a common name and so this is probably the late 5th-c. and early 6th-c. CE provincial governor, the same official named on two of the late antique epigrams inscribed on the Propylon of the Place of Palms. Since Doulkitios was a politician and, as Maioumarch, presumably a pagan, this insult may well reference wider tension in the city beyond the world of gaming.[57] Eusebios is a name especially common among Christians.[58] Doulkitios was probably responsible for the restoration of the pool into which this slur was inscribed, lending it a certain extra piquancy.

CONCLUSIONS

The Place of Palms, with its series of stoas, planted and shaded walkways, purpose-built seating, and expansive water displays, provided an oasis for leisured recreation in the heart of Aphrodisias, easily accessed and close to many of the main urban attractions (Theatre, Baths, Basilica, Agora). This was an obvious area for congregation and socializing and indeed clusters of gameboards in similar 'cool spots' have been noted in other cities, such as around the fountains of Sagalassos.[59] We can imagine the citizens of Aphrodisias playing games in the shade of trees around the pool, and perhaps at the same time consuming snacks or drinks purchased from one of the *kapeloi* (tavern-keepers) whose *topos* inscriptions survive on the wall of the South Stoa.[60] It is also possible that some of the gameboards on the North Stoa were used by tradespeople or other

54 *IAph2007* 4.6 ii = Chaniotis (2024b), no. P111. For examples of gameboards with accompanying inscriptions, see also Akli (2017), 157 (from Cherchell in Algeria); *MAMA* X 330 (from the area of Kotiaion in Phrygia).

55 Ν̣ικᾷ ἡ Τύχη τρ̣[ῦ?] | Νικᾷ [- - ?] | Εὐσεβίου̣ | [- -]ΟΑ. Ἀλυπιο[- -].

56 *IAph2007* 4.26 iii a/b = Chaniotis (2024b), no. P110, who reads the text as [π]υγί|[ζει] or [ἐπ]ύγι[σεν] ὁ Εὐ|[σέ]βις | Δουλ|κίτιν; see also Chaniotis (2018), 87–89.

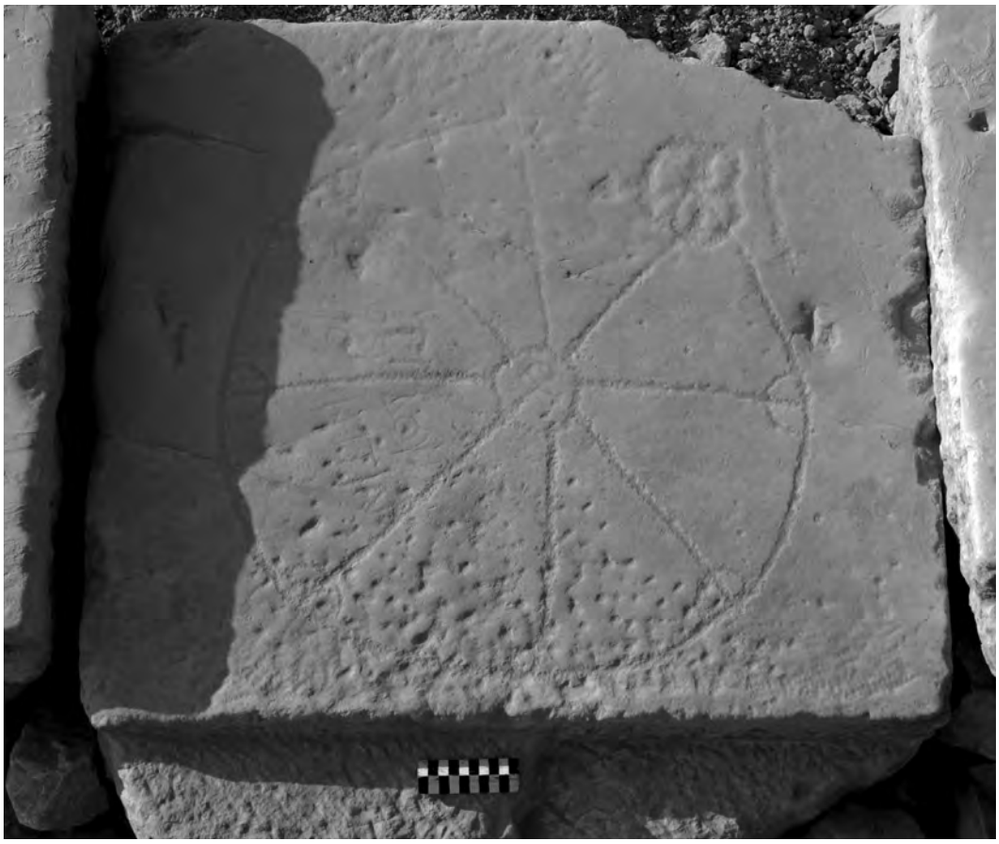
57 Wilson, Russell (2024b).

58 Chaniotis, Wilson, Russell (2024).

59 See Lavan (2013), 327 fig. 10c and 339–43, with Lavan (2008), 205, 209.

60 Two κάπηλοι, Zotikos and Artemon, have *topos* inscriptions on the rear wall of the South Stoa. A κάπηλος is a retail seller or more probably in this context a tavern-keeper; we imagine stalls selling drinks and perhaps food in this stoa: Chaniotis, Wilson, Russell (2024).

A



B

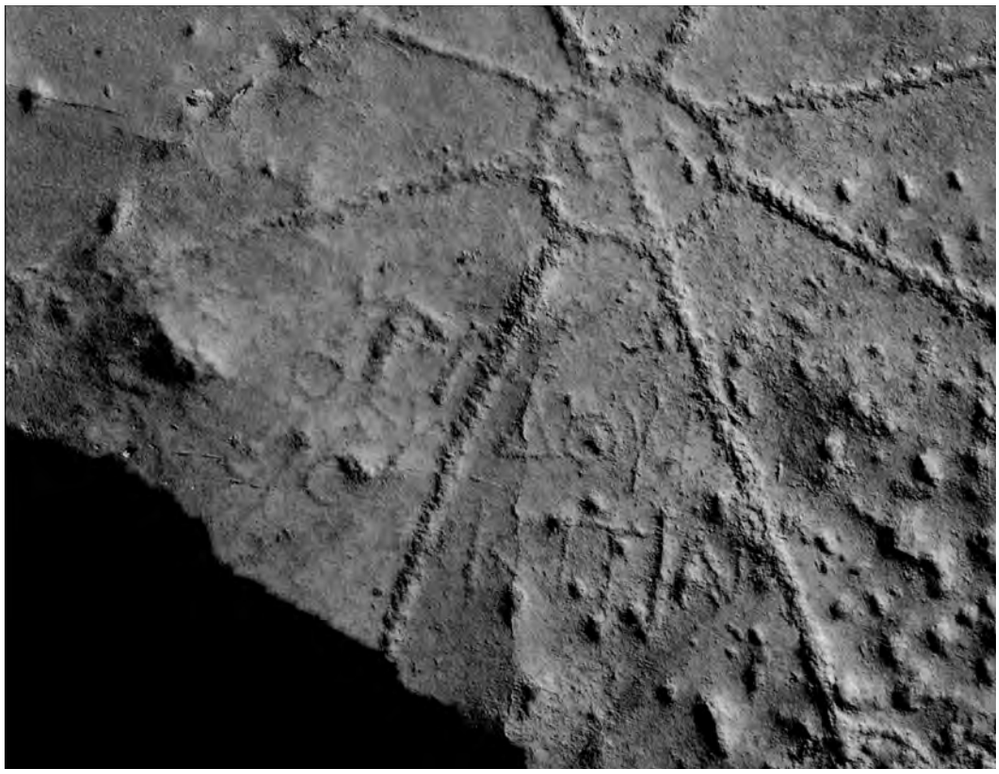


Fig. 18. a) Inscribed eight-spoke-wheel board, immediately to the west of the duodecim scripta *board in Fig. 17; b) Detail of the inscription reading 'Euse-bi(o)s buggers/buggered Doulkiti(o)s'*

professionals, the individuals named on the *topos* inscriptions, whose businesses were based here. At nearby Laodikeia gameboards have been found outside the shops on Syria Street, here usually carved on re-purposed architectural elements, and indeed there is other evidence for shopkeepers playing games in front of their premises.[61]

Gaming means competing, winning, and losing. The Place of Palms, where most of the Aphrodisian evidence for gaming is found, played a significant role also in other forms of competition and entertainment, as we may infer from informal texts and pictorial graffiti. Images show victorious athletes (most likely boxers), and acclamations for and monograms of circus factions,[62] suggest that their fans gathered here to celebrate a successful charioteer or to quarrel with the fans of another faction. There is also evidence for religious competition, and the acclamations for Albinos on the columns of the West Stoa imply political conflicts as well. This was the broader social, political, and religious context, in which the games were played.

As an urban park, the Place of Palms offered a perfect set of conditions both for the initial inscribing of gameboards and for their preservation: a shady space with water features, designed for leisure pursuits and complete with hundreds of metres of seating; flat marble surfaces that can be inscribed and hold details; a city population that included a large number of stoneworkers possessing both the tools and the skill to inscribe gameboards on marble; a space that was still intensively used up until the early 7th c.; and then a site in which the marble architecture has not been removed/destroyed in later periods. Few other large public spaces in Roman cities meet all these criteria, or allow the same reconstruction of the physical context in which people were playing such board games.

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61 Şımşek (2013), 121, fig. 145. For other strands of evidence, see Lavan (2020), 241.

62 Chaniotis (2024b), nos. P33, P139, P245 (athletes), P377, WS12, NS227, NS244, NS260 (circus factions).

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Roman, Byzantine, and Medieval Games in Ephesus: preliminary survey results

INTRODUCTION

The survey, conducted during two campaigns in 2007 and 2008, recorded designs carved into the pavements, as well as gaming tables.[1] The survey essentially focused on two areas: the excavated areas of the Graeco-Roman town and the Ayasoluk hill with the Temple of Artemis at its feet, the Church of St. John on the slope halfway up the hill, and the Selçuk Castle on the summit. Naturally, such a survey cannot detect all pavement signs and this chapter only discusses evidence detected where engravings can be made out on ancient pavements which are both preserved and exposed (Fig. 1). However, some areas of Ephesus are overgrown (for example, all of the baths) or covered with blockfields of architectural elements stored there by the excavators (e.g. the Tetragonos Agora, Curetes Street). Elsewhere, original floors have not been preserved or are only partially preserved, which is particularly regrettable with regards to the theatre and the stadium, since at other towns such as Aphrodisias, for example, many features have been preserved precisely in these buildings. About 350 pavement signs that might have been used for playing games and one small and six large game boards were identified; to these we can add the gaming tables now preserved in the Selçuk Museum and the one in the Ephesosmuseum Vienna. The exact locations of the pavement signs were mapped in GIS to integrate the finds into the digital map of ancient Ephesus. The topographical distribution of the signs and particular types of shapes may provide important insights as to their function and date.

The quality of the patterns engraved into the pavements varies greatly. Some are crudely carved with separate single chisel strokes, and in some cases the circular shape of a wheel pattern is not very precisely executed. In other cases, the circles are more carefully made, sometimes certainly drawn with the help of a compass, and the chisel strokes have been connected to each other and smoothed to form continuous lines. Morris patterns and rows of squares are mostly drawn freehand without the use of a ruler. On the other hand, *XII scripta/Alea* boards are usually of better quality, in some cases with the squares or circles recessed into the surface, even when engraved into pavements.

A particular problem is the dating of these incised game boards. In the case of elaborated game boards and tables stylistic features such as decorative elements or letter forms make it possible to propose an approximate date for their production. On the other hand, the architectural context, i.e. the construction period of the building in which the patterns are found, provides clues for approximate dating. But here it should be borne in mind that the reuse of older building elements (spolia) was very widespread, particularly in the Roman imperial period and later and specially in the context of

1 The survey was begun in the context of the ongoing excavation, research, and restoration project of the Austrian Archaeological Institute (ÖAI) and finalized within the ERC Advanced Grant project "Locus Ludi". A small number of preliminary results can already be studied on the project's website locusludi.ch. I would like to take this opportunity to thank the ÖAI for financing my research visits to Ephesus in 2007 and 2008. For a preliminary account see: Schädler (2012), 20-23. During the last 15 years I presented and discussed aspects of this project in numerous papers.

Fig. 1. Distribution of pavement signs on the Harbour Street (Arkadiané), Ulrich Schädler and Christian Kurtze (ÖAW-ÖAI)

restorations after destruction in war or by natural disasters. In the late antique and early Byzantine periods, Ephesus underwent profound changes. Some city areas were abandoned, the material of damaged buildings was reused for repairs or even new buildings, and other buildings were transformed and put to a new use. Therefore, the ruins of Ephesus as they are visible today reflect not the metropolis of the Roman imperial period but the Late Antique and Byzantine phases (Fig. 2).

Among the most important events affecting the dating potential of pavement designs are reconstruction measures taken after destruction like that caused by the earthquakes of the 3rd century. In the meantime, it is assumed that in many areas of the city, no immediate reconstruction occurred in the late 3rd century, and building activities first resumed in the early 5th century. However, not all areas and buildings were affected by those destructions to the same degree, so it is likely that during the 4th century ruins stood next to completely intact and unaffected buildings.[2]

The Harbour Street — or "Arcadiané"[3] — has undergone several phases of reconstruction and restoration, during which spolia were used to repair the colonnaded halls on both sides.[4] An important project, though not the first, seems to have been its restoration by Arcadius around 400 CE. The extent to which these works also affected the street pavement, into which most of the pavement signs were carved, is not quite clear. Here, then, it cannot be ruled out that some patterns were already carved into the slabs when they were laid here. On the other hand, during the first half of the 6th century, a tetrastyle monument was erected about halfway between the Harbour and the East Gate, which reduced the width of the roadway.[5] The fact that most of the incised drawings do not protrude further into the street than the monument may provide a hint as to their chronology.

In the first half of the 4th century, the Herakles Gate was built on the Curetes Street, separating a traffic-calmed inner city from the suburb around the State Agora.[6] It was extensively renovated and modified in the third quarter of the 5th century. Today, the southern pillar of the monument covers part of an inscribed

2 Ladstätter (2019), 19.

3 For the Arcadiané inscription see: FiE 1 (1906), 55; Heberdey (1905), 54-57; Rathmayr (2010), 33; Schneider (1999), 476.

4 Schneider (1999). An example of a re-used funerary inscription of the 1st century is the threshold on the north side of the street in the 4th intercolumniation counted from the *Tetrakionion* towards the harbour: the hitherto unpublished inscription belongs to a large sepulchral monument of the family of the Stertinii, five slabs of which were reused as floor slabs in the church of St. Mary: compare FiE IV.1 (1932), n° 23; IvE n° 4123; Skizzenbuch 1327, 1334 and 1466.

5 Wilberg, Heberdey, FiE 1 (1906), 133-142; Foss (1979), 57-58; Jastrzębowska (2006), 447-454.

6 Miltner (1959), col. 353-54, Abb. 193; Bammer (1972–75), col. 383 and fig. 6; Bammer (1976-77), col. 93-126.

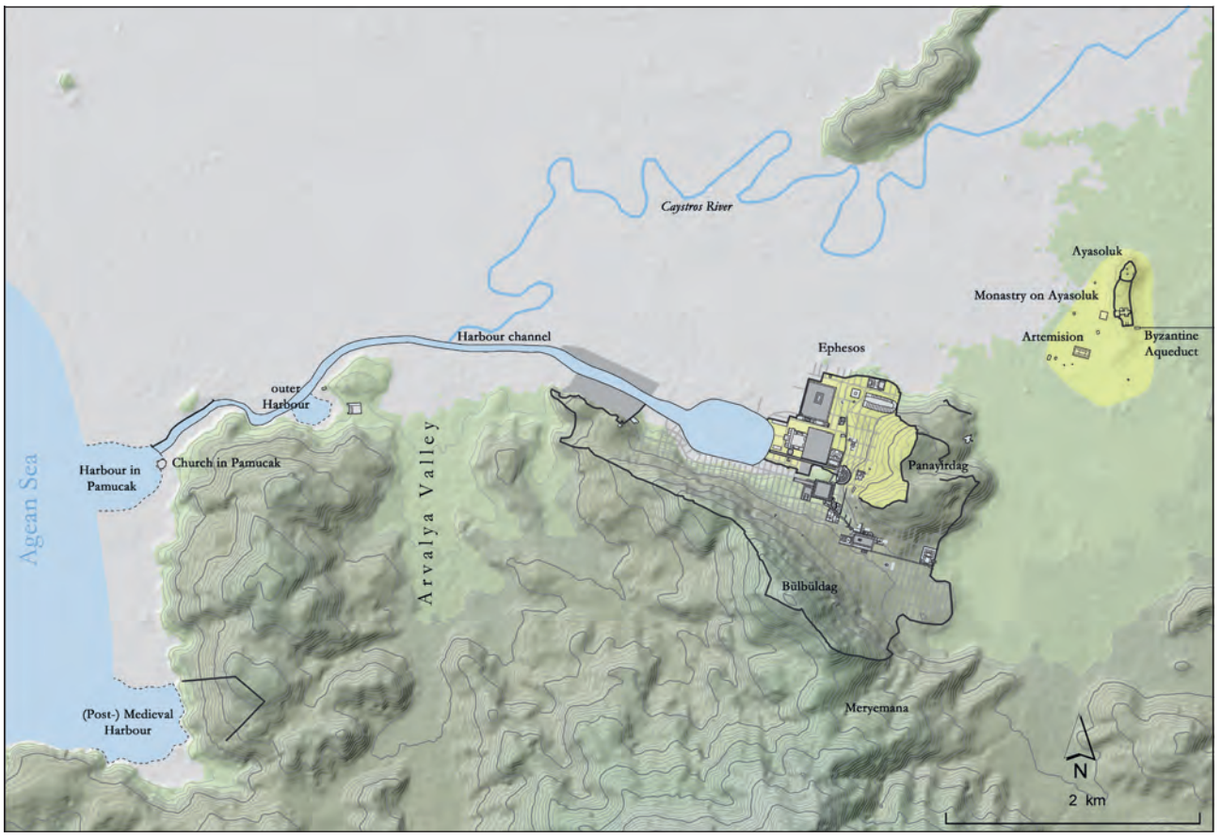

Fig. 2. Byzantine Ephesus, general plan (ÖAW-ÖAI/Ch. Kurtze, N. Math)

XII Scripta/Alea board, but it has been placed there by the excavators.[7] If this reconstruction is correct, the game board was already carved there before the gate was rebuilt in Late Antiquity. However, it seems more likely that this modern placement is erroneous. Subsequently, numerous shops, workshops, and tabernas were built along Curetes Street (or *Embolos*). The reuse of a *XII Scripta/Alea* game board for a canal cover in the Northern porticoes may belong to this period. However, traces of massive destructions in the area are attested from the early 7th century.

The construction of the Byzantine city wall, for which dating hypotheses in the 5th, 7th, and 9th centuries have been proposed,[8] was also an incisive event. While the Arcadiané continued to be an important urban axis, the new fortification excluded the areas around the marketplace (Tetragonos Agora), the state market (Upper Agora), and Curetes Street (*Embolos*), which in Late Antique and early Byzantine times was an important urban area with a public function, as evidenced by the numerous honorary statues and repairs to the buildings flanking the street.[9] This of course did not mean that no one lived in this area anymore, and traces of occupation reveal that it was not completely abandoned.[10] The importance of Ephesus as a Christian pilgrimage site increased significantly from the 5th century, when in 431 the third Ecumenical Council was held in Ephesus in the church of St. Mary. The so-called Grave of St. Luke, a former monopteros fountain house transformed into a church in the second half of the 5th century, situated next to the South Street leading to the Magnesian Gate, may have been one of the pilgrimage destinations the city had to offer.[11] The construction of the new Church of St. John on the Ayasoluk hill under Justinian from 535/36, atop earlier buildings, and the relocation of the bishop's seat to this church promoted the emergence of a Byzantine settlement there, including appropriate infrastructure for pilgrims. The visitors required accommodation and provisions at the site, and the commerce with pilgrim souvenirs became a profitable part of the local economy.[12] From the second half of the 7th century, there is evidence of Arab invasions, but they did not settle permanently in the area. In the 8th century, plague and Arab raids led to a considerable decline in the population. Nevertheless, the old town continued to be inhabited even in the 8th/9th century, especially around the Church of St. Mary, but the focus of the

7 See Schädler (2019b), 86 fig. 1. For the building: Bammer (1976-77), 105, 107-108.

8 Niewöhner (2007), 126 (9th century); Ladstätter (2018), 81 (before 7th century); but now: Ladstätter (2019), 39-40 (5th century). Pülz (2010c), 556 Abb. 15 (plan).

9 See now: Waldner (2020).

10 Niewöhner (2007), 127; Ladstätter, Pülz (2007), 408.

11 Pülz (2012), 249-50; Pülz (2010a), 90-93; Pülz (2010b).

12 Pülz (2010a); Fugger (2022), 290-293.

settlement shifted more and more to the Ayasoluk. In the 11th century, the old town had practically ceased to exist; only a few inhabitants continued to occupy the area around St. Mary's church until the 14th century. A drastic event took place at the end of the 11th century: from 1090 to 1096 the Ayasoluk was occupied by the Seljuks, before they were driven out again by the Byzantines.[13] As we shall see, some game boards engraved in the floors in and around St. John's may date to this period.

It was not until 1304 that the Ayasoluk and its surroundings permanently fell under Turkish control. The Turkish town of Ayasoluk developed out of the Byzantine settlement in the area of the Temple of Artemis, with a fortified castle on the top of the hill. However, the Turkish remains in modern Selçuk have received only limited attention and the daily life of the inhabitants of the Late Medieval and Early Modern period, including their culture and practices of play, remains largely unknown. It must be stressed that traces of Turkish settlement are concentrated exclusively on the Ayasoluk and its surroundings, while they are completely absent from the ancient urban area of the Graeco-Roman city.[14] This is also confirmed by the complete absence of Arab or Turkish games in the "old town".

1. POTENTIAL PLAYING SURFACES AND GAME BOARDS

The identification of those designs that served as playing surfaces or even game boards, i.e. boards for a board game, is of course the primary task of such a research project. Generally speaking, playing surfaces or game boards tend to have specific shapes, specially designed for particular games. Therefore, they usually appear not just once, but are repeated in different places within a site or across sites. However, among the pavement signs are not only geometric patterns, but also letters, combinations of letters, textual inscriptions, and figural designs.[15] In some cases, a geometric pattern is accompanied by an inscription. On the Arcadiané, the main street leading from the harbour to the theatre, the Early Christian inscription KYPIE BOHTHCON around a circular pattern 39 cm in diameter can be seen.[16] NH/KA/HTY/XH/OΛYM[…][…]ΔOC is written in the outer circle of an elaborately designed wheel pattern on the same street.[17] And NIK[A H] TY[X]H[…]N can be read besides a Three Men's Morris pattern on top of the secondary fill of an intercolumniation in Curetes Street (*Embolos*).[18] With such acclamations accompanying the designs, it is not easy to know whether the wish for good luck was addressed to the player of a game played on that design or whether the design itself was considered a good luck symbol, with the inscription referring to gladiators, athletes, or *aurigae* in the circus.[19] This last possibility is attested by the acclamation for the Greens NIKA H TYXH ΠΡΑCINΩN, engraved next to a wheel pattern on a block at the north side of the *Embolos* close to the statue of Aelia Flacilla near the *Nymphaeum Traiani*.[20]

2. CIRCULAR AND WHEEL PATTERNS

A great number of circles and wheel patterns are distributed all over the urban area of ancient Ephesus, mainly along the streets. Circular patterns come as simple circles, circles divided by one line, circles divided by two intersecting lines (or four spokes), possible Christograms (a circle divided by six spokes), wheel patterns (a circle with four intersecting lines or eight spokes), and double or triple versions of such patterns. A particularly high concentration is attested on both sides of the Arcadiané.[21] They usually do not protrude further into the middle of the street than the tetrastyle memorial, erected in the 6th century. It appears that the only areas of the street pavement without circles and wheel patterns are those where the ancient pavement is not preserved. In some instances, several wheel patterns appear side-by-side on a relatively small surface (Fig. 3). Their relation to what was inside the covered colonnades, which lined both sides of the streets to give access to rows of shops behind them, is difficult to establish. In other contexts, wheel patterns often appear in front

13 Anna Komnena, Alexias, XI §5, 1-5.

14 Ladstätter (2019), 63.

15 On the Arcadiané, combinations of letters appear frequently in intercolumniations and might hint at collegia having their premises/workshops there: See Rohde (2012), esp. Chapter 5. For figural designs see, for example, Ladstätter (2019), 45 fig.38; Roueché (2011), figs. 6.1-7.

16 Lessing, Oberleitner (1978), Abb. 62. The formula appears also elsewhere in Ephesus, in graffiti from the Church of St. John (IvE 4315b, 4318a, 4318c), from the Grotto of St. Paul (IvE 1285.5, 1285.7, 1285.19) and in front of the Library of Celsus (IvE 1374.1). It is usually used in the sense of "Lord, help your servant (name)". Sometimes, this help is asked for in the course of a game: see the Gruterus-game board with the formula "Κ(ύρι)ε βοῆθει τοῦ ἐγράψαντος καὶ παίζοντος εἰς τὰ βόλια. Ἀμήν" ("Lord, help the writer and player at dice. Amen"): Goncalves (2014). Compare also the *XII scripta/Alea board* from Ghor es-Safi (Jordan), reading Κ(ύρι)ε, ὁ γράψας *v* δὸς *vacat* χάρησμα β(όλια) II ("Lord, grant the writer two throws of the dice"): Meimaris (2008), n. 64; Politis (2023), 55 fig. 4.1a, 4.1b). As a medieval example for a successful prayer to St. Mary in the course of a gambling game, compare the song n° 214 of the *Cantigas de Santa Maria*: see Krappe (1946) and recently Parkinson (2020). However, in the case of the graffiti found in the Church of St. John and the Grotto of St. Paul this seems rather unlikely.

17 Schädler (2012), 22 fig. 7: second intercolumniation from the tetrastyle monument, on the north side of the street.

18 Similar combinations of geometric pattern and acclamation are also found in Aphrodisias: Roueché (1993). For the acclamations in Aphrodisias see: https://insaph.kcl.ac.uk/ala2004/inscription/bytxt.html. Dunbabin (2017), 164-65.

19 Acclamations for the circus factions are frequently found in Ephesus and other sites.

20 IvE 1198. Roueché (1999), 167 n° 14; Roueché (2007), 222-223. For wheel patterns as symbols of good luck see: Schädler (2018), 91-92.

21 On the development of the Arcadiané, see Schneider (1999).

Fig. 3. Wheel patterns engraved into the pavement of the Harbour Street (Arkadiané) (photograph U. Schädler)

of entrances or even on thresholds. Such a wheel pattern is engraved into the entrance of the Harbour Gate or, to give another example, in front of a house on the Theater Street.

The function of these wheel patterns is a matter of debate. They probably served different meanings, symbolic, apotropaic, as *topos* markers, or as playing surfaces for throwing games. Importantly, however, the long-established theory that these patterns were boards for a circular version of Three Men's Morris, must be discarded, as has been convincingly proven elsewhere.[22]

In Ephesus, one context is particularly intriguing. At its eastern end, the Arcadiané terminates at the so-called East Gate, a poorly studied monument which marked the transition from the street to the theatre plaza, the level of which was about 1 m above the level of the street.[23] From the mighty supports which separated three passageways and fragments of a relief frieze 4 m wide and 80 cm high, decorated with scenes of battles against barbarians, it can be inferred that it was a monumental gate, not unlike a triumphal arch. It is not unplausible to suggest that this monument must be related to the "Boar" mentioned in the Arcadiané inscription as the end point of the street, a place or monument referring to Ephesus' mythical founder (*ktistes*) Androklos and the foundation myth of the city.[24] The space to the west of the East Gate (in front of its façade) is covered with a dozen wheel patterns, each arranged at a distance from the others (Fig. 4). What is particularly remarkable about this is that this collection of wheel patterns extends into the middle of the street, whereas everywhere else on the Arcadiané they appear at both edges of the street near the colonnades. It seems therefore that these wheel patterns are related to the East Gate, i.e. they are engraved there not so much on the street but rather in front of the gate. The most plausible explanation seems to be that they served as *topos* markers for certain participants during ceremonies held in front of the gate's façade.

3. SQUARE SHAPES

Squares crossed by four spokes, in some cases with both diagonals added, are usually connected to the game described by Ovidius (*Ars amatoria* III 365-66; *Tristia*, II, 480-81) and identified as Three Men's Morris.[25] At least 40 such patterns have been documented across Ephesus.

22 See: Heimann (2014), 51-61; Behling (2014), 63-70; Schädler (2018), 87-98.

23 Heberdey (1899), col. 47; Heberdey (1900), col. 90; recently: Yoncaci (2007), 70 and fig. 3.24, 3.25; Schneider (1999), 476. It could have been built in honor of an imperial visit. For a good photograph see Roueché (2009), 168 fig. 14.

24 IvE 557: ☩ ἔχι ἡ Ἀρκαδιανὴ ἕως τοῦ Συάγρου αί β′ στοαὶ κανδήλας ν′ ☩ ("The Arcadiané, i.e. the two halls, has up to the boar 50 lamps"). For the discussion see: FiE 1 (1906), 55; Heberdey (1905), col. 54-57; Schneider (1999), 476; Rathmayr (2010), 33.

25 The earliest full description known to us was given by king Alfonso X in his "Libro de los juegos", 1284, fol. 91r: Schädler, Calvo (2009), 291-292, 302-303.

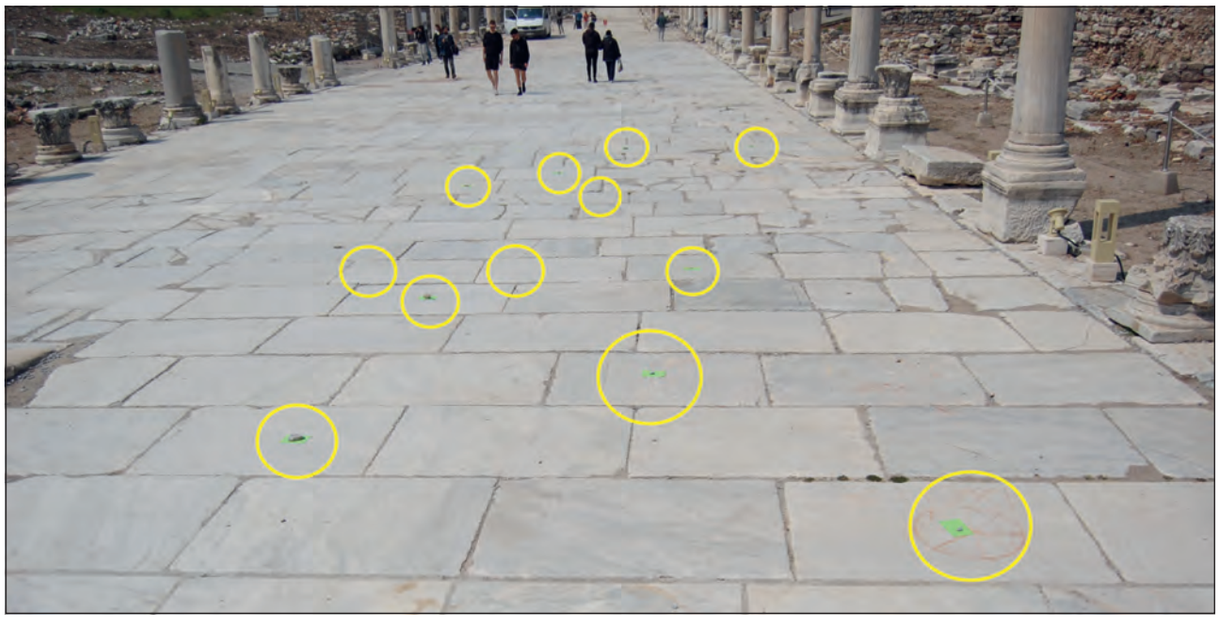

Fig. 4. Wheel patterns in front of the western facade of the East Gate, Arkadiané (U. Schädler)

4. TWO ROWS OF SQUARES

Another type of pattern consists of an oblong rectangle divided into two parallel rows of five square cells by one central line running parallel to the long sides and four intersecting lines parallel to the short sides. At Ephesus, apart from boards of 2 × 5 squares, boards of 2 × 11 squares are attested. In some cases, circles or cup-like holes fill the cells. In one case, the two middle cells - that is, the sixth square of each row - are specially marked by inscribed circles. Elsewhere I argued that these patterns are for a version of the Greek *Lines* game, of which the standard variant described by Pollux had five lines, with the central line called "the Sacred [Line]".[26] Of this game there apparently also existed a "double" version of 2 × 11 lines, i.e. 2 × 5 lines plus a new "Sacred Line" between them. The above-mentioned board on the Curetes Street, with both central squares marked by circles — thus leaving 2 × 5 cells on either side — strongly suggests that it is a board for this type of game. In Ephesus, no such patterns with numbers of cells other than 2 × 5 and 2 × 11 have been observed.[27]

An interesting case is that of an acclamation for the Blues (i.e the circus faction) accompanied by five parallel lines, situated on the upper step in the eastern colonnade of the Tetragonos Agora, towards the northern end.[28] Five parallel lines are often boards for *pente grammai*, however, game boards of this type have not yet been attested in Roman Imperial and Late Antique contexts.

5. *XII SCRIPTA/ALEA* PATTERNS (THREE ROWS OF TWICE SIX SQUARES)

Patterns consisting of three parallel rows of 12 "squares" divided into groups of six can, by comparison with the description given by Isidore of Seville (*Etymologies*,18.60-64) and the 4th-century dice tower from Froitzheim[29], firmly be associated with the game Isidore calls "Alea". This game apparently is nothing less than a late antique version of the *Ludus XII Scriptorum* (or *XII Scripta*), mentioned in literary sources since the Republican period.[30] The places on *XII Scripta/Alea* game boards can take very different forms: circles, semicircles, single squares, connected squares, crosses, dashes, leaves, dots, or other symbols, or even letters, in many cases forming hexagrams. The groups of squares are usually divided by an empty space or a symbol, such as circles or semi-circles, six-petalled circles, or semicircles with a half rosette, crosses, squares, and many more such dividing symbols.

At Ephesus, 34 such game boards are attested, most of them unpublished. One is engraved – on the model of a wooden folding board – in the surface of a marble table in Hanghaus 2, Wohneinheit 7.[31] Others are engraved into pavements, and still others are elaborate monumental gaming tables, similar to the gaming tables from the Hadrianiac Baths at

26 Pollux, *Onomastikon*, VII 206; IX, 97. See also Eustathius, *Od.* 1397,28 and *Il.* 633,58-59. For the game see: Schädler (1998), 12-19 with typology fig. 1; Schädler (2009); Kidd (2017); Costanza (2019), 99-103, 193-195.

27 Elsewhere, a few patterns with other numbers of squares are attested, as e.g. a pattern of 2 × 6 squares in the *dodekastylos* of the temple of Apollo at Didyma, see Höckmann 1996, pl. 45.1. They are, however, very rare.

28 The acclamation reads: […]NΩ / ✠NIKA H TYXH TON BENETON.

29 Horn (1989), 139-160. For this and similar dice towers see: Cobbett (2008), 219-235.

30 For the game see: Schädler (1995), 73–98. Schamber (2009) gives a useful overview of the material, without, however, new insights. For a short summary see also Schädler (2016), 519-523.

31 Schädler (2016).

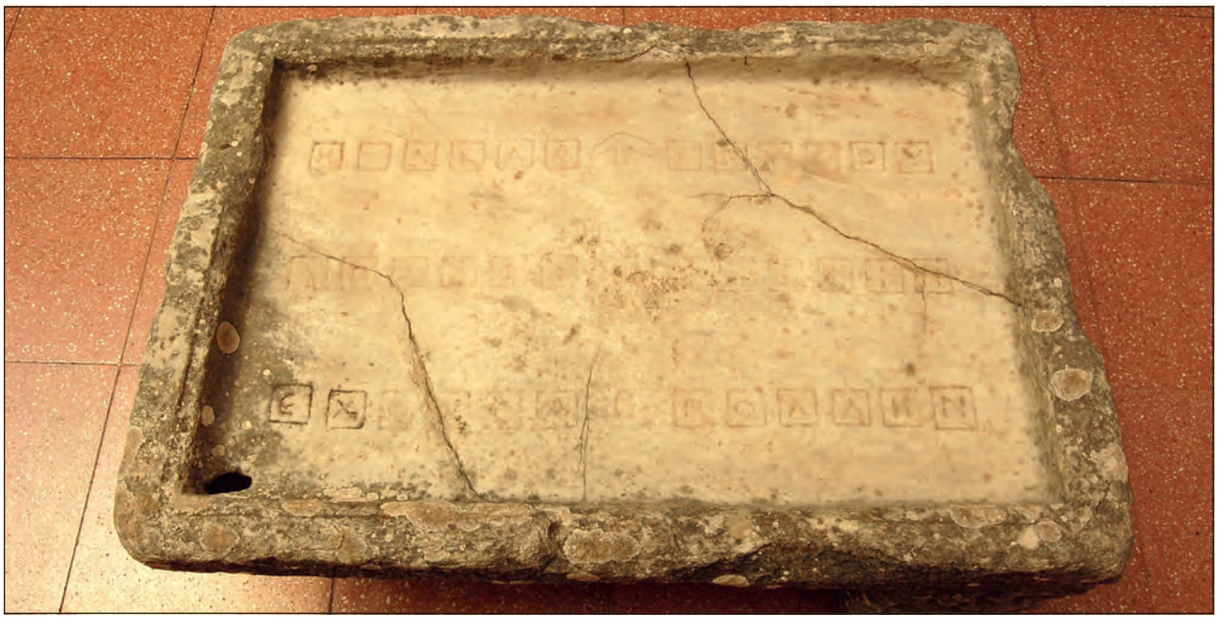

Fig. 5. Alea table with inscribed hexagram „The table on which losing money makes fun", probably 4th/5th century, Archaeological Museum Selçuk (photograph U. Schädler)

Aphrodisias, from the Agora at Perge, or from Sagalassos, and other sites[32]. The design and workmanship of the gaming table exposed in the Ephesosmuseum Vienna is closely related to the Aphrodisian tables.[33] On the *Alea* gaming table from the East Hall of the Marble Street, a Greek hexagram has been inscribed on the squares, which suggests that losing money on this gaming table was a pleasure (Fig. 5).[34] In Asia Minor, *XII Scripta/Alea* boards with hexagrams in Greek are also known from Sagalassos, Kos, Halikarnassos, and Bursa.[35] Several *XII Scripta/Alea* boards are engraved into the pavements close to passageways, as for example one in the south-eastern gate to the State Agora, another one, partly covered by the southern pillar, in the Gate of Herakles in Curetes Street, and a third one in the south-eastern corner of the colonnade of the Tetragonos Agora, entering from the Mithridates gate. *XII Scripta/Alea* is the only ancient game for which people went to the trouble of making monumental game tables. For some of these tables, professional stonemasons reused blocks whose sides and undersides remained unfinished. The playing surfaces are however of high-quality workmanship: the squares precisely carved (in the case of a game board once lying beside the north colonnade of the State Agora, even the finely incised preliminary lines are still visible: Fig. 6), the surfaces smoothed, the playing surface recessed within a raised border, and with a small hole in a corner to serve as a rainwater drain, which suggests that these tables were set up in the open air.

6. MARBLE LANES

As marble lanes were identified collections of depressions or pockets, carved preferably into long rectangular surfaces such as steps or thresholds.[36] The pockets are distributed in such a way that the number decreases from one side to the other. Often there are two parallel lines on the short side where the density of depressions is highest, while at the opposite end there is a target trough, sometimes rectangular in shape; but in some cases, the target seems to be one depression in the middle of the board. In Ephesus, four such marble lanes are still *in situ*: one on the steps of the Celsus Library, two on the steps of the Octagon or the Tomb of Arsinoe IV and one on the steps of the Heroön right next to it. In both cases, game boards of other types are engraved into the adjacent steps to form an area where people gathered to play different games. A possibly unfinished marble lane is in the street pavement in front of the Library of Celsus. A fragment of another marble lane is built into the Byzantine fortification wall of the Ayasoluk: it preserves the two parallel starting lines and a number of depressions (Fig. 7).

These types of potential playing surfaces and game boards appear on the site of the Graeco-Roman

32 Roueché (1989), 110–112 nr. 68–71 ; Roueché (2007a), 101 ; Talloen (2018), 97-132.

33 Seipel (1998), 110-111 Nr. 34 ill. on p. 108.

34 Merkelbach (1978), 48–50 (erroneously identified as *Ludus Latrunculorum*); Börker, Merkelbach (1979), 226 Nr. 556 (erroneously identified as *Ludus Latrunculorum*).

35 Sagalassos: Talloen (2018), 103-104 fig. 2. I have to thank Anne Widura, Klaus Hallof, and Signe Isager for alerting me to the finds from Bursa, Halicarnassus, and Kos (IG XII 4,4, 3409), all with Greek inscriptions in the squares. The text of the still unpublished Halicarnassus board (Bodrum Museum inv. no. 6567), of which only the left part is preserved, reads "ΤΑΒΛΙΝ [.....] / ΦΕΙΛΩΝ [.....] / [.]ΟΝΟC [.....]". The inscription will be published in the Corpus of Inscriptions from Halikarnassos, to be edited by Jan-Mathieu Carbon, Signe Isager, and Poul Pedersen, which is under preparation.

36 See Schädler (2013); Schädler (2019); Penn, Courts, Schädler (2023).

Fig. 6. Elaborate Alea board, Ephesus, State Market, probably 5th century (photograph U. Schädler)

Fig. 7 Fragment of a marble lane built into the fortification wall of the Ayasoluk (photograph U. Schädler)

town. The picture is completely different on and around the Ayasoluk hill. Here, the Graeco-Roman patterns are almost totally absent, while the patterns found here are completely absent from the Graeco-Roman town. Only a fragment of a marble lane has been reused as spolia in the walls of the fortification under the church, a block with two wheel patterns and one with two square patterns were built into the wall of the Selçuk Castle, and another wheel pattern is engraved into one of the blocks probably taken from the stadium and reused to construct a flight of stairs below the fortification wall overlooking the plain.[37]

7. NINE MEN'S MORRIS BOARDS

No less than 12 Nine Men's Morris patterns are documented, 10 of them within or near the Church of St. John and one inside the Selçuk Castle.

8. ALQUERQUE BOARDS

Following the description given by King Alfonso X in his *Libro de los juegos* from 1284, a board for the game of "Alquerque de doze" ("Alquerque with 12 counters") and for the game of "Cercar la liebre" ("Surrounding the hare"), consists of four boards for Three Men's Morris (called "Alquerque de tres" by

37 Next to this block the fragmented funerary inscription *SE* 2663.20 (see ÖJh 62, 1993, 139 n° 46) was also reused to make a seat.

Fig. 7

Fig. 8: Game boards engraved into a marble block: unfinished Alquerque, Tâb, Alquerque (from left to right), St. John's Church, Ayasoluk, Selçuk (photograph U. Schädler)

Alfonso) arranged in a square.[38] We identified four Alquerque boards on blocks in the Church of St. John. Two such boards are engraved right next to a Tâb board on a block which Franz Miltner reused in 1957 to restore the northwestern pillar in the central nave of the church (Fig. 8).[39]

One further notable context is constituted by engravings which can be seen on a block now standing upright in the southeastern passage of the transept. On the block, a Three Men's Morris pattern, a Nine Men's Morris pattern, and a barely visible Alquerque pattern are scratched into the marble and. The drawings are accompanied by a more deeply engraved name, reading Muhyiddîn or Madschîdaddîn Ibn[40] ("Madschîdaddîn the son of…"), presumably left by an Arab visitor.

9. FOUR ROWS OF SQUARES: TÂB OR „14"?

A board[41] with 4 × 16 squares was engraved right next to the Alquerque board mentioned above (Fig. 8). Another one of 4 × 14 squares was engraved on a former threshold and next to a Nine Men's Morris pattern.

38 Schädler (2009), 291-293 (translation), 297-303 (commentary); Musser Golladay (2007), 595-603.

39 Miltner (1959), 376 with fig. 201; Miltner (1960), 66-69 with fig. 42.

40 Reading by Gesine Yildiz.

41 For this game see: Depaulis (2001); de Voogt *et al.* (2017).

10. GRIDS

A pattern consisting of 5 × 5 squares (19 × 15 cm) is engraved into the pavement of the street leading from the north-western exit of the church up to the Castle. It can certainly be associated with a kind of Seega game. A Nine Men's Morris-pattern (27 × 27 cm) is located directly next to it.

So, what is the date of these game boards? The Turkish occupation of 1090-1096 seems less likely, because game boards carved into floors testify to a long-term presence of people who have time to kill and therefore meet often at these places to play. The Church was not a mosque at this time, making it an unlikely place of congregation for the Turks; it was only when the Aydınoğlu dynasty took permanent control of the site in 1304 that the church was temporarily used as a mosque. According to Ibn Battuta, who visited the city in 1333, the Church of St John was then still in splendid condition and served as a mosque, which is also confirmed by William von Boldensele in 1335. Significant for our present purposes, however, is Ludolf von Sudheim's (or Suchem's) account, written between 1336 and 1341, according to which the former church served as a market hall: "In this church the Turks now sell silk, wool, wheat and other merchandise of the kind."[42] Such a mundane function

42 "In ipsa ecclesia Turchi nunc vendunt bombycem, lanam et frumenta ac huiusmodi mercimonia."

for a building, where people use to gather, is often a breeding ground for games and their players. A few decades later, Sultan Isa Bey I had a new mosque built, which was completed in 1375.[43] The reason for the new building was perhaps the progressive decay of the old church.[44] The mosque was completely built from reused material, but no structural elements from the Church of St. John were used, but only decorative elements such as revetment panels.[45] From this and from a pilgrim's inscription that provides a date of 1387, we can assume that the Church of St. John was still accessible at that time. Therefore, the collapse and burial of the church probably occurred in the late 14th or early 15th century, when most of the floors would have been buried and levelled. We can therefore assume that the games on the Ayasoluk date either from the time of the first Turkish occupation between 1090 and 1096 or, more likely, from the time of the profane use of the former church during the 14th century.

CONCLUSION

To briefly sum up our observations, six major observations emerge from this survey:

1. The absence of gridded game boards. Except for one board of 5 × 5 squares near the church of St. John, gridded boards, such as boards for *Ludus Latrunculorum*, are absent at Ephesus.
2. The enormous number of wheel patterns is striking, but comparable to what can be observed in Aphrodisias. The sheer number makes it unlikely that we are dealing with "boards" for one particular game. It is plausible to think that these patterns instead served various functions.
3. Monumental game tables and boards made by professional marble craftsmen are only attested for *XII Scripta/Alea*. This attests to the high esteem the game was held in during Late Antique and early Byzantine times, as is also clear at Aphrodisias and other sites.
4. The difference between the games present in the Graeco-Roman town on the one hand and on the Ayasoluk hill on the other is striking. It seems that the Byzantine population did not leave traces of playing board games in and around the Church of St. John. On the other hand, Arab and Turkish games are only to be found there and not in the Graeco-Roman town. On the Ayasoluk, Nine Men's Morris, Alquerque, and Tâb appear together. This fact calls into question previous assumptions that the game of Nine Men's Morris was known in the Roman Empire already during the Imperial period. It looks like these games did not arrive at Ephesus prior to the Arab invasions.
5. No Mancala-type patterns have been observed in Ephesus. The only evidence for this game at Ephesus is on top of the ruins of the Belevi Mausoleum, where the parallel rows of depressions show that the Ottoman soldiers passed their guard duty by playing games.
6. Chess, already known in Constantinople by the time of emperor Alexios Komnenos (* 1057; † 1118)[46], is not present among the carved games boards on the Ayasoluk.

However, a forthcoming in-depth study will provide further information and reflections concerning the history and evolution of the culture of play and games in Ephesus, as well as discussing the origin and history of some of the games attested in and around the "metropolis Asiae."

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Abbreviations

FiE Österreichisches Archäologisches Institut, Forschungen in Ephesos, Wien, vol. 1, 1906

IvE Inschriften von Ephesos, Teil 1.a, 1979 – Teil 8.2, 1984, Habelt, Bonn (incorporated in «Inschriften griechischer Städte aus Kleinasien»)

IG Inscriptiones Graecae

ÖJh Jahreshefte des österreichischen archäologischen Instituts in Wien, Wien

SE Supplementum Ephesium, herausgegeben von Michael Alpers und Helmut Halfmann (Universität Hamburg) in Zusammenarbeit mit John Mansfield (Cornell University) und Christoph Schäfer (Universität Regensburg), gefördert von der Deutschen Forschungsgemeinschaft. Hamburg 1995.

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43 The dedicatory inscription dates to January 13, 1375: George Niemann, FiE 1 (1906), 131. Sotiriou (1921-1922); Thiel (2005), 82.

44 An earthquake which shook Hierapolis and Laodikeia is documented for the year 1358. Whether it also affected Ephesus, however, is unclear. See Kumsar *et al.* (2016).

45 George Niemann, FiE 1 (1906), 116; Thiel, 107 note 94; Otto-Dohrn (1950).

46 Anna Komnene, *Alexiad*, 12.6.1.

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Europe's playful frontiers: Roman board games in the Barbaricum, from Britain and across the Rhine and Danube lands[1]

INTRODUCTION

In 2014 the Allard Pierson Museum, Amsterdam opened its renewed Roman galleries, accompanying them with a new book exploring the impact of Rome[2]. Included was a chapter dealing with entertainment, the umbrella term used to subsume various forms of play and recreation. Of the three contributions[3] only Willemsen addresses the question of board games, recognising that the archaeology record appears to show that board games were a Roman practice that they brought to Northern Europe. It is a necessarily brief survey within that publication's limits but it points up the lack of long overdue research into the Europe-wide evidence for the spread of board games through contact with Rome[4]. There are of course notable exceptions[5]. This paper on its own cannot redress the balance, not only do we not have the space but much essential groundwork remains to be done in reviewing and assessing the evidence from across Rome's European frontiers and the cultural complexities of interaction and exchange it reveals[6]. The discussion about "Roman" gaming material found in regions that were not provinces of the Roman empire turns around the question of the so-called "Roman import": its transmission and accessibility, which wraps around several questions: how, for instance, did the reception of Roman board games vary across the frontier zones? How finely can the chronology be tuned to assess when the arrival of board games began? What changes in meaning took place in the symbolism of board games? What does the evidence reveal about Rome – Barbaricum political and social relations? What prompted Celtic and Germanic innovations upon Roman board games? What are the dynamics of the subsequent spread of indigenous games into former provinces of the West, after the dissolution of the Empire? Were glass counters used for playing games or just regarded as exotic or precious objects?

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2 Huppertz *et al.* (2014).

3 Naerebout (2014), Hoogendijk (2014) and Willemsen (2014).

4 A thesis first put forward by Hall, Forsyth (2011).

5 Notably Widura (2015), which sets Europe in a wider Roman and Classical context (critically establishing that the spread of Roman games in German territory was not restricted to the elites and their burials) and Krüger (1982), a ground-breaking review of the range of evidence in Late Iron Age and Roman period Germania.

6 cf. for example, in an early medieval context, Kopp (2018), Hall (2018) and Forsyth, Hall (2021).

Another aspect concerns the question of the transmission (both whether and how) of rules for games from the Roman to the Barbarian world, and whether the Barbarians played Roman games or newly invented games. In this context, Stefan Schreiber recently posed the question what precisely would be the Roman import: the gaming material (game boards, counters, dice), the rules and principles of the game or the practice of playing board games.[7] As Petra Wodtke recently pointed out, the question also implies two different perspectives, namely that of archaeology on the one hand and that of the "Barbarian" owners/users of this playing equipment on the other. With regard to the archaeological discipline, she stressed that:

labelling an object as "Roman" always implies "assignment to a culture or a society" ("the Romans") or even to an ethnicity, however heterogeneous one may imagine it to be. If something is declared "Roman," it also immediately becomes the mediator of a "Roman culture," a "Roman style," or otherwise a form of "Roman presence." An object addressed as "Roman" is thus inscribed with a "Roman environment" quasi automatically at the moment of its discovery. The object is stylized as a representative of a "Roman society," it becomes a bearer of meaning for "the Roman," a part of a "Roman culture".[8]

Whether this was also the understanding of the "Barbarian" owners/users of this objects, is a matter of debate. Did they consider this material "Roman" and was this of any importance to them? Did they provide, own, and use these games to represent a particular identity concerning status, gender etc?[9] And how do we define "Roman" in the context of games and gaming material? This paper then serves as a prolegomenon for a much fuller survey and seeks to further demonstrate the potential and to indicate the range of fruitful, complex issues raised by the still too often dismissed evidence of "playthings."

Within its allotted space this paper cannot cover the entire frontier zone and so the focus is on two broad case studies: Britannia and its frontier and the lands beyond the Rhine-Danube frontier (with occasional comparisons from elsewhere). The Britannia case study has a smaller geographic range permitting analysis of the Roman province and the 'barbaricum' beyond. It has two elements: an overview of the evidence, military and civilian, from across the province and through time; and a more detailed look at the situation north of Hadrian's Wall, in Scotland, to spotlight some less well-known evidence as an example of a long-term frontier zone where the gaming evidence reveals linkages and contrasts across the Roman military presence and the indigenous community groupings. For succinctness the evidence is presented as a provisional, outline catalogue laid out in two tables (Tables 1 and 2), intended also as a springboard for future work[10]. In assessing the evidence on the Rhine-Danube frontier zone, one of the authors (US) draws together the main strands of evidence from a huge geographic area, much of it (especially from Poland) little known to scholarship in Western Europe. In essence then, the idea is to explore the evidence for board games in terms of their arrival, their spread through time, their innovation and legacy, that is the games developed by the Barbarians from this Roman material. We are talking not about a single episode of introduction and adoption but in essence a wave-like series of introductions and adaptations facilitated through trade, exchange, gift-giving, bribery, conquest, assimilation, appropriation, and innovation. Allied to this outline the range of evidence found across the frontiers. Before concluding we turn to discuss some of the contextual issues that unite all this material, specifically the question of Roman gaming material equalling Roman games; the mechanism of Roman gaming material arriving in Barbaricum, and links between gaming and the supernatural/magic.

1. BRITANNIA: A SHIFTING FRONTIER AND ITS GAMING LEGACY

On the mainland of Europe one of the keyways in which we can see board games as an aspect of frontier policy is through their inclusion in high status burials – such as Leuna in Germany – and in ritual deposits such as Vimose in Denmark. In Britain gaming kit is an element of some cremation and inhumation burials down to the 4th century and in the early to mid-1st century CE there is a series of high-status burials from the SE of England which include significant elements of gaming kit. From Camulodunum (Colchester, Essex) come the Warrior's and Doctor's cremation burials[11]. South across the Thames, at Gravesend, Kent, a Romano-British site includes three elite cremation burials of the mid-1st century CE. Each contained elements of handled boards, one of them including 23 glass counters, two dice and wine mixing and drinking

7 Schreiber (2018), 194.

8 Wodtke (2018), 37: "…die Zuweisung zu einer Kultur oder einer Gesellschaft („die Römer") oder gar zu einer Ethnie, so heterogen man sich diese auch vorstellen mag. Wenn etwas als „römisch" deklariert ist, so wird es auch sogleich zum Mittler einer „römischen Kultur", eines „römischen Stils" oder sonst einer Form von „römischer Präsenz". Einem als „römisch" angesprochenen Objekt wird somit im Augenblick seiner Auffindung eine „römische Lebenswelt" quasi automatisch eingeschrieben. Das Objekt wird zu einem Repräsentanten einer „römischen Gesellschaft" stilisiert, es wird zu einem Bedeutungsträger für „das Römische", zu einem Teil einer „römischen Kultur"." Also cited by Schreiber (2018), note 218.

9 Wodtke (2018), 44.

10 These tables refine and update the data presented in Hall (2007), 40-54.

11 Crummy *et al.* (2007), 170-96, 201-53; 352-75; 444-47; Hall, Forsyth (2011).

vessels.[12]. From Welwyn Garden City, Hertfordshire, comes a rich cremation burial including 24 spherical glass gaming pieces with 6 pieces each of 4 contrasting patterns of dots or eyes and associated with them the fragments of six beads and bangles[13]. From the site at King Harry Lane, Verulamium/ St Albans, Hertfordshire, comes an equally rich cremation burial, where the finds included several bone pegs of 'ice-cream cone' form[14]. Four identical cone-pegs have also been excavated form a well at the elite site at Skeleton Green, Hertfordshire – the well and its deposits (evincing well spread contacts with Gaul) have been dated to not later than 10 CE and are arguably the earliest known gaming pieces from Britain[15]. From Alton, Hampshire, comes a cremation burial with a complete set of counters with board and dice and a rich accompanying assemblage, dated 45-65 CE[16]. These high-status burials raise the question of innovation – do we see them as developments of Roman games in a new cultural context or do they represent pre-existing Celtic games?[17].

One of the most critical factors in the spread of board games was the role of the military[18], which is multi-layered, for the military was not just a fighting, conquering force, absorbing new territory – in this case driving north and west across Britain – but one that had multiple peaceful contacts with indigenous peoples within and beyond a province. The soldiers played for their own recreation and used such recreation to interact with civilians and indigenous peoples, too. At the eastern end of Hadrian's Wall, the fort at Arbeia was an important naval supply base and helped facilitate Septimius Severus's invasion of Scotland in 208 CE and was also culturally diverse – its name comes from it being home to a detachment of Arabian soldiers and it was also for some time occupied by a squadron of Spanish cavalry. There is an extensive range of gaming kit from Arbeia, including some probable composite peg-pieces in jet and bone, a fragment of a sandstone board, bone counters and dice, glass counters and an unusual and unplayable miniature game board of chequer design[19]. Comparable to this miniature board is a wooden example, a fragment of a disc or lid (original diameter 12 cm), on one face a grid pattern of c. 11 × 4 small cells – it was excavated from the Roman fort at Castleford, West Yorkshire. Like Arbeia, the site has produced an extensive gaming assemblage, including glass counters (both purpose-made and refashioned from vessel shards), bone counters, dice, ceramic counters, and stone counters and found across both the fort and the vicus[20]. A third miniature board is a stone example of similar size and design excavated from the 1st-2nd-century CE Iron Age village site at Glastonbury, Somerset[21], a site which has produced many stone counters and discs and three bone parallelepiped dice. The three miniature boards are too small to be playable and seem unlikely to be toys but could, *pars pro toto,* serve as aids to magic working (a theme we return to below).

The military-generated evidence is, of course, spread across the whole of the province, in recognition of which three further examples must suffice. Excavation of the fortress baths of *Legio II Augusta* at Caerleon *(Isca)*, South Wales, has produced an extensive assemblage of gaming kit in the shape of counters and dice. The diverse range of counters includes some two dozen re-fashioned from sherds of Samian pottery, a similar number re-fashioned from coarse ware ceramic vessels, 48 plano-convex glass counters (32 black, 15 white and one of re-fashioned green bottle glass), a single lead counter, 65 bone counters (100 including those from previous excavations) including one with the Latin graffiti MII = me(um) = 'mine', and five bone and one bronze dice with the typical Roman ring-and-dot pips with opposite faces adding up to seven[22]. The range is compatible with *ludus latrunculorum* and *duodecim scripta*. Their dating encompasses the 1st-4th century, with a particular concentration of the diversity from the frigidarium drain for the period c. 160-230 CE (comparable to a similar group from the legionary bathhouse drain at York[23]). The excavations also found evidence of the manufacture of bone counters on site, with a cattle scapula from which counters had been cut[24]. No boards were found but the two triangular and single rectangular plaques with ring-and-dot pips could be inlays from a board/ boards for *duodecim scripta* (see discussion below). From 88 CE *Legio XX Valeria Victrix* was based at the fortress of Chester (*Deva*) and a detachment of the troops built and operated a pottery manufacturing depot at Holt, Wrexham, Wales. The extent of the depot (with barracks and bathhouse) was established in the early twentieth century with excavations reported by Grimes and although no counters or dice were identified a significant board was recovered. Though not complete, sufficient survives (60-70%)

12 Allen *et al.* (2012), 344-74.

13 Stead (1967).

14 Stead, Rigby (1969) and see Hall, Forsyth this volume for discussion.

15 Partridge (1981), 61, fig. 26, 353-54.

16 Millett (1987), 68.

17 Schädler (2007); Hall, Forsyth (2011); see also Cotton (2001), 26-31 for the wider burial context.

18 Courts, Penn (forthcoming).

19 Allason Jones, Miket (1984), 47-61, 78-79, 276-78, 301, 316, 349.

20 Cool, Philo (1998), 170, 174, 178, 190-92, 225, 260, 262-5, 271-75, 335-36.

21 Bulleid, Gray (1917), 623, fig. 178.

22 Boon (1986), 41; Brewer (1986), 155-56; Zienkiewicz (1986), 191; Greep (1986), 202-07, 211.

23 Macgregor (1976), 2-4.

24 Greep (1986), 209.

to reconstruct a board for *duodecim scripta*, though Grimes simply recognizes it as a game[25]. It is made of a buff ceramic with a buff slip coating, and it has a raised moulded border to prevent pieces leaving the board (cf. discussion on the term *alveus* or "trough-shaped" gaming board in Hall and Forsyth THIS VOLUME). It remains the only ceramic *duodecim scripta* board from Britain. Excavations at the fort at Ravenglass, Cumbria established a chronology spanning the early 2nd century to the late 4th century. From that later phase came seven stone discs/counters[26] and from the late 2nd to late 3rd century three black glass plano-convex counters. Unstratified was a small fragment of a sandstone gaming board of which elements of only six of the deeply-incised cells survive, each bearing a trace of a cross. The key find of relevance here, however, was made in the barrack-block 4. This burnt down in the late 2nd-early 3rd century CE, causing a (presumably leather) bag of counters hanging on the wall to fall to the floor and get preserved in the ashes. The counters comprise 119 bone examples (plain and types marked with concentric circles or spots), some bearing graffiti and seven plano-convex glass examples (black, blue, turquoise, and cream)[27].

But of course, the story is not only a military one and Britannia provisions us with plenty of evidence from civilian contexts, both urban and rural. Two examples must suffice on this occasion. Silchester was originally an oppidum of the Atrebates tribe, which after the Roman Conquest became the Romanised *Calleva Atrebates*. A ceramic board for *Latrunculi* and many counters are amongst the surviving evidence on display in Reading Museum, but they are only partially published in the series of excavation reports in the journal *Archaeologia* between 1881 and 1910. More recently excavated material, from the forum area, includes a black glass plano-convex counter, a fragment of a parallelepiped die and a bone counter[28]. Many mosaics survive from Calleva and these received much fuller consideration in the earlier reports. A geometric example from House 1, Insula XXIII, includes two *Latrunculi* boards scratched onto two of the red tiles, though the boards attract no account in the excavation report[29]. A loose tile, marked with a gaming-board design seemingly for a morris/merels game was subsequently reported[30]. In addition to the partial die noted above a complete parallelepiped die was found and it, and the single example from the Roman baths at Bath[31], remind us that these elements of gaming kit were not confined to indigenous populations (see discussion below). From a rural villa setting at Lullingstone, Kent, excavations found a notable set of glass gaming pieces and dice, along with elements of at least one board evinced by several bone inlays. The inlays are discussed below and suffice to say here that the glass plano-convex counters number 30, 15 of them opaque white and 15 opaque red/brown in colour. All the counters are decorated with marvered spots of contrasting colours, five to eight spots on the white counters and three to twenty-five on the red counters[32]. These civilian sites exhibit a range of social contexts, and as the tower from Vettweiß-Froitzheim (Fig. 1) reminds us, links with the military: both were part of a single network.

2. THE FINAL FRONTIER ZONE AND BEYOND: THE EVIDENCE FROM SCOTLAND

We turn now to explore something of the dynamics of board game culture on the Northern Frontier of Britain, which from the 3rd century was focused on dealing with the Picts. As a cultural force the Picts continued and changed well beyond the Eastern transition of Rome to Constantinople and Byzantium, becoming a significant polity in the early medieval period. This trajectory for 'Barbarian' *gentes*, was an Empire-wide phenomenon which saw board games involved in complex cultural entanglements, which one of the authors of this paper has previously noted with reference to the Longobards, for example[33].

Before we turn to consider the body of evidence from Scotland, we need to take account of a key object not from Britain but from the German frontier, the well-known but still not fully understood copper-alloy dice tower or *turricula* from Vettweiß-Froitzheim (Fig. 1), a villa or agricultural site situated a short distance behind the Roman side of the North Rhine frontier, in *Germania Inferior*. This single object can be seen to stand at the junction of networks of frontiers, physical and metaphorical. It links the Germanic and the North British, Pictish frontier through its place of discovery, military origin, and its inscriptional references. It also links these back to Rome, where it may possibly have been made, sent out as a diplomatic gift or as high-level military kit. Unfortunately, it has no archaeological context, having been found casually on site before the villa was excavated[34]. It has an openwork form, with geometrically patterned sides and a set of interior baffles that tumble the dice dropped into the tower and directed onto the flight of steps to continue

25 Grimes (1930), 131 no. 12, fig. 60.8.

26 Potter (1979), 72 nos. 49-51.

27 *Ibid*, 75-87, pl. VIIIb and IX.

28 Fulford, Timby (2000), 322 no. 14, 382 nos. 7 and 24.

29 Fox, St. John Hope (1901), 231-3, fig. 1, pl. XXVII; see now also Neal, Cosh (2009), 226, mosaic 321.73.

30 St. John Hope (1902), 31, fig. 4.

31 Bulleid, Gray (1917), 409.

32 Meates (1989), 123-25, 139-42.

33 Hall (2018), 206-07.

34 Horn (1989).

Fig. 1. Copper-alloy dicing tower found at Vettweiß-Froitzheim, nr. Cologne, Germany. Courtesy © Rheinisches Landesmuseum, Bonn.

tumbling in the gaze of the players. The top of the tower has pinecones at the front corners and the steps are flanked by dolphins. It bears two inscriptions. One runs round the back and sides and reads VTERE FELIX VIVAS ('Use happily may you live') and the second, main inscription fills the front panel:

PICTOS/VICTOS/HOSTIS/DELETA/LUDITE/
SECURI

(The Picts defeated, the enemy wiped out,
play without fear)

This hexagram is typical of inscriptions found on boards for *duodecim scripta/alea*[35]. In the context of frontier dynamics, it is notable that four such boards (two of them from Rome and one from Trier) celebrate victory against the enemy. The fourth, from the catacombs of SS Marco e Marcellino, Rome, is particularly significant in that it names the defeated as the Britons (alongside the Parthians):

PARTHI OCCISI / BR[I]TT[O] VICTVS /
LVDIT[E R]OMANI

(The Parthians are killed, the Britons conquered,
Romans play)

Both inscriptions, Froitzheim and Rome, commemorate Imperial campaigns in Britain in the late 3rd and early 4th centuries CE or possibly in the late 4th century CE. Caution is needed in seeking a specific date for the actions referred to, for, as Henig[36] reminds us, the term 'Picts' (and by analogy 'Britons' and 'Parthians') were literary/epigraphic topoi and so difficult to date precisely. That said, the reference to 'Britons' in the inscription on the board from Rome suggests that the campaign possibly being referred to is that of Constantius in 296 CE against the usurper Allectus and his Britons, whose defeat led Diocletian to adopt the title 'Britannicus Maximus.' Around the same time, two panegyrics written to mark Constantius Chlorus' victories as Caesar mention the Picts. In 297 CE the Picts are mentioned as an enemy of the Britons and in 310 CE his victory over the Picts is recalled before his death as emperor in York in 306 CE, following which his son Constantine was acclaimed emperor[37]. For the *turricula* inscription the other potential context of association is the late 4th century – in 368/9 CE General Count Theodosius conducted a successful campaign against the Picts on behalf of the emperor Valentinian I (r. 364-375)[38]. We will return to the Froitzheim *turricula* below when we look at games and their links to ritual and magic.

35 Schädler (1995), 80-81; Purcell (1995), 23-26; Hülsen (1904), 142-43.

36 Henig (2006), cat. 69.

37 Hall (2007), 3 and fn. 8 and 12.

38 *Res Gestae* 28, 3, 1-9; Hughes (2013), 69-72.

TABLE 1:
Provisional outline catalogue of Roman and indigenous gaming kit from Scotland (north of Hadrian's Wall) AD 1-500

LOCATION	SITE TYPE	GAME ELEMENT	MATERIAL TYPE	DATE	REFERENCES
ABERDEENSHIRE:					
1.Crichie	Roman Iron Age Burial cist (?) nr. Bruce's Camp hillfort	13 black, hemispherical, socketed pieces, identified as pin heads but more likely to be gaming pegs	Jet/Shale	2-5th century CE	Callander 1927, 245; Ralston & Inglis 1984, 57-8; Hunter 2006b, 78-9
2.Cairnhill, Monquhitter	Roman Iron Age inhumation burial cairn	• Two balls/marbles, green with inlaid white spirals. • Variety of natural, polished stone pebbles	Glass Stone	2-3rd century CE	Anderson 1902, 678 fig. 4-5; Curle 1932, 296, fig. 7; Stevenson 1967
3.Waulkmill, Tarland	Roman Iron Age Inhumation Burials (2) inserted into a stone circle	**1898 burial:** • 6 plano-convex counters, blue (4) and polychrome (2), several fragmentary • Re-used beaded stem of a Roman vessel • 6 quartzite, oblate pebbles, brown **2012 burial:** • 9 vari-coloured natural small pebbles • Grey, flat disc with abraded edges • Mottled pebble, flattened egg-shape, a so-called 'egg' amulet	• Glass • Glass • Stone • Stone • Mica-schist • Spotted quartzite	2-4th century CE	Coles 1905, 215-17; Callander 1915, 204; Curle 1932, 296, 390-91, fig. 63; Cool & Hall 2016, 47-52; Ingemark 2014, 54, fig. 3.5.5, 251-2, fig. 8.9
4.Dalladies, Kincardineshire	Iron Age open settlement	• 3 stone discs • Irregular stone 'ball' with possible spiral decoration imitating glass	• Schist • Schist		Watkins 1980a, 36-38, fig. 20
ANGUS:					
5.Hurly Hawkin	Promontory fort, broch and souterrain	• 50 discs, various sizes, none too big to be gaming pieces. Spread across the site • Ball/marble, translucent ice-green with 7 spiral eyes of opaque black, turquoise/yellow • Curious peg from the broch floor, short tapering shaft with longer, flattened, oblong head. • Fragment of a black, polished, hemispherical, socketed piece, formerly identified as a pin-head but probably the head of a gaming peg	• Stone • Glass • Bone/antler • Jet/jet-like substance	2nd-5th century CE	Taylor 1982, 233-34, fig. 9; 231-32, no. 55, fig. 13, 232, no.63, fig. 8 Ibid, 239 no. 114; Hunter 2006b, 79 table 2
ARGYLL & BUTE **Argyll:**					
6.Dun a Fheurain, Gallanch	Dun – previously unpublished midden deposits from 1890s excavation, no secure dating	• Finds include three globular headed pins, in size and shape ideally suited to serve as gaming pegs • Medium-sized stone disc	• Bone • Shale	3rd-5th century CE	Ritchie 1971, 108 nos 14-16, 109 no. 40, figs 2, 4
7.Kildonan Bay, Kintyre	Dun	• Min. 8 stone discs • Min. 14 selected pebbles	• Schist and shale • Natural pebbles	1st-3rd century CE	Fairhurst 1939, 212, 214, pl. LXXVIII
8.Dun Mor Vaul, Tiree	Dun/ broch	• 11 circular and oval discs/counters, 2 highly polished • 12 discs/counters • 2 broken, parallelopiped dice, casually found in annex by visitor to broch excavations; numbering on near complete example is 3,4,4,2. • Plano-convex counter, opaque white with 3 green dots; lost after excavation.	• Stone (including schist, slate, siltstone and jet/shale • Ceramic (reused vessel sherds) • Bone • Glass	1st-3rd century CE	Mackie 1974, 135-36, 144, 148,151-2, figs. 13, 18, 19' Clarke 1970, 231 nos 19-20
Bute: 9.Unknown	Cave	• Parallelopiped die with ring-and-dot numbering: 3,6,4,5	• Bone	2nd -5th centuries CE	Clarke 1970, 229 no. 1

TABLE 1: Provisional outline catalogue of Roman and indigenous gaming kit from Scotland - (north of Hadrian's Wall) AD 1-500 (suite)

AYRSHIRE					
East Ayrshire:					
10.Buston Crannog, nr. Kilmaurs	Crannog	• Variegated blue and white 'marble' • Plano-convex, white counter • 3 marble-sized globular knobs, one incised with circles and ridges around circumference. Each has a portion of iron pin projecting from underside. Not identified at time of publication but very likely to be gaming pegs • Red deer astragali	• Glass • Glass • Bone	First-second centuries CE	Munro 1882, 216-17, 242, 244, figs. 214, 215; MacSween 2000, 144, 151
South Ayrshire:					
11.Castle Hill, Dundonald	Hillfort	• Socketed, domed hemisphere, black • 2 sub-hexagonal stone discs	• Bone • Shale • Slate	2nd-5th century CE	Hunter 2006a, 104-07; Hunter 2006b, 76-80
12.Kemp Law, nr. Dundonald	Hillfort			2nd-5th century CE	Ibid, table 2; Stewart 1963, 23
13.Lochlee Crannog, Tarbolton	Crannog	• Black, socketed, domed hemisphere • Thickened disc/counter • Two short minimally carved pegs, with defined heads	• Shale/jet • Stone • Wood	1st-3rd century CE	Munro 1882, 116, fig. 56; 135, fig. 111-112
BORDERS:					
14.Bonchester Hill, Hobkirk	Hillfort	A small stone counter, partially pierced centrally on one side	Stone	1st-2nd century CE	Piggott 1951, 129, fig. 6.3
15.The Dunion	Hillfort	12 stone discs from house interiors	Stone	1st-2nd century CE	Rideout 1992, 102
DUMFRIES & GALLOWAY:					
16.Borness Cave, Borness	Occupied cave	• 3 short pegs, 2 with baluster heads and I with an oblong head • Domed hemisphere with ring-and-dot decoration	• Bone • Bone	2nd-5th century CE	Corrie et al. 1874, 493, 496-7, pls. xvii.23, 33, 80, xxii.114
17.Mote of Mark, Rockcliffe, Dalbeattie	Hillfort spanning mid-to-late first millennium AD	Most of the gaming pieces are post 500 CE but potentially earlier is a black, socketed, domed hemisphere. Previously identified as a pin-head	Jet/shale	5th-early 6th century CE (?)	Curle 1914, 161-2, fig. 15.11; Laing & Longley 2006, 104, 120 no. 1230
FALKIRK:					
18.Camelon	Iron Age roundhouse (adjacent to Roman fort complex – see table 2)	2 plano-convex counters, 1 white, 1 dark blue, from house floor	Glass	1st-2nd century CE	Proudfoot 1978, 120, fig. 5.4-5, 125
HIGHLANDS					
Caithness:					
19.Everly, Keiss Bay	Broch	2 roughly finished stone discs	Slaty stone	1st-2nd century CE?	Anderson 1901, 143
20.Hillhead	Broch	2 parallelopiped dice, one worn and other ring-and-dot numbered 3,5,4,6	Bone	1st-2nd century CE?	Clarke 1970, 229 nos. 2-3
21.Road, Keiss Bay	Broch	Several roughly finished stone discs			
22.Shirza Head, Keiss Bay	Broch	Several roughly finished stone discs	Slaty stone Slaty stone	1st-2nd century CE? 1st-2nd century CE?	Anderson 1901, 137 Ibid, 145
23.Dun Ardtreck, Skye	Drystone fort	2 roughly plano-convex water-worn pebbles	Stone	c. 2nd -5th century CE	Mackie 2000, 393 nos. 69-70
SOUTH LANARKSHIRE:					
24.Hyndford, nr. Lanark	Crannog	Carefully formed circular disc, polished both sides	Stone	c. 1st-3rd century CE	Munro 1899, 380, fig. 3
LOTHIANS					
East Lothian:					
25.Broxmouth, nr. Dunbar	Hillfort settlement	3 antler domes (2 incomplete) charred black for colour and polished, one had an iron pinnacle now lost. Gaming pegs. From House 4, phase 6 (Late Iron Age village), from within the walls and from a floor-pit	Antler	1st to mid-2nd century CE	Hunter *et al.* 2013, 271-72, ill. 10.16; Büster & Armit 2013, 139-52; Büster 2021a, 10, fig. 9; Büster 2021b, 9-10, fig. 5
26.Craig's Quarry, Dirleton	Hillfort settlement	A sawn-off antler tine with sides worked into facets, from floor of round-house	Antler	1st-early 2nd century CE	Piggott 1958, 76 no. 5, fig. 6.5
27.St Germains, Tranent	Iron Age settlement	• Ground disc, probable gaming counter. Unphased • 'Marble'/ball/playing piece. Unphased	• Sandstone • Glass with two colour bands • Sandstone	1st/2nd century CE? Uncertain 1st/2nd century CE?	Hunter 1998a, 238 no. 528, ill. 18 Ibid, no. 349, ill. 18 Gleeson 1998, 240 no. 822

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28.Traprain Law, Haddington	Iron Age hillfort and later settlement	• Edge-ground plain counter from Phase 3 polygonal Iron Age enclosure (a domestic area?) • 6 large, polished, black, socketed, spherical domes, identified as a pin-heads at time of publication and here classified as peg-heads. 4 are fragmentary • Ball / marble of clear/greenish glass decorated with discs of red and white opaque vitreous paste. Excavator later suggested it was a playing piece for a dimpled board/sand • Several years of excavation by Curle and Cree identified 80 "playing-men", discs/counters in various media, 11 from Layer 1; 45 from Layer 2; 18 from Layer 3 and 6 from Layer 4, with 50% dating to c. AD 300-350 • Stone disc/counter	• Jet/shale • Glass • Sandstone (49), shale / jet (6), quartz (6), natural pebbles (7), ceramic (5 – reused Samian sherds), glass (6 – 4 reused Roman vessel glass shards and 2 plano-convex, blue counters), coprolite (1)	2-5th century CE	• Curle 1915, 176-77, fig. 28.2; Curle 1920, 82, fig. 11.27; Curle & Cree 1921, 191, fig. 20.55; Cree 1923, 196, fig.5.30; Cree 1923, 219, fig. 26.5; Cree 1924, 279 • Ibid, 179, fig. 30; Curle 1932, 296; Hall et al. forthcoming • Curle 1915, 191, fig. 38.7, 8 & 10; Curle & Cree 1916, 128, fig. 38.7-14; Curle 1920,72, 83, 90, figs. 11.30-31, 18.13-14; Curle & Cree 1921, 174, 180, 190-91, figs. 11.42, 14.39, 20.38-39; Cree & Curle 1922, 232, 235, 240, fig. 27.3-9; Cree 1923, 197, 204, 214, fig.5. 34, fig. 13.37-38, fig.19.33-40; Cree 1924, 272, fig. 18.10; Ingemark 2014, 157, fig. 3.25.1.3 • Rees & Hunter 2000, 431, ill. 13.171 • Hunter 2004, 105, ill.39
Midlothian: 29.Kaimes Hill, Ratho, Edinburgh	Prehistoric palimpsest including round-houses and ramparts	• Irregular, flattened sphere, broken; decorated with fingernail impressions other than on flattened surface • Two stone domes with roughly flattened bases; unstratified • Edge-ground stone counter • 5 certain (sub-oval and sub-hexagonal in form) and 1 possible stone discs	• Limestone • Fired red clay with grits • Stone • Quartz • Sandstone and slate	Uncertain, probably 2-5th century CE	• Clarke 2004, 99, ill. 35.3 & .5 • Ibid, 99, ill. 39.6 • Ibid, 101, ill. 34-5
MORAY: 30.Sculptor's Cave, Covesea	Occupied cave – the gaming pieces are from unphased contexts	• 8 vari-sized small discoids/counters • 4 vari-sized small discs/counters, carefully shaped and smoothed	• Shell • Stone (sandstone, slate & mudstone)	Unphased but probably 2nd-4th century CE	Cruickshanks & Hunter 2020, 111, fig. 5.20; Cruikshanks 2020, 113, 114-15, fig. 5.23; Hall 2020, 115-16
31.Birnie	Roundhouse settlement	• Marble with inlaid spirals and a small basal socket for a peg shaft • Small, well-finished disc/counter	• Glass • Stone	c. 2nd – 4th century CE	• Hunter 2009, 41, fig. 20f • Hunter 2008, 38, fig. 23d
ORKNEY ISLANDS **Burray:** 32.Bu Broch	Broch and immediately succeeding earth-house	Small stone counter	Stone	Probably 1st-2nd century CE	Hedges 1987a, 43, fig. 1.32
33.Bu Sands	Casual beach find from an eroding midden in the vicinity of a known prehistoric settlement	Four decorated mounts, published as elements of a box of late Roman date from south Britain; re-evaluated recently as possible elements of a gaming board	Antler	3rd/4th century CE	Hunter 1993; Hall 2021, 40-1
Mainland: 34.Broch of Ayre, St. Mary's Holm	Broch	2 parallelopiped dice, one with slightly concave sites, the other convex. The latter has numbered end terminals intact. 1 unstratified, I from outbuilding passage. Ring-and-dot numbering 3,4/6,5,6 the other 3,4,5,6	Bone	1st-3rd century CE?	Clarke 1970, 230 nos. 6-7; Sutherland-Graeme 1914, 42-3, 51, fig. 10

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35.Gurness Broch	Broch – with finds assemblage showing continuity of types from broch period to Pictish period. Finds span late broch and (early) Pictish period, some unstratified	• 2 parallelopiped dice with incised dot numbering: 3,4,5,6 • Domed, hemispherical, socketed so-called pin-head, with iron shank, reclassified as a peg-head here • 2 globular socketed, so-called 'pin-head', with part of iron peg surviving • Solid head of oblong form with trace of iron peg attached • Small, flat sawn gaming piece • Globular unfused distal condyle of a metapodial • Stone disc and 2 selected pebbles (white and black), all polished; unstratified • Slab of laminated stone marked with incised parallel lines in 4 groups which appears to been incomplete gaming board design. Unstratified, could be first or second half of first millennium	• Bone • Bone • Bone • Bone • Ivory • Ivory • Stone (granite and natural pebbles) • Stone	1st-6th century CE?	• Clarke 1970, 230 nos. 6-7, Hedges 1987, 209 nos. 191-92, fig. 2.36 • Ibid, 203 no. 119, fig. 2.26 • Ibid, 203 no. 120-21, fig. 2.26 • Ibid, 203 no. 122, fig. 2.26 • Ibid, 209 no. 193, fig. 2.36 • Ibid, 209, no. 194, fig. 2.36 • Ibid, 218 nos. 302-04, fig. 2.46 • Ibid, 218, no. 310, fig. 2.53
36.Broch of Lingro, Scarpa	Broch	• A parallelopiped dice now lost	• Bone	• Probably 1st-5th century CE	• Anderson 1883, 244; Clarke 1970, 231 no. 13
37.Howe, Stromness	Broch – two successive brochs and succeeding farmstead	• 5 stone disc/counters with ground sides • Small counter/disc from broch tower • Iron 'pin' with glass paste head comparable to the jet/bone hemispherical pin types • Black, domed, socketed, hemispherical 'pin' head, here classified as a peg head; phase dating of site matched to radiocarbon dating means could be early or late • 2 globular with basal holes for shafts • Dome shaped roundel, highly polished with trace of iron 'pin' N.B. 3 stone incised stone gaming boards are from unstratified rubble layers but suggested to date between 6th-9th centuries, probably 6th-7th	• Sandstone and silt • Bone • Iron and glass • Jet/jet-like material • Bone • Walrus ivory / seal tooth and iron	• 2nd-4th century CE • 2nd-4th century CE • 2nd-4th century CE • 5th-7th century CE • 2nd-4th century CE • 2nd-4th century CE • Uncertain, 5th-8th century CE	• Ballin Smith 1994, 188, ill. 106 • Ibid, 170, fig. 106 • Ibid, 219, ill. 130.5502 • Ibid, 191, ill. 107; Hunter 1996b, table 2 • Ballin Smith 1994, 177 • Ibid, • Ibid, 188, ill.90c and 106
38.Broch of Burrian, North Ronaldsay	Broch – the finds are essentially undated and span the mid-millennium divide	The first 6 listed here were classified as pin heads but are probably peg heads: • Solid head • Bun-shaped head • 4 Globular heads, ground and polished pierced by shank of pin/peg on flat underside • Oblong head with iron staining from shank • 3 parallelopiped dice, one unstratified with no clear numbering, one fragmentary with ring-and-dot numbering surviving as 6,2,2 and one restored with3,4,5,6 pips. • 3 conical antler tips • 3 ox phalanges incised with Pictish symbols	• Bone • Animal tooth/ivory • Bone (long bone) • Ivory • Bone • Antler • Bone	• c. 2nd-5th century CE • 4th-7th century CE? • Mid-2nd-5th century CE • 2nd-5th century CE? • 1st-4th century CE?	• MacGregor 1974, 71-76, fig. 8, 111-117 • Ibid, 86-8, fig. 16, 204-06; Clarke 1970, 230 nos. 8-10 • MacGregor 1974, 88, fig. 16, 207-209 • Ibid, 88, fig. 16, 210-12

TABLE 1: Provisional outline catalogue of Roman and indigenous gaming kit from Scotland - (north of Hadrian's Wall) AD 1-500 (suite)

39.The Cairns, South Ronaldsay	Broch	On-going excavation since 2007 has unearthed (between 2007-2017) at least 15 conical and disc/counter pieces. More details pending	Stone, glass	2nd-5th century CE?	Hall, in prep.
40.St Tredwell's Chapel, Papa Westray	Unstratified find from a building beside chapel	Parallelopiped die with pip numbering 3,6,4,5	Bone	5th-6th century CE (and 9-10th century)	Clarke 1970, 231 no. 15
41.Midhowe Broch, Rousay	Broch and settlement	• Half a hemispherical, domed pin/peg head, with socket for iron shaft • Proximal end of an ox femur with a perforation/socket on under side • Sawn off tine point	• Tooth/walrus ivory • Bone • Antler	Late 3rd-early 4th c. CE and 5th-6th c. CE 7th-8th century CE	Callander & Grant 1934, 490, 495
Sanday:					
42.Peter Kirk, Newark	Broch (?)	• Unstratified parallelopiped die, with pips 3,6,5,4	• Bone	2nd-5th century CE?	• Clarke 1970, 231 no. 4
43.Pool	Farmstead	• A small number of stone discs span the late Iron Age and Viking phases • 2 parallelopiped dice, one with probable values of 6 and 4, in double ring-and-dot, the other has pips in the same manner but very worn and only the face with 5 is visible • Group of 6 worked cattle astragali including one with a grid pattern comparable to the two from Bornais of c.5th-6th c. date.	• Stone, including amphibolite • Bone • Bone (cattle)	2nd-5th century CE?	• Clarke 2007, 369, 387-88 • Smith 2007, 513-14. • Ibid, 510-12
44.Stywick Bay, Links of Skaill	Broch?	Antiquarian find of a parallelopiped die with pip numbering: 3,5,4,6	Bone		Clarke 1970, 231 no. 17
45.Unprovenanced	Unknown	Parallelopiped die; pips: 3,6,5,4	Bone		Clarke 1970, 231 no. 16
46.How, Kettletoft	Broch (?)	Peg-head of spherical form, polished and basally pierced	Horse tooth		Anon. 1938, 9
PERTH & KINROSS:					
46.Newmill, Bankfoot	Iron Age souterrain and IA -early medieval settlement	Small fragment of a probable stone board, preserving 11 incised cells arranged 3x3, not all complete. Post-hole fill near souterrain	Slate	C.150-350 CE	Watkins 1980b, 190-91, fig. 11e
STIRLING:					
47.Fairy Knowe, Buchlyvie	Iron Age roundhouse/broch	• Irregular plano-convex, white counter, from the phase 2 broch • Natural, flat circular pebble selected for a counter from phase 2 broch • Two irregular stone counters, one from phase 2 broch, the other from phase 3 broch destruction • Irregular flatish disc/counter from phase 3 broch destruction	• Glass (opaque) • Quartzose sandstone • Sandstone (laminating) • Fired clay	• c. 80-140 CE • c. 80-140 CE • c.80-140 CE & c. 100-140 CE • c.100-140 CE	• Hunter 1998b, 337-38, no. 253, ill. 17 • Clarke 1998, 386 no. 308, ill. 39 • Ibid, 382, nos. 452, 509 • Willis 1998, 332 no. 66, ill. 15
48.Leckie, Gargunnock	Iron Age broch and later roundhouse	19 small plain stone discs, found from across the site in all layers, including a set of 6 size-sequenced pieces	Sandstone	1st-2nd century CE	Mackie 2016, 76, 79, 84, 91, ill. 4.14.1-2, 4.18.6-7
SHETLAND ISLES:					
49.Broch of Burland	Broch, craft-working building on adjacent islet	Several small discs/counters	Stone, steatite	5th-9th century CE	Moore & Wilson, in prep.
50.Clickhimin	Broch and later settlement	From the broch phase: • 12 vari-coloured, smooth counters • Fragmentary parallelopiped die, numbering incomplete	• Stone • Bone	1st-5th century CE	• Hamilton 1968, 80, 84, figs. 35, 147 • Ibid, 116, 118, fig. 49.5; Clarke 1970, 231 no. 18
51.Scalloway	Broch and external settlement. Most of gaming kit associated with broch use	• 5 parallelopiped dice, 3 complete and 2 of fragments, on 2 ring-and dot numbering 3,5,4,6, third is illegible; one has 2 ends numbered 4. Also die manufacturing waste • 5 conical pieces, 3 incomplete, 1 with flattened top with	• Bone • Stone	The majority appear to fall within late in phase 2 and early phase 3, c. 400-650 CE	• Smith *et al.* 1998, 174, fig. 111; • Smith 1998, 130-31

TABLE 1: Provisional outline catalogue of Roman and indigenous gaming kit from Scotland - (north of Hadrian's Wall) AD 1-500 (suite)

		herringbone work, I carved with a face • playing piece, polished cattle tooth and one side flattened • Min. 10 selected natural pebbles or rounded forms • 8 counters	• Cattle tooth • Micaceous sandstone • Stone, ceramic (1)		• Ibid, 174-5, fig. 111-13; Hall 2007, 17-19 • Smith *et al.* 1998, 175-76, fig. 111 • Ibid, 178-79, fig.116, 117
52.Mail, Cunningsburgh	Broch	Unstratified find from the broch, a conical piece with an incised hooded face	Stone	c. 400-650 CE	Anon. 1924, 17; Smith *et al.* 1998, 174, fig. 112
53.Jarlshof	Broch and wheelhouses	• Throughout the broch and wheel-house levels large numbers of stone discs were found of a suitable size for gaming. • Although dated to the earliest Norse phase a double, incised stone gaming board is of note. It comes from a midden area in use for several centuries before Norse arrival. The board designs appear to be *l.latrunculorum* type of 20x10 lines to create uneven number of cells; on the other face, a min. of 7x15 cells layout has the central area modified by five crosses arranged in a circle, one at the centre.	Schist, sandstone Slate	1st- 8th century CE 9th/10th century CE (perhaps earlier?)	Hamilton 1956, Ibid, 145 no48, pl. XXXI
WESTERN ISLES: 54.Dun Cuier, Barra	Roundhouse / Galleried Dun	• 6 parallelopiped dice, I a fragment, 2 damaged, 3 complete; only two are numbered on all faces (6,4,2,1 and 4,2,1,4), and the rest maybe unfinished; some of pips are shown within rectangles rather than rings. Five were found in the ashes beside the central hearth • conical piece cut from end of a tine/horn and shaped • Unspecified number of small stone discs • Unspecified number of small, smooth pebbles of similar size and weight	• Bone • Antler/horn • Stone • Stone	c. 400-700 CE	• Young 1956, 300, 304, 319-20, 324, fig. 13.5-10; Clark 1970, 232 nos. 22-27 • Young 1956, 320 no. 20, fig. 13.20 • Ibid, 324, fig. 16.56-8 • Ibid, 324
55.Cnip, Lewis	Roundhouse / wheelhouse	Unique piece of conical, tapering form with double-pronged terminal, reminiscent of later chess pieces. Phase 2 of wheelhouse 1	Antler	1st century CE	Hunter 2006c, 148-50, ill. 3.24b; Hall 2007, 17, ill. 14
North Uist: 56.Bac Mhic Connain, Vallay	Roundhouse / wheelhouse	• So called pin head, here regarded as a peg piece. Globular form, polished • Cattle femur head with round socket and one with no socket • Parallelopiped die, ring-and-dot pips of 3,6,4,5	• Cattle bone • Bone • Bone	c.2nd -6th century CE	• Hallén 1994, 197, 213, Ill.3.4, ill.9.10 • Ibid., 215 • Ibid., 225; Clark 1970, 229 no. 4
57.Foshigarry	Roundhouse / wheelhouse	• So called pin head, here regarded as a peg piece. Globular form, discarded • Cattle femur head with square socket • Parallelopiped die, ring-and-dot pips of 3,6,4,5	• Cetacean bone • Bone • Bone		• Hallén 1994, 197, 213, ill.9.10 • Ibid., 215, ill. 10.17 • Ibid., 225; Clark 1970, 229 no. 5
58.Machair Leathann	Roundhouse / wheelhouse	Said to come from one of the wheelhouse chambers, a damaged sphere/knob decorated with ring-and-dot ornament and possible socket-hole	• Bone	1st-3rd century CE (?)	• Beveridge 1911, 127-28, pl. opp. p.227

TABLE 2
Provisional outline catalogue of gaming kit from Roman contexts in Scotland (north of Hadrian's Wall) AD 1-500

LOCATION	SITE TYPE	GAME ELEMENT	MATERIAL TYPE	DATE	REFERENCES
ANGUS: 1.Cardean (nr. Meigle)	Roman fort	1 fragmentary and 3 complete counters	Glass	Flavian	Robertson in prep. (ed. Hoffmann)
BORDERS: 2.Newstead, Melrose	Roman fort and annexe (*Trimontium*)	• At least 11 plano-convex counters, black, white, yellow and blue; one of the blue from Pit VIII within Fort • 3 black, I white and half a blue plano-convex counters • Min. 12 counters decorated with concentric circles, min. 4 from the *Principia* courtyard, several from the Bathhouse • Counters • Counters • Die, from Bathhouse well (1:6, 2:5, 3:4)	• Glass •Glass •Bone •Stone •Ceramic (refashioned Samian sherds) •Bone	c. 90-184 CE	• Corrie 1914, 341; Curle 1911, 339, pl. XCIII.20-23, .26-7, .30-1, .35 • Unpub., from f/walking in 1960s (now in Perth Museum) • Corrie 1914, 341; Curle 1911, 338, pl. XCIII.1, .2, .4-6, .8-9, .24-5, .28-9, .32 • Ibid, 339, pl. LXXXIII.5 • Ibid, 339, pl. XCIII.10-11; Corrie 1914, 341 • Ibid, 339, pl. XCIII.3
DUMFRIES & GALLOWAY: 3.Birrens, Ecclefechan	Roman fort (*Blatobulgium*)	• One certain and one possible game board from in the debris and burning layers above the Antonine 1 floor level. The incomplete, certain board for *ludus latrunculorum* was found in 7 fragments and min. 11x14 cells; the possible board is described as bearing a few faint scorings. • Crudely hemi-spherical-oval, white counter; polished • 5 counters/discs and 3 fragments of a possible sixth disc • Domed piece with basal hollowing • 3 plano-convex counters, 1 unstratified, 1 from Antonine 1 level of intervallum street, I stray find • Irregularly rounded 'marble' with no provenance	•Sandstone •Quartz •Sandstone •Lead •Glass (2 black, 1 white) •Clay	Mostly c. 142-155 CE, 122-142 ACE (for the quartz counter)	Robertson 1975, 100-03, 108, 130, 135-37, 140, figs, 29.9-10, 44.3, 47.1-3, 48.6
EAST DUNBARTONSHIRE: 4.Beardsen, Greater Glasgow	Roman fort (Antonine Wall)	Board of 8x5 surviving cells; presumably for *l. latrunculorum*; found as rubble in building 4 (granary)	Sandstone	c. 142x150 CE	Keppie 2004, pl. 21 Keppie in Breeze 2016, 93, illus. 5.20, 5.21
FALKIRK: 5.Camelon 6.Mumrills	Roman fort (for IA roundhouse adjacent – see table 1) Roman fort (Antonine Wall)	• 12 plano-convex counters, six white and six dark blue • Disc • Disc • Plano-convex counter, white • Counter	•Glass •Quartzite •Shale •Glass •Ceramic (reused Samian sherd)	Flavian/Antonine 1st/2nd century CE Antonine	Anderson 1901, 397; 412 McLaren forthcoming MacDonald & Curle 1929, 549
NORTH LANARKSHIRE: 7.Castlecary	Roman fort (Antonine Wall)	Black plano-convex counter	Glass	Antonine	Anderson 1903, 338
SOUTH LANARKSHIRE: 8.Castledykes, Carstairs	Roman fort	3 plano-convex counters,	Glass	Antonine	Robertson 1964, 171 and 92, 271

TABLE 2 Provisional outline catalogue of gaming kit from Roman contexts in Scotland - (north of Hadrian's Wall) AD 1-500 (suite)

9.Crawford	Roman fort	1 black, 1 white and 1 green; black counter from Principia, white counter from Extramural area - both excavated - and green counter from Vicus, from field-walking c. 2019. • White, plano-convex counter • Plano-convex counter Both pieces found together above the Flavian *Principia*	•Glass •Lead (possibly a reused weight)	c. 80-87 CE	Maxwell 1972, 189 no.11, 186 no. 3
LOTHIANS: **East Lothian** 10.Inveresk, Musselburgh	Roman fort (*Coria*? or *Evidensca*?)	Incomplete board for *l. latrunculorum*, broken after carving, min. 11x8 cells	Sandstone	c.139/40 -160 CE	Hunter, F. in prep.; Leslie 2002; Neighbour 2002.
Midlothian: 11.Cramond	Roman fort (*Rumabo*?)				
	• Cramond Road sites • Mainly bathhouse	• Plano-convex dark brown-black counter (frag.)	•Glass (translucent)	• Antonine	McLaren, D. 2017, 40-41, ill. 33.c
		• Disc/counter	•Ivory	• Antonine	Holmes *et al.* 2003, 120-21, ill. 119
		• 3 disc/counter: 1 shale unprovenanced and other associated with Roman road nr. bathhouse; s/stone from 17th c. robbing of bathhouse	•Stone: sandstone and shale (2)	• Antonine	Ibid
	• Fort interior	• Hemispherical counter with basal piercing (disturbed level near Room 1, Block B)	•Lead	• Antonine	Ibid
		• 2 counters with concentric circle decoration (same level as die below and second from Severan surface of the *via principalis*	•Bone	• Antonine & Severan	Rae and Rae 1974, 195-97
		• Die (1:6, 2:5, 3:4) [first Antonine floor by kiln under Room 4, block B]	•Bone	• Antonine	Ibid
12.Elginhaugh, Dalkeith	Roman fort & annexe	7 complete, plano-convex counters, 3 black, 2 opaque white with dark specks, 1 dark blue with few specks, 1 opaque yellow; 5 from various fort contexts, 1 from annexe, 1 from pot-Roman ploughsoil	Glass	Flavian	Price & Worrell 2007, 454-55, 470, 675, fig. 10.4.95-101
West Lothian: 13.Inveravon, Linlithgow	Roman fort (Antonine Wall)	Double-board, in fragments, one face an incomplete board of min. 16x13 cells, presumably for *l.latrunculorum*; on the other a pattern of 7 compass drawn circles suggestive of an unfinished *duodecim scripta* board. Found as part of the resurfacing of the Military Way approaching the fort	Sandstone	Second-third quarter of the second century CE	Dunwell & Ralston 1996, 562, 564, ill.26
PERTH & KINROSS: 14. Inchtuthil, Delvine	Roman fortress (for *Legio XX Valeria Victrix*)	Casual/field-walking find of a fragment of tile with 11 surviving cells in a min. grid of 4x3. Apparently from the bathhouse	Ceramic	c.82-86 CE	Unpublished, PMAG reg. no. 11/1935
15.Bertha, Perth	Roman fort (*Tamia*?)	Fragment of tile with 13 surviving cells in a min. grid of 4x4.	Ceramic	Flavian/Antonine	Croom 2002, 43
16.Strageath, Muthill	Roman fort (*Victoria*?)	• 24 complete, plano-convex counters, 17 white, 7 black. I unstratified, 1 Flavian, 22 Antonine I, from fort buildings and pits	•Glass	c. 80-87 CE and c. 142-158 CE	Price 1989, 196,200-02, fig. 102.1-5
		• Ball-headed pin – the head is socketed and the shaft short and it may be a gaming peg?	•Silver, head soldered into socket	142-58 CE	Grew & Frere 1989, 154 no. 102, fig. 79.102

Fig. 2. Sandstone gaming board from the Roman fort at Bearsden at the western end of the Antonine Wall, Strathclyde, Scotland. Courtesy and © Hunterian Museum, Glasgow University.

The evidence for the playing of board games from Roman and indigenous Scotland is laid out in Tables 1 and 2. For clarity this separates out the evidence from Roman, military contexts and from indigenous contexts[39]. The general discussion which follows draws on all this data without necessarily mentioning each example. The Tables exclude the category of small stone balls of various diameters which occur widely on later Iron Age sites in southeast Scotland. They are in the literature generally categorized as for gaming, but they do not appear to be shaped for board games, rather than such as marbles or boules[40]. A wider study of leisure and recreation would need to take account of this distinctive element of the material culture of play in the Roman/post-Roman Iron Age of Scotland. Much of the material comes from older, antiquarian interventions and is generally not well dated. This is a factor in the seeming continuity in some material culture spanning the 2nd or 3rd century to the eighth century CE. Consequently (and in the knowledge that the necessary follow-up would suit a doctoral or post-doctora project) we have cast our net quite widely over the indigenous material, much of which could be either side of 500 CE. We have sought to capture 5th-century material because in a Scottish context this is significantly post-Roman and a Roman legacy is perceptible in some of this material. Here we will give a brief overview and tease out some of the key strands of the evidence.

Table 2 shows that Roman military sites in Scotland have produced valuable evidence for both boards and pieces in relation to board games. The seven boards or board fragments are primarily of stone (5), with two of ceramic (floor tiles). Four of the stone boards and the two ceramic boards all share patterns of incomplete, grided cells, likely to be for the *ludus latrunculorum* (Table 2, nos. 3, 4 – see Fig. 2, 10, 13, 14 and 15) – the type so common on Roman military sites[41]; the fifth stone board (one side of the double-sided board no. 13) is probably an unfinished board for *duodecim scripta* (cf. the ceramic example from the legionary fortress at Holt, Wales[42]). Less plentiful evidence for boards comes from the indigenous Scottish evidence. A fragment of a probable *latrunculi* board from the settlement at Newmill, Perths. (Table 1, no. 45) is securely dated to the 2nd to the 4th century CE. We can rule out contact with the legionary fortress at Inchtuthil, abandoned in 86 CE (and from where the possible ceramic board no. 14 comes, Fig.3), but close by is the fort of Bertha, which was occupied in both Flavian and Antonine times and from where the second possible ceramic board fragment comes (no.15; Fig. 3). Is the Newmill board a direct Roman import or gift or is it a Celtic hybrid of the *tafl* group? The question

39 It does not claim to be exhaustive and represents a refinement and an update of the data presented in Hall (2007).

40 Cool (1982); Cool, Baxter (2013), 333-48; Clarke (2004), 98-100; Willis (1998), 332, ill. 15.

41 Courts, Penn (2021).

42 Grimes (1930), 131 no. 12, fig. 60.8 and cf. the boards discussed in Schädler (1995), 73-81.

Fig. 3. Ceramic tile fragments of gaming boards from the Roman fortress at Inchtuthil (left) and the fort at Bertha (right), both Perthshire, Scotland. Courtesy and © Perth Museum & Art Gallery.

remains open. The second, significant board element is the four antler plaques from Orkney (Table 1, no. 32), which are likely to be elements from a board for *duodecim scripta*. Generally, such plaques are seen as inlays for boxes/caskets[43], sometimes as gaming pieces, of which there are a notable number from Romano-British sites, including a 'quantity' from the fort at Arbeia/South Shields, at the eastern end of Hadrian's Wall. Its extensive and varied assemblage of gaming kit is suggested here to include these plaques, four of which have entries in the catalogue[44] as dice or possibly inlays, all with beveled edges and all carrying a design of four double-ring motifs. One of the authors (MH) has come to this view after his recent re-evaluation of the gaming evidence from Dorestad, Netherlands, including four such plaques[45], led to that interpretation, through comparison with examples from a burial at Seidinga, Sudan (another Roman frontier context) and dated to the 1st/2nd century CE. There, thirty-two tiles were associated with one board (comparable to the complete board from Qustul, Nubia, of 4th century CE date). The quantities at Arbeia were taken to imply manufacture but they may simply indicate the presence of a board. At Lullingstone villa, Kent (introduced above), 17 such plaques (interpreted as inlays for a box or gaming pieces) were found beneath a board on which sat the 30 glass gaming counters and 2 bone die, deposited as elements of a burial assemblage within a temple-mausoleum[46]. Found separately were elements of four further plaques[47]. Beyond the Roman frontier, in Ireland, Raftery long ago suggested that two bone plaques from Mentrim Lough and Cush were somehow gaming pieces[48].

Even nearer the mark might be that they were inlays for a *duodecim scripta* board. They have been suggested to date to the 1st century CE and we know that board games had reached Ireland in the early part of that century thanks to the remarkable burial of decapitated British twins from Knowth, Co. Meath[49]. In his discussion of the Orkney pieces, Fraser Hunter[50] argued for links with the south of Britain with Roman manufacture there before being traded or gifted north to Orkney. Perhaps there was a common production centre, perhaps several but it is certainly another line of enquiry to be pursued. Even a small number of such plaques re-identified as game board elements would significantly alter the balance of known boards, both in terms of games played and in materials used, making both the game of *duodecim scripta* and the presence of boards of wood and bone more visible. Better preservation conditions on the southern and eastern shores of Rome's Mediterranean

43 As Hunter (1993) suggests for the Orkney pieces.

44 Allason Jones, Miket (1984), 48, fig. 2.83-86.

45 Hall (2021), 40-41.

46 Meates (1979), 129-30 and 1987, 143-44.

47 Meates (1987), 144 nos. 395-7 and 399.

48 Raftery (1984), 248-50.

49 Eogan (2012), 23-26; Hall, Forsyth (2011), 1328-1330.

50 Op.cit. n. 42

provinces reminds us that despite varied geographic and environmental conditions across the frontiers, board games were a ubiquitous, indeed essential element in the military dynamics and the gift-giving of the foreign policy of Empire. With appropriate caution we mention one further, double board, from Jarlshof (Table 1, no. 52). Although likely to be early medieval rather than Romano-British or Late Antique, still its double-board combination appears to combine a Roman-style *latrunculi* board (which may be a British *gwyddbwyll* variant) with a more Scandinavian style *tafl* board: it represents a meeting of cultures and innovation upon an ultimately Roman model.

Turning to consider the certain and possible gaming or playing pieces the evidence from Scotland only partially follows the broader pattern seen elsewhere with respect to the commonest forms of counters, of glass and bone. To date, only two Roman forts in Scotland, Newstead (Table 2, no. 2; Fig. 4) and Cramond (no. 11) have produced bone counters with concentric, incised circles decorating the upper surface. At least 12 were found at Newstead, mainly in the *Principia* courtyard and the bathhouse. Two were found at Cramond, at where there was also found a plain counter, in ivory, but its plano-convex form suggests it was of the type more commonly found in glass. There are no such skeletal material counters from indigenous sites, though a single example of a bone disc/counter from the broch at Howe, Orkney (Table 1, no. 37) may have been influenced by the type (similar examples of counters with roughly incised crosses are known from Piercebridge and Silchester for example and further afield from Vimose, Denmark). The bone discs were most likely for *duodecim scripta/alea* which we might interpret as not present on indigenous sites were it not from the board inlays from Orkney discussed above. More common than the bone counters are the typical plano-convex glass counters. From military sites in Scotland there are 73 such counters (Table 2, nos. 1-3, 5, 7-9, 11, 12 and 16), 24 of them from the fort at Strageath, from various fort-interior contexts and so not identifiable as a set. The majority are of black and white, with occasional green and blue. From indigenous contexts there are 12 such counters (Table 1, nos. 3, 8, 18, 28 and 47) and although the numbers are low, their geographical spread and their variety of contexts indicates the significant penetration of a Roman object, though single examples may indicate curation as amulets as much as the playing of board games. Two of the counters were found at the roundhouse at Camelon (Table 1, no. 18), adjacent to the Roman fort, and similarly close to the frontier were the examples from Traprain Law (Table 1, no. 28) and the roundhouse/broch at Buchlyvie (Table 1, no. 47). The most interesting grouping is the six counters from Waulkmill, Tarland, Aberdeenshire (Table 1, no. 3; Fig. 5). Here, four blue and two polychrome counters were found as part of an inhumation burial inserted into a stone circle during the 2nd-4th century CE. The range of other materials from this burial suggest we may be seeing an elite burial, to some degree comparable to the elite burials from the south of England discussed above. A further parallel is that it includes a reworked piece of Roman glass drinking vessel which, in this refashioned phase, may have been part of the gaming kit and recalls the fragments of beads and bangles in some of those southern assemblages. The Waulkmill burial also includes several polished stone and quartzite discs. A second burial from Waulkmill lacks the presence of Roman glass but does suggest, through the presence of stone discs and pebbles, that gaming practices were adopted and/or adapted.

Fig. 4. Glass gaming pieces/counters from Newstead Roman fort, Borders, Scotland. Courtesy and © Perth Museum & Art Gallery.

These natural and worked examples of stone are part of a more widely found category of playing pieces, that includes refashioned ceramic sherds (the majority Samian ware), in fact the most numerous and widespread category, from across both Roman and indigenous sites. The group from the broch at Clickhimin, Shetland (Table 1, no. 50) of vari-coloured and vari-polished small stone counters and discs (Fig. 6) bears comparison with those from the burials at Waulkmill. 19 plain sandstone discs of various sizes (six of them size-sequenced) were found across the site at Leckie, Stirling (Table 1, no. 48), a broch and later roundhouse a few miles to the north of the Antonine Wall. The reader is referred to the companion paper by Mark Hall and Katherine Forsyth (this volume) for a comprehensive discussion of the use of pegged gaming pieces. Suffice to say here that there that there is a marked absence: presence of these when we compare Roman to indigenous sites. There are no presently known pegged pieces from Roman sites. These are generally composite pieces with a separately applied head, usually in a different material. Most notable are the various globular and domed bone pieces (e.g. Broxmouth – Table 1, no. 25 – and Bac Mhic Connain – Table 1,

Fig. 5. Stone and glass gaming counters from Waulkmill, Aberdeenshire. Photography M A Hall and courtesy NMS, Scotland.

Fig. 6. Clickimin, Shetland 12 vari-coloured smooth stone counters from the broch at Clickimin, Shetland, Scotland. Courtesy and © Didier Piquer and Shetland Museums.

no. 56) and the domed/spherical pieces of jet/jet-like materials. There are 24 of these from Scotland, from all compass points but with a notable concentration of 13 from Crichie, Aberdeenshire (Table 1, no. 1, Fig. 7) – from a possible cist burial that also included elements of weaponry and horse gear – and six from

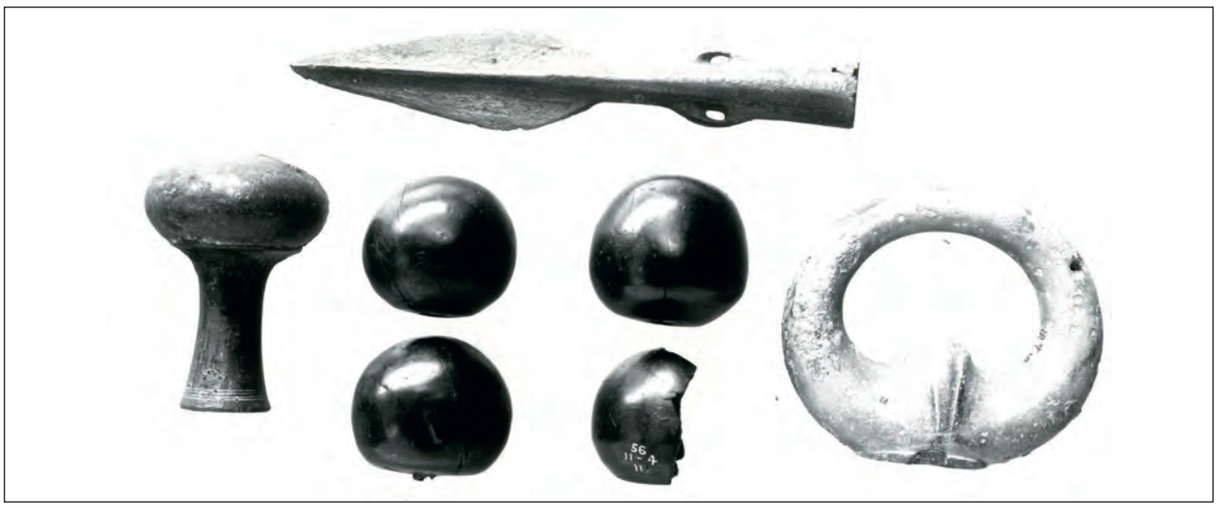

Fig .7. Jet/shale heads of pegged gaming pieces, with associated finds, from Crichie, Aberdeenshire. Courtesy of the British Museum, Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0) license.

Fig. 8. Bone, parallelepiped die from broch at Stywick Bay, Orkney, Scotland. Courtesy and © NMS, Scotland.

Traprain Law, Borders (Table 1, no. 6) from across the settlement.

From Roman sites in Scotland there are surprisingly few cubic dice, with currently only two known, from the forts at Newstead and Cramond (Table 1, nos. 2 and 11). Both are of bone, and both have the typical Roman numbering of the pips, where opposite sides add up to seven. To date no Roman dice have been found on indigenous sites but there are now over 20 bone dice from across the north of Scotland (including the Orkneys, the Shetlands and the Western Isles, Table 1. nos. 8, 9, 34-36, 38, 40, 42, 43-45, 51, 54, 56, 57, 60 and 6; Fig. 8 for no. 44), all of the parallelepiped form known also from southern Britain and the western Continent. The majority of the Scottish examples are poorly provenanced but in recent years excavated examples from Pool (three, Table 1, no 43), Scalloway (five, Table 1, no. 51) and Bornais (two, Table 1, no. 60) have suggested a floruit in the later part of the first half of the 1st millennium CE, pushing their use considerably later than the rest of Britain or the Continent[51].

3. GAMING MATERIAL EAST OF THE RHINE AND NORTH OF THE DANUBE

The finds from Germany as well as Southern Scandinavia are relatively well known through the publications by Thomas Krüger and more recently by Anne Matschoss, now Anne Widura.[52] However, their research does not include areas in Eastern Europe and the Balkans, such as Poland, the Czech Republic, Slovakia, Serbia, Romania, Belarus, and Ukraine, where "Roman" gaming material is also attested.

As far as Germanic sites east of the Rhine are concerned, the most significant finds come from the rich burials of the so-called Hassleben-Leuna and Lübsow groups uncovered in Southern Scandinavia, Northern and Eastern Germany, and Poland[53]. It can be observed that these burials are situated relatively far away from the Roman *Limes*.[54] In some of these burials not only glass counters but also traces of game boards are documented. However, there might once have been many more which remained undetected. Important here are finds of copper alloy handles, metal hinges and fittings, which are often taken as parts of a *cista* (box), but could, at least in some cases, indicate a game board.[55]

In Nordrup (Ringsted, Seeland, Denmark), burials A and J, which belong to the Hassleben-Leuna type of burials, contained Roman glass and bronze objects and gaming material. In burial A, 18 red and 23 multicoloured glass counters were found, as well as a bronze handle nearby, which might have belonged to a game board. Burial J contained 15 dark and 25 white glass counters placed on a wooden (oak) board, as well as a bronze handle and other bronze fittings.[56] Both burials date to period C1b (late 2nd century AD). In a contemporary burial in Aasø (Seeland, Denmark), dating to period C1b, bronze corner fittings and a handle, possibly belonging to a game board, were found together with a black and three white glass counters.[57] Perhaps slightly later in date (C1b–C2) is burial 2000, belonging to a young man, from Brøndsager (Denmark). Here, remains of a game board made of maple wood (with red paint

51 cf. Raftery (1984), 247-48.

52 Krüger (1982); Matschoss (2007); Widura (2015).

53 Catalogue in Widura (2015), 66–70 and 191–201.

54 Neudorf-Bornstein grave 4: Schäfer (1968), 41–59, burial 4: 46–51 with Abb. 5; Gabriel (2005), 358; Widura (2015), 194–95; Neudorf-Bornstein burial 7: Schäfer (1968), 52–59 with Abb. 12; Gabriel (2005), 358; Widura (2015), 195–96. Heiligenhafen: Kersten (1942), 99; Kersten (1951), 74–76; Raddatz (1962), 91–128, esp. 94; Widura (2015), 192–93.

55 Liubichev, Schultze (2013), 254. See also Schädler (2019).

56 Burial A: Petersen (1890), 4-8; Widura (2015), 96.
Burial I: Petersen (1890), 11-13, Widura (2015), 196-97.

57 Przybyła (2016), 180–181 and 154 Fig. 4.

Fig. 9. Game board and glass counters from Poprad (Photograph & Courtesy University of Nitra)

Figs. 10. a and b. Fragment of a game board from the Vimose bog (Photograph National Museum of Denmark, Copenhagen, inv.n. 24227).

on the underside)[58], bronze corner fittings and nails to attach them to the game board were found, as well as 29 black and 30 white to light blue-green glass counters.[59] Varpelev burial A, part of the Hassleben-Leuna group, belongs to period C2. Among the grave goods were Roman glass bowls and bronze vessels, and a solidus of Probus (r. 276-282) used as a pendant (compare Poprad below). Here, 42 bone counters were recovered, originally placed on a wooden board.[60]

In addition, fragments belonging to at least three game boards come from the Vimose bog find and are kept in the Danish National Museum in Copenhagen (inv.n. 24227, 20300, Ul1382)[61]. The playing surface is inserted into a frame 3-4 cm wide, unlike the board from Poprad, where the frame and playing surface are made from a single piece (Fig. 9). According to Conrad Engelhardt's illustrations, the remainder of the corner of one board consisting of a decorated frame border and the edge of the playing surface with a complete row of 18 squares (ca. 47-48 cm) is preserved (inv.n. 24227, Figs. 10a-b)[62]. An identical

58 However, it is unlikely that the coloured fragment belonged to a two-coloured chequered board.

59 Boye (2009), 267–271.

60 Widura (2015), 199-200.

61 Gabriel (2005) argues for two boards. For the find in general: Engelhardt (1869), 11–12 with pl. 3, 9–11, speaks of fragments of four game boards.

62 Engelhardt (1869), Taf. 3,9; Krüger (1982), 222 Abb. 27,9; Schulz (1953), 64 Abb. 75,1.

Figs. 11 a and b. Fragment of a game board from the Vimose bog (Photograph National Museum of Denmark, Copenhagen, inv.n. 20300).

frame decoration is found on the second fragment, which consists of a border assembled from mitered slats and part of the playing surface for the Roman game of *XII scripta/Alea* (inv.n. 20300, Figs. 11a-b)[63]. From its structure, consisting of three rows of six squares on either side of a dividing pattern, the original total length of the board can be estimated quite accurately; it may have been about 54-55 cm. Another fragment of a game board, about 30.6 cm long, which is also inserted in a frame, also shows the division for *XII Scripta* on one side[64], from which the original length of the board including the frame of about 45 cm can be determined (inv.n. Ul1382, Figs. 12a-b).

Some 3rd-4th century Hassleben-Leuna group burials from German sites also produced traces of wooden game boards. The board from Leuna[65] was a double-sided board for *XII scripta/alea* on one side and a game played on a grid on the other. The inlaid ornament on the *XII scripta/alea* side, a three leaved petal, shows, that the board was a luxury item and most likely of Roman manufacture. Black and white glass counters were aligned in groups of three along the edges of the board.

Corner fittings, nails, a bronze handle and two fittings of a game board made of maple wood were found together with at least 50, somewhat scattered game pieces at the feet of the deceased in the grave of Gommern (period C2: 2nd half of the 3rd century). The handle must have been on one of the long sides of the board. The size of the board cannot be precisely determined from the irregular position of the fittings but is estimated by Becker to be about 40 × 40 cm[66]. Worthy of attention is the observation that the fittings indicate a local production in which a Roman bronze handle was reused.

In grave 4 at Neudorf-Bornstein[67] (dating to the 3rd-4th century), wooden remains and four corner fittings of a board were found on the southern long side of the surface discoloured by the former tree coffin; two corner fittings of a second board were found on the opposite side. These include 24 black and 18 white glass counters, which lay distributed over the lower body and legs of the deceased. Most striking is the position of 10 counters in a row from the left hand downwards, which thus appear to have lain on a third board measuring about 60 × 44 cm, to which may also have belonged a bronze handle lying between these counters and the four corner fittings (Fig. 13). In grave 7 at Neudorf-Bornstein[68], 26 gaming pieces were found irregularly distributed underneath the feet of the buried person on a game board with a

63 Engelhardt (1869), Taf. 3,11; Krüger (1982), 222 Abb. 27,7; Schulz (1953), 64 Abb. 75,2.

64 Engelhardt (1869), Taf. 3,10; Krüger (1982), 222 Abb. 27,8; Schulz (1953), 64 Abb. 75,3.

65 Schulz (1953).

66 Becker (2010).

67 Schäfer (1968), 41–59, burial 4: 46–51 with Abb. 5; Gabriel (2005), 358; Widura (2015), 194–95.

68 Schäfer (1968), 52–59 with Abb. 12; Gabriel (2005), 358; Widura (2015), 195–96.

Figs. 12 a and b. Fragment of a game board from the Vimose bog (Photograph National Museum of Denmark, Copenhagen, inv.n. Ul1382).

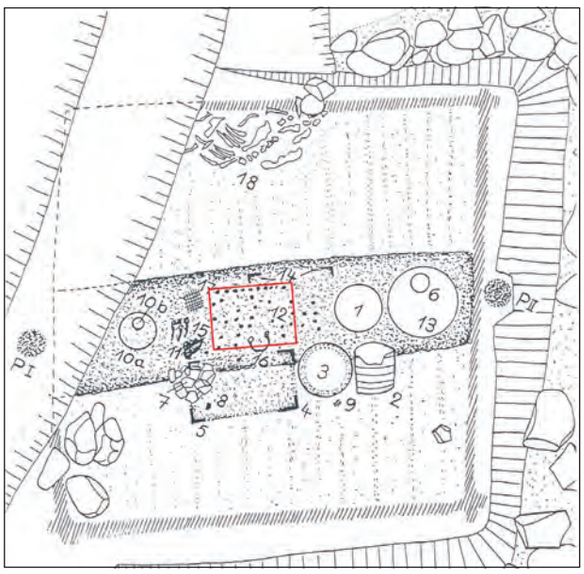

Fig.13. Possible game board, Neudorf-Bornstein, Burial 4 (U. Schädler after Schäfer 1968, 47 Abb. 5).

bronze handle on one long side, as evidenced by four corner fittings. At least one game board was found in grave 1 from Heiligenhafen[69]: four corner fittings formed a rectangle of 46 × 64 cm above the lower legs from the knees to above the feet, in which 29 white and black glass game pieces of Roman import were placed. A rectangle of the same size, interpreted as a "chest", was visible as discoloration below the feet of the buried person. At Emersleben, burial 1 produced 47 glass counters of 5 colours, as well as traces of a wooden board underneath.

Further to the east, in Poland, the most important sites that produced gaming material are Łęg Piekarski II, Zgliczyn Pobodzy, grave R374 in Czarnówko, Pielgrzymono (Pilgramsdorf), and Wrocław-Zakrzów (Sakrau) I and III. In the grave of Sub-Kurhan II in Łęg Piekarski, of the Przeworsk

69 Kersten (1942), 99; Kersten (1951), 74–76; Raddatz (1962), 91–128, esp. 94; Widura (2015), 192–93.

culture (period B2), 30 counters in five colours were found: 10 white, four black, five dark and five light yellow, three blue and three green. Grave 4 at Zgliczyn Pobodzy was an inhumation burial placed in a stone chamber. Among the grave goods were 24 glass counters (six of each colour: white, yellow, light blue and black-blue). They were supposed to lie within a poorly preserved wooden object, of which traces of quadrangular outline measuring approximately 40 × 25 cm (compare the game board from Poprad: 42.5 × 31 cm) remained, together with copper alloy rivets and other grave goods, some of which Roman import and copies of Roman glass vessels. Whether the wooden object was a tablet, a box, or a game board remains open, but the presence of glass counters in the grave might corroborate the latter suggestion. This grave should be considered as a princely burial of the type Lubieszewo (Lübsow) and dated to the period B2a of the Roman period.[70] A wooden fragment with the rests of an ornamental fitting made of copper alloy from the grave R374 in Czarnówko[71] was tentatively interpreted as a rest of a game board. This assumption is supported by the similarity to the remains from burial 4 at Neudorf-Bornstein as well as the glass counters found in the grave. According to Jan Schuster, the arrangement of the 13 black and nine creamy-white glass counters suggests that originally they may have been arranged on a (no longer extant) board.[72] In barrow 1 at Pielgrzymono (Pilgramsdorf), dating to the late Wielbark Culture of period C2 and therefore contemporary to the Hasssleben-Leuna burials, near the feet of the buried were found parts of a 40 × 38 cm wide wooden frame, which probably belonged to a game board, as well as a gaming counter made of black glass flux.[73]

Of the three rich chamber graves from Wrocław-Zakrzów (former Sackrau), burial I and III contained glass counters[74]. The grave goods consisted of Roman bronze, silver and glass objects, Roman coins as well as indigenous materials. Grave 1, probably a female burial, bore four glass counters in black and white. Grave 3, probably of a boy, bore 14 light green and 15 black glass counters of about 20 mm in diameter and 6-7 mm in height. A coin of Probus (r 276-82) from grave I and an aureus of Claudius Gothicus (after 268) from grave III as well as the typology of the fibulae and other grave goods indicate a date at the end of the 3rd/beginning of the 4th century. The character of the material points to close connections to Pannonia, leading Wilhelm Grempler to interpret them as members of a rich Vandal family.

In Slovakia, the nearly completely preserved wooden board from the chamber grave of Poprad-Matejovce is worth mentioning:[75] it is a one-sided game board of about 42.5 × 31 cm with a grid structure of 17 × 15(?) squares around 20 mm wide. The grave was robbed in antiquity, so that the assemblage of grave goods was incomplete. One white and five black glass counters were certainly only a part of the counters that once belonged to the board. However, the important find of a solidus of Valens dating to 375 transformed into a pendant not only points to the date but also shows – together with other elements – that the young man buried in the grave was, possibly from his own experience, closely familiar with the life and burial customs in the Roman Empire.

Apart from the game boards already mentioned, several fragments of game boards come from the Roman frontier provinces of Dacia (*Turda*, *Drobeta*, *Porolissum*, *Ulpia Traiana Sarmizegetusa*), Moesia inferior (*Noviodunum*) and Moesia superior (*Singidunum*, *Saldum*?). They are most often incised into brick tiles. Some have a grid pattern, others Nine Men's Morris patterns, but it is not certain whether these patterns were used to play a board game, since the game is not securely attested in the Roman Empire before the early Byzantine period. It is worth noting that similar game boards are missing beyond the Pannonian Limes.[76]

Important finds also come from Ukraine, especially from burials belonging to the Sântana de Mureş-Chernyakhov-Culture (Southwest-Ukraine, Moldova, north of the Danube) and dating to the period between the 2nd half of the 3rd to the early 5th century. Burial 69 from Voitenki contained 30 "Roman" glass gaming pieces of 14-23 mm in diameter in various colours (nine black, nine light red, but discoloured by fire). A bronze handle might have belonged to a game board. Pereyaslav-Khmel'nitskii burial 5 produced 11 white and 11 black glass counters, remnants of wood and two bronze clamps and a silver bail were interpreted as belonging to a box, but could also testify to a game board.[77] The gaming finds from the Sântana de Mureş-Chernyakhov-Culture do not necessarily come from rich graves nor are they linked to a particular burial practice, but are often associated with Roman glass jars, thus indicating a privileged social status. Kurgan 1 in Kantemirovka, a Sarmatic burial with material from the Chernyakov culture, is worth mentioning here because of its unusual assemblage of game

70 Schuster (2016), 144; for the counters p. 141-144 with fig.17 and 18.

71 Schuster (2018), 106.

72 Ibid, 19-20, 59-60, with pl. XXIX:D (counters as found), 106, pl. XXX.3 (fragment of wood with metal), pl. (XXXIII (counters).

73 Lau (2014), 205sq. with fig. 5 Nr. 16; Lau (2012), 30–64, 174 pl. 9; Widura (2015), 196 with fig. 60.

74 Grempler (1887), esp. pl. VI, 7a and b; Review by Wiedemann, 1888, 268-70, 269; Grempler (1888), esp. p. 10.

75 Lau, Pieta (2014), 360-61; Lau, Pieta, Štolcová (2022).

76 Paki, Cociş (1993); Nutu, Botan (2009); Janković (2009); Mihailescu-Bîrliba (2017).

77 Goncharov, Makhno (1957); Liubichev, Schultze (2009), 254.

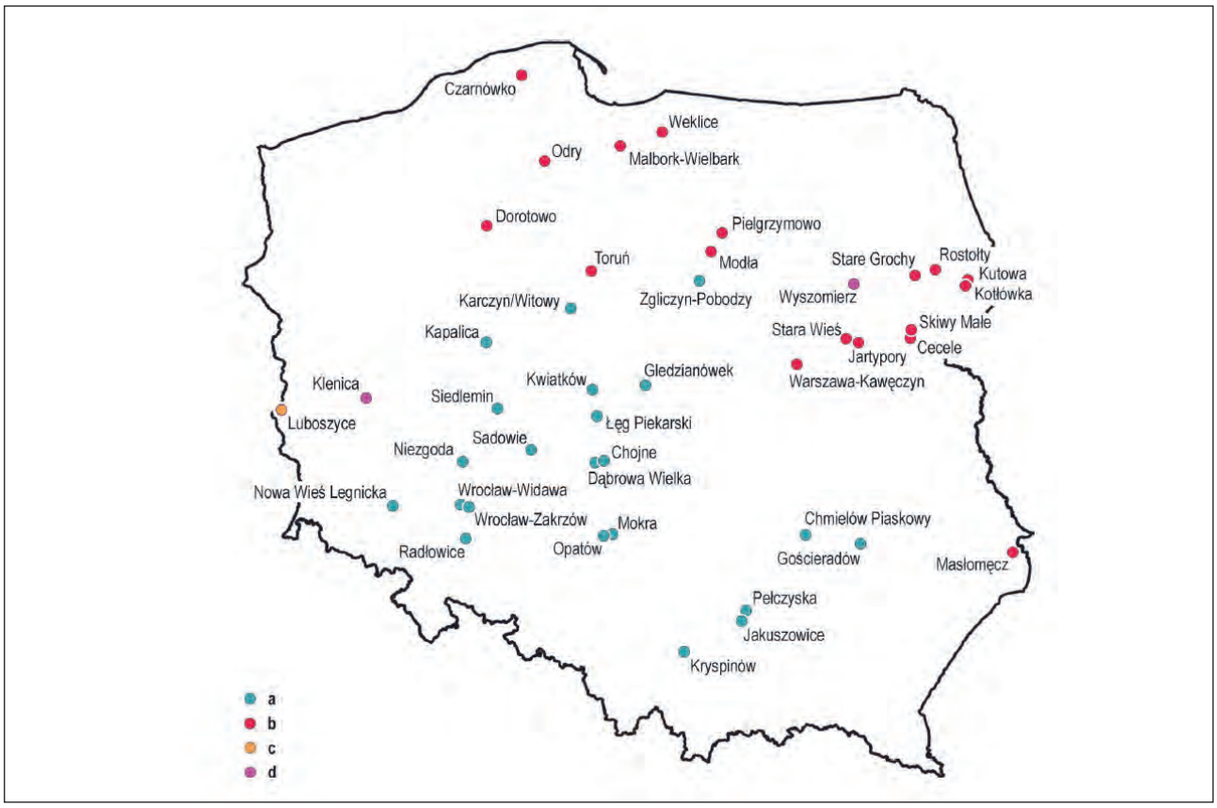

Fig. 14. Glass counters from archaeological sites in Poland: Przeworsk Culture (a), Wielbark Culture (b), Luboszyce Culture (c), undetermined (d) (after Krzyzanowska 2020, Fig. 2).

related objects[78]: eight glass counters (six dark, two lighter), one "jeton" of amber, one die, several bone pieces, as well as silver fittings with fragments of wood (from a game board?) were among the grave goods — the equipment of a player.

4. ROMAN GLASS COUNTERS: A PARTICULARLY APPRECIATED CATEGORY OF GOODS

The Hassleben-Leuna burials date to phase C2 and contain exclusively glass counters. However, glass counters are not an exclusive feature of these rich graves, but in comparison to other burials, they contain a higher number of such counters. In addition to the glass counters already mentioned, relatively large numbers of such counters come from other sites. A burial in Valløby[79] (Seeland, Denmark), dating to phase C1b, contained among other grave goods Roman bronze vessels, two silver bowls, a terra sigillata bowl from Rheinzabern, and a silver denarius of Lucius Verus (r. 161-169). No less than 106 glass counters (69 white, 31 black, six dark red) were found in two groups: 31 black and 29 white pieces lay beside the left elbow, the others on the right of the head. 16 black and 16 turquoise glass gaming pieces measuring approximately 3 cm in diameter come from Avaldsnes (Karmøy, Norway), Flaghaug burial 1, a chamber grave.[80] The burial, which contained Roman imports, dates to period C2. In sum, the burial resembles the one in Gommern (Germany).

More glass counters have been found at Saetrang, Ske i Stokke, Langeland i Skjold, and Hegge i Stod.[81] In Poland, we must mention the finds from Stare Grochy, grave mound I (22 white-yellow-white and 24 yellow-emerald-green), Siedlemin, barrow VI (10 white and six black) and Dorotowo (19 white and one or two green). Marta Krzyzanowska analyzed nearly 400 glass counters found in Poland (Fig. 14).[82] She distinguishes "small" counters with diameters of up to 14.5 mm from "large" counters with diameters of 15 mm or more. However, this distinction seems rather arbitrary. She found that the number of colours decreases from period B2 to C2-D, with the most usual colours being black and white. Only in eight (?) of 59 cases do glass counters occur in assemblages together with other game accessories such as boards, dice, or marbles. Schuster's assumption that the uneven number of counters from Czarnówko seems to indicate that the set in question is incomplete, is difficult to agree with, as Krzyzanowska pointed out. Her review of the sets of counters (both from the Wielbark and the Przeworsk cultures) allows us

78 Liubichev, Schultze (2013), 254.

79 Engelhardt (1873), 285-320.

80 Lorange (1876), p. 71, speaks of twice 14 pieces. Grimm (2014), 183.

81 Lorange (1876).

82 Krzyzanowska (2020), with fig. 2 and table 2 on p. 259.

to state that none of them, with the exception of the set from Zgliczyn Pobodzy does contain an equal number of counters of each colour.

In quite a few graves (26 burials according to Matschoss 2007), on the other hand, counters made of bone were added, as for example in Varpelev. The calculi set from grave 2 under tumulus V of Cecele in Podlasie (Poland), dating to C1b-C2, is remarkable. It consists of 58 gaming pieces, namely two glass, one amber, seven clay, three stone and 42 bone counters. The counters – probably originally packed in a bag – were lying close to the right knee of the adolescent person.[83]

Anne Matschoss observed that bone counters became more frequent in the transition period from Late Antiquity to the early Migration Period. Burial 128 from Köngen (near Stuttgart, Germany) deserves mention here, because of the exceptionally high number of 124 bone counters (cattle) of two types: 41 with concave upper side and 83 with concentric circles.[84]

Moreover, there are many contexts with only a few glass counters, an observation also true for parts of Romania, Bielorussia and the Ukraine. Small numbers of counters raise the question whether in these cases the glass counters were still regarded part of a board game or rather precious objects. In Dacia Romana, mostly small numbers of glass counters were found in burials of the 4th century CE: tumulus no. 32 from Branişte-Nemțișor produced three black counters from pit no. 4, while one white counter comes from the funerary pyre (bustum). Tumulus no. 5 in the necropolis at Gura Secului-Nemțișor produced, also from the pyre, a translucid glass counter of white colour, and at Târzia, the bustum of tumulus no. 5 produced another translucid glass counter, this time yellow in colour.[85]

An interesting complex comes from three Wielbark culture burials in Pjatrovičy, Bielorussia[86], where 5 glass counters have been found in three graves: burial 1 of a 6-7 year old girl, dating to period C1, contained 1 light Turkish-blue glass counter; burial 36, also of a child, dating to C1b - C1b/C2, contained a millefiori counter; burial 59 of three individuals, two children and an adult, contained three millefiori counters. These findings from Pjatrovičy are revealing for two reasons: First, the glass tokens are associated with children and even girls. Secondly, only as many game pieces were placed in the graves as dead bodies were buried (1, 1 and 3). Therefore, it is not very likely that the glass counters were regarded as board game pieces and were given to the buried in this sense. It is more likely that they were considered simply precious and beautiful objects.

While glass and bone counters are the most common, also stone counters are attested, as for example in grave III 1 of the Lübsow type from Prague-Bubeneč (Czech Republic): 23 of originally 25 grey pebbles of different shapes and colours are preserved, twelve of which are rather dark grey, while eleven are light grey.[87]

5. DICE

The types of random generators we meet with are cubic six-sided dice, four-sided long dice (also named stick dice, German "Stabwürfel"), four-sided long dice with rounded ends of the so-called "Westerwanna"-type, four-sided slender rods or casting sticks, and knucklebones. In the literature, it is not always evident whether four-sided long dice or slender stick dice are meant.

Six-sided cubic dice with the numbers of the opposing faces adding up to 7, are essentially found in Roman contexts. In the Roman provinces of Dacia, Moesia inferior and Moesia superior such cubic dice are attested.[88] Therefore, it is remarkable that burial 1 from Heiligenhafen, as the only burial of the Hassleben-Leuna graves to provide a die, produced a cubic six-sided Roman die.[89]

Four-sided long dice are known from Groß Kelle (Germany)[90], Dorotowo[91], from the Celtic oppidum Hradiště-Stradonice (Czech Rep., c. 1st century BCE)[92], Łęg Piekarski, Krakówka (Poland), and other sites.[93]

Four-sided stick dice come in the shape of slender, often curved bone pieces with tapered ends. They are attested in various sites, among which Młodzikowo (Poland)[94], Hoštice (Czech Rep.)[95], and Sörup (Kr. Flensburg, Germany)[96]. The example from Stendal-Uenglingen (Germany) is evidenced as an example of Germanic gambling and lot casting as described by Tacitus in his *Germania*.[97] Dice of this type also come from Botoșani (Moldavian Plain, Romania),

83 Jaskanis (1996), 79-81.

84 Luik (1994), 363-68, figs. 5-11; 371-81.

85 Mihailescu-Bîrliba (2017), pl. I/1,3; pl. 1/5,6; pl. 1/7.

86 Beljavec (2009), 169-172.

87 Droberjar (2014).

88 Mihailescu-Bîrliba (2017); Jankovič (2007), 28-33.

89 Krüger (1982), 310, with reference to Kersten (1951), 76.

90 Krüger (1982), 231 Abb. 36.16-18; 302 n. 111; Lisch (1840).

91 Schuster (2018), 59; Kokowski (2011), 372, Fig. 24, 64, 133 (with older bibliography). The information about the number and material of the grave goods is uncertain, but obviously the two stick dice were associated with 19 white glass counters and one or two greenish ones.

92 Píč (1906), 90-91, pl. 44; Rybová, Drda (1994), 108, fig. 35.1; Karasová, Schönfelder (2004), 219-242, 236 Abb. 6; Gostenčnik, Grömer (2019), 27-29, Abb. 3, Tab. 1.

93 Krüger (1982), p. 224 Abb. 29.9-17c.

94 *Ibid*, 225 Abb. 30.1-3.

95 *Ibid*, 229 Abb. 34.8, p. 230 Abb. 35.1-2.

96 *Ibid*, 239 Abb. 44.5,6,10.

97 Muhl, Schwarz (2017), 52-9; Tacitus, *Germania,* 14 and 24.2.

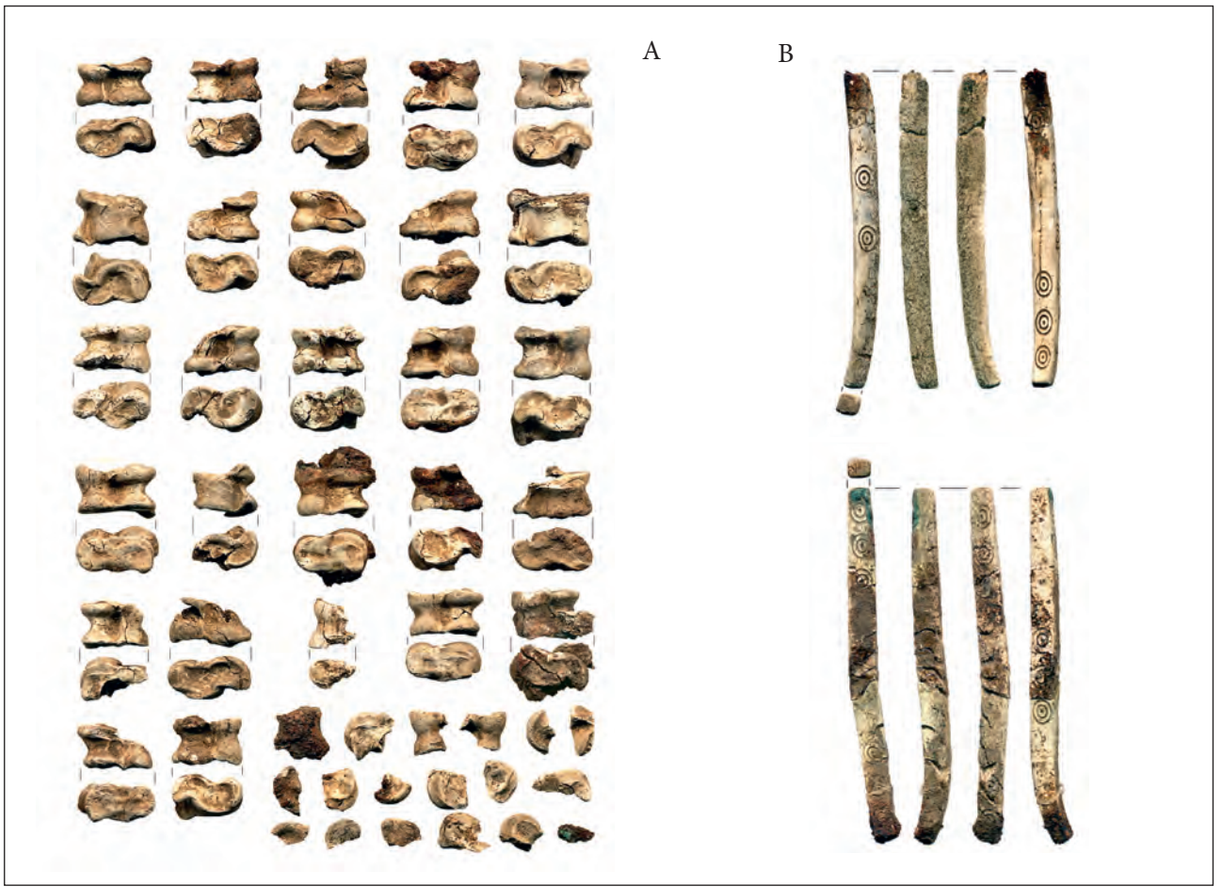

Fig. 15 a and b. Knucklebones and Germanic casting sticks from Prusiek, Burial 19 (Archaeological Institute, Jagiellonian University of Kraków, photograph by Urszula Socha).

where casting sticks in the form of bone lamella were found, onto which the points were marked by concentric circles.[98] They date to the 3rd century.

According to Krüger, the long, slender dice with tempered ends would be Germanic; the shorter long dice Celtic. They are frequent in late La Tène and early Imperial times, later they appear less often. Krüger also found that cubic dice never occur in Celtic oppida; long dice not in Roman forts. Both occur in free Germania, but never together.[99]

Of particular interest are some finds from the Przeworsk culture, where stick dice accompanied by large numbers of knucklebones have come to light. Two stick dice and c. 30 knucklebones come from Prusiek burial 19 (Figs. 15a-b), a warrior grave dating to B2b, B2/C1, perhaps C1a (= c. 70-150 CE)[100]. Probably 24 sheep or goat knucklebones were found together with two stick dice in burial 44A at Nadkole (Węgrów, Eastern Poland). The four-sided dice are marked with concentric circles in a 0-1-4-6 and 0-1-3-6 pattern (Fig.16)[101]. Nine knucklebones and five dice were found in a warrior grave from Lizawice in Lower Silesia[102], and 19 knucklebones with three long dice come from burial 132a at Młodzikowo in (south-east of Poznan)[103]. Jan Schuster seems to believe the knucklebones were used as gaming counters, a usage that is not attested from the Graeco-Roman world. In any case, these assemblages, consisting of indigenous dice combined with knucklebones (of Graeco-Roman tradition?) are of a very different nature than those of the Hassleben-Leuna and Lübsow burials.[104]

6. ROMAN GAMING MATERIAL = ROMAN GAMES?

The question of what makes a game a Roman game has several different aspects. In the context of the present contribution, a "Roman game" is a game that is attested primarily and before anywhere else

98 Ciucălău (2017), 46-50, (DOI:10.14795/j.v4i2.253); Mihailescu-Bîrliba (2016), 33-56, pl. I/8.

99 Krüger (1982), 220.

100 Madyda-Legutko, Rodzińska-Nowak, Zagórska-Telega (2009), 301.

101 Andrzejowski (1998), 85 pl. 33:13,14 (dice and astragals), 114:3 (dice).

102 Hendel, Moździoch (1981), 310 fig. 22g–k.

103 Dymaczewski (1957/58), 290.

104 It is worth noting here the early Anglo-Saxon cremation cemetery at Caistor-by-Norwich, Norfolk, England, which included urn 59, which contained 33 shale and bone counters and more than 35 sheep astragaloi, along with a single, rune-inscribed deer astragal. Myres, green (1973), 99-100, 160 (N.59).

Fig. 16. Knucklebones and Germanic casting sticks from Nadkole, gmina Łochów, powiat węgrowski, woj. mazowieckie, site 2, grave 44A (State Archaeological Museum, Warsaw, photograph by Barbara Solarewicz).

in the Latin-speaking part of the regions under Roman influence or domination. The players of these games were predominantly "people who considered themselves to be, and were widely acknowledged as, Roman."[105] Knowledge we have about these games stems from Roman authors writing in Latin, such as Varro, Cicero, Ovid, or Martial, to name just some of the most reputed authors, who mention, describe, or allude to certain games, or from other written sources such as inscriptions. In some cases, names of the games can be inferred from those sources. Archaeological sources can sometimes be linked to the literary references, but also testify to the existence of games that are not mentioned in the writings. When we speak of a "Roman" game, we do not make any statement about its origin. As a matter of fact, the origins of most games are not known to us. For example, the information we have about the Roman board game *Ludus Latrunculorum* closely matches what we know about the Greek board game *Polis*[106]: both games are played on gridded boards with many pieces and the method of capture by interception described by Pollux (*Onomasticon*. 9,98-99) on the one hand and Ovid (*Art of Love*, 3.358; *Sorrows,* 2.478) and Martial (14.17) on the other is identical. It seems impossible to determine, based on the patchy data, the exact relationship of both games: is *Ludus Latrunculorum* just the Latin name for the Greek game? Or did it evolve from "Polis" as Louis Becq de Fouquières thought 150 years ago?[107] Is it a variant of the Greek game? Or do both games differ sufficiently that we should speak of two distinct games? There are reasons to believe that *Polis* was still known in the Hellenized East well into Byzantine times[108], which would mean that both games existed simultaneously over a long time. The problem of identification and definition of what is a "Roman" game also arises regarding the children's games that Pollux lists in book 9, chapter 110-129, of his *Onomasticon*.[109] Pollux wrote during the reign of Commodus, but in Attic Greek. Following his Atticizing approach, he referred essentially to Classical Greek authors. As far as the children's games are concerned his principal source was Aristophanes of Byzantium, the head of the Library of Alexandria in the early 2nd

105 Following Woolf (2003), 5. We can use the term "Roman" in an ethnic sense following Brather's definition, Brather (2004), 51.

106 For *Ludus Latrunculorum* see Schädler (1994); for the game of *Poleis* see Schädler (2002), 99-102, and Nelson (2020), 18-32.

107 Becq De Fouquières (1869), 427.

108 Schädler (2002), 99-102.

109 Costanza (2019), 115-172.

century BCE. Are those games all Greek games or games that were played mainly in the Greek speaking East? And were they all still played there in Pollux' lifetime? Were they also played by children in Rome and the Western provinces, as it seems to be true for at least some of them? However, we would certainly not qualify them as Roman games, just because the author lived in and under the Roman Empire.

It is assumed that the concept of board games was introduced to the *Barbaricum* through contacts with the Romans.[110] Therefore, the material (boards, counters, dice, etc.) used for these games is assumed to have been, at least in early times, also of Roman manufacture, and is therefore discussed within the context of the so-called "Roman import". Especially glass counters are considered to be of Roman manufacture and to have been produced in workshops somewhere within the Roman provinces, where the know-how of glassmaking was established. However, only a few of these counters have been analysed to determine their provenance, e.g. the counters from Poprad.[111] On the other hand, glass recycling and glass production is attested also outside the Roman Empire, as for example in workshops in Mühlberg (Gotha district, Germany) with semi-finished glass beads and in Klein-Köris (Dahme-Spreewald district, Brandenburg, Germany).[112] There, 509 glass fragments of various colours were found including a glass rod, a mosaic tessera, five counters and glass enamel, and interpreted as glassmaker's recycling waste from the end of the 3rd century or around 300 CE (period C2).[113] In view of this, one would have to reckon with instances of local productions of Roman-style counters and should therefore rather speak of "Roman-type" glass counters[114], without making premature statements about their possible place of production.

As far as game boards are concerned, the type of wood or specific details of their decoration allow for hypotheses about their origin. For example, the board from grave III in Leuna (Germany) and its ornament finds exact parallels in *XII scripta/Alea boards* found in the heart of the Roman Empire.[115] It is therefore very likely that this board can be labelled "made in Rome". The *XII scripta/Alea* boards from the Vimose bog, preserved in the Danish National Museum at Copenhagen, also find exact parallels in Roman marble game boards, which supports the hypothesis that they were made in a place where the game was familiar. However, a close look at fragments inv.n°24227 and inv.n° 20300 of double-sided boards reveals that the way the *XII scripta/Alea patterns* were incised into the wooden surface differs greatly from the grided reverse side (Figs. 10-12). While the lines for the former were finely incised with a ruler and compass, the lines for the fields of the grids are coarser and less regular. This could be an indication that the back of the originally single-sided *XII scripta* boards was prepared by another hand for a different game.

7. HOW DID "ROMAN" MATERIAL FOR PLAYING GAMES ARRIVE IN THE BARBARICUM?

It was Joachim Werner, who formulated the hypothesis that the people who became accustomed to the games played in the Roman world must have been those who lived in the Empire for a certain time, came into direct contact with objects specific to these games, had the necessary time and money to learn how to play, and then returned to their homes outside the Empire.[116] This seems to hold true for the Poprad prince. Analyses show that he lived for a certain time in the Roman Empire, the construction of his tomb is not of indigenous workmanship, and a solidus of Valens, transformed into a pendant (compare this with a similar object from Varpelev), speaks to privileged relationships with Rome.[117] Elements like these point to the warriors enrolled into the Roman auxiliary forces, originating from among the "barbarians." One might also think of former hostages (*obses*), who would have been educated in Roman culture and society, a widespread practice in the context of Roman diplomatic relations.[118] Although recently Werner's connection of the Hassleben-Leuna burials with auxiliary officers of the Gallic Empire has been refuted[119], this does not mean that his hypothesis is totally invalid. In Dacia, it is evident that Roman gaming material such as counters and cubic dice appears mainly in the vicinity of Roman military posts and settlements, and essentially in the Roman frontier provinces of Dacia and Moesia inferior.[120] The continuing integration of foreigners into the Roman army would certainly have encouraged this development.

However, some contexts indicate that precious objects of Roman fabric were also part of war booty. This is especially the case with glass vessels and objects made

110 Hall, Forsyth (2011).

111 Lau, Pieta (forthcoming).

112 For these workshops see Laser (1982); Gustavs (1989); Gustavs (1992); Gustavs (1993).

113 As far as the five counters from Klein-Köris are concerned, it is unclear whether they were "Roman" counters meant to be melted down together with other glass fragments or produced in the workshop.

114 It must not be ignored that this type of glass counters was already produced and used in Hellenistic Greece: see recently Ignatiadou (2019).

115 Schädler (2022).

116 Werner (1973).

117 Lau, Pieta (2014) and (forthcoming).

118 Thijs 2016. As far as the Roman Republic is concerned, see now: Thijs (2019).

119 Bemmann (2014).

120 Mihailescu-Bîrliba (2017), 41-45 with a useful catalogue of finds.

of bronze and silver, the value of which also lay in their material. With "Roman" gaming material frequently associated with such Roman luxury items, it is tempting to believe that the former arrived together with the latter. But would board games be considered a trophy and status symbol? The examples from the bog at Illerup, Denmark, discussed below, certainly suggest that they would have been in some instances. It is generally assumed that the material indicates a simultaneous transmission of the respective rules of specific Roman games. Renata Madyda-Legutko and Joanna Zagórska-Telega write that "objects… that are interpreted as gaming material and attested in the Barbaricum … indicate the adoption of various games popular in the Roman empire by the barbarian population."[121] Meller also assumes that the Germanic upper classes played specific Roman games, first *XII Scripta*, then *Latrunculi*.[122] However, we consider these statements somewhat premature and would advise more caution, since this cannot be concluded on the archaeological record alone. As a matter of fact: we do not know which games people played on those boards and with those dice and counters. It is striking that in various places very small numbers of Roman-type counters are found in graves. More often only one or two, and in different sizes. Moreover, only a few of them were associated with other gaming material. Anne Widura speaks of *pars pro toto* gifts. But could this not also mean that such coloured glass stones were no longer used as gaming pieces at all but seen as exotic and precious objects?[123]

The question of "what actually happens when things 'wander'"[124] is a particularly complex one when considered in relation to games. One must keep in mind that games have a twofold existence as objects and as an activity. Games are characterised by the fact that they provoke a constant process of engagement in the field of tension between materiality, grammar (rules of the game), and semantics (narrative). Objects can 'travel' by being taken along by individuals, sold, exchanged, stolen, or given away. In the case of games, however, the object(s) do(es) not automatically include the game as an activity, i.e. the find of gaming objects does not necessarily imply that the grammar or the semantics of a specific game are included in the given assemblage. Thus, when gaming material changes hand, the instructions for use would have to be transmitted at the same time. From an archaeological point of view, however, we cannot determine whether this was the case or not.

The situation is further complicated by the fact that game-related objects, like other objects, may have moved from one owner to another and changed hands several times. Roman objects in 'barbarian' contexts often had a long life before they were used as grave goods and thus became accessible to archaeologists. Objects have been found that were several generations old (compare the passing on of objects as gifts frequently reported by Homer). And each time, the rules of the game would have to have wandered along with its material. The same may well be true for some objects that are almost self-explanatory such as knucklebones or dice, or whose function is obvious like knives, swords, fibulae, jewelry and the like, but board games require detailed instructions on how to play. Therefore, the question is always: When material we know from Roman contexts as gaming material (possibly for a specific game) is found somewhere, did it have the same function in its new context? Was it used to play the same game(s)?

In principle, this is rather unlikely, at least in the long term. Games tend to evolve, that is, to be modified by the players or simply by error or by adapting them to changing needs and new ideas. It is likely that the new owners of these game boards, dice, and counters invented their own rules once the idea of a board game was known. Rules must be applied repeatedly to memorize them in all their details. If not, some details of the rules are easily forgotten, misunderstood, or wrongly transferred, and will then be replaced spontaneously by an *ad hoc* rule which might or might not survive and possibly spread thus replacing the original rules. This process will first lead to what might be termed variants of a game, and finally to completely new games as well. An emblematic case for such a kind of problem is constituted by the game found in the so-called Doctor's Grave in Stanway, Colchester. As a matter of fact, the material does not exactly correspond to what we know about Roman board games and might therefore point to some other game.[125]

As far as game boards found in the Greek East and the *Barbaricum* are concerned, one observes an increased number of cells of gridded boards compared to Roman examples,[126] which might be taken as an indication of changing rules or newly invented games. The only Roman game we know of that was played on gridded boards was *Ludus Latrunculorum*, a relatively complex strategic board game[127]. In Roman contexts (which concentrate mainly on the 1st century AD), it can be observed that the dimensions of the board (i.e. the number of squares) were not standardized, which led to boards

121 Madyda-Legutko, Zagórska-Telega (2000), 113-114; Widura (2015), 132.

122 Meller (2001), 132.

123 Widura (2015), 153.

124 Schreiber (2018), 19.

125 Schädler (2007).

126 The catalogue of examples has been enlarged recently by Courts, Penn (2019); Courts, Penn (2021).

127 Schädler (1994).

of 7×8, 8×8, 9×9, 9×10, 10×10 etc. squares. In the Heraion on Samos, a marble block with an inscribed board of 11×12 squares can still be seen today, but cannot be dated. From Vimose, Leuna, Poprad, and other sites boards with 13, 16, 17 or even 18 squares in a row have come down to us, which are also later in date (3rd- or even 4th-century) than the dated boards from Roman sites. Considering the information about the rules of the game available from ancient sources, we may conclude that larger boards with more squares and therefore probably more counters would lead to the game being more complicated and taking much more time to play out. The point here is not to imply that the Germans were not up to more complex games. But the limitation of the numbers of squares and pieces in a board game is not without reason. The game must be manageable, and playable in what is considered a reasonable amount of time. Larger boards will make the game more or even too complicated. One might even ask whether *Latrunculi* is still an interesting game, when played on a board such as the one from Poprad with (probably) 15×17 squares, roughly four times the size of a normal Roman *Latrunculi* board. Therefore, the assumption is evident that the large Germanic boards were perhaps used for some other game than *Latrunculi*.[128]

A further aspect is how long an originally Roman board game was still considered "Roman", i.e. foreign in a certain sense, when it circulated for years or even decades in a non-Roman social and cultural environment. Was the process of acculturation at some point so far advanced that the game was truly appropriated? And what socio-cultural significance lies in the appropriation of a "foreign" game? What was the motivation to play such a game? What significance did that game have for the players, their audience, and the society? In Late Antiquity, however, when the game finds in Germanic contexts increase (Hassleben-Leuna graves), the Roman army was already so strongly interspersed with men from beyond the Empire's borders[129] that the question arises whether the games were still considered "Roman" at all or rather taken as a typical element of a soldierly lifestyle.

8. SUPERNATURAL OVERTURES: MAGIC/ RITUAL/MEMORY

For this final element of discussion, we return to the Froitzheim *turricula*, which has added significance in evidencing the magical practices that could be wrapped up in the playing of board and dice games as a bridge to the supernatural. In her wide-ranging discussion of a magical gem engraved with a board game scene, Véronique Dasen brings together various strands of evidence that indicate the gem invoked supernatural aid to bring its owner luck at board games and in life generally (in particular it references the Graeco-Roman concept of *tychê*, that mixed divine protection and personal skill). She discusses the Froitzheim tower in reference to a tower depicted on the gem's game-board scene, as a signifier of a dice game being played[130]. Such towers were themselves part of the concept of luck/fate – as an aid to preventing cheating they allowed luck to flow freely. The depiction of such a tower in the calendar illustration for December, in the *Codex-Calendar of 354*[131] also links it to the December festival of *Saturnalia*, when gambling was legal and when slaves could freely play with their masters. The tower itself then was an agent of luck but in the case of Froitzheim it brought other factors into play to reinforce this. Its inscriptions, bells, pinecones, and dolphins are all gestures in the manipulation of fate, the apotropaic deflecting of the evil eye away from the rolling dice, which as they tumble through the tower deliver to each player their dose of luck and fortune. At the base of the tower, where the dice would emerge onto the steps, a single small bell survives hanging from a slot at the tower base, two further slots, to right and left, indicate there were at least two other such bells originally. As the dice emerged the bells would ring or tinkle, the sound itself being a protective charm to divert the evil eye[132]. The open steps are flanked by a dolphin either side – these were perceived as protecting and guiding figures thanks to their roles as psychopomps[133] further emphasised by their supporting role with several Greek and Roman gods, including Fortuna[134]. The top of the tower carries two pinecones, a symbol of fertility (particularly connected to Bacchus) which could also have been perceived as bringing luck[135].

The intimate connection between dice and luck could be ritually expressed in other ways. Analysis of the find-spot distribution of the dice found at the legionary fortress and vicus at *Vindonissa* (Aargau, Switzerland) observed that the greatest concentration of dice was in the fort's midden. The number recovered was far in excess of the numbers of dice elsewhere in the fortress, suggesting that generally care was taken not to lose them, in contrast to the

128 Accordingly, one may doubt whether the famous *Alea Evangelii* game described in the Corpus Christi College ms. 122, usually dated to the 11th century, refers to a game of the tafl-type really played or whether it should be regarded as a learned Christian allegory in the shape of a game board. The board of 18×18 squares or 19×19 lines is much larger than the boards of the tafl group with usually 7×7, 9×9, or 11×11 lines. See discussion in Forsyth, Hall (2020), 34-35 and notes.

129 See Ebner (2018): http://portal-militaergeschichte.de/ebner_diversitaet, DOI: 10.15500/akm.25.04.2018. (22.11.2022).

130 Dasen (2020), 180.

131 Salzman (1990).

132 Cf. Eckardt, Williams (2018).

133 Avery (2007), 93-97.

134 *Ibid*, 56-92.

135 Hall (1979), 303 ['Thrysus'].

midden dice, consciously thrown away, possibly because they brought bad luck to their owners[136]. No site in Britain has anything like this quantity of dice but there are instances of dice seemingly being ritually deposited or dispensed with. At Newstead (Table 2, no.2) the only dice recovered by excavation came from the bathhouse well. The fort bathhouse is known to have been one of the key places in which soldiers diced, perhaps a run of bad luck for one soldier was ended by disposal in the well? Specific wells and watery places could be the focus for more ritualised deposits. A well excavated at Skeleton Green, Hertfordshire was found to have a rich series of material deposited within it[137]. It forms of the first phase of the site (late 1st century BCE to the first decade of the 1st century CE). Included in the deposits were four cone-pegs, identical to those from King Harry Lane, Verulamium. Arguably the earliest gaming pieces found in Britain, their companions include a wide-range of Gallo-Roman goods from across the Continent. The quality of this material suggests it was not simply being disposed of as rubbish and that gaming kit had supernatural tendrils from the start.

Close-by the fort of Carrawburgh, on Hadrian's Wall is the site of a spring-well dedicated to the goddess Coventina, an important deity possibly with Continental connections. When discovered in the 19th century, along with the remains of the Roman superstructure it was excavated and a mass of coins and other objects of bronze, bone, pottery, glass, lead, leather, jet, and shale[138]. These finds included a small bone die and seven bone counters of varying forms[139]. The placing of gaming kit in a votive well dedicated to a powerful deity strongly implies that supernatural aid was being sort, possibly to change luck and/or skill. A different kind of watery deposit is encountered beyond the frontier in Denmark. At the Illerup river-valley site, Skanderborg, huge deposits were made (in former wetland and lake areas) of mainly weapons, understood as having been deliberately sacrificed probably around 200 CE, possibly to mark victory over an enemy and/or the sharing of spoils with the gods. The objects were offered in discrete groups probably wrapped in textile[140]. The sacrificed objects include a range of non-military items, including a single die, made of amber, of Westerwanna type, of cubic form with rounded edges[141]. Andrzej Kokowski suggests that the invading force whose equipment was sacrificed at Illerup had acquired the die on route (presumably with other gaming kit) and that it had been deposited as enemy booty[142].

We should be aware though that the communities near Illerup were familiar with Roman games – plano-convex gaming pieces are displayed from one of the villages, in the Moesgaard Museum, Aarhus. Further south in Denmark, on Funen, the bog at Vimose attracted a large number of weapon sacrifices between the 1st and 7th centuries CE, but with a focus in the 2nd-3rd century CE. The non-weapon deposits at Vimose include an extensive assemblage of gaming kit: four fragments of gaming boards, 87 gaming pieces (glass, amber and bone) and seven dice. Excavated in the 19th century, Conrad Engelhardt's initial publication clearly shows two boards of *duodecim* type and one of *latrunculi* type[143] (and see discussion above). The suggested date for the gaming deposit (c. 300 CE, pers. comm. Xenia Pauli Jensen) along with the large numbers of other Roman material deposited in the Vimose bog[144] suggests that these boards are of Roman origin and not Germanic variants. Xenia Pauli Jensen suggests that the earlier deposits at Vimose are different to the later "war booty sacrifices" seen there and elsewhere; they perhaps represent a continuation of established cult practice on the site going back several millennia to earlier prehistory. The gaming kit could be part of a deposition of war booty, though perhaps in this instance the gaming kit was part of a high prestige Roman gift giving/exchange and deemed appropriate to share with the supernatural domain and so help consolidate a local leader's political power[145].

There are other, liminal, ritual spaces where gaming equipment has been found. In Scotland, two caves, Borness, Dumfries and Galloway and Sculptor's Cave, Covesea, Moray (Table 1, nos. 16 and 30) including gaming kit amongst their finds, bone pegs and a counter from Borness and a range of stone counters from Covesea. They date from approximately the 2nd to the 4th century and although poorly provenanced we can understand then as helping to invoke supernatural aid in an environment where sound, light and odours could be readily manipulated to create a performance of supplication. During the same time frame, the jet peg-heads were buried at Crichie, Aberdeenshire (Table 1, no. 1) possibly in cist burial, possibly cached under a large stone as an offering. Committing to the earth also took place in the context of human burials, some of which have been mentioned above, from Stanway, Welwyn Garden, and Waulkmill, burials where the key tone seems to have been the demonstration of *Romanitas*

136 Hollinger, Hollinger (1984), 14, Fig. 8.

137 Partridge (1981), 61, Fig. 26, 353-54.

138 Allason Jones, Mckay (1985), 2-6.

139 *Ibid,* 36, Nos.110-117, Fig. 110 P. 35.

140 Ilkjaer (2002), 62-4.

141 Kokowski (2019), 126-29.

142 *Ibid*, 129.

143 Engelhardt (1869), Pl.3.

144 Pauli Jensen (2008); Pauli Jensen (2011); Pauli Jensen (forthcoming), & cf. Roman objects at Illerup: Ilkjaer (2002), 74-7.

145 Pauli Jensen (2011), 45.

by indigenous elites, a demonstration that faced both the community audience and the supernatural one. Other burials seem to strike a different tone. A cremation burial from Roman Gloucester is particularly significant. Grave goods added to the pyre remains in the cremation urn comprised 43 bone and glass counters and two dice, along with a melon bead and a scrap of iron[146]. A second example comes from the Roman East cemetery in London, an early 1st-century CE cremation burial, which for that cemetery uniquely included a set of 24 glass counters and four dice that had been placed in a wooden box (of which only some of the fittings survived) and a wooden board is presumed[147]. Both these burials seem to be best understood as examples of a small group of burials where gaming kit forms almost the only offering, often connected to children or adolescents related to soldiers or colonists[148]. Their 'Romanness' is not being defined so much as a display of special treatment in their afterlife journey and definition in memory.

Their ability to function as amulets may have been important in these contexts. The burial of a set of gaming pieces in a bag, where 17 of the counters were chalk pebbles, and the other three ceramic counters, alongside them a stylus and a pig mandible, all accompanying a crouched inhumation burial of a teenage boy at Little Cheney, Dorset, probably buried in the mid-late 1st century CE[149], is not a burial of wealth but of memory and amuletic function. One final context is worthy of notice, from Scotland, a tribute to the care with which the hillfort settlement at Broxmouth was excavated (Table 1, no. 25). There in house 4, an antler, domed gaming piece was deposited as part of the infilling of a pit in the floor, perhaps in the mid-1st century CE. Several generations later a further two identical peg pieces were concealed during the construction of a new wall. Linsdey Büster treats these three objects as having considerable biographical agency, inferring that the two latter pieces were curated in the family group as visual prompts in stories and memories about family ancestors[150]. She also posits that this approach may indicate a reluctance to dispose of stuff which is 'problematic' in its human attachments and so hard to let go of. These explanations can also have a supernatural/magical dimension. Disposing of objects in this way, retained within the structure of a building would prevent their use in magical practices by others (making them safe in magical terms and there may be a parallel here with bog deposits) as well as giving them a protective, apotropaic role for succeeding generations. There may be an heirloom quality to the six fragments of beads and bangles apparently included in the same bag as the Welwyn Garden gaming pieces – they have polished edges indicative of long use as fragments. They may represent a personal connection to someone which may have given them a magical impetus in connection with the board game.

One final aspect to discuss is the link to divination. The Doctor's Grave, from Stanway, Colchester, included a set of metal rods, said to be for divination, lying across the gaming board area[151]. Such magical aids may suggest we are better to think of the person buried as not just a Briton but a druid too[152]. In this context also of note is the pharmaceutical box associated with a game-board deposited with cremation 6635 at Tollgate, Gravesend[153]. The link between board games or gaming kit and the practice of divination is also evinced in the indigenous archaeological record. Excavations at Bornais, South Uist (Table 1, no. 60) have recovered a wide range of gaming kit across the three settlement mounds excavated, broadly dating to the 2nd-13th centuries. The key pieces for this discussion are two parallelepiped dice and two astragali (marked on one face with a partially shaded grid pattern) and dated to the 5th-6th century CE. They were found in pairs, a die and an astragalus together, in contexts that marked the transition from house 1 to house 2 and in the midden of house 2. House 1 was burnt down and a die and astragalus were found, unburnt, on top of the burnt layer. The interpretation is that they may have been part of an act of divination to ensure it was propitious to build the new house on top of the old. Four ceramic counters were found in the same layers: could these be connected to the ritual?

Indications of similar possibilities at other sites include Pool, Orkney (Table 1, no. 43), where there were parallelepiped dice (2) and astragali (6) were found but their phase dating does not overlap (3rd-6th century and 7th-8th century CE respectively); Scalloway, Shetland (Table 1, no. 51) where five parallelepiped dice were dated to the 5th-7th Century CE and finally from Burrian, Orkney (Table 1, no. 38) three parallelepiped dice, three conical pieces and three decorated phalanges were found. There is a strong implication of a continuity in divination practice linked to gaming from the Late Roman Iron Age to the early medieval period. Though later in date there are medieval textual references that suggest the playing of a board game could itself be an act of divination, a magical act (fusing luck and skill) where a king or ruler sought to shape the course of events (notably battles) by winning the board game.

146 Cool (2008), 105-110.

147 Barber, Bowsher (2000), 192-95.

148 Cool (2008), 108-09.

149 Bailey (1967), 156-59.

150 Büster (2021a), (2021b).

151 Crummy *et al.* (2007), 224-29.

152 Hall (2007), 5-6

153 Allen *et al.* (2012), 354-74.

Paul the Deacon, in his *The History of the Longobards* records the loss of a battle and a kingdom by the Heruli to the Longobards – Paul blames the Herulian king, Hrodulf, for arrogantly playing a game whilst the battle raged. But Hrodulf is more likely to have been seeking to manipulate fate through the board, but he loses and so his army does. The episode is paralleled by an Arthurian tale in which Arthur wins on the battlefield by winning on the gaming board (albeit by wiping off all the pieces to head-off impending defeat)[154].

CONCLUSION

In this wide-ranging exploration we have wandered either side of the Roman frontier across Europe from the Black Sea to the Orkneys, seeking out the nature of the evidence for board games played in the polities of Rome and Barbaricum. We have only scratched the surface of the evidence but we nevertheless hope to have done enough to show a common materiality of things used for play. We have shown that the material culture of board games also influenced other areas of practice in daily life, identifying the sensory appeal of glass counters in particular, heirloom functions, funerary rites, and a crossover with magical practices (including the manipulation of fate) as particularly important. The material, whether specifically made for board game play or improvised to do so, has a cultural life, or a biographical trajectory. The material is not fixed but fluid in meaning. A fuller collation of the evidence is needed to document the ambiguities and fluxes in meaning more fully, whether at the level of games: what was their full range? Who played them? What was their geographic range and overlap? – whether at the level of cultural and social interaction: what is hidden by the terms Roman, Barbaricum and board game? How do play and frontiers interact? – or whether at the symbolic level: why do playthings work as heirlooms and tools for supernatural engagement?

The paper deploys a large wedge of evidence, but much remains to be gathered for a complete synthesis. The scale warrants a database that brings together all the known material culture evidence (archaeological, documentary, and artistic), with collaboration across multiple countries. This is a key challenge, and we encourage the taking up of that challenge as a valuable and necessary contribution to the scholarship and understanding of why, how, and when people have faced each other across the board of play.

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The Iberians played too

INTRODUCTION

The analysis of play in the Iberian world draws on a large amount of disconnected and disorganized information, but this nevertheless holds great potential for future research.[1] Until now, though an essential human activity, play, has been approached tangentially in studies devoted to this field of culture in relation to childhood.[2] Our knowledge of Iberian daily life is limited for three main reasons:

1. The nature of the materials used for play.
2. The complete absence of Iberian daily life in Iberian iconography.
3. Our ignorance concerning the meaning and translation of preserved Iberian texts, leading to reliance on a few foreign (Greek and Latin) sources compiled many years after the time period under discussion.

1. What do we know about games in Iberia?

The iconographic and textual limits force us to focus on material culture found in archaeological contexts, especially in the funerary sphere, because closed funerary contexts provide well-delimited spaces and relationships between objects. However, many of the elements that we connect with play are directly available in nature (stones, bones, etc). Most of the objects which have been preserved down until the present day and have not been affected by different physico-chemical processes, either pre-depositional or post-depositional, but do not exhibit any modification of their original natural state: river pebbles, animal astragals, shells, etc.

Archaeological analysis shows that human action, visible through selective groupings or modifications on the surface of the objects, either facilitates or hinders their identification as elements used for play: astragals with modified surfaces, circular cut-outs of ceramic fragments, stone sets with the same dimensions and colours, etc. Lastly, gaming equipment originally created by human action, such as glass paste gaming counters, fired clay marbles, miniature animal figures, or other small glass pieces that have no decorative use or clear function other than that of a gaming-related object, presents less ambiguity, (though on function, see Penn, Pace, Schädler, this volume).

We have a sufficient number of Iberian contexts to study and an acceptable quality of data regarding all these objects, which together facilitate research that can offer coherent and well-founded interpretations following methodological criteria derived from post-processual archaeology. Previous research did not take into account the diversity of the contexts or the chronological span they cover in an Iberian society that was permeable to Mediterranean contacts and influences, and constantly evolved from the 6th until the 1st century BCE. In any case, we have tried to remedy the scarce attention paid to this documentation until now, and we seek to establish some important first conclusions comparing this data with other contemporary Mediterranean cultures.

1 This work has been the starting point for the exhibition «El guerrero íbero y el juego» (18/05/2021-30/09/2021) and the international congress «Warriors at Play» (28/05/2021), both held at the Museo Arqueológico y de Historia de Elche "Alejandro Ramos Folqués" (Elche, Spain).

2 Chapa (2003).

We limit the subject of this article to evidence from funerary records: gaming counters in glass paste and stone, dice, astragals, balls, and discs cut from ceramic vessels. These groups of objects provide the categories that have helped us identify the games played by the Iberians. We have organized our research according to these groups in order to present each category and comment on aspects of their chronology, spatial distribution, and historical context. We will leave aside evaluations of regarding the gender and age connotations of each category, but in all cases, the evidence suggests that these should be attributed to individuals of high social status.

Glass paste counters

Blue glass paste game counters with white or yellow decorative trails and a plano-convex section[3] have recently been studied in the context of central Italy and the central European Celtic world, with their origins attributed to the Celtic world and the distribution of the counters towards France as an expression of the movement of the Celts (Gauls).[4] This work has also demonstrated the uniqueness of Italian gaming sets from funerary contexts and has highlighted the connection of these game counters with exceptional assemblages, usually very rich ones, which are often of a military nature.

The observations that Manuela Diliberto and Thierry Lejars[5] propose in this regard revolve around the appearance of these counters as an expression of society in central Italy from the middle of the 4th century BCE to the end of the 3rd century BCE, which is associated with the creation of a particular type of board game. The circulation of these counters, unrelated to commercial transactions, is proposed to be directly related to the movement of people in the context of military activities, particularly mercenary activities. Their study, which is exhaustive for northern Italy and central Europe, ignored the record for the Iberian Peninsula which provides important data relating to chronology and is an attractive dataset for examining the movement of people with military roles.[6]

The glass paste plano-convex counters with white or yellow trails documented in the Iberian Peninsula are concentrated in the south-east, whether found in groups in tombs or as individual finds in settlement contexts. They appear in high-status tombs, both in warrior tombs and in tombs in which the grave goods do not allow for a characterization of the deceased's social role.[7] The presence of these counters in children's graves is rare. Dating ranges between the last quarter of the 5th century BCE, the whole of the 4th century BCE and the beginning of the 3rd century BCE. Monochrome glass paste plano-convex counters have a similar distribution and chronology.[8]

A different case, though still related to the research presented so far, is presented by sets of stone counters.[9] Other pieces, not automatically identifiable as game counters by their irregular form, could be identified as such if we consider their contexts. Some have been recovered as individual finds in domestic or cult contexts, but an unusual stone type, color, or morphology could support an identification as game counters.

If we accept that the glass paste counters with spiral-shaped decorations were produced in central Italy,[10] we must interpret the abundant examples from the Iberian Peninsula as imports. The extreme scarcity of imports to Iberia from these territories during the 4th century BCE, except for some metal vessels concentrated in the same area from which the game counters in question came[11], leads us to speculate about the mechanisms which brought them to the Peninsula.

By simply adopting the arguments proposed by Diliberto and Lejars, the movement of people between Italy and Iberia seems to be a logical argument, even more so given the context of these counters, which often relate to elite warriors. In this way, we must add the particular distribution of these counters in the territory of Bastetani to their obvious concentration in central Italy, and relate them to the proximity

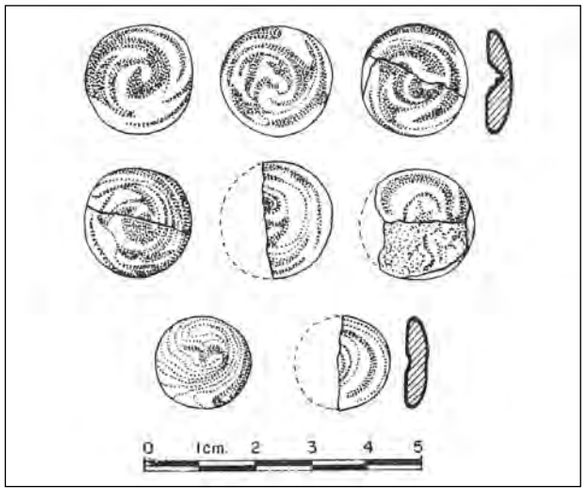

Fig. 1. Glass paste pieces from El Cigarralejo's Grave 45. Drawing after Cuadrado *(1987), fig. 51.*

3 Graells i Fabregat (2021a), 58-60.

4 Diliberto, Lejars (2011); Diliberto, Lejars (2013).

5 Diliberto, Lejars (2011), 411; Diliberto, Lejars (2013), 441.

6 Graells i Fabregat (2014), 131-136.

7 Graells i Fabregat (2014), 134-135; Graells i Fabregat (2021a), 58-60, fig. 11.

8 Graells i Fabregat (2014), 136; Graells i Fabregat (2021a), 60.

9 Graells i Fabregat (2014), 135; Graells i Fabregat (2021a), 61.

10 Diliberto, Lejars (2011); Diliberto, Lejars (2013); Schädler (2019).

11 Synthesis in Graells i Fabregat (2014); Bardelli, Graells i Fabregat (2017).

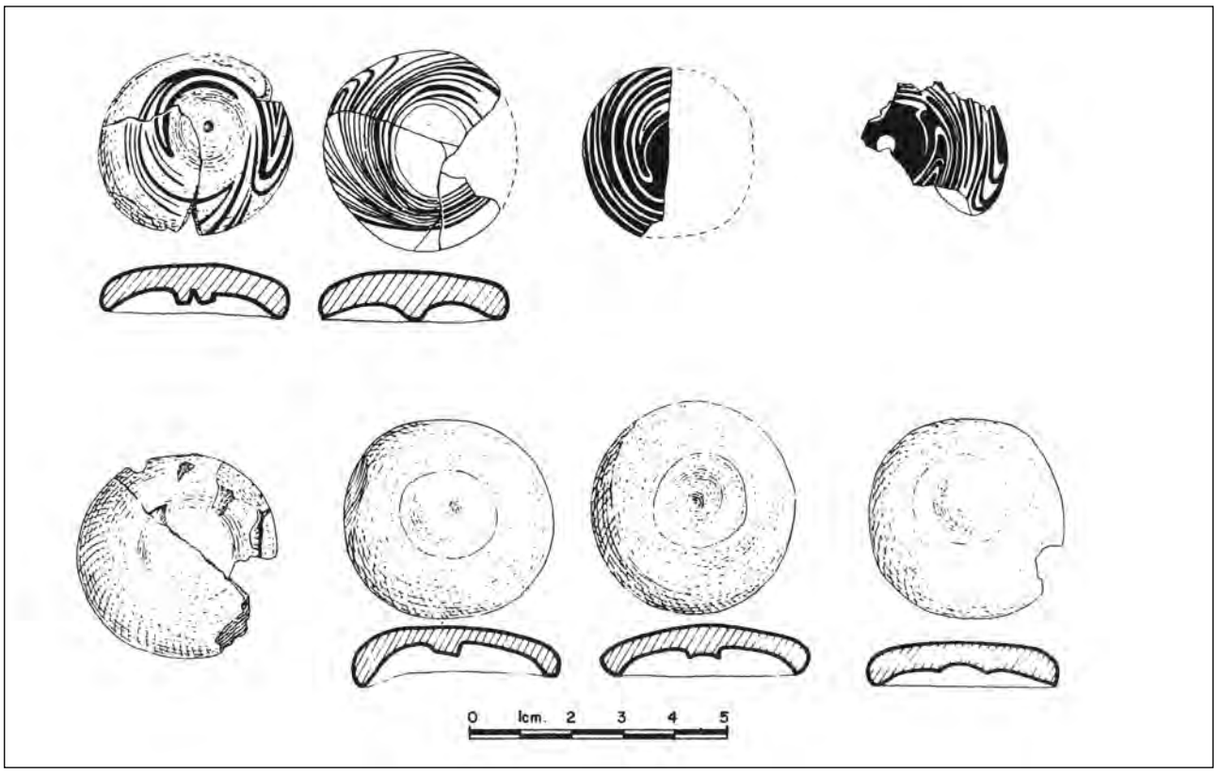

Fig. 2. Glass paste pieces from El Cigarralejo's Grave 204. Drawing after Cuadrado *(1987), fig. 161, 55 and 62.*

of the harbours of Villaricos (prov. Almería) and Alicante.[12] These areas could be potential locations for the enrolment of mercenaries,[13] with their particular idiosyncrasies on an artistic level, and their development in terms of weapons.[14]

The groups of glass paste counters in Iberian tombs repeat sets whose number of counters is usually divisible by four with (Fig. 1-2), but rather surprisingly, two sets of stone counters comprised 14 pieces.[15] Perhaps they correspond to two different games, both relatively well structured in terms of counter numbers and their division between two opponents.

For both categories, the counters with white or yellow decorative trails and the monochrome ones, the data do not allow us to see a regular pattern (Fig. 3). However, these may represent distinct sets with different purpose, or the rest of the set may have been made of organic material or not directly preserved for reasons which remain unclear to us. It should also be noted that, as anticipated, most of these groups are associated with high-status warriors. If we consider their date — in the first half of the 4th century BCE — their arrival in Iberian contexts should be directly related to military movements and not to comercial interactions.

12 Graells i Fabregat (2021b).

13 Graells i Fabregat (2014), 46-49.

14 See synthesis in Graells i Fabregat, Pérez Blasco (2022).

15 Graells i Fabregat (2021a), fig. 11.

• Dices and astragals

Dice and astragals stand out as the most visible evidence of of chance. In Iberia, dice are very rare, almost to the point of being anecdotal finds.[16] The dispersion and concentration of astragals in Iberian sites is better understood.[17] The oldest die in the Iberian Peninsula was found in the palace-sanctuary of Cancho Roano (Zalamea de la Serena, prov. Badajoz) and dates to the 5th century BCE[18], while the first astragals used for a recreational purpose[19] were discovered in the Orientalizing Period cemetery of Cruz del Negro (Carmona, prov. Sevilla)[20] and Medellin (prov. Badajoz).[21]

As in other Mediterranean cultures, most of the astragals associated with games in Iberian culture come from sheep and goats. The fact that these astragals were without any need for manufacture enabled their widespread availability, but this currently hinders their identification as objects related to play, since the quality of the information of the archaeological record is often not sufficiently detailed. The fact that archaeozoology was only widely practiced from the end of the 20th century in the Iberian Peninsula has contributed to an added historiographical difficulty in the analysis of the

16 Blasco Martín (2016).

17 Pérez Blasco (2021), 64-65, fig. 16.

18 Celestino, Jiménez (1993), 48. 140.

19 Pérez Blasco (2021), 71-72.

20 Bernáldez-Sánchez *et al.* (2013).

21 Almagro-Gorbea (2008), 481-483.

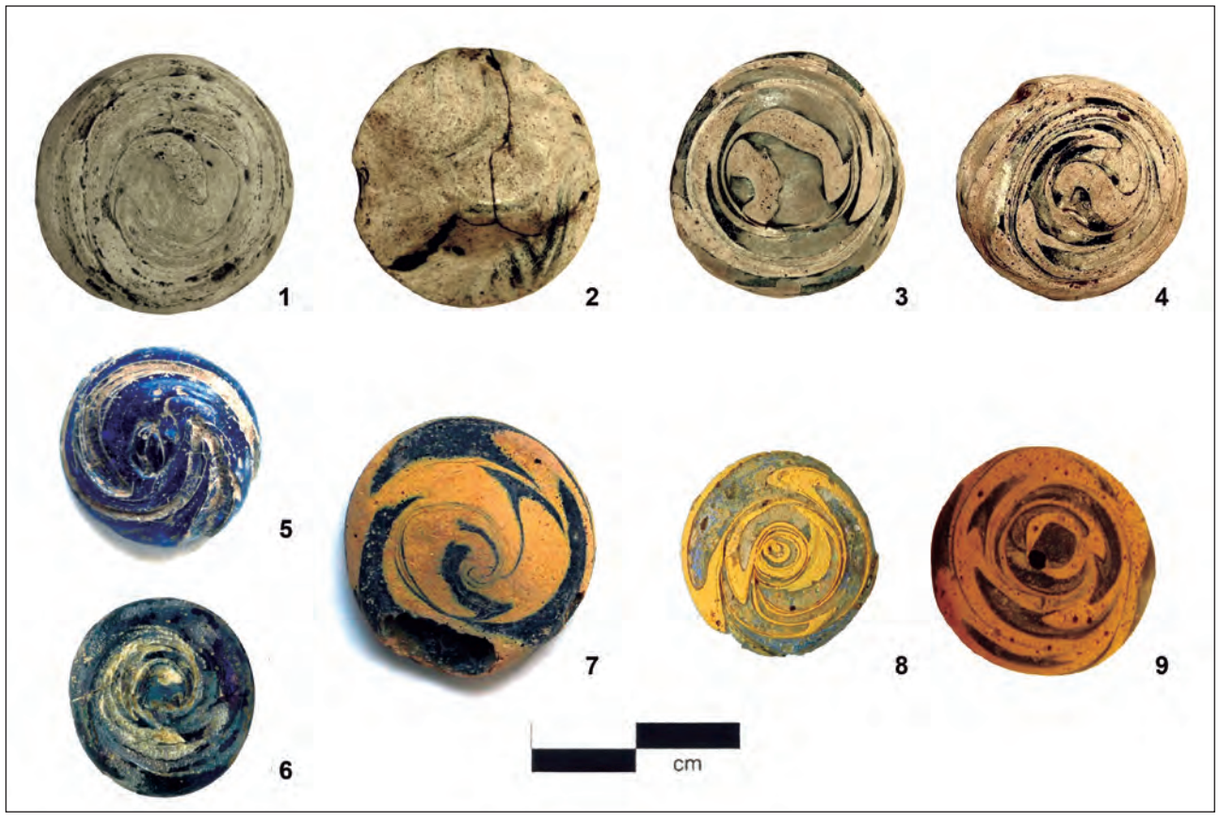

Fig. 3. Glass paste pieces from Ullastret (5-8) and Emporion (1-4 and 9) (prov. Girona): 1) Nr. Inv. 29178; 2) Nr. Inv. 29177; 3) Nr. Inv. 29179; 4) Nr. Inv. 29175; 5) Nr. Inv. 3549; 6) Nr. Inv. 2788; 7) Nr. Inv. 4753; 8) Nr. Inv. 2789; 9) Nr. Inv. 9115. Pictures MAC-Ullastret and MAC-Barcelona/Empúries.

contexts of earlier excavations, where astragals had been overlooked.[22] This reality is most noticeable in relation to older excavations and their associated publications, and can be extended to other series of 'small finds'[23] obtained from nature (e.g. shells or similar items), which could have been used as in games.

Astragals, ceramic and stone (hemi-)spheres, or cut-out disc-shaped ceramics appear in settlement, ritual, and votive contexts, as well as among grave goods in Iberian sites. However, most publications from the 20th century relating to these materials do not provide details regarding their dimensions and weight, their exact context, their association with other objects, their quantity or even a scientific archaeological illustration. In most cases, the interpretative paradigm is reduced to repeating traditional interpretations suggested since the end of the 19th century and deduced from parallels with other cultures, e.g. the Greeks or the Romans. Astragals could have a recreational, apotropaic or oracular use;[24] spheres or cut-out disc-shaped ceramic fragments are gaming-related objects, elements from an accounting system or caps, and even have a magical use. In any case, it cannot be discounted that these items are domestic elements related to everyday life.

In light of the variety of contexts, groupings, and modifications of astragals, it is difficult to advance just one interpretation for these bones; even though the prevailing interpretation in scholarship on the Iberian world considers them to be used for games. They appear in religious, votive, domestic, and funerary spaces, either alone or grouped with various elements. Some of them are polished, others have a central perforation and sometimes they combine both previous modifications or have a larger number of perforations. The modification of their lateral and medial sides has usually been interpreted as a powerful argument to connect them to the "knucklebones game",[25] even though the aforementioned modifications distort the essence of a game of chance by altering the irregular surfaces on which the game is reliant. Another option linked to leisure should not be ruled out: namely that these modifications of the large sides of the astragals could have been carried out so they could be used as counters on a game board, or in another game type with more restricted options.[26]

In these contexts, material associations and the number of objects in the groups can contribute to the interpretation of these objects. The spatial coincidence of dice, astragals, ceramic disks, small pebbles[27] of

22 Pérez Ripoll (2013).

23 Feugère, Charpentier (1989-1990).

24 Lafaye (1877-1919).

25 Iborra (2004).

26 Pérez Blasco (2021), 66.

27 Graells i Fabregat (2014), 135; Page (2021), fig. 21.

Fig. 4. Grave 43 of Coimbra del Barranco Ancho (Jumilla, Murcia). Photo M.F. Pérez Blasco / R. Graells i Fabregat.

different colours and stone or clay balls, etc. would suggest they were used for play. Decades ago, due to the transfer of Mediterranean culture into the Iberian Peninsula, the 90 astragals discovered in Department 78 of the settlement of La Bastida de les Alcusses (Mogente, prov. Valencia) were linked to the Greek game *Pentelitha*, since they appeared next to three small pebbles and three tejuelos (or recut ceramic discs, discussed further below),[28] even though just five astragals are needed to play this game, which was very popular among Greek and Roman women.[29]

The truth is that the connection between these bones and gaming is more complex, especially in settlement contexts, as the bones may be the remains of household waste, of a sacrifice, or in such quantities that suggest they should not be viewed as linked to recreational use and are better associated them with other functions, such as part of an accounting system or even loom weights.[30] Therefore, cemeteries provide better quality information in this regard. The ritual and intentional incorporation of astragals in the grave good assemblages imbues more meaning to their presence, since in this micro-context, the association of materials, the analysis of the astragals themselves, and the number of pieces present is extremely important in terms of connecting them with gaming. In a sealed funerary context, interpretations linked to leisure are more credible, as can be seen in Tomb 43 of Coimbra del Barranco Ancho (Jumilla, Murcia), where three carved astragals, three ivory dice, and two glass paste counters were discovered as part of a "gaming set" in a man's grave[31] (Fig. 4).

In Iberian graves, we find a number of astragals ranging from one to more than 100, regardless of the buried person's gender or the chronological period. The truth is that the recreational use that might be deduced from the four astragals in Tomb I (campaign of 1956) in the cemetery of Castellones de Ceal (Hinojares, prov. Jaén), the four astragals among the grave goods in Tomb 258 of Cabecico del Tesoro (Verdolay, Murcia) or the four astragals in Tomb 478 in the cemetery of El Cigarralejo[32] (Fig. 5), all of which are warrior tombs, has little to do with the use of 'almost three hundred astragals' found in the female burial in Tomb 200 in El Cigarralejo.[33] The latter is not the only example of a tomb with a large number of astragals. In the cemetery of Piquía (Arjona, prov. Jaén), in a tomb from the 1st century BCE, more than 200 astragals were found among the grave goods of an Iberian prince.[34] These two burials are a good example of yet another interpretation that, until now, has has only been considered in specialist publications: the notion that these astragals were an indicator of wealth and social distinction, and are documented among the grave goods of the social elite. However, following a thorough analysis of the tombs with astragals, we can prove that not all the so-called 'rich' tombs have astragals, neither do these objects appear in these tombs exclusively. In the cemetery of Coimbra del Barranco Ancho (Jumilla, Murcia), for example, astragals appear in just two of the three richest tombs from the 3rd century BCE and even then in moderate numbers, since the largest number of astragals (29) in Tomb 36.[35] If these bones were wealth indicators, we would imagine either that the buried person was not particularly rich or the number of astragals was not consistent with the rest of their grave goods. Therefore, the presence of astragals, even in large numbers, cannot be considered as a reliable indicator of wealth or high social status. Moreover, we should remember that not all the inhabitants were buried in the Iberian cemeteries which have so far been excavated; only certain individuals had the privilege of being buried in these sacred, defined spaces.[36]

Similarly, some studies have suggested that astragals appear more frequently in male graves than in female graves. However, this consideration should also be reviewed since the gender identification of those buried in the tombs has mostly been made by connecting male gender with the presence of weapons among the grave goods. Even though this connection has been proved to a high percentage, osteological results indicate that this is not accurate 100 per cent of the time.[37] A review of Iberian cemeteries indicates that astragals do not appear among grave goods according to any discernible gender or age pattern, nor are they exclusive to the tombs of men, women, children or the elderly. This is consistent with similar practices in other areas of the Mediterranean.

There are other examples of interpretations that link astragals with fortune telling or magical protection in the Iberian Peninsula. In an transitional Iberio-Roman burial (2nd-1st century BCE) near the hill of Cabeza del Obispo (Alcaudete, prov. Jaén), a complete and interrelated analysis of all the objects among a selection of grave goods identified 13 unmodified, unburned ovicaprid astragals as magical

28 Fletcher, Pla, Alcacer (1969), 172. 174-175.

29 Lafaye (1877-1919), 28-30; Fittà (1998), 16; Averna (2009), 285-286. 603.

30 Grabundzija, Schoch, Ulanowska (2016).

31 García Cano (1997), fig. 119; García Cano *et al.* (2008), 56-58, figs. 65-66; García Cano (2021), 88-91, fig. 24.

32 Graells i Fabregat, Pérez Blasco (2021).

33 Cuadrado (1968), 162.

34 Ruiz *et al.* (2017), 95.

35 Gallardo (2002), 51-52.

36 García i Roselló (1993), 211; Santonja (1998), 231-232; Lillo *et al.* (2004), 20; Page (2016), 96.

37 Santonja (1993); Quesada (1998), 193-194; Page (2016), 98.

Fig. 5. Grave 478 of El Cigarralejo (Mula, Murcia). Photo M.F. Pérez Blasco / R. Graells i Fabregat.

elements used for fortune-telling.[38] This connection of the astragals with fate also meant that these bones could be good luck symbols and/or protective amulets. This explanation seems to correlate with the isolated presence of astragals in tombs, usually with modified and pierced surfaces in order to fit on a necklace, bracelet, or ring. This meaning is also valid for these elements in Phoenician-Punic funerary contexts. The clearest example of this can be found in the cemetery of Puig des Molins (Eivissa/Ibiza), where just one astragal was documented inside a tomb, with a central hole and strung together with a double copper alloy ring.[39] These astragals would work as good luck accumulators and would have been placed in the tomb so as to extend their protective effect over the deceased during their trip to the Underworld.[40] This protective aspect has also been suggested when interpreting the appearance of large quantities of burned astragals in Iberian burials, which would have been thrown into the pyre to protect the deceased.[41]

On the other hand, a panoramic analysis of the existence of astragals in Iberian cemeteries shows that, within the same region, evidence of astragals has been found among the grave goods in some cemeteries but not others.[42] The percentage of tombs with astragals is low, which indicates that this was a minority practice and was not widespread. The appearance of astragals among grave goods is not restricted to chronological or geographical criteria, since they appear from the early years of Iberian culture until its final years in the 1st century BCE.

Astragals should not be ascribed just one meaning, since they clearly had a polysemic function in antiquity. In a similar way, we should not think of them as restricted to a specific social group, and they were certainly not exclusively used by social elites. Their discovery in the burials of different wealth levels globalizes and expands their ritual value in the tomb socially, regardless of the magical or recreational meaning that could be deduced from each specific archaeological context. In regards to gaming, one interpertation of grave goods is that children, teenagers, women, and men of all social origins played games of chance with astragals as a means of escapism and to have fun.[43]

So-called *tejuelos* or recut ceramic discs have also been regarded as having a recreational meaning. During the Iberian period, as is the case with the astragals, these discs are mostly documented in votive contexts, domestic spaces, and among grave

38 Jiménez (2005).

39 Gómez Bellard (1984), 139, fig. 65, 9.

40 Cintas (1946), 128; Fernández *et al.* (2009), 23-27. 188.

41 Izquierdo *et al.* (2004), 109-110.

42 We should not rule out that this could be due to a lack of exhaustiveness in the transmission of the archaeological information from earlier excavations, due to the low value ascribed to these objects.

43 Pérez Blasco (2021), 72.

goods, and may appear alone or in sets of variable quantities. They appear in large numbers — usually more than 100 — in settlements. However, the archaeological record has been lacking in terms of sharing information, since in most cases the objects have not been drawn, the total number of discs in each context has not been calculated, their dimensions have not been disclosed and neither has the type of ceramic that was used for the cut-outs or how perfectly their borders were cut been documented. These parameters and variables are essential, together with the context of their discovery, to allow us to assess their potential use as gaming counters (*pessoi*), since most studies acknowledge the difficulty of assigning these recycled, ceramic objects a single guaranteed function.[44]

The sizes of this type of ceramic disc are variable. They can be small in size, around 2 cm in diameter, as in the aforementioned Tomb 478 in El Cigarralejo[45] (Fig. 5); the larger size of others could be proof of their use in games other than board games. Similarly, it has also been suggested that they could have a different function, e.g. as auxiliary loom elements, parts of a weighing system, lids, etc.[46] Certainly, it does not seem possible that the cut-out discs of 3 and 4 cm in diameter, found in the 4th century BCE in various tombs in the cemetery of Los Castellones de Céal (prov. Jaén)[47] had the same function as the disc measuring 7.2 cm in diameter discovered in Tomb 60 (at the end of the 3rd century and beginning of the 2nd century BCE) in the cemetery of Turó dels Dos Pins (Cabrera del Mar, prov. Barcelona).[48]

However, even though the materials are simple and recycled, the fact that these ceramic discs are documented in ritual and votive contexts suggests that they could have had an important function or meaning. The discs were incorporated into the votive deposit of El Amarejo (Bonete, prov. Albacete)[49] at the end of the 3rd century and the beginning of the 2nd century BCE; they also appeared in the sanctuary of La Luz (Santo Ángel, Murcia) [50] and were given as offerings, together with an interesting group of five panoplies that probably belonged to the aristocratic elite in a ritual deposit found in the western gate of the La Bastida de les Alcusses settlement dating from the second quarter of the 4th century BCE.[51]

Spheres and balls

Lastly, stone or clay spheres are the other class of possible gaming-related small finds that sometimes appear in Iberian tombs. They have also been subject to symbolic, functional or recreational interpretations (as marbles).[52] These spheres are attested in the Iberian Peninsula since the Bronze Age, both in settlement and funerary contexts, and have been interpreted as parts of an accounting system, as small idols or, as just mentioned, as marbles.[53] It is possible to track them separately from the Orientalizing Period, similar to the sphere made of polished stone (1.3 cm in diameter) found in a female tomb in the cemetery of Les Moreres (Crevillent, prov. Alicante) (750-625 BCE);[54] in Iberian tombs with different chronologies, the stone ball (2.5 cm in diameter) was discovered in Tomb 10 in the cemetery of Tútugi (Galera, prov. Granada),[55] and the four stone marbles (approximately 2 cm in diameter) from the princely Tomb 277 in the cemetery of El Cigarralejo.[56] However, their anecdotal presence among grave goods in Iberian tombs contrasts with their regular presence in large quantities in the contexts of settlements and cemeteries in the Celtic-Iberian world, especially among the *Vaccei* and *Vettones*.[57] Some of these clay spheres, with stamped decorative designs similar to the Celtic-Iberian examples, are documented in Tomb 51 in Turó dels Dos Pins, which dates from the middle of the 3rd century BCE[58], and in the Iberian settlement of La Codera, from the end of the 3rd century and the first quarter of the 2nd century BCE.[59] As in the case with astragals and ceramic discs, these balls or marbles could be interpreted as gaming objects, but we should always accept the need to consider new interpretations and data.[60]

CONCLUSIONS: THE IBERIANS PLAYED TOO

Considering all the information presented in this conntribution, it is clear that there is still a great deal of work to be done but there is also enormous potential regarding the amount of data, evidence, and their possible interpretations. The Iberians who played undoubtedly sometimes played Iberian games, but sometimes they played with objects of a nature familiar elsewhere in the Mediterranean and perhaps, as is quite obvious, they also played 'Mediterranean' games, that is, games known

44 Castro (1978), 183-193; García Cano (1997), 185-187; Bonet, Mata (1997), 120; López Padilla, Martínez Monleón (2014), 192-193; Comino (2015), 447-448; Moreno, Adroher (2019).

45 Graells i Fabregat, Pérez Blasco (2021).

46 Castro (1978), 183-193; Bonet, Mata (1997), 120; Moreno, Adroher (2019).

47 Chapa *et al.* (1998), 51. 55. 62. 64. 67. 69. 77. 117.

48 García i Roselló (1993), 139, Nr. 4.

49 Broncano (1989), 106-108.

50 Comino (2015), 447-448.

51 Vives Ferrándiz *et al.* (2015), 293-294, fig. 7.

52 Cuadrado (1968), 47; Cuadrado (1987), 478, fig. 212, Nr. 60.

53 Pastor Quiles (2020), 481-486.

54 González Prats (2002), 102-104 y 248, Fig. 87, Mo.39.4.

55 Cabré, Motos (1920), 24; Pereira *et al.* (2004), 82, figs. 13 y 19, 18-19.

56 Cuadrado (1968), 47; Cuadrado (1987), 478, fig. 212, Nr. 60.

57 Lorrio (2005), 249-250; Camacho, Lorrio (2021).

58 García i Roselló (1993), 106-107.

59 Montón Broto (2020), 192, fig. 14.

60 Pastor Quiles (2020), 497; Camacho, Lorrio (2021), 51. 54.

elsewhere in the Mediterranean world. Those who played and were buried with their gaming-related posessions (board games or related pieces) belonged exclusively to the elite; other more ambiguous elements, however, belonged to other social classes. Classifying, understanding, and evaluating these finds will be an important contribution to understanding how the Iberians interacted with other Mediterranean populations and how they became 'Mediterraneanized' by understanding and sharing the rules of different games.

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The gaming material from Empúries, Catalunya

Fig. 1. Aerial photo of Empúries, Catalunya. Photo from MacEmpuries.cat

1.THE SITE

1.1 Introduction

The archaeological site is situated north of the local area of L'Escala (*Alt Empordà,* Girona). This little town is a renowned destination in Catalunya, and it hosts the *Museu d'Arqueologia de Catalunya - Empúries.*[1] The human presence in this place goes back thousands of years: the first indigenous settlement here dates to the Neolithic era.[2] Occupation continued during the Bronze and Iron Ages: archaeological excavations in the area have reported residential and funerary structures from the second half of the 2nd millennium to the 6th century BCE.[3] Remarkable archaeological data belong to the Late Bronze and Iron Age cemetery at *La necròpolis de Vilanera,* which is still being excavated.[4] Greeks colonists founded the city of *Emporion* as a commercial entrepôt during the 6th century BCE. It quickly flourished and became a stable settlement.[5] The city was then partially conquered by the Romans in the 2nd century BCE, there was a period when Greeks, Indigenous people and Romans cohabitated the area. Although, by the beginning of the 1st century BCE, most of the previous inhabitants fell under the power of Rome and the *Municipium Emporiae* was founded. (Fig. 1).[6]

1 Aquilué Abadias (2007), 74-97.

2 Codina *et al.* (2020), 47-51.

3 Delgado *et al.* (2020), 93-97.

4 Codina, Pullia (2020), 89-92.

5 Miralles (2008), 50-52.

6 Aquilué Abadias (2012).

The progressive abandonment of the area started at the end of the 4th century CE, when the population moved back to the promontory of Sant Martí. It was the location of the bishopric of Empúries until the arrival of the Arabs in 715 CE.[7] The Christian restoration of the *Empordà* took place under the French monarchy in 785 CE. Empúries then became one of the Carolingian counties in Hispania, with its capital in Sant Martí.[8] During the 16th century CE the inhabitants moved from Sant Martí to the new port called L'Escala; the first reference to this village dates back to 1539.[9] The archaeological discovery of this site is remarkable: the first excavation was held in 1908 and archaeological activity at the site has continued to the present day.[10] The first, and one of the most significant excavations here, was undertaken by Emili Gandia and Josep Puig I Cadafalc; present-day archaeologists still use Gandia's meticulous diaries as reference works.[11] Due to the very long history of the research, some reports are imprecise, but work to uncover new details is ongoing. This investigation is going to focus on the evidence and the use of astragals and gaming material in both cities. The specimens, their dating, and the places in which they were found enable us to express a theory about which games people played in the two different periods. The comparison with other similar sites will then underline the similarities and the differences in board games and leisure activities at Empúries and elsewhere (Fig. 2).

1.2 The Palaiapolis

The first Greek inhabitants settled permanently in the area of Sant Martí d'Empúries around 575 BCE.[12] They were people from the city of *Phocaea* in Ionia; the same people who also founded *Massalia* in 600 BCE. The community, which had already established contact with indigenous Iberians in the area, named the city *Emporion*, that is, market. This marketplace was active in Mediterranean trade networks since its very beginning. The archaeological record attests to different classes of archaic pottery that indicate trade connections with eastern Greece.[13] The growth of the population led to the relocation of the society to the southern coastline nearby. By the middle of the 5th century the *Neapolis* (new city) was founded.[14] As the settlement grew bigger it gained all the political, economic, and residential amenities any other Greek city possessed: the public *agora* and *stoa*, the temples, residential and working areas, baths, and cemeteries.[15]

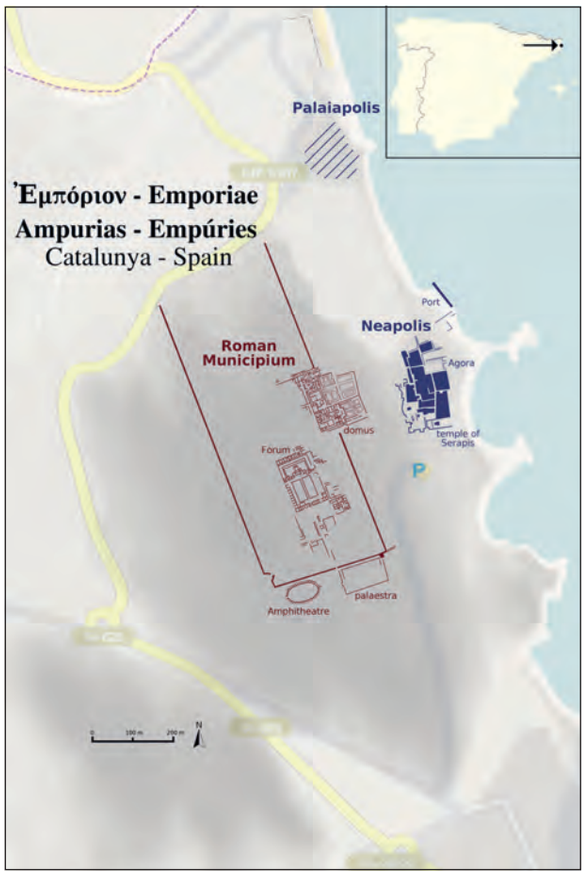

Fig. 2. Plan of the three cities of Empúries: Palaiapolis, Neapolis and Municipium Emporiae. Photo from MacEmpuries.cat

1.3 The Neapolis

The study of the cemeteries is useful for understanding how people lived there and what they owned. The wealthy grave goods from all the cemeteries encircling the city contained pottery, jewellery, weapons, tools, clothes, and many other kind of objects.[16] Several burials also contained astragals, used both for religious and leisure activities. The *Neapolis* is still being excavated, and research is ongoing to interpret the use of each part of the city through time. A new project started in 2018 focusing on the north harbour of the Greek city, and the aim is to continue the development of the archaeological open-air museum and to open a new path for the visitors.[17]

1.4 The Roman city

The city acquired the title of *Municipium Emporiae* by the middle of the 1st century BCE.[18] The inhabitants fell under Roman influence during the

7 *Empúries* 2007.

8 Cobos Fajardo, Tremoleda I Trilla (2010).

9 *Empúries* 2001.

10 *Empúries* 2008.

11 Ripoll Perelló (1993), 493-507.

12 Aquilué, Monturiol (2008).

13 Tremoleda I Trilla *et al.* (2000), 285-346.

14 Aquilué Abadias (2008), 15-29.

15 Santos, Castanyer, Tremoleda (2013), 103-113; see also Castanyer, Santos, Tremoleda (2015), 121-130.

16 Almagro Basch (1953).

17 The project is called *Les àrees portuàries de l'antiga Empúries*; for further information see Castanyer *et. al* (2020), 239-250.

18 Almagro Basch (1951).

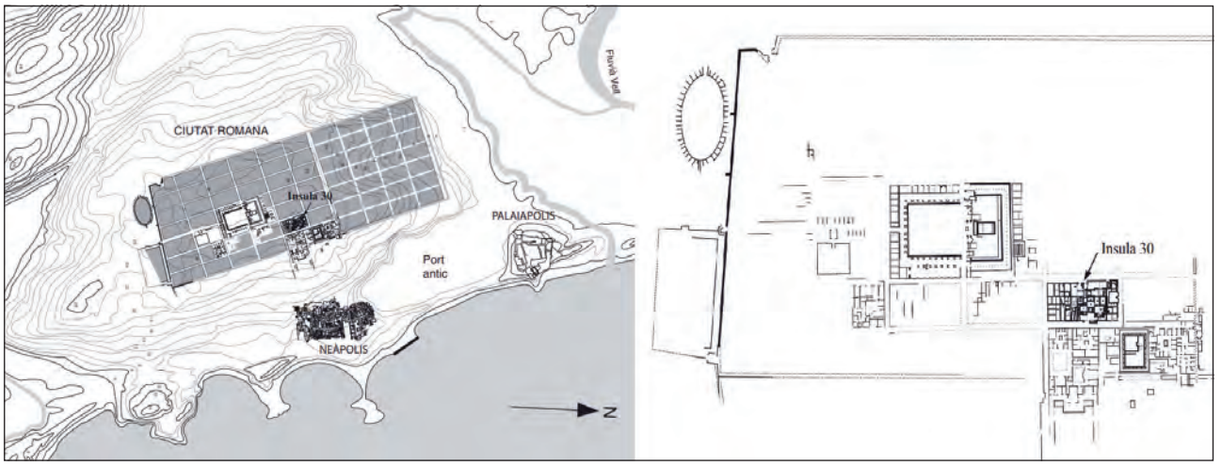

Fig. 3. Plan of the Roman city divided into 70 insulae and location of the Insula 30. Photo from Aquilué *(2006), 18. fig.1*

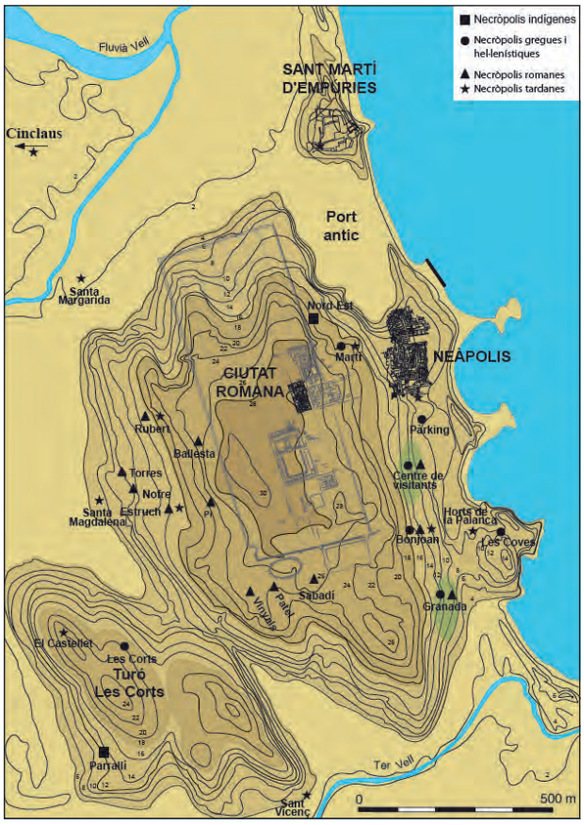

Fig. 4. Map of the cemeteries of Empúries: indigenous, greek, roman and late antiquity burials. Photo from Castanyer, Santos, Tremoleda, *(2015a), 123, fig.1*

Second Punic War. When the peace treaty with the Carthaginians was signed in 201 BCE and the two provinces of *Hispania Citerior* and *Ulterior* were created, cohabitation with the Romans began.[19] In 195 BCE, the consul Marcus Porcius Cato suppressed the rebellion in the northeast of *Hispania*, and he was able to subdue the population of the Middle Ebro Valley. Empúries was certainly among them.[20] During the 1st century BCE what was earlier just a military base became a prosperous city. The orthogonal street plan was divided into 70 *insulae,* which are still poorly understood, since the excavated area now corresponds to just 10% of the city.[21] The presence of gaming material so far is concentrated in the forum, where most of the counters and the dice were found.[22] In 2000 a largescale project was initiated, focusing on *Insula 30*.[23] An interesting set of counters was discovered here in 2017 (Fig. 3).

1.5 The necropolis

Studying graves has always played a major role in the collection of archaeological data. The contents of a grave provide information about the society that created it. Nevertheless, as it was explained elsewhere in this volume,[24] a detailed study of each individual context is required to understand the possible and variable uses that an artifact underwent in its 'life', which can include gaming-related purposes.[25]

Empúries had many cemeteries. Unfortunately, continuous looting happened both in the past and in the modern period. Some areas were used as cemeteries both by the Greeks and the Romans. There are also indigenous cemeteries, which belonged to the locals who cohabitated with the city's inhabitants.[26] These also play a major role in understanding of contact among different ethnic groups. The present contribution will focus on the cemeteries where there is evidence of gaming materials, according to the most recent publications.[27] The cemeteries are named after the owners of the properties at the time when they were excavated during the first half of the 20th century. They should not be considered separated entities, but instead reflect continuous occupation of

19 Tremoleda, Santos, Castanyer (2015), 107-127.

20 Principal *et al.* (2020), 183-189.

21 Santos *et al.* (2009).

22 Aquilué Abadias, Monturiol (2004).

23 Santos (2006), 203-214.

24 See Penn, Pace, Schädler.

25 See the methodologic chapter in this volume under the section "Material challenges".

26 López Borgoñoz (1998), 275-298.

27 Detailed information about each cemetery can be found in *Empúries* 2009.

the area for funerary purposes (Fig. 4).[28] The so-called *Martí* necropolis is situated between the *Neapolis* and the ancient indigenous population centre and it was used by the Greeks from the end of the 6th century BCE to the 3rd century BCE. It was reused during the 3rd century CE by the last Roman population living in the declining city. The burial rite used here for adults was mostly inhumation, with just a few examples of cremation,[29] but children were buried in amphorae, following the *enchytrismòs* rite.[30] Several astragals were found in the Greek burials in this area.

The *Bonjoan* cemetery is almost contemporary. It was situated 200 metres south of the *Neapolis* and it was used by the Greeks from the end of the 6th century BCE until the 1st century BCE and by the Romans in the 1st century CE. A few burials also date to the early Christian era.[31] During the Greek period, the main burial rite was the inhumation.[32] On the contrary under the Roman Empire most of the burials here were cremations.[33] Several astragals from Greek burials were found here, and there was also a bone counter in the Roman cremation number VI.

The *Necròpolis del Pàrking* was smaller. It is situated close to the southern entrance of the Greek city. The burials date to the 4th/3rd century BCE. Above the tomb structures, there is evidence for a Republican building dating to the beginning of the 2nd century BCE, but its function remains unclear. Later this place was used as an industrial area for iron and copper working.[34] It is interesting that this area is thought to have been a part of the indigenous city. Strabo writes:

"[…] The city is double, being divided by a wall, for in past times some of the Indiceti dwelt close by, who, although they had a separate polity to themselves, desired, for the sake of safety, to be shut in by a common enclosure with the Grecians; but at the same time that this enclosure should be two-fold, being divided through its middle by a wall. In time, however, they came to have but one government, a mixture of Barbarian and Grecian laws; a result which has taken place in many other states.[35]"

Nowadays there is no evidence for the presence of the indigenous people in this exact spot. Research has revealed the use of different rites in the cemetery: inhumation and cremation for adults and *enchytrismòs* for children.[36] Three counters were found in this cemetery, and they were each in different children's graves.

The *Les Corts* necropolis was used during a particular period of transformation for the city. It is located on a hill south of the city and it was used from the end of the 3rd century BCE to the 1st century BCE. Its ownership is still controversial: Martín Almagro stated it belonged to the Greeks.[37] He supposed that contacts among both the indigenous people and the Romans led to the modification of their burial rite, given that this necropolis contains cremations. Further scholars claimed it belonged both to local Iberians and Romans[38] or just to the Iberians.[39] Alfonso López in 1998 declared that it could not belong to the Greeks precisely because of the different rite, and argued it was probably used by the Romans and/or Iberians.[40] The abandonment of this cemetery by the end of the 1st century BCE may coincide with the constitution of the *Municipium Emporiae* and the permanent establishment of the Romans in the city.[41] All the considerations lead contemporary scholars to believe that this cemetery was probably used by the first Roman inhabitants of the military *praesidium*. Several counters were found in these burials.

Among the Roman cemeteries, there were also some counters in the *Necròpolis Torres.* The Roman cemeteries from the Empire are all situated outside of the city, on a hill by the southwest area not far from the urban wall circuit.[42] The main ritual was cremation. We know this cemetery was used mostly during the 1st century CE and the beginning of the 2nd century CE.[43]

Some counters were also found in the *Necròpolis de l'Anfiteatre Romà.* This is one of the cemeteries located south of the Roman city wall and was used during the 1st and the 2nd century CE.[44] Two cremations were found here, located inside the *cavea* of the amphitheatre. The first one includes two clay counters among the grave goods.[45] The building was erected around the second half of the 1st century CE,[46] the tombs are dated about a century before the construction, since the type of the ointment jars found inside belong to the last quarter of the 1st century BCE.[47] It was a funerary area which included other fields named Nofre, Torres, Pi, Rupert, Ballesta, Patel, Sabadí and Viñals. Although these fields have different denominations, they may all refer to the same cemetery used by the Romans from the beginning of

28 Castanyer, Santos, Tremoleda (2015), 128.

29 Santos (2009a), 33-38.

30 Boardman, Kurtz (1971).

31 Tremoleda, Santos, Castanyer (2012), 66-75.

32 Castanyer, Santos, Tremoleda (2015), 121-140.

33 Castanyer (2009), 39-42.

34 Ripoll Perelló, Sanmartí, López (1982), 324-328.

35 Strabo, *Geography*, 3.4.8 (trans. H.C. Hamilton 1903).

36 Sanmartí (1984), 110-153.

37 Almagro Basch (1953), 251.

38 Sanmartí (1982), 75-81.

39 Pena (1988), 11-46.

40 López Borgoñoz (1998), 275-298.

41 López Borgoñoz, Vollmer (1997), 129-140.

42 Ruiz de Arbulo (1987), 311-319.

43 López Borgoñoz (1994), 243-245.

44 Jones (1984), 237-265.

45 Almagro Basch (1953).

46 Santos *et al.* (2009), 101.

47 López Borgoñoz (1997), 734.

the Empire, located outside of the walls.[48] The other places, which were not so close to the amphitheatre, were still used after its construction and until the end of the 2nd century CE.[49]

The last cemetery that needs to be mentioned is an indigenous one—the *Necròpolis de la Muralla Nord-est*. It was situated in the west area of the Neapolis. It was used by the indigenous people who were cohabitating with the Greeks during the 6th and the 5th century BCE.[50] Cremation was used for adults and there were four inhumations for children. There were six astragals in cremation burial 4, dating around 500 BCE. The grave goods from these tombs is very interesting for our understanding of contacts between indigenous people and the inhabitants of the newly-founded Empúries.[51] It is also possible that they inherited some Greeks habits, including games.

2. USE OF GAMING MATERIAL IN EMPÚRIES

2.1 Astragals

The many astragals in the Greek cemeteries prove their presence in Empúries from the start of occupation at the site until the arrival of the Romans. So far, knucklebones have not been found in Roman-period burials, but we may imagine they were still present in the city. The use of astragals among the Romans is well attested elsewhere, and ancient sources mention this habit very often.[52] Unfortunately, there is a general lack of information about these specific items at Empúries. Many of the burials were robbed out in ancient times, others were robbed out more recently for sale on the antiquities market. Most of the cemeteries were excavated more than a century ago, and many of the objects mentioned in reports are now missing. Moreover, there is no publication about the discovery of astragals in the residential areas of the city, every published evidence refers to their placement in the burials, , but they were recently found in different domestic layers both in the Roman and the Greek city.[53] These new discoveries suggest the presence of astragals in Empúries, and we can still discuss their use based on evidence from other Greek and Roman cities.[54] Astragals were used for divinatory purposes and they are usually found in funerary or religious areas, but they were also used for gaming. The first discoveries of these bones, which usually belonged to goats or sheep, date back to the late Neolithic era.[55] They are found during the Copper, Bronze and Iron Age all around the ancient world including in Europe,[56] in the Ancient Near East,[57] and in Egypt.[58] It is problematic to identify them as objects of play until the Classical Period when their name appeared in some boards inscriptions, like the bilingual Oxford tablet S302 from the Bodleian Collection, transliterated by Stephen Langdon.[59] This board was written in the 1st century BCE, it was probably just a transcription of a text which refers to a more ancient time, composed both in Sumerian and Akkadian language and it contains a hymn for the Goddess Inanna, citing games played with counters and knucklebones. Moreover, these peculiar objects are often mentioned by textual sources:

"When we got inside, we found that the boys had performed the sacrifice in the place and, as the ceremonial business was now almost over, they were all playing at knuckle-bones and wearing their finest attire. Most of them were playing in the court out-of-doors; but some were at a game of odd-and-even in a corner of the undressing room, with a great lot of knuckle-bones which they drew from little baskets; and there were others standing about them and looking on." [60]

The presence of knucklebones is best attested in the Greek and Roman periods; a recent publication notes their presence in many Greek cemeteries.[61] Furthermore, several authors such as Polybius and Suetonius mentioned the use of this class of material. Polybius tells us that Antiochus Epiphanes would give gazelle knucklebones as presents;[62] in Suetonius' *Life of Tiberius*, the author describes how, when the emperor was marching to Illyricum, he threw golden *tali* into the fountain of Aponus, for an answer for his inquiries.[63]

Some astragals found under the *Lapis Niger* in the Roman Forum determine how they were part of one of the most ancient rituals of the city since they date back to the 6th century BCE.[64] In Empúries astragals are found in ten inhumations and two cremations from the Greek necropolis and one cremation from an indigenous burial. Unfortunately, we have little information about the exact ages of the deceased: in five of the graves, including all

48 *Ivi,* 715.

49 Santos *et al.* (2009), 103.

50 Santos (2009b), 29-32.

51 Almagro Basch (1949), 97; see also Cabrera, Santos (2000).

52 De Grossi Mazzorin, Minniti (2013), 371-380.

53 Specimens were found during the 73rd and the 74th curs d'arqueologia de Empúries held in 2019-2020 in the area next to the ancient harbour, the pieces are still in the storage rooms, waiting to be contextualized and studied.

54 De Grossi Mazzorin (2012), 213-220.

55 Haddow (2015).

56 Mirea (2011), 241-257; see also Tecchiati (2001), 149-151.

57 Minniti, Peyronel (2004), 7-26.

58 Hayes (1953), 46; see also Kendall (1982), 263-272.

59 Langdon (1915), 73-84.

60 Plato, *Lysis,* 206e (trans. W. Lamb 1955).

61 Carè (2006), 143-152.

62 Polybius, *Histories*, 26.1.7 (Trans. E. S. Shuckburgh 1889).

63 Suetonius, *Tiberius*, 14 (Trans. J. E. Reed 1889).

64 Blanc, Blanc (1960), 7-57.

the cremations, the bones were too fragmentary to determine age. In the remaining ones osteological data indicate that four of the burials belonged to children, two of them to young individuals and the other two were adults.[65] The anthropological data given in Almagro's catalogue provide the age of the deceased,[66] supported by the length of the body and the association with childhood indicators such as seashells, nails that could have been used for a coffin to contain the deceased and *lekythoi* with particular patterns: animals like a rabbit, or diamond-shaped patterns.[67]

The presence of astragals is often related to young adults' or children's graves, and our anthropological data suggests this was the case at Empúries too. Astragals relate to the many games played by children which include the use of knucklebones, so serving as a reminder of their vitality.[68] It is not uncommon to find evidence of children playing with knucklebones on painted vases: we even have an example in Empúries itself: an Attic *lekythos* portraying a child throwing a knucklebone in the air was found in the *Neapolis*, and it is dated at the beginning of the 4th century BCE.[69] However, the use of the knucklebones does not only relate to childhood, and they are commonly found within children's and adults' graves.[70] In fact, as it has already been stated, other inhumations at Empúries containing knucklebones belonged to adults.

Astragals are often objects for divination and/or used as votive offerings. Thus, their presence could mean that the deceased used them for divinatory practices during life.[71] When thrown, astragals land showing different faces and combinations. These sequences could then be interpreted with a range of different meanings. They have been found in many temples such as Didyma and Ephesus.[72] These sites are situated on the east coast of the Aegean Sea, and the Greeks here developed many contacts, economic and cultural, with Anatolia. The use of knucklebones for divinatory purposes is a habit the Greeks may have learned from this interchange. The people of Phrygia, Lydia and Caria already practiced this cult, having inherited it from the Hittites.[73]

Astragals could also be used for gaming activities. As discussed earlier, children played with these bones by throwing them in the air and scoring different points according to the face that was visible when the bone landed on the ground, or alternatively they would have to throw them inside a hole dug in the ground. This game is probably called *tropa* or *tropaee*.[74] Another game mentioned by attic comedy writer Antiphanes is called odd-and-even: "We played odd-and-even with the knucklebones."[75] A child would hold some knucklebones or some nuts in their left or right hand, and others would guess if the number they carried was odd or even. [76] This game was played by adults too, but they would use money: "The servants play odd-and-even with golden coins."[77] *Omilla* was another game played by children using astragals, in which they would have to mark a circle on the ground and throw the bones into it.[78] *Pentelitha* was the name of a game played by adults and probably preferred by women, in which the aim was to throw five astragals in the air and then catch them all with the back of the hand: "To play pentelitha you have to throw high in the air five pebbles, dice or astragals, and you must catch them all with the back of your hand. […] It's a game played especially by women.[79]" Usually, these games could have been played both by children and adults, but with different meanings: for the children it was a leisure activity, but for the adults there was also a gambling dimension. After these explanations, we can now better analyse their presence in the funerary contexts: the astragals could have been buried with their owners, i.e. those who used them during their life, and whether as children or as adults. The astragals could have been buried with them as votive offerings, used for divinatory practices during the ritual, or placed as talismans for the deceased.[80]

2.2 Counters and dice

Specimens that could be interpreted as counters were found both in funerary and public contexts in the city. Some counters from the *Necròpolis Les Corts* were found in burials dating to the 2nd century BCE, which probably belonged to the first Roman inhabitants of Empúries. Other counters come from the Roman-period *Necròpolis Bonjoan, Torres,* and the *Necròpolis de l'Anfiteatre Romà*. All these pieces date to the

65 See Table 1 below.

66 Almagro Basch (1953), 27-128, 129-216; Almagro Basch (1955), 357-399.

67 On childhood indicators see Elia (2010); Di Carlo (2018), 105-110.

68 Carè (2013), 56.

69 Museu d'Arqueologia de Catalunya-Girona, inventory number 21 (MAC-Girona 21).

70 Carè, Scilabra (2013), 93-122.

71 Ismaelli (2009), 131-192.

72 Greaves (2012), 177-206; Hogart, Harcourt-Smith (1908), 190-192.

73 Gilmour (1997) 167-175.

74 Tremoleda i Trilla (2013), 42-44.

75 Antiphanes, *Epidaurios*, fragment 92 K-A (ἐπαίζομεν μὲν ἀρτίως τοῖς ἀστριχοις).

76 Keller (1904), 125.

77 Aristophanes, *Plutus*, 816-817 (στατῆρσι δὲ οἱ θεράποντες ἀρτιάζομεν κρυσοῖς).

78 Hesychius, *Lexicon*, Omilla, ω 194 (ὥμιλλα·παιδιά τις, ὅταν κύκλον περιγράψαντες βάλωσιν εἰς αὐτὸν κάρυα, εἶτα ἐν τῷ κύκλῳ μ.... λαμβάνει. ἢ ἔπαθλον).

79 Julius Pollux, *Onomasticon*, IX, 126-127 (τὰ δὲ πεντάλιθα, ἤτοι λιθίδια ἢ ψῆφοι ἢ ἀστράγαλοι πέντε ἀνερριπτοῦντο, ὥστ' ἐπιστρέψαντα τὴν χεῖρα δέξασθαι τὰ ἀναρριφθέντα κατὰ τὸ ὀπισθέναρ. […] γυναικῶν δὲ μᾶλλον ἡ παιδιά.)

80 Carè (2010), 32-42.

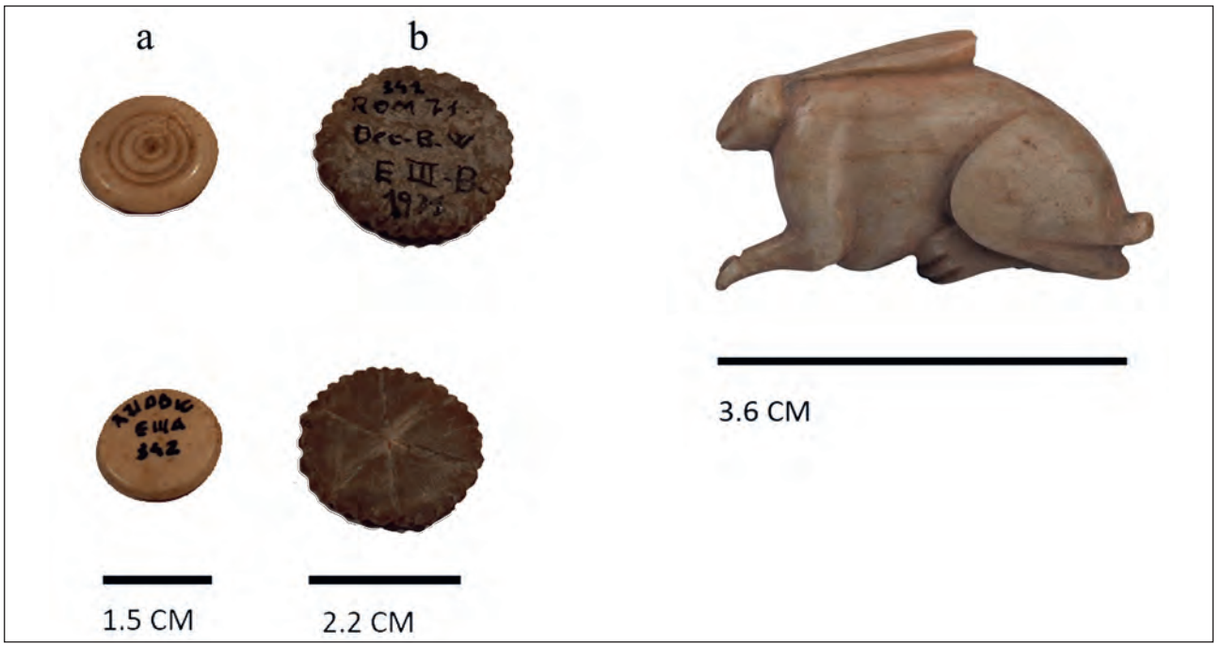

Fig. 5. Some counters from the Roman city. A) Bone counter (1.5 cm), 1st c. CE. Empúries MAC-EMP 00342. Photo by Ilaria Truzzi B) Stone counter (2.2 cm), 1st c. CE, Empúries MAC-EMP 00341. Photo by Ilaria Truzzi. On the right, bone counter, hare shaped, (3.6 x 2 x 0.6 cm), 2nd c. CE. Photo from MacEmpuries.cat

1st century CE. A few specimens come from the *Necròpolis del Parking* which, as we discussed above, was a Greek cemetery. These hemispheres are made of glass, stone, and clay, and they could have been used for gaming activities. The interpretation of these discs as gaming counters is still problematic, they could also have been accounting tokens, inlays, jewellery, and their purpose varies depending on the context.[81] We have little further information about them because they are now missing from the museum collection. We can imagine that their presence in these burials means they belonged to those who used them in life, but we can at most suggest their use may have been linked to recreational activities.

The other big group of counters in the city was found in the Roman forum of Empúries. The forum excavations started a century ago, and any finds from these early campaign were not reported. It was only in the 1990s that new excavation began in the forum and most of the counters were found during this more recent fieldwork.[82] The counters were discovered in different layers.[83] Their dating, based on stratigraphy, runs from the 1st century BCE to the 2nd century CE, and it underlines that they were common throughout the Roman occupation of Empúries. They are made from a variety of materials, including glass of different colours, bone, stone, ceramic, and marble. Two of them are peculiar: they are orange glass counters with a silver patina.[84] This could be the remains of an ancient covering, or it could simply be iridescence.[85] Other gaming-related finds in the forum and other parts of the Roman city include dice, whether cubic or rectangular. They are mostly made of bone, but we also have examples made of other materials: bronze, marble, and other stones. Their faces are numbered from one to six. The dice were found in layers dating between the 1st and the 2nd century CE; counters and dice belong to the *Municipium Emporiae's* heyday.

Two unusual counters were found in the *Kardo B* sector, a street that runs next to the forum, during the 1971 excavations.[86] The first one is made of bone, its diameter is 1.5 cm, and on one face it is very smooth, while on the other face it is carved with three circles. The other counter is made of stone, its diameter is 2.2 cm, one face is carved with a star symbol and its border is indented. These specimens belong to a layer that dates to the 1st century CE and the *Kardo B* is.[87] Hence, it is possible that these counters belonged to people entering or exiting the forum square, who lost them there. Other interesting findings include a hare-shaped *tessera lusoria* dating to the 2nd century CE and a star-shaped one dating the 1st century CE.[88] (Fig. 5). As was mentioned earlier, in 2000 a major research project started in *Insula 30* in the Roman city, and in 2017 these excavations uncovered a set of counters. They were located inside of a storage room of a Late Republican house, together with

81 See the methodologic chapter in this volume under the section "Material challenges".

82 Aquilué Abadias, Monturiol (2004).

83 See Table 2 below.

84 Inventory 1995-CR-F-5205 and 1996-CR-F-5236

85 Emami (2016), 59-68.

86 Inventory MAC EMP 00341-00342

87 Santos *et al.* (2009).

88 Inventory MAC EMP-02890 and MAC BARC-1661

a set of amphorae used to date the whole layer in Square 25000. The excavations also uncovered charcoal indicating that a fire took place in 75 BCE and destroyed the entire house. This storage room collapsed, and all the ceramics and the gaming pieces were left there; the house was then overbuilt by a tavern. The fire that occurred here provides a *terminus ante quem* for all the objects found inside, including the counters. There were twelve smoothed stone counters, a marble one, and a glass one.[89]

Despite this group of counters found in a domestic context, the data collected in Empúries demonstrate that most of the gaming material from the city was recovered from public spaces like the forum, the streets, and the taverns around it.[90] The discovery of this set of counters in a storage room of a house is a unique context at Empúries. There are examples of gaming pieces found in some Roman houses, but they usually come from reception areas, where the owner could have played with guests or otherwise provided entertainment for them.[91] It is probable

Fig. 6. Plan of the Insula 30. On the right there is the Taberna 25000 where the set of counters was recovered. Photo by Joaquim Tremoleda.

that this set was lost when the fire occurred. We can now briefly discuss which games the Romans might have played with their counters and dice (Fig. 6).

Ludus Latrunculorum is a common Roman board game that required the use of counters.[92] The name originated from the Latin word *latro*, meaning soldier. It referred to the aggressive component of this game, in which the counters must be used to eliminate one another.[93] The plank included different numbers of squares, it would usually be a 6x6 or an 8x8 board game.[94] The game was played by two players with a variable number of counters. In Empúries the counters could be made of bone, ceramic, glass, stone, and marble. These materials were common for these specimens in the Roman world. The player might each have his or her own set of counters, similar to the one that was found in *Insula 30*, and they would be of different colours, shapes or materials than their opponent's. This game was played in almost every stratum of the society in the Roman world. It could be a leisure activity played at the local taverns, in the forum, or when invited in a wealthy house.[95] It was also common for soldiers to entertain themselves by playing board games during military expeditions, and evidence of boardgames and dice has been found in military settings all over the Roman Empire.[96] People playing this game are represented in many iconographic sources: coins, gems, mosaics, and reliefs. We also have some information about the rules from the textual tradition: Ovid claimed that playing games and gambling could cause fights;[97] Pliny the Elder describes the use of gems as counters by Pompey after his victories against the pirates and Mithridates VI of Pontus;[98] Martial wishes his friend Paulus joyful festivities by winning at the game.[99] The aim was, of course, to beat the other player by capturing his counters. To eliminate their opponent's counters, the players had to lock them between two of his pawns, and this process could take place both from left to right, backwards and forwards on the board.[100] Another important rule was how to place the counters on the board before starting the moves, and this was probably a choice of the players themselves, so there was not a precise, pre-prescribed formation. It is probable that counters could not move diagonally, and we do not know how many squares they could cross in one move. (Fig. 7)

Duodecim scripta used both counters and dice.[101] The name, which means "twelve lines", could refer both to the dice and the board. In the first instance, it might have indicated the maximum points a player could get by throwing the dice ("Scripta, the points of the dice.")[102] In the second instance, it indicated the

89 Tremoleda I Trilla *et al.* (2018), 197-222.

90 Data collected in 2019 and summarized in Table 2 below.

91 Allison (2004), 124-159; Giacobello (2015), 37-42.

92 See the methodologic chapter of this volume under the section "Ancient games: the state of play"-*Ludus latrunculorum.*

93 Ernout, Meillet (2001), 343-344.

94 Austin (1934), 26-27.

95 See Pace in the same publication.

96 Courts, Penn (2019), 4-12; see the methodologic chapter of this volume under the section "Gaming, globalisation, and Romanisation".

97 Ovid, *Art of Love*, 3. 377-384.

98 Pliny the Elder, *Natural History*, 37.6.13-14. (Trans. J. Bostock, H. T. Riley 1855).

99 Martial, *Epigrams*, 7.72. (*Gratus sic tibi, Paule, sit December, Nec vani triplices brevesque mappae, Nec turis veniant leves selibrae, Sed lances ferat et scyphos avorum, Aut grandis reus aut potens amicus, Seu quod te potius iuvat capitque; Sic vincas Noviumque Publiumque, Mandris et vitreo latrone clusos* […])

100 Schädler (1994), 47-67.

101 See the methodologic chapter of this volume under the section "Ancient games: the state of play"- *Duodecim Scripta.*

102 Nonius Marcellus, *De compendiosa doctrina*, 2. 24 *Incipit per s litteram (Scripta, puncta tesserarum, M. Tullius in Hortensio itaque tibi concedo, quod in duodecim scriptis | solemus, ut calculum redducas, si te alicuius dati paenitet).*

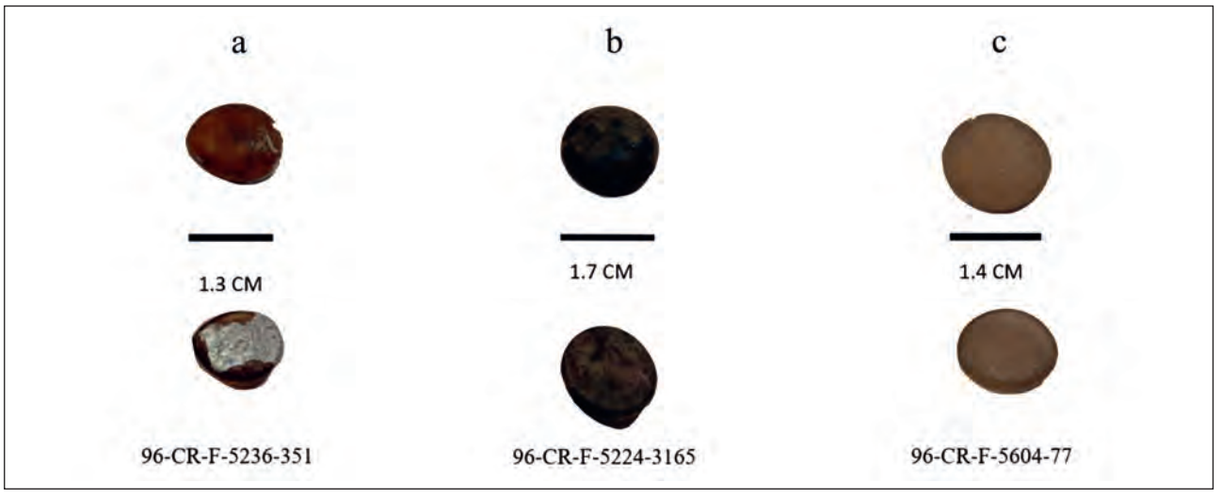

Fig. 7. Glass counters. A) Counter, orange glass (1.3 cm), 1st-2nd c. CE. Empúries, 96-CR-F-5236-351. © Empúries Archive B) Counter, dark blue glass (1.7 cm) 1st-2nd c. CE. Empúries, 96-CR-F-5224-3165. © Empúries Archive C) Counter, white glass (1.4 cm), 1st-2nd c. CE. Empúries, 96-CR-F-5604-77. © Empúries Archive.

numbers of the squares of each line ("There is a game that includes a board divided in little squares, as many as the months of the year").[103] The board game in fact included three lines with twelve squares each, and the aim of a player was to follow the itinerary with his or her counters.[104] The first player to finish the race was the winner. In Late Antiquity, the game is also called *Alea* or *Tabula*, i.e. dice or board.[105] An example of this game can be seen in a tavern at Pompeii; the Caupona of Salvius was decorated with a wall painting of two players holding the board on their knees. (Fig. 8).[106] One of them is probably cheating to win the race, but the other player noticed the gambit. They say:

"Exsi"- "Non tria, duas est",

"I can go out (of the boardgame)" – "That is not a 3, it is a 2".

In Empúries the many dice finds could have been used for this game. (Fig. 9). They are usually cubic or rectangular dice, and they could also be loaded, i.e. unfair. This game was based both on chance and the skill of the player. *Duodecim Scripta* boards often have inscriptions on them. Every square could include a letter and they could create full sentences.[107] They are interesting because they can introduce us to the world of gambling and leisure activities in the Roman times, and they share information about who, how, and where the game was played. Much information, provided by literature, archaeological

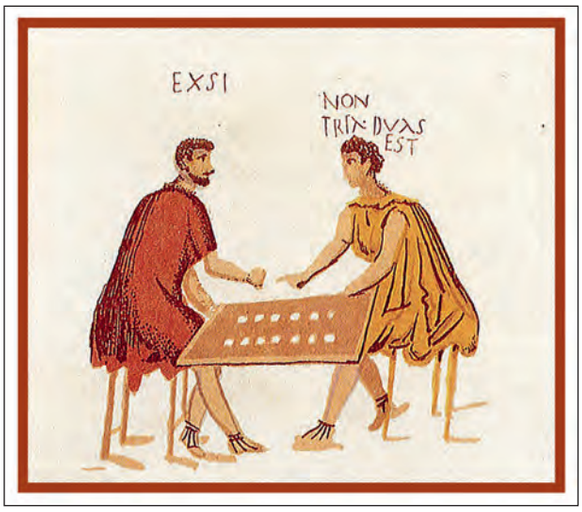

Fig. 8. Roman players arguing about gambling. Pompeian fresco from the caupona of Salvius, 1st c. CE. After Preshun *(1882), plate VI-VII.*

finds, and iconography, reveal that these kind of games were often accompanied by gambling. Players could stake money or possessions, and they could win or lose a great fortune, as Cicero tells us:

"*It is much like playing at morra, dice, or knuckle-bones, in which recklessness and luck prevail rather than reflection and judgement."*[108]

2.3 Tesserae lusoriae

There is also a series of *tesserae lusoriae* found in this site. They are rectangular bone sticks with two carved faces: one with a word, the other with a number. They end in a circular extremity that is usually pierced with a small hole. The pieces found in Empúries exhibit these combinations, each number on one face is followed by a name on the opposite one: FORTUNATE-XXIII; TUBE-X; AUDAX-XXI;

103 Ovid, *Art of Love*, 3.363-364 *(Est genus, in totidem tenui ratione redactum Scriptula, quot menses lubricus annus habet).*

104 Schädler (2019), 127-129.

105 Isidore of Seville, *Origines*, 18.60-61 (*De tabula: Alea, id est lusus tabulae, inventa a Graecis in otio Troiani belli a quodam milite Alea nominee, a quo et ars nomen accepit*).

106 Naples Archaeological Museum, inventory 111482, see Preshun (1882)

107 Schädler (1995), 73-98, Ferrua (2001).

108 Cicero, *Concerning Divination*, 2.41. (Trans. W. A. Falconer 1923), see also *Ivi*, 2.85. ([…] *Idem prope modum quod micare, quod talos iacere, quos tesseras, quibus in rebus temeritas et casus, non ratio nec consilium vale. […]*)

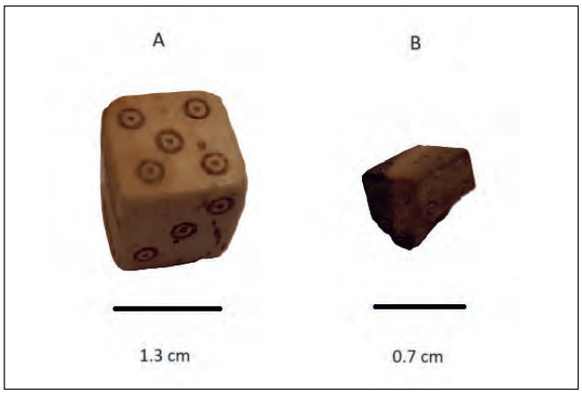

Fig. 9. Roman dice. A) Bone die (1.3 cm), Empúries, inv. 95-CR-F-6202-4137. 2nd c. CE. © Empúries Archive B): Bone die (0.7x0.8 cm) Empúries, inv. CM, MAC-EMP 04601 © Empúries Archive

NUGO-I; […]-XXIII; CL or CIN[…]-XX[…]; AMATOR-[…]; FVCO-IX.[109]

The use of these objects has been widely discussed, as they are found all around the Roman world and their dating runs from the 2nd century BCE to the 1st century CE.[110] The most reliable theory associates them with leisure activities, and particularly with a sort of game that could be played in a group. They are unlikely to have been used as counters because their shape and size would not be suited to fit on a board and their placement on a square would not allow for both faces to be read. They seem to be better adapted to other kinds of activities, perhaps a sort of bingo or lottery game. A given player would have to extract one stick from a sack, then the small hole at one end would serve to pile or hang the *tesserae* while playing.[111] The names written on the examples in Empúries are related to sexuality (*amator* = lover or womanizer; *tube* = female genitals), to a quality of someone's personality (*nugo* = imposter; *audax* = brave or arrogant; *cinaedus/cinaede* = depraved/shameless,[112] *fvco* = deceiver) or to fortune (*fortunate* = lucky). (Fig. 10)

The relation between the numbers and the word is the most intricate part of these *tesserae*. One interpretation could be that each number corresponded to a word, known by the participants; and the person who pulled them out of a bag would have to say the word written on one of the faces, and the other participants would have to remember by heart the number related to it.[113] In this case the activity would have been more challenging and fun. The other phases of the game are still unknown, and it is not clear how the players would know which *tesserae* had been already pulled out. Interestingly, some of the *tesserae* bear the letters AL after the number. It could maybe refer to the word *albus* (favourable), related to a new move for a player to make, such as the extraction of another stick, or *alienus* (belonging to someone else), perhaps meaning the player would have to hand over his or her *tessera*. According to this interpretation, the game was based on an element of randomness.

A competing explanation links the *tesserae lusoriae* to the extraction of presents during lavish banquets. The guests would have to draw the *tesserae* from a bag or sack and their number would correspond to a gift, while the funny word would contribute an element of entertainment, by defining a good or bad quality of a person or a humorous situation. This activity is attested in the *Satyricon*[114] and the *Historia*

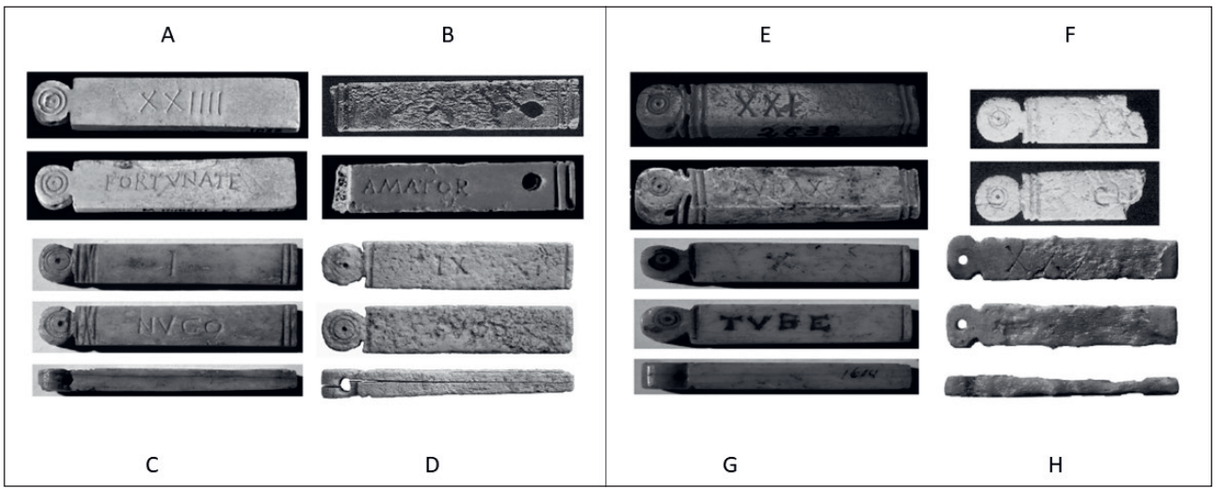

Fig. 10. Tesserae lusoriae from Empúries. A) Fortunate-XXIII (5.8x1.1 cm), B) Amator-[…] (4x1 cm), C) Nugo-I (5x1 cm), D) Fvco-IX (4.6x0.9 cm), E) Audax-XXI (5.5x1 cm) F) CL/CIN[…]-XX[…] (3.5x0.9 cm), G) Tube-X (4x1 cm), H) […]-XXI[…] (5x1 cm); After Baratta (2018), 253-263, fig. 1-11.

109 See Table 2 below, from Almagro Basch (1952), 177-179; Rodríguez Martín (2016), 210-212.

110 Hülsen (1896), 227- 257.

111 Balil Illana (1987), 331-336.

112 Interpretation of CIN as *Cinaedus* by Baratta (2018), 257.

113 Baratta (2019), 104.

114 Petronius, *Satyricon*, 56, 7-10: "He was just throwing the philosophers out of work, when tickets were carried round in a cup, and a boy who was entrusted with this duty read aloud the names of the presents for the guests". (Trans. M. Heseltine 1913)

Augusta.[115] The guests could also collect the cards and take them home as souvenirs, and the hole would be useful to hang them and display them in the house as reminders of the banquet.

2.4 Game boards

The research presented above leaves us with a question: where are the game boards? There are different reasons that explain why none have been found so far. The first reason is that the excavations are still ongoing, and while the Greek city is well documented, 90% of the Roman city is still unexcavated.[116] Sooner or later, a game board may be found. Furthermore, since the city underwent widespread spoliation in antiquity, some specimens may have been lost. The first reports are also incomplete, resulting in loss of potentially useful information. Additionally, lots of games played with counters or astragals did not need a board game, or if they did, it could be made from perishable materials.[117] Moreover, many games were played in public buildings, with players drawing game boards on the ground and each one of them bringing their own counters.[118] The main public building we have information about in the Roman city is the forum, and we know its floor was not paved.[119] As a result, it is impossible to find any lasting traces of this habit.

3. CONCLUSIONS

This contribution demonstrates how numerous and varied the gaming material at Empúries was. When the Greek *Neapolis* was settled, community started to live like it used to "back home." The Greek settlers not only shared the same habits and religion, but also the same games. The grave goods from the cemeteries demonstrate the presence and use of astragals. We discussed how they could relate to many games and how they were used both by children and adults. There is, however, not yet any evidence for counters from the Greek city. This may be because the excavators who worked there a century ago misplaced, sold, or simply did not report some items, and gaming pieces could have been among them given the previous lack of interest in ancient games and gaming. In regards to the Roman period, since a large part of the city has not yet been excavated, we still have much to learn. Despite this, the current state of our knowledge confirms the presence of counters of different materials, including a probable complete set, the use of dice, and *tesserae lusoriae* too. These items could have been used to play various games. Finally, it is clear that board games and probably also games in general were played by the people who lived in this prosperous city during both the Greek and the Roman periods.

115 *Historia Augusta*, *Elagabalus*, 22.1:"At his banquets he would also distribute chances inscribed on spoons, the chance of one person reading «ten camels,» of another «ten flies,» of another «ten pounds of gold,» of another «ten pounds of lead,» of another «ten ostriches,» of another «ten hens-eggs,» so that they were chances indeed and men tried their luck." (Trans. D. Magie 2022)

116 Aquilué Abadias, Monturiol (2004).

117 Vimose, inv. 20300, inv. Ul 1382, inv. 24227; see also Schulz (1953), 29; 63-66; tables XXVII-XXVIII.

118 De Voogt, Crist, Dunn Vaturi (2016), 125-151.

119 Aquilué Abadias, Mar Medina, Ruiz de Arbulo (1984).

Captions for Table 1

Burial ritual	Age rating	C.I.=Childhood Indicator	Bone Information	Cemetery
IN= inhumation	C= child	L1= lekythos with diamond-shaped pattern	L= lamb	NM= necròpolis Martí
CR= cremation	YA= young adult	L2= lekythos with rabbit figure	G= goat	NB= necròpolis Bonjoan
	A= adult	L3= lekythos with palm tree	A= amber	NN= necròpolis Muralla nord-est
		N= nails	S= sheep	
		S= seashells	P= perforated	
			F= fragmentary	
			B= burnt	

Abbreviations for Table 1

Pottery	Jewellery	Fibulae	Other
AP= Apulian lekythos	B= beads	F1= fibula La Tène	ES= ear swab
AL= Attic lekythos	BR= bronze ring	F= fibula	BP= bone plate

AK= Attic kylix	BT= bracelet		A= ax
A= alabastron	MP= metal pin		N= nail
OJ= ointment jar	P = pendant		FO= foil
J= jar			B= button
CP= Campanian patera			S= seashell
CA= Corinthian aryballoi			CH= clay figure of Hermes
EK= Etruscan kantharos			C= coin

Table 1: astragals found as part of the burial goods in the Empúries' necropolis[120]

Burial Data

Inventory Number	Rite	Age	Length (mt)	C.I.	N. astragals	Bone	Place	Dating
9	IN	C	1		22	L	NM	5th c BCE ca
15	IN	C		L1	26	L or G P	NM	400-350 BCE
20	IN	YA		L2 N	1	A	NM	Last quarter of the 5th c BCE
90	IN	YA	1.35	L3 N	1	L	NM	350-300 BCE
99	IN	A			19	L	NM	/
109	IN	A			24	L P	NM	3rd c BCE
28	CR	NA			2	S B	NM	5th -4th c BCE,
30	CR	NA			1	F B	NM	5th -4th c BCE
12	IN	NA			11	L	NB	300-250 BCE
13	IN	NA			3	L	NB	5th c BCE
18	IN	C	0.60	S	1	L	NB	200-150 BCE
56	IN	C	1		2	S	NB	4th- 3rd c BCE
4	CR	NA			6	L	NN	500 BCE

Equipment (other than knucklebones)

	Pottery									Jewellery					Fibulae		Other								
Burial	AP	AL	AK	A	OJ	J	CP	CA	EK	B	BR	BT	MP	P	F	F1	ES	BP	A	N	FO	B	S	CH	C
9										1															
15	1									3	2					1	1				1		1		
20		1								30			1	1		1		2	1	6	1			1	
90		1																		5					
99													1												
109					4	1				33	2									4					1
28																									
30				1																					
12					7		1																		
13																				1					

120 To produce this record the author focused on published investigations, mostly using Martín Almagro's *Las Necrópolis de Ampurias*, Monografías Ampuritanas III, 1953. This work remains the most accurate one because it provides us with the contents of every burial in all the Greek, Roman, and Indigenous necropoleis around the site. Another key publication is *El mon funerari a l'antiga Empúries*, Museu d'Arqueologia de Catalunya, 2009. This work is a good summary of all the most recent discoveries in the cemeteries.

18						5	1															3	2		
56					2																				
4		1	1					2	1			1			1					1	2				

Legend for Table 2

Object	Material	Colour	Size	Location	Layer	Current position	Dating
T= tessera lusoria	B= bone	W= white	W= width	NL= necròpolis Les Corts	T= tomb	MB= Museu arqueòlogic de Barcelona	RE= Roman imperial period
C= counter	I= ivory	B= blue	L= length	NB= necròpolis Bonjoan	CF= casual finding	MG= Museu arqueòlogic de Girona	LR= Late Roman Period
S= set of counters	G= glass	LBL= light blue	H= height	NT= necròpolis Torres		MEA= Museu arqueòlogic de Empúries, Airlock	
S1= set of counters, 8 specimens	L= limestone	O= orange		NR= necròpolis Anfiteatre Romà		MEAR= Museu arqueòlogic de Empúries, Archive	
S2= set of counters, 11 specimens	C= clay	GE= green		NP= necròpolis Del Pàrking		EXP= exposició Jocs I joguines a l'antiquitat	
CD=cubic die	S= stone	DB= dark brown		F= forum, Roman city		MV= Museu de Prehistòria de Valencia	
FD= fragmentary die	C1= Campanian pottery	LB= light brown		MR= muralla rupert, Roman city			
RD= rectangular die	M= marble	BL= black		K= Kardo B, Roman city			
PD= prismatic die	B= bronze	G= grey		RS= southern area, Roman city			
PH= hare shaped pawn				I30= Insula number 30			
PS= star shaped pawn				SW= southern wall, Roman city			
				R= Roman city			

Table 2: gaming material from the archaeological archive in Empúries[121]									
Object	**Material**	**Colour**	**Size (cm)**	**Exca-vation/ discovery**	**Location**	**Layer**	**Inv. number**	**Current position**	**Dating**
T-AMATOR	B	W	L. 4 W. 1 H. 0.5	1901	/	/	MAC BARC- 1612	MB	/
T- TUBE	B	W	L. 4 W. 1 H. 0.5	1901	/	/	MAC BARC-1614	MB	/
T- NUGO	B	W	L. 5 W. 1	1901	/	/	MAC BARC- 1131	MB	/
T- […]-XXIII	B	W	L. 5 W. 1 H. 0.3	1901	/	/	MAC BARC-1613	MB	/
T- AUDAX	I	W	L. 5.5 W. 1 H. 0.5	1901	/	/	MAC GIR- 2638	MG	/
T- CL/CIN […]	B	W	L. 3.5 W. 0.9 H. 0.4	1901	/	/	MAC GIR-2638	MG	/
S1	S	/	W. 1.8	1927	NL	T 41	/	/	2nd c BCE
C	G	B	W. 1.8	1927	NL	T 41	/	/	2nd c BCE
C	L	/	W. 3	1927	NL	T 62	/	/	2nd c BCE
C	G	B	W. 1.6	1927	NL	T 83	/	/	2nd c BCE
C	G	B	W. 1	1927	NL	T 103	/	/	2nd c BCE
S2	G	B	W.0.8-1.5	1927	NL	T 104	/	/	2nd c BCE
C	G	B	W. 2	1927	NL	T 109	/	/	150 BCE
C	G	B	W. 1	1927	NL	T 121	/	/	2nd c BCE
T- FVCO	B	W	L. 4.6 W. 0.9 H. 0.4	1929	/	/	A-357	MV	2nd-1st c BCE
T- FORTUNATE	B	W	L. 5.8 W.1.1 H. 0.4	1949	MR	1C	MAC EMP-01022	MEA	1st c CE
C	B	W	W. 2.7	1952	NB	T VI	/	/	1st c CE
C	G	/	W. 1.5	1952	NT	T 16	/	/	1st c CE
C	G	G	W. 1.5	1952	NT	T 50	/	/	1st c CE
C	C	O	W. 1.4	1952	NR	T 1	/	/	1st c CE
C	B	W	W.1.5	1971	K	/	MAC EMP- 00342	MEAR	1st c. CE

121 This table is the result of research in 2019 at the *Museu d'Arqueologia de Catalunya-Empúries*. Unfortunately, some reports in the archive are inaccurate and they do not always provide all the required information about the pieces held in the storage rooms; therefore, the table contains just the most interesting and detailed specimens.

C	S	G	W. 2.2	1971	K	/	MAC-EMP-00341	MEAR	1st c. CE
C	G	/	/	1984	NP	T p724	/	/	4th-3rd c BCE
C	G	/	/	1984	NP	T p1083	/	/	4th-3rd c BCE
C	G	/	/	1984	NP	T p2010	/	/	4th-3rd c BCE
C	G	GE	W.1.1	1992	F	9025	92-F-9025-4	MEAR	1st c. CE
C	S	DB	W. 1.5	1992	F	6006	92-F-6006-10	MEAR	1st c. CE
C	G	O	W. 1.4	1992	F	6006	92-F-6006-12	MEAR	1st c. CE
C	S	LB	W. 1.8	1994	F	2157	94-F-2157-20	MEAR	RE
C	S	BL	W. 0.9	1994	F	2157	94-F-2157-16	MEAR	RE
C	S	G	W. 2	1995	F	5701	95-CR-F-5701	MEAR	RE
C	C	O	W. 1.2	1995	F	5704	95-CR-F-5704-47	MEAR	RE
C	S	G	W. 1	1995	F	4151	95-CR-F-4151-8	MEAR	RE
C	C	O	/	1995	F	5201	95-CR-F-5201-861	MEAR	RE
C	C	O	/	1995	F	5204	95-CR-F-5204-140	MEAR	RE
C	G	O	W. 1.2	1995	F	5205	95-CR-F-5205	MEAR	1st c CE
C	G	B	W. 1.2	1995	F	5201	95-CR-F-5201-1156	MEAR	1st c CE
C	G	/	/	1995	F	5205	95-CR-F-5205-361	MEAR	LR
CD	B	W	W. 1.3	1995	F	6202	95-CR-F-6202-4137	MEAR	2nd c CE
C	S	B	W. 0.8	1996	F	5224	96-CR-F-5224-3169	MEAR	1st c CE
C	C	W	W. 2.5	1996	F	5224	96-CR-F-5224-3168	MEAR	1st c CE
C	C	O	W. 2.3	1996	F	5224	96-CR-F-5224-3162	MEAR	1st c CE
C	S	G	W. 1.4	1996	F	5236	96-CR-F-5236-306	MEAR	1st c CE
C	C	O	W. 2.5	1996	F	5236	96-CR-F-5236-304	MEAR	1st c CE
C	G	B	W. 1.7	1996	F	5224	96-CR-F-5224-3165	MEAR	1st-2nd c CE
C	G	LBL	W. 1.9	1996	F	5236	96-CR-F-5236-350	MEAR	1st-2nd c CE
C	G	O	W. 1.3	1996	F	5236	96-CR-F-5236-351	MEAR	1st-2nd c CE
C	G	W	W. 1.4	1996	F	5604	96-CR-F-5604-77	MEAR	1st-2nd c CE

C	B	W	W. 1.2	1996	F	5203	96-CR-F-5203-324	MEAR	1st-2nd c CE
C	C1	BL	W. 1.2	1996	F	4355	96-CR-F-4355	MEAR	1st-2nd c CE
CD	B	W	/	1996	F	5120	96-CR-F-5120-21	/	/
C	S	W	W. 0.9	1998	F	1115	96-CR-F-1115-468	MEAR	1st c BCE-1st c CE
C	S	G	W. 1.2	1998	F	1115	96-CR-F-1115-469	MEAR	1st c BCE-1st c CE
C	S	G	W. 1	1998	F	1115	96-CR-F-1115-470	MEAR	1st c BCE-1st c CE
FD	B	W	L. 0.7 W. 0.8	1999	RS	CF	MAC EMP-04601	MEAR	/
C	B	W	W. 1.3	2002	R	1012	02-CR-CD-1012-41	MEAR	/
S	S	G, DB, BL	W.1.2-2.2	2017	I30	25000	MAC EMP-11696	EXP	1st c BCE
C	M	W	W. 4	2017	I30	25000	MAC EMP-11696	EXP	1st c BCE
C	G	B	W. 1.4	2017	I30	25000	MAC EMP-11696	EXP	1st c BCE
CD	B	W	L. 0.9 W. 0.9 H. 0.8	/	/	/	MAC EMP-02982	MEA	1st- 2nd c CE
PD	B	W	L. 1.5 W. 1.5 H. 1.2	/	/	/	MAC EMP-02981	MEA	1st- 2nd c CE
RD	M	W	L. 2.7 W. 1 H. 0.7	/	/	/	MAC EMP-00911	EXP	1st- 2nd c CE
CD	B	/	L. 0.9 W. 0.9 H.0.9	/	/	/	MAC EMP-02983	EXP	1st- 2nd c CE
CD	S	W	L. 1.3 W. 1.3 H. 1.3	/	/	/	MAC EMP- 02984	EXP	1st- 2nd c CE
RD	B	W	L. 1.2 W. 1.1 H. 0.8	/	SW	/	MAC EMO- 04599	EXP	1st- 2nd c CE
RD	B	W	L. 1.3 W. 1.1 H. 0.9	/	/	/	MAC EMP-04600	EXP	1st- 2nd c CE
PH	B	W	L. 3.6 W. 2 H. 0.6	/	/	/	MAC EMP-02890	EXP	2nd c CE
PS	B	W	/	/	/	/	MAC BARC-1661	EXP	1st c CE

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Le mobilier de jeu antique dans l'habitat de la cité de Nîmes

INTRODUCTION

Le corpus sur lequel se base notre analyse comprend 880 objets mis au jour entre 1970 et 2021, lors de fouilles et de diagnostics archéologiques[1]. Ces artefacts proviennent de niveaux d'habitat antiques (Ve s. av. J.-C. – Ve s. apr. J.-C.) de seize sites de Nîmes et de quelques agglomérations secondaires situées sur le territoire de ce chef-lieu durant l'Antiquité. La zone d'étude correspond au département du Gard et à la partie orientale de l'Hérault (fig. 1).

Le recensement a été effectué à partir de trois types de sources :

- les monographies des sites suivants : ZAC des Halles, quartier des Bénédictins, Saint-André de Codols pour la commune de Nîmes (Gard), oppidum (Devès) et quartier bas (Sablas) d'Ambrussum pour la commune de Villetelle (Hérault), village de Lunel-Viel (Hérault),
- les rapports de fouilles et de diagnostics peu diffusés et qui n'ont pas toujours donné lieu à des publications,
- les inventaires d'*instrumentum* que nous avons constitués à partir des collections provenant de fouilles, souvent inédites, antérieures à 1995, c'est-à-dire d'une époque où les études des spécialistes étaient rares.

Le mobilier issu des fouilles nîmoises anciennes, dont le contexte est souvent méconnu, et celui recueilli dans les sépultures n'a pas été pris en compte, ce dernier ayant déjà fait l'objet d'une étude spécifique propre au domaine funéraire[2].

Pour la majorité des sites pris en compte, les lots étudiés correspondent à la totalité du mobilier mis au jour, ce qui permet de raisonner en termes de proportion pour chacune des catégories recensées. Dans quelques cas (rue Nationale à Nîmes, site du Castellas à Murviel-lès-Montpellier, musée de la Société archéologique de Montpellier dans l'Hérault), les objets retenus pour certaines particularités ne représentent qu'un échantillon de ce qui a pu être mis au jour sur un site, la collection complète n'ayant pu être étudiée.

Deux tableaux de comptage permettent de répertorier le nombre d'artefacts pour chaque site étudié et de mettre en évidence la part des différentes catégories de jeu (fig. 2a-b). Ils révèlent aussi la relative abondance des pièces de jeu de société et la rareté des jouets, faits par ailleurs déjà observés dans les contextes funéraires[3].

1. LES JETONS EN OS

La catégorie des jetons en os est celle qui regroupe le plus grand nombre de pièces de notre corpus (330 unités, soit 37,80 % du corpus). Il convient de noter que plus des deux tiers de ces jetons proviennent de sites qui se trouvent en dehors de la ville de Nîmes,

1 Nous remercions nos collègues Jean-Yves Breuil, Philippe Cayn, Marc Célié, Gilles Escallon, Bertrand Houix, Martial Monteil, Michel Piskorz, Laurent Sauvage et Ghislain Vincent qui nous ont confié pour étude le mobilier issu de leurs fouilles, Diane Dussseaux et Mario Marco du musée Henri-Prades de Lattes, qui ont mis à notre disposition le mobilier de Lattes et de Murviel-lès-Montpellier, ainsi qu'Alain Bouet, Véronique Dasen, Caroline Lefebvre et Véronique Lelièvre qui ont relu et corrigé notre étude.

2 Manniez (2019).

3 Manniez (2019).

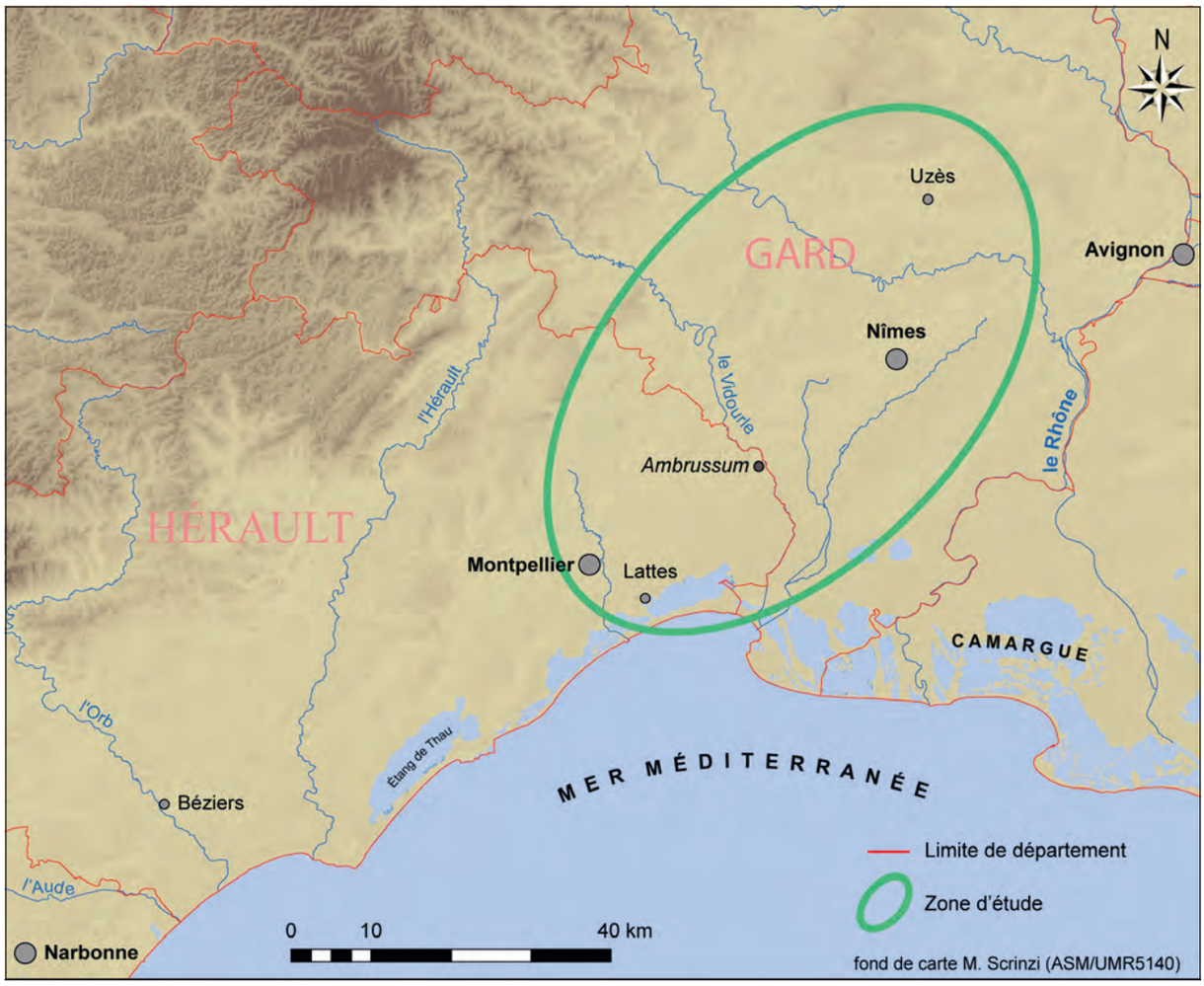

Fig. 1. Carte de la zone d'étude (DAO Maxime Scrinzi).

Site	jeton os	tes. os	p. os	p. verr	dé rom.	dé gaul.	p. pierre	pt galet	jeton cér.	jeton plb	astrag. os	astrag. plb	pou-pée	figu-rine	vase mini	diable	bille	total
Murviel, St Julia 89	80							69										149
Mons, Vié-Cioutat	26			1	3													30
Villevieille, Terriers	9	1		2	3			1										16
Lattes, musée	29		6	17	15	2	1		1	3	4	6	1		1			86
Villetelle, Ambrus.	70		1	38	16			6	4								4	139
Uzès, Anc. Gendarm.	4			5	2				12									23
Lunel-Viel, village	1		1		3													5
total	219	1	8	63	42	2	1	76	17	3	4	6	1	0	1		4	448

Fig. 2 a). Tableau de répartition des mobiliers par type et par site (agglomérations secondaires).

le lot le plus important (80 exemplaires) ayant été découvert à Murviel-lès-Montpellier.

1.1 Typologie

La grande majorité des jetons est constituée d'exemplaires ornés de moulures à savoir les types A XXXII,6, 8 et 9 de J.-Cl. Béal[4], mais aussi des exemplaires à faces lisses des types A XXXII, 1, 2 ou 3 qui pourraient correspondre aux premiers modèles de jetons apparus dans la région[5] (fig. 3a).

Nous nous attarderons ici sur quelques jetons particuliers appartenant à trois groupes de la typologie.

4 Béal (1983a), 319.

5 Un jeton du type 2 mis au jour lors des fouilles récentes menées par M. Scrinzi sur l'oppidum est daté de la période -15/-1 ; deux autres du type 3 sont datés de -50/-1 et de -15/15.

Site	jet. os	tess. os	dé brz	p. verr	dé rom.	dé gaul.	p. pier	pt galet	jet. cér.	jet pier	pion os	astr. os	pou-pée	figur.	vase mini	diable	bille	total
Villa Roma + Sol.	13			40	4			1										58
PJJ diag + fouille	24			43	1		3		2									73
place J. Guesde	1				2					1								4
ZAC des Halles	26	1		40	3			9										79
Villég. Béné-dictins	8			8				1	1								2	20
Maison Carrée	1			1	1													3
Hespérides	4			7			1											12
Jean-Las-serre				1								1						2
24, r. E.-Ja-mais				2														2
Maison de Santé	3			4		1										1		9
r. Léo-pold-Morice	5			6												1		12
Séguier-An-goul.	5			3														8
St André de Cod.	7			17													2	26
place d'Assas	5			5									2	2				14
Miremand 2				1														1
3-5 r. Pel-loutier	3			4	1				3									11
r. Rouget de l'Isle	1			2	1				1									5
Palais Justice											1							1
hors strati			1												1			2
total	106	1	1	184	13	1	4	11	7	1	1	1	2	2	1	2	4	342

Fig. 2b). Tableau de répartition des mobiliers par type et par site (Nîmes).

Le type A XXXII,4 qui se caractérise par un trou central, est relativement rare. On en retrouve un exemplaire à Nîmes, sur le site de la rue Pelloutier (fig. 3b), un deuxième à Vié-Cioutat (Mons-Monteil, Gard), quatre autres à Murviel-lès-Montpellier et un dernier à Villevieille (Gard)[6].

Le type A XXXII,5 dont la face supérieure est en cuvette et qui est habituellement peu fréquent (Béal 1983a, 318), est relativement bien représenté à Nîmes (10,3 % du total des jetons nîmois) ainsi qu'à Ambrussum[7] (fig. 3c).

Le type A XXXII,7 qui regroupe les pièces à bordure ornée de guillochis inclinés ou radiés et dont l'origine pourrait être, d'après J.-Cl. Béal, les villes de Lyon (Rhône) ou de Vienne (Isère)[8] n'est attesté qu'à six reprises dans notre zone d'étude, ce qui représente 1,84 % du total de cette catégorie[9]. On peut se demander si ces jetons ne correspondaient pas à des pièces particulières sur les plateaux d'action, comme le roi ou la reine sur les échiquiers, ce qui expliquerait leur rareté sur les autres sites (fig. 3d). Les éléments les plus précoces proviennent de niveaux de la fin du Ier s. apr. J.-C. du site de Vié-Cioutat[10].

• 1.2 Quelle fonction : pièces d'action ou de comptage ?

C'est la découverte de lots importants issus le plus souvent d'ensembles clos qui, sur les sites d'habitat comme dans les sépultures, permet de proposer des hypothèses sur la fonction des pièces de jeu, qu'il s'agisse de jetons en os, de pions en verre ou bien de dés.

Dans deux cas, les jetons en os étaient probablement réunis dans un contenant en matière périssable de type bourse qui a probablement été égaré par son propriétaire. Le premier lot tombé dans un des puits du quartier bas d'Ambrussum (PT19) dans la période 125/200 apr. J.- C. comprend dix-huit éléments : neuf jetons rainurés, sept jetons lisses, un pion en verre et

6 Nîmes/Pelloutier n° 3, Us 2097 (inédit) ; Vié-Coutat n° 59, Manniez (1984), 131, fig. 5; Murviel-les-Montpellier (au musée de Lattes) n° 13 à 16 ; Villevieille/Les Terriers n° 82, Us 8148.

7 Nîmes, sites divers (ZAC des Halles, rue Séguier, place Jules-Guesde, parking Jean-Jaurès) : 8 jetons ; Ambrussum (Villetelle, Hérault) ; *domus* de la zone 9 : 3 jetons.

8 Béal (1983b), 614.

9 Vié-Cioutat (Mons-Monteil, Gard) : 2 jetons ; Lattes (Hérault) : 1 jeton ; Nîmes/parking Jean-Jaurès : 1 jeton ; Nîmes, musée de la Romanité : 1 jeton ; Villevieille (Gard) : 1 jeton.

10 Manniez (1984), n° 76 et 77, 33. À Lyon et Vienne, ce type n'est attesté qu'à partir du IIe s.

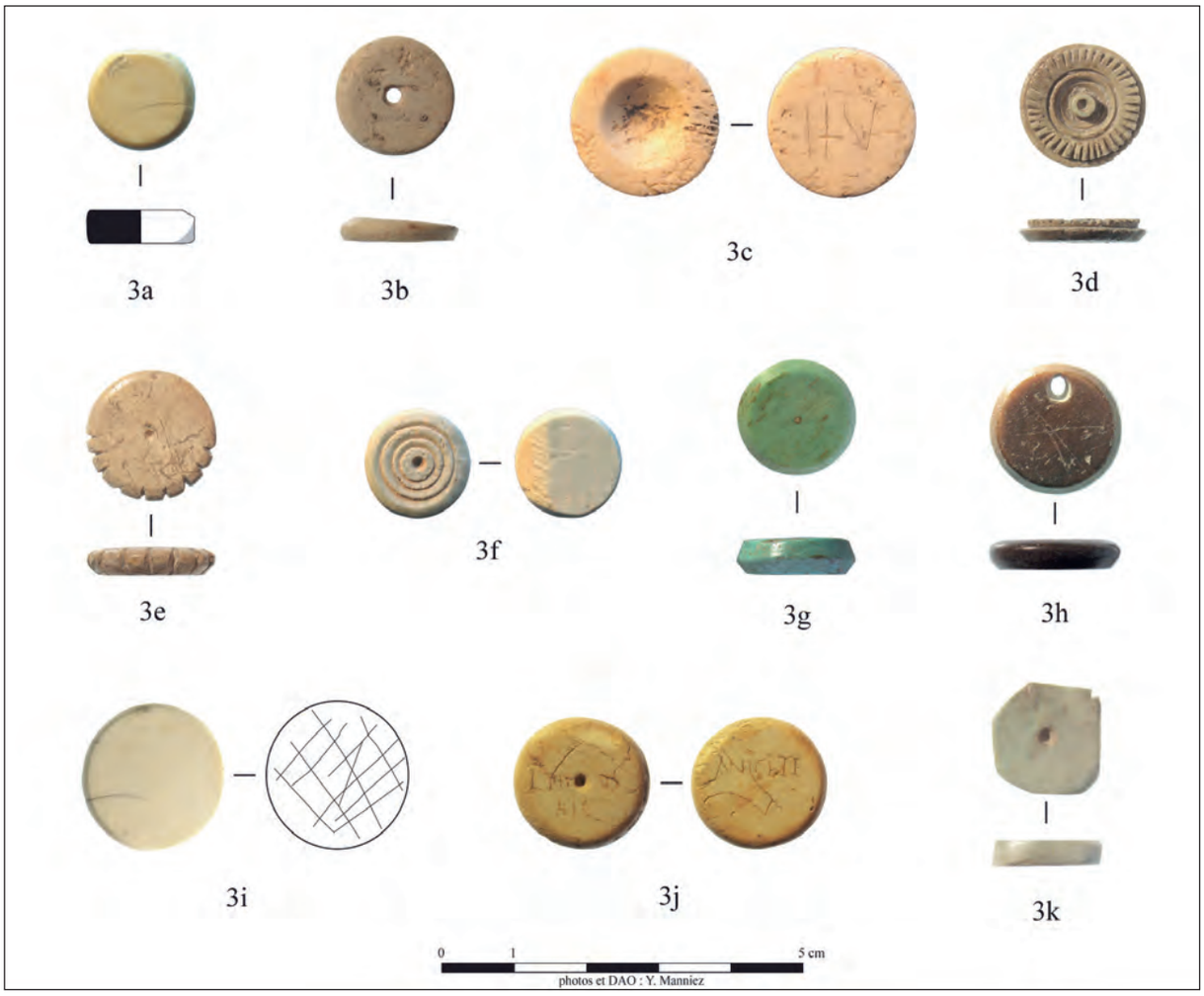

Fig. 3 a). Jeton en os de type 1 ; diam. : 15 mm; ép. : 4,6 mm; Villevieille, Les Terriers, n° 75, Us 5292 ; datation : 75/150 J.-C. ; b) : jeton en os de type 4 ; diam. : 16,3 à 16,6 mm; ép. : 2,3 à 3,4 mm; Nîmes, 3-5, rue Pelloutier n° 3, Us 2097 ; datation : 200-300 apr. J.-C. ; c) : jeton en os de type 5 ; diam. : 20,5 mm; ép. : 3,8 mm; Nîmes, parking Jean-Jaurès, n° 65, Us 5003 ; datation : 200-300 apr. J.-C. ; Manniez 2017, 170 fig. 2 et 202 ; d) : jeton en os de type 7 ; diam. : 17,5 à 17,6 mm; ép. : 3,4 mm; musée de Lattes (inv. 984.8.1) ; datation : 1-200 apr. J.-C. ; Manniez 1984, 34 n° 78 ; e) : jeton en os de type 1, non mesuré ; Ambrussum, Devès, sect. IV, inv. n° 48, inédit ; datation : 40-100 apr. J.-C ; f) jeton de type 8 ; diam. : 14,8 à 15,2 mm; ép. : 3,2 à 3,8 mm; Nîmes, parking Jean-Jaurès, n° 102, Us 5409 ; datation : 75-200 apr. J.-C. : Manniez 2017, 171 fig. 3 et 207 ; g) : jeton en os de type 3 ; diam. : 16,1 à 16,5 mm; ép. : 5,2 mm; Nîmes, Villégiales des Bénédictins, n° 89, Us 1041 ; datation : 40-200 apr. J.-C. ; h) : jeton en os de type 3 ; diam. : 18,4 mm; ép. : 4,3 mm; musée de Lattes (inv. 984.10.7) ; Manniez 1984, 27 n° 44 ; i) : jeton en os de type 2 ; diam. : 19,7 à 20,5 mm; ép. : 3,7 mm; Murviel-lès-Montpellier, Saint-Julia, Us 1122, n° 7 ; datation : fin du Ier siècle ap. J.-C. ; j) : jeton en os de type 3 ; diam. : 18,4 à 18,9 mm; ép. : 3,9 à 4,5 mm; Nîmes, Villégiales des Bénédictins, n° 145, Us 2080 ; datation : 150-200 apr. J.-C. ; Manniez, Bost 2019, 26-27 ; k) : jeton en os de type inconnu ; dim. : 15,2 x 15,5 mm; ép. : 3,7 mm; Murviel-lès-Montpellier, Saint-Julia, Us 1122, n° 17 ; datation : fin du Ier siècle ap. J.-C. (Photos de l'auteur).

un dé en os[11]. La grande homogénéité des modules et des types laisse supposer qu'il s'agit de deux sets de pièces d'action permettant à deux personnes de jouer en même temps. L'inégalité numérique entre les deux lots et la présence d'un intrus (pion en verre) sont difficiles à expliquer. On les retrouve à plusieurs reprises dans la panoplie des pions déposés auprès des défunts[12]. Quant au type de jeu auquel ces pièces d'action appartenaient, il est bien illusoire, en dépit de tout ce qui a pu être écrit sur le sujet, de trancher du fait de la rareté, notamment en contexte d'habitat, des découvertes de sets complets : jeu des cinq lignes ou des douze points, *latroncules*[13], jeu de dames ou autres dont les règles ne sont pas parvenues jusqu'à nous.

Le second ensemble important provient du remplissage primaire d'un égout du pseudo temple de Murviel-lès-Montpellier qui s'est constitué à la fin du Ier siècle de notre ère[14]. Outre 69 petits galets, il comprend 80 jetons en os dont 75 à faces lisses, simplement pointées ou à petit trou central. Un seul se distingue par son décor de gorges concentriques.

Compte tenu du grand nombre de pièces non ornées et de la présence de petits galets, on peut considérer qu'il s'agit là de substituts de monnaies pour des jeux de hasard avec gain et non de pièces d'action.

11 Manniez (2012), 236-237.

12 Manniez (2019), 130.

13 Schädler (2013), 27; Rowan (2019), 84; Lemoine, Manniez (2021).

14 Escallon *et al.* (1990), 27; Manniez (2022).

• 1.3 Jetons en os particuliers

Sur les 325 jetons de notre catalogue, on signalera l'existence de quelques exemplaires particuliers :

Jetons à bordure découpée

Il s'agit de jetons du type 3 dont la bordure présente 2 à 9 entailles verticales (fig. 3e). On peut penser qu'un tel aménagement des tranches était destiné à distinguer les jetons concernés du lot des exemplaires simples, peut-être pour en faire des pièces d'action d'un jeu qui pouvait être propre à l'aire méditerranéenne. On les retrouve, en effet, essentiellement dans la cité de Nîmes et à Marseille[15].

Jetons à base biseautée

Plusieurs exemplaires présentant cette particularité ont été observés à Nîmes[16]. Cet aménagement non accidentel a pu servir à faciliter le déplacement des pièces sur un plateau rugueux, la pression sur la face supérieure au niveau du biseau permettant de relever le côté opposé (fig. 3f).

Jetons teintés

Les expérimentations de tournage de l'os par Christophe Picot[17] montrent que les reproductions obtenues à partir de la matière dure animale actuelle, ont une couleur blanche. La patine liée à l'utilisation des artefacts antiques et leur long séjour dans la terre leur donnent une teinte beige ou crème. On note toutefois la présence de quelques éléments colorés dans les jetons de notre corpus, mais aussi d'autres collections comme celle d'Avenches[18].

Ainsi, l'uniformité de la teinte bleu-vert de certains jetons laisse croire que ces objets ont été plongés dans un bain chargé en oxyde de cuivre afin d'en modifier la couleur (fig. 3 g). Tel est le cas pour les quatre petits dés du trésor d'Ambrussum présentés plus bas[19]. Dans un seul cas, le jeton semble avoir été teinté en noir[20]. À l'instar du lot du puits PT19 d'Ambrussum, les exemplaires brun foncé doivent probablement leur coloration à un séjour en milieu humide.

Jeton perforé près du bord

Un jeton de Lattes[21] présente une perforation volontaire sur sa bordure. Cet aménagement sans utilité dans le cadre des activités ludiques suggère que cet artefact a été percé, comme certaines monnaies, pour être porté en pendentif ou amulette (fig. 3h).

Jetons à graffiti

À plusieurs reprises, la face inférieure des jetons a servi de support pour recevoir des gravures à la pointe sèche. Il s'agit le plus souvent de croix ou de lettres (M, N, T, F) ou de chiffres romains, plus rarement de groupe de lettres (HV, MI, XAR ou XIVR), de mots dont la lecture n'est pas toujours aisée ou de dessins sommaires (croix, étoiles). Nous ne nous attarderons pas sur ces marques dont la fonction reste mystérieuse (marque de propriété, indication de valeurs, simple dessin…) (fig. 3i).

Jetons à inscription

Dans trois cas, des jetons du type 3, qui ont récemment fait l'objet d'une étude[22], ont reçu, sur leurs deux faces, des inscriptions comportant plusieurs mots. Le texte du premier jeton provenant du puits antique de la place d'Assas, à Nîmes, bien que de très belle graphie est inexploitable du fait d'une cassure et de la perte de la moitié de l'objet. Le texte des deux autres exemplaires découverts lors de la fouille des Villégiales des Bénédictins, en revanche, est bien lisible et nous permet de penser que ces jetons de jeu ont été transformés en tessères de spectacles. Ils auraient été offerts à deux esclaves *Ereptus* et *Lytius* par leur maître, un certain Cassius, afin que ces derniers puissent assister au combat de deux gladiateurs nommés *Olympus* et *Anicetus* (fig. 3j).

Jeton polygonal

C'est dans cette catégorie qu'il convient de ranger l'exemplaire de forme irrégulière découvert dans le lot de Murviel-lès-Montpellier. Il est possible qu'il s'agisse d'un jeton de type 3 réaménagé après une cassure accidentelle ou d'un raté de fabrication (fig. 3k).

1.4 Datation

Les jetons sont difficiles à dater car ils proviennent le plus souvent de strates dont le mobilier court sur un ou plusieurs siècles. Seule la prise en compte des exemplaires issus de couches qui sont à la fois les plus anciennes et les mieux calées dans le temps, car situées entre deux bornes chronologiques rapprochées, peut servir à préciser à quel moment apparaissent ces objets. Dans la région qui nous intéresse, cette démarche nous a ainsi permis de situer l'apparition des plus anciens jetons dans les années 20/30

15 Murviel-lès-Montpellier jetons n° 66 : 4 entailles et 72 : 2 entailles ; Ambrussum, zone 1, (Us 18002) : 9 entailles, Manniez (1989), 133-135, n° 11; Ambrussum, zone 12, (Us 12298) : 16 entailles, objet inédit. Marseille : 1 exemplaire à 8 entailles gravé au nom de Verecundus, Hesnard *et al.* (1999), 23.

16 Nîmes, parking Jean-Jaurès : objets n° 2, 23, 42, 102, 162 et 163 ; Ambrussum, zone 9, n° 167.

17 Voir les réalisations en os sur le site : http://cpicod.blogspot.com/

18 Schenk (2008), 15-16.

19 Manniez (2010), 20; jetons teintés en vert : Nîmes, parking Jean-Jaurès n° 102 ; Nîmes, Villégiales des Bénédictins n° 81 et 144 ; Nîmes, Villa Roma, n° 82 (inédit). À ce lot, on peut ajouter 1 jeton de Nîmes, rue Nationale et 4 jetons conservés au musée de la Société archéologique de Montpellier, Manniez (1984), 23, 29 et 36 ; n° 13, 54, 55 et 57.

20 Musée de la Société archéologique de Montpellier, Manniez (1984), 29 n° 56.

21 Manniez (1984), n° 44, 4 et 132, fig. 6.

22 Manniez, Bost (2019).

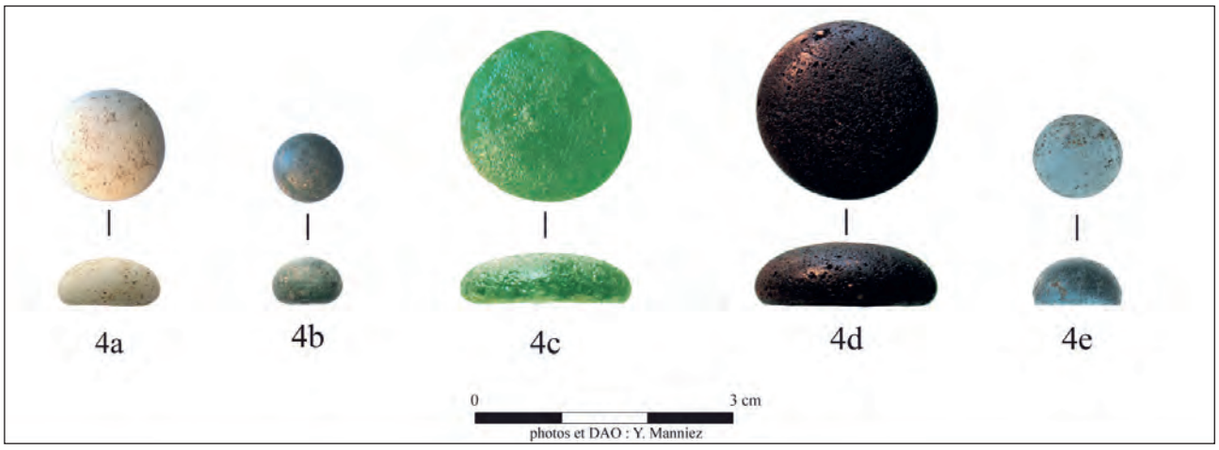

Fig. 4 a). Pion en pâte de verre blanchâtre ; diam. : 13 à 13,2 mm; ép. : 6 mm; Nîmes, parking Jean-Jaurès, n° 364, Us 4005 ; datation : 200-300 apr. J.-C. ; Manniez 2017, 174, fig. 6 et 194 ; b) : pion en pâte de verre vert foncé ; diam. : 12,7 à 13,1 mm; ép. : 6,7 mm; Nîmes, parking Jean-Jaurès, n° 364, Us 4005 ; datation : 200/300 apr. J.-C. ; Manniez 2017, 174, fig. 6 et 194 ; c) : pion en pâte de verre verte ; diam. : 19,5 à 20 mm; ép. : 5,5 mm; Nîmes, parking Jean-Jaurès, n° 364, Us 4005 ; datation : 75/150 apr. J.-C. ; Manniez 2017, 174 fig. 6 et 205 ; d) : pion en pâte de verre noire ; diam. : 20,8 à 21,2 mm; ép. : 7,2 mm; Villevieille, Les Terriers, n° 85, Us 4005 ; datation : 100/225 apr. J.-C. ; e) : pion en pâte de verre bleu clair ; diam. : 9,9 à 10,4 mm; ép. : 5,5 mm; musée de Lattes (sans n° d'inv.) ; datation : inconnue. (Photos de l'auteur).

apr. J.-C.[23] et de constater qu'à cette période ils sont encore très rares. C'est seulement dans la seconde moitié du Ier s. et dans le courant du siècle suivant que le nombre de ces pièces de jeu augmente[24], puis il semble chuter à partir de 200, notamment à la ZAC des Halles à Nîmes[25]. Sur ce site, on les rencontre, encore en assez grand nombre (12 exemplaires sur 26), dans les niveaux des phases 6 et 7 (postérieurs à 400 apr. J.-C.), mais il s'agit probablement d'éléments en position remaniée.

À Uzès, sur la fouille de l'Ancienne gendarmerie, où les jetons des niveaux du Haut Empire sont rares (2 exemplaires), on en retrouve le même nombre en position secondaire dans les strates des Ve-VIIe siècles[26]. On signalera enfin l'absence totale de jetons en os dans les niveaux de la fin de l'Antiquité du quartier ouest de Lunel-Viel et la présence d'un seul exemplaire dans les couches de l'occupation tardive (Ve -VIe siècles) de l'Ancien théâtre d'Arles (Bouches-du-Rhône), commune située en limite de notre zone d'étude[27], alors que les dés sont encore présents en plusieurs exemplaires sur ces deux sites.

Si les jetons sont nombreux en Narbonnaise, mais aussi dans les provinces antiques de Belgique et de Germanie, ils sont en revanche fort rares dans les strates romaines de la péninsule italienne[28].

2 LES PIONS EN PÂTE DE VERRE

Les pions en pâte de verre arrivent en deuxième position dans le décompte des objets se rapportant au domaine ludique. Sur les 256 exemplaires de notre corpus, on note que 185 (soit 72,26 %) proviennent de sites nîmois.

2.1 Typologie

Les pions en pâte de verre, de forme plus ou moins circulaire ou oblongue, présentent une face supérieure bombée et une face inférieure généralement plane. Ils sont obtenus par dépôt d'une goutte de matière en fusion sur une surface lisse. C'est ce mode de fabrication qui rend chaque pièce unique et qui explique les variations de forme ou de dimensions pouvant exister d'un objet à l'autre à l'intérieur d'un même lot. Dans la cité de Nîmes, le diamètre de ces pièces est le plus souvent compris entre 11 et 19 mm, l'épaisseur entre 6 et 7,2 mm (fig. 4). Dans de rares cas, les mesures des pions se situent en dehors de ces valeurs. Ainsi, le plus petit exemplaire de notre catalogue a un diamètre de 8,2 mm, le plus grand mesure 26,5 mm[29].

Les pions du Haut-Empire sont de couleur variable et le plus souvent obtenus à partir d'une matière opaque qui semble noire ou blanche au premier abord mais qui, sous un éclairage puissant de lumière neutre (lampe de gemmologue), s'avère parfois violette, vert foncé, bleu marine pour les objets sombres[30], jaunâtre pour les pions paraissant blancs. Les teintes translucides, rares dans notre zone d'étude (fig. 4c),

23 Ce fait semble confirmé par l'examen du mobilier découvert à Ensérune (Nissan-lès-Ensérune, Hérault), site dont l'occupation s'achève dans les premières décennies du Ier siècle apr. J.-C. En effet, ce site n'a livré que deux jetons en os (inv. n° 236 et 237). Information Sophie Izac.

24 Lors de la fouille de la *domus* de la zone 9 d'Ambrussum, ce sont les unités stratigraphiques de l'état A (125-175 apr. J.-C.) qui ont livré le plus de jetons en os.

25 Feugère, Manniez (1993), 269.

26 Fouille dirigée par Ph. Cayn.; MANNIEZ (2023), 301.

27 Raynaud (2007), 173.

28 On note leur absence, à Pompéi, dans les niveaux contemporains de l'éruption, alors que des tessères alexandrines et des pions en pâte de verre et des dés ont été mis au jour, Pace (2022).

29 Le plus petit (n° 366, Us 4340 ; diam. : 8,2 mm ; ép. : 5,6 mm) et le plus grand (n° 390, Us 5656 ; diam. : 26,5 mm, ép. : 6,6 mm) ont été mis au jour sur le site nîmois du parking Jean-Jaurès.

30 Il est probable qu'une bonne part des exemplaires noirs de la plupart des catalogues soient en fait bleus ou verts.

semblent caractéristiques des productions plus anciennes que l'on rencontre à Ensérune et qui font probablement partie des mobiliers italiques ou grecs importés[31].

2.2 Fonction

Les découvertes, dans les sépultures du Haut-Empire, de lots constitués de deux groupes de pions de couleurs différentes associés parfois à un ou plusieurs dés en os, nous permettent de déduire qu'il s'agissait de pièces d'action destinées à deux joueurs utilisées sur un plateau. C'est notamment grâce à ces ensembles homogènes que l'on a connaissance des différences de modules pouvant exister au sein d'un même set, ainsi que du nombre de pièces revenant à chacun des partenaires. Dans les lots des dépôts funéraires ou plus rarement, comme à Crémone ou à Pompéi (Italie), issus d'un site d'habitat[32], on note parfois une différence entre le nombre de pièces de chaque lot – variable d'une tombe à l'autre – et la présence d'éléments d'une autre couleur[33]. Cette grande variabilité rend impossible l'identification précise du type de jeu auquel ces pions se rapportaient.

Dans le cas des pions de très petit ou de très grand module évoqués plus haut, il est difficile d'affirmer, bien que nous les ayons classés dans le mobilier ludique, que ce choix soit vraiment judicieux. Il est, en effet, reconnu que certains de ces objets ont pu être détournés de leur fonction d'origine et utilisés pour réaliser des incrustations dans des décors muraux[34].

Lorsque, exceptionnellement, ces éléments se retrouvent en grand nombre, comme dans la tombe 15 de la nécropole de la Via Cappuccini de Brindisi qui en a livré 1121 exemplaires[35], on peut supposer que ces pions pouvaient être utilisés comme pièces de comptage.

2.3 Datation

Dans l'étude du petit mobilier de la ZAC des Halles de Nîmes rédigée avec M. Feugère, nous avions souligné que les pions étaient les premiers objets en verre à réapparaître en Gaule après l'abandon des parures laténiennes et qu'il s'agissait probablement d'importations italiques[36]. Ce mobilier attesté dès le IIIe millénaire en Grèce[37] se retrouve fréquemment dans les tombes de Macédoine et de Thrace datées du IVe siècle av. J.-C., mais aussi dans les tombes d'Étrurie, dès la fin du VIe siècle av. J.-C.[38] Comme pour les jetons, la prise en compte des éléments de notre corpus issus des niveaux les plus anciens permet de préciser la date d'apparition des pions en pâte de verre dans la région de Nîmes et de confirmer ce que nous avions proposé en 1993[39], à savoir qu'elle est antérieure à celle des jetons en os. Les données issues des fouilles récentes laissent supposer que c'est dans la période 15 av. J.-C./ 5 apr. J.-C. que les premiers pions en pâte de verre commencent à circuler dans cette cité de la Narbonnaise.

3 LES JETONS EN PIERRE

Dans cette catégorie, il convient de distinguer les éléments naturels qui sont des petits galets prélevés au bord des rivières et les objets manufacturés, plus rares, qui rappellent les exemplaires en os.

3.1 Les petits galets

Il s'agit de petites pierres plates sub-circulaires ou ovales dont les dimensions maximales varient entre 10 et 25 mm. Du fait de leur origine, il n'est pas évident, lors de la fouille des niveaux d'habitat de distinguer les galets qui ont pu servir de pièces de jeu, notamment lorsqu'ils sont isolés, de ceux appartenant au sédiment. La question ne se pose plus quand ces artefacts sont retrouvés en grand nombre (69 exemplaires)[40] et associés à un lot de 80 jetons en os, comme ce fût le cas pour le lot découvert à Murviel-lès-Montpellier (fig. 5). Il est important de signaler que l'utilisation de ces pierres naturelles dans le domaine ludique est attestée dans les tombes de Grèce et d'Étrurie padane dès la fin du VIe siècle av. J.-C.[41]. On les retrouve à deux reprises dans le mobilier ludique de Pompéi[42].

Des jetons de ce type ont été recueillis sur plusieurs sites nîmois. Le lot le plus important, daté du Ier siècle de notre ère, est celui issu du puits de la place d'Assas (71 exemplaires).

3.2 Un jeton ou palet en pierre

Le site de la ZAC des Halles à Nîmes est le seul à avoir livré un jeton en pierre. Il s'agit d'une rondelle de 38 mm (ép. : 8 mm) taillée dans une plaque de marbre rose[43].

31 La majorité des pions de Délos visibles dans les vitrines du musée de Mikonos sont en verre translucide.

32 Cecchini *et al.* (2015), 121-125; Pace (2022).

33 Manniez (2019), 190 et 195; Langlade (Gard) : 12 noirs, 11 blancs, 4 bleus ; Graveson (Bouches-du-Rhône) : 12 noirs, 10 blancs ; Nîmes T116 : 10 noirs, 10 blancs, 3 verts, 2 petits galets, 1 jeton en os. Hors catalogue : Milan Universita Cattolica, tombe Us 216 : 15 blancs, 13 bleus, 1 dé en os ; Brescia, via Dalmazia/S. Giovanni Bosco : 5 noirs, 6 blancs ; Brescia, via S. Zeno : 15 blancs, 9 bleus, Airoldi (2015), p. 116; Crémone (Italie) : 6 noirs, 7 blancs, Cecchini *et al.* (2015), 124.

34 Cool (2016), 170-174.

35 Cocchiano (2013), 244.

36 Feugère, Manniez (1993), 269.

37 Igniatiadou (2019), 148.

38 Schädler (2019), 162.

39 Feugère, Manniez (1993), 272.

40 Manniez (2022), 35-36.

41 Igniatiadou (2019), 153-155; Schädler (2019), 170-173.

42 Pace (2022), maison I,9,9 : 20 exemplaires, cf 97-98; *fullonica* de *Stephanus*, I,6,7: 42 exemplaires, cf 96 et 105-106.

43 Feugère, Manniez (1993), 289 ; Us 1014, objet n° 326, inédit.

Fig. 5. Lot de 69 pions en pierre non mesurés ; Murviel-lès-Montpellier, Saint-Julia, Us 1122, n° 81 à 149 ; datation : fin du Ier siècle ap. J.-C. (Photo de l'auteur).

4. LES PIONS EN PIERRE

4.1 Les pions hémisphériques

Ces pions, assez rares, ont un diamètre qui varie entre 14,5 et 17 mm et une hauteur comprise entre 6,9 et 9,8 mm. Trois des quatre exemplaires recensés ont été mis au jour à Nîmes sur le site du parking Jean-Jaurès (fig. 6a). Issus de niveaux précoces datés de -15/15 et de -25/25, ils apparaissent comme éléments précurseurs du mobilier de jeu en os. La découverte de quatre exemplaires du même type dans un niveau tardo-républicain d'un site de Vénétie semble confirmer l'ancienneté de ce modèle de pion[44]. Un autre exemplaire en porphyre rouge, de même type, mais un peu plus grand (diam. : 23 mm ; H. : 15 mm), a été mis au jour à Pompéi lors des fouilles du *thermopolium* de Phœbus[45].

4.2 Un pion conique en pierre

Le musée de Lattes conserve dans ses collections un petit élément conique à sommet arrondi (H. : 15,2 mm), en pierre de couleur brun-rouge, probablement en cornaline, qui semble être une pièce de jeu d'un type particulier puisqu'aucun autre objet similaire n'a été recensé dans le sud de la Gaule (fig. 6b). Bien que légèrement plus petit, cet objet rappelle les pions en faïence du jeu égyptien de senet conservé au Brooklyn Museum de New York[46]. La présence d'un petit cône approchant dans un lot de Pompéi comprenant des pions en pâte de verre et un dé confirme qu'il s'agit bien d'une pièce de jeu[47].

44 Bolla (2015), 172-173.

45 Cool (2016), 168, fig. 5, n° 3.

46 https://www.brooklynmuseum.org/opencollection/objects/3537 ; Jeu daté de la période 1390-1353 av. J.-C. (inv. 49.571.13).

47 Information Alessandro Pace. On peut rapprocher ce pion d'un exemplaire en verre, en forme d'ogive, du musée d'Aquilée voir https://artefacts.mom.fr ; fiche Artefacts PIO-4049.

Fig. 6 a). Pion en pierre couleur rose veinée ; diam. : 14,5 mm; ép. : 6,9 mm; Nîmes, parking Jean-Jaurès, n° 412, Us 6766 ; datation : 25 av. J.-C.-25 apr. J.-C. ; Manniez 2017, 175 fig. 8 et 225 ; b) : pion conique en cornaline ; diam. base : 17,7 à 17,8 mm; ép. : 15,2 mm; musée de Lattes (inv. 984.320.1) ; datation : 1/200 apr. J.-C. ; c) : pion en os ; diam. : 15,6 à 15,8 mm; ép. : 5,9 mm; musée de Lattes (inv. 984.11.3) ; datation : 1/200 ap. J.-C. ; Manniez 1984, 42 et fig. 7 ; d) : pion en os ; diam. : 15,3 à 16,6 mm; ép. : 11,1 mm; musée de Lattes (inv. 983.995.1 ; datation : 1/200 apr. J.-C. ; Manniez 1984, 42 et fig. 7, 133 ; e) : pion en os ; diam. : 29 ; ép. : 8,4 mm; Lunel-Viel, fouille I-80, couche 2 ; datation 230/250 apr. J.-C. ; Manniez 1984, 41 et fig. 7, 133 ; Manniez 1990, 273 fig. 139 et 275 ; f) ; pion en os ; diam. : 22,5 ; ép. : 5,2 mm; Ambrussum, Sablas, sond. 1968 (inv. AS 654), datation : inconnue : Manniez 1989, 134-135 ; g) : pion en os ; diam. : 23 mm; ép. : 7,2 mm; Nîmes, rue Nationale, hors stratigraphie (inv. NM-RN-230) ; datation : IIIe siècle apr. J.-C. (?) ; Manniez 1984, 42 et fig. 6, 132 ; h) : petit pion en os ; diam. : 16,6 mm; ép. : 4,2 mm; musée de Lattes (inv. 984.7.1).; datation : 1/200 apr. J.-C. ; Manniez 1984, 43 et fig. 6, n° 125 ; i) : jeton en terre cuite ; diam. : 16,2 à 17 mm; ép. : 4,2 mm; Nîmes, rue Rouget de l'Isle (2021), Us 1272 ; datation : 1/100 apr J.-C. ; j) : jeton retaillé dans une panse de céramique campanienne A ; diam. : 31,4 à 32,8 mm; ép. max : 7 mm; musée de Lattes (inv. 993.429.1) ; datation : inconnue ; k) : jeton taillé dans une panse de céramique commune ; dim. : 35,9 x 38,4 mm; ép. : 7,8 mm; Nîmes, 3-5, rue Pelloutier n° 22, Us 2097 ; datation : 25 av. J.-C./25 apr. J.-C. ; l) : jeton en plomb ; diam. : 19,6 à 20,5 mm; ép. : 3,1 mm; musée de Lattes (inv. 991.315.1) ; datation : inconnue ; m) ; tessère en os ; diam. : 27,4 mm; ép. maxi : 3 mm; Villevieille, Les Terriers, Us 4209 ; datation : 175/225 apr. J.-C. (Photos et dessins de l'auteur).

5. LES PIONS EN OS

On distingue quatre types de pions en os.

5.1 Les pions hémisphériques

Ces demi-sphères à face inférieure plane rappellent les exemplaires en pierre évoqués plus haut. Les deux exemplaires répertoriés proviennent des fouilles réalisées à Lattes[48] (fig. 6c). La face bombée d'un troisième pion à la particularité d'être décorée de deux lignes perpendiculaires de petits ocelles (fig. 6d).

5.2 Les pions larges à surface bombée

Les pions de ce groupe se distinguent des précédents par leur diamètre plus important (15 à 30 mm) que leur épaisseur. Les trois exemplaires de notre corpus, déjà publiés[49], proviennent de Lattes, de Lunel-Viel (fig. 6e) et d'Ambrussum (fig. 6f). La datation fournie par le pion de Lunel-Viel (230-250 apr. J.-C.) pourrait correspondre à la date d'apparition de ces pièces de jeu que l'on retrouve à Avenches en Suisse[50]. On signalera aussi la découverte d'un pion bombé à Alignan-du-Vent (Hérault) dans un niveau daté de la période 375-425[51], et de plusieurs autres exemplaires du même type dans les couches tardives (Ve -VIe siècles) de l'Ancien théâtre d'Arles[52].

5.3 Les pions larges à surface bombée et décor d'ocelles

Les deux exemplaires de ce type qui figurent dans notre corpus proviennent de la fouille de la rue Nationale à Nîmes (fig. 6g). Ils font partie d'un ensemble régional bien caractéristique comprenant deux autres exemplaires[53] qui se rapportent tous à la fin de l'Antiquité et qui constituent le lot de mobilier ludique le plus tardif. Un élément appartenant à la même série, décoré de trois ocelles, a été recueilli dans le comblement d'un puits marseillais daté du dernier tiers du Ve siècle[54]. Trois autres exemplaires sont conservés dans les musées d'Ostie, d'Avenches et au Metropolitan Museum of Art de New York[55].

5.4 Les pions en forme de chapeau

Ces pions de petit module (diam. proche de 15 mm), en forme de chapeau aplati, se caractérisent par une partie centrale en dôme et un revers en cuvette. Cette particularité pouvait permettre d'empiler les pièces de même type au cours des jeux. Ce type rare n'est représenté que par deux exemplaires découverts à Lattes[56] (fig. 6h).

6 LES JETONS EN TERRE CUITE

Dans un seul cas, il s'agit d'une rondelle façonnée à partir d'argile crue de couleur grise (fig. 6i). Elle a la particularité d'être ornée sur la bordure de chacune de ses faces de petites incisions concentriques[57].

Le plus souvent, ce sont des pièces subcirculaires obtenues à partir de tessons de vases –généralement non tournés ou en céramique campanienne – retaillés avec plus ou moins de soin. (fig. 6j et 6k). Ces jetons sont très rares sur les sites de la plaine littorale et semblent plus nombreux dans l'arrière-pays gardois, notamment à Laudun-L'Ardoise (Gard)[58]. Sur le site de l'Ancienne gendarmerie d'Uzès, où ils sont bien représentés (64 exemplaires), on les rencontre principalement dans les strates des IIe et Ier siècles av. J.-C. On note que seuls dix exemplaires ont été découpés dans des tessons d'époque romaine.

La fonction de ces disques, classés comme pièces de jeu, demeure mystérieuse. Certains auteurs leur ont attribué une fonction votive ou religieuse, notamment quand ils ont été retrouvés en contexte de sanctuaire[59]. S'il s'agit de mobilier ludique, nous ignorons à ce jour, pour quel type d'activité ils étaient utilisés.

7 DEUX PIONS ET UN JETON EN PLOMB

Deux pions à face supérieure bombée et un disque à bordure moulurée en plomb du musée de Lattes ont été considérés comme des pièces de jeu (fig. 6l). Ces deux types d'objet n'ayant pas été retrouvés sur les autres sites, on peut supposer, si l'identification est bonne, que ce petit lot constitue une particularité locale.

8 LES TESSÈRES EN OS

Il s'agit de rondelles dont le diamètre mesure entre 27 et 30 mm. Leur face supérieure est ornée d'une moulure en forme d'accolade et leur face inférieure, lisse, présente généralement l'indication d'un chiffre

48 Manniez (1984), fig. 7 n° 118, 119 et 120.

49 Manniez (1989), 136 fig. 90, n° 18; Manniez (1990), 273 fig. 139, n° 92.

50 Schenk (2008), 226-227. L'un des trois exemplaires de ce site est issu d'une strate datée de la période 150/250.

51 Feugère, Prévot (2008), 246.

52 raynaud (2007), 173.

53 Un exemplaire du site du Palais de Justice à Nîmes daté du Ve s. et un dernier sans provenance connue, conservé au musée de la Société archéologique de Montpellier, Manniez (1984), fig. 6 n° 121-124. Voir aussi : https://artefacts.mom.fr ; fiche Artefacts PIO-4036.

54 Reynaud (1998), 249-250.

55 Exemplaire d'Ostie voir www.ostia-antica.org image E27343 ; pion d'Avenches non daté, voir Schenk (2008), 284, n° 1017 ; exemplaire sans provenance connue (diamètre : 21 mm) conservé au Metropolitan Museum (inv. 96.9.454) et daté des environs du IVe siècle ; voir www.metmuseum.org/art/collection/search/246450.

56 Manniez (1984), 43-44, n° 125 et 126, et 132, fig. 6.

57 Nîmes/Rouget de l'Isle, Us 1272.

58 La fouille conduite par L. Vidal aux abords de la chapelle médiévale de Saint-Jean de Todon à Laudun-L'ardoise a livré une grande quantité de ces éléments (plus de 200 exemplaires). Ils proviennent de niveaux de la fin de l'Âge du Fer remaniés par le creusement des sépultures du Moyen Âge. Étude du petit mobilier en cours.

59 Fiche Artefacts JTN-3001.

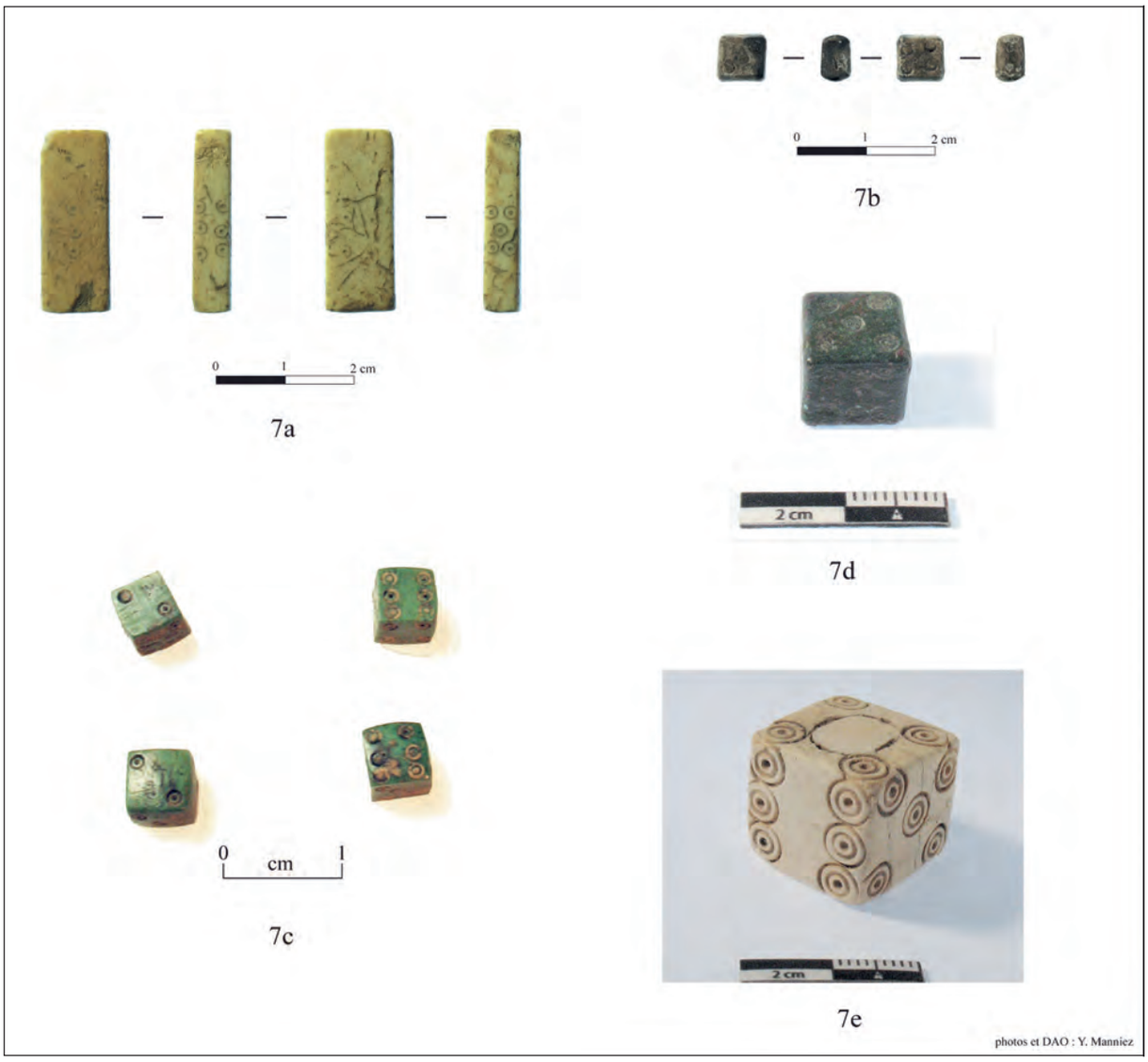

Fig. 7 a). Dé parallélépipèdique en os ; dim : 27,5 x 10,1 x 5,5 mm; chiffrage : 3 et 4 sur les faces larges, presque effacés, 5 et 6 sur les faces étroites ; Nîmes, Maison de Santé Protestante, Us 250 ; datation : inconnue ; b) : dé parallélépipèdique pré-romain en bronze ; dim. : 4,3 x 7,1 x 7,1 ; musée de Lattes (inv. 991.429.1), datation : non précisée ; chiffrage : 3 et 4 sur les grandes faces ; 2 sur l'une des faces arrondies ; c) : dé en bronze ; dim. : 10,6 x 10,7 x 10,9 ; 9,58 g. ; Nîmes, hors contexte, collection privée ; d) : lot de 4 dés miniatures en os ; dim. : 5,5 à 5,9 mm; Ambrussum,Sablas, Us 12336 ; datation : début IIIe siècle apr. J.-C. ; Berdeaux-Le Brazidec 2021 ; Manniez 2010 ; e) : dé en os ; dim. 18,3 x 20,6 x 21 mm; Nîmes, rue Rouget de l'Isle (2021), Us 3185 ; datation : Haut-Empire. (Photos de l'auteur).

romain (Béal 1983a, 325). Elles sont des variantes de type B des jetons historiés alexandrins étudiés par Ch. Bianchi et qui sont plus fréquents en Italie[60]. En l'absence d'inscription, les rondelles de ce type ont parfois été considérées comme des couvercles de pyxide.

Deux de ces disques moulurés ont été mis au jour ; le premier à Nîmes[61] sur le site de la ZAC des Halles, le second sur le site des Terriers de Villevieille (fig. 6m)[62]. Bien qu'ils ne soient pas inscrits au revers, nous les considérons comme des pièces de jeu par rapprochement avec un objet identique, découvert dans une tombe de la nécropole des Marronniers de Beaucaire, qui était associé à un jeton en os et à cinq pions en pâte de verre[63].

9 LES DÉS

9.1 Les dés préromains

Un dé parallélépipédique en os

Un seul dé de notre corpus se rapporte à la catégorie des dés parallélépipédiques. Il s'agit d'une sorte de plaquette rectangulaire qui n'est marquée que sur quatre de ces faces et qui ne présente pas les valeurs 1 et 2 (fig. 7a). On peut rapprocher cet artefact d'un objet pré-augustéen découvert à Alès (Gard)[64].

60 BIANCHI (2021), 181-183.

61 EUGÈRE, MANNIEZ (1993), 281-282, n° 143.

62 Site des Terriers, Us 4203, objet n° 9 inédit.

63 DEDET *et al.* (1978), 96; MANNIEZ (1984), 45 et 133, n° 127.

64 MANNIEZ (1984), 48 et 134 fig. 8; objet marqué sur deux faces seulement de la valeur 3, daté de -60/-20.

Un dé plat en bronze

Le musée de Lattes conserve un exemplaire d'un dé en forme de parallélépipède aplati en bronze (fig. 7b). Cet exemplaire fait partie d'un groupe comprenant deux objets gardois à chiffrage incomplet datés de la période 450-350 av. J.-C[65].

9.2 Les dés de type classique

Avec un total de 56 exemplaires, dont 55 en os, les dés constituent le troisième groupe le plus important de notre catalogue.

Typologie

Du point de vue morphologique, les dés de la cité de Nîmes se répartissent en quatre groupes les mieux représentés étant les exemplaires de petit module dont les côtés mesurent entre 7 et 10 mm et les dés moyens compris entre 11 et 17 mm[66].

On note que ces objets sont rarement des cubes parfaits : la différence de mesure entre les côtés peut varier de 2 à 5 mm. Généralement, c'est sur les deux faces les plus larges – celles qui devaient revenir le plus souvent lors des jets – que sont placés le 1 et le 6. Pour que les chances soient identiques, il est vraisemblable que les joueurs, qui avaient conscience de cet avantage, exigeaient de jouer avec le ou les mêmes dés.

Les dés miniatures (5,5 à 7 mm de côté) constituent un groupe à part pour la période antique et apparaissent comme une particularité propre à ce secteur géographique. Sur les neuf exemplaires recensés, un seul a été mis au jour en contexte funéraire. Les autres proviennent de niveaux d'habitat du Haut-Empire. Quatre d'entre eux faisaient partie de la bourse d'un joueur dans laquelle se trouvaient aussi 43 deniers ainsi que du mobilier précieux (trois bagues en argent, deux intailles) pouvant correspondre à un ou plusieurs gains, ou à du mobilier destiné à servir de mise (fig. 7c). Les monnaies les plus récentes ont permis de déterminer que ce petit trésor a été caché, au début du IIIe siècle de notre ère, dans un mur du quartier bas de la station routière d'Ambrussum[67].

Parmi les dés de taille moyenne, on signalera la présence d'un exemplaire rare en bronze malheureusement découvert hors contexte[68] (fig. 7d).

Les dés de grandes dimensions sont particulièrement rares. Deux exemplaires conservés dans les collections nîmoises et un troisième mis au jour, en 2021, rue Rouget-de-l'Isle à Nîmes (fig. 7e), mesurent entre 18 et 24 mm[69]. Le plus grand exemplaire, qui est conservé au musée de la Romanité de Nîmes, n'a pas été pris en compte dans notre corpus car sa provenance est inconnue[70]. Ces trois dés sont les seuls à avoir été fabriqués, non pas dans l'épaisseur du périoste de gros os mais plutôt dans le pédicule de bois de cerf[71]. Il a donc été nécessaire de colmater en deux points opposés, au moyen de deux petits bouchons, les enlèvements de matière réalisés dans la partie spongieuse. Cette pratique assez fréquente pour la réalisation des dés d'époque préromaine du monde méditerranéen[72] et qui semble s'être prolongée dans les régions septentrionales de l'Empire durant tout le Ier siècle[73], n'a pas eu de postérité dans le sud de la Gaule, ce qui a eu pour effet de réduire la taille des dés et de stabiliser leurs dimensions maximales autour de 18 mm. Plusieurs raisons à cet abandon peuvent être invoquées. La première est technique : il est certainement plus facile de mettre en œuvre des segments de matière non perforés en leur centre. On peut aussi supposer que la grande dimension des cubes et la réalisation des tampons demandaient un surcroît de travail. La deuxième raison est économique. Même si l'os était une matière première abondante et bon marché, le débitage de segments dans la partie pleine que forme le périoste, permettait d'obtenir un plus grand nombre de pièces. La dernière raison est d'ordre pratique : les dés de petite taille étaient plus faciles à emporter, voire à cacher lorsque les jeux étaient soumis à un contrôle ou frappés d'interdiction.

Datation

Les dés de forme cubique ou approchante, dont l'origine est fort ancienne et que l'on retrouve souvent associés à des pions en pâte de verre ou en pierre dans les tombes grecques, sont rares en Gaule avant la conquête romaine. L'exemplaire le plus ancien de notre catalogue a été mis au jour à Lattes (Hérault) dans un niveau daté du Ve siècle av. J.-C.[74]. Il correspond certainement à un objet importé du monde étrusque qui restera un *unicum* pendant plusieurs siècles. Le véritable développement de ce type de jeu est contemporain de l'apparition des pions en pâte de verre, comme le suggère la découverte du lot de la propriété Solignac à Nîmes daté de la période 1-40[75], mais il faut attendre la seconde moitié du Ier siècle apr. J.-C. pour que les dés se diffusent dans les *domus* de ce chef-lieu de cité.

65 Py 2016, 493.

66 Manniez (2010), 20-21.

67 Berdeaux-Le Brazidec (2004), 268-269.

68 Objet nîmois sans provenance précise connue (dim.: 10,6 x 10,7 x 10.9 : masse : 9,58 g ; chiffrage de cercles simples pointés : 1, 2, 6I, 5, 4, 3/).

69 Dé provenant de la fosse FS3185 masquée par un niveau daté de 20-100 apr. J.-C. ; dim. : 18,3 x 20,6 x 21 mm. Un exemplaire plus grand, de 26 mm de côté, a été mis au jour à Pompéi dans le *thermopolium* de la Maison des Vestales (VI,1,5), Cool (2016), 168, fig. 5.

70 Béal (1984), 87.

71 Observations faites par V. Forest.

72 Deux dés creux de grande taille d'Aléria datés de 475-450 av. J.-C., Jehasse (1973), 470 et 526, pl. 166; trois dés de même type provenant de la tombe L de la nécropole dell'Osteria à Vulci (fouilles Margarelli) datés de 530-510 av. J.-C. au musée de la Villa Giulia à Rome.

73 Manniez (2010), 18 ; Fluch (2019).

74 Py 2016, 193.

75 Manniez (1990), 210-211.

À Ambrussum, les dés sont absents de l'habitat qui se met en place sur l'oppidum vers 40 de notre ère. Les trois plus anciens exemplaires du quartier bas proviennent de strates des années 50-75[76]. Par la suite, ce mobilier de jeu semble connaître un grand succès puisque les établissements du relais routier ont livré 16 exemplaires, soit près d'un tiers du total des dés recensés.

10. LES ASTRAGALES

L'osselet, nommé astragale, du grec *astragalos* ou *talus,* terme latin utilisé par les archéozoologues, est un petit os du tarse de la patte arrière des ovicapridés (mouton, chèvre), mais aussi du cerf, du bœuf ou encore du porc.

Les éléments de petite taille proviennent généralement d'ovicapridés. Leur usage est varié. Ils ont pu servir pour les jeux d'adresse, particulièrement prisé des enfants et des jeunes filles ou faire office de dés pour des jeux plutôt pratiqués par les hommes. Leur usage est également bien attesté comme matériel divinatoire[77].

10.1 Les astragales en os

Si ces pièces du squelette animal peuvent être aisément rangées comme objets lorsqu'elles sont associées à des dépôts de mobiliers dans les sépultures antiques, il est en revanche beaucoup plus difficile de les distinguer des restes fauniques dans les strates des habitats. Il est donc probable que de nombreux *talus* utilisés pour le jeu n'aient pas pu être identifiés en tant que tels et c'est pour cela que le nombre d'osselets reste relativement faible. À l'inverse, on peut penser que dans le lot des astragales prélevés, une certaine proportion de ceux qui ne présentent pas de traces particulières sont de simples témoins d'une activité bouchère.

Sur les cinq exemplaires de notre catalogue, seuls les deux qui présentent une perforation transversale peuvent être considérés comme de véritables artefacts. La présence d'une tige en plomb à extrémités rivetées, dans le trou de l'un de ces deux osselets, apporte un éclairage intéressant sur la raison d'être de ces perforations que l'on considère souvent comme des aménagements destinés à transformer l'astragale en pendentif. Si cette hypothèse reste plausible, il convient désormais de considérer qu'une partie des osselets ont été percés pour permettre l'ajout et le maintien en place d'une sorte d'agrafe en plomb destinée à les rendre plus lourds (fig. 8a, 8b).

10.2 Les astragales en plomb

Le musée de Lattes conserve six exemplaires d'osselets en plomb stylisés, probablement réalisés à partir de moules à valve unique correspondant à l'empreinte d'une seule des faces larges. Un objet approchant, non retenu dans notre corpus car considéré comme un poids, a été mis au jour à Nîmes, sur le site de la ZAC des Halles[78]. Les valeurs pondérales des exemplaires lattois ne correspondant pas aux subdivisions de la livre romaine, nous sommes tentés de ranger ces reproductions en plomb, au demeurant fort rares[79], dans le mobilier ludique (fig. 8c, 8d).

11. LES BILLES

Bien que les textes anciens ne livrent pas de façon claire le nom des billes[80], l'archéologie permet de confirmer que ce jeu était pratiqué par les enfants durant l'Antiquité. Des pistes avec lignes de petites cuvettes aménagées sur les marches d'escalier ou sur les seuils de bâtiments antiques de Rome, mais aussi de certains sites d'Afrique du Nord et d'Asie Mineure et quelques « petites boules » découvertes sur les îles grecques de Délos et Rhénée[81] témoignent de la pratique de ce loisir dans la culture gréco-romaine[82]. Les billes, qui pouvaient être en terre cuite, en verre, en calcaire ou en marbre, sont toutefois peu fréquentes en Gaule[83]. Trois sites de la région de Nîmes ont livré les huit de notre corpus : Villégiales des Bénédictins et Saint-André de Codols[84] à Nîmes et Ambrussum (oppidum et quartier bas)[85]. Dans six cas, il s'agit d'exemplaires en pierre et dans un cas, d'une petite sphère en terre cuite. Ces billes ont un diamètre qui varie entre 15 et 22 mm (fig. 8e, 8f, 8g).

12. Les jouets

Les observations relatives à la rareté des jouets dans les ensembles funéraires de Narbonnaise[86] s'avèrent aussi valables pour les sites d'habitat de la cité de Nîmes.

12.1 Les poupées en terre cuite

La découverte, dans le comblement du puits nîmois de la place d'Assas et à Lattes, de deux jambes en terre cuite (dont une incomplète) perforées à leur sommet, confirme l'existence de poupées articulées de petites

76 2 exemplaires de l'Us 19004 ; 1 exemplaire de l'Us 9395.

77 Carè (2013), 56 ; Zwierlein-Dielh (2013), 60.

78 Feugère, Manniez (1993), 296-297.

79 Un exemplaire en plomb d'époque romaine est conservé au Staatliche Museen de Berlin (inv. Misc. 10248).

80 *Ocellatta* d'après Rich, Rich (1861), 432.

81 Zaphiropoulou (1973), 614, 632-633.

82 Schläder (2019), 66-67.

83 Le lot le plus important (17 exemplaires en verre) a été découvert à Lillebonne, Schläder (2019), 67, fig. 6.

84 Villégiales des Bénédictins : Us 1024, bille en pierre brun-rouge inédite (diam. maxi : 17,8 mm) ; Saint-André de Codols : billes en pierre des Us 3062 et 4034, bille en terre cuite de l'Us 3019, Pomarèdes *et al.* (2009), 319, 341-342.

85 Bille du secteur IV de l'oppidum (inv. AD 183-12), non publiée ; bille de la zone 40 du quartier bas fouille de 1980 ; bille de la zone 12 (Us 12265), inédite, diamètre et matière indéterminés, connue d'après l'inventaire du dépôt archéologique ; 1 bille en pierre de la zone 9, Us 9792, n° 1899, Manniez, Dupuy (2009), 158.

86 Manniez (2019), 193.

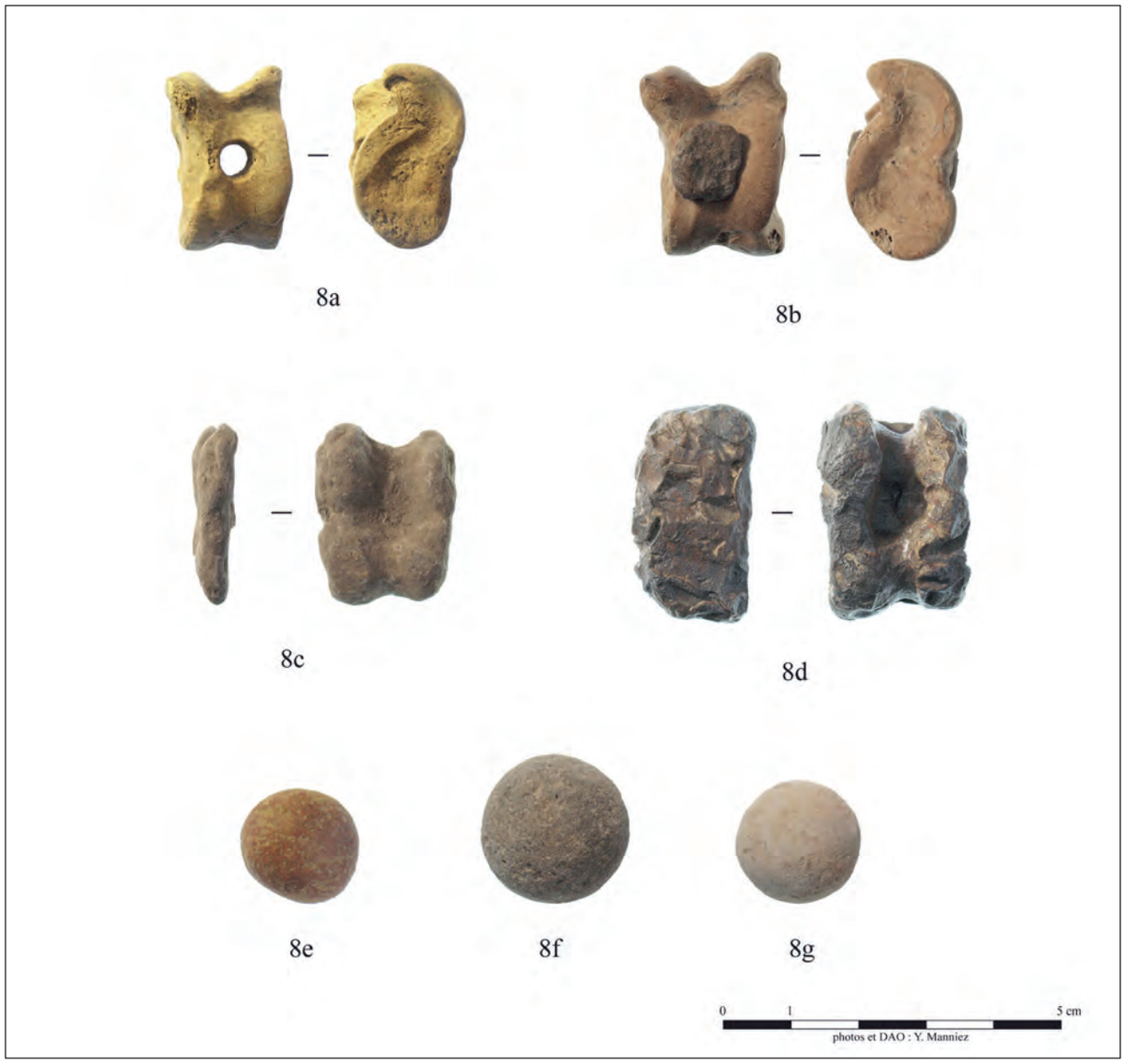

Fig. 8 a). Astragale en os ; L. : 27,5 mm; l. maxi : 17,7 mm; Nîmes, fouille Jean-Lassère (1989), Us 720, datation : Antiquité ; b) : astragale en os ; L. : 30,2 mm; l. maxi : 20,4 mm; musée de Lattes (inv. 991.28.1) ; présence d'une sorte de rivet en plomb destiné à alourdir l'objet ; datation : inconnue ; c) : astragale en plomb ; L. : 27 mm; l. maxi : 20,3 mm; ép. maxi : 6,4 mm; 18,18 g ; musée de Lattes (inv. 991.28.1 ; d) : astragale en plomb ; L. : 32,5 mm; l. maxi : 21,1 mm; ép. maxi : 18 mm; 84,88 g ; musée de Lattes (inv. 991.876.1b) ; datation : inconnue ; e) : bille en pierre indéterminée brun-rouge ; diam. : 16 à 17,8 ; Nîmes, Villégiales des Bénédictins, n° 145, Us 1004 ; datation : 1-200 apr. J.-C. ; f) : bille en calcaire gris foncé ; diam. : 20 ; Ambrussum, Devès ; sans n° d'inv. ; datation : inconnue ; g) : bille en calcaire gris clair ; diam. : 18,5 ; Ambrussum, Sablas, zone 9, Us 9792 ; datation : 125/175 apr. J.-C. ; Manniez, Dupuy 2009, 158, n° 1899 (non représenté). (Photos de l'auteur).

dimensions[87] dont l'origine remonte au moins au Ve siècle av. J.-C.[88]. La facture médiocre de l'élément complet, constitué d'un simple boudin d'argile replié à une extrémité pour former le pied, contraste avec celle d'une autre jambe de poupée, beaucoup plus réaliste, découverte à Lattes (fig. 9a), et qui rappelle un membre de même type découvert à Fréjus dans un contexte daté de la période -25/80[89].

87 La hauteur restituée de ces poupées est de 10 à 15 cm, si l'on considère que la longueur d'une jambe correspond à la moitié de la hauteur du corps.

88 Manson (1992), 48.

89 Feugère (2009), 182, fig. 2, n° 8.

12.2 Une figurine en terre cuite

Le puits de la place d'Assas à Nîmes a aussi livré deux fragments qui semblent appartenir à une même statuette en terre cuite représentant un gallinacé. Cette figurine, malheureusement incomplète, pourrait faire partie des *crepundiae* destinés aux très jeunes enfants et correspondre à un hochet dans lequel étaient enfermées de petites billes d'argile destinées à faire du bruit[90]. Par sa facture assez sommaire, notamment son œil globulaire, cet objet peut être rapproché d'une figurine apulienne associée à de la vaisselle et du mobilier miniature dans une

90 Durand (1992), 12; Rouvier-Jeanlin (1995), 78.

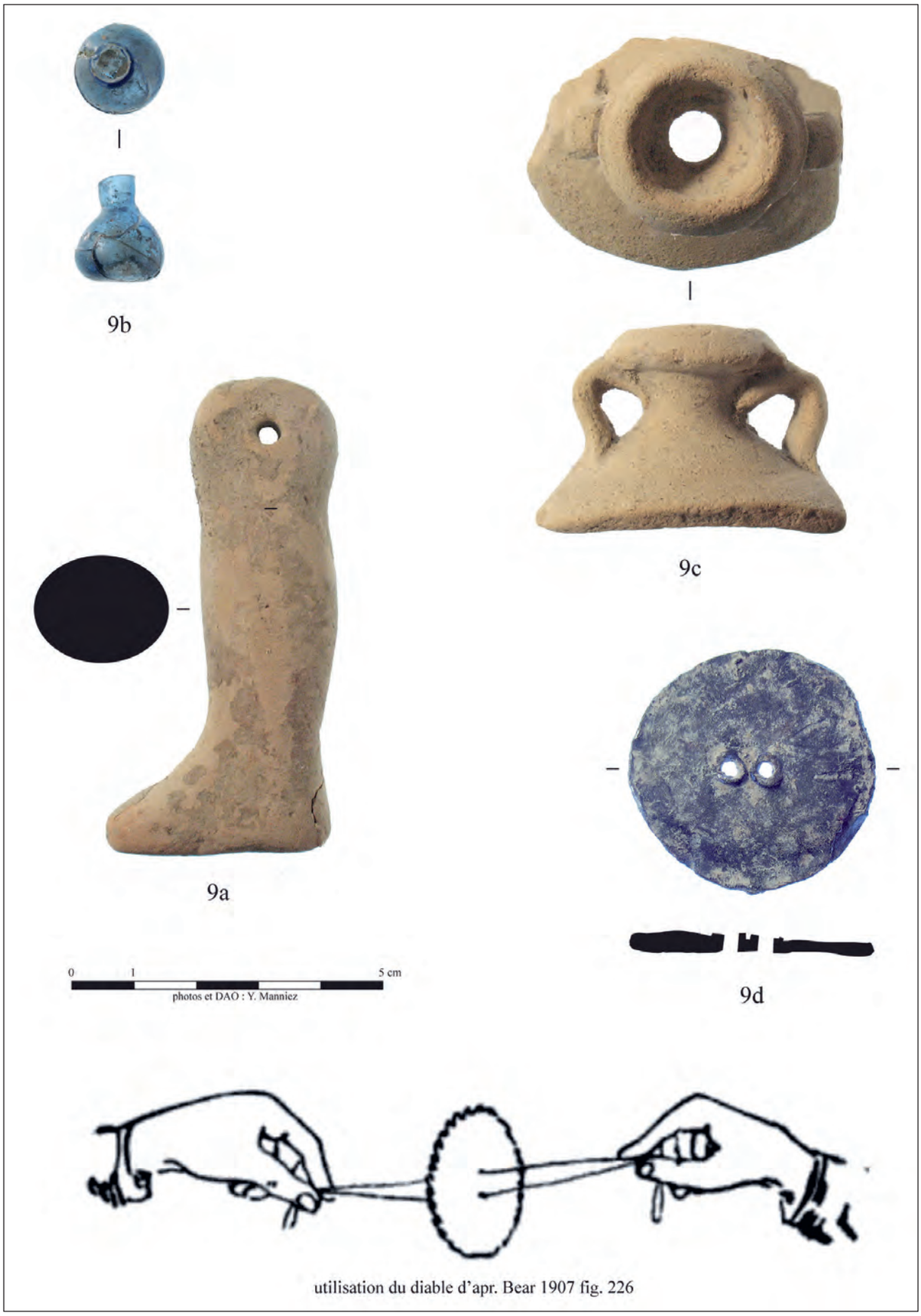

Fig. 9 a). Jambe de poupée en terre cuite beige ; L. : 77,6 mm; l. maxi : 36,2 mm; ép. ; 17,3 mm; musée de Lattes, (inv. 991.511.1) ; datation : inconnue ; b) : vase miniature en verre bleu ; H. act. : 17,4 mm; diam. : 14,5 mm; musée de Lattes (inv. 982.139.1) ; datation : inconnue ; c) : amphore miniature de forme Dressel 20 ; H. act. : 34,2 mm; l. act. : 50,8 mm; Nîmes, collection privée ; datation : Antiquité ; d) : diable en plomb ; diam. : 39,4 à 39,7 mm; ép. : 18 mm; Nîmes, rue Léopold-Morice. (Photos de l'auteur, dessin de Bear 1907).

tombe d'enfant du IVe siècle av. J.-C.[91], ou du coq en terre cuite du site suisse de Vindonissa considéré comme un hochet[92]. Il est évident que de tels jouets ne pouvaient être mis entre les mains du bébé. C'est la mère ou la personne chargée de la surveillance du nouveau-né qui devait agiter cette figurine afin de distraire ce dernier[93].

12.3 Les récipients miniatures

Du fait de sa petite taille, c'est dans la catégorie des jouets qu'il convient probablement de ranger le balsamaire de petite taille (H. : 17,4 mm) en verre bleu découvert à Lattes (fig. 9b). Bien que fabriqué dans une matière fragile, ce petit récipient a pu faire partie de la panoplie d'une jeune fille au même titre que la vaisselle en plomb que l'on rencontre parfois dans les sépultures[94].

Il en est certainement de même pour l'amphorette en terre cuite qui semble être la reproduction, en modèle réduit, d'un contenant de forme Dressel 20 (fig. 9c).

12.4 Un diable en plomb

Deux sites nîmois[95] ont livré chacun un exemplaire d'un objet circulaire en plomb à double perforation centrale qui ressemble à un gros bouton (fig. 9d). Des rondelles approchantes, privées de tout contexte, apparaissent souvent sur les sites de détection comme des lests de robe. Si cette identification, bien que curieuse, est envisageable pour des exemplaires de petit diamètre datables des périodes récentes, il ne semble pas possible de la retenir pour ceux qui proviennent assurément de contextes antiques. Plusieurs indices nous incitent à voir une parenté entre ces disques et les artefacts que la littérature archéologique nomme *rhombus*, rhombes ou rhombos par comparaison avec des instruments de sortilège en forme de losange ou des fuseaux[96] ou avec des aérophones de certaines peuplades d'Océanie, d'Amérique du Sud et d'Afrique noire. À cause de leur forme, il semble cependant plus juste de rapprocher les deux objets nîmois du iynx « ce disque que l'on faisait tournoyer dans le cadre de procédures magiques pour attirer la chance en amour »[97] ou du diable[98], classé lui aussi comme instrument de musique et qui possède parfois une bordure crantée.

Dans les trous de ces petites roues à bords lisses, que nous supposons liées au domaine ludique, devait passer un cordon dont les extrémités étaient reliées de manière à former un anneau fermé. En tirant simultanément sur les deux boucles du cordon passées autour des majeurs, puis en les rapprochant, on imprimait à la rondelle un mouvement de rotation. C'est apparemment avec ce type d'ustensile que joue Éros sur une représentation d'origine inconnue[99] ou sur le chaton gravé d'une bague en or du IVe siècle av. J.-C. conservée au British Museum de Londres[100].

Dans les Cyclades, trois objets de pierre en forme de losange à bords concaves, percés en leur centre et considérés comme des jouets, ont été mis au jour dans des sépultures d'enfants, deux à Paros et un à Rhénée[101].

CONCLUSION

L'étude quasi exhaustive dont les résultats sont exposés ci-dessus, par son ampleur, livre une image, probablement assez réaliste, du mobilier ludique en usage à Nîmes et dans quelques agglomérations de sa cité pendant l'Antiquité et principalement durant le Haut Empire.

Le premier constat qu'elle conduit à faire est celui de la relative abondance des objets de loisir (880 artefacts) sur un territoire somme toute assez réduit (rayon de 50 km maximum) situé autour du chef-lieu de cité.

Le deuxième est l'absence de découvertes exceptionnelles, le caractère modeste et peu diversifié des pièces de jeu, ainsi que la rareté des jouets qui laisse supposer que ce mobilier, dans l'habitat comme dans les contextes funéraires, était en majorité constitué d'éléments en matériaux périssables : bois, tissus principalement.

Parmi les artefacts du premier groupe, on note la forte proportion des jetons en os qui, avec un total de 325 exemplaires, représentent près de 37 % du mobilier étudié. La présence de quelques-unes de ces rondelles dans des contextes à faible amplitude chronologique amène à situer leur apparition dans la région nîmoise dans le premier tiers du Ier siècle apr. J.-C.

La présence de ce mobilier de jeu, à Nîmes, dans les niveaux précoces du Haut Empire, alors qu'il est méconnu à Pompéi au moment de l'éruption de 79[102] et semble rare dans les niveaux postérieurs à cette

91 Oakley (2003), 176.

92 Dasen (2019), 33.

93 Sur les hochets voir: Dasen, Pfäffli (2013), 36 et Dasen (2017).

94 Mathieu (2014), 15. Sur ces miniatures en plomb, voir Darani (2021).

95 Maison de Santé Protestante, objet n° 90, Us 450 et rue Léopold-Morice, objet n° 26, Us 2223 (inédits).

96 Daremberg, Saglio (1877-1919), vol. IV.2, s.v. *rhombus*, 863.

97 Dasen (2018), 30.

98 Cet objet, nommé Saw-Mill en anglais fait partie des jeux à la mode aux Etats-Unis, au début du XXe s. Bear (1907), 360, fig. 226.

99 Daremberg, Saglio (1877-1919), vol. IV.2, 863, fig. 5940.

100 https://www.britishmuseum.org/collection/object/G_1888-0601-1, inv. 1888,0601.1.

101 Zaphiropoulou (1973), 632; Zaphiropoulou (1994), §14 fig. 27.

102 Information A. Pace (étude du mobilier en cours). Le mobilier de jeu en os est bien conservé à Pompéi mais il consiste en dés et jetons de type alexandrins, Bianchi (2021), 186.

date des fouilles italiennes[103], amène à s'interroger sur l'origine de ces jetons en os qui pourrait être provinciale, voire nîmoise.

Si l'on tient compte des surfaces fouillées[104], on constate aussi que le nombre des jetons découverts à Nîmes (106 exemplaires) est proportionnellement plus faible que celui de certains sites ruraux (219 exemplaires), ce qui s'explique peut-être par des pratiques de jeu différentes. Grâce à des lots perdus par des joueurs, il est possible de distinguer les pièces d'action, dont la face supérieure est ornée de gorges concentriques, des jetons aux faces lisses utilisés comme numéraire au même titre que les petits galets.

Les pions en pâte de verre, dont l'origine est gréco-italique, constituent le deuxième groupe le plus important de notre catalogue, du point de vue numérique. Avec 184 exemplaires (74,5 % du total de cette catégorie), le chef-lieu de cité arrive en tête. Il est intéressant de noter que le nombre des pions, mis au jour dans cette ville est presque trois fois plus important que celui des pièces retrouvées dans la totalité des agglomérations rurales. Il semblerait donc que certains jeux – vraisemblablement des jeux de plateau et/ou de stratégie, si l'on se réfère aux découvertes faites en contexte funéraire – aient eu plus de succès en ville qu'à la campagne.

Là encore, la prise en compte de quelques éléments issus de strates anciennes dont la datation est assurée, nous a donné l'occasion de situer la date d'émergence de ces artefacts, dans notre zone d'étude, avant celle des jetons en os, dans la période comprise entre 5 av. J.-C. et 15 apr. J.-C.

L'examen des dés, qui font eux aussi partie des objets les plus courants, révèle là encore quelques particularités. Bien que connu des Grecs et des Étrusques, ce mobilier ne s'implante véritablement dans la région nîmoise qu'à l'époque romaine. Les éléments de gros module (dimensions maximales entre 21 et 24 mm), obturés à l'emplacement du canal médullaire, sont très rares dans la cité de Nîmes ; les deux exemplaires découverts lors de fouilles sont à considérer comme des prototypes d'époque augustéenne qui n'ont pas eu de postérité. La grande majorité du lot est constituée de dés, en forme de cube plus ou moins parfait, dont les côtés mesurent de 7 à 18 mm.

Le fait marquant qui ressort de l'étude de cette catégorie est que le nombre de dés cubiques en os exhumés à Nîmes (13 exemplaires) est nettement inférieur à celui des dés provenant des sites ruraux (42 exemplaires). Il est probable que ce déficit ne soit pas fortuit mais plutôt lié, là encore, à des pratiques ludiques différentes ou à une réglementation plus stricte, en ville par rapport à la campagne, sur les jeux de hasard.

On sait, par les auteurs anciens, qu'à Rome, dès l'époque républicaine, les jeux de hasard, considérés comme un fléau de la société, sont défendus sous peine de fortes amendes et qu'ils ne sont tolérés que pendant les Saturnales[105].

Le grand nombre de dés à Ambrussum est probablement à mettre en relation avec la position de ce relais sur la voie Domitienne, à la présence, dans le quartier bas, de plusieurs auberges destinées à accueillir les voyageurs et à la nécessité de les occuper durant les haltes. La découverte d'un petit trésor comprenant des deniers et du mobilier précieux associés à quatre dés en os, mais à aucun jeton, est le témoignage probant de pratiques ludiques avec mise d'argent qui avaient cours sur ce site et qui étaient, peut-on supposer, moins soumises à contrôle que celles de la ville de Nîmes.

En marge de ces grandes catégories, notre étude a aussi mis en lumière quelques objets plus rares ou inédits, que l'on peut rattacher à l'univers du jeu.

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103 Le lot le plus important de jetons en os découvert à Ponte Gardena - Maurina (2015), 123 - comprend 13 jetons dont 10 du type 5, dont 4 issus d'un niveau d'incendie daté des IIe-IIIe siècles (informations Chiara Bianchi et Barbara Maurina). Un seul jeton de type 7 figure dans le mobilier de jeu en os du musée d'Ostie voir www.ostia-antica.org image E27343.

104 24 jetons en os sur 6500 m² à Nîmes/parking Jean-Jaurès ; 20 jetons sur 530 m² pour la *domus* 9 d'Ambrussum.

105 Daremberg, Saglio (1877-1919), vol. I.1, 191-192 s.v. *Alea*; Becq de Fourquières (1869), 320-324. À la fin du Ier siècle av. J.-C., le poète Horace, nous informe que les jeux de dés sont interdits par la loi : Horace, *Odes*, 3.24.55 «L'enfant de libre race ne sait plus se tenir à cheval, il craint de chasser, et il est plus habile au jeu, soit au cerceau Grec, soit aux dés proscrits par les lois». Un siècle plus tard l'engouement pour les jeux n'a pas cessé ; Juvénal écrit que les joueurs ne jouent plus seulement leur bourse mais leur coffre-fort (Juvénal, *Satires* 1.17).

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Wrote for luck? Unofficial literacies and gaming counters from Roman Britain

INTRODUCTION

Counters are frequent small finds from Roman Britain and across the wider empire. Roman gaming practices incorporated several ancient board games, probably originating in the Greek East and Egypt. The most well-known are *XII Scripta*, played with both counters and dice, and *Ludus Latrunculi*, a game of military strategy and tactics, played on a board without dice.[1] These have parallels in games like draughts or backgammon, although it is risky to rely too closely on modern comparators. Some classical texts also describe games of chance, often in moralistic treatises which condemn gambling alongside vices of idleness and drunkenness.[2] In addition, some art historical sources depict games being played, such as the wall painting showing a dice game from the bar of Salvius in Pompeii.[3]

Archaeological finds include gaming counters, boards, dice and shakers. For Roman Britain, these are largely recorded in dispersed excavation site reports, although Stephen Greep's thesis on bone artefacts provides a very useful starting point.[4] Gaming pieces are occasionally discovered as surface finds by fieldwalkers or as "eyes-only" finds by metal-detectorists. We also have sources such as the Roman Rural Settlement Project, the Portable Antiquities Scheme database and, for counters with graffiti, the Roman Inscriptions of Britain.[5]

Terminologies vary, with interchangeable labels such as roundels, counters, and discs commonly used. Most bone counters exhibit a central indentation where the disc was fitted to the lathe; this is often described as a lathe indent, compass-hole or "chuck mark". I use the terms "obverse" and "reverse" for the top and bottom of the counter respectively. The "top" face has the lathe indent and is generally countersunk or bears concentric grooves, although as will be shown below, there are occasions where this may not be the upper surface when in play. "Rim/edge" is used to mean either the vertical part of the circumference (rim) or the very outer part of the face (edge). Sometimes the distinction between the two is blurred, hence rim/edge as a composite term.

Objects interpreted as gaming pieces are made from animal skeletal material, most often bone, sometimes antler or even ivory, as well as pottery, glass, lead, and stone. Different materials coexisted, with glass examples dating from slightly earlier (1st century CE) and bone types becoming more widespread in the 2nd to 3rd centuries CE.[6]

Counters are rare in Iron Age contexts in Britain, becoming more common on Romano-British sites. Peri-conquest grave goods of counters and boards are known from King Harry Lane, *Verulamium* and the so-called Doctor's and Warrior's graves at

1 Austin (1934); Austin (1935); Crummy (1983); Keegan (2014) 215; MacGregor (1976).

2 Ovid *Ars Amatoria* 3 (trans. J. Mozley, Loeb Classical Library), *Tristia* II (trans. A. Wheeler, Loeb); Martial *Epigrams* XIV, 17 (trans. D. Shackleton Bailey, Loeb); Varro *De Lingua Latina* II, 10.22 (trans. R. Kent, Loeb).

3 Cool (2016), 166.

4 Greep (1983).

5 https://archaeologydataservice.ac.uk/archives/view/romangl/; https://finds.org.uk/database; Collingwood, Wright (1991).

6 Cool (2016), 174; Cotton (2001), 13.

Stanway, Colchester.[7] The Knowth Gambler's grave in Ireland demonstrates the penetration of board games beyond the frontiers.[8] Counters are found widely across Roman Britain, in both urban and rural locations, forts and towns, baths and burials. This social distribution is discussed below (Section 4.1.3).

There are three main typological schemes for Romano-British bone gaming counters.[9] S. Greep divides them into Types 1-4: The simplest and earliest counters are plain and flat (Type 1). These develop into those with countersunk obverses (Type 2). Flat counters with concentric grooves on one surface date throughout the Roman period (Type 3). Later examples (Type 4) are convex or domed and perhaps provided prototypes for early medieval plano-convex pieces.[10]

S. Greep's most recent research suggests that his Type 1 counters were introduced in the 1st century CE (e.g. at Caerleon *circa* 75-110 CE) and continued in use into the 2nd. They are demonstrably earlier than his Type 2, which came into use in the early to mid 2nd century and persisted into the 3rd (again at Caerleon, in deposits dating *circa* 160-230 CE). Type 3 counters overlap with the chronologies of both these types, and Type 4, while uncommon, is generally of Roman dating.[11]

Who were the people playing board games and games of chance in Roman Britain? Were they played by both soldiers and civilians, young and old, women and men? Were certain games restricted by social status or group affiliation? In the classical world, men, women and children all played games. Summer Courts establishes that women from all social backgrounds played games in the Roman world, identifying a duality between the propriety of gaming in public and private.[12] Children's games differed from adults', but men and women could participate in the same games, sometimes together.[13]

Most games of chance were played for profit. Ulrich Schädler observes that a society which could afford to play games was one which had surmounted the daily fight for survival. In the mid-Roman period, the earlier emphasis on gaming artefacts made from luxury materials in wealthy burials began to shift, but the symbolism of prosperity, good fortune and virtue remained connected.[14]

How certain can we be that counters were used in conjunction with game boards? A comparison of average sizes of board "squares" with bone counter diameters appears to confirm this supposition. S. Greep gives an average diameter of 20mm for Type 1-3 bone counters and 22mm for Type 4 from Roman Winchester. He also notes the Romano-British averages are Type 1: 18mm, Types 2 and 3: 20mm, and Type 4: 23 mm.[15] One of the key sources of data for inscribed counters is the *Roman Inscriptions of Britain Volume II, Fascicule 3* (henceforth RIB II, see Section 4). The average diameter of bone gaming counters in RIB II is 19.5mm (n=372). This diameter would fit suitably inside the average game board "squares" identified from *Vindolanda*, Richborough, and Corbridge, with widths falling mainly in the range of 20-40 mm.[16] Ceramic or stone discs, which are sometimes identified as counters, are often larger.[17]

In reality, small bone discs could have been used for a variety of purposes, including accounting, gaming and divination. Graffiti scratched on the roundels may give us some insights into their functions and uses. Inscriptions most often appear on bone discs, while they are infrequent on other materials, probably simply due to the ease of carving into bone. The particular focus of this paper is the role of graffiti on gaming counters and how they can contribute to our understanding of literacy and numeracy in Roman Britain.

1. Graffiti on Gaming Counters

A variety of symbols was inscribed on bone gaming counters. Their meanings and interpretations are often ambiguous. The most common graffito is a simple two-stroke "X" on the reverse, while others display much more complex and elaborate groups (and sequences) of markings. Counters with the X symbol are also known from elsewhere in the Roman world, e.g. in Moesia Superior.[18] Other variants include a six-point star which is akin to the X, with an additional stroke through the centre-point. This may be a method of writing the number IX or XI, although this is unlikely. Robin Collingwood and Richard Wright interpret the six-point star motif as representing "*denarius*", perhaps for use as gambling chips.[19] This could have been the case, although it does not explain the other many and varied inscriptions on counters. Single letters which do not refer to Roman numerals, and letters in combination, are thought to denote personal names. My research also suggests some alternatives relating to the calendar, outlined below.

7 Crummy (2007); Schädler (2007).

8 Hall, Forsyth (2011), 1327-31.

9 Crummy (1983), 91; Greep (1983); Greep (1986); Greep (2023); Kenyon (1948), 266, fig. 91

10 Greep (1998).

11 Greep (1986) 202; Greep (2023), VI Part ii.

12 Courts (2022), 59, 68.

13 Schädler (2013), 2842.

14 Schädler (2007), 374.

15 Greep (2023), Table 7.25.

16 Courts, Penn (2021), 2 and fig 4.

17 Moffett (2018).

18 Janković (2018), 245 fig 11.5.

19 Collingwood, Wright (1991), 105-6.

The term "graffiti" encompasses a wide variety of markings, from single letters or numerals to longer texts and drawings. Graffiti on gaming counters are generally assumed to be secondary rather than part of the manufacture and intended design. On some examples it is possible to discern more than one hand or multiple episodes of inscription.

From the mid-1st century BCE in Britain, familiarity with Latin letters and numerals began with imports of coins.[20] Under Roman occupation, "official" literacies appeared on monuments, gravestones, and altars: the language of administration, religion, and power, as well as correspondence, such as the *Vindolanda* tablets. Here, I use the phrase "unofficial literacies" to describe writings and marks which occurred outside of these officially sanctioned, and predominantly high status, practices.

Modern graffiti are often considered transgressive and destructive, but also a form of outsider art.[21] Are graffiti on counters a sign of resistance to Roman imperialism? While not strictly rebellious or damaging, "graffiti" is commonly used to describe markings on gaming counters and other items. Individual names were also often scratched on finewares and plain samian tableware (e.g. "IVNIANI" PAS: PUBLIC-FBA44F). This suggests personal ownership of vessels and the spread of at least a limited degree of literacy among some sections of the population. Questions remain over whether such inscriptions really signify widespread literacy and numeracy beyond officialdom.

2. Luck, Literacy and Power

Mark Hall considers play as one of the methods of cultural hybridity and transfer which enabled social boundaries to be crossed and transformed.[22] The earliest links between writing and gaming in Britain occur in the mid-1st century CE, at Stanway (Colchester) where gaming pieces, boards and an inkwell were found, and at Litton Cheney, Dorset, where a stylus was discovered alongside a set of gaming counters. Mark Hall and Katherine Forsyth draw parallels between the introduction and adoption of gaming with the spread of literacy as "part of a much wider process of cultural response manifest in the archaeological record of pre-conquest Britain."[23]

Ellen Swift discusses the role of artefacts (specifically dice) and the links between gambling and fate and fortune in the Roman world. In both life and games people took chances and anticipated divine intervention. Material culture is seen as an "active communicator" in these transactions, embodying a potent form of agency.[24] Gaming also allowed expression of the performative nature of literacy in a society which often conveyed status through elite activities.[25]

Simple practices such as board games encode complex social strategies and relationships. Arguably, graffiti on counters could represent a means of propitiating the divine forces of good fortune and magic. Nicholas Purcell claims that the dual role of letters as numerals in antiquity makes them inherently numerological.[26] Counters, like knucklebones and dice, could have been used for casting lots in games of chance. The outcome would be decided by which face landed upright. Numbers, the alphabet and strategic thinking all come together in gaming to emphasise the skills of the player in conjunction with the vagaries of the deities of luck. N. Purcell observes that the "numerical sophistication of ancient gambling may ultimately be related to the patterns of ancient literacy."[27] I would add that counters with personal names scratched upon them could potentially have been used for drawing lots for job details or other allocations among a community.

Magical literacy in the form of curse tablets, amulets and other dedications was widespread in Roman Britain.[28] Markings such as X and V sometimes appear on votive items, including miniature axes. This practice may have extended to inscribing on counters. An X symbol with a dot in the inner corner of each side is visible on a gold *lamella* (amulet) from Billingford, Norfolk, alongside a Latin inscription, mixed with Greek magical characters and naming the gods Iao and Abrasax (PAS: NMS-7BEED8).[29] This symbol bears a resemblance to several of the inscribed counters in RIB II. However, names of deities do not seem to be recorded on gaming pieces, unlike finger rings and votive plaques. Neither are there representations of the evil eye or phallus, regular apotropaic devices on other small belongings such as seal-boxes and jewellery.[30] This would suggest that graffiti were not specifically apotropaic in this context.

Gambling may have been one of Tacitus's "alluring vices" which the Britons supposedly found irresistible.[31] But was there more to gaming than simply a form of light entertainment of the day? Hella Eckardt acknowledges the relationship between writing and power by which literacy can

20 Williams (2001).

21 Sliwa, Cairns (2007).

22 Hall (2019), 203-204.

23 Hall, Forsyth (2011), 1326-7.

24 Swift (2017), 123.

25 Eckardt (2018), Ch. 8.

26 Purcell (1995), 33.

27 Purcell (1995), 4.

28 McKie (2017).

29 Tomlin, Hassall (2006) 481-2.

30 Harlow (2021), 169-182.

31 Tacitus *Agricola* 21 (trans. M. Hutton, W. Peterson, Loeb)

be used as a technology of control.[32] Strategy games could act as a means of power over the populace by showing them the structure of a correct society and the rules of warfare.[33] Different forms of gaming would potentially have taken place in locations of high control and vigilance (like the forum and forts) or in secluded areas (such as bathhouses or private homes). Counters are common finds from bathhouses, locations for both free expression and dissolute behaviour. Opportunities for irreverence and disorder are often enacted in plain sight, in gathering places such as taverns and marketplaces.[34]

People may have chosen their gaming practice according to the circumstances, or the company: "The special nature of games of chance raised the prospect of insight into a hidden order of things to which rich and poor alike are subject, creating the opportunity for fantasies of social promotion and levelling."[35] Bone and antler were not prestige materials. Turning over a set of counters to reveal an alternative range of symbols for play could be seen as a subtle, and quite literally subversive, means of resistance. Alternatively, these marks could be widely known and accepted characters which allowed a greater variety of games to be played with the same tokens.

3. Counting Counters

The next section describes the various sources available for data on gaming counters from Roman Britain. It is followed by a more detailed quantification and discussion of the inscribed counters from RIB II.

• 3.1. Roman Rural Settlement (RRS)

The Rural Settlement of Roman Britain project (2012-2018) collated the excavated evidence from the countryside of Roman Britain, including both traditionally excavated and "grey literature" reports from developer-funded excavations since 1990. RRS recorded a total of 160 counters from across England and Wales, including uninscribed examples.[36] The counties of Gloucestershire, Wiltshire, and Somerset had the most recorded gaming counters, although these were not concentrated on any specific site. RRS results showed that social distribution was largely on rural settlements and religious or funerary sites. This balances up the more traditional view of gaming pieces having an urban/military distribution (see Section 4.1.3). Of course, there are necessary caveats to be made here about the selection of data in such projects.[37]

• 3.2. Portable Antiquities Scheme (PAS)

The PAS database records objects found by members of the public, usually metal-detectorists, across England and Wales. Perhaps surprisingly, it includes 151 Roman gaming pieces. Fifty-five of these are made from "animal skeletal material" with the remainder being a mixture of glass, lead, pottery, and other materials. The majority of findspots are located along the banks of the River Thames in London, and potentially represent the activities of "Mudlarks" retrieving objects from along the tideline. Several pieces appear to have inscribed graffiti (e.g. "XIIII" PAS: LON-0A2EA4).[38]

• 3.3. Historic Environment Records (HERs)

Approximately 120 gaming pieces (of varied materials, not all inscribed) were noted by a search of the "Heritage Gateway" which provides access to local and national records on the historic environment, including over 70% of HERs in England and the National Trust's Historic Buildings Sites and Monuments Record.[39] The counties of Norfolk and Essex were particularly prominent, which may reflect a certain degree of recording bias. The level of detail provided by this search was limited and a wider survey of the HER records to identify counters by material and potential inscriptions is recommended. Many of these artefact records will no doubt be duplicated across two or more resources, including the Roman Inscriptions of Britain, to which we shall now turn.

4. Roman Inscriptions of Britain (RIB)

The Roman Inscriptions of Britain project began in the 1960s and proceeded to publish three large volumes compiled by, at various times, R. G. Collingwood, Mark Hassall, Roger Tomlin, and R. P. Wright.[40] Volume II, Fascicule 3, which details inscribed *instrumentum domesticum* including counters, was published in 1991 with an updated edition in 1995.[41] An online version of RIB is partly completed, although selected records from RIB II were only made available after this paper was composed.[42] Bone "roundels", as they are described, are categorised under RIB 2440. Each disc is then given an extension number: for example 2440.208 is a bone roundel from Caerwent with a grid-like pattern and three dots on the reverse (which calls to mind counters in play on a board) and seven vertical strokes on the rim/edge (Figure 1).

32 Eckardt (2018), 6.

33 Nuțu, Boțan (2009), 146.

34 Scott (1990).

35 Purcell (1995), 27.

36 https://archaeologydataservice.ac.uk/archives/view/romangl/

37 Courts, Penn (2019), 4.

38 https://finds.org.uk/database [search carried out 14/07/2021]

39 https://www.heritagegateway.org.uk/gateway/about/default.aspx [accessed 14/07/2021]

40 https://www.classics.ox.ac.uk/roman-inscriptions-britain

41 Collingwood, Wright (1991).

42 https://romaninscriptionsofbritain.org/

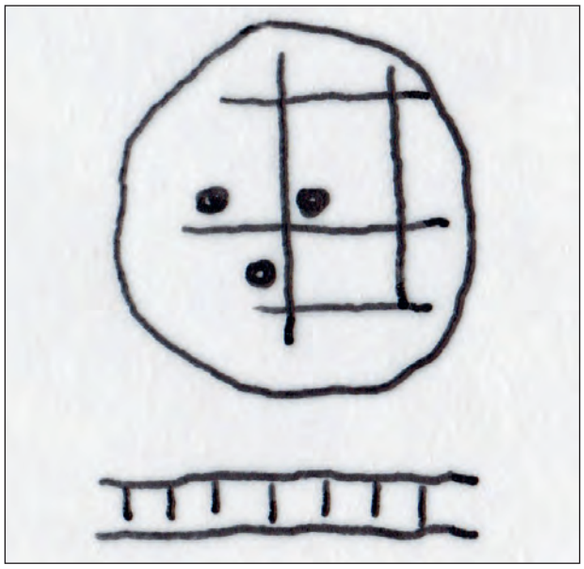


Fig. 1. Inscribed bone gaming piece (diameter 22 mm), Caerwent. Drawing after Collingwood, Wright *(1991), 2440.208.*

The 1991 edition by R. G. Collingwood and R. P. Wright provides data on a total of 381 inscribed bone roundels from a range of key sites, including 88 from Ravenglass, 22 from Wroxeter, 26 from Colchester, 20 from St Albans, 30 from Silchester, 32 from Chichester, and just two from Caistor St Edmund. Figure 2 shows the distribution and concentration of inscribed counters in RIB II.

In the following analysis, I present the data from selected sites of interest based on RIB II, with my own observations and some updated information on specific sites. I chose to focus on a mixture of site types from Roman Britain, selecting locations with more than twenty inscribed counters, with the addition of *Venta Icenorum* and Richborough where recent reinvestigations have resulted in additional data. Aspects chosen for specific analysis included context, social distribution, dimensions and, of course, the inscriptions themselves. Further work is necessary to look at more sites in Scotland and Wales and in more detail at finds recorded in England since 1991, particularly after the 1996 planning legislation which required funding of archaeology on development projects.

• 4.1. General Trends

Some general trends are revealed by analysis of the material form and patterning of the counters. There are 381 inscribed bone counters detailed in RIB II (1991). Of those, 138 had a countersunk obverse and 141 had between two and seven inscribed concentric rings or grooves on the obverse. These grooves may have been purely for decoration, to identify matching pieces of a gaming "set", or may even have had numerical significance. Some known sets appear to have similar concentric groove patterns even when the dimensions of the counters vary quite widely, perhaps giving a decorative cohesiveness to the set (e.g. Chichester Burial Group 66, see Section 4.3).

The six-point star motif appears on the reverse of at least 35 roundels. Four counters have a version of the six-point star on both the obverse and reverse (2440.223, 241, 322, 334). This design is not recorded on the rim/edge of any counters in RIB II. This implies that placement choice for graffiti was deliberate and appropriate.

4.1.1. Letters and Numerals

Twenty-six counters had letters (not obviously Roman numerals) on the obverse, and over 100 counters had letters on the reverse. This weighting will be partly due to the decorative schemes often found on the obverses, such as turned concentric circles, which somewhat preclude the positioning of graffiti on those faces. Most groups of letters refer to personal names (e.g. PRISCI "of Priscus" 2440.98). There are also those roundels which bear letters possibly referring to dates or months: MAR (2440.69, 70), IANVA (2440.38, 39). MAI(I) (2440.121, 298) and CALIID (possibly the Kalends) (2440.23). Some graffiti represent ordinal numbers which were also used as dates of the month, such as PRIMVS "first" (2440.97) and TIIRTIVS "third" (2440.138). This is discussed further below (Section 4.7).

4.1.2. On the Edge

Bone roundels with rim/edge graffiti are primarily of the countersunk variety, rather than those with

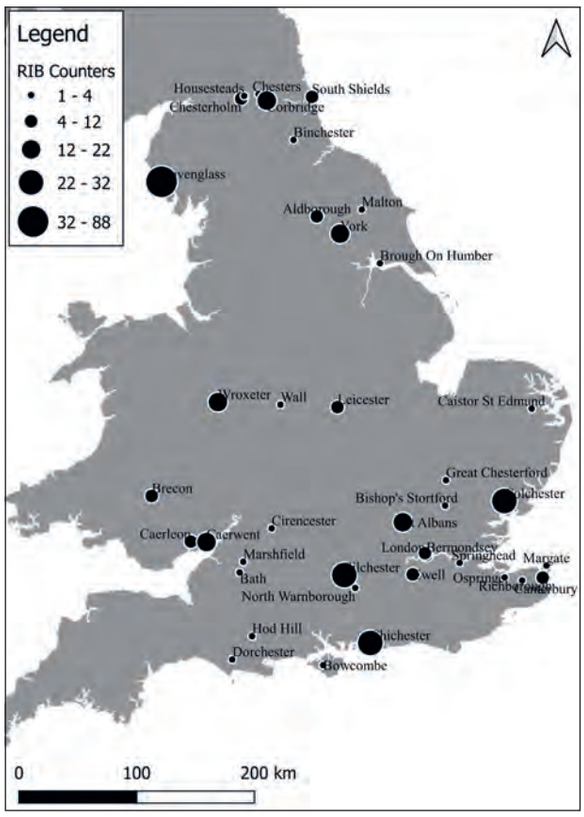


Fig. 2. Distribution and concentration of inscribed counters in RIB II. Map: N. Harlow.

concentric rings. Fifty-seven of the 381 RIB records had some form of rim/edge graffiti. Of those, 38 had a countersunk obverse, compared to only nine with incised circles. S. Greep has dated the countersunk variety largely to the 2nd century CE.[43] This hints at a chronological focus for these rim-marked pieces, maybe a game or usage which was in vogue during that century, although of course the inscriptions could have been made long after the bone roundel was turned.

Rim/edge markings on counters tend to be predominantly numerical. Of the 57 counters with markings on the rim/edge, nine discs had letters and 46 had inscribed numerals. There were no six-point star motifs recorded on rim/edges. This shows selectivity for placing numerical information on the rims of the counters. Local or regional preferences or production connections may also be suggested by the frequency of rim/edge graffiti at Silchester (16/30), Chichester (11/32), and St Albans (8/20).

The inscribed counters from Silchester have a range of numerals around the rim/edge. They vary from a single stroke I, through II, III, IIII, IIII II, IIII IIII, IIIIV, VIIII, and X. There are also longer sequences such as M III V II VN IIIIV (2440.347) and II VII XX X (2440.26). At Chichester, numbers include IIII, VII, and XII as well as XXVIIII (2440. 372), and XI XII XIII XIIII XV (2440.220). Recorded as having "cross-scorings" on the reverse, 2440.222 is a complex countersunk piece with four numbers (or perhaps pictograms) I, II, X, and a double-barred X on the reverse, and a rim/edge inscription IV V I VIII (inverted) VIIII (inverted) which could be read either way up (Figure 3). These artefacts prompt questions about who is looking at the rims and what games may be played from this perspective.

A group of roundels from Winchester, published in 2008, had the rim/edge inscriptions cut to be legible when the flat face of the counter was uppermost, i.e. when the graffiti on the reverse face was visible. These partly overlap with those counters described as having a series of "pits" on the reverses (groups of one, two, four, six, and seven, plus there is a four without rim marking).[44] By contrast, Burial Group 66 at Chichester is illustrated with the rim/edge marks appearing when the countersunk obverses are upwards, thereby obscuring any graffiti on the reverse. Although we might refer to these groups of discs as "sets" they appear to show very mixed schemes of inscriptions, with a variety of letters, numerals, dots/pits and other symbols amongst the group, possibly indicating a lack of importance of visual homogeneity in the past.

43 Greep (1998), 272.

44 Rees *et al* (2008), 113.

Fig. 3. Inscribed bone gaming piece (diameter 25.5 mm), Silchester. Drawing after Collingwood, Wright (1991), 2440.222.

4.1.3. Social Distribution

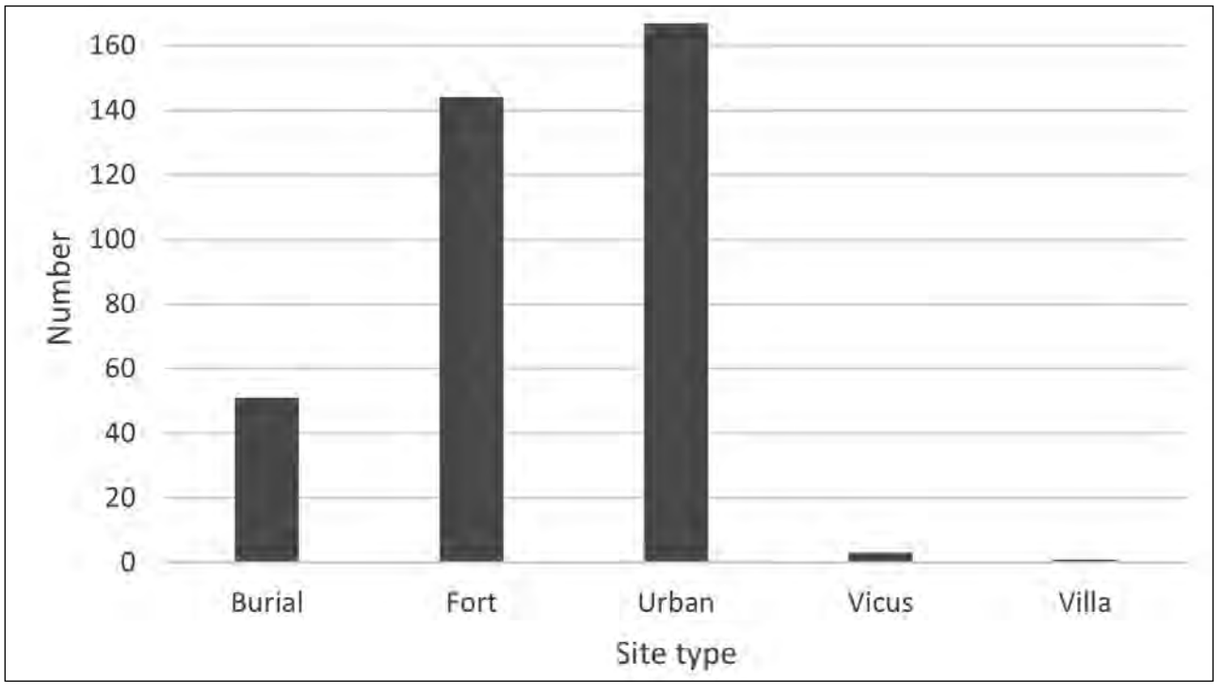
Cool noted that graffiti occur more frequently at forts and *vici* than small towns and rural sites, which suggests lower levels of rural literacy, although *styli* are widespread across the countryside.[45] Summer Courts and Tim Penn found the vast majority of gaming boards in Britain came from military sites,[46] and they query "whether the relative lack of evidence for leisure of this kind in the countryside is sufficient to justify the interpretation of such pursuits as 'urban' in nature."[47] The urban and/or military slant probably reflects the focus of Roman archaeology before the advent of development archaeology in the UK in the 1990s.

A look at the social distribution of inscribed bone discs from RIB II reveals a high proportion from towns, forts and burials, although this is potentially skewed by the large number from Ravenglass and the two grave groups from Chichester (Figure 4). It is also worth noting that there are high proportions of inscribed counters from "wet" places — baths, latrines, sewers, and drains (Figure 5). This may be due to conditions suitable for preservation of the bone or to the cultural interlinking of bathing and leisure activities such as gaming. Further detailed study of the contextual and social aspects of these finds may refine any possible biases in these results. In the following section, I take a closer look at itemised assemblages from a range of sites in RIB II.

45 Cool (2006), 35-6.

46 Courts, Penn (2019), 8.

47 Courts, Penn (2019), 4.



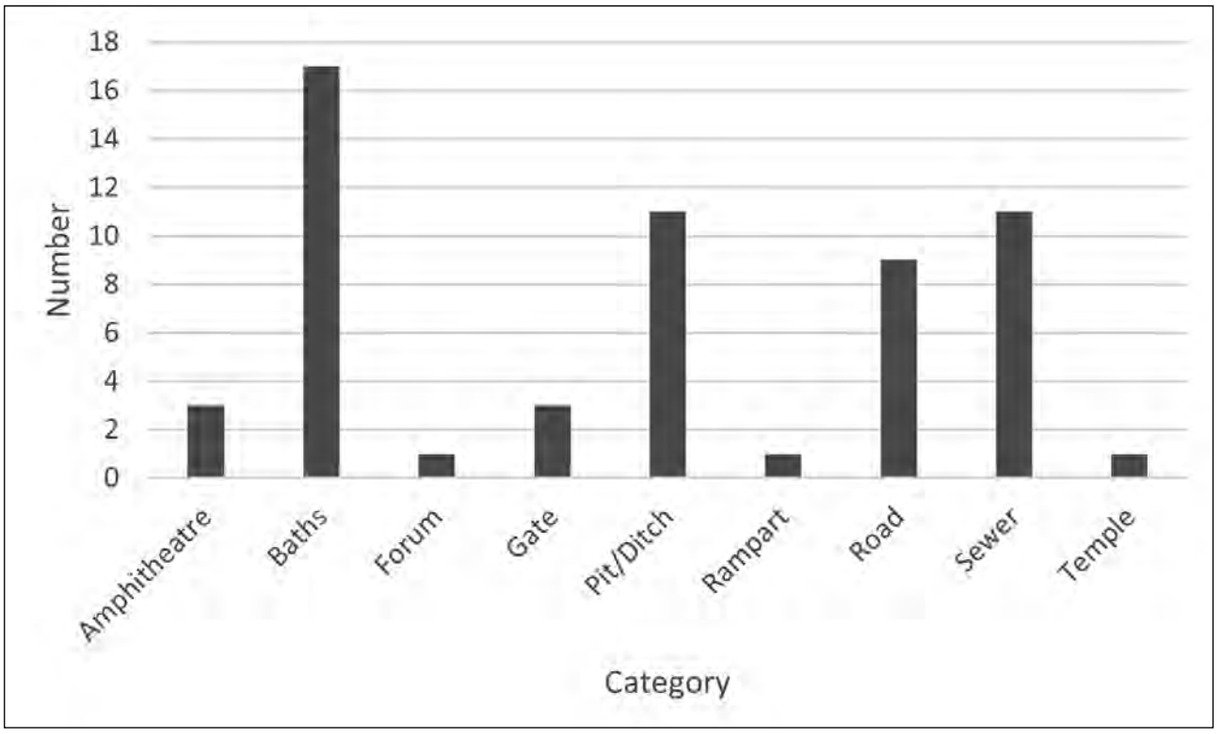


Fig. 5. Social distribution of gaming pieces 2.

• 4.2. Ravenglass (*Glannoventa*)

Glannoventa was established as an early Hadrianic fortlet, later developing into a larger coastal defensive emplacement, with associated civilian settlement. It played a major role on the northern frontier and western coast of what is now Cumbria.[48] A group of 119 bone and seven glass roundels were found in a barrack block at the fort, in a burnt deposit dating from *circa* 190-210 CE.[49] Eighty-eight of these were inscribed, including one marked INCIDIV|VS overlaid with a six-point star (2440.42) and two with PE on the reverse (2440.94, 263). Ten counters have letters, 75 have numerals and only three have both letters and numerals. There are no counters recorded as having rim/edge markings.

This large grouping may represent multiple sets stored or deposited together, perhaps in a bag, or

48 https://historicengland.org.uk/listing/the-list/list-entry/1013013

49 Greep (1983), 271.

Fig. 6. Bone gaming piece, inscribed VAL (diameter 25 mm), Colchester. Drawing after Collingwood, Wright *(1991), 2440.144.*

Fig. 7. Bone gaming piece, inscribed CALED (diameter 23 mm), Wroxeter. Drawing after Collingwood, Wright *(1991), 2440.23.*

Fig. 8. Bone gaming piece, inscribed IANVA (diameter 23 mm), St Albans. Drawing after Collingwood, Wright *(1991), 2440.39.*

an assemblage gathered for some other purpose.[50] In addition, many counters in this collection show multiple overlying layers of graffiti, calling into question the idea of private ownership of specific sets, or even of individual counters. As with board games today, collective ownership and inheritance may have been common. Conceivably counters were lost and won in games, passing through many hands, with new keepers occasionally modifying existing graffiti or adding their own marks. This also implies that many (or even most) players had a functional level of literacy and numeracy.

• 4.3. Chichester (*Noviomagus Regnensium*)

Excavations at the fort and regional urban centre at Chichester in West Sussex provided two groups of counters included with Burial Groups: BG 66 (23 counters, 17 of which were inscribed) and BG 250 (24 counters, at least 12 inscribed). A further three came from the pre-Flavian amphitheatre. Marks include numerals, names and symbols including AMA (possibly "love me") (2440.15) and MASCIILLIO (name) (2440.68).[51] 11 of the discs had rim/edge graffiti.

Comparison must be made here with the 29 bone counters from an early 3rd century cremation burial from Winchester, reporting of which post-dates RIB II.[52] 21 of these bore some form of graffiti, including five with rim/edge markings. Neither site report mentions signs of burning on the counters, which suggests they were placed into the burial after the cremation had taken place. By contrast, many of the 46 counters from a cremation at Trentholme Drive, York, were burnt or distorted by heat.[53]

To be buried with these artefacts must have held special significance for the mourners, if not the deceased. Unlike at Ravenglass, there is less evidence for multi-layered graffiti, suggesting these groupings could be read as defined sets which counted among the deceased's personal belongings. They may represent the character of the person as a chancer or someone who was associated with leisure pursuits. Gaming could even have made up part of the funerary performance. Including items displaying literacy and numeracy with the burial may also have been a way to claim some of the power of these objects, perhaps for good fortune for the deceased in the otherworld, or for the bereaved family.

• 4.4. Colchester (*Camulodunum*)

Colchester in Essex was once a Roman *colonia*, a large military and urban site. RIB II records 26 inscribed counters from Colchester. One found in a cemetery was marked VAL (2440.144) (Figure 6), possibly an abbreviation for Valens or Valerius (sim. VA from *Venta Icenorum*). 12 roundels were found in a pit, of which nine were uninscribed and two had letters EI (2440.197) and EIR (2440.33). The latter may instead read EID, perhaps referring to the "Ides" of the month. There were four other counters with an inscribed rim/edge, including a long alphanumeric string MNMIV XI or XX (2440.76) and three with six-point stars.

• 4.5. Wroxeter (*Viroconium Cornoviorum*)

The conquest period fort of *Viroconium* (Wroxeter, Shropshire) developed into a large urban settlement and regional capital which thrived throughout the Roman occupation of Britain. There are 22 inscribed counters from Wroxeter in RIB II, including three bone roundels retrieved from the Baths, the impressive remains of which still stand. One disc was inscribed CALIID - possibly Calends (date) or Caledonius (name) (2440.23) (Figure 7), and one IAN (2440.38) possibly for Ianuarius (paralleled at *Venta Icenorum*). Another counter was marked with a long string of numerals around its rim: VI IIIIV NIIV XVV (2440.366).

50 Greep (1983), 254; Potter (1979), 75.

51 Down, Rule (1971).

52 Rees *et al* (2008), 113-7.

53 Wenham (1968), 32.

• 4.6. Silchester (*Calleva Atrebatum*)

At Silchester, Hampshire, *Calleva Atrebatum* was a sizable Iron Age and Roman centre, becoming the *civitas* capital of the Atrebates. There were 30 inscribed counters, including one with the reverse MAR, possibly "Martius" (date) or "Martialis" (name) (2440.70), and one counter marked PRIMVS "first" (2440.97), with a possible parallel PRI from *Venta Icenorum* (2440.96). As discussed above, there were sixteen counters with rim/edge graffiti, including one with a long string of numerals reading M III V II VN IIIIV (2440.347).

• 4.7. St Albans (*Verulamium*)

A substantial Iron Age and Roman urban centre in what is now Hertfordshire, *Verulamium* was occupied shortly after the Claudian conquest and was designated a *municipium* in *circa* 49 CE.[54] The site provided 20 inscribed counters, including eight discs with graffiti on the rim/edge, for example XVIIII A (2440.362). One roundel had IANVA|IIII on the reverse (2440.39) (Figure 8), perhaps a date: "Ianuarius IIII."

Ten ornately decorated counters reported from Toppings Wharf, Bermondsey, London provide potential support for this idea. They are lettered with variants of SEXTIII and IVNIII (2440.123-132).[55] While these are often interpreted as personal names, they could equally represent months of the Republican calendar, perhaps Iunius III and Sextilis III (later to become August after *circa* 8 BCE).[56] Interestingly, an almost identical counter was reported from the legionary fortress at York in 2009.[57] If these marks do encode dates, were they pieces for an unknown calendrical game, a way of marking points in the year, reminders of forthcoming events or some form of token or ticket?

• 4.8. Richborough (*Rutupiae*)

The Roman fort and port city of Richborough (Kent) was a Claudian establishment which developed, like many such towns, into a large urban centre. In the late 3rd century CE its defences were reinforced, and it became one of the so-called "Saxon Shore" forts.[58] RIB II holds records for 11 inscribed counters from this site, including CAM|PVS (interpreted as an abbreviated name or as "field") (2440.24) (Figure 9) and one with XXX inscribed on its rim/edge (2440.374). An updated survey means there are now over 300 counters (of all materials) recorded from Richborough, at least fifteen of which are inscribed.[59]

54 Frere (1972), iii.

55 Schwab (1974), 100-102.

56 Macrobius *Saturnalia* 1.35 (trans. R. Kaster, Loeb).

57 Tomlin (2010), 460.

58 Historic England (2020), 6-15.

59 Philip Smither and Roland Cobbett pers. comm.

Fig. 9. Bone gaming piece, inscribed CAMPVS (diameter 20.5 mm), Richborough, RIB II 2440.24 Photo: R. Cobbett.

• 4.9. Caistor St Edmund (*Venta Icenorum*)

The *civitas* capital of the Iceni at Caistor St Edmund, Norfolk has only two inscribed bone roundels in RIB II. One counter reads PRI on its reverse (2440.96), perhaps Primo or Primus "first", and the other has VA (2440.143) as mentioned above. Recent work by the author has identified 72 bone counters at the town, of which 28 have possible graffiti, including 15 from the forum-basilica complex.[60] One disc has three dots across the obverse (1929.152.O105). Another has IAN combined with or overlain by IX (NWHCM: 1929.152.O147) (Figure 10), again perhaps an abbreviation for Ianuarius as discussed in Section 4.7. A countersunk piece has an X on the reverse and a long numeric string around the rim/edge: a faint initial X then XXVIIII. Some of these numerals have been diagonally crossed to form Ns and other symbols (NWHCM: 1929.152.O176). If the number 39 was intended, it does not reference any known game from the period. A chance find reported to the PAS from near the south defences of the town is inscribed NLL, perhaps "null", in retrograde with the upstroke of the central L extended upwards as a line of punched dots (PAS: NMS-BD4B28). Unusually, given the observed preference for numerical annotations on the rim/edge, a counter from Caerleon (2440.73) was inscribed NVLLVM "null." These additions demonstrate the benefits of revisiting collections, collating sources, and updating catalogues.

CONCLUSIONS AND FURTHER RESEARCH

Bone counters are deceptively familiar finds in Roman Britain and other provinces. They display a wide range of styles, as well as both simple and very complex marks. The social distribution

60 Harlow (2019); Harlow (forthcoming).

Fig.10. Bone gaming piece, inscribed IAN (diameter 18.5 mm), Caistor St Edmund. Norwich Castle Museum 1929.152.O147. Photo: N. Harlow.

ranges across the military and civilian settlement spectrum, with clusters in graves and at baths – recent additions will surely change the map. Local "traditions" or distinctiveness can be seen as well as possible temporal variety (e.g. numerical edge markings on countersunk pieces dating to the 2nd century CE). The connection between counters, graffiti and calendrical information deserves further investigation.

Unofficial literacies like graffiti on gaming counters relate to the cusp of mass literacy and numeracy in Britain. People were using gaming and writing as strategies to enhance their personal standing, wealth and integration within a new social milieu. The power of literacy and the performative nature of play according to local rules, using non-elite materials, gave new opportunities for both subversion and empowerment to those outside the highest social circles.

This interpretation of the inscribed bone gaming counters from RIB II shows the potential for research on these often overlooked objects. An updating of the catalogue is surely overdue, with profitable parallels to be drawn between the Chichester and Winchester cremations, or the close similarities between finds at Bermondsey and York, and new data to be added from Caistor and Richborough among others. Future research could collect data on counters with graffiti from British sites post-1991, from sources such as the county HERs, museums and grey literature. Other beneficial investigations would include checking the orientation of the graffiti, comparing them with inscriptions on other object types (e.g. votive miniatures) and comparing the UK data with counters from other Roman provinces.

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Casino at *Coria*? Evidence for gaming at Roman Corbridge

1. INTRODUCTION

Coria (modern Corbridge), is a site with over 350 years of occupation. There have been extensive excavations on the site and the associated collection is large. As is to be expected from a Roman site there are inscriptions, sculptures, altars, pottery, jewellery, militaria, domestic items, and religious pieces. All aspects of life on the north-western frontier are represented, including leisure, with a bone flute being a highlight in that category. The focus of this paper will be the evidence for gaming, in particular an unusually high number of counters cut down from Samian vessels. They will be considered alongside the other gaming paraphernalia from the site and placed into their context (where known).

1.1 The Site

The site has a complicated occupation history, with the military coming and going at various stages. There is still much debate over the dating of many of the phases on site, although in general the relative chronology is accepted. However, what is not disputed is that there was a civilian settlement of some form for almost all of the site's life. Originally this settlement surrounded the fort, but when the military left, the town remained, and even expanded. This continuation of the civilian settlement after the fort is abandoned is unusual as forts act as the hub for the civilians, whether they are related to, or making money from, the army, so when that hub leaves, the town fails. The survival, and indeed success, of *Coria* after the fort shows its importance in the economy of the frontier zone of Northern Britain.

Coria sits on the crossroads of Dere Street and the Stanegate, less than two miles south of Hadrian's Wall (See Fig 1). Dere Street was an important arterial road running North from York up to Scotland, and the Stanegate (a Medieval name) was the east-west frontier line before Hadrian's Wall was built in 122 CE. *Coria* was founded around 72 CE and there is evidence of occupation right through until the early 5th century CE.[1] It is worth however, giving a brief explanation of the nature of the occupation of the site in order to understand the context of the material to be discussed (see Fig. 2 for a more detailed plan of the site).

In the early-mid 70s CE a fort was set up 2 km north-west of the current site, as part of the campaign to conquer the entire island of Britain. This fort was occupied for approximately ten years, before relocating to the site of the present-day museum and site. From the mid-80s CE, a series of forts were built on top of each other until around 160 CE when the fort was abandoned. By this time a town had built up around the outside of the fort, and it seems that the townsfolk simply took over the area of the fort with strip buildings springing up along the *via principalis,* which became the central road through the town. Dere Street was altered to pass through the town from its previous route around the outside of the fort.

In the late 2nd- early 3rd century CE, two vexillations of legionary soldiers, *Legio II Augusta* and *Legio XX Valeria Victrix*, were based at *Coria*. Their purpose and role are unknown, and indeed it is unprecedented to have legionary troops on the frontier, as Hadrian's

1 For an overview of the history of the site see Bishop, Dore (1988), with more detailed work on specific phases by Hodgson (2010), Stobbs (2018) and Teitz (forthcoming; 2023).

Fig. 1. Map showing the location of Coria. Copyright; Frontiers of the Roman Empire Project.

Wall was manned by auxiliary soldiers. Whatever their role, they created two compounds in the centre of the town, which respected the civilian buildings. After around a century of occupation, the military again left *Coria* and the space vacated by the legionaries was taken over by the civilian population, with much evidence for industry and production. The town remained occupied into the early fifth century, and indeed some of its residents were extremely wealthy. The Corbridge lanx, a solid silver late 4th-century platter and a hoard of 48 late 4th-century solidi, alongside other material culture, demonstrate this prosperity.

It is against this backdrop of a complicated site history, not fully understood, that the gaming paraphernalia must be considered. As the next section will demonstrate, there has been a long history of excavation at the site, which has not always been to modern scientific standards. This has affected the contextual information we can extract about the material. Therefore, studies of specific contexts are very limited with this material, but the large number of counters allow us to make suggestions as to activities at site more generally.

2. EXCAVATION HISTORY

To understand the material from Corbridge, and its limitations, a brief history of the investigation at the site is required. Roman material had been discovered at the site through ploughing and other agricultural activity, and so it was known that a Roman site of some form existed here from a very early date. Indeed, King John (r. 1199-1216) sent his treasurer to site to try to discover the treasure that local legend said was buried here. The bridge, just south of the site, was excavated in 1861-2 by William Coulson.[2] It was not, however, until 1906 that any excavation took place on the site of the fort and town. Between 1906 and 1914, the project at Corbridge uncovered 56 acres of the Roman site. All other excavations after that were focussed on a much smaller central area of the site. Table 1 lists the work on site over the

2 Bruce (1865).

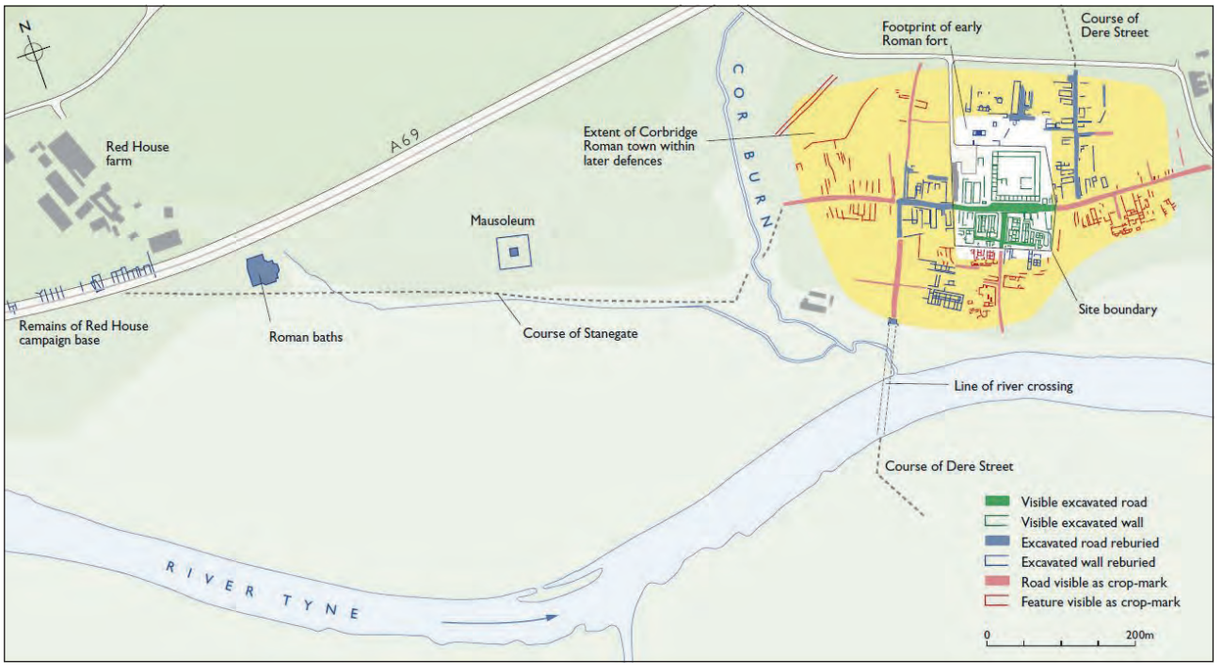


Fig. 2. The extent of Coria. Copyright; Historic England/English Heritage.

last 100 plus years. Each building, or area, was given a site number by the Edwardian archaeologists, and this system was continued by the later excavations; so buildings are generally referred to as Site 11, or Site 44 for instance, due to the order they were excavated.

Table 1. List of excavation on site

Date	Excavators	Publications
1906-14	L. Wooley, W.H. Knowles, R.H. Forster	Wooley (1907); Forster (1908); Knowles, Forster (1909); Knowles, Forster (1910); Forster, Knowles (1911); Forster, Knowles (1912); Forster, Knowles (1913); Forster, Knowles (1914).
1936-9	I Richmond and E. Birley	Birley, Richmond (1938); Richmond, Birley (1940).
1946-73	Durham University Training Excavation	Bishop, Dore (1988); Birley (1959).
1980-1	J. N. Dore and J. Gillam	Bishop, Dore (1988).

The two main periods of excavation, 1906-14 and 1946-73, both have problems in terms of recording techniques in regards small finds. During the Edwardian excavations there was a small number of supervisors, with a large team of labourers doing most of the digging. Although the records show the archaeologists understood stratigraphy and context, there was no formal recording system for small finds. Therefore, they may note the presence of gaming counters in a room or area, but those finds were not marked, and many not described in enough detail to identify them now. The finds registers from the 1946-73 excavations record counters being found in contexts periodically throughout the years of excavation.[3] Unfortunately, not all objects were marked with context information so correlation between the paper archive and physical objects is not always possible. One specific example is context CX52, described as a section between the Antonine *principia* and *praetorium*. The finds register lists "*Knuckle bones, lump of ?lead, potsherds and draughts piece of samian,*" but only the Samian counter and nine pottery sherds can now be linked to that context, the lead, and knuckle bones having lost their association with the context (or have themselves been lost). Similarly, a report notes a group of 20 bone counters found on the Stanegate, eight of which were inscribed with graffiti,[4] but not all of these have retained their context information so they cannot all be matched up to the published pieces.

3. THE MATERIAL

The collection from *Coria* is one of the largest Roman collections cared for by English Heritage. It is an incredibly rich assemblage, in particular the carved and inscribed stonework. It is within this context of a varied and high-quality assemblage of material that we will consider the gaming paraphernalia. In late 2021 the database contained seven dice, three possible shakers or *fritilli*, nine records for gaming boards (which equates to parts of five boards) and 715 gaming counters made of a variety of materials. All the boards now in the collection are those with a

3 These books are part of the archive kept of the excavation and are now part of the museum collection (Accession numbers CO21302-7, CO21310-11, CO21313-19, CO21323, CO21325-29, CO21332-34 and CO21336-7).

4 Wright (1942).

Fig. 3. A compilation of gaming paraphernalia from Coria. A stone gaming board (CO936, H. 71.9 x W 276 mm, Weight 12.1 kg), a ceramic shaker (CO8473. H 79.6 x W. 48 mm), a bone shaker (CO8472, H. 50.5 x Diam. 42.4 mm) 3 bone dice (CO784, CO8476, CO8478), one ceramic die (CO8474, H. 12.5 x W. 12.5mm) and a selection of bone and Samian counters. Copyright; Historic England/English Heritage.

simple, and slightly crude, grid scratched into stone, there are no purpose-made, portable boards. Bell records a stone merels board from the site, but this is no longer in the collection.[5] Figure 3 shows a stock shot used for many years by English Heritage to illustrate the range of gaming material from the site.

As finds of *fritilli*, or shakers, are so rare, particularly in Britain,[6] a short note on the three examples from Corbridge is worth including here, before the main part of the article. Although there is a typology for *fritilli*,[7] Alessandro Pace argues, from his work in Italy, that these items are often improvised and therefore not always of the same form and the situation is likely to be the same across the empire.[8] Elsewhere in this volume, Tim Penn, Alessandro Pace, and Ulrich Schädler discuss affordances, with items being used for purposes other than their original intended function.[9] *Fritilli* are a perfect example of this; a ceramic unguent bottle, a small ceramic cup, or a bone pot could all just as easily be used a dice shaker as their original function. Identification of these items can be confirmed by association with dice, and so context is key. None of the possible shakers from Corbridge have a context assigned, and so cannot be linked to other gaming material. Fig 4 shows all three possible shakers, whose identifications have been assigned by previous curators due to their shape, not from associated context. They could all have fulfilled the function of a *fritillus* but can we prove that they were used as such by the Roman inhabitants of *Coria*? Unfortunately not. It will only be through the discovery of more *fritilli,* both purpose-made and improvised, that our understanding of their role can be improved, not just at Corbridge, but across Roman Britain.

3.1 All counters

As of 1st September 2021, there were 715 gaming counters on the museum database for *Coria*. The breakdown of materials can be seen in Table 2, listed in decreasing order. Samian counters make up more than half of this object type from the site. As usual at a Roman site on the frontier there is a mix of materials, with glass and bone making up most of the non-ceramic examples. For these two materials, all the counters appear to be purpose-made. A non-exhaustive survey of sites with larger numbers of counters show no discernible pattern in the materials

5 Bell (1977), 208. See Appendix II in this volume.

6 A bronze example from Sheepen - Niblett (1985), Pl.16 - was found with 2 dice, but this is the only example in Britain which has been found with gaming material.

7 Annecchino (1977).

8 Pace (2022) and Pace this volume.

9 See Penn, Pace, and Schädler this volume.

Fig. 4. Three items identified as dice shakers from Coria (from l-r), CO1390, bone (H.54 x Diam. 36mm), CO8473, ceramic (H 79.6 x W. 48 mm), CO8472, bone (H. 50.5 x Diam. 42.4 mm) Copyright; English Heritage/Nick Hine.

(Table 3).[10] The only point of note seems to be the large number of Samian discs from *Coria*, with few sites having any sizeable groups of this material. Even in London and Colchester, where a large number of ceramic discs have been listed, Samian discs are either not present (London) or are there only in low numbers (Colchester). Ceramic counters could have been made to create a whole new 'set' for a game, but equally could have been individual pieces made to replace lost counters from existing sets. Tim Penn and Summer Courts discuss patchwork sets, and individual losses, showing that there would have been a need for replacement pieces, as indeed there is today.[11] Although the introduction of a mis-matched ceramic disc into a set may have affected the visual beauty, it would have allowed the set to continue in use.

Table 2. Counters of all materials from Coria

Materials	Count
Samian	384
Other Ceramic	112
Glass	104
Bone/ Antler	88
Stone	16
Jet/shale	7
Other material	6
Total	**715**

Table 3. Comparative sites and their counters

Materials	Aldborough[12]	MOLA (London)[13]	Colchester[14]	South Shields[15]	Homesteads[16]
Samian	1	0	11	0	27
Other Ceramic	4	94	187	11	14
Glass	1	133	11	11	10
Bone/ Antler	37	167	58	76	4
Stone	8	4	4	8	8
Jet/shale	0	0	0	0	0
Other material	0	1	13	1	0
Totals	**51**	**399**	**284**	**107**	**63**

Any discs over 35 mm have been discounted, following Alex Croom's research showing that purpose-made bone counters are rarely (if ever) over 28 mm (p*ers comm*) and Lindsay Allason-Jones who suggests an upper limit of 25 mm.[17] As always in archaeology, we must remember that there are no certainties or definite answers. If a gaming board has been drawn in the dirt, then the sizing of squares could vary drastically. Austin notes that stone boards from Roman Britain, even those with the same number of squares (8 x 8), vary in their

10 During research for this article it was discovered that re-fashioned discs of pottery, and other materials, are rarely fully catalogued, even less fully published, and so collating comparative data was difficult, particularly during Covid-restricted times.

11 Penn, Courts (2022).

12 Bishop (1996).

13 Thanks to Michael Marshall for this data, this comes from all the Roman excavations by the Museum of London Archaeology Unit in London which are recorded on their database.

14 Crummy (1983).

15 Allason-Jones, Miket (1984). This covers only the objects from the site found before 1977.

16 Rushworth (2009).

17 Allason-Jones (2011), 233.

measurements.[18] Indeed, a stone gaming board from Aldborough Roman Town (museum no. 81418147) has squares measuring roughly 55 mm^2, larger than any of the 23 measured from Corbridge, Vindolanda, and Richborough, recorded by Summer Courts and Tim Penn in their corpus (2021, 3). Purpose-made, and high-quality, gaming counters and boards may well always sit below the 25mm or 28mm advocated by Allason-Jones and Croom respectively, however the counters made by cutting down pottery vessels, and the boards created by etching a paving slab are likely to be much more varied in size and style.

For ceramic and stone discs over 35 mm in diameter there are other potential uses, such as lids, stoppers, or bungs. Cameron Moffett's work on the use of ceramic and stone discs as lids and bungs for honey, wine, and mead jars in Britain is particularly informative on this topic.[19] Similar debates are taking place on the material from Mediterranean sites, with Johanna Witte specifically comparing counters and stoppers from *Amorium*.[20] Stoppers and bungs, such as those identified by Avshalom Zemer, are much thicker and none of the *Coria* material fits this category. [21] In Britain most flagons and closed-neck vessels tend to have an external rim diameter of less than 50mm,[22] excluding the use of discs smaller than this as lids. However, the internal diameter is smaller, and it has been shown that amphora lids were placed down into the neck,[23] not just sat on the top, so smaller diameter discs would be used. Purpose-made lids have small handles on the top, used to lift them. Re-fashioned discs do not have this feature and so they would be much harder to use in this specific way. Therefore, it seems more likely that re-fashioned discs, if used as lids, may have been used at the top of the vessel, and so would have needed to be larger. Taking all these factors into account, the 35 mm cut-off point for counters seems reasonable.

3.2 The Samian counters and their nature

At *Coria*, all the Samian pottery was sorted by volunteers over an 18-month period to record the context of each sherd, if known. This project led to the regular discovery of small circular discs of Samian, labelled as gaming counters. At the end of the project there was a total of 113 boxes of Samian pottery, which produced 384 Samian counters. This seemed to the author a large number, but was it simply an artefact of the project to sort the Samian? Although the complete assemblage of non-Samian pottery has not been catalogued to the same level of the Samian pottery, the sample of boxes sorted so far does not suggest that there will be the same proportion of counters of other ceramic fabrics. Sorting of around 35 boxes has produced 30 counters, on top of the 82 previously found. This includes all ceramic fabrics other than Samian. Not recorded in these numbers are some unusual square and unfinished pieces, which will be discussed in Section 3.4. None of these unusual pieces have been found in Samian, which produced only circular/sub-circular, finished pieces.

Any site which has had its pottery fully sorted for a report should have sifted out artefacts such as these. Therefore, other sites with similar-sized pottery assemblages should produce similar numbers of Samian discs. To test this hypothesis, the numbers of counters from a variety of sites were collated. The best comparison are sites along Hadrian's Wall, along with other Roman towns, in order to compare both similar geographic locations and site types. Few sites have their entire assemblages published but most have them documented in their museum catalogues. Table 4 shows that of all sites investigated, the numbers of Samian counters from Corbridge genuinely does seem to be high, with only Vindolanda getting into triple figures, but still half of the Corbridge total.

Table 4. Comparative sites with Samian counters

Site	Site type/ location	Number of Samian counters	Source
South Shields (post 1997)	Fort/ Hadrian's Wall	47	Alex Croom pers. comm.
Wallsend	Fort/ Hadrian's Wall	11	Alex Croom pers. comm.
Vindolanda	Fort and town/ Hadrian's Wall	190	Barbara Birley pers. comm.
Birdoswald	Fort/ Hadrian's Wall	11	Summerfield 1997
Richborough	Fort and town/ Kent	23	English Heritage Database
Aldborough	Town/ North Yorkshire	1	Bishop 1996
Wroxeter	Town/ Midlands	3	Cameron Moffett pers. comm.

In terms of the size of the Samian counters, they range in diameter from 12 mm to 35 mm. The majority lie between 19 mm and 25 mm in diameter, with very low numbers below 16 mm or above 30 mm (See Graph 1). Thickness is perhaps not as relevant, as it merely represents the thickness of the vessel, or part of vessel the counter was made from, however Graph 2 shows the main grouping is between 5 mm and 8 mm, with some outliers between 4 mm and 12 mm. None of them reach a thickness seen in stoppers, as mentioned above.

18 Austin (1934), 26.

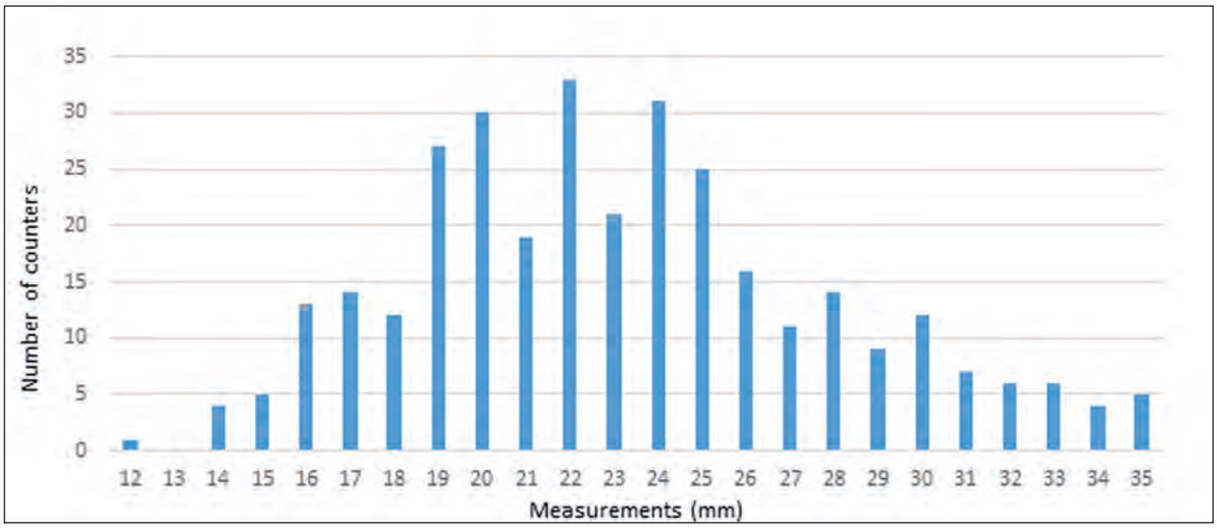
19 Moffett (2018); Moffett 2021.

20 Witte (2012).

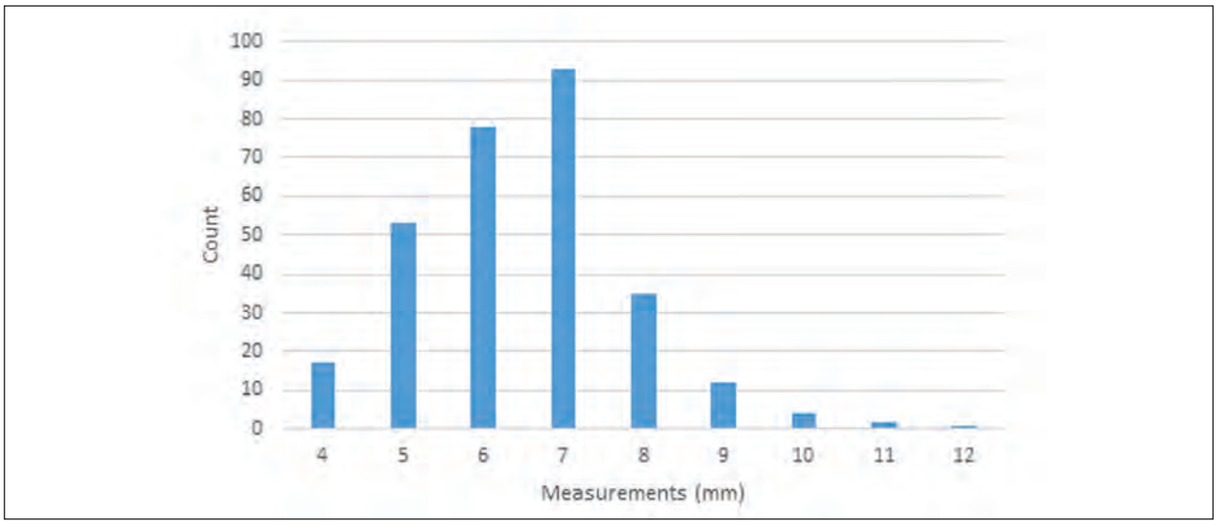
21 Zemer (1977), 83-93.

22 Eniko Hudak pers. comm.

23 Conrad (1999).



Graph 1 Diameter of Samian counters.



Graph 2 Thickness of Samian counters.

Most of the counters were roughly finished, with only 38 having smoothed and rounded edges compared to 346 where the edges are rough and angular, showing the chip marks where they were cut down. Figure 5 shows a sample of the pieces which appear unfinished, but which would have served the purpose of counters perfectly well. The 38 with smoothed and rounded edges would have taken much longer to produce than simply roughly cutting down a pot into a sub-circular counter. So far, most counters in other ceramic fabrics had similar un-smoothed edges also. They were not being used as markers of wealth as is seen in the ornately constructed board and counter sets found in burials across the empire as discussed by Ulrich Schädler.[24] These counters were not intended to look good, simply fulfil a purpose.

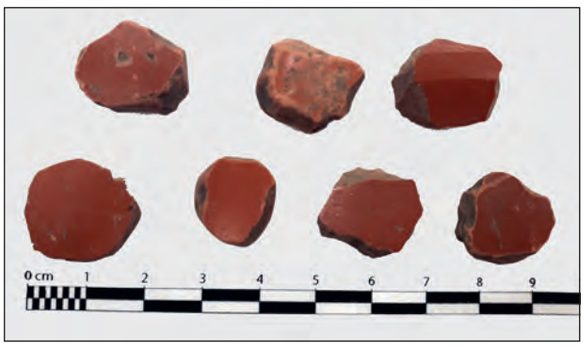


Fig. 5. A typical group of Samian counters from Coria. CO38136 (Diameter range of 16.5-19 mm) Copyright; English Heritage/Frances McIntosh.

With so many counters made from the same material, how were the pieces differentiated in games? Was a choice being made to use patterned Samian to differentiate between pieces? Perhaps a set of Samian counters consisted of half made from plain Samian and half from decorated? From the authors analysis this does not seem to be the case. Only 82 counters were made from decorated Samian, with 302 being of plain ware. One counter made from a base sherd has the remains of a stamp, and one made from a body sherd has part of an intra-decorative stamp,

24 Schädler (2007), 374.

not enough to suggest specific choice. Only 10 Samian counters had any form of mark/incision, mostly simple lines, nothing as complex as the series of marks on the group of bone counters found in 1941.[25] Where the pattern of decoration could be determined, ovolos and parts of motifs within medallions/between beaded lines are the most common. These numbers do not signify much however, as these designs are simply the ones which are most common on decorated Samian vessels.

Table 4. Decoration on Samian counters

Type of decoration	Number of occurrences
Ovolos	24
Motifs within medallions/ between beaded lines	15
Beaded rim	6
Routletting	3
Foliate motif	2
Cordon	2
Human figure	1
Animal figure	1

With so few of the counters being decorated, or having identifying marks, what games might these counters have been used for? For both *Latrunculi* and *Duodecim Scripta* players require a way to differentiate between the two players pieces,[26] as is the case with merels,[27] whether through colour, material, or markings. There are no known board games which are single player, or where players can use inter-changeable counters. Controversial as it may be in this volume to suggest, should we be considering another role for at least some of these Samian counters?

Hilary Cool studied 566 small glass discs from Insula VI.1 in Pompeii and concluded that many of them would have been used for interior decoration due to their small size, rather than as gaming counters.[28] Lindsay Allason-Jones reminds us of a variety of possible uses for discs made from stone, pottery, glass, shale, or wood such as theatre tickets, lids, and accounting.[29] There is no known theatre at *Coria* so the first suggestion is likely not relevant here. The use of the larger discs as lids has been discussed above, and discs with a diameter greater than 35 mm have been discounted for this reason. Pliny the Younger describes how in one speech, in order to illustrate calculations, he called for a board and counters.[30] Bone roundels used for accounting are discussed by Sheppard Frere and Roger Tomlin, and Jean-Claude Béal but the evidence can also be used to consider discs in other materials.[31] Stanley Bonner illustrates the use of a wooden reckoning-board, the abacus, where counters, *calculi*, were laid out for calculation.[32] These *calculi* would not need to be differentiated from each other as their values would be determined by the line they were on. *Coria* was a bustling town, with many traders, so the use of some of these Samian discs as *calculi* for accounting is a valid suggestion. As with the identification of *fritilli*, context is key to considering the use of these discs, a point emphasised by Béal from the material in the museum at Lyon.[33]

3.3 Context of the material

Out of the 715 counters, less than one third have context information other than site level recorded on the database. This is a similar picture with the other gaming material, for instance, only two of the seven die have a context. The largest group with detailed context information is the Corbridge Hoard group of 43 glass counters,[34] with another 17 glass counters having various contexts from across the site. Only 52 of the 384 Samian counters have context information, a disappointingly small proportion. Nonetheless, those that do have context provide a chance to discuss their use across the site. Figure 6 marks where groups of counters have been found on site, using context information from the museum database, alongside mentions in the finds books and reports where that information has not been retained in relation to physical objects in the collection. Only the context of the Samian pieces will be discussed below, with non-Samian pieces mentioned only when found in context with Samian. Four locations on site will be examined, noting the structures and archaeology of those locations and what it can tell us about the use of the counters found there.

Site 14, which has been identified as a possible store building,[35] has produced 16 Samian counters, nine with decoration and seven without. There are also five which were found in the courtyard outside of the building, of which four are plain and one is decorated. This makes a group of 21 in total, if we consider them together 10 decorated, and 11 plain. Tim Potter notes that where complete (or assumed complete) sets are

25 Frere, Tomlin (1991), 115; Wright (1942).

26 Balsdon (1969), 156.

27 Parlett (1999), 116-119.

28 Cool (2016).

29 Allason-Jones (2011), 234.

30 Radice (1969), 478. Ep. Vi 33.9.

31 Frere, Tomlin (1991), 105; Béal (1983), 283.

32 Bonner (1977), 183.

33 Béal (1983), 283.

34 Allason-Jones, Bishop (1988).

35 Forster, Knowles (1910), 18-26; Stobbs (2018), 110-112. The Edwardian excavators date the construction of Site 14 to the first half of the second century, mostly from the coinage discovered. The building seems to have been demolished within the Roman occupation of the site, and very little of it remained above the foundations, which hinders our understanding of its function.

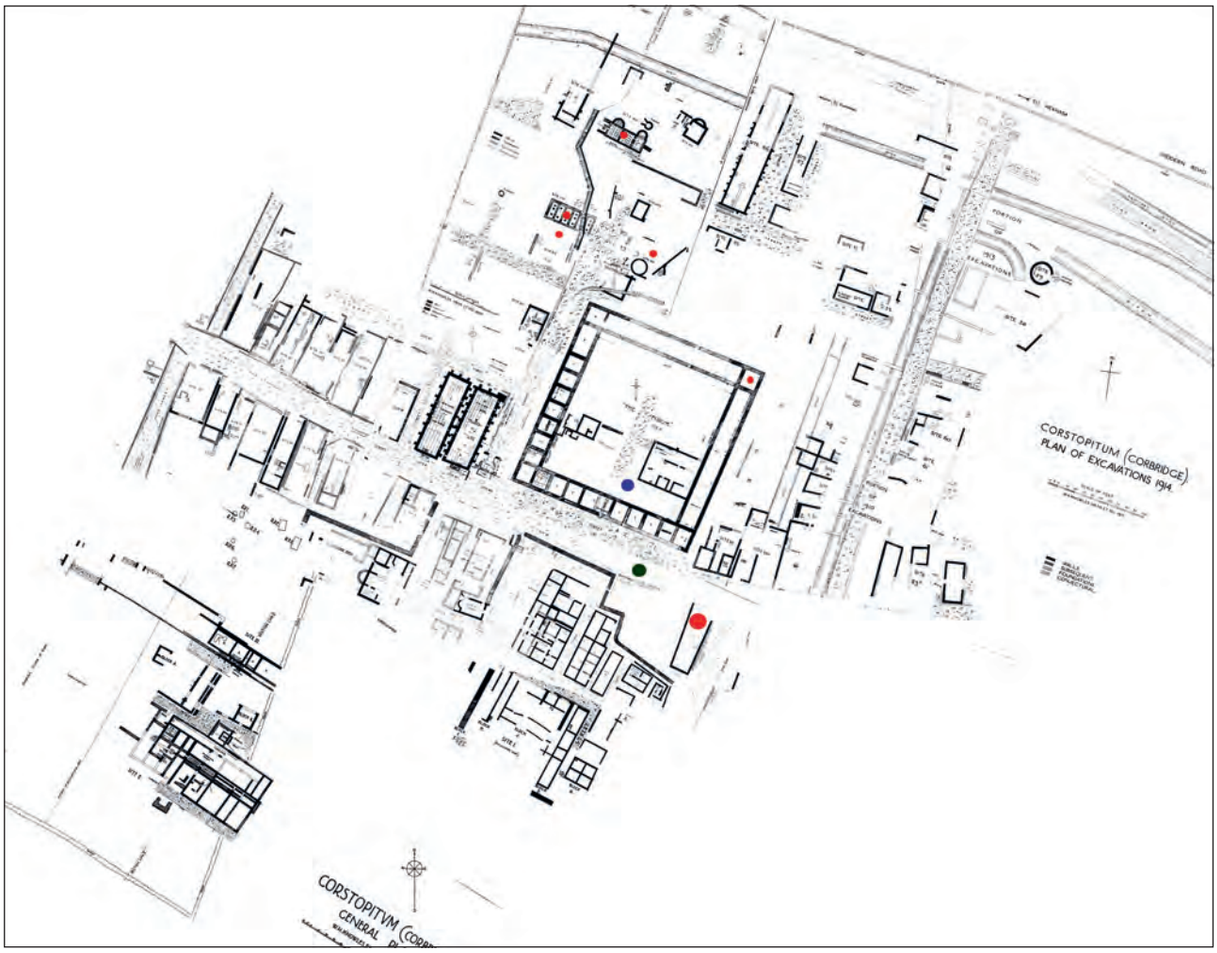


Fig. 6. Site map marking findspots of groups of counters. Red = Samian, dark green = bone and blue = the glass counters from the Corbridge Hoard.

found in Roman Britain they tend to be smaller than those found on the Continent.[36] Groups of 24 were found in burials at Ospringe, Kent[37] and Chichester.[38] Therefore, this group of 21 could be close to complete, or more importantly, a functioning set. It is tempting to think about someone working in the storehouse playing games on their break, or perhaps during quiet periods.

The next site with a group of Samian counters is Site 16, which in fact seems to have been multiple buildings over various phases of the site's life. Along with the eight Samian counters (four decorated and four plain), the excavation report lists some other interesting finds; namely a relief to Fortuna and Ceres,[39] fragments of a Dressel 30 Samian vessel (used for mixing wine), and the handle of an amphora (the latter two have not been identified in the collection currently). In the database there is also a Samian bung/stopper (measuring 52 cm in diameter, CO8692), which, following Cameron Moffet's system would have been used to seal a flagon neck.[40] If we were to be fanciful then we could consider these pieces taken together, as evidence for drinking and gaming, even if on a small scale.

Even more fanciful might be taking the single counter from Site 17, the bathhouse, as a marker of gaming in that location. Many site guidebooks will say gaming took place in bathhouses, and although the ancient sources are limited in speaking on this matter, the archaeological record provides proof for this statement. Alissa Whitmore summarises the finds evidence from a number of bathhouses for various activities, including gaming.[41] Caerleon in Wales provides the most evidence for gaming, with three dice and more than ninety counters,[42] but the bathhouses of *Augusta Raurica*, Herculaneum, Mirobriga, and both the pre-Hadrianic and 3rd-4th century baths at *Vindolanda* have also produced gaming pieces and dice.[43]

36 Potter, Charlesworth (1979).

37 Whiting, Hawley, May (1931), plate LVI.

38 Down, Rule (1971), 83; Austin (1934), 26-7, references a board set up with 18 counters from Richborough Fort, however this is a mistake, and conflates two different groups of material (this reference is also used in Murray (1952), 30. Pit 34 produced 6 or 7 plain bone counters and 11 decorated with incised concentric circles, Bushe-Fox (1930), 64. The board, of 8x8 squares, came from a completely different context to the counters, Bushe-Fox (1928), Plate XIV, Fig. 1.3). My thanks to Phil Smithers for helping to resolve this erroneous reference.

39 Philipps (1977), 2, no.3. CO23353.

40 Moffet (2018); Moffet (2021).

41 Whitmore (2018).

42 Zienkiewicz (1986).

43 Whitmore (2018), 67, Table 5.

Site 44, a strip building used as a dwelling but also as a workshop has produced a group of seven Samian counters. They are all made from plain Samian, with their edges un-smoothed. All of them are also on the smaller end of the scale for diameter, with the largest being less than 25 mm. It is speculative to say the least, but perhaps given the context these may be some counters not used for gaming, but for accounting. Buildings such as Site 44 which front onto the street are likely to have had at least some retail activity taking place in them, selling wares they made or traded to passers-by. Simple discs like these would fulfil the role of counters for sales accounting or similar in this trade.

3.4 Non-circular pieces

The recent work to sort the non-Samian pottery from the site has provided evidence for the stages of making these circular counters, as well as the larger lids and bungs. These consist of pieces in the shape of a comma, or apostrophe (Fig. 7), the 'tail' being where the maker held the piece whilst chipping the shape. These are a fascinating insight into the making of these objects, whether they are gaming counters, *calculi,* stoppers, or lids. Figure 7 shows one example, but over ten have come to light so far. Interestingly, no pieces like this of Samian have been found, only those using coarse-ware pottery such as Black-Burnished ware or Greywares. These pieces could well have been used for playing a game, for counting, or as lids, as for all these functions a precise size is not necessarily required.[44] They would not have worked as stoppers where more specific size and shaping is necessary. So, are these pieces unfinished, or simply counters or lids which were deemed complete enough to carry out their function? No similar examples from other sites could be found, and so they remain a *Coria* oddity for now. It is hoped in the future more pieces will be found at other sites to allow further study to understand these pieces.

Fig. 7. A sherd of greyware in the process of being cut into a circle. CO58813 (H. 34 x W. 47 mm). Copyright; English Heritage/Frances McIntosh.

44 See Penn, Pace, and Schädler this volume.

Another small, but growing, group is made up of rectangular and square pieces (Fig. 8). It is possible they were used as gaming counters, or perhaps as counters for accountancy, but they seem unparalleled: perhaps a home-made set of counters of coarseware would consist of half circular and half square pieces for differentiation? Again, this phenomenon only appears in the coarsewares, not Samian. A visit in August 2022 to LVR-Römer-Museum, Xanten, Germany, provided the only other examples of pottery cut down into squares known to the author. There, a grave assemblage contained ceramic flagons with cut-down square ceramic pieces laid on as lids. The square did not match the shape of the rim of the flagon, so if it had not remained in place, there is no way they would have been connected. It was purely due to excellent preservation and retrieval that their connection was known. As with the comma-shaped pieces, the lack of comparative data means our understanding of these pieces is limited. By publishing them, it is hoped that others will come to light.

Fig. 8. A sub-square piece of Black Burnished Ware pottery, purposefully cut down. CO59680 (H. 27 x W. 21 x D. 4.5 mm). Copyright; English Heritage/Frances McIntosh.

4. CONCLUSION

When this project began, the large numbers of counters inspired the author to the title of this paper. Corbridge does have an unusually high number of circular discs cut down from Samian, in whatever way they were used by the Romans. However, further work looking in detail at the Samian discs means we should temper our excitement at the prospect of evidence of large-scale gaming in the town. While

there is no doubt some of the pieces were used in gaming, the probability is that many of them were used for other purposes, in which accounting is the most likely suggestion. This conclusion has been reached in particular by the very low number of counters made from decorated Samian, meaning most of the Samian pieces would have been indistinguishable from each other. Whilst they would work as one half of a gaming set, there seem to be too many plain, and not enough decorated pieces, to suggest this was the use for all the pieces. The two unusual shaped ceramic pieces discussed towards the end highlight how much is still to be learned from looking in detail at collections. This paper has perhaps raised more questions than it has answered, but it has highlighted the benefits of re-examining historic collections to see what material is available to cast light on life in Roman Britain.

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On pegged gaming pieces (with particular reference to a Late Celtic set from Lough Sewdy, Ireland)

INTRODUCTION

Gaming pieces held in place on perforated boards by means of short pegs are a type widely familiar from games such as *Chinese chequers* and travel versions of popular board games including chess, backgammon, and draughts (though nowadays the latter tend to rely on magnetism rather than pegs as a fixing mechanism). It comes as something of a surprise to discover how recent these innovations are. *Chinese chequers* was invented in Germany in 1892[1] and board-game travel sets are also a late 19th-century invention. Before this, pegged gaming pieces are rare. They appear to be restricted to two distinct geographical areas: Egypt in the Pharaonic and Late Antique/Early Byzantine periods, and Britain and Ireland in the 1st millenium CE (with Norse borrowing towards the end of this period extending the geographical range). We explore the archaeological and literary evidence for pegged gaming equipment over the longue durée, briefly surveying the Egyptian material and looking in more depth at the Celtic evidence. We take this opportunity to bring to wider attention a remarkable group of Early Medieval pegged gaming pieces from Lough Sewdy, Ireland, which are a particularly fine example of the type and have not yet been fully published.

Although all the types surveyed require the use of a reciprocally holed board, the peg playing pieces fall into two distinct groups reflecting, we would argue, two distinct phenomena. The simplex pegs used in Egypt are a distinct type of piece used in a specific game, each carved out of a single piece of material (typically ivory or bone, but also wood or copper alloy). They are tall and thin, with the decorative head only a small element and the majority of the peg visible throughout play. In contrast, the composite pegged pieces of North-West Europe in the 1st millenium CE are a functional variant of a range of standard gaming-piece types, used in games (such as *hnefatafl)* which could also be played with unpegged pieces. They were made from a range of organic and inorganic materials with the short pegs typically inserted in a socket in the base of the piece (although more complex constructions are also found), and the peg element is thus, generally invisible during play. The weight of evidence suggests this latter type of pegged piece is a Celtic innovation or characteristic in the 1st millennium CE, and its near total absence for Roman contexts helps to confirm the distinctive originality of the Celtic variations.

THE OLDEST PEGGED GAMING SETS OF THE ANCIENT NEAR EAST AND EGYPT

The earliest potential examples of the phenomenon we are discussing date from the Neolithic of the Near or Middle East. It has been suggested that a gypsum fragment with three rows of deep hollows recovered from Chagha Sefid, Iran and dated to 5700-5400

1 Parlett (1999), 135-6.

BCE, and a similar example from Wadi Tbeik, Sinai[2], are game-boards of a distinct class and that these are related to comparable examples thought by some to be game-boards which have two rows of more shallow hollows. The depth of the indentations on the three-row variety suggests they could have accommodated an early form of peg playing piece. However, these very early, Neolithic examples are not universally accepted as gaming boards. A recent re-assessment[3] suggests that they might instead be fireboards, for the making of fire by rubbing a stick in a hole. This is certainly a possibility, one that Thierry Depaulis links to the evolution of the human mind, but this defines the "boards" unhelpfully as somehow "primitive" and does not account for the need for the purposes of fire-starting of so many (impractically?) small holes laid out in such a regular manner. The stones could be some form of hybrid between divinatory tool and board game, or it may be they have no relationship to gaming at all.

Unambiguous evidence for pegged gaming sets comes from a later period with examples from Bronze and Iron Age Anatolia (Acemhöyük), Iran (including Tepe Sialk and Nineveh) and Iraq (Ur), the Levant, Syria, Egypt, and Nubia, spanning in date the mid-2nd to mid-1st millennium BCE[4]. Rock-cut outliers in Azerbaijan have recently been identified and are pending publication[5]. This range of more refined boards all represent variations of the same game, dubbed by scholars *fifty-eight holes*, or, after the well-known Egyptian examples, *hounds and jackals*[6]. The game, of which there are at least seventy examples extant, has been compared to the Indian game of *pachisi*[7], and is essentially a race between two players around a course to reach a defined end point. The most recent review of this widespread evidence outlines the three types of board-shape known and argues for a particular development of board design that can be understood by focussing on so-called "crossover boards", which exhibit innovations in layout to permit a game of greater complexity in which skill and chance are more evenly balanced[8].

The most well-known examples of *fifty-eight holes/ hounds and jackals* both come from Egypt. In the collections of the Louvre (registration number N 3043) is a blue-faience example fashioned as a hippopotamus and dated to the mid-1st millennium BCE. There is no provenance for this object beyond it coming from Egypt and the pegs often shown with it in published images have been added for effect[9]. A related turtle-shaped example, of wood, from a tomb in Drau Abu el-Naga is thought, because it has too many holes, to be either a holder for pegs or an amulet in the style of a board[10]. The second board, which notably includes 10 original pegs, is in the collections of the Metropolitan Museum of Art[11] (Fig. 1). It was found at Thebes amongst the burial goods of the magnate Reny-sonbe and dates to the reign of King Amunemhet IV, c. 1990-1800 BCE. The board is made of wood overlaid with ivory and ebony and the pegs are of ivory. The board is in the shape of an axe head and is mounted on four ivory legs in the form of the legs of a bull. At the flat end is a lockable drawer in which the pegs could be stored, five of them jackal-headed and five of them dog-headed. Traces of red pigment on some of the Thebes pegs suggests some pegs were coloured[12].

These ten pegs from Thebes are the best known of the type and their form has given the game its scholarly label, but a range of pegs of diverse form are known from Egypt. Some are very large: in the Egyptian Museum, Turin are two copper alloy pegs both 32 cm in length, one jackal and one hawk-headed (both in the Drovetti Collection, inventory nos. 6327 and 6328) and in the same collection, is a wooden jackal-headed peg, only slightly smaller at 25 cm in length (inventory no. 6934)[13]. These examples raise an important point about the challenge of distinguishing between game pegs and hair or dress pins, one that resurfaces in Late Antiquity and the Early Medieval period, where it remains to be fully confronted. The discussion of pegs in a recent assessment of Egyptian games, noted that the comparative scarcity of such pieces may be in part due to their being of perishable wood but also because they lie unrecognised, wrongly catalogued as hairpins: the pegs associated with the turtle holder/amulet mentioned above were originally catalogued as hairpins and the wooden turtle as a pincushion[14].

The hawk-headed peg in Turin and a lion peg of unidentified location[15] also suggests there may have been animal-oppositions other than the eponymous jackals and hounds. We should note however that the Turin pegs are not universally accepted as being for *hounds and jackals*: the game

2 Hole (1977), 215, fig. 19 & pl. 48; Bar-Yosef (1982), 10-11; Simpson (2007), 6 and 7 no. 5.

3 Depaulis (2020).

4 Examples include May (1991), 158 & fig. 151, 159 & figs 150 & 152, 160-61 & fig 148, 162 & fig 157, 163 & figs 152 & 158; Finkel (2008), 151-54; Bardiès-Fronty & Dunn-Vaturi (2012), 58-60, 128-9.

5 Finkel (2020), 53-55.

6 Hoerth (2007); de voogt *et al.* (2013); Crist *et al.* (2016).

7 Parlett (1999), 42-51.

8 Finkel (2020).

9 May (1991), 157, fig. 156; Crist *et al.* (2016), 103-24, esp. 108-10.

10 Crist *et al.* (2016), 111.

11 Hayes (1953), 249-50; May (1991), 160-61, fig 148; Finkel (2008), 153, pl.92; Crist *et al.* (2016), 105-06.

12 Hayes (1959), 38, 200; Crist *et al.* (2016), 110.

13 Donadoni Roveri (1988), 247, fig 350; May (1991), 156, fig. 154; Crist *et al.* (2016), 111.

14 Crist *et al.* (2016), 110-12.

15 May (1991), fig.153.

Fig. 1. Ancient Egyptian board and pegs for the game hounds and jackals, in ebony and ivory from Thebes, Egypt (board H: 6.8cm. W. 10.1cm. D. 15.6cm). Metropolitan Museum of Art, New York, 26.71287a-k. © and courtesy Metropolitan Museum of Art

of "horseshoes" has been suggested[16], presumably imagining a pitching game akin to quoits. There are also non-animal headed pegs—examples with disc-heads and plain knobs were found with no boards in the North Cemetery at Lisht for example. The Lisht pegs extend the game's chronological currency into the later 2nd millennium BCE, but the archaeological record evidences the severe decline if not total disappearance of *fifty-eight holes* by Late Pharaonic times (i.e. mid-1st millenium BCE) and, as discussed further below, there appears to be no Roman period evidence of peg gaming pieces. It is therefore something of a surprise to see peg-boards return to Egypt in the Late Antique/Coptic/Early Byzantine period. These were formerly thought to be a late variant of *fifty-eight holes*[17], however, given the chronological gap and their different form, they are now more generally thought of as a different game, called today *the Coptic board game* or *the game of thirty points*[18]. Several boards are known but only one has a secure provenance, a female burial from Antinoë, radiocarbon dated to the second half of the 7th century CE[19]. The boards are arranged in a series of steps and the objective was to rise up the levels to reach a key, end hole. The playing pieces are typically small bone begs decorated variously with geometric knops and/or other mouldings, including human heads. *The Coptic board game* brings us into the Early Medieval period but seems to be an innovation rather than an evolving tradition from an ancient game. It was chronologically and geographically restricted, and appears to have neither spread beyond Egypt nor survived into the Middle Ages.

ROMAN PERIOD: CONTINENTAL EUROPE

The Egyptian examples discussed thus far concern long pins with decorative heads which move along a designated course of perforations in a specific game which exists only in this form (i.e. there are no known versions involving similar layouts on non-perforated boards). We turn now to a different phenomenon in which otherwise standard playing pieces of, for example, conical shape, are modified by the insertion of a short peg into their base for use on a board with otherwise standard layout which has a hole drilled in each square to accommodate the pieces. This practical innovation does not affect the nature of the game, but improves the stability of the pieces while in play, though at the cost of making them more cumbersome to move. The pay off would seem worth it in situations where the board is likely to be accidentally knocked,

16 Donadoni Roveri (1988), 247.

17 Drioton (1940); May (1991), 164-65; a view adhered to recently by Finkel (2020), 43.

18 Crist *et al.* (2016), 122-24.

19 Crist *et al.* (2016), 123-4; Gayet (1902), 47-8, 51; Calament & Durand (2013), 330.

for example in "lively" social settings, or when in motion on wheeled transport or on board a ship. Given the practicality of this arrangement, it comes as a surprise that evidence for pegged gaming pieces or holed boards in antiquity is very hard to discern. An extensive review of archaeological and literarary evidence has revealed virtually no Roman period evidence of gaming with pegged pieces. The only certain archaeological evidence comes from native contexts in Britain and Ireland, with only a handful of potential examples from Roman sites (discussed below). It is possible that pegged gaming pieces may be languishing in stores or catalogues, misidentified as pins or similar, but we know of no archaeological examples of Roman holed boards, nor any confirmed examples of Roman pegged pieces outside Britain.

There are certainly several stone boards (including for *pente grammai*, *ludus latrunculorum* and *mancala*) with indentations for the placing of gaming pieces but these cavities are very shallow and irregular, quite different from the defined circular holes drilled into the Egyptian boards discussed above. They are meant to cradle the entire piece, not simply receive the tip of a peg[20]. Having said that, though *mancala* boards from antiquity to modern times tend to have shallow indentations, there are some rare, later pegged boards, from the early modern Benin kingdom of Nigeria[21]. From 17th-century France, we have dimpled boards for *peg solitaire* (invented in 1687 at the court of Louis XIV)[22] but, like the earlier *mancala*, these feature shallow hemispherical indentations to cradle spherical pieces (which, despite the name, are not pegs) and are thus only loosely connected with the pegged equipment under discussion.

Previously one of the authors[23] interpreted the well-known passage from Suetonius about the gaming/dicing obsession of the Emperor Claudius (which led to him having a board fixed to his carriage so that the game could not be upset), as probably indicating the use of a pegged board:

Aleam studiosissime lusit, de cuius arte librum quoque emisit, solitus etiam in gestatione ludere, ita essedo alueoque adaptatis ne lusus confunderetur

"He played *alea* most avidly and published a book upon the subject. He even used to play as he was driven about, his chariot (*essedum*) and hollowed gaming board (*alveus*) so fitted that the game was not disturbed."[24].

In revisiting this passage for this paper, we recognise, however, that this was an over-interpretation. As Véronique Dasen kindly pointed out (*pers. comm.*), there is no explicit mention of holes or pegs in Suetonius' text, merely that the board was attached to the chariot in such a way that play was not disturbed by the motion, with the implication that this was a special adaptation. The term used for a gaming board, *alveus*, refers to something "trough-shaped" or "hollow", and is typically applied to U-shaped things such as a river channel or the hull of a ship. Presumably, when applied to a gaming board it indicates not a strict U-shape but something "hollow" in a looser sense: perhaps a board with a raised frame which stopped dice and counters falling off. The term *alveus* for a "hollowed gaming board", while not common, is used by a number of authors including Cicero, Varro, Valerius Maximus and Pliny[25]. Pliny's account describes the triumph of Pompey in 61 CE after his victory over Pontus and, in particular, the luxurious gaming board (*alveum lusorium*) seized from king Mithridates:

transtulit alveum cum tesseris lusorium e gemmis duabus latum pedes tres, longum pedes quattuor ....in eo fuit luna aurea pondo xxx

"he displayed in public, with its pieces, a gaming-board, made of two precious stones, three feet in width by two in length … upon which was a moon of gold, thirty pounds in weight"[26].

This particular board is atypical in its size and luxuriousness, and, of course, is not a Roman board but one made in Asia Minor, however, it seems unlikely that it bore any resemblance to a boat: perhaps it had a sunken, trough element, most obviously if the playing area was set within a deep, raised rim. Its general immovability suggests stability in play was not an issue (though ironically we only know of the board through its movement in triumph). It does, however, seem to confirm that the stability achieved for Claudius' board was a function not so much of the shape of the board itself but how it was specially adapted or fixed to his carriage.

Before we leave Claudius, it is worth noting that the vehicle he had adapted was an *essedum*, originally the formidable war chariot encountered by Julius Caesar in Britain and Gaul and which came to symbolise both Rome's conquest of Gaul and one of its most vaunted commanders, Caesar[27]. The enthusiasm for this symbolism was such that the chariot was adopted by Romans soon after Caesar's account of it, as a key form of transport about the city. Suetonius was quick

20 Crist *et al.* (2016), 125-146, gives several examples.

21 Von Luschan (1919), 427-429, esp. figs 674 and 676.

22 Beasley (1985).

23 Hall (2007), 11.

24 Suetonius, *Lives of the Caesars*, V.33, trans. Mottershead, Bristol Classical Press (1986).

25 See entry on *alveus* in Lewis & Short (1879); also, Nettleship (1889), 145.

26 Pliny the Elder, *Historia Naturalis,* 37.6.2, Bostock & Riley, ed. and trans. 1893, see also *Pliny the Elder, The Natural History* (London: Bell and Sons) (available online at http://www.perseus.tufts.edu).

27 Hudson (2013), 114.

Fig. 2. Cupids playing latrunculi, sandstone relief part of a Gallo-roman sculpted relief reused in the cathedral, Le Puy en Valay, Auvergne-Rhône Alpes, France (H. 57 cm. L. 74 cm. Th. 56 cm). Le Puy-en-Velay, musée Crozatier, 890.888.1. Photo A. Bonnet © and courtesy Crozatier Museum

to satirise this appeal to the chariot's symbolism when he perceived it. Jared Hudson characterises Suetonius' description of Claudius' adapted chariot as an extravagant piece of "weird tinkering" in line with his portrait of Claudius as an "eccentric with antiquarian fixations" and which effectively satirises his deployment of the chariot as it "ending up being rebuilt as a bumbling autocrat's plaything"[28]. See below for discussion of game playing and chariot riding in early Ireland.

The only piece of evidence for pegged boards known to us from Continental Europe is from Gaul: a 2nd-3rd-century CE funerary relief from Le Puy-en-Valay, Auvergne-Rhone Alpes, France which depicts Cupids playing a board game, apparently the Roman game of *ludus latrunculorum* (Fig. 2). It was found in the foundations of the cathedral choir before 1890 and is in the collections of the Crozatier Museum[29], where it is referred to as the *Les Joueurs de latruncules* ("The *Latrunculi* Players"). The location of its discovery in the cathedral foundations suggests it originally formed an element in the decoration of a pagan sanctuary[30]. This relief appears to depict a wooden board with two typical, opposed trapezoidal projections which serve as handles and can also be used to hold either captured pieces or those still to be placed on the board (pieces are depicted resting on both projections). Boards of strikingly similar form are also found in later Irish contexts, as discussed below. The Le Puy depiction shows a grid board of 5x6, with clear cavities or hollows, some of them occupied by what appear to be short pegs with domed heads. In the most recent discussion of this scene the link to depictions of the intimacies of family life is made[31]. The Le Puy board is shown balanced on the knees of the players suggesting a lively social setting (the depiction of the players and audience make it clear there is shouting and gesticulation going on) where pegging would be a great aid to stability.

Chronologically, the earliest and longest-enduring evidence for pegged pieces and reciprocally holed boards comes from Britain and Ireland, whence it appears to have been borrowed at a slightly later date into north-western European (predominantly Scandinavian) contexts during the Viking Age. Other than the Le Puy board, as things presently look, there is no Roman tradition of pegged gaming boards. This suggests that such equipment was an innovation of Celtic-speaking communities, and that pegged pieces and holed boards were a specifically

28 *Ibid*. (2013), 7, fn. 17, 114.

29 Registration 890.888.1, https://www.musee.patrimoine.lepuyenvelay.fr/musee-crozatier/les-collections/les-oeuvres/prehistoire-et-antiquite/latruncules/

30 Dasen & Mathieu (2021), 8.

31 *Ibid*., 8 and fig. 9, see also May (1991), 175-77, fig. 173.

Fig. 3. Bone cone pegs from burial at King Harry Lane site, Verulamium, Hertfordshire, England (with Braughing bird peg for comparison) (H. c. 4-5cm.). British Museum, London, 1976,0501.621-641. Photo © Mark Hall and courtesy the Trustees of the British Museum

Celtic mode of play. The significance of the Le Puy depiction is hard to discern; it is quite an outlier. Although not the earliest piece of evidence it is essentially the most complete in combining board and pieces and showing them in use.

ARCHAEOLOGICAL EVIDENCE FROM BRITAIN IN THE 1ST MILLENIUM CE

Board games seem to have reached Britain in the early decades of the 1st century CE in the period immediately before the Roman Conquest. Half-a-dozen or so sets of gaming pieces have been found in south-east England forming part of special funerary deposits amidst the Cantiaci in Kent, and as a component of a high-status feasting repertoire from elite Iron Age cemeteries of the neighbouring Catuvellauni further inland[32]. Most critical for the present discussion is the group of simplex bone pegs, like little ice-cream cones, from the King Harry Lane site in *Verulamium*/St Albans, the tribal capital of the Catuvellauni[33] (Fig. 3). The pegs number 21 in total, divided into two distinct groups, 11 of them plain and 10 of them decorated with swirling diagonal

32 Hall & Forsyth (2011); Forsyth & Hall (2020), 40.

33 Stead & Rigby (1989),107-108 [no 3 249], 334 and fig. 137.

lines around their upper third giving the "ice-cream cone" effect. Their number and dimorphism point strongly towards their being board-game pieces. They were found as a discreet pile in the same cremation pit (249) as an urn containing burnt human bone and a copper alloy brooch. Most of the pegs are damaged but the two complete decorated examples measure 37 and 34 mm in length and the two complete undecorated examples measure 39 and 42 mm. The cremation is part of the Phase 1 group of such burials, dating to the early decades for the 1st century CE (c.1-40 CE). Whether these gaming pegs were a British innovation or were part of the cremation rite package identical on both sides of the English Channel in the first half of the 1st century CE[34] remains an open question: a re-examination of contemporary cemeteries on the Gallic side of the Channel and their excavated assemblages may find such pegs unrecognised in reports and museum collections. From the King Harry Lane cemetery complex come two further bone pegs of similar date. They were recovered from cremation 148, possibly of a male, with melted iron and copper alloy objects and the two pegs, placed in the cremation urn which may have been placed within a large wooden box[35]. Slightly smaller than the group of 21 pegs from pit 249, they measure 26 mm and 19 mm in length, and have narrow, tapering shafts and enlarged, bulbous heads decorated with ring-and-dot motif.

To the North of St Albans, in East Hertfordshire, excavations at Skeleton Green, Puckridge in the late 1970s revealed further examples of such pegs[36]. Four in number, the three complete examples have their upper sections decorated with an incised lattice pattern rather than the swirling diagonals of the *Verulamium* pieces. One of the pegs is broken and burnt and the three complete examples measure c. 35 mm in length. They were excavated from a large well (Well 2, F.52) dating to Phase ii of the site. The well was cut through the site's defining ditch and palisade trench. Phase ii has been dated to c.10 BCE – 20 CE making the pegs contemporary with the *Verulamium* set.

The most recent consideration of the set from *Verulamium* placed alongside them a darkly polished bone (possibly ivory) peg in the shape of a bird now in the collections of the British Museum[37] (Fig. 4). Taking up a suggestion by Julia Farley of the British Museum, we agree that this peg can be interpreted as a gaming piece, a type perhaps later echoed in Irish textual references to a "silver raven" playing

Fig. 4. Ivory bird peg from Braughing, nr Verulamium, Hertfordshire, England (H. c. 4.7cm. W. 1.2 cm max.) British Museum, London, 1976,0101.1. Photo © Mark Hall and courtesy the Trustees of the British Museum

piece and a game called *Brandub* ("black raven")[38]. The Braughing bird peg was recovered from the river Rib, Hertfordshire (3 km northeast of Puckridge and 77 km northeast of St Albans). The peg itself has no dateable context but comes from an area rich in Iron Age/Roman material culture, permitting a suggested date of late 1st century BCE to 1st century CE. Although the British examples discussed thus far are simplex (i.e. carved from a single piece of bone), these short, squat, wedge-shaped pegs are otherwise very different in shape to the elongated Egyptian pieces and appear to have more in common with the composite pieces discussed below.

Archaeological evidence indicates that these early board games were largely the preserve of social elites, but boardgaming seem to have rapidly spread to other social levels (both military and civilian) within burgeoning Romano-British society. The Roman fish farm, with its fine villa, at Shakenoak Farm, Oxfordshire was built in the 1st century CE but went out of use c. 200 CE. Finds from the early 2nd century CE include seven plain, glass, hemispherical counters along with what the excavators interpreted as a pin[39]. The head of this pin is slightly smaller (at

34 *Ibid.*, 86.

35 *Ibid.*, 108 [4 148], 310 and fig. 314.

36 Partridge (1981), 61, fig. 26.1.

37 Registration no. 1976,0101.1 and accessible at: https://www.britishmuseum.org/collection/object/H_1976-0101-1 see also Forsyth & Hall (2020), 52-53, fig. 2.6.

38 Forsyth, in prep.

39 Harden (1977), 98-108, at 106, fig. 45.

c. 10 mm diameter) but otherwise identical to the gaming pieces (diameters ranging from 15-20 mm) and within the size range found in groups of such glass gaming pieces elsewhere. Was it then a gaming piece adapted to serve as a pin head or was it placed on a "peg" so that it might be used securely on the ground or on a holed board? The glass head is fixed to the shaft but not pierced through. Were the two not attached, the head alone would be unlikely to be identified as a "pin head", a further caution in recognising the potentially variable use of such objects. On the very edge of the Empire, the elite crannog site at Buiston, Ayrshire has produced three globular bone pieces with iron shafts, long identified as pins, but which must surely be peg pieces—they date to the 2nd-4th century CE[40].

Roman use of pegged boards in Britain appears rare[41], however, their use in the Hadrian's Wall military zone is suggested by material from the forts at *Arbeia*/South Shields and Chesters. The gaming kit from *Arbeia* includes a jet/shale socketed piece[42] and four complete composite 'pins', from 82-92 mm long, with tapering, centrally-bulged, shafts of bone and spigotted upper ends to receive a separate disc of jet/shale. These 'jet' heads are decorated with varying patterns of incised grooves[43]. From Chesters, comes a single bone peg with a bulbous, domed head and a tapering shaft (overall length c. 35 mm; length of exposed shaft c. 15 mm). Hitherto unpublished, it has no provenance other than being found at the fort between 1843-90 (Chesters Museum registration no CH1221). The Fort was established in c.124 CE and was occupied down to the early 5th century CE. This example is a further reminder of the likelihood that other such peg pieces lie unrecognised in museum collections and excavation assemblages. Further west, in Wales, excavations at the fort of *Segontium* recovered a composite peg of antler (shaft) and bone (polished globular head), which is published as a pin-head[44]. The form of this piece is very similar to the composite glass and metal examples from Stanway. There are three of these (with a further two probable), found with a black glass counter within burial chamber CF42[45].

Glass pieces were mentioned above, and these form a consistent thread through the post-Roman and Early Medieval period. The recent excavation of an elaborate glass head from a peg-piece[46] has prompted a re-evaluation of this type, which have a geographic and cultural concentration in northern Britain and Ireland dating to the second half of the 1st millennium CE and were probably used as pegged gaming pieces rather than the pins or studs the majority have been previously identified as[47].

From the middle of the 1st millennium CE onwards there are also a range of pegged pieces in other materials, including jet/jet-like substances and bone, which are evidenced from the second quarter of the 1st millennium CE down to around the 7th century CE. Historically the bone and jet pieces of the type from Late Iron Age/Pictish sites such as Clatchard Craig and Crichie were interpreted as pins[48], but this was questioned by Joanna Close-Brooks in her work on Clatchard Craig suggesting rather that they were pegged gaming pieces[49] (Fig. 5). The more globular bone examples from Clatchard Craig, from Chesters fort and from several Orkney brochs are similar in size and shape to the pegs depicted on the stone relief from Le Puy. Larger and more bulbous are the examples in jet or jet-like materials such as shale. They are found largely on indigenous sites in Scotland—including Traprain Law, Hill of Crichie (the pieces are split between Marischal Museum, Aberdeen and the British Museum), Hurly Hawkin, Kemp Law, Mote of Mark and Howe—and South Wales (Dinas Powys and Merthyr Mawr, both in Glamorgan), with a single example from South Shields Roman fort on Hadrian's Wall[50]. The Scottish distribution encompasses all points of the compass and elite broch and hillfort sites confirming the board games in question as an attribute of lordly power and its display. In the context of a new find from the hillfort at Dundonald, Ayrshire, the whole group was reviewed, confirming their Scottish concentration and spread across the 3rd-7th centuries[51]. Amongst the most securely provenanced of the excavated examples is the single piece, of shale/lignite, from Dinas Powys. Leslie Alcock's excavations at this lowland, defended-palace complex identified a principal phase of occupation spanning the 5th-7th centuries CE[52]. Several pegged pieces were among the finds from this phase, including one of shale (with part of its copper alloy shank intact), seven of bone (including one of cylindrical form), and one, a section of boar tusk with a peg inserted[53].

40 Munro (1882), 242, fig. 215; Stevenson 1955, 283 argues for a later date.

41 See Hall & Schädler in this volume; Courts & Penn (2021) identify no pegged boards.

42 Not published but listed in Hunter (2006b), table 2.

43 Allason Jones & Miket (1984), 28, fig. 2.443-446.

44 Casey, Davis & Evans (1993), 204 no. 465, fig. 10.21.

45 Crummy *et al.* (2007), 156-7, nos. CF42-16a-e, fig. 73.

46 Hall (2021), fig. 9.

47 Hall, Graham-Campbell & Petts, Forthcoming.

48 Stevenson (1956).

49 Close-Brooks (1987), 166; see also Hall, *et al.*, forthcoming.

50 Cree (1915), fig. 28.2; Callander (1927); Ralston & Inglis (1984), 57; Taylor (1982), 239, no. 114; Stewart (1963), 23; Curle (1914), 161-2; Laing & Longley (2006), 102-04, fig. 49; Ballin Smith (1994), 191.

51 Hunter (2006a), cat. 84, fig. 47, 106-07; 2006b, 78-79, table 2; the date range was previously suggested by Laing & Laing (1986), 214.

52 Alcock (1963); a schema confirmed by re-analysis and further fieldwork: Seaman (2013); Seaman & Sucharyna Thomas (2020).

53 Alcock (1963), bone: 151-54, nos 6, 8, 12, 16 [a disc], fig. 38, shale: 176-77, no. 4, fig. 39.

Fig. 5. Globular bone peg from Clatchard Craig, Fife, Scotland (H.1.3cm. W. 1.8cm.) National Museums Scotland, X.HHC 114. © and courtesy National Museums Scotland

NORSE CONTEXTS

When we reach the fourth quarter of the 1st millennium CE, larger hemispherical domed and piriform pegged pieces survive from a range of Scandinavian contexts, usually without the peg-shaft element surviving and only a socket to indicate their original form. Presumably these would have been used on wooden or whale-bone perforated boards, though sadly none survive from Scandinavia. A set of piriform pegged pieces in the British Museum, from Boge on Gotland (registration no. 1921, 11-1, 285-301), is poorly provenanced but comprises fourteen socketed piriform pawns of a type known from Viking Age contexts but which carry on in use into the 13th/14th century, and three, elongated cubic dice. The grave goods in a 9th-/10th-century Viking boat burial from Scar, Sanday, Orkney includes a set of 24 whalebone, hemispherical, socketed pieces, including a "king" piece (so probably for *hnefatafl*)[54]. Traces of iron peg shafts are preserved in several of them. A set of 27 pieces similar to the one from Scar (including a "king" piece) was excavated from a non-burial context in the harbour area of the emporium of Dorestad in the Netherlands[55]. It is worth noting that before the Viking Age there are no Scandinavian pegged pieces or peg-boards (for example see the assemblages from the Valsgärde and Vendel boat burials[56]. It needs further exploration but it is not improbable that the use of pegged pieces and perforated boards could represent Viking Age borrowings from the Insular Celtic zone.

54 Owen & Dalland (1999), 127-32.

55 Hall (2021), 38-39.

56 Arwidsson (1954) and (1977); Herschend (2001); Hall (2016), table 1.

Fig. 6. Whalebone game board fragment with peg holes, from Birsay, Orkney, Scotland (L.9.2cm W.6.2cm.) National Museums Scotland, X.HB 274. © and courtesy National Museums Scotland

Although Viking Age peg-boards are not currently archaeologically attested in Scandinavia, there are two examples from Scotland and Wales to take into consideration. Lying somewhat hidden in the pages of the Brough of Birsay, Orkney excavation report, and long under-appreciated, is a fragment of a whalebone pegged board (Fig. 6). It measures 92 x 62 mm and is incised with a grid of five vertical and three horizontal lines, the grid is perforated with irregularly spaced holes at lower-right (based on published drawing) junction points—12 complete and eight incomplete. The board is broken through the middle of a set of perforations along two sides and appears to be a corner of a board. There are several pegs of interest from the same site: there are four globular, bone headed pegs with short iron shanks (identified as pins in the report); a socketed, hemispherical bone peg-head; and an antler, socketed piriform piece with an acorn shaped terminal[57]. Non-pegged gaming pieces in the form of circular stone discs of diameter 20 mm and 33 mm respectively were found in subsequent excavations[58]. This material comes from a range of contexts from the late Pictish and early Norse phases of the site. The board fragment and the piriform peg were the only two finds from the same room in a building adjacent to the early church. They seem likely to go together and suggest a fusion or hybridising of Insular Celtic and Norse gaming practices. The four globular pegs were spread across the last Pictish phase and the earliest Norse phase and again hint at fusion, being typically Insular Celtic peg forms[59]. The socketed hemispherical piece is a typical Norse/Viking Age

57 Curle (1982), globular pegs: 62, cat. 259-262 & ill. 38; piriform peg: 89, cat. 275, ill. 50; hemispherical peg-head: 75, cat. 271 & ill. 38; board: 89, cat. 274, 275 & ill. 50.

58 Morris & Barrowman (2021): RF 988, p.278 illus 14.32 on p.268; RF 2024 p.338 illus. 15.42 on p.337.

59 The chronology was established by Stevenson (1955), 292-93, where they were interpreted as pins.

Fig. 7. Whalebone game board fragment with peg holes from Caerwent, South Wales (L. 30cm. W. 9cm. Th. 2.25cm.) Newport Museum & Art Gallery, NPTMG:1983.311.55. Reproduced with permission of Newport Museum and Art Gallery

type (as has been discussed above from Scar and Dorestad, for example). As we will see they also occur during the Viking Age in Ireland.

The second, also fragmentary, board has only recently been identified as such, having been brought to our attention by Stephen Greep. Dr Greep published the item in his PhD on Roman bone-working[60]. He encountered it as an unaccessioned item in the stores of Newport Museum, as part of the archive of (mainly Roman) finds from Caerwent and classified it as a Roman whalebone gaming board. As the only piece of worked whalebone from Roman Britain, Dr Greep suggests to us that it might fit better with an Early Medieval date—its material and form certainly point towards its being an Early Medieval pegged board. Medieval Welsh legal texts refer to whalebone boards as royal possessions and gifts[61]. The Caerwent board survives as a broken fragment with maximum length of 237 mm and a maximum width of c. 46.5 mm, incised with a grid of cells, perforated with drilled holes (6 mm deep and 5 mm diameter) at the cell junctions (there are 21 complete perforations and nine partial ones on the broken edges, see Fig.7). There is no secure provenance known for the board but given the likely Early Medieval date, one possibility is the putative Norse graves from the post-Roman cemetery in *Insula* XII of Caerwent[62]. This forms part of the suggested Cambro-Norse Phase for Caerwent, dating to 850-1066 CE, which includes additional Hiberno-Norse objects and Early Christian Welsh material culture[63]. However, the board is not certainly Viking Age and could readily relate to the longer duration of Cambrian occupation (including a probable monastery complex) and may be further testimony to Insular Celtic and Norse/Viking Age gaming hybridity.

60 Greep (1983), vol.i, 239-41, fig. 62.

61 Forsyth & Hall (2020), 55.

62 Knight (1966), 56-58.

63 *Ibid.*, 58-59; Seaman (2019), 341-42.

Turning to the Irish context we begin with a brief summary of the archaeological context for pegged boards in Early Medieval Ireland, before focussing on a particular set of gaming pegs from Lough Sewdy and then review the rich body of textual evidence for pegged gaming.

ARCHAEOLOGICAL EVIDENCE FROM IRELAND

Soon after board games arrived in Britain, they reached Ireland[64]. The key location for us is the complex site at Knowth, Co. Meath, a place of ritual since the Bronze Age, and the location of a remarkable burial of two decapitated twins of British origin. Buried with them were two sets of gaming pieces: a set of 21, unpegged, stone pieces, together with three dice (which we have suggested were for playing an *alea*-type race game), plus a set of thirteen small bone composite pegged pieces (of a type similar to those depicted at Le Puy and not disimilar to some of the Early Medieval examples discussed above, including Clatchard Craig and Brough of Birsay). The burial is radiocarbon dated to 40 BCE–130 CE), making it broadly contemporary with the early evidence of simplex peg pieces from the southeast of England discussed above[65]. The lay-out of the pegs suggests they were buried in playing position on a board, presumably of wood, which does not survive.

There are, however, a small number of wooden peg-boards which do survive from subsequent centuries—they are a consistent strain of the Early Medieval period in Ireland[66]. They comprise the 7th-/8th-century board from Knockanboy, Co. Antrim, now

64 For the wider, current view on the Roman background in Ireland, albeit neglectful of gaming evidence, see Wilson (2014).

65 Hall & Forsyth (2011), 1328-1330, fig. 2; Eogan (2012), 23, 419-22.

66 Forsyth & Hall (2020), 59 review them. As this paper went to press, we learnt of a recently excavated peg board from the early medieval crannog of Drumclay, Co Fermanagh, Ireland and shortly to be published – it may lead to further insights. We are grateful to John O' Neill for alerting us to this board.

Fig. 8. Wooden peg-board for hnefatafl from Ballinderry Crannog, Co. Meath, Ireland (L. 24.9cm. W. 24.3cm.) National Museum of Ireland, 1932:6533 © and courtesy National Museum of Ireland

lost[67]; the famous *hnefatafl* board of late 10th-century date from Ballinderry crannog, Co. Westmeath (Fig. 8), which marries Viking and Insular art styles with both Irish and Viking board traditions in having peg holes (Irish) and a specifically marked central square and corner squares (Viking—*hnefatafl*))[68]; a little-known fragment of a 10th-century wooden peg-board from Lagore Crannog, Co. Meath[69]; and a substantial fragment of a board from 12th-century urban deposits in the town of Waterford, alongside which six pegged pieces were also recovered, five of them conical with short shanks and pointed knops and one of them a smaller, piriform piece of the type discussed above[70]. Three of these wooden boards (Ballinderry, Knockanboy, and Waterford) have handles, and the latter two, in particular and despite the disparity in dating, closely recall the design of the Le Puy board handles. One difference between the Irish and the Le Puy boards is, however, that all the Irish boards have a broad, flat, raised rim which would have served to keep the pieces and any dice from rolling off, a feature not visible on the Le Puy depiction.

When it comes to the pieces used on such boards, it should be noted that pegged pieces in Britain and Ireland are otherwise akin to non-pegged pieces. They are of the same size and shape but simply have a small socket in their base into which is inserted a metal or bone pin to act as the peg. The most common form of gaming piece in Ireland is the conical type sometimes described as "truncated acorn"—this is the type already noted for Waterford, for example, but also from Knowth[71]—but the typical Scandinavian, Viking-Age type of hemispherical bone/whalebone pegged piece also occurs. Four of the latter type were amongst the grave goods from a Norse burial in the burial complex at Kilmainham-Islandbridge, Dublin. The grave was excavated in 1845 and all four pieces are of whalebone[72]. From the more central, urban environment of Viking Dublin we have no peg-boards as yet but there are several socketed pieces missing their shanks (some piriform, some knopped hemispherical) and several conical ("truncated acorn") pieces with intact shanks. Alongside these are several non-perforated wooden boards and fragments, along with non-pegged hemispherical/conical stone playing pieces[73]. We seem to be seeing a combination of Norse and Irish equipment with the most obvious fusion the additon of pegs to typically Scandinavian hemispherical gaming pieces.

The Irish pieces just discussed are relatively plain, but there are further examples of a more elaborate nature. Amongst the many objects recovered from the royal crannog at Lagore, Co. Meath, is a small gilt copper alloy, open-work casing and pin, decorated with simple interlace designs. It was interpreted by the excavators as a wood-working rivet[74]. What made it difficult to identify was the loss of the bone or wooden core which sat within the casing. It can, however, be confidently identified here as a gaming peg at the *de luxe* end of the "truncated acorn" Irish style. This brings us back to Knowth once more, from where there are two further variations of this type of piece. One (4284) is a cylindrical cone of horn, with a copper alloy top, base and shank, (Fig. 9b) and the second (22309) is a copper alloy shank with circular top disc or cap decorated with ring-and-dot and an incomplete base disc. They were recovered from various habitation contexts of the 10th-11th-century open settlement built on and around the Bronze Age burial ground[75], and suggest a long chronological currency for the type. These pieces from Lagore and Knowth, bear direct comparison with a set of strikingly similar pieces thought to be

67 Simpson (1972).

68 Hencken (1933); Hencken *et al.* (1937), 175-90; Johnson (1999), 47-56; Wallace & Ó Floinn (1992) 231, pl. 6:22).

69 Hencken *et al.* (1951), 168, fig. 86 W111.

70 Hurley, Scully & McCutcheon (1997), 592-94, fig. 16:14.1, fig. 17:4, 10-15

71 Barton-Murray *et al.* (2012).

72 Bøe (1940), 54, fig. 36; Harrison & Ó Floinn (2014), 201-02, ill. 126; 324, ill.184.

73 Wallace (2016), 404-06, ill. 11.24-11.28.

74 Hencken *et al.* (1951), 68, fig. 12.17.

75 Barton-Murray *et al.* (2012), 426, fig. 7.3:8.

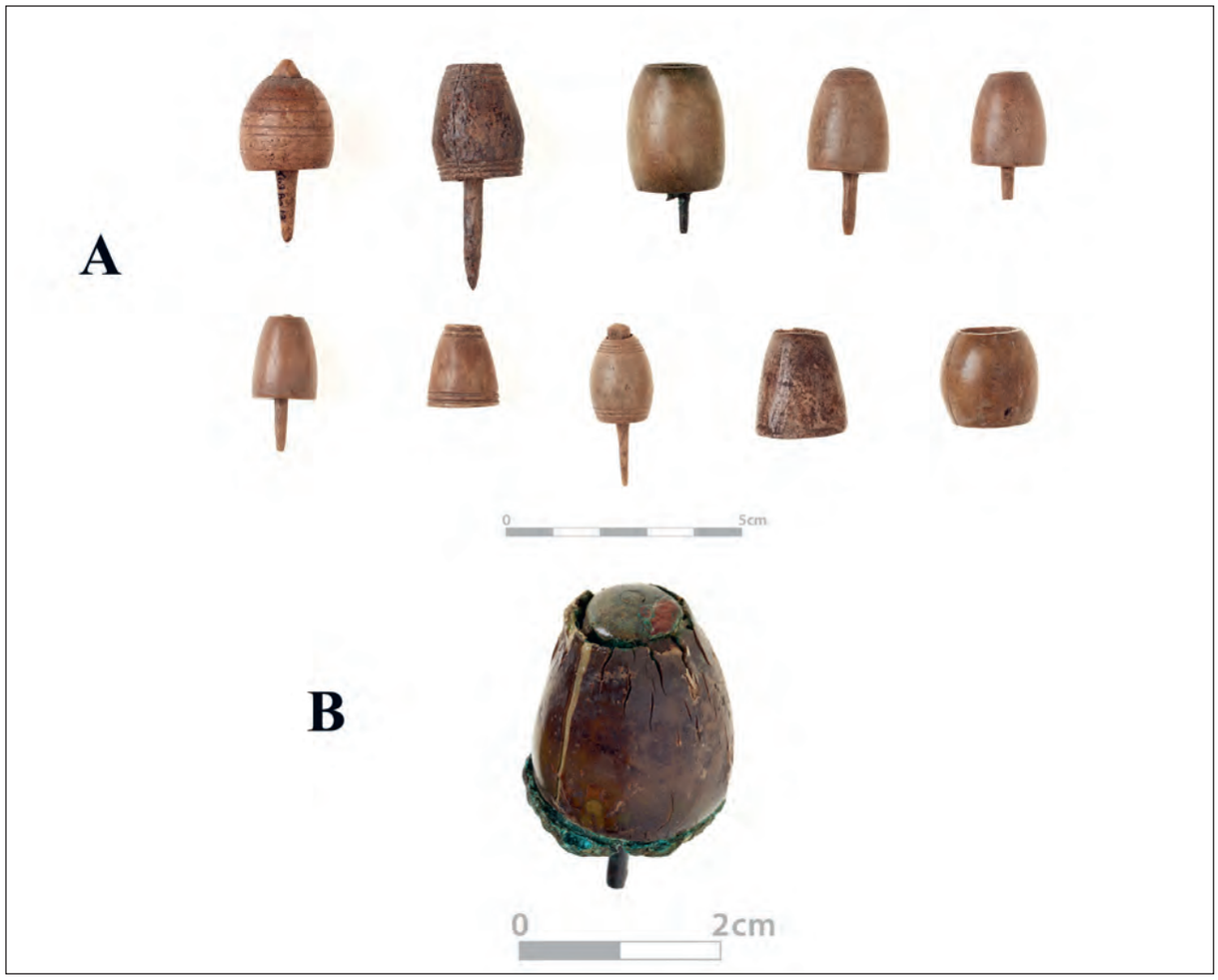

Fig. 9. a Antler pegs from early first century CE burial, (H. 2-3cm. W. 1.4-1.6cm) National Museum of Ireland E70; 10.b Late first millennium CE horn and copper alloy peg (overall H. 7.3cm. D. of cone 2.1cm) National Museum of Ireland E70: 4284; all from Knowth, Co. Meath, Ireland. © and courtesy National Museum of Ireland

from Sallow Island, Lough Sewdy, Co. Westmeath[76], comprising 20 pieces, with bone core, copper alloy casing and shank, only one of which is complete (the remainder lack some element or other but clearly all were originally more or less identical apart from minor details). The Lough Sewdy pieces were found by chance sometime before 1982 by illegal metal-detecting which destroyed all chance of knowing their exact find circumstances. The awkwardness surrounding their provenance inhibited research on them, and, though they have long been on display in the National Museum of Ireland (NMI 1982.6.1-6.21) they have remained unpublished until very recently[77] (Fig. 10). The meticulous reproduction of the Lough Sewdy pieces in 2020 by archaeologist Adam Parsons of Blue Axe Reproductions (https://blueaxereproductions.com) gives a sense of how impressive these pieces would have looked originally (Fig. 11). The following details are based on his personal observations (Adam Parsons pers. comm.): even allowing for their various states of preservation, the pieces vary in size by about 4-5 mm. The most complete is 32 mm tall from cap to flat base with a maximum diameter of about 21 mm. The central pin runs through the osseous core, holding the elements together, and projects a further 21 mm out the bottom. Its thickness within the core is only 1 mm but the projecting part is 2.5 mm thick. Although superficially identically, in fact, the pieces fall into three or four subgroups based on subtle differences of manufacture and decoration. Each has a knob/cap at its apex and three 'arms' which reach down to the base. One subgroup has triangular projections between each set of arms. Only one base is intact and its underside is decorated with a ring of tiny dots. Parsons is of the opinion that at least three different master moulds were used in the manufacture of this collection of pieces.

Despite the lack of precise archaeological information we can nonetheless make some general observations about the finds context. The pieces are thought to have come from a crannog (artificial island supporting an elite dwelling[78]), one of several in Lough Sewdy

76 Incorrectly identified as 'Swallow Island' in Forsyth & Hall (2020), 57.

77 *Ibid.*, 57-58, fig. 2.7.

78 O'sullivan *et al.* (2014), 58-62.

Fig. 10. Antler/bone and copper alloy peg pieces from Lough Sewdy, Co. Westmeath, Ireland (H.32mm), National Museum of Ireland 1982:6.1-6.21 © and courtesy National Museum of Ireland

Fig. 11. Replica of Lough Sewdy peg made by Adam Parsons (H. 32mm) © and courtesy Adam Parsons

(*Loch Seimhdí*), in the townland of Lugacaha, parish of Ballymore. Lough Sewdy, formerly known as Lough Sunderlin, was clearly an important place, strategically located on the ancient route to the royal ceremonial centre of Uisnech, 8km away, which was celebrated as the umbilicus of Ireland[79]. Lough Sewdy was also close to the western boundary of the Province of Leinster, and this made it vulnerable to attack: twice in the 12th century different invading armies stopped to sack it, and it was also a focus of military operations in the 17th century.[80] Murchadh Ua Macleachlainn, king of Meath, was slain on the island of Lough Sewdy in 1034, following his remote ancestor, Áed Sláine, joint high-king of Ireland, who was assasinated "on the shore of Lough Sewdy" in 604[81]. A further reflection of the area's Early Medieval significance is the small hoard of Scoto-Scandinvian silver ring-money (two rings) from one of the other islands (i.e. crannogs) in the Lough, Corran Island, which contained a mid-10th century coin, and the same site also produced two separate finds of silver ingot fragments likely of a similar date[82]. A log-boat recovered from the lake in 1984 is also thought to be of Early Medieval date[83].

79 Schot (2006).

80 *Ask about Ireland*; O'Sullivan (2004), 111

81 Annals of the Four Masters = *Annala Rioghachta Eireann: Annals of the Kingdom of Ireland, by the Four Masters, from the earliest period to the year 1616*, trans. J. O'Donovan, 7 volumes, 1856, Royal Irish Academy, vol.2 p. 829; vol. 1, p.227.

82 Graham-Campbell & Sheehan (2009), 84.

83 *Ask About Ireland*.

The Early Medieval sites at Lough Sewdy have not been excavated and their precise nature remains a matter of conjecture. Clearly, they were of high status. Aidan O'Sullivan suggested they were "perhaps even royal sites"[84]. We have been unable to identify the scholarly source of the oft-repeated claim that Lough Sewdy was the site of a *bruiden* or "hostel" or "banqueting hall"[85], though this is plausible given its location on a major routeway, close to an important boundary. The *bruiden* was an important institution in non-urban Ireland[86]: a building offering shelter, drink, and food, presided over by a *briugu* ("hospitaller") who gained high status through his "public function of dispensing unlimited hospitality to all persons in his hostel which must be beside a public road. For this he is given the same honour-price as the king of a *túath* [i.e. petty kingdom]"[87]. Literary texts make it clear that such hospitality also typically extended to entertainment in the form of boardgames: the sound of *fidchell* being played is a characteristic of the lord's hall[88]. Whether a *bruiden* or a royal residence, a set of luxury gaming pieces would be necessary equipment for a high-status household.

Finally, we note, in passing, that the Lough Sewdy gaming pieces enjoy the distinction of having inspired a striking work of public art: *The Game Piece* (2005), by Dony MacManus[89], is an almost 4 m-tall representation of one of the pieces, originally situated by the N4 motorway between Kinnegad and Mullingar to the east of Lough Sewdy under the "Percent for Art" scheme which provides funding for public art features in state-funded major construction projects. The sculpture was subsequently moved to its current location outside the Westmeath County Council offices in Jail Park, Mullingar[90]. Lagore and Lough Sewdy are not the only *de luxe* pegged pieces known from Ireland. The great Irish antiquarian George Petrie described in a letter what appears to be two further Early Medieval pegged playing pieces ("ancient chessman") one of which is "silver-headed"[91]. Sadly, both are now lost.

EARLY IRISH TEXTUAL EVIDENCE

Early Irish texts in a variety of genres provide a wealth of evidence for boardgaming in early Ireland[92]. While we should not expect to be able to read directly from these works of literary imagination, which revel in the hyperbolic and the praeternatural, we have nonetheless argued that "textual descriptions [of gaming and gaming equipment] have, in many cases, a far firmer basis in contemporary material culture than hitherto acknowledged"[93]. The most frequently attested and highest status game was known as *fidchell*, which we have argued is a descendent of *ludus latrunculorum*[94]. The earliest surviving description of a *fidchell* set comes in the 8th-century Old Irish poem *Reicne Fothaid Canainne* ("The '*reicne*'-poem of *Fothad Canainne*")[95], which provides detailed evidence for the appearance of Irish gaming sets before the Viking Age, including what we interpret as a reference to pegged pieces and a perforated board. The poem is a song which the head of the recently decapitated warrior-chief Fothad sings posthumously to his lover (the wife of the man who has just killed him and many of his men), bequeathing to her his hidden treasures buried nearby, which, amongst other splendid items, include a superlative *fidchell* set[96]. The board is described twice, in both cases, with reference to its "*indech*" (in later spelling *innech*). This is a weaving term which refers to the horizontal threads (the "woof" or "weft") drawn under and over through the vertical warp threads[97]. Here it provides a nice metaphor for the interweaving of the lines on the gaming-board's grid. Two pieces of information are given about the *indech* of Fothad's *fidchell* board. At one point it is said to be made of pearl (*a hindech do margarét*) which has been plausibly explained as referring to an inlay[98]. It is also described as *deirc-indech* which the original editor of the text interpreted as incorporating the word *derc/derg* "red"[99]. This would appear to contradict the statement that it is inlaid with pearl, and, instead, we would prefer to interpret this word as the homonym *derc/deirc* "hole, cavity, hollow", and to take this as a reference to the interwoven lines of perforations on a peg-board.

The couplet as a whole is as follows:
Is mór colla cúan rinnech
sán chán immo deircinnech,

"Many a body of the spear-armed hosts
lies here and there around its crimson woof..."
(trans. Kuno Meyer)

The most recent commentator on this understudied text has interpreted this as referring not only to the "corpses of the dead warriors lying around the *fidchell* board", but also as "evoking the image of

84 O'Sullivan (2004), 111.

85 *Ask About Ireland*.

86 eDIL s.v. 1 bruiden or dil.ie/7093; Kelly (1997), 36-8.

87 eDIL s.v. *briugu* or dil.ie/6874

88 Forsyth & Hall (2020), 50.

89 www.donymacmanus.com

90 *Roadside Art of Ireland* website; Dony MacManus *pers. comm.*

91 Stokes (1868), 304.

92 Forsyth & Hall (2020); MacWhite (1948); Niehues (2011); Nuti (2001).

93 Forsyth & Hall (2020), 34, 36, *et passim.*

94 Hall & Forsyth (2011).

95 Meyer (1910).

96 Forsyth (2019); Forsyth & Hall (2020), 46.

97 eDIL s.v. *indech* or dil.ie/28356

98 Meyer (1910), v. 32.

99 *Ibid.*, v.30.

game-pieces left carelessly scattered after the players have finished their game"[100] When not in play, pieces were usually stored in a *ferbolg*, "man bag", and the *ferbolg* from Fothad's set is described as particularly lavish[101]. Nonetheless, this martial metaphor linking defeated warband and scattered pieces seems very plausible: as we have noted elsewhere, in Medieval Irish/Gaelic and Welsh literary traditions, playing pieces "are never referred to inanimately, but are invariably referred to as 'men' ... pieces are not 'captured' they are 'wounded/slain'"[102]. Indeed, later on in this poem the *fidchell*-men are referred to as a *foirenn*, a term commonly used for a set of gaming pieces but which has the basic meaning "a group of people (often though not necessarily militarily), a crew, a troop"[103]. Similarly, although it does not appear in this text, the term *muintir* is used elsewhere both for a set of gaming pieces and, more commonly, "family or household, followers, attendant troops"[104]. The collective noun *cúan* used here in Fothad's *reicne* means "a litter or pack of dogs, wolves, etc.", and can be used metaphorically to refer to "a band of warriors"[105]. Although we are not aware of any other examples of *cúan* used to refer to gaming pieces, such a usage would be quite natural, given the semantic ranges of these other terms. The men/wolves/warriors of the *cúan* are described as *rinnech*, "sharp pointed"[106]. Kuno Meyer took this as a reference to spears, the standard weapon in this period. Kirsten Mills accepted this interpretation but suggested a possible double-meaning, with *cúan rinnech* also meaning "sharp-toothed (or "sharp-clawed"?) wolf-pack".

Whether or not her interpretation is accepted, we would argue a more concrete double-meaning is also possible, with the "sharp-pointed men" being pegged gaming pieces akin to those from Lough Sewdy. The fact that the board is described as *deircinnech*—not, as Meyer supposed, of 'crimson woof' but rather of 'holed grid'—makes this all the more plausible. The preposition *imm* has a range of meanings, primarily "around, about", but also "encircling", "through", "throughout", and "against"[107]. Perhaps, then, the pieces/men are not scattered around (i.e. off and to the sides of) the buried board, but that the whole has been put in the ground with the pieces lodged in place across the grid (i.e. in their holes). The 1st-century CE evidence from Knowth and Colchester, Essex[108], reflects the archaeological practice of burying gaming sets in graves with the pieces laid out ready for play. Inhumation with gravegoods was never widespread in Ireland and the practice would have been long extinct by the 8th-century date of the text's composition, but in any case, what we have here is not funerary inhumation but objects buried for safe-keeping and to hide them from enemies. Nonetheless it is an intriguing detail. Could it have been inspired by an actual Early Medieval discovery of an ancient (Iron Age) furnished burial with a gaming set? Or perhaps contemporary awareness of the nature of late pagan burials in 7th-century, conversion period, Anglo-Saxon England. Elizabeth O'Brien has argued that such knowledge, derived perhaps from the many Anglo-Saxon clerics who visited Ireland in this period, lies behind Irish literary references to sentinel warrior burials. Interestingly, one of her examples is the richly furnished late 6th-/7th-century burial from Taplow, Buckinghamshire, which included a set of bone gaming pieces now in the British Museum possibly set out ready for play[109]. We have argued that the *reicne* author, in order to present the *fían* warriors as remnants of an earlier age, has assigned them antiquarian accoutrements (a puzzle lock, a silver handpin) from earlier centuries[110], the buried *fidchell* set may be a further example of this strategy.

Turning, now, to other texts, the circumstances in which pegged pieces might come in handy are delineated in an obscure early text known as *Cú Chulainn and Fedelm* (or *Ces Ulad*, "The debility of the Ulstermen")[111]. The great hero Cú Chulainn and his charioteer and companion Lóeg are travelling by chariot, with the former at the reins:

Fidc[h]iult lais ina c[h]arpuot 7 buónfuch 7 í bocclán di c[h]lochuip d'orcoin 7 gaoi inna laim co téd n-ass de gouin éscc 7 essé uhud desen no gaipiot[h] ésse an c[h]arpoid.... Aspert Eulcmaire fria mnái: 'Turtarta, a Fedlim!' Fedlim dixit: 'Antar frim aire co n-accar in coimriti in fer isind airide coni chéli alaili aireccar in dá n-ech la fidc[h]ioll, lia búanpuch, la forum n-én ic gach lercc.'

"He had *fidchell* and *buanfach* [a rare and unidentified board game] with him in his chariot, and it was full of stones for casting; and he had a spear in his hand with a strap attached to it for killing fish.... [The pair are spotted by the prophetess Fedelm and her husband Elcmaire who try to overtake them] She says: 'Let me see whether the man on the bench competes with his companion. Something is discovered between two men [?], with *fidchell* and with *buanfach*, with hunting birds on every slope.'"[112]

100 Mills (2018), 14.

101 Forsyth & Hall (2020), 62-67.

102 Forsyth & Hall (2020), 52.

103 eDIL s.v. *foirenn* or dil.ie/22968.

104 eDIL s.v. *muinter* or dil.ie/32754

105 eDIL s.v. 1 *cúan* or dil.ie/13334

106 eDIL s.v. *rindech* or dil.ie/35333

107 eDIL s.v. 1 *imm*, *imb* or dil.ie/27635

108 Crummy *et al.* (2007).

109 O'brien (2008), 328-9; for Taplow see Stevens 1884, 65 and fig.1.11-12; Hall 2018, 205.

110 Forsyth (2019).

111 Meyer (1912), 120.

112 Carey (1994a).

The great epic *Táin Bó Cuailnge*, has several mentions of Cú Chulainn and Lóeg playing one another at *fidchell*[113] but always when the pair are sitting at rest (apparently on the ground). In the *Fedelm* text, however, the implication appears to be that the two men will be observed playing boardgames *as they travel along*, and this is not presented as remarkable. The example of the Emperor Claudius, discussed above, suggests the plausibility of this imaginative scenario need not be dismissed out of hand. It is relevant to note that both the Gallo-Roman *essedum* in which Claudius was said to have travelled and the Early Medieval chariots used in Ireland are distinguished in having a suspension system which meant the seating compartment was not fixed to the axle (as in other ancient chariots) but swung free, resulting in a much smoother ride, as has been demonstrated through experimental archaeology[114] though, as far as we know, there have been no attempts to play a boardgame while in motion in a reconstructed chariot.

Pegged pieces of the Lough Sewdy type could inflict serious damage if wielded carelessly or with malice. We close, therefore, with some literary references to gaming pieces as weapons: in all cases, the examples are passing mentions, minor incidents, presented as plausible happenings. We have argued elsewhere that "in order to conjure up effective images of the actions of heroes, heroines, villains, and saints at play", literary references such as these "worked in partnership with the audience's sensory understanding of how actual gaming paraphernalia was shaped, textured, coloured, and subjected to metaphorical engagement"[115]. Thus, though the tales are fictitious, the need for versimilitude means they can offer important clues to the physical reality of contemporary gaming.

Our first example forms a minor incident in the famous Irish tale of the doomed lovers Deirdre and Noíse, *Oided mac nUisnig* ("The violent deaths of the sons of Uisnech"), which is preserved in the Glenmasan Manuscript of c. 1490, although linguistically the text appears to be earlier, perhaps early 13th century[116]. The exiled lovers Deirdre and Noíse have barracaded themselves into a *bruiden* ("hostel") to defend themselves against the king who is pursuing them, and are passing time playing *fidchell* on a famous named board stolen from the king. Meanwhile the king has dispatched a spy to check if Deirdre's beauty has faded while she has been on the run. The spy manages to find a window to peer through, but Deirdre spots him and alerts Noíse:

Fer gonta d'feraib na fichle aige 7 tuc urcar ághmar urmaisnech de go tarrla a suil an oglaich 7 doronadh imlaéid áinignech etarra andsin 7 dochúaid a tshuil ara gruaid don óglach

"He [i.e. Noíse] had [i.e. in his hand] one of the captured pieces [lit. 'slain men'] of the *fidchell* pieces [lit. 'men'] and he made a valorous well-aimed cast so that it came to the young man's eye and a violent exchange was made between them [i.e. the piece and the eye] and his eye came on the young man's cheek."[117]

Although it would need to be of some heft, it could be argued that a piece need not necessarily have a spike in order to be able to put out someone's eye, if thrown accurately and hard enough. So, while it is possible, it is not certain that the author is imagining Noíse throwing a pegged piece. The details of our next example are less ambiguous. Like the previous example, it hinges on a player holding captured pieces in his hand while continuing with play, perhaps giving a small insight into the mode of playing. It is an incidental reference in the strange tale of supernatural adventures known as *Echtra Nerai* ("The adventure of Nera"), which is at least as old as the 10th century and perhaps as old as 8th century[118]. Like the previous examples, it is part of the great Ulster Cycle of Irish literature which includes the tales of Cú Chulainn and of Deirdre and Noíse previously discussed. The relevant scene comes towards the end of the tale, and in it Aillil, the king of the province of Connacht, is playing *fidchell* with Fergus, the exiled former king of the province of Ulster (and also his wife's lover). Looking on is Fergus's fellow exile, Bricriu, who is a hospitaller (*briugu*) and notorious troublemaker. At the same time, two supernatural cattle are fighting in the valley below. When one is finally defeated it emits a terrible bellowing and the queen asks what the noise is. Bricriu cannot resit the opportunity to mock Fergus, and says the noise is Fergus singing. At this insult, Fergus is enraged, and lashes out at Bricriu striking him in the head, forgetting he is holding five *fidchell* pieces in his fist. The text explains in typically laconic style:

Doneco Fergus seco la soduin ocus bentoi sethnu a chinn do Briccriu cona durn co lotur na cuicfir fichilli batar hind-durn Ferguso hi cenn m-Bricriunn, co m-bo buan d'olcc do.

"Fergus looked aside at him at that, and struck Bricriu across the head with his fist, so that the five *fidchell* pieces which were in Fergus's fist went in to Bricriu's head, which was a cause of lasting ill to him."[119]

113 Forsyth & Hall (2020), 45.

114 Karl (2003); Stifter (2009).

115 Forsyth & Hall (2020), 36.

116 Stokes (1887).

117 Stokes (1887), 139, 167.

118 Meyer (1889); Carey (1994b).

119 ed. Meyer (1889) lines 176-9, 229; trans. Carey (1994b), 119.

We interpret this as the author envisioning Fergus holding the body of each of the pieces in the palm of his fist with their pegs pointing out between his five fingers. If the pieces in question were pegged pieces, like those found at Lough Sewdy, then small wonder this action was a "cause of lasting ill" to Bricriu!

The next example, comes, not from Celtic literature, but from Icelandic saga. This brief incident in the 14th century *Grettis saga*, which explains how one of the characters came to be an outlaw, gives our most explicit example of the use of a pegged piece to inflict injury:

"One time, Þorbjǫrn Ǫngull sat playing *tafl*. Then his stepmother came and saw that he was playing *hnettafl*, it was a large *halatafl* [literally "tail *tafl*"]. That he was doing seemed sluggardly to her, so she hurled certain words at him, and he answered badly. She then picked up a game piece [*toflinna*] and struck him against the cheek with it, but it slipped and broke off in his eye, so that his eye popped out onto his cheek. He jumped up and grabbed her so very forcefully that she lay bedridden because of it and later died from it. People said that she had been pregnant. After this he became the most unforbearing of men, and he took his movable property and settled first in Viðvík." (ÍF 7:226-7)[120]

There are a number of parallels with the scenes in *Oided mac nUisnig* and *Fled Bricrenn*: the fit of rage against a game-player, a victim being struck in the head with a pegged piece, and even the detail of the eye coming out onto the cheek. The closeness of these similarities raises the possibility that the motif has been borrowed from an Irish/Gaelic tale in a similar manner to another gaming-related Gaelic motif absorbed into Norse tradition: the step-mother who tricks her son-in-law into losing a boardgame against her in order to impose a supernatural obligation hindering his ability to marry[121]. While a borrowing is a possibility, the social reality of conflict over boardgames[122] and the material reality of play with pegged pieces, means it is possible an Icelandic author might devise such a motif independently.

The reference in *Grettis saga* to *halatafl* (literally "tail *tafl*") has previously been interpreted as the earliest surviving reference to the game known in English as "*fox-and-geese*" (Swedish *ref-skak*, "fox chess")[123] but this seems to be a misunderstanding based on the fact that in Icelandic a nickname for the fox is *hali* "tail", with reference to the animal's distinctive brush. The game *fox-and-geese* is not otherwise attested in Iceland for a further two centuries and a close reading of the *Grettis saga* passage shows that *halatafl* is not the name of the game being played (which has already been stated to be *hnettafl*, i.e. *hnefatafl*), but rather a description of the physical form of the pieces: *þat var stort halatafl* means "it was a large pegged gaming set"[124]. The *hala* "tail" is the spike coming out the bottom (c.f. *halastjarna*, "tailstar, i.e. comet"). This is made clear when it is stated that Þorbjǫrn"s step-mother *setti halann á kinnbein* "put the tail on the cheekbone". Another unambiguous reference to the "tail" of a tafl piece (*hali a hnefa-toflu*) comes in the Late Medieval Icelandic Romance *Vilmundar saga Vidutan*:

Gudifreyr geck Þa til og setti eina hneftoflu upp a eplit og geck fra jafnligt sem Hiarrandi og skant a halann a hnef-toflunni so at hun kraut ofan en eplit stod kyrt[125]

"Gudifreyr then volunteered and put one *hnefatafl*-piece up on the apple and went an equal distance as Hiarrandi and shot the tail of the *hnefatafl*-piece so that it fell down but the apple stood still."

DISCUSSION

This contribution has looked at the longue durée of peg-hole gaming boards and their attendant pegged pieces, a phenomenon which we suggest falls broadly into two distinct and unconnected categories. Leaving to one side the highly uncertain Neolithic evidence, the first reliable body of evidence concerns a race game – *fifty-eight holes* – where pegs with decorative heads were moved around a course defined by the lines of perforations in a board. The game was popular in ancient Egypt, where it is referred to as *hounds and jackals* (after the most common form of decoration of the opposed sets of pegs, though other animal types are also found). It was less popular than other boardgames of the time and seems to have disappeared by the Late Pharaonic period. A similar board game emerges over a millenium later in Early Medieval/Late Antique Coptic Egypt on which a different race game is played (*the Coptic game* or *the game of thirty points*). Its popularity was more limited and it appears neither to have spread to other regions, nor lasted long.

The second body of evidence appears to reflect a Celtic innovation of the 1st century CE. It is largely restricted to Ireland and Britain, with only a single example known from Continental Europe (a 2nd-/3rd-century Gallo-Roman relief from Le Puy in the Auvergne). The apparent absence of pegged forms of gaming equipment from any other Roman sites outside Britain is striking. Pegged pieces and perforated boards in this category are alternatives to non-pegged versons for use with the same types of game, essentially the *tafl* group as derived from the Roman game of *ludus latrunculorum*.

120 Jónsson (1936), 226-7 (ch.70).

121 Sveinsson (1971).

122 Martin (2003).

123 Fiske (1905), 156.

124 Jónsson (1936), 226.

125 Loth (1964), chapter 8.

Archaeologically they are attested fom the early decades of the 1st century CE in Southern Britain (where the bulk of the evidence comes from – the only part of the country where inhumation with gravegoods was extensively practiced) and at elite sites in Ireland. There are scattered examples from Early Medieval Wales and Pictish Northern Britain, but in the second half of the 1st millennium CE the bulk of the evidence, both archaeological and textual, comes from Ireland. This, however, is likely an accident of survival. The use of pegged gaming sets may have been adopted by the Norse from the Irish and/or Picts during the Viking Age. There are no surviving peg-boards known from Viking Age and Medieval Scandinavia but there are gaming pieces socketed to receive peg shanks. The hemispherical form of these pieces is typically Scandinavian, with the peg socket added on the model of Irish or Pictish examples. The phenomenon of pegged gaming equipment was time-limited: by the later medieval period there seems to have been no great demand for the type, and by the 13th century the numbers of socketed piriform pieces are comparatively few, superceded by forms based on older, ultimately Roman, types (flat counters for *tables*) and new forms of eastern origin for playing chess. Not until the 19th century does the form resurface again when increased modes and means of travel created a merchandising opportunity for travelling game sets which has persited until our own time (with, later, magnetism being an alterntive stability solution to pegs).

It is far from clear why the pegged form of boards and pieces developed. Pegging has obvious practical advantages and would certainly have helped with stability when such games were being played in intimate social occasions with jostling and shouting. Adam Parsons has worked extensively with historical re-enactors and so has first-hand experience of what it is like to play with the different kinds of equipment: "We have found that people gaming in re-enactment get their games knocked, ALL the time. This causes a lot of grief, and one fight I witnessed" (pers. comm.). To Parsons, the practical advantages of a pegged board are obvious: "we have found that a pegged board is almost impossible to upset, without literally flipping the board; unstable table/floor/on ship/drunk, you name it, it's solid" (pers. comm.). If stability were the only concern, however, one would expect the use of peg-boards to be more geographically and chronologically widespread. Were not Roman gaming contexts as lively as Celtic ones? A similar advantage would be confered when playing on the move, whether on land or by water, but play stability during transport appears not to have been of much concern either (Claudius is presented as an eccentric aberration), at least not on the basis of archaeological and art evidence from either the Roman and Medieval periods. The latter includes depictions of the famous episode from the *Tristan and Iseult* Romance where the lovers play chess aboard ship[126] and surviving gaming equipment recovered from some half-dozen ship-wrecks[127]. None of these sources give any indication of the use of pegged boards or pieces. The question, perhaps, is not so much why were pegged pieces invented, but, rather, why were they not more widely adopted? One thing to consider is the impact that a peg has on the way a piece can be moved. If the existing habit was to slide pieces between cells that would not be possible if the piece were pegged. This may have had an inhibiting affect on the uptake of pegged pieces. If moves were made in *fidchell* with a more jump-like motion, then this may have been less of an issue, or one worth enduring for the benefit of greater stability.

Pegged pieces are among the earliest surviving examples of Celtic gaming sets and their use appears to be part of the initial Celtic conversion of *latrunculorum* games to *tafl* games (including, as previously argued, the Irish *fidchell* and the British *gwyddbwyll*[128]). But what prompted this innovation? We have previously drawn attention to Celtic interest in conical pieces, which are otherwise rare in 1st-millenium CE Europe. These would be more likely to topple than hemispherical pieces, or squat cylinders, and thus perhaps benefit from a peg, but neither the earliest conical examples (the 4th-5th-century CE examples from Tara, Co. Meath, and Dunbell Big, Co. Kilkenny), nor the tallest and slimmest—the anthropomorphic stone gaming pieces from 5th-7th -century CE Shetland—have pegs or sockets for pegs[129]. The use of wood for boards was a prominent element of Celtic gaming—both the Goidelic and Brittonic terms, *fidchell* and *gwyddbwyll* (which are cognate) contain the word for "wood" (*fid*, *gwydd*)[130]—which would have made it comparatively easy to drill holes for the pegs, but, although stone was widely used for boards in the Classical world, wood was also a common material, so this is not a compelling reason either.

Was the difference due to differences in the use of furniture, perhaps? There are Roman depictions of boardgaming in taverns which show the board resting on a small four-legged occasional table with the players sitting on stools (e.g. Pompeii's Osteria della Via di Mercurio[131]), but other representations show the players sitting on backed chairs or stools facing one another and resting the board on their knees between them, a situation in which, one would think, pegged pieces would be handy. Examples

126 e.g., see Bardiès-Fronty & Dunn-Vaturi (2012), 124, cat. 125.

127 For the details see Caldwell, Hall & Wilkinson (2009), 165-67.

128 Hall & Forsyth (2011).

129 Forsyth & Hall (2020), 51, fig. 2.5.

130 Hall & Forsyth (2011), 1331-33.

131 Beard (2009), pl. 6.

include a fresco from the Caupona of Salvius, also in Pompeii[132]; and a 3rd-century CE mosaic from a villa at Thysdrus (El Djem) in the Bardo Museum, Tunis[133], and, of course, the example from Le Puy discussed above. We note also a similar playing posture depicted on the 11th-century runestone (now lost) from Ockelbo, Gästrikland (Gs 19), which shows two men each holding a drinking horn while playing *hnefatafl* with the board balanced on their knees between them[134]. There is insufficient detail to tell whether or not they are using pegged pieces. The question of tables is complicated by the fact that in Egypt people did rest gaming boards on low tables or stands, as depicted in scenes of figures playing (unpegged) *senet*, for example, on a papyrus with satirical vignettes, from Deir el-Medina (Thebes), 1250–1150 BCE[135]; or the famous tomb-painting of Queen Nefertari, ca. 1279–1213 BCE[136] and yet Egyptians also played peg-games. Egyptian peg-games, however, are physically quite small— some might even have been hand-held (the board from Thebes in the Metropolitan Museum is only 101 mm x 156 mm). This may have been a factor in encouraging the use of pegs rather than free-floating pieces because on such a small scale the latter would have had to be unfeasibly small. Note also that, as the two players are playing round the course in the same direction, they need not have sat opposed.

Throughout the Classical world, we also find game boards incised directly onto stone benches and steps in, for examples, gymnasia and bath-houses, or in public areas such as fora[137]. That is all very well in urban settings with stone architecture, but what about in the non-urban Celtic world where buildings were predominantly of wood and wattle? In the 1st century BCE, the Greek writer Poseidonios witnessed first-hand the dining habits of the Gauls, and his account is transmitted by later writers who state they sat on top of wolf/dog skins in a circle on the floor to eat[138], or on top of dried grass, eating from "tables raised slightly off the ground"[139]. Evidence for portable furniture is lacking from early Ireland, either from archaeology or literary evidence[140], but what textual evidence we do have suggests tables were not a common feature of the typical home, certainly not before the Viking Age. It is noteworthy that the two most common words for (dining) table are both loan words: *mías*, from Latin *mensa*, and *bord*, from Old English, with Old Norse influence[141]. A third term *clár* "board", "plank" is used in a wide range of contexts for flat things, including occasionally for something one eats at (a plank over trestles?), though not usually as a piece of furniture *per se*: it is the standard term for a gaming board[142]. The early 8th-century law text on status *Críth Gablach* gives a detailed list of the domestic equipment expected of a household of *mruigfer* ("independent farmer") status. The close correlation with archaeological evidence suggests it provides an accurate picture of the material possession of an economically secure household. Although numerous cooking and serving implements are listed there is no mention of any tables[143].

In non-urbanized Britain and Ireland of the Iron Age and mid-first millenium CE the domestic context of game playing was very different to that of the Roman world. People of all social classes lived in wood and wattle round-houses (which could be very large) which comprised a single communal living area with a central fire and sleeping cubicles (*imdada*) arranged radially against the outer wall, with beds which doubled as couches during the day[144]. These cubicles were open to the fire, with the option to draw a curtain for warmth and privacy, were furnished with straw mattresses and coverings of animal skin and/or textiles, and were often beautifully carved and decorated[145]. In early Irish literature, gaming is depicted occuring in domestic houses "between fire and wall"[146], and in at least two examples is specifically associated with sleeping cubicles. In the tale *Loinges Mac Dúil Dermaid* ("The Exile of the Sons of Dúil Dermaid") a superlatively well-appointed dwelling is described as having a very large number of cubicles, each equipped with the essential leisure equipment needed for the entertainment of guests: *Fidchell 7 brandub 7 timpan huas cach imdai*, "with a *fidchell* gaming set and a *brandub* gaming set and a *tiompán* [lyre-like musical instrument] hung over each cubicle/couch"[147]. Lyres are elsewhere described as being stored in ornately

132 *Ibid*., pl.13 and 230.

133 Dunbabin (1978).

134 Lindquist (1991), 96-97; image at http://www.worldtreeproject.org/document/2361

135 Image at https://www.britishmuseum.org/collection/object/Y_EA10016-1

136 Image of reproduction at https://www.metmuseum.org/art/collection/search/548355

137 Lavan (2007); Talloen (2018); Dasen (2020).

138 Diodorus Siculus, *Bibliotheca historia*, trans. c. h. oldfather, (Loeb Classical Library), Harvard University Press, Cambridge, MA (1935), 5.27.

139 Athenæus *Athenaei Naucratitae Dipnosophistarum*, (ed.) Kaibel, Georg, Teubner, Leipzig (1890). Relevant excerpt, 4.36, trans. Philip Freeman in John T. Koch and John Carey (trans.) *The Celtic Heroic Age* (Celtic Studies Publications 1), 4th edition, Celtic Studies Publications, Aberystwyth (2003), 10-11.

140 O'Sullivan *et al.* (2014), 97.

141 eDIL s.v. mías or dil.ie/32144; s.v. bord or dil.ie/6404.

142 eDIL s.v. *clár* or dil.ie/9377

143 Binchy (1978), CIH 779.37-780.4; CG 171-82.

144 eDIL s.v. 2 *imdae* or dil.ie/27434

145 Murray 1979, 87-8.

146 Forsyth & Hall 2020, 59-61; Hall 2017, 54.

147 Windisch & Stokes 1884, p.179, lines 147-8.

decorated otter-skin bags[148], and we should perhaps imagine similar leather storage bags for game-boards and pieces, hanging on a peg, ready for use above each bunk. It is not just that gaming equipment was stored above beds, in one text play is explicitly said to have habitually occurred *in* bed (using another term for the sleeping cubicle/bed, *lepaid*). This is stated in the tale *Cath Maighe Léna* ("The battle of Mag Léna") which was composed c.1300 CE. When the king returns from exile he is re-assured that things are as he left them: *Mairid in fhithecheall egair | D' imertha 'san aird-lepaid*[149]. The text's editor, the noted Celtic scholar Kenneth Jackson, translated this as "The ornamented chessboard still survives | Which you used to play on the high bed…", choosing to translate *egair* as "decorated", but given the context it may be more appropriate to take this word in its more literal sense, meaning "arranged", "made ready" (i.e. set out ready for play)[150]. Thus, a better translation may be: "the *fidchell* set remains arranged". *Ard* means "high" both in the physical sense of "elevated", "not in contact with the ground", and also in the metaphorical sense of "noble", so *ard-lepaid* here could mean something like a raised box-bed[151], or "the chief bed/couch". The preposition *'san* means "in", but as the terms *lepaid* and *imda* cover both the cubicle (the space) and the sleeping/sitting surface, this could mean "on the bed", rather than "in bed" (i.e. under the covers). Either way, it seems we should imagine a pair of players sitting/reclining beside one another on a bed/couch, with the board resting between them on the mattress. This seems exactly the kind of situation when pegging would be useful to ensure pieces did not slide off their cells. Outside the home, there are literary references to the playing of boardgames in tents and out-of-doors, apparently while seated on the ground[152]. Little or no detail is given about these physical settings and whether furniture is used. There are no indications whether or not the board is set upon a table (it is never stated to be so) and so the question must remain open.

One final thought: as noted above, Irish literary texts always refer to captured pieces as "slain men", using the Old Irish verb *gonaid*. The root meaning of this word is "pierces", hence "wounds", "kills"[153]. Is it possible that the spike in the bottom of each piece allowed a player to use it to symbolically "pierce"/"lay" an opposing piece?

The intention of this contribution has been to raise awareness of a type of gaming equipment which has received little prior attention: gaming-piece pegs and pegged gaming pieces (with their reciprocally holed boards). We suspect these are an under-recognised class and hope that scholars will be more attentive to potential identifications, including among existing museum collections. If we are correct and further examples remain to be identified, this may alter the overall distribution, but on the basis of current evidence, the concentration of pegged pieces in Ireland and Britain, and their general absence from non-Insular Roman contexts is striking and suggests that they are a Celtic innovation. We have attempted to speculate on why this might have been the case but remain puzzled as to why this practical innovation was not more widely adopted.

148 Whitfield 2012.

149 Jackson 1938, lines 738-9.

150 eDIL s.v. *ecor* , *ecar* or dil.ie/19636.

151 In Modern Scottish Gaelic, "box-bed" is *leabaidh-árd,* see *Am Faclair Beag*, www.faclair.com.

152 see examples in Forsyth & Hall 2020.

153 eDIL s.v. *gonaid* or dil.ie/26387

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Spielen in Vindonissa
Spielsteine und Würfel im militärischen Kontext

Fig. 1. Fragment einer Schreibtafel (L. 14 cm, B. 6 cm), aus dem Schutthügel des Legionslagers Vindonissa, ca. 30-101 n. Chr. Brugg, Kantonsarchäologie Aargau Inv.-Nr. V.03.50/0.10, ausgestellt im Vindonissa-Museum, Brugg. Foto © Kantonsarchäologie Aargau, Brugg (Béla Polyvás).

EINLEITUNG

Aus *Vindonissa* / Windisch (Kanton Aargau, CH) sind mehrere Hundert Spielsteine aus Bein und Glas, gut drei Dutzend beinerne Spielwürfel und drei hölzerne Kreisel in zusammenfassenden Aufsätzen bis heute bekannt gemacht worden[1]. Dazu kommt das Fragment einer hölzernen Schreibtafel aus der grossen Abfallhalde des Legionslagers *Vindonissa,* auf dem sich die Einladung zu einem Gastmahl mit Würfelspiel erhalten hat[2]. Dieses Schreibtafelfragment ist als Quelle zur sozialen Funktion des Spiels im militärischen Kontext sowie zur Frage nach den Spielorten besonders wichtig[3] (fig. 1). Michael Speidel konnte mit guten Gründen vorschlagen, dass die Zahl XII auf der Aussenseite der Tafel als Hausnummer interpretiert werden kann, und vermutete deshalb das so bezeichnete Gebäude innerhalb des Legionslagers. Da sich im Zentrum des Lagers eine Konzentration von Spielsteinen feststellen liess und sich entlang der Hauptstrasse Gaststätten (*tabernae*) nachweisen liessen, lag es nahe daraus zu schliessen, dass an diesem Ort mit Spielaktivitäten zu rechnen ist[4].

1 Holliger, Holliger (1983); Schmid (1978); Fellmann (2009), 107 Kat.-Nr. 1174-1176.

2 Speidel (1996), 188-191 Kat. 45. Inv.-Nr. V.03.50/0.10.

3 Zur Freizeit im militärischen Alltag und Spiel: Speidel (1996), 79-81 mit Anm. 35.

4 Holliger, Holliger (1983), 14 Abb. 7; Speidel (1986), 58-61.

Fig. 2. Rekonstruktion des Legionslagers Vindonissa und seiner umliegenden Zivilsiedlung im späten 1. Jh. n. Chr. © Kantonsarchäologie Aargau, Brugg / ikonaut GmbH, Brugg (Jürgen Trumm / David Schürch, Jonas Christen).

Diese Feststellung wurde seither in der Forschung immer wieder aufgegriffen und diskutiert[5].

Seit dem Aufsatz von Christian und Claudia Holliger über römische Brettspiele in *Vindonissa* von 1983 hat sich, bedingt durch anhaltende und grossräumige Ausgrabungen in und um das Legionslager *Vindonissa*, die Anzahl der Spielsteine und Würfel markant erhöht. Bei einer erneuten Beschäftigung mit dem Thema Spielen in *Vindonissa* geht es deshalb darum, den Bestand der als Spielutensilien anzusprechenden Funde, insbesondere der Spielsteine und Würfel, erneut zusammenzustellen und auf folgende Fragen hin zu prüfen[6]: Wie haben die Neufunde innerhalb und ausserhalb des Legionslagers das Fundbild von 1983 verändert? Liefern die Neufunde ein differenzierteres Bild von möglichen Spielorten? Lassen sich daraus Aussagen zu den Spielenden selbst ableiten sowie zu möglichen Interaktionen oder Kontakten zwischen den Bewohnerinnen und Bewohnern der zivilen Siedlung und den Angehörigen des Militärs?

1. KURZE EINFÜHRUNG ZU *VINDONISSA* UND QUELLENKRITISCHE BEMERKUNGEN

Das Legionslager *Vindonissa* gehört zu den seit dem ausgehenden 19. Jahrhundert intensiv erforschten Legionslagern der nordwestlichen Provinzen des Römischen Reiches[7] (fig. 2). Es wurde um 17 n. Chr. am Zusammenfluss von Aare und Reuss erbaut und 101 n. Chr. aufgegeben. Drei Legionen (*legio* XIII / *legio* XXI / *legio* XI) waren nacheinander am Bau und Umbau des Lagers beteiligt, was insbesondere im Zentrum des Legionslagers zu einer bis zu zwei Meter mächtigen Stratigraphie geführt hat[8]. Durch neuere Untersuchungen wissen wir, dass das Lager beim Abzug der 11. Legion systematisch geräumt wurde. Die zivile Besiedlung des Areals des aufgelassenen Legionslagers setzte etwa ab der Mitte des 2. Jh. n. Chr. entlang der West-Ost verlaufenden Hauptstrasse des ehemaligen Lagers nur zögerlich ein, lässt sich aber nach derzeitigem Wissensstand bis mindestens zum Ende des 4. Jh. n. Chr. belegen[9].

Die mehrphasige Baugeschichte des Legionslagers und die daraus resultierende komplexe Stratigraphie bedingen bei einer Untersuchung, welche die Interpretation von Fundbildern zum Ziel hat, dass jeder Fund einzeln kontextualisiert und zeitlich eingeordnet werden müsste. Dabei müssten zusätzlich die jeweils angewandte Grabungsmethodik, mögliche antike Verlagerungsprozesse und letztlich das einstige Abfallverhalten berücksichtigt werden.

5 Vgl. z. B. Rütti (1988), 100-101; Schucany (1996), 150; Allison (2013), 28-29; Widura (2015), 98-100; Fellmann Brogli (2019).

6 Der vorliegende Beitrag entstand im Rahmen des Projektes *Locus Ludi*. The Cultural Fabric of Play and Games in Antiquity, ein durch den European Research Council (ERC) unterstütztes Forschungsprojekt der Universität Fribourg (ERC-Advanced Grant 2017-2022/23). S. Locus Ludi – The Cultural Fabric of Play and Games in Antiquitym (zuletzt konsultiert am 6.1.2023). Véronique Dasen, Alessandro Pace, Tim Penn und Ulrich Schädler sei für die Einladung zur Mitarbeit sowie für Literaturhinweise gedankt. Der vorliegende Beitrag ist eine ergänzte und überarbeitete Version eines 2018 gehaltenen Vortrages. Das Manuskript wurde im Herbst 2021 abgeschlossen. Später erschienene Literatur konnte nur noch vereinzelt berücksichtigt werden. Mein besonderer Dank geht an Jürgen Trumm, wissenschaftlicher Leiter Ausgrabungen *Vindonissa*. Er hat die Arbeit mit anregenden fachlichen Diskussionen unterstützt und begleitet und insbesondere die Befunde der Spielsteindepots zusammengestellt. Für die Durchsicht des Manuskriptes danke ich Christine Meyer-Freuler und Judith Fuchs, für weitere Unterstützung Béla Polyvás (Fotos) sowie Stephan Schneider und Tamara Koch (Fundkarten, Bildbearbeitung).

7 Zusammenfassend zu *Vindonissa* vgl. Trumm (2015). Zum Stand der Erforschung: Trumm (2010); Trumm (2011).

8 Wir wissen heute, dass im Südteil des Legionslagers mit bis zu vier vorlagerzeitlichen Holzbauphasen, drei lagerzeitlichen Holzbauphasen, vier lagerzeitlichen Steinbauphasen sowie nachlagerzeitlichen Belegungsphasen des 2.-4. Jh. n. Chr. zu rechnen ist. S. dazu: Hagendorn *et al.* (2003), 25-39; Trumm, Flück (2013), 18-31. Zur Terminologie und Chronologie von *Vindonissa* vgl. Trumm (2015). Mit «vorlagerzeitlich» wird im Folgenden die Zeit vor Ankunft der 13. Legion in *Vindonissa* bezeichnet, mit «nachlagerzeitlich» die Zeit nach Abzug der 11. Legion aus *Vindonissa*.

9 Zur Aufgabe des Legionslagers und der nachfolgenden Siedlungsentwicklung in *Vindonissa*: Trumm, Flück (2016).

Im Rahmen der vorliegenden Arbeit konnte dies aus Ressourcengründen nicht vollumfänglich geleistet werden, weshalb ein anderes Vorgehen gewählt werden musste. Zunächst wurde auf Basis der derzeit in der archäologischen Datenbank der Kantonsarchäologie Aargau erfassten Einträge zu Spielsteinen und Würfeln eine Datenzusammenstellung gemacht, die durch Autopsien und Stichproben an den Funden selbst ergänzt und mit den Angaben von Holliger / Holliger 1983 ergänzt wurde[10]. Allerdings sind die Fundbestände aus *Vindonissa* derzeit noch nicht vollständig in der archäologischen Datenbank erfasst und eine Komplettierung dieser Daten durch eine durchgehende Erfassung der in der Sammlung vorhandenen Bestände war aus Ressourcengründen nicht möglich[11]. Der auf die oben beschriebene Weise erfasste und hier diskutierte Bestand beträgt 850 Spielsteine und 82 Würfel[12]. Davon können 828 Spielsteine und 81 Würfel einer Grabung zugewiesen werden. Sie bilden die Basis der Fundkarten (figg. 8-9).

Um trotz dieser Defizite die Ausgangslage für Interpretationen zu verbessern, werden im Folgenden zunächst die Spielsteindepots mit ihren Kontexten einzeln neu vorgelegt. Danach werden Spielsteine und Würfel zusammengestellt, die im Rahmen der Auswertung verschiedener Ausgrabungen bereits publiziert worden sind. Die Diskussion der Funde aus der zivilen Siedlung rund um das Legionslager kann erst ansatzweise erfolgen, da die Auswertung der entsprechenden Ausgrabungen grösstenteils noch aussteht. Die Frage nach dem Vorhandensein von Spielbrettern und weiteren Spielutensilien rundet die Objektvorlage ab. Die abschliessende Diskussion der so gewonnenen Resultate zusammen mit den Fundbildern der 828 Spielsteine und 81 Würfel geschieht mit der gebührenden Vorsicht und im Wissen um die Grenzen der Interpretierbarkeit der erhobenen Daten.

2. SPIELSTEINE UND WÜRFEL

2.1. Spielsteindepots

Zu den bereits 1983 publizierten Depots sind bis heute keine weiteren Fundkonzentrationen von Spielsteinen hinzugekommen[13]. Indes konnten die im Folgenden zusammengestellten Informationen zu den Fundkontexten von vier Depots recherchiert werden[14].

• 2.1.1. Depot 1

1963 wurden bei einer grossflächigen Ausgrabung am Westrand des Legionslagers in einer Grube 25 weisse und 21 schwarze Spielsteine aus Glas geborgen[15]. Sowohl weisse wie schwarze Spielsteine sind rund mit konvexer Oberfläche und einem Durchmesser zwischen 15 und 18 mm. Das Glas ist opak. (fig. 3). Die Grube liegt in der Westerweiterung des Legionslagers, wohl unmittelbar ausserhalb einer Mannschaftsbaracke. Aufgrund der Mitfunde ist das Spielsteindepot wohl der jüngeren Holzbauphase des Legionslagers zuzuweisen, d. h. spättiberisch bis claudisch zu datieren[16].

• 2.1.2. Depot 2

1938 kamen bei grossflächigen Ausgrabungen im nordöstlichen Bereich des Legionslagers in einer Grube 21 Spielsteine aus Bein zum Vorschein[17]. Die Spielsteine sind zwischen 12 und 20 mm im Durchmesser, beidseits flach und unverziert[18]. Sie tragen keine Ritzzeichen. (fig. 4). Die Grube, aus der die Spielsteine stammen, liegt im Bereich von Mannschaftsbaracken, wahrscheinlich unter einer

10 Keramikrundel und flache Steine, die als mögliche Spielutensilien in den Inventaren erfasst sind, wurden in der vorliegenden Untersuchung nicht berücksichtigt. Runde, konvexe Glassteine (meist schwarz oder weiss) wurden hingegen durchwegs zu den Spielsteinen gezählt. Zur Problematik der Ansprache dieser Funde: Cool (2016), 229-243; Pace (2022b), bes. 328 mit Anm. 4; Pace (2022c).

11 Das rückwirkende Erfassen von Funden aus Grabungen vor dem Jahr 2000 in der archäologischen Datenbank der Kantonsarchäologie Aargau (ImdasPro) wurde 2011-2017 in einem mehrjährigen Projekt in Angriff genommen. Der Fokus lag dabei auf der Zuweisung von Funden zu den jeweiligen Ausgrabungen, weniger auf der Erfassung von einzelnen Fundgattungen.

12 Der Bestand bildet aus den oben beschriebenen Gründen nicht den real vorhandenen Gesamtbestand ab. Dies geht aus dem Vergleich der von Holliger, Holliger (1983) publizierten Anzahl Spielsteine mit den aktuellen Zahlen hervor. Seit 1983 sind mindestens 330 Spielsteine zu den damals 806 genannten Stücken dazu gekommen. Der Gesamtbestand an Spielsteinen dürfte deshalb bei rund 1130 Stück liegen.

13 Als Spielsteindepots bezeichnen wir eine auf engem Raum aufgefundene Ansammlung von Spielsteinen, von denen man annehmen darf, dass sie nicht einzeln als Verlustfunde in den Boden kamen, sondern mit Absicht deponiert wurden. Zu Spielsteindepots vgl. jetzt Penn, Courts (2022).

14 Alle Depots sind bereits erwähnt bei Holliger, Holliger (1983), 12. Die Recherchen zu den Befunden verdanke ich Jürgen Trumm.

15 Grabung Windisch-Königsfelden 1961-1963 (V.61.1), FK 0372, F2 (XII), Inv.-Nr. 63:2130 (weisse Steine) und 63:2131 (schwarze Steine). Funddatum 25.6.1963. Offenbar war die Inv.-Nr. der Spielsteine schon wenig später nicht mehr bekannt. Jedenfalls wurden sie unter den Streufunden der Grabung mit der Inv.-Nr. 63:3739 erneut inventarisiert. Die Zuweisung zu den ursprünglichen Inv.-Nr. mit Fundkontext ist über die Fundlisten und das Tagebuch eindeutig. Die Spielsteine sind heute alle mit der Inv.-Nr. 63:3739 beschriftet und wurden auch unter dieser Inv.-Nr. bei Holliger, Holliger (1983), 12 publiziert.

16 Zur jüngeren Holzbauphase vgl. Trumm (2010), 43-45 mit Abb. 4-6. Der von J. Trumm und R. Bellettati aktualisierte Plan des frühen Lagers ist abgedruckt bei Deschler-Erb *et al.* (2018), 81 Abb. 3. Zur Keramik und den Ausbauphasen des Legionslagers vgl. auch Meyer-Freuler (1998), 125-131.

17 Grabung Windisch-Breite 1938 (V.38.1), Grube 34, Inv.-Nr. 38:485, gefunden 16.9.1938. Keine weiteren Detailinfos in der Dokumentation. Mögliche weitere Beifunde aus Grube 34 sind aus der Dokumentation nicht zu erschliessen. Zur Grabung vgl. Simonett (1939).

18 13 Spielsteine sind nach der Ansprache von S. Deschler-Erb den flachen Tesserae mit zentralem Punkt zuzuordnen, die restlichen 8 Exemplare den flachen, runden Tesserae. Vgl. Deschler-Erb (1998), 146-153.

Fig. 3. Spielsteindepot 1, 25 weisse und 21 schwarze Spielsteine aus Glas (Dm. 15-18 mm), aus dem Legionslager Vindonissa, Grabung Windisch-Königsfelden 1961-1963 (V.61.1), 1. Hälfte 1. Jh. n. Chr. Brugg, Kantonsarchäologie Aargau Inv.-Nr. 63:2130 (weisse Steine), 63:2131 (schwarze Steine), ausgestellt im Vindonissa-Museum, Brugg. Foto © Kantonsarchäologie Aargau, Brugg (Béla Polyvás).

späteren Steinmauer. Sie gehört deshalb wohl zur Holzbauphase des Lagers. Da keine Mitfunde aus der Grube bekannt sind, kann das Depot zeitlich nicht näher als in tiberisch-claudische Zeit eingeordnet werden.

• 2.1.3. Depot 3

12 Spielsteine aus weissem Glas wurden 1954 in einer tiefen Grube im Peristyl des sog. Tribunenhauses A gefunden[19]. Sie sind rund mit konvexer Oberfläche

19 Grabung Windisch-Breite 1954 (V.54.1), Inv.-Nr. 54:549. Genaue Fundortangaben auf der Inv.-Karte (Feld C, Raum 42, T 2,75 m) ermöglichen die Lokalisierung des Fundes. Gemäss der

Fig. 4. Spielsteindepot 2, 21 Spielsteine aus Bein (Dm. 12-20 mm), aus dem Legionslager Vindonissa, Grabung Windisch-Breite 1938 (V.38.1), 1. Hälfte 1. Jh. n. Chr. Brugg, Kantonsarchäologie Aargau Inv.-Nr. 38:485. Foto © Kantonsarchäologie Aargau, Brugg (Béla Polyvás).

Fig. 5. Spielsteindepot 3, 12 Spielsteine aus weissem Glas (Dm. 13-18 mm), aus dem Legionslager Vindonissa, Grabung Windisch-Breite 1954 (V.54.1), 1. Hälfte 1. Jh. n. Chr. Brugg, Kantonsarchäologie Aargau Inv.-Nr. 54:549. Foto © Kantonsarchäologie Aargau, Brugg (Béla Polyvás).

und haben einen Durchmesser von 13-18 mm. Das Glas ist opak. (fig. 5). Sie entsprechen in ihrem Aussehen den weissen Spielsteinen aus Depot 1. Die vom Ausgräber Rudolf Fellmann notierten TS-Funde in dieser Grube datieren in tiberisch-claudische Zeit. Damit dürfte auch das Spielsteindepot zur (jüngeren?) Holzbauphase unter dem Tribunenhaus gehören. Die bauliche bzw. funktionale Zuweisung dieser Vorgängerstruktur muss mangels damals flächig ausgegrabener Holzbaubefunde offenbleiben.

• 2.1.4. Depot 4

29 Spielsteine aus Bein, drei flache kleine Steine und ein beinerner Spielwürfel wurden 1982 bei der Ausgrabung in der Klosterkirche Königsfelden

zeitgenössischen Dokumentation gab es in «Raum 42» wohl nur einen Befund, der so tief reichte: «Grube 4», deren Sohle bei -4,35 lag. Zur Grabung vgl. Fellmann (1954/55).

Fig. 6. Spielsteindepot 4, 29 Spielsteine aus Bein (Dm. 16-23 mm), drei flache Steine (Dm. 12-15 mm), ein Würfel aus Bein, aus einem nachlagerzeitlichen Steinkeller der Siedlung im Bereich des aufgelassenen Legionslagers Vindonissa, Grabung Windisch-Königsfelden 1982 (V.82.2), 1. Hälfte 3. Jh. n. Chr. Brugg, Kantonsarchäologie Aargau Inv.-Nr. V.82.2/126.251-280 (Spielsteine), V.82.2/126.281 (Würfel), teilweise ausgestellt im Vindonissa-Museum, Brugg. Foto © Kantonsarchäologie Aargau, Brugg (Béla Polyvás).

in einem römischen Steinkeller gefunden[20]. Die Spielsteine aus Bein weisen einen Durchmesser von 16-23 mm auf, die drei flachen Steine sind mit einem Durchmesser von 12-15 mm deutlich kleiner. (fig. 6). Sieben Spielsteine aus Bein sind unverziert, 11 weisen einen gekerbten Rand auf, weitere 11 sind mit konzentrischen Rillen verziert. Die flachen Steine sind weiss und von unregelmässiger Form. Rechnet man die flachen Steine zu den unverzierten Spielsteinen aus Bein, ergeben sich drei annähernd gleich grosse Gruppen von 10 bzw. zweimal 11 Spielsteinen. Der Keller liegt über einer Strasse des Legionslagers des 1. Jh. n. Chr. und ist deshalb in die Nachlagerzeit (2.-4. Jh. n. Chr.) zu datieren. Aufgrund der Mitfunde kann das Spielsteindepot etwa in die erste Hälfte des 3. Jh. n. Chr. datiert werden.

• 2.1.5. Zwischenfazit I

Beim jetzigen Forschungsstand können vier Spielsteindepots aus dem Bereich des Legionslagers

20 Grabung Windisch-Königsfelden 1982 (V.82.2), Inv.-Nr. V.82.2/126.251-280 (Spielsteine), V.82.2/126.281 (Würfel). Jeder Spielstein des Depots wurde einzeln inventarisiert. Die zeitgenössische Grabungsdokumentation nennt als Funddatum 11.1.1983, Feld 3, FK 126, Keller L 521-523,5 «Funde aus brauner, weicher Erdschicht, Kellerverfüllung».

Fig. 7. Steinplatte mit kreuzförmig eingeritzten Linien und Vertiefungen in den Ecken und am Kreuzpunkt der Linien (L. 18 cm, B. 14 cm, D. 3 cm), Aus der Sammlung Alfred Meyer, Baden, angeblich aus Vindonissa / Windisch. Brugg, Kantonsarchäologie Aargau Inv.-Nr. 7295. Foto © Kantonsarchäologie Aargau, Brugg.

bekannt ist. Aus der zweiten Hälfte des 1. Jh. n. Chr., also aus der Zeit der 21. und 11. Legion und aus der zivilen Siedlung um das Legionslager sind bis anhin keine lagerzeitlichen Spielsteindepots zum Vorschein gekommen. Depot 4 stammt aus der ersten Hälfte des 3. Jh. n. Chr. und ist im Kontext der zivilen Bebauung im Areal des aufgelassenen Legionslagers zu sehen[21].

Die Frage, in welchem Zusammenhang bzw. mit welcher Absicht die Spielsteine deponiert wurden, ist nicht einfach zu beantworten[22]. Handelt es sich jeweils um Beutel, die entweder verwahrt oder zurückgelassen wurden? Ist die Anzahl der Spielsteine rein zufällig oder spiegeln sich darin mögliche «Spielsets»[23]?

Bei römischen Grabfunden lassen sich immer wieder eine grössere Anzahl von Spielsteinen als Beigabe beobachten[24]. Am häufigsten belegt sind Ensembles zwischen 10 und 30 Spielsteinen. Es hat sich aber gezeigt, dass man nicht a priori davon

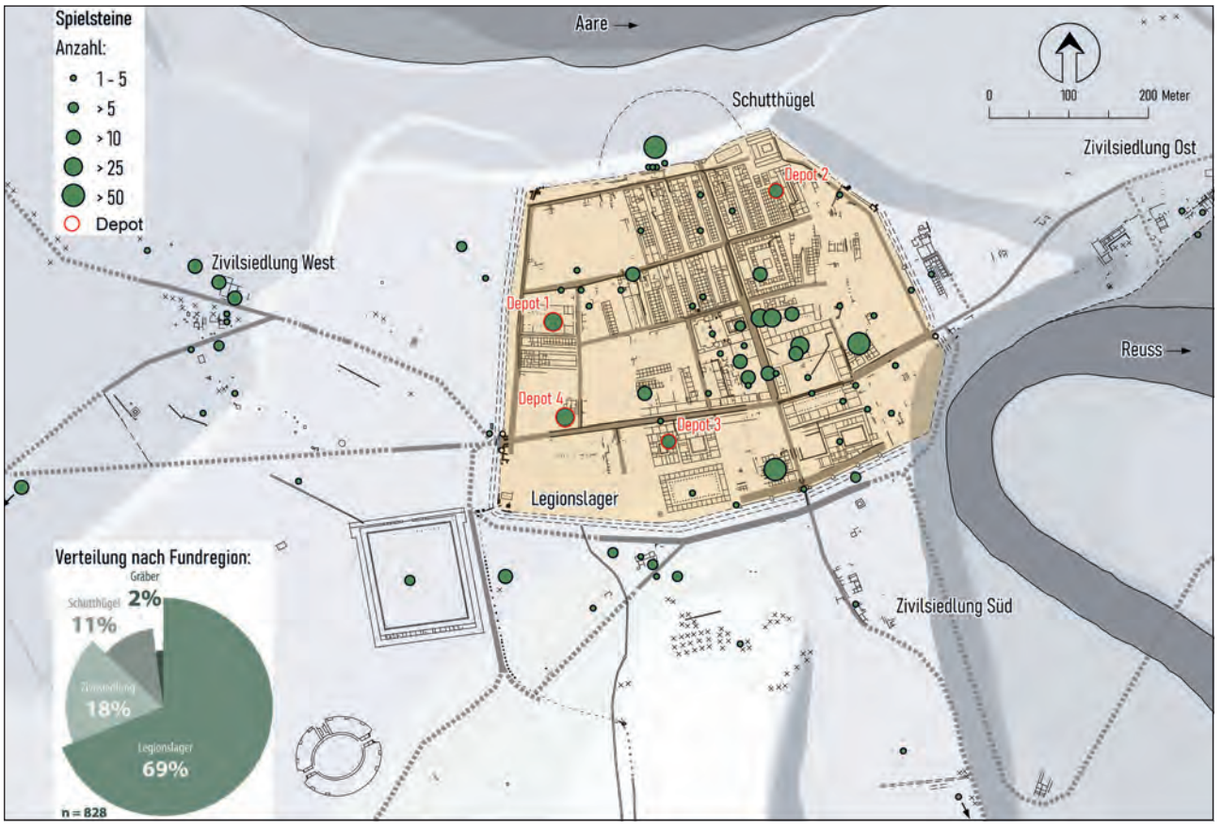

Fig. 8 Vindonissa gegen Ende des 1. Jh. n. Chr. mit Legionslager, Zivilsiedlung und Brandgräberfeldern. Verteilkarte und prozentuale Häufigkeit der Spielsteine nach Fundregion. Mit rotem Kreis markiert sind die Spielsteindepots. © Kantonsarchäologie Aargau, Brugg (Riccardo Bellettati / Stephan Schneider / Tamara Koch / Regine Fellmann Brogli).

vorgelegt werden (fig. 8). Drei stammen aus dessen Holzbauphase, können also mit der 13. Legion in Verbindung gebracht werden. Depot 1 und 2 stammen vermutlich aus dem Bereich von Mannschaftsbaracken, Depot 3 kann keinem Gebäudetyp zugewiesen werden, da die Bebauung in Holz unter den späteren Tribunenhäusern nicht

21 Zu *Vindonissa* nach 101 n. Chr. s. Trumm, Flück (2016).

22 Zu dieser Frage s. jetzt Penn, Courts (2022).

23 Die Frage nach der Verwendung der Spielsteine bzw. der Rekonstruktion von römischen Spielen wird im vorliegenden Beitrag ausgeklammert.

24 S. die Zusammenstellung bei Luik (1994), 372-381; Martin-Kilcher (1976), 76-77 mit Anm. 314-318. Nur selten werden mehr als 30 Spielsteine beigegeben.

ausgehen kann, dass die ins Grab mitgegebenen Spielsteine eigentlichen «Spielsets» entsprechen[25]. Seltener sind Ansammlungen von Spielsteinen aus Siedlungskontexten. Holliger / Holliger wiesen auf vier mögliche, damals unpublizierte Depots aus Baden (CH) und Augst (CH) hin[26]. Unterdessen wurden diese teilweise publiziert und erweisen sich nicht alle als Depots im hier verwendeten Sinn[27]. Die Ensembles sind in unserem Zusammenhang aber trotzdem interessant, da sie ein Licht auf Spielaktivitäten im nahe bei *Vindonissa* gelegenen *Vicus* von Baden und in der Koloniestadt *Augusta Raurica* werfen. Einen interessanten Befund liefert der Hortfund aus Corbridge (GB), bei dem in einer Holzkiste neben militärischen Ausrüstungsgegenständen, Werkzeug, Schreibtafeln und weiteren Utensilien, 47 gläserne Spielsteine (weiss und schwarz) zum Vorschein kamen[28]. Diese wurden als eine grössere «Sammlung», nicht als Ensemble für ein bestimmtes Spiel interpretiert. Ähnliches könnte man auch für die 46 gläsernen Spielsteine aus Depot 1 von *Vindonissa* vermuten. Ein weiterer interessanter Befund ist aus dem Legionslager Dangstetten (D) bekannt. In einer Grube kamen 16 beinerne Knochenscheiben zusammen mit drei Bronzeringen und zwei Ziernieten zum Vorschein[29]. Möglicherweise handelt es sich dabei um die Überreste eines Kästchens, das Spielsteine enthielt. In unserem Zusammenhang erwähnenswert ist auch der Fund eines Spielsteindepots aus dem *Vicus* von Lausanne-Vidy (CH), der neben 40 Spielsteinen aus Knochen, zwei Würfel und verschiedene Münzen enthielt[30]. Zuletzt sei auf einen Fund aus Rottweil (D) hingewiesen, bei dem in einem Loch im Fussboden eines römischen Gebäudes mehr als 130 Keramikrondellen zum Vorschein kamen[31]. Sie waren möglicherweise in einem Beutel deponiert worden. Ob es sich dabei um Spielsteine handelt, muss allerdings offen bleiben.

Wir dürfen also in den Spielsteinkonzentrationen von *Vindonissa* durchaus Spielutensilien erkennen, die in Beuteln oder einem anderen organischen Behälter verwahrt deponiert wurden. Die Verwahrorte lassen in allen vier Fällen kaum an eine kultische Bedeutung der Depots denken. Vielmehr deuten sie im Falle der Depots 1 und 2 auf eine ehemalige Nutzung durch Soldaten im Bereich ihrer Mannschaftsbaracken. Auch Depot 3 dürfte im Zusammenhang mit Spielaktivitäten von Angehörigen des Militärs gestanden haben. Weshalb die abziehenden Soldaten die Spielutensilien nicht mitgenommen haben, als sie das Lager verliessen, muss offenbleiben. Depot 4 ist durch seine Zusammensetzung klar als Ensemble von Spielutensilien anzusprechen. Da es aus einem nachlagerzeitlichen, zivilen Kontext stammt, zu dem wir derzeit wenig wissen, kann es nicht näher eingeordnet werden[32].

2.2. Spielsteine und Würfel aus ausgewählten Ausgrabungen innerhalb des Legionslagers und aus Gräbern

Um diese Zwischenerkenntnisse zu prüfen und zu erweitern, werden im Folgenden Spielsteine und Würfel aus publizierten Befunden zusammengestellt. Ausserdem wird der Frage nach dem Vorkommen von Spielutensilien in Gräbern nachgegangen.

• 2.2.1. Grabungsareal Legionslager Zentrum (GA1)

1996 bis 1998 musste im zentralen Bereich des Legionslagers eine Grossgrabung durchgeführt werden[33]. Dabei kamen gesamthaft 45 Spielsteine aus Glas, Bein und Stein sowie ein beinerner Würfel zum Vorschein. Bisher detailliert ausgewertet sind die vorlagerzeitlichen Befunde sowie die beiden lagerzeitlichen Holzbauphasen der Grabung. 34 Spielsteine aus Glas, fünf Spielsteine aus Bein und der Würfel sind vorgelegt[34]. Die gläsernen Spielsteine sind alle rund mit konvexer Oberfläche und entweder weiss oder dunkel. Die beinernen Stücke sind flach und von einfacher Form, einer ist mit konzentrischen Rillen verziert. Drei gläserne Spielsteine und einer aus Bein stammen aus den vorlagerzeitlichen Holzbauperioden, d.h. aus spätaugusteischer Zeit[35]. Die restlichen 35 Spielsteine und der Würfel wurden aus Befunden der lagerzeitlichen Holzbauphasen geborgen, die

25 S. dazu Penn, Courts (2022), 243-245.

26 Holliger, Holliger (1983), 13.

27 Baden: Die Spielsteine aus Baden, Römerstrasse 1977, Benutzungsschicht des 1. Jh. n. Chr. sind nicht als eigentliches Depot anzusprechen, könnten aber eine erhöhte Spielaktivität widerspiegeln. Schucany (1996), 150. In der Publikation Schucany (1996) bleiben die Spielsteine aus Schacht 4 der gleichen Grabung aus dem 2. Jh. n. Chr. unerwähnt. Ob es sich dabei um ein Depot handelt, müsste überprüft werden. Augst: Bei der Spielsteinkonzentration Augst, Insula 42, 1972 handelt es sich um 32 Spielsteine, die im Abwasserkanal eines privaten Bades zum Vorschein kamen: Deschler-Erb (1998), 274. Sie bezeugen Spielaktivität im Bad, sind aber eher als einzelne Verlustfunde denn als Depot anzusprechen. Die Spielsteinkonzentration Augst, Kurzenbettli 1965 wird bei Deschler-Erb (1998) im Katalog erwähnt, im Text aber nicht weiter behandelt. Deschler-Erb (1998) Kat.-Nr. 1314-1329. 1355. 1360. 1757. Es bleibt also offen, ob es sich dabei um ein Depot handelt. Als eigentliches Depot können einzig 10 Spielsteine aus Augst, Region 5B angesprochen werden. Vgl. Deschler-Erb (1998), 277-278.

28 Allason-Jones *et. al.* (1988), 82; Pace (2020), 321-322; Penn, Courts (2022), 250-251.

29 Fingerlin (1998), 52, Fundstelle 767,4.

30 Flutsch (2019).

31 Sommer (1989), 131-132 mit Abb. 88.

32 Die Grabung Windisch – Königsfelden 1982 (V.82.2), in der das Areal unter der Klosterkirche Königsfelden untersucht wurde, ist nicht ausgewertet.

33 Grabung Windisch - Breite 1996-1998 (V.96.8; V.97.1; V.98.1).

34 Hagendorn *et al.* (2003), 366-372, Taf. 42-46; ibid. 430-431, Taf. 79-80.

35 Spielsteine aus Glas: V.97.1/835.138; V.97.1/1280.2; V.97.1/1041.3. Spielstein aus Bein: V.98.1/2281.1.

in tiberisch-claudische Zeit datiert werden können. Die vorlagerzeitlichen Besiedlungsreste deuten darauf hin, dass an dieser Stelle zunächst eine «militärische Schaltstelle» angesiedelt war, von der aus die römische Siedlungspolitik gelenkt wurde und die zugleich als Warenumschlagplatz diente[36]. Die Gebäude der lagerzeitlichen Holzbauperioden können als Wohnbauten von höheren Offizieren angesprochen werden, im Nordteil des Grabungsareals wurden ausserdem die unter dem späteren Stabsgebäude (*principia*) liegenden älteren Thermen angeschnitten[37].

• 2.2.2. Grabungsareal Legionslager Ost (GA2)

In den Jahren 2002 bis 2004 wurde bei einer Grabung im östlichen Teil des Legionslagers 61 Spielsteine aus Bein, Glas und Stein und vier beinerne Würfel gefunden[38]. 57 Spielsteine konnten in der wissenschaftlichen Auswertung berücksichtigt werden[39]. Die überwiegende Zahl dieser Spielutensilien stammt aus dem Südteil der Grabung und kann zu einem guten Teil der jüngeren Steinbauphase zugewiesen werden, die ins letzte Drittel des 1. Jh. n. Chr. datiert wird[40]. Dort standen gemäss der Befundauswertung seit der Mitte des 1. Jh. n. Chr. Gaststätten (*tabernae*) entlang der Hauptstrasse (*via principalis*) des Lagers.

• 2.2.3. Grabungsareal Legionslager Süd (GA3)

2003 bis 2006 fand im Süden des Legionslagers eine grossflächige Grabung statt, bei der 59 Spielsteine und drei beinerne Würfel gefunden wurden[41]. Bisher ausgewertet sind die lagerzeitlichen Steinbauphasen und die Spuren der Nachlagerzeit. Dabei konnten 14 Spielsteine vorgelegt und verortet werden. Aus der älteren Steinbauphase, die ca. 45-70 n. Chr. datiert werden kann, stammen 10 Spielsteine aus Glas, Stein und Keramik und zwar aus den Kopfbauten von Mannschaftsbaracken, also den Unterkünften von Centurionen, sowie verlagert aus den Spitzgräben. Aus der jüngeren Steinbauphase, die ins letzte Drittel des 1. Jh. n. Chr. datiert werden kann, stammen lediglich vier Spielsteine. Sie kommen alle aus dem Kopfbau einer Mannschaftsbaracke[42].

• 2.2.4. Grabungsareal Legionslager Nord (GA4)

Verschiedene ältere und jüngere Grabungen im nördlichen Bereich des Legionslagers wurden 2010 publiziert[43]. Gemäss der archäologischen Datenbank kamen bei diesen Ausgrabungen 24 Spielsteine und ein beinerner Würfel zum Vorschein. 11 Spielsteine konnten Befunden zugeordnet werden. Sie sind in allen vier Bauperioden belegt, wobei die meisten aus Bauperiode 3 stammen[44]. Die baulichen Strukturen sind in der frühesten vorlagerzeitlichen und der ersten lagerzeitlichen Bebauung nicht genauer ansprechbar. In Bauperiode 3, die in tiberisch-claudische Zeit datiert werden kann und in der die Nordumwehrung des Lagers nach Norden verschoben wurde, sind Mannschaftsunterkünfte mit dazwischenliegenden Lagergassen nachweisbar. Aus dieser Bauperiode stammen ein Spielstein und ein Würfel aus einer Benutzungsschicht; der Spielstein aus dem Mannschaftsteil einer Kaserne, der Würfel aus der Zwischengasse.

• 2.2.5. Grabungsareal Legionslager Südwest (GA5)

Auf einer kleinen Grabungsfläche konnte 1976 in einem damals noch wenig erforschten Gebiet des Legionslagers eine Grabung durchgeführt werden, die anschliessend aufgrund ihrer gut erhaltenen Stratigraphie detailliert ausgewertet und publiziert wurde[45]. Dabei konnten 12 Spielsteine aus Glas und Bein vorgelegt werden. Aus den jüngeren Holzbauphasen stammen fünf Spielsteine, aus den jüngeren Steinbauphasen je ein Spielstein[46]. Ihre genaue Fundlage ist nicht bekannt. Die restlichen Spielsteine sind nicht stratifiziert. Die Interpretation der freigelegten Gebäude ist aufgrund der kleinen Grabungsfläche schwierig. Es dürfte sich sowohl in den Holzbauphasen als auch in den Steinbauphasen am ehesten um Unterkünfte von militärischen Sondereinheiten gehandelt haben[47].

• 2.2.6. Spielsteine und Würfel aus Gräbern

Abschliessend sei noch ein Blick auf diejenigen Gräber von *Vindonissa* geworfen, die im 1. Jh., also während der Besatzungszeit des Legionslagers, niedergelegt wurden[48]. Sind dort Beigaben von Spielsteinen und Würfeln belegt? Einzig der Südfriedhof wurde bis anhin ausführlich ausgewertet und publiziert. Aus den dortigen, rund 375 Bestattungen stammen

36 Hagendorn *et al.* (2003), 463-464.

37 Hagendorn *et al.* (2003), 34-39. 144. 154.

38 Grabung Windisch-Römerblick 2002-2004 (V.002.11).

39 Flück *et al.* (2022), 231.

40 Gemäss Auskunft von M. Flück konnte nur ein Spielstein den Holzbauphasen zugewiesen werden.

41 Grabung Windisch-Spillmannwiese 2003-2006 (V.003.1).

42 Trumm, Flück (2013), 438-458 mit Verteilkarte Abb. 346.

43 Grabungen Windisch-Zentralgebäude 2004 (V.004.3), Windisch-Königsfelden (P3) 1975-1976 (V.75.4), Windisch-Königsfelden (P2) 1989-1994 (V.89.4; V.90.4; V.93.5; V.94.1).

44 Benguerel, Engeler-Ohnemus (2010), 162-163 Abb. 153.

45 Grabung Windisch-Königsfelden (Feuerwehrmagazin) 1976 (V.76.3). Meyer-Freuler (1998).

46 Meyer-Freuler (1998), Taf, 18,302; 26, 467-468; 33,602; 39,705; 55,966; 66,1129-1133. Jüngere Holzbauphase 3 und 4 und jüngere Steinbauphase 6 und 7.

47 Meyer-Freuler (1998), 110-115; Trumm, Flück (2013), 268-269.

48 Zusammenfassend: Trumm (2011), 11-13; Hintermann (1998), 55-62; Hintermann *et al.* (2000), 23-24.

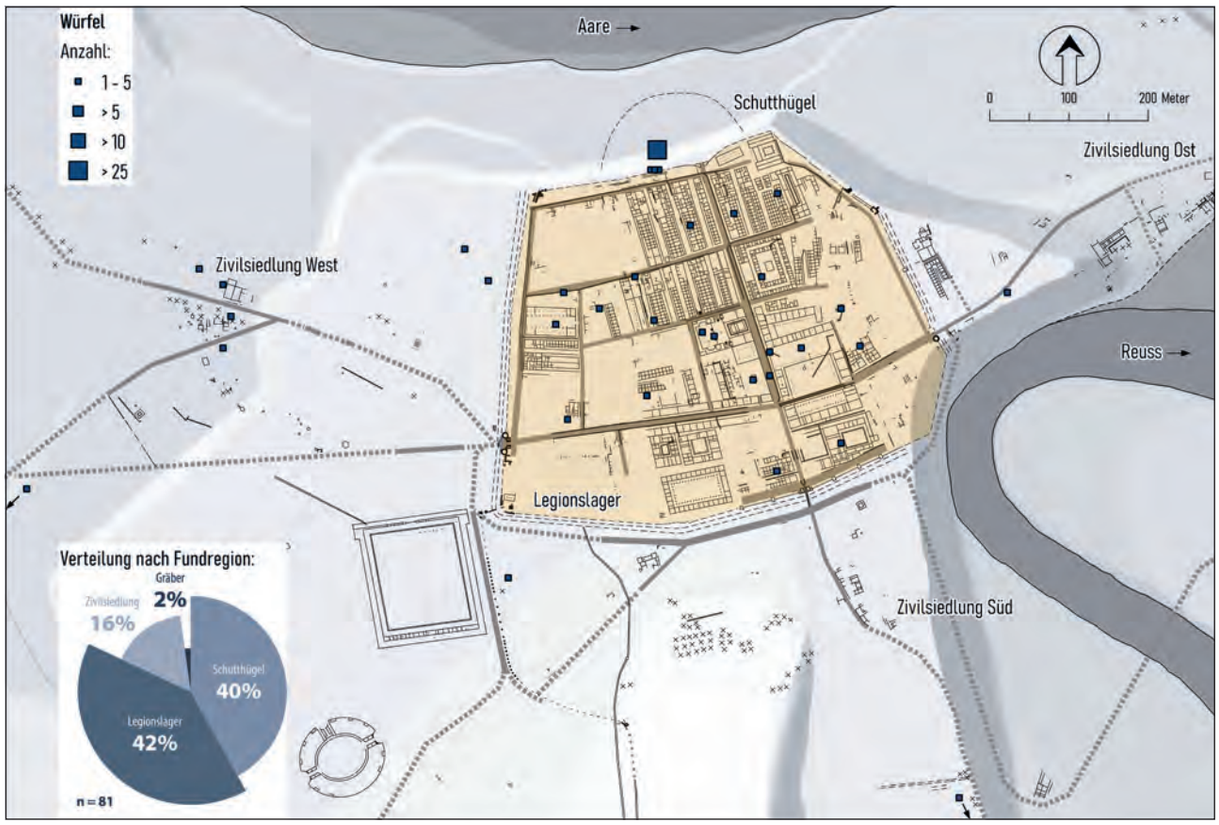

Fig. 9 Vindonissa gegen Ende des 1. Jh. n. Chr. mit Legionslager, Zivilsiedlung und Brandgräberfeldern. Verteilkarte und prozentuale Häufigkeit der Würfel nach Fundregion. © Kantonsarchäologie Aargau, Brugg (Ricardo Bellettati / Stephan Schneider / Tamara Koch / Regine Fellmann Brogli)

lediglich ein Spielstein aus Knochen und ein Würfel[49]. Aus der über 200 Gräber umfassenden Nekropole von Brugg–Aarauerstrasse, die bereits am Ende des 19. Jh. und zu Beginn des 20. Jh. ausgegraben wurde, stammen zwei gläserne Spielsteine sowie ein Würfel[50]. Ihre Zuweisung zu Grabinventaren ist allerdings aufgrund der Dokumentationslage dieses Gräberfeldes nicht mehr möglich. Möglicherweise aus demselben Gräberfeld stammen 15 Spielsteine aus Bein[51]. Diese gelangten aus einer privaten Sammlung des ausgehenden 19. Jh. zusammen mit weiteren Funden ins Vindonissa-Museum in Brugg (CH). Die Spielsteine sind alle verbrannt, was auf eine Herkunft aus Kremationsgräbern hindeuten könnte. Aus einem 2012 neu entdeckten Gräberfeld nördlich der Aare, an der Strasse nach *Augusta Raurica*, das ca. 145 Brandgräber des 1. Jh. umfasst, sind nach jetzigem Bearbeitungsstand keine Spielsteine oder Würfel bekannt[52]. Zusammenfassend kann also festgehalten werden, dass im Vergleich zur grossen Anzahl Spielsteine und Würfel aus dem Legionslager nur eine verschwindend kleine Anzahl aus zeitgleichen Gräbern stammt.

• 2.2.7. Zwischenfazit II

Ergänzend zu den Erkenntnissen des Zwischenfazits I kann Folgendes festgehalten werden: Bereits vor dem Bau des ersten Lagers in Holz, also in den spätaugusteischen Schichten, sind wenige Spielsteine aus Glas und Bein belegt (GA1, GA4). Dies deckt sich zeitlich mit dem Vorhandensein von Spielsteinen in den Legionslagern von Haltern (D), Dangstetten (D) und Xanten (D)[53]. Dass in *Vindonissa* Spielsteine in diesem frühen Kontext belegt sind, wird als Indiz für die Anwesenheit römischer oder romanisierter Personen schon vor Errichtung des Legionslagers gedeutet[54].

Während die Depots 1, 2 und 3 alle aus den Holzbauphasen tiberisch-claudischer Zeit stammen, zeigen die untersuchten Grabungsareale wenig

49 Hintermann *et al.* (2000), 100, Abb. 122. Spielstein aus Grab 93-15-19 (Mann), Würfel aus Grab 94-274-21 (Frau).

50 Inv.-Nr. 37:757, 37:879 (Spielsteine), 37:866 (Würfel).

51 Inv.-Nr. F.87-F.101. Bei Holliger, Holliger (1983), 12 zu den Depots gezählt. Gemäss der Angabe auf den Inventarkarten wurden die Spielsteine 1928 angekauft. August Frey hatte diese um 1890 «zu beiden Seiten der Aarauerstrasse» ausgegraben. Ihre Zuweisung zum Gräberfeld Brugg-Aarauerstrasse ist möglich, bleibt aber unsicher. Unklar ist auch, ob sie aus einem oder mehreren Gräbern stammen.

52 Gräberfeld Brugg-Remigersteig 2012-2013 (Bru.012.2). Trumm *et al.* (2013); Trumm, Huber (2014), 16-21.

53 Hagendorn *et al.* (2003), 366 Anm. 2075 mit Verweis auf Spielsteine aus augusteischer Zeit aus Haltern; Hanel (1995), 285 mit Anm. 1631; Fingerlin (1986), Fundstelle 402, 42; Fingerlin (1998), Fundstellen 757,7; 767,4; 906,29; 1149, 8; 1160,6; 1220,29; 1337,25. Bei Fingerlin (1998) werden nur die gläsernen Exemplare als Spielsteine angesprochen, die beinernen Exemplare neutral als «Knochenscheiben» bezeichnet.

54 Hagendorn *et al.* (2003), 431. Zum Vorhandensein von Spielsteinen in spätlatènezeitlichen Kontexten vgl. Luik (1994), 374 Anm. 63; Fecher (2010), 256 mit Anm. 986.

überraschend, dass auch in den Steinbauphasen, also in der zweiten Hälfte des 1. Jh. n. Chr., Spielsteine zum üblichen Fundspektrum gehören. Was die Zuweisung zu Gebäuden anbelangt, sind erneut Mannschaftsbaracken (GA4) belegt. Hinzu kommen Unterkünfte von Centurionen (GA3), nicht genauer bestimmbare Wohnbauten (GA1, GA5), Gaststätten (*tabernae*) (GA2) sowie möglicherweise die frühen Thermen (GA1).

Während bei den Depots eine Ansprache als Spielutensilien naheliegend ist und für die Würfel als sicher gelten darf, muss dies bei den einzeln gefundenen Spielsteinen differenziert betrachtet werden. Die Forschung hat gezeigt, dass gläserne und beinerne «Steine» auch als Zählsteine, «Ersatz» für Geld oder gar als Einsätze in Wanddekorationen oder Möbel Verwendung gefunden haben[55]. Während aufwändige Wanddekorationen und luxuriöse Möbel in *Vindonissa* höchstens in den Unterkünften der höheren Offiziere zu erwarten wären, ist die Möglichkeit der Verwendung als Zählsteine oder fallweise als «Ersatz» für Geld gut vorstellbar.

Um einen Eindruck zu erhalten, von wie vielen Spielsteinen und Würfeln wir einen genaueren Kenntnisstand haben, seien hier ein paar Zahlen zusammengestellt: Zählen wir alle Spielsteine und Würfel aus den Depots 1-4, den Grabungsarealen (GA1-GA5) und den Gräbern zusammen, sind dies insgesamt 244 Spielsteine und 5 Würfel. Bezogen auf die in unserer Untersuchung berücksichtigte Gesamtzahl von 828 Spielsteinen und 81 Würfeln entspricht dies knapp 30% der Spielsteine und lediglich 6% der Würfel. Zeitlich verteilen sich die Spielsteine wie folgt: etwas mehr als die Hälfte (54%) stammen aus Kontexten der 1. Hälfte des 1. Jh. n. Chr., rund ein Drittel (31%) aus der 2. Hälfte des 1. Jh. n. Chr. Aus der Zeit nach Abzug des Militärs aus *Vindonissa* stammt bislang einzig Depot 4, das in die 1. Hälfte des 3. Jh. n. Chr. datiert werden kann.

3. SPIELSTEINE UND WÜRFEL AUS DER ZIVILEN SIEDLUNG UM DAS LEGIONSLAGER

Durch die grossflächigen Ausgrabungen seit 2006 im Bereich der zivilen Siedlung im Süden und Westen des Legionslagers, hat sich das Fundbild von Spielsteinen und Würfeln erweitert (figg. 8). Sie sind auch ausserhalb des Lagers gut belegt. Leider sind die Befunde und Funde dieser Ausgrabungen bis anhin nur teilweise ausgewertet und publiziert[56]. Spielsteine oder Würfel sind dabei nicht berücksichtigt worden und können deswegen derzeit weder zeitlich noch räumlich näher eingeordnet werden. Das Fundbild kann deshalb nur bedingt mit jenem der Funde innerhalb des Legionslagers verglichen werden. Trotz dieser Einschränkung wagen wir den Versuch eines Vergleichs, indem wir für vier Grabungen innerhalb des Legionslagers (GA1-GA4) und für vier Grabungsareale ausserhalb des Legionslagers (GA6-GA9) einen Fundquotienten berechnen, der die Anzahl gefundener Spielutensilien pro ausgegrabenem Quadratmeter angibt (fig. 10). Das Resultat ist interessant, wenn auch beim jetzigen Forschungsstand mit Vorsicht zu interpretieren: Der errechnete Fundquotient zeigt, dass Spielsteine und Würfel im Bereich des Legionslagers durchschnittlich etwa viermal häufiger gefunden werden, als in der zivilen Siedlung. Zudem liegt der Fundquotient des Grabungsareals Legionslager Ost (GA2), wo eine Gaststätte (*taberna*) nachgewiesen werden konnte, nochmals deutlich höher. Es scheint also, dass im Lager tatsächlich mehr Spielsteine verloren gingen als in der zivilen Siedlung. Dort lassen sich ausserdem keine Konzentrationen von Spielsteinen beobachten, die auf spezielle Spielorte hinweisen würden. Für weiterführende Interpretationen des Fundbildes ist es aufgrund des Forschungsstandes zu früh. Ausserdem müssten weitere Fundgattungen auf ihre Verteilung innerhalb bzw. ausserhalb des Legionslagers untersucht werden, wie z. B. Waffen, Fibeln, Spinnwirtel oder Haarnadeln[57]. Die Frage, ob die Funde ausserhalb des Lagers auf soziale Kontakte und Interaktionen zwischen den Soldaten und den Bewohnerinnen und Bewohner der Zivilsiedlung hinweisen, muss also derzeit offenbleiben. Ein Bild auf einem Weihealtar eines Beneficiariers aus Osterburken (D), das eine Frau und einen Mann beim Brettspiel zeigt, mag hier ein Schlaglicht auf eine mögliche Interaktionen werfen[58].

4. SPIELBRETTER, WÜRFELBECHER, KREISEL UND MURMELN

Bei einer Untersuchung zu Brett- und Würfelspielen aus *Vindonissa* darf die Frage nach möglichen Spielbrettern nicht fehlen. Zu erwarten sind in Bodenbeläge eingeritzte sowie mobile Spielbretter aus verschiedenen Materialien, wie Stein, Ziegel, Keramik, Holz oder Leder[59]. Bereits 1983 war aus *Vindonissa* nur ein mögliches Spielbrett bekannt, eine Steinplatte mit vertieftem Feld und kreuzförmig

55 Deschler-Erb (1998), 146 und oben Anm. 10. Zur «Börse eines Spielers» vgl. Flutsch (2019). S. dazu auch Einführung in diesem Band.

56 Zu den grossflächigen Ausgrabungen in der Zivilsiedlung West s. Schucany (2011); Flück *et al.* (2017).

57 S. dazu Birley (2016); Van der Veen (2020); Van der Veen (2021) mit älterer Literatur. Zu weiteren Untersuchungen zu Fundverteilungen in *Vindonissa* vgl. Holliger, Holliger (1985). Zu Recht weisen sie darauf hin, dass eine grössere Funddichte im südlichen Lagergebiet zu beobachten ist.

58 Ronke (2017).

59 Zu römischen Spielbrettern allgemein vgl. Schädler (2019a); Daniaux (2019); Penn, Pace and Schaedler in diesem Band. Zu römischen Spielbrettern aus Fundkontexten im Zusammenhang mit römischem Militär vgl. Hanel (1997); Courts, Penn (2021). Zu einem hölzernen Spielbrett aus Stanway (GB) vgl. Schädler (2007). Auch *ad hoc* in den Boden eingeritzte Spielbretter sind denkbar, freilich können wir solche in einem archäologischen Befund nie fassen.

Lage der Grabung	Hauptbefund	Grabungskürzel	Fläche der Grabung in m^2	Anzahl Spielsteine	Anzahl Würfel	Fundquotient* (gerundet)
Legionslager Ost (GA2)	Wohnhaus eines Offiziers, Taberne, Strasse	V.002.11	900	61	4	7.2
Legionslager Süd (GA3)	Kopfbauten von Mannschaftsbaracken, Spitzgraben, Strasse, Gruben	V.003.1	2700	59	3	2.3
Legionslager Nord (GA4)	Mannschaftsbaracken, Spitzgraben, Strasse, Gruben	V.004.3	1200	24	1	2.1
Legionslager Zentrum (GA1)	Wohnbauten für höhere Offiziere, ältere Thermen	V.96.8; V.97.1; V.98.1	2400	45	1	1.9
Zivilsiedlung Süd (GA6)	Spitzgraben, Strasse, Holzbauten, Gruben	V.013.2	1600	9	0	0.6
Zivilsiedlung West (GA7)	Streifenhäuser, Handwerkerplätze, Strasse, Gruben	V.006.1; V.007.2; V.007.3; V.008.2; V.008.3; V.008.4; V.009.16	15000	74	8	0.5
Zivilsiedlung Süd (GA8)	Pfeiler, Aquäduktbrücke, Strasse, Gruben	V.011.1	4400	18	4	0.5
Zivilsiedlung West (GA9)	Spitzgraben, grosser Abwasserkanal, Gruben	V.016.1	5000	8	1	0.2
* Objektzahl / Fläche der Grabung überhöht ($1m^2$ => $100m^2$)						

Fig. 10 Schematisierte Zusammenstellung der Fundhäufigkeit von Spielsteinen und Würfel in ausgewählten Grabungsflächen innerhalb und ausserhalb des Legionslagers Vindonissa. Sortiert nach Fundhäufigkeit (Fundquotient). © Kantonsarchäologie Aargau, Brugg (Regine Fellmann Brogli)

eingeritzten Linien[60] (fig. 7). Allerdings passt das eingeritzte Kreuz zu keinem der bekannten Brettspiele, sodass es unsicher bleiben muss, ob die Steinplatte als Spielbrett angesprochen werden darf. Zu erwägen bleibt, ob sie für eine Art Wurfspiel verwendet worden sein könnte[61].

Die erneute Recherche nach Spielbrettern im Fundbestand von *Vindonissa*, insbesondere auch nach Resten von solchen aus Holz oder Leder, die sich im «Schutthügel» von *Vindonissa* erhalten hätten, verlief ohne Erfolg[62]. Besonders erstaunt, dass es keine Spuren von Spielbrettern auf Ziegeln gibt, die andernorts im militärischen Kontext gut belegt sind, obwohl bei der Fundbergung und Inventarisation routinemässig darauf geachtet wird[63].

Wie kann das Fehlen von Spielbrettern erklärt werden? Verschiedene Überlegungen lassen sich anführen: Dass Einritzungen auf steinernen Bodenplatten fehlen, mag damit zusammenhängen, dass es im Legionslager wenig gepflasterte Bereiche gab, die sich zum Spielen geeignet hätten. Ausserdem wurde das Lager immer wieder umgebaut und nach seiner Auflassung auch Baumaterial zur Wiederverwendung abtransportiert[64]. Das Fehlen von mobilen Spielbrettern mag damit zusammenhängen, dass hauptsächlich Spielbretter aus Holz verwendet wurden, die sich nicht erhalten haben. Möglich ist auch, dass mobile Spielbretter beim Abzug der Legion von den Soldaten mitgenommen wurden.

Auch Belege für Würfelbecher, wie sie aus Pompeji bekannt sind, fehlen bislang im Fundmaterial von *Vindonissa*[65]. Freilich kann man sich hier auch hölzerne Exemplare oder umfunktionierte Trinkbecher aus Keramik vorstellen.

Neben Brett- und Würfelspielen sind auch Kreisel, Astragale oder Murmeln in römischer Zeit zu den Spielutensilien zu zählen[66]. Die drei hölzernen

60 Inv.-Nr. 7295. Holliger, Holliger (1983), 18 Abb. 10. Herkunft gemäss Inventarkarte: «Geschenk von Notar Meyer, Baden, gefunden in Windisch». Die Sammlung von Alfred Meyer aus Baden entstand am Ende des 19. Jh. und enthielt neben Bodenfunden aus Baden und anderen Orten auch Ankäufe aus Sammlungen. Die Steinplatte kam nach dem Tod von Meyer 1910 in die Sammlung der Gesellschaft Pro Vindonissa (GPV) in Brugg.

61 Zu den Spielbrettern bekannter Spiele und zur Interpretation der sog. «Rundmühle», vgl. Penn, Pace and Schaedler in diesem Band.

62 Der «Schutthügel» ist die am Nordabhang des Windischer Plateaus gelegene grosse Abfallhalde des Legionslagers *Vindonissa*. Darin haben sich Holz- und Lederfunde erhalten. Zu den Holzfunden vgl. Speidel (1996); Fellmann (2009). Zum Schutthügel vgl. zuletzt Trumm (2018).

63 Zu Spielbrettern auf Ziegeln aus militärischem Kontext vgl. Hanel (1997), 318 mit Anm. 16; Pace (2020); Courts, Penn (2021).

64 In Bodenplatten eingeritzte Spielbretter haben sich dort häufiger erhalten, wo mehrheitlich in Stein gebaut wurde. Vgl. Courts, Penn (2019), 4 (mit weiterführender Literatur); Schädler (2019a).

65 Zu Pompeji vgl. Pace (2022a).

66 Vgl. Rieche (1984); Schädler (2019b); Dasen (2019). Bei den als mögliche «Jojo» angesprochenen Holzobjekten Fellmann (2009), 35-37 Kat.-Nr. 230-231 Taf. 5 dürfte es sich um gewöhnliche Spulen

Kreisel haben wir bereits eingangs erwähnt. Sie stammen alle aus dem sog. Schutthügel von *Vindonissa* und man darf deshalb annehmen, dass sie im Legionslager zum Einsatz kamen[67]. Während sich für Astragale als Spielutensilien aus *Vindonissa* derzeit keine Belege beibringen lassen, sind hingegen kleine Ton- oder Steinkugeln mehrfach bezeugt[68]. Ob es sich dabei ausschliesslich um Geschosse handelt, wie häufig angenommen wird, kann aufgrund des archäologischen Befundes nicht entschieden werden[69]. Dass entsprechende Kugeln im zivilen Kontext als Murmeln verwendet wurden, steht hingegen ausser Diskussion[70]. Wenn wir uns die Spielfreude der Soldaten vergegenwärtigen, so darf zumindest nicht ausgeschlossen werden, dass die Kugeln möglicherweise auch als Murmeln zum Einsatz kamen.

5. SPIELEN IN *VINDONISSA*

Kehren wir nochmals zu den Spielsteinen und Würfeln zurück (figg. 8-9). Das 1983 vorgelegte Fundbild der Spielsteine liess vermuten, dass innerhalb des Legionslagers vorwiegend im Lagerzentrum, in ausgedehnten Innenhöfen und auf Plätzen gespielt wurde, weniger in den engen Kasernen[71]. Unsere Untersuchungen haben ein differenzierteres Bild ergeben. Gut die Hälfte aller Spielsteine, deren Befunde wir analysieren konnten, stammen aus der 1. Hälfte des 1. Jh. n. Chr., aus den Holzbauphasen des Lagers mit ihren fundreichen Gruben und Planierungsschichten. Im Zentrum des Legionslagers lagen die älteren Thermen unter dem Nordteil des späteren, in Stein gebauten Zentralgebäudes (*principia*). Die im Zentrum des Legionslagers zu beobachtende Konzentration von Spielsteinen könnte also eher mit den älteren Thermen der Holzbauphase, als mit der späteren Bebauung in Stein, dem Stabsgebäude (*principia*), in Zusammenhang stehen. Ähnlich vorsichtig muss man die Anzahl Spielsteine im Bereich der späteren, in Stein gebauten grossen Thermen bewerten, denn wir wissen nicht, welche älteren Gebäude der Holzbauphase unter diesem Gebäude lagen. Gehen wir davon aus, dass entlang der Hauptstrassen sowohl in der frühen als auch in der späteren Bebauung des Legionslagers mit Gaststätten (*tabernae*) zu rechnen ist, darf die dortige Konzentration von Spielsteinen mit gutem Grund mit diesen Verkaufs- und Begegnungsstätten in Verbindung gebracht werden. Die auf Basis des Fundbildes von 1983 gemachte Annahme, dass vorwiegend in Innenhöfen und auf Plätzen gespielt wurde, weniger in den Kasernen, muss deshalb relativiert werden. Wie oben aufgezeigt, sind Mannschaftsbaracken, Unterkünfte der Centurionen sowie weitere Wohnbauten neben Gaststätten als Spielorte belegt. Direkte Hinweise auf Spielaktivitäten auf Plätzen fehlen hingegen.

Vergleichen wir das Fundbild der Würfel von 1983 mit jenem von 2021 (fig. 9) zeigt sich, dass die grosse Mehrzahl der Würfel damals aus der grossen Abfallhalde des Legionslagers, dem sog. Schutthügel, stammte. Das hat sich heute deutlich relativiert, wohl nicht zuletzt weil dort seit 1952 nicht mehr gegraben wird[72]. Die Spielsteine und Würfel aus dem sog. Schutthügel gelangten vermutlich immer wieder mit Abfall aus dem Legionslager dorthin. Es mag verwundern, weshalb funktionstüchtige Objekte dort in grosser Zahl entsorgt wurden. Dieses Phänomen ist schon länger auch für andere Fundgattungen bekannt, wenn auch letztlich noch nicht abschliessend geklärt[73].

Es wäre interessant, das gewonnene Bild der Spielaktivitäten in *Vindonissa* nun mit anderen zivilen und militärischen Orten zu vergleichen. Auch wenn dies im Rahmen der vorliegenden Arbeit nur in Ansätzen unternommen werden konnte, sei abschliessend darauf hingewiesen, dass die grosse Anzahl Spielsteine und Würfel aus *Vindonissa* im Vergleich zu anderen militärischen Plätzen auffällt[74]. Einzig aus der Koloniestadt *Augusta Raurica* ist eine vergleichbar hohe Anzahl an Spielsteinen und Würfeln belegt[75]. Diesen Fundreichtum für *Vindonissa* zu erklären, der zum grossen Teil aus der Zeit der Belegung des Legionslagers bis 101 n. Chr. stammt, bleibt weiteren zukünftigen Studien vorbehalten.

handeln. Freundlicher Hinweis U. Schädler.

67 Fellmann (2009), 107 Kat.-Nr. 1174-1176 Taf. 37 mit Anm. 511-513. Zum Nachbau eines Kreisels aus *Vindonissa* vgl. Weiss (2013). Ein gut vergleichbares Exemplar aus Holz wurde bei Ausgrabungen auf dem Titelberg gefunden. Vgl. Metzler *et al.* (2016), 254 Abb. 466. Zur Verwendung von Kreiseln als «Orakel» in Liebesdingen vgl. Dasen (2019).

68 Vgl. z. B. Inv.-Nr. 2133, 2561, 6817, 7447-7449, 9847, 13:706, 18:293, 23:1998, 23:1241, 25:1179, 26:150, 27:956, 28:3139, 28:3603, 33:3824, 37:756, V.003.1/6904.1. V.003.1/632.4. Eine vollständige Zusammenstellung aller Kugeln war im Rahmen dieser Arbeit nicht möglich. Einige Exemplare sind abgebildet bei Hintermann (2012), 61 Abb. 6. Belege für Kugeln aus Glas lassen sich bis anhin im Fundgut von *Vindonissa* nicht finden.

69 Die Tonkugel mit der Inv.-Nr. 37:756 stammt aus dem Gräberfeld Brugg-Aarauerstrasse. Als Beigabe in einem Grab dürfte es sich dabei wahrscheinlich um eine Spielkugel handeln.

70 Schädler (2019b); Galtier *et al.* (2015), 45 Fig. 16.

71 Holliger, Holliger (1983), 14 mit Anm. 24.

72 Holliger, Holliger (1983), 14. Seit 1952 werden keine systematischen Ausgrabungen am «Schutthügel» mehr durchgeführt.

73 Es gelangten neben Abfall und Bauschutt auch eine grosse Menge Schreibtafeln, Schreibgerät sowie Schmuck und Votivgegenstände in den Schutthügel. Zum Schutthügel vgl. zuletzt Trumm (2018).

74 Für die Militäranlagen von Xanten/*Vetera* I, Rottweil, Oberstimm und Ellingen s. Allison (2013), 104; Oldenstein (1982). Zu Funden aus Kastellen und Wachttürmen am Limes und am Hadrianswall s. Jilek, Breeze (2007), 210 Tab. 19.2. Zu Spielsteinen aus den *Vici* von Baden und Oberwinterthur s. Schucany (1996), 150 und Rütti (1988), 100-101.

75 Freundlicher Hinweis Barbara Pfäffli, Augst. 2018 waren es gemäss der archäologischen Datenbank Augusta Raurica 1857 Spielsteine und 35 Würfel.

Zusammenfassend kann festgehalten werden, dass die grosse Anzahl Spielsteine und Würfel, sowie die hölzernen Kreisel, Ton- und Steinkugeln, die alle innerhalb des Legionslagers gefunden wurden, zusammen mit der Schreibtafel mit einer Einladung zum Gastmahl mit Würfelspiel für *Vindonissa* eine rege Spieltätigkeit im militärischen Bereich belegen. Auch wenn wir nur knapp 30% des hier berücksichtigten Bestandes an Spielsteinen zeitlich genauer einordnen können, weisen diese darauf hin, dass der Grossteil der Funde aus der Belegungszeit des Legionslagers im 1. Jh. n. Chr. stammen dürfte. Fragen wir nach den Spielorten, so lassen sich innerhalb des Legionslagers Mannschaftsbaracken, Unterkünfte für Centurionen und höhere Offiziere, Gaststätten entlang der Hauptstrasse sowie vermutlich die Lagerthermen ausmachen. Auch in der Zivilsiedlung wurde möglicherweise gespielt, Spielsteine finden sich dort aber deutlich seltener. Sicher als Spielbretter anzusprechende Funde fehlen bis heute im Fundgut von *Vindonissa*. Spielen gehörte für Angehörige des Militärs offenbar zum gängigen Zeitvertreib; inwieweit auch die Bewohnerinnen und Bewohner der Zivilsiedlung sich beim Spiel vergnügten, können wir derzeit nicht beantworten.

ABKÜRZUNGEN

B.	Breite
bzw.	beziehungsweise
D.	Dicke
Dm.	Durchmesser
GA	Grabungsareal
Inv.-Nr.	Inventarnummer
Jh.	Jahrhundert
L.	Länge
s.	siehe
sog.	sogenannt
vgl.	vergleiche
z. B.	zum Beispiel

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Oggetti per il gioco di epoca romana: rinvenimenti in contesti archeologici in Lombardia

INTRODUZIONE

Il presente contributo si propone un riesame critico della documentazione esistente su alcuni oggetti collegati a giochi da tavolo (dadi, pedine, gettoni) rinvenuti in un'area geografica circoscritta corrispondente al territorio dell'odierna regione Lombardia. Il tema è stato ampiamente trattato di recente nel volume dedicato al materiale ludico della Collezione Sambon di Milano edito nel 2015, in una sezione a parte nella quale sono stati presentati gli oggetti per il gioco rinvenuti nel corso di scavi archeologici, per lo più recenti, in Lombardia[1]. Dal momento però che alcuni ritrovamenti sul territorio, specialmente quelli effettuati in anni più lontani, erano rimasti esclusi da tale trattazione[2], è sembrato utile proporre un riesame dell'intera documentazione, in modo da offrire un quadro riassuntivo della diffusione il più possibile completo.

I contesti di rinvenimento sono presentati in forma catalogica con schede sulle singole attestazioni[3], suddivise per aree geografiche corrispondenti alle città che hanno restituito testimonianze, quali *Mediolanum, Brixia, Cremona, Ticinum*, nonché ad alcuni siti nei territori extra-urbani, come ad esempio nel caso delle province di Brescia e Pavia. Segue un capitolo dedicato all'analisi critica delle attestazioni, nel quale vengono approfonditi i dati relativi ai contesti, distinguendo le testimonianze provenienti dalle necropoli (tombe a incinerazione e a inumazione), da quelle dalle aree urbane, in zone residenziali (*domus*, edifici rustici) o cultuali (santuari). I dadi e le pedine, una volta inquadrati dal punto di vista tipologico, sono analizzati, ove possibile, nell'associazione tra loro e con altre categorie di manufatti, come risulta particolarmente evidente nel caso dei corredi funerari. Viene infine sottolineata la possibilità di sfruttare le indicazioni sulla datazione offerte da alcuni contesti per proporre alcune osservazioni sui termini cronologici della diffusione di alcuni tipi di oggetti ludici allo stato attuale delle nostre conoscenze.

1. I CONTESTI DI RINVENIMENTO

1.1 Milano

Milano, necropoli dell'Università Cattolica del Sacro Cuore, tomba US 216.

Incinerazione diretta, la fossa venne riempita con un riporto di 35 cm (terra, carboni, ciottoli frammenti di laterizi), entro questo riporto si trovavano il dado in osso e le pedine in pasta vitrea, deposte quindi dopo il rogo.

- Un dado in osso cubico, con punteggio da 1 a 6, lunghezza lato cm 0,8

- Ventotto pedine discoidali in pasta vitrea con base

1 Slavazzi, Lambrugo (2015), 105-135.

2 In particolare erano rimasti esclusi dalla trattazione nel volume citato alla nota precedente alcuni rinvenimenti di pedine in pasta vitrea e dadi in osso e bronzo: in tombe delle necropoli di Brescia, Bezzi Martini (1987), 20-22; 28-30; Bonini (2004) - e del suo territorio, ad esempio a Manerbio - Cascina Trebeschi, Portulano, Ragazzi (2010), 59-60; 114 - e Salò – Lugone, De Marchi (1997) -, nonché a Calvatone nel cremonese, Medici (1996a), 219; 222, fig. 325; Medici (1996b), 235; 238, fig. 358.

3 Le schede non risultano sempre omogenee per quanto riguarda la completezza della documentazione, in quanto sono basate sui dati riportati dagli autori delle pubblicazioni originarie, in alcuni casi in parte lacunose.

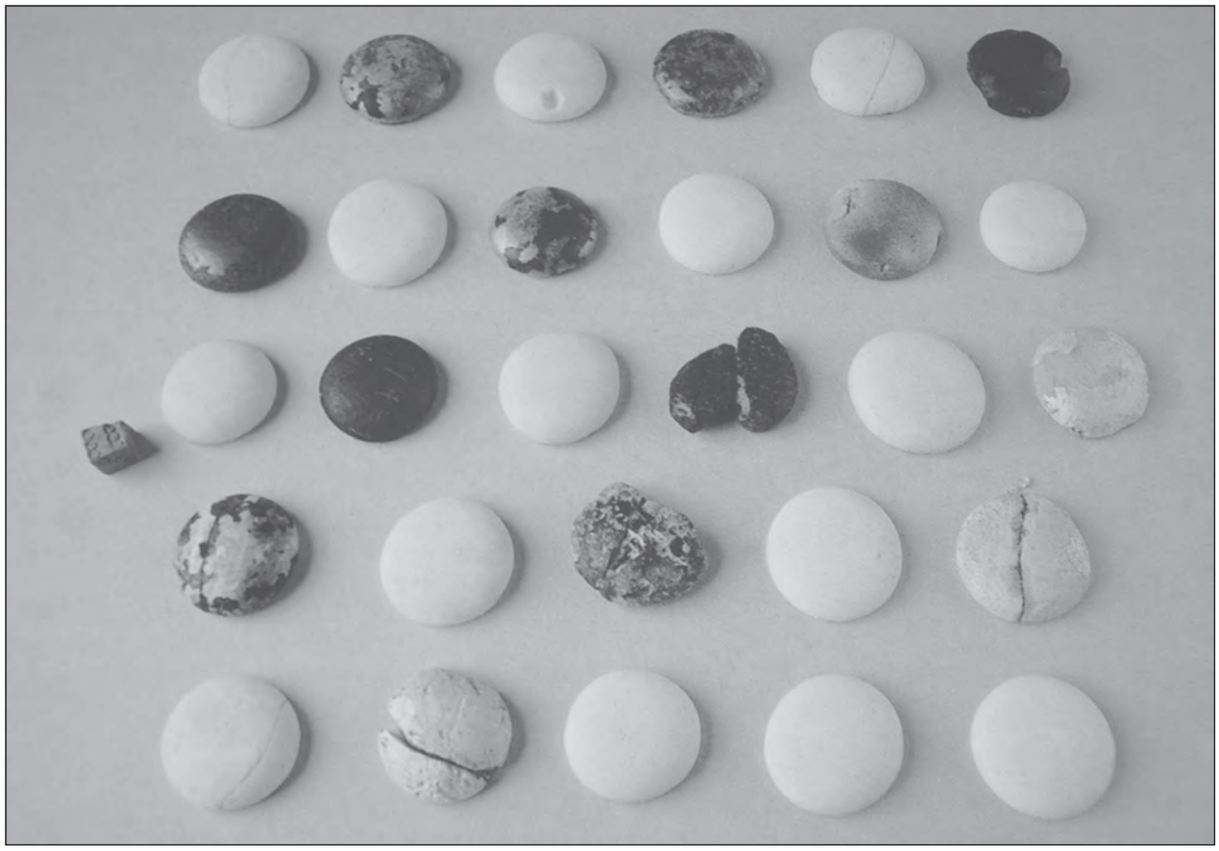

Fig. 1. Pedine in pasta vitrea (Diam. min. 2.3 cm, max. 2.6 cm) e dado in osso (Lungh. lato 0.8 cm), da Milano, necropoli Università Cattolica, tomba US 216, fine del I-primi decenni del II sec. d.C. Da Airoldi *(2015).*

piatta e faccia superiore convessa, diametro base tra 2,3 e 2,6 cm; altezza tra 0,6 e 0,7 cm. Quindici pedine sono di colore bianco e tredici di colore blu? (alcune deteriorate con colore modificato?) (fig. 1)

Datazione: La tomba appartiene al settore della necropoli, Area UC II, che raccoglie sepolture databili tra la fine del I e i primi decenni del II sec. d.C.

Bibliografia: Sannazaro *et alii* (1998), 79 (schede di F. Airoldi); Airoldi (2015).

Milano, via Moneta.

Zona residenziale, edifici dei quali non si conservano né alzati né pavimentazioni.

- Quattro dadi in osso cubici, con punteggio da 1 a 6, lunghezza lati cm 1,1-0,85. (fig. 2)

- Una pedina discoidale in osso con le due facce piatte e lisce, diametro 1,4 cm.

- Una pedina cilindrica in avorio (?), faccia superiore leggermente convessa con al centro una piccola protuberanza, faccia inferiore con un'incavatura conica al centro.

Datazione: Non è disponibile una datazione su base stratigrafica.

Bibliografia: Ceresa Mori, Bianchi (2015a), 109, cat. nn. 1-3.

Milano, via Calatafimi.

Canale con le sponde rinforzate da palificazioni lignee.

- Due pedine discoidali in osso con la faccia superiore concava, diametro 1,9; 2,4 cm. (fig. 3)

Datazione: Una pedina (St. 161595) proviene da un

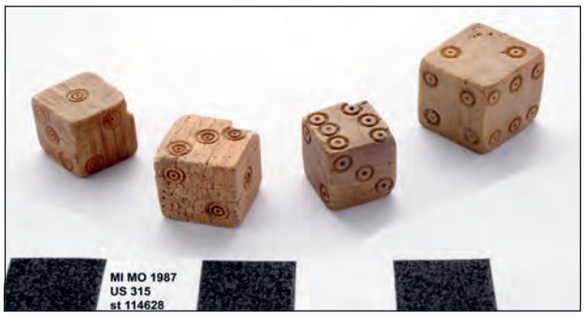

Fig. 2. Dadi in osso (Lungh. lati 0.85, 0.95, 0.9, 1.1 cm), da Milano, via Moneta. Milano, Soprintendenza Archeologia Belle Arti e Paesaggio. Da Ceresa Mori, Bianchi *(2015a).*

Fig. 3. Pedina in osso (Diam. 1.9 cm), da Milano, via Calatafimi, I sec. d.C. Milano, Soprintendenza Archeologia Belle Arti e Paesaggio. Da Ceresa Mori, Bianchi *(2015b).*

deposito relativo alla fase d'uso del corso d'acqua, I sec. d.C.; l'altra (St. 161594) dagli interri del canale, IV-V sec. d.C.

Bibliografia: Ceresa Mori, Bianchi (2015b), 112, cat. n. 1.

1.2 Brescia e provincia

Brescia, via S. Giovanni Bosco, tomba 11.

Inumazione, tomba costruita in mattoni, chiusa da una lastra in pietra di Botticino, all'interno vi era una cassa in lamina di piombo. Nel terrapieno soprastante furono rinvenuti una lucerna, due chiodi in ferro e le pedine in pasta vitrea.

- Undici pedine discoidali in pasta vitrea con base piatta e faccia superiore convessa, diametro base medio 3 cm. Sei pedine sono di colore bianco e cinque di colore nero? (fig. 4)

Datazione: La tomba è ritenuta databile al II sec. d.C., sulla base anche della tipologia della lucerna.

Bibliografia: Bezzi Martini (1987), 20-22.

Brescia, via S. Zeno, tomba 18.

Inumazione, tomba costruita in mattoni, chiusa da tre lastre in pietra di Medolo. All'interno vi era un sarcofago in pietra di Botticino che conteneva lo scheletro di un bambino, ai suoi piedi c'erano un vaso in alabastro e le pedine in pasta vitrea, lungo una parete vi erano un'asticella appiattita in osso con un'estremità distinta di forma ovale, uno stilo in bronzo e un coltello in ferro in custodia lignea. (figg. 5-6) Facevano parte del corredo anche un sesterzio di Antonino Pio e cinque monete in bronzo non leggibili.

- Ventiquattro pedine discoidali in pasta vitrea con base piatta e faccia superiore convessa, diametro base medio 2,7 cm. Diciotto pedine sono di colore bianco

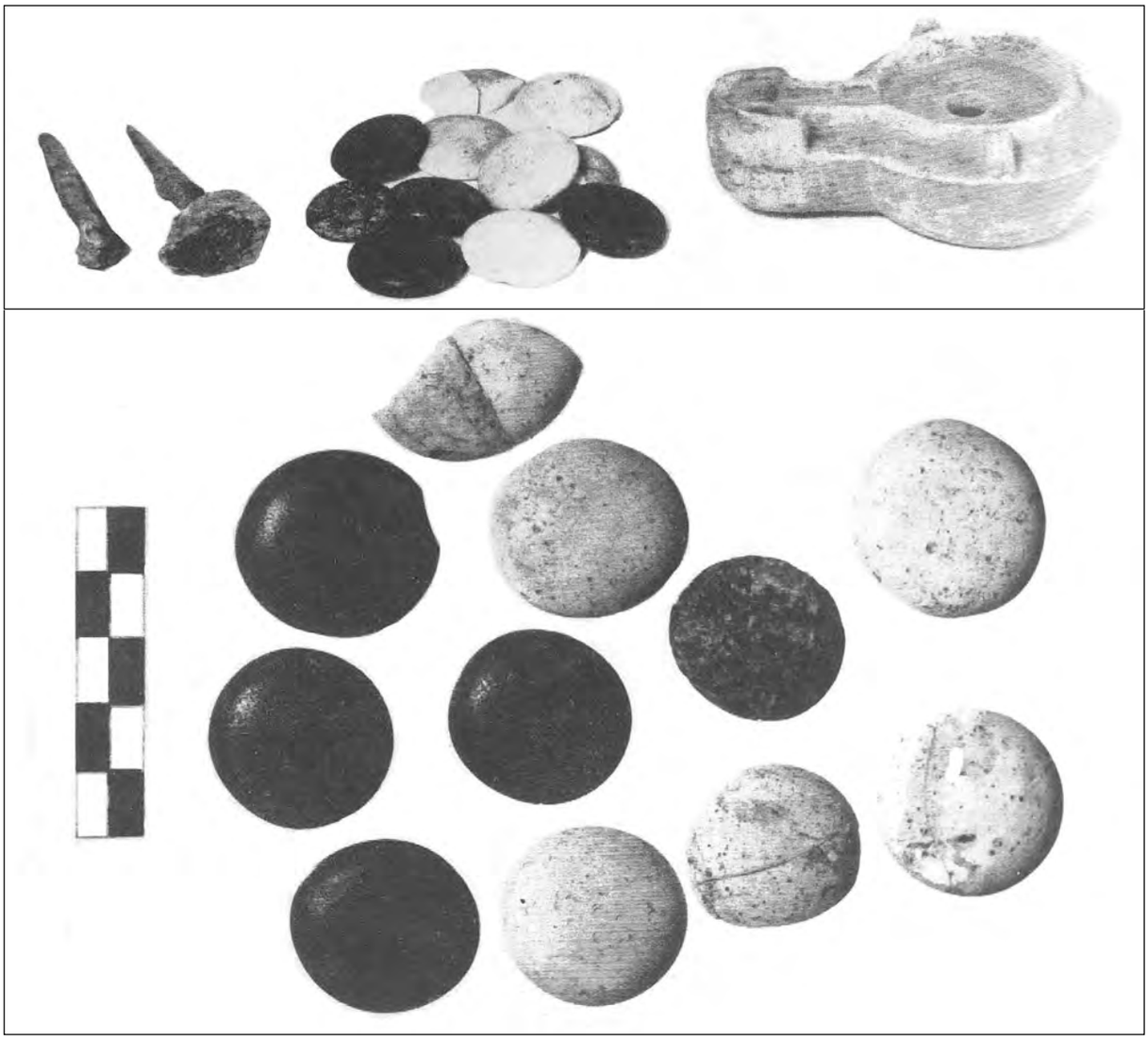

Fig. 4. Chiodi in ferro, pedine in pasta vitrea e lucerna (in alto); dettaglio delle pedine in pasta vitrea (Diam. base medio 3 cm) (in basso), da Brescia, via S. Giovanni Bosco, tomba 11, II sec. d.C. Da Bezzi Martini (1987).

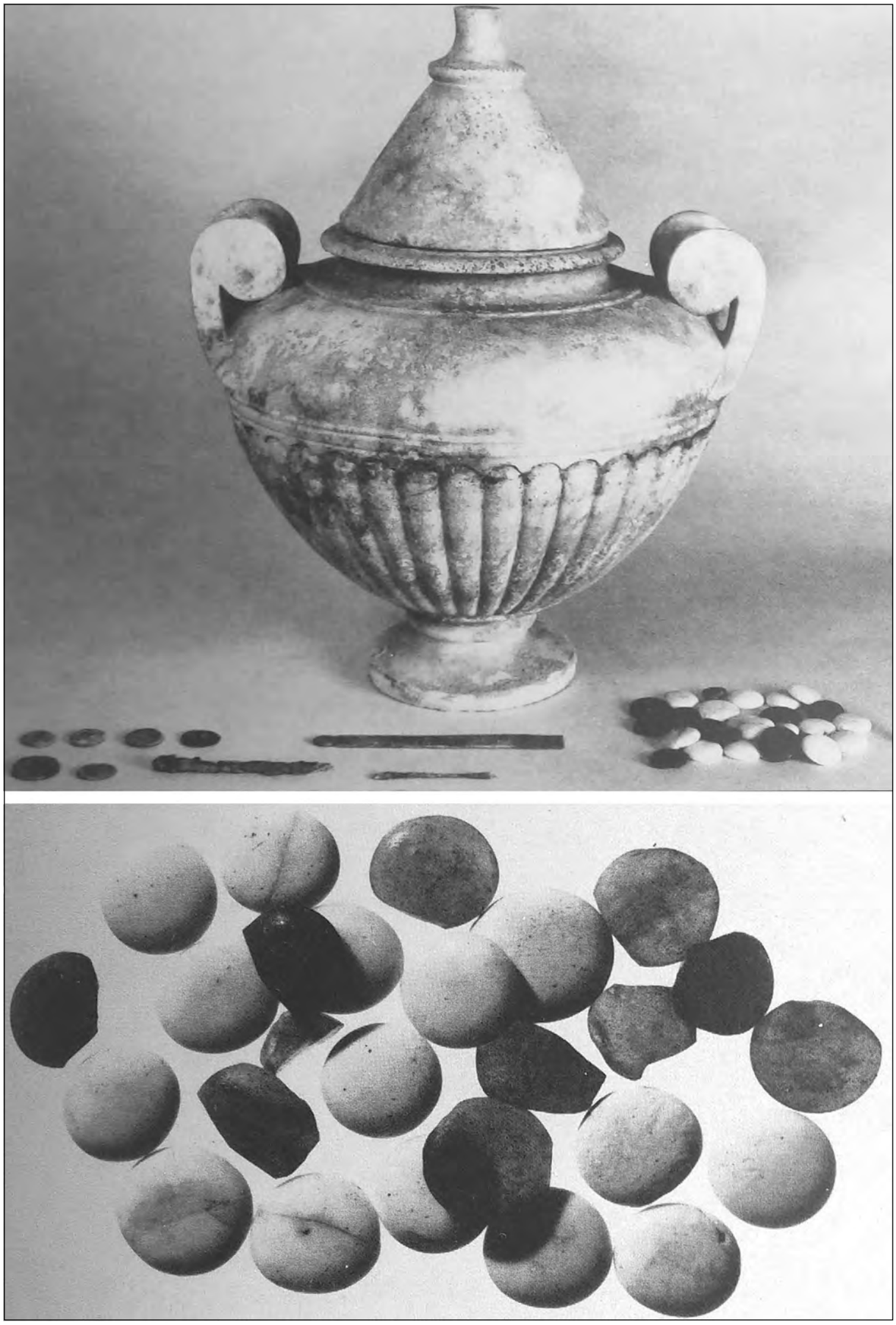

Fig. 5. Vaso in alabastro e corredo della sepoltura (in alto); dettaglio delle pedine in pasta vitrea (Diam. base medio 2.7 cm) (in basso), da Brescia, via S. Zeno, tomba 18, fine del II sec. d.C. Da Bezzi Martini *(1987).*

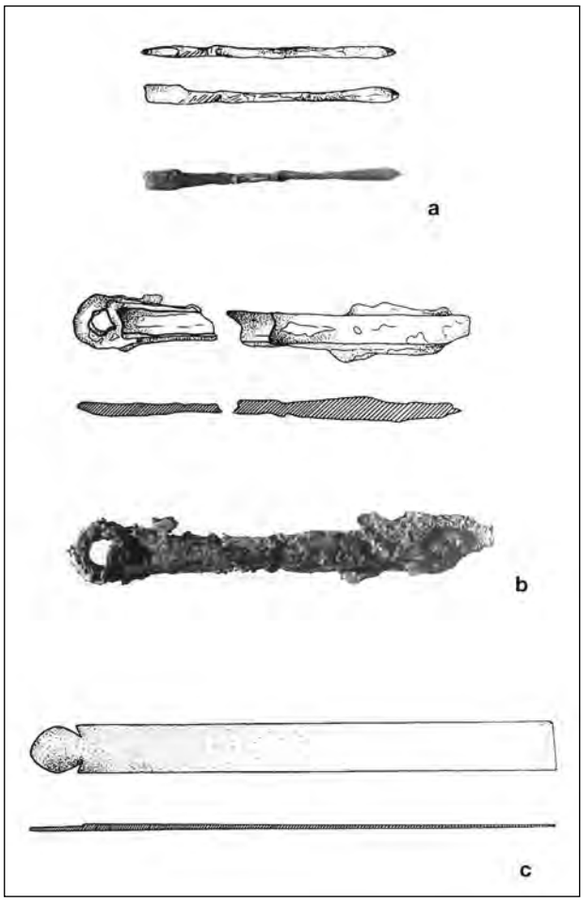

Fig. 6. Parte del corredo della sepoltura comprendente uno stilo in bronzo (Lungh. 7.5 cm) (a), un coltellino in ferro in custodia lignea (Lungh. 11 cm) (b) e un'asticella in osso con un'estremità distinta di forma ovale (Lungh. 15.9 cm) (c), da Brescia, via S. Zeno, tomba 18, fine del II sec. d.C. Da Bezzi Martini *(1987).*

e sei di colore blu? (più frammenti di altre?). (fig. 5)

Datazione: La tomba è ritenuta databile alla fine del II sec. d.C., nonostante l'incertezza posta dalle monete illeggibili.

Bibliografia: Bezzi Martini (1987), 28-30.

Brescia, via Cremona, tomba 1a.

Inumazione, tomba a cassa di forma parallelepipeda in pietra di Botticino con coperchio in blocco unico displuviato. All'interno era stato deposto un individuo di sesso maschile di età non determinabile, al cui corredo potevano appartenere un dado in osso e le pedine in pasta vitrea. Successivamente lo scheletro e il corredo vennero rimossi e accantonati in un angolo della cassa per far posto al corpo di un bambino di 5-7, con accanto sei monete databili entro la fine del II sec. d.C.

- Un dado in osso cubico, lunghezza lato cm 0,7.

- Diciassette pedine discoidali in pasta vitrea con base piatta e faccia superiore convessa, diametro base tra 2,5 e 3 cm. Dieci pedine sono di colore verde, sei di colore turchese e una di colore bianco? (nella foto sono visibili sedici pedine e non diciassette). (fig. 7)

Datazione: La tomba, nella quale sono presenti due deposizioni successive, sulla base delle monete è ritenuta inquadrabile entro la fine del II sec. d.C.

Bibliografia: Rossi (2004); Bonini (2004).

Manerbio (BS), necropoli di Cascina Trebeschi, tomba 40.

Incinerazione indiretta, anfora segata in fossa rettangolare, con i resti di un individuo adulto (forse di sesso femminile per la presenza nel corredo di un ago crinale). Nella terra di rogo si trovava una

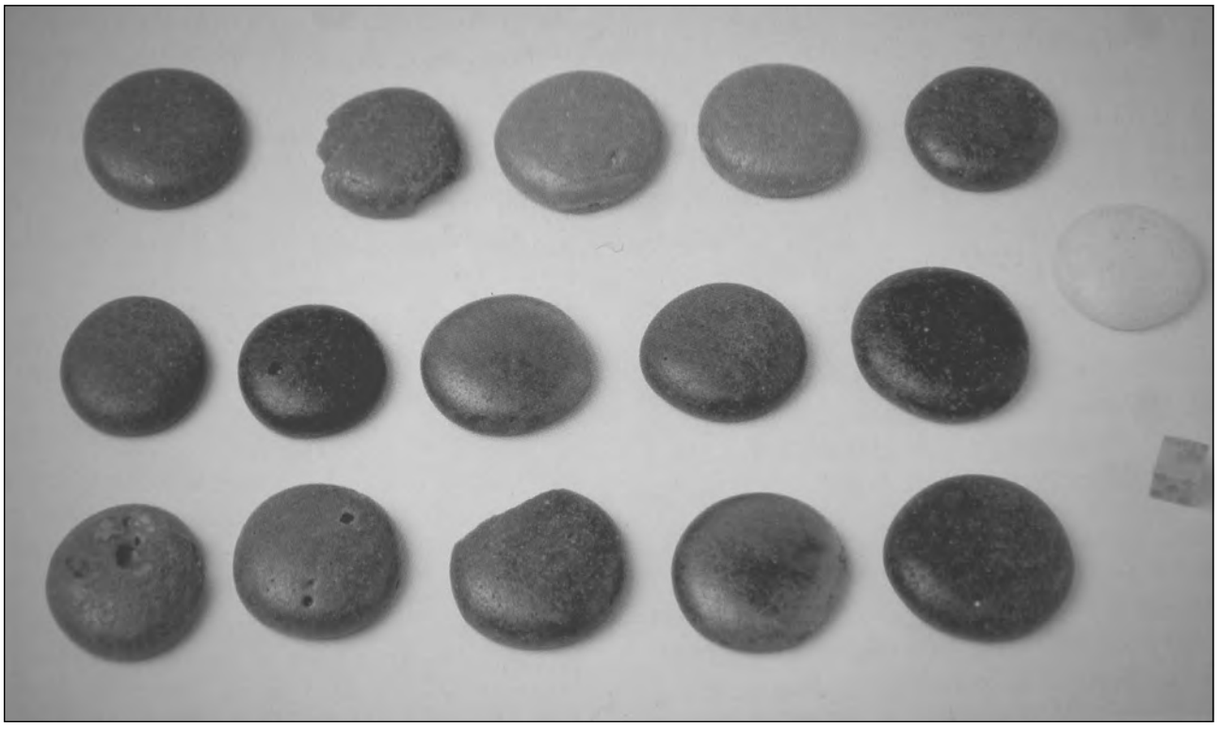

Fig. 7. Pedine in pasta vitrea (Diam. min. 2.5 cm, max. 3 cm) e dado in osso (Lungh. lato 0.7 cm), da Brescia, via Cremona, tomba 1a, II sec. d.C. Da Bonini *(2004).*

pedina in pasta vitrea, insieme a resti di vasellame in vetro, terra sigillata, ceramica comune e chiodi in ferro.

- Una pedina discoidale in pasta vitrea con base piatta e faccia superiore convessa, frammentaria, diametro base 2,1 cm. La pedina è di colore bianco.

Datazione: La tomba è databile al II sec. d.C.

Bibliografia: Portulano, Ragazzi (2010), 59-60, 114, tav. I, n. 15.

Salò (BS), necropoli del Lugone.

Tomba 77, incinerazione

- Un dado in bronzo cubico, con punteggio da 1 a 4 su quattro facce.

Datazione: Fine I sec. d.C.

Bibliografia: De Marchi (1997); Massa (1997), scheda n. 16.

Tomba 149, incinerazione

- Un dado in bronzo cubico, con punteggio 1 su una faccia.

Datazione: Fine I-inizi II sec. d.C.

Bibliografia: De Marchi (1997); Massa (1997), scheda n. 24.

Tomba 26, inumazione

- Tre dadi in bronzo cubici, il primo senza punteggio, il secondo con punteggio 1 ripetuto, il terzo con punteggio 2 ripetuto.

Datazione: Seconda metà IV-inizi V sec. d.C.

Bibliografia: De Marchi (1997); Massa (1997), scheda n. 66.

Tomba 40, inumazione

- Tre dadi in bronzo cubici, il primo senza punteggio, il secondo con punteggio 1 ripetuto, il terzo con punteggio 2 ripetuto.

Datazione: Seconda metà IV sec. d.C.

Bibliografia: De Marchi (1997), tav. LIII, n. 122; Massa (1997), scheda n. 67.

Tomba 160, inumazione

- Tre dadi in bronzo cubici, il primo senza punteggio, il secondo con punteggio 1 ripetuto, il terzo con punteggio 2 ripetuto.

Datazione: IV sec. d.C.

Bibliografia: De Marchi (1997), tav. LIII, n. 121; Massa (1997), scheda n. 64.

Tomba 169, duplice inumazione (i dadi deposti davanti al viso dello scheletro femminile)

- Tre dadi in bronzo cubici, il primo senza punteggio, il secondo con punteggio 1 ripetuto, il terzo con punteggio 2 ripetuto. (fig. 8)

Datazione: Seconda metà IV-inizi V sec. d.C.

Bibliografia: De Marchi (1997), tav. LIII, n. 120; Massa (1997), scheda n. 74.

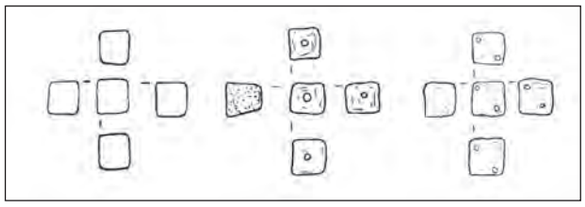

Fig. 8. Dadi in bronzo (Lungh. lati 1 cm circa), da Salò, necropoli del Lugone, tomba 169, seconda metà IV-inizi V sec. d.C. (sono disponibili solo i disegni di 5 facce su 6). Da De Marchi (1997).

Breno (BS), località Spinera, Santuario di Minerva.

- Quattro pedine discoidali, tre in pietra e una in pasta vitrea, con base piatta e faccia superiore convessa, diametro base da 1,7 a 1,3 cm. Una pedina è di colore bianco e tre di colore nero[4].

Datazione: I ritrovamenti sono sporadici e non è possibile una datazione sulla base del contesto, ad eccezione della pedina in pasta vitrea nera che proviene da uno strato databile entro l'età domizianea.

Bibliografia: Bonini (2010), 368-369, fig. 1, tav. I, 1-4; Solano (2015), 132-135, cat. nn. 2-5.

1.3 Cremona e provincia

Cremona, Duomo, Cripta di S. Omobono.

Muro pertinente a una *domus* di età augusteo-tiberiana; rinvenuta all'interno della fondazione, quindi anteriore all'età augustea.

- Cosiddetta 'tessera lusoria' in osso, a forma di parallelepipedo, con estremità distinta di forma circolare, attraversata all'attacco con il corpo da un foro passante nel senso della larghezza, lunghezza cm 4,5, larghezza cm 0,9, spessore 0,5 cm. Su una faccia è incisa la scritta FICOSE, sull'altra il numerale XIV. (fig. 9)

Datazione: I sec. a.C. (ante età augustea).

Bibliografia: Cecchini (2009), 23; 38-39, tav. 3, n.

Fig. 9. Cosiddetta 'tessera lusoria' in osso (Lungh. 4.5 cm; largh. 0.9 cm; sp. 0.5 cm), da Cremona, scavi della Cripta di S. Omobono sotto il Duomo, fondazioni di una domus, I sec. a.C. (ante età augustea). Da Cecchini, Bianchi, Diani (2015).

4 Da un rinvenimento sporadico nell'area del santuario di Breno proviene anche un frammento di laterizio, in terracotta beige rosata, lungo 13,5 cm, sul quale sono stati incisi a crudo tre quadrati disposti uno dentro l'altro, congiunti al centro di due lati da due tratti verticali, interpretata come una *tabula lusoria*, Solano (2015), 131-134, cat. n. 1.

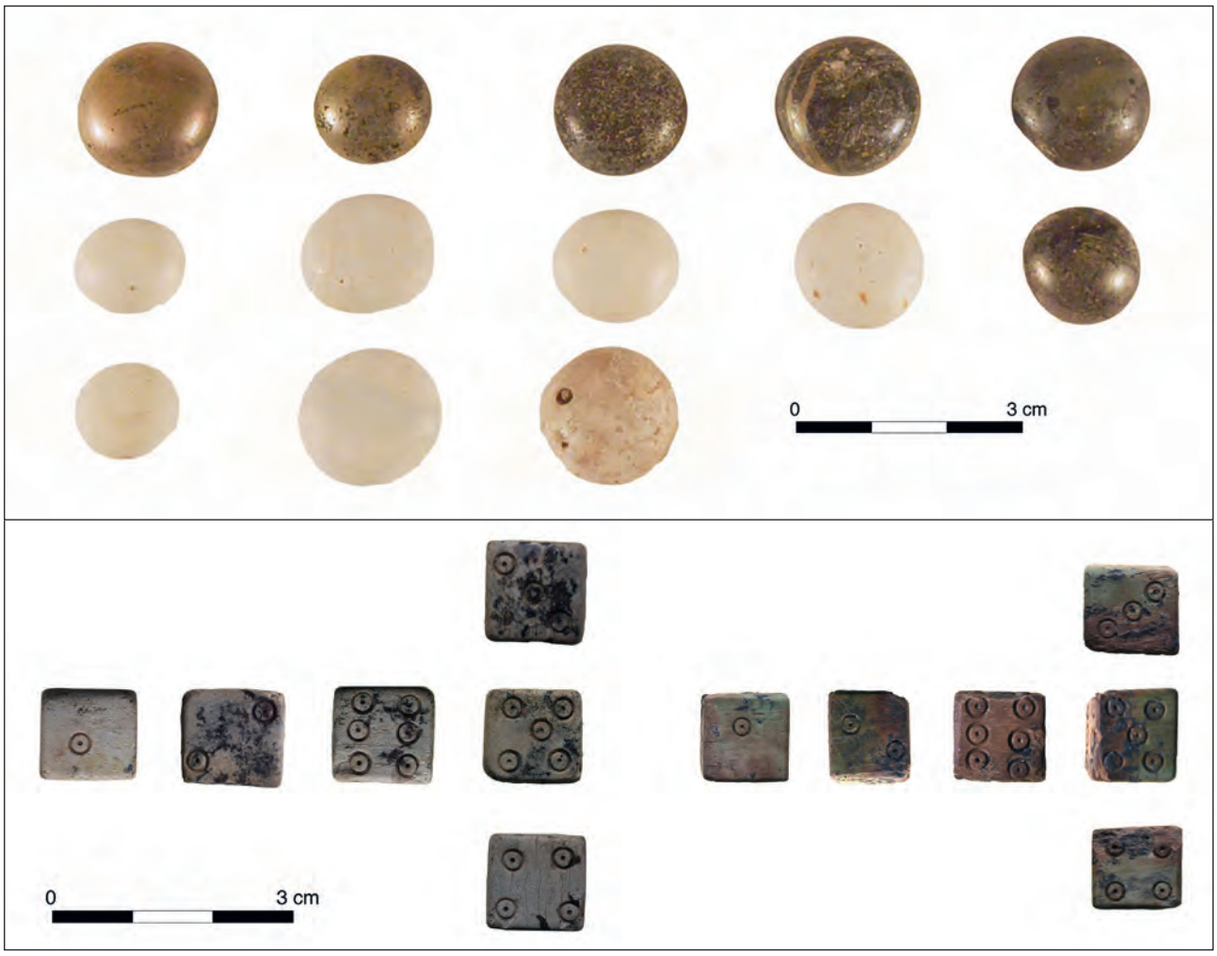

Fig. 10. Pedine in pasta vitrea (Diam. min. 1.2 cm, max. 1.8 cm) e dadi in avorio (Lungh. lati 1.3 cm e 1.1 cm), da Cremona, piazza Marconi, Domus del Ninfeo, I sec. d.C. (ante 69 d.C.). Da Bezzi Martini *(2015).*

14; Cecchini, Bianchi, Diani (2015), 121-125, cat. n. 1 (scheda di N. Cecchini); Baratta (2019), 123-124, cat. n. 19.

Cremona, piazza Marconi, Domus *del Ninfeo.*

Zona di servizio, probabilmente dispense, ambiente 18, strato di distruzione/abbandono (US 4689).

- Due dadi in avorio cubici, con punteggio da 1 a 6, lunghezza lati cm 1,3-1,1.

- Tredici pedine discoidali in pasta vitrea (sette di colore bianco e sei di colore nero). (fig. 10)

Datazione: Il contesto di rinvenimento è databile al 69 d.C.

Bibliografia: Cecchini, Bianchi, Diani (2015), 121-125, cat. nn. 3-4; Bianchi (2018), 429, tav. IV, 18-19; Diani (2018), 332.

Cremona, piazza Marconi, Domus *delle Buche Rosse.*

Riempimento (US 1158) di una "buca rossa", contenente le macerie dell'incendio degli edifici a seguito degli eventi bellici del 69 d.C.

- Gettone discoidale in osso di tipo "alessandrino", che presenta su una faccia decorazione figurata incisa con l'immagine di un uccellino con lo stelo di un fiore nel becco, mentre sull'altra vi è una cifra espressa in caratteri latini (II) e greci (B), corrispondente al valore 2. (fig. 11)

Datazione: Fine I sec. a.C.-I sec. d.C. (ante 69 d.C.).

Bibliografia: Cecchini, Bianchi, Diani (2015), 121-125, cat. n. 2; Bianchi (2018), 430, tav. IV, 23.

Calvatone (CR), Campo del Generale, saggio 6.

Fig. 11. Gettone/pedina di tipo "alessandrino" in osso (Diam. 3 cm), da Cremona, piazza Marconi, Domus delle Buche Rosse, fine I sec. a.C.-I sec. d.C. (ante 69 d.C.). Da Bezzi Martini *(2015).*

Insediamento con edifici di età tardo-repubblicana-imperiale nel *vicus* di *Bedriacum*.

- Una pedina discoidale in pasta vitrea con base piatta e faccia superiore convessa, diametro base 1,6 cm. La pedina è di colore giallo-bruno.

- Una pedina discoidale in osso, diametro 1,5 cm.

Datazione: La pedina in pasta vitrea proviene da un contesto databile tra l'ultimo quarto del I sec. d.C. e il primo quarto del I sec. d.C. (US 698, Periodo I, fase recente), la pedina in osso da un rinvenimento sporadico.

Bibliografia: Medici (1996a), 219, 222, fig. 325; Medici (1996b), 235, 238, fig. 358.

1.4 Pavia e provincia[5]

Pavia, ex Convento di S. Tommaso.

- Un dado in osso cubico, incompiuto, con indicazione del punteggio solo sulla faccia con il numero 4, lunghezza lato cm 0,8.

Datazione: Da scavo in contesto medievale, fortemente rimaneggiato; proviene dal riempimento di una buca contenente materiale eterogeneo per cui non è da escludere una sua pertinenza all'età romana.

Bibliografia: Invernizzi (2015), 128-129, cat. n. 7.

Casteggio (PV), necropoli area Pleba, tomba XXII.

Inumazione, in fossa rettangolare con i lati brevi ovalizzati, contenente lo scheletro di un bambino di 8-10 anni, con una piccola lucerna alla destra del cranio e una forma chiusa in ceramica comune depurata presso i piedi. Nel riempimento della fossa venne rinvenuta una pedina in vetro, probabilmente appartenente al corredo.

- Una pedina discoidale in vetro mosaico con decorazione a millefiori, con base piatta e faccia superiore convessa, diametro base 2,7 cm, altezza 0,8 cm. La pedina è in pasta vitrea verde con inclusioni sub-circolari gialle con alone verde chiaro. (fig. 12)

Datazione: La tomba è databile al II sec. d.C. avanzato.

Bibliografia: Marchese, Vecchi (2000), 19, fig. 10; Bolla (2011), 70-71, 267, tav. XXXV, 8, fig. 128; Invernizzi (2015), 127-128, cat. n. 3.

Casteggio (PV), via Torino, area Quaglini.

Abitato pluristratificato.

- Due pedine discoidali in pasta vitrea, con base piatta e faccia superiore convessa, diametro base 3,2; 2,1 cm. Una pedina è di colore blu-nero, l'altra di colore verde.

5 Nella provincia di Pavia a seguito di un ritrovamento sporadico a Borgo Priolo (PV), località Cappelletta, è stato recuperato un frammento di tegola in terracotta, lungo 27,3 cm, sul quale era stata incisa una scacchiera irregolare, che è stato interpretato come parte di una *tabula lusoria*, Invernizzi (2015), 127-128, cat. n. 4.

Fig. 12. Pedina in vetro mosaico con decorazione millefiori (Diam. 2.7 cm), da Casteggio, necropoli area Pleba, tomba XXII, II sec. d.C. avanzato. Casteggio, Civico Museo Archeologico. Da Bolla (2011).

Datazione: Provengono da livelli di distruzione degli edifici, le pedine sono databili in un caso (St. 125068) al III sec. d.C. e nell'altro (St. 125067) al IV sec. d.C.

Bibliografia: Invernizzi (2015), 127-128, cat. nn. 1-2.

Garlasco (PV), località Bozzole, tomba 12/1974.

Incinerazione con corredo costituito da vasellame ceramico, un balsamario vitreo e una lucerna a disco, sulla quale la pedina era appoggiata al momento del ritrovamento.

- Una pedina discoidale in pietra con base piatta e faccia superiore convessa, diametro base 1,8 cm; altezza 0,6 cm. La pedina è di colore bianco.

Datazione: La tomba è databile intorno alla metà del I sec. d.C.

Bibliografia: Invernizzi (2015), 128, cat. n. 5.

Lomello (PV), Villa Maria.

Fortificazioni del *castrum* altomedievale di *Laumellum*.

- Un dado in osso cubico, con punteggio da 1 a 6, lunghezza lato cm 0,6.

Datazione: Da contesto fortemente rimaneggiato, per cui non è da escludere una sua pertinenza all'età romana.

Bibliografia: Invernizzi 2015, pp. 128-129, cat. n. 6.

2. ANALISI DEI DATI

Tra i contesti più importanti che hanno restituito un significativo numero di oggetti per il gioco in Lombardia vi sono in primo luogo le tombe, per le quali è per lo più possibile un inquadramento cronologico. I rinvenimenti nelle necropoli permettono, grazie all'analisi dei dati disponibili sul defunto (età, sesso) e sull'associazione con altri materiali del corredo, di condurre alcune osservazioni sul significato della

presenza di materiale ludico quale offerta funeraria.

Il contesto funerario più antico risulta essere una tomba rinvenuta a Garlasco (PV), in località Bozzole (v. *supra* 1.4), databile intorno alla metà del I sec. d.C. Si tratta di un'incinerazione (n. 12/1974) al cui corredo apparteneva una lucerna a disco, sulla quale era appoggiata al momento del ritrovamento una pedina discoidale in pietra di colore bianco[6]. Segue cronologicamente una tomba rinvenuta a Milano (v. *supra* 1.1), nella necropoli dell'Università Cattolica del Sacro Cuore, la quale si trovava nel settore (Area UC II) che raccoglieva sepolture databili tra la fine del I e i primi decenni del II sec. d.C. Si tratta di un'incinerazione diretta (n. 216), la cui fossa venne riempita con un riporto entro il quale si trovavano un dado in osso cubico e ventotto pedine discoidali in pasta vitrea (quindici di colore bianco e tredici di colore blu?), che vennero deposte dopo il rogo[7].

Sono invece databili nel corso del II sec. d.C. tre tombe rinvenute nelle necropoli di Brescia. La prima è una inumazione (n. 11) scoperta in via S. Giovanni Bosco nel 1955 (v. *supra* 1.2). Nel terrapieno soprastante furono rinvenute undici pedine discoidali in pasta vitrea (sei di colore bianco e cinque di colore nero)[8]. La seconda, anch'essa una inumazione (n. 18), venne scavata nel 1968 in via S. Zeno (v. *supra* 1.2). Si riporta[9] che nel sarcofago in pietra di Botticino vi era lo scheletro di un bambino, ai suoi piedi c'erano un vaso in alabastro e ventiquattro pedine discoidali in pasta vitrea (diciotto di colore bianco e sei di colore blu)[10]. La terza è un'altra inumazione rinvenuta in via Cremona nel 2002 (v. *supra* 1.2). All'interno di una tomba a cassa in pietra di Botticino era stato deposto un individuo di sesso maschile di età non determinabile, al cui corredo potevano appartenere un dado in osso cubico e diciassette pedine discoidali in pasta vitrea (dieci di colore verde, sei di colore turchese e una di colore bianco)[11].

Il ritrovamento di una pedina isolata in pasta vitrea bianca è invece da segnalare in una tomba nel territorio di Brescia a Manerbio, nella necropoli di Cascina Trebeschi (v. *supra* 1.2), anch'essa databile al II sec. d.C. Nella terra di rogo di un'incinerazione indiretta (n. 40) con i resti di un individuo adulto (forse di sesso femminile per la presenza nel corredo di un ago crinale) si trovava una pedina discoidale in pasta vitrea di colore bianco[12]. Nell'Oltrepò pavese a Casteggio (*Clastidium*), nella necropoli in area Pleba (v. *supra* 1.4), una tomba a inumazione (n. XXII), databile al II sec. d.C. avanzato, conteneva lo scheletro di un bambino di 8-10 anni. Nel riempimento della fossa venne rinvenuta una pedina discoidale in vetro mosaico con decorazione a millefiori[13]. Si può osservare che tra i casi sopra illustrati, che si estendono dal I al II sec. d.C., vi sono alcuni corredi che contenevano un numero cospicuo di pedine, sempre attestate nei due differenti colori (chiaro e scuro) che distinguevano la dotazione di ciascun giocatore. Il numero delle pedine presenti non è mai omogeneo (variando da una fino a un massimo di ventotto) ma non è possibile trarre deduzioni significative dal dato numerico quantitativo.

Il dado cubico in osso è raramente presente insieme ai lotti di pedine: è attestato, con un solo esemplare in ciascun contesto, nella tomba di Milano, Università Cattolica, e in quella di Brescia, via Cremona. Per quanto riguarda l'identità dei defunti nella tomba di Brescia, via Cremona l'individuo deposto era di sesso maschile e di età non determinabile, mentre due sono i casi di deposizioni di bambini: la tomba di Brescia, via S. Zeno (con ventiquattro pedine) nella quale si riporta che era deposto un fanciullo senza determinazione dell'età, e la tomba di Casteggio, area Pleba (con una pedina), che conteneva lo scheletro di un bambino di 8-10 anni.

Tra i rinvenimenti in tombe è del tutto particolare il caso della necropoli del Lugone a Salò nel bresciano (v. *supra* 1.2), dove sono stati rinvenuti numerosi dadi in bronzo cubici[14]. I dadi provengono sia da tombe a incinerazione della prima età imperiale, sia da tombe a inumazione di età tardoantica. Presentano tutti anomalie nell'indicazione del punteggio e in particolare si segnala il caso di diverse tombe che hanno restituito ciascuna tre dadi, dei quali il primo non presentava il punteggio sulle facce, il secondo con punteggio 1 ripetuto su quattro facce, il terzo con punteggio 2 ripetuto su quattro facce[15].

Passando ad analizzare i rinvenimenti in contesti di abitato si osserva che il centro urbano che ha restituito le testimonianze più significative è indubbiamente Cremona. Il primo importante rinvenimento è avvenuto nel 2000 durante gli scavi nella Cripta di S. Omobono sotto il Duomo (v. *supra* 1.3), nel corso dei quali sono stati portati alla luce resti di una *domus* databile all'età augusteo-tiberiana[16]. All'interno delle fondazioni di un muro è stato rinvenuto un elemento in osso a forma di parallelepipedo allungato, un oggetto che era quindi in uso in età tardorepubblicana

6 Invernizzi (2015), 128, cat. n. 5.

7 Sannazaro *et alii* (1998), 79 (schede di F. Airoldi); Airoldi (2015).

8 Bezzi Martini (1987), 20-22.

9 La fonte del rapporto di scavo sono gli appunti di I. Guarnieri conservati presso il Civico Museo Romano di Brescia.

10 Bezzi Martini (1987), 28-30.

11 Rossi (2004); Bonini (2004).

12 Portulano, Ragazzi (2010), 59-60, 114, tav. I n. 15.

13 Marchese, Vecchi (2000), 19, fig. 10; Bolla (2011), 70-71, 267, tav. XXXV, 8, fig. 128; Invernizzi (2015), 127-128, cat. n. 3.

14 De Marchi (1997), 136-137.

15 Una valutazione precisa è impossibile a causa dell'incompletezza della documentazione grafica.

16 Passi Pitcher, Volonté (2007); Cecchini (2009). Sull'urbanistica di Cremona in generale v. Passi Pitcher (2003).

prima della costruzione della casa avvenuta in età augustea[17]. L'elemento presenta estremità distinta di forma circolare, attraversata all'attacco con il corpo da un foro passante nel senso della larghezza. Su una faccia è incisa la scritta FICOSE[18], sull'altra il numerale XIV. L'oggetto appartiene ad un gruppo di reperti in osso, tradizionalmente associati all'ambito dei giochi, anche se le modalità di utilizzo rimangono di difficile comprensione. Su un lato in genere è presente un'iscrizione in latino con una parola al nominativo o al vocativo, il cui senso è benevolo oppure offensivo e in alcuni casi incerto, ma possono essere presenti anche forme verbali alla seconda persona singolare come per esempio VIX RIDES o MORARIS oppure alla terza persona singolare come BENEST or MALEST. Sull'altro lato sono incisi numerali, tra i quali sono attestati I numeri da I a XXV, poi XXIIX, XXIX, XXX and LX. In alcuni casi dopo il numerale c'è il nesso delle due lettere AL. Gli epiteti possono essere associati a numeri differenti e la tendenza generale è la combinazione di numeri bassi con gli insulti e i numeri alti con gli appellativi benevoli. L'orizzonte cronologico della diffusione si estende nel II e I sec. a.C. fino ai primissimi anni del I sec. d.C. Questo tipo di oggetti sono definiti tradizionalmente con il termine *tesserae lusoriae,* che rimane nell'uso corrente per distinguerle da altre categorie, e sono state esaminate in un recente e complessivo studio critico a cura di Giulia Baratta[19].

Ulteriori oggetti collegati con giochi da tavolo sono stati rinvenuti nel corso degli scavi archeologici condotti tra il 2005 e il 2008 in piazza Marconi. Nell'area di servizio adibita probabilmente a dispensa di una lussuosa residenza denominata *Domus* del Ninfeo (v. *supra* 1.3), sono stati trovati i resti di un probabile armadio in legno bruciato e collassato sul pavimento della stanza 18, distrutta con il resto della casa durante l'incendio provocato dalle truppe di Vespasiano nel corso della guerra civile del 69 d.C.[20]. Sul pavimento della stanza sono stati trovati più di cento oggetti di diverso tipo, tra i quali due dadi in avorio cubici, con punteggio da 1 a 6 (la somma del punteggio sulle facce opposte risulta sempre 7) e tredici pedine discoidali in pasta vitrea (sette di colore bianco e sei di colore nero)[21]. Gli oggetti provengono da uno strato di distruzione/abbandono (US 4689) databile al 69 d.C.

Un ulteriore rinvenimento è avvenuto in un contesto immediatamente successivo alla distruzione della città, ovvero una delle trincee (cosiddette "buche rosse") nelle quali furono scaricate le macerie e numerosi oggetti di uso quotidiano provenienti dagli edifici distrutti a seguito degli eventi bellici del 69 d.C. In particolare nell'area della *Domus* delle Buche Rosse, nel riempimento (US 1158) di una di queste buche (v. *supra* 1.3) è stato rinvenuto un gettone/pedina discoidale in osso di tipo "alessandrino", che presenta su una faccia una decorazione figurata incisa con l'immagine di un uccellino con lo stelo di un fiore nel becco, mentre sull'altra vi è una cifra espressa in caratteri latini (II) e greci (B), corrispondente al valore 2[22].

Appartiene alla categoria dei gettoni discoidali in osso o in avorio di tipo "alessandrino", il cui utilizzo nell'ambito dei giochi da tavolo rimane tuttora di incerta interpretazione. Gli esemplari sono caratterizzati dalla presenza sul diritto di rappresentazioni figurate varie, spesso desunte dal repertorio ellenistico egiziano, mentre sul rovescio mostrano incisi su due righe numerali da 1 a 15, in caratteri latini e greci, tra i quali è talvolta inserita un'iscrizione in lingua greca che identifica la raffigurazione sulla faccia principale. L'arco cronologico della loro produzione si circoscrive all'incirca tra l'età cesariano-augustea e la fine dell'età giulio-claudia[23].

Altri rinvenimenti sono avvenuti in contesti di abitato per i quali solo in alcuni casi è possibile un inquadramento cronologico abbastanza preciso. A Milano, nello scavo condotto nel 2006-2007 in via Calatafimi (v. *supra* 1.1) che ha messo in luce un canale con le sponde rinforzate da palificazioni lignee, sono state recuperate due pedine discoidali in osso[24]. Una di queste proviene da un deposito relativo alla fase d'uso del corso d'acqua databile al I sec. d.C., l'altra dagli interri del canale realizzati nel IV-V sec. d.C. A Calvatone (CR), nello scavo del Campo del Generale, saggio 6 (1988-1990 e 1993) (v. *supra* 1.3), che ha messo in luce edifici del *vicus* di *Bedriacum*, è stata recuperata una pedina discoidale in pasta vitrea di colore giallo-bruno, che proviene da un contesto databile tra l'ultimo quarto del I sec. d.C. e il primo quarto del I sec. d.C.[25]. Un'altra pedina discoidale in osso proviene da un rinvenimento sporadico[26]. Nello scavo a Casteggio (PV), via Torino, area Quaglini

17 Cecchini (2009), 23, 38-39, tav. 3, n. 14; Cecchini, Bianchi, Diani (2015), 121-125, cat. n. 1; Baratta (2019), 123-124, cat. n. 19.

18 La parola è un insulto, espresso al vocativo, indicante una persona coperta di porri o sofferente di emorroidi (il termine è citato da Marziale, *Epigr.* 7.71).

19 Baratta (2019); tra gli altri studi recenti su questa categoria di oggetti si possono citare Cecchini (2015); Rodríguez Martín (2016); Guàrdia i Llorens (2017); Pace (2023), 31-32.

20 Arslan Pitcher (2017). Sull'assedio e la distruzione di Cremona v. Tacito, *Hist.* 3. 27-33.

21 Cecchini, Bianchi, Diani (2015), 121-125, cat. nn. 3-4; Bianchi (2018), 429, tav. IV, nn. 18-19; Diani (2018), 332.

22 Cecchini, Bianchi, Diani (2015), 121-125, cat. n. 2; Bianchi (2018), 430, tav. IV, 23. Data la lacunosità del pezzo vi è la possibilità che il numero non sia completo ma vi fosse anteposta un'altra cifra.

23 Per l'inquadramento generale v. Alföldi-Rosenbaum (1971); Alföldi-Rosenbaum (1975); Alföldi-Rosenbaum (1976); Alföldi-Rosenbaum (1980); Alföldi-Rosenbaum (1984); Giovannini (2006), 340-343; Bianchi (2015) e Bianchi (2021); Pace (2023), 28-31.

24 Ceresa Mori, Bianchi (2015b), 112, cat. n. 1.

25 Medici (1996a), 219, 222, fig. 325.

26 Medici (1996b), 235, 238, fig. 358.

(v. *supra* 1.4), di un abitato pluristratificato, sono state recuperate due pedine discoidali in pasta vitrea (una di colore blu-nero, l'altra di colore verde), che provengono da livelli di distruzione degli edifici databili rispettivamente al III sec. d.C. e al IV sec. d.C.[27] A Pavia, presso l'ex Convento di S. Tommaso (v. *supra* 1.4), nello scavo di un insediamento medievale fortemente rimaneggiato, è stato trovato un dado in osso cubico, incompiuto, con indicazione del punteggio solo sulla faccia con il numero 4. Il dado proviene dal riempimento di una buca contenente materiale eterogeneo per cui non è da escludere una sua pertinenza all'età romana[28].A Lomello (PV), Villa Maria (v. *supra* 1.4), è stato recuperato un dado in osso cubico, con punteggio da 1 a 6, rinvenuto nelle fortificazioni del *castrum* altomedievale, un contesto fortemente rimaneggiato, per cui non è da escludere una sua pertinenza all'età romana[29].

Meritano infine particolare attenzione i rinvenimenti avvenuti a Breno (BS), nell'area del Santuario di Minerva in località Spinera (v. *supra* 1.2), per la particolarità della provenienza da un luogo di culto. Si tratta di quattro pedine discoidali, tre in pietra e una in pasta vitrea (una pedina di colore bianco e tre di colore nero)[30]. I ritrovamenti sono sporadici e non è possibile una datazione sulla base del contesto, ad eccezione della pedina in pasta vitrea nera che proviene da uno strato databile al I sec. d.C. entro l'età domizianea.

3. CONCLUSIONI

L'esame critico della documentazione esistente su alcuni oggetti collegati a giochi da tavolo di epoca romana rinvenuti nel territorio corrispondente all'odierna regione Lombardia ha mostrato la presenza diffusa dei principali manufatti appartenenti a questa categoria in alcune delle città più importanti come *Mediolanum, Brixia, Cremona, Ticinum*, nonché in alcuni siti nelle aree extra-urbane.

Sono documentati dadi in avorio, in osso e in bronzo, numerose pedine in osso e in pasta vitrea, un gettone o pedina di tipo "alessandrino" e una "*tessera lusoria*" in osso. L'analisi delle attestazioni ha permesso di ricostruire un quadro dei dati disponibili relativi ai contesti di rinvenimento, tra i quali vi sono tombe a incinerazione e a inumazione, ma anche *domus* e santuari. Lo studio dei materiali associati in alcuni contesti di rinvenimento, in particolare nei corredi funerari, ha reso possibile un affinamento delle datazioni di alcuni tipi di oggetti ludici e la conseguente proposta di alcune precisazioni sui termini cronologici della loro diffusione allo stato attuale delle nostre conoscenze.

27 Invernizzi (2015), 127-128, cat. nn. 1-2.

28 Invernizzi (2015), 128-129, cat. n. 7.

29 Invernizzi (2015), 128-129, cat. n. 6.

30 Bonini (2010), 368-369, fig. 1, tav. I, 1-4; Solano (2015), 132-135, cat. nn. 2-5.

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Les jeux de Pompéi. Réflexions sur la culture matérielle ludique de la ville romaine

UNE BRÈVE INTRODUCTION MÉTHODOLOGIQUE

Cette contribution s'inscrit dans le cadre du projet ERC Locus Ludi, dirigé par la professeure Véronique Dasen (Université de Fribourg, CH) dont le but est d'analyser la culture ludique ancienne, en valorisant son potentiel exégétique intrinsèque dans la reconstruction des sociétés antiques.[1]

L'auteur a focalisé son attention sur Pompéi, déclinant ainsi les mêmes finalités de recherche dans un contexte circonscrit et défini, dans le but de reconstituer ce que le jeu représentait dans la vie quotidienne de ses anciens habitants.[2]

Les finalités qui sous-tendent l'étude du matériel pompéien sont multiples : tout d'abord, offrir pour la première fois un panorama complet de la problématique (en analysant non seulement les objets stockés dans les entrepôts, mais aussi en les articulant à l'ensemble des données disponibles et pas uniquement archivistiques), et par conséquent trouver des lignes interprétatives capables de nous renseigner sur certains aspects des habitudes ludiques en usage dans la ville, jusqu'à présent considérées comme une curiosité ou sous un angle folklorique.[3]

Évidemment, considérant l'ampleur des données disponibles, de la complexité et de l'étendue des enjeux en cause, il n'est pas possible ici d'embrasser le sujet de manière exhaustive. Seuls quelques points, particulièrement significatifs, seront pris en considération.

Tout d'abord, il faut souligner que lorsque nous parlons de jeux à Pompéi, nous parlons spécifiquement de certaines classes d'objets tels que les dés (fig. 1, a), les osselets (fig. 1, b), les pions et les *tesserae lusoriae*[4] (fig. 1, c-d) soit des artefacts généralement étiquetés comme de *small finds* et doués d'une fonction ludique primaire.[5] On a déjà noté que seuls les jeux 'pour adultes' sont attestés dans la ville, alors que les types habituellement attribués à des individus infantiles (comme les poupées, les toupies, etc.) ne sont pas attestés.[6] Bien sûr, si cela ne signifie pas que les enfants ne jouaient pas dans la ville, cela met en évidence en revanche les limites des approches interprétatives modernes appliquées à

1 This research is part of the project ERC Advanced, *Locus Ludi*. The Cultural Fabric of Play and Games in Classical Antiquity (2017-2022) (European Union's Horizon 2020 research and innovation programme, grant agreement No 741520) based at the university of Fribourg CH. Sur le cadre théorique du projet, voir Dasen (2018); Dasen (2019a); Dasen (2019b); Schädler (2019a); Dasen, Schädler (2019); Dasen, Vespa (2020). Pour une vue d'ensemble du projet, voir le site web: https://locusludi.ch/ Je tiens à remercier Alessandra Attia pour son précieux travail dans la révision du texte.

2 Une monographie consacrée à l'analyse de la culture ludique de Pompéi est en préparation, ainsi que de nombreux articles centrés sur des problématiques spécifiques : Pace (2020); Pace (2022a); Pace (2022b); Pace (2022c); Pace (2022d); Pace (2023).

3 Roberts (2013), 60-63; Cantarella, Jacobelli (2013), 122-124; Guidi (2015), 73-77; Beard (2017), 267-277.

4 Cecchini (2015); Bianchi (2015); Lambrugo (2015b); Baratta (2019).

5 Il est bien connu par l'écrivain que les dés et/ou les osselets peuvent également être utilisés dans des activités autres que ludiques (comme, par exemple, la mantique ou la divination), mais avec les données disponibles la valeur ludique du matériel examiné dans ce le lieu ne peut être refusé. Sur la divination / utilisation mantique des dés et des osselets, voir Costanza (2019), 187; 197.

6 Harlow (2013); Allison (2018), 174.

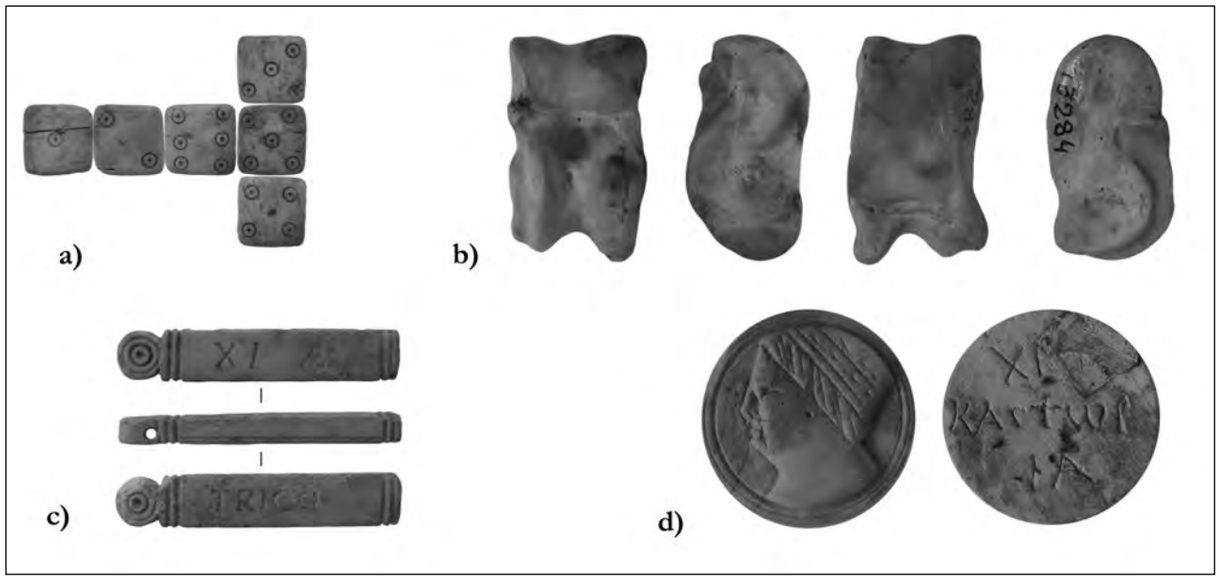

Fig.1. Objets de jeu de Pompéi. a) Dès (os, H. 1,2 cm, Pompéi inv. 1692), b) osselets (os, H. 3,5 cm, Pompéi inv. 13284), c) tessera lusoria (os, H. 4,8 cm, Pompéi inv. 11493A), d) tessera lusoria (os, MANN).

l'analyse de la culture matérielle pompéienne, dont la complexité échappe aux schématisations rigides.[7]

Avant de continuer, il faut attirer l'attention sur quelques *caveat* méthodologiques, pour mettre en évidence les problèmes qui ont dû être affrontés *in itinere*. Pompéi a été l'objet de nombreux travaux de synthèse, néanmoins peu de travaux ont analysé et évalué la qualité des données réellement disponibles. Par conséquent, il existe une croyance répandue selon laquelle de nombreux aspects de la ville antique sont bien connus, une croyance qui repose souvent sur des bases peu solides.[8]

Et c'est d'autant plus vrai pour le jeu, sujet pour lequel il n'y a pas eu de réflexion générale. Il n'y a pas d'ouvrage generaux sur la ville où le jeu n'est pas mentionné, ce dernier cependant est généralement présenté, selon des voies d'interprétation désormais normalisées, comme étant uniquement associé au monde des tavernes.[9] Ainsi lorsqu'on parle de jeux, c'est de jeux d'argent dont il s'agit (essentiellement liés aux dés), donc illégaux (du moins selon les règles en vigueur à l'époque) et pratiqués dans des structures spécifiques (*popinae* e *cauponae*),[10] généralement considérés comme des lieux peu recommandables car fréquentés par les couches inférieures de la population.

C'était aussi le point de vue sur le jeu dans les publications les plus récentes, néanmoins le patient travail sur le matériel pompéien suggère un changement de perspective sur la question. S'il n'est pas surprenant que les dés soient les jeux les plus populaires à Pompéi,[11] leur découverte, essentiellement dans les maisons et non pas dans les tavernes, est en revanche tout à fait déconcertante.[12] Cette inversion numérique des provenances ouvre une brèche quant aux habitudes réelles des habitants, dépassant la vision traditionnellement admise et continuellement reprise en bibliographie. Toutefois, ce constat suscite de nombreuses interrogations, difficiles à résoudre ; par exemple, comment interpréter le grand nombre de dés trouvés dans les maisons ? Y étaient-ils stockés et utilisés à l'extérieur du foyer ou au contraire utilisés *in loco* ? Dans ce cas, faut-il considérer que les anciens habitants jouaient partout, même chez eux, violant ainsi en toute impunité la réglementation en vigueur ?[13]

Il existe également d'autres types de problèmes, cette fois intrinsèquement liés aux modalités de formation et de conservation des données archéologiques. Pompéi, on le sait, représente un site particulièrement intrigant dans l'imaginaire commun, généralement entendu comme la parfaite transposition du dernier moment de vie de la ville et de ses occupants. En réalité, la situation est beaucoup plus complexe et il y a de nombreuses questions à considérer lorsque on souhaite entreprendre l'étude d'un certain aspect de la réalité pompéienne. Tout d'abord, l'idée selon laquelle l'éruption du Vésuve en 79 après J.-C. aurait

7 Allison (2018), 175.

8 Coralini (2020), 63-65.

9 Wallace-Hadrill (1995), 43-54; Laurence (2007), 92-101; Newsome (2011), 4-5; Trifilò (2011), 325-330; Cool (2016a), 169.

10 Sur ce type de structure voir Ellis (2004); DeFelice (2007); Monteix (2007); Monteix (2010), 113-132; Grossi (2011); Giacobello (2015), 37-40; Ruiz de Arbulo, Gris (2017); Grossi (2017); Le Guennec (2019), 33-121.

11 Sur les données quantitatives concernant la distribution des objets ludiques à Pompéi voir Pace (2023).

12 Pace (2023).

13 Sur la question législative relative aux jeux de hasard voir Bottiglieri (2014); Greco (2016); Pichonnaz (2018); Fasolino (2018), 25-32; Greco (2018a); Greco (2018b); Greco (2018c); Ziliotto (2018); Laurendi (2021).

scellé hermétiquement la ville antique, ne correspond pas à la réalité. Il a maintenant été établi l'existence de nombreuses interférences anthropiques, à la fois anciennes et modernes, qui ont compromis, dans certains cas, son intégrité.[14]

Les sources rappellent qu'une fois l'éruption terminée, les bâtiments les plus hauts ne furent pas complètement enterrés par le volcan, permettant ainsi d'avoir des points de repère grâce auxquels s'orienter à l'intérieur de ce qui avait été l'aire urbaine.[15] Cela a probablement permis à certains d'effectuer des fouilles pour récupérer ce qui restait dans la ville sous les *lapilli*, et dont les traces seraient, dans certains cas, reconnaissables dans les trous percés à travers les murs des structures interceptées. L'inscription *domus pertusa* (mais écrite en caractères grecs) probablement tracée par l'un des *recuperanti* sur les murs d'une maison pour avertir qu'elle avait déjà été 'visitée' (littéralement 'perforée')[16] est en ce sens significative. La même technique a été utilisée plusieurs siècles plus tard lors des premières investigations menées à l'époque moderne, avant de commencer à fouiller sur de grandes surfaces, libérant complètement les bâtiments des débris volcaniques.[17]

Enfin, il convient méthodologiquement d'envisager comment nos connaissances sur Pompéi se sont formées. En assemblant, selon un processus combinatoire, des données matérielles et littéraires, par exemple, nous en sommes venus à reconnaître dans la maison pompéienne '*ad atrio*', la concrétisation de ce qui est décrit dans les auteurs latins, tels que Vitruve, Varone et d'autres.[18]

Cette situation nous a fait croire de manière erronée que nous en savions beaucoup sur la culture vivante de la ville, et pendant longtemps, nous avons pensé que la simple disposition planimétrique des pièces, appelée avec des étiquettes empruntées aux sources romaines, était informative sur la façon dont les espaces étaient réellement utilisés. Une approche plus critique a montré combien il fallait renverser les termes de la question, ou plutôt comment seule l'analyse des '*artefact assemblages*' peut véritablement nous renseigner à quoi était destiné un environnement spécifique.

En fait, des structures similaires peuvent être utilisées de différentes manières par différents propriétaires (exactement comme cela peut arriver aujourd'hui) ou dans la même maison, les fonctions des pièces individuelles peuvent changer au fil du temps.[19] De plus, il faut considérer la complexité de la vie urbaine de Pompéi, bouleversée au fil du temps par plusieurs événements sismiques, même dans les décennies précédant l'événement paroxystique du 79 après J.-C.

En fait, de nombreux dommages causés par un tremblement de terre sont visibles dans la ville, généralement considérés comme ceux de 62 après J.-C. mentionné par les sources. Cette date a longtemps été utilisée comme *terminus post quem* pour la dernière phase de construction de la ville, mais il semble maintenant clair qu'entre 62 après J.-C et 79 après J.-C. toute la région du Vésuve a été en proie à un essaim sismique désastreux. Il est donc tout à fait vraisemblable que les dommages encore visibles sur les structures, dans de nombreux cas en cours de restauration, soient à imputer à un séisme intervenu peu avant la destruction définitive.[20]

Quoi qu'il en soit, cette situation a modifié les conditions traditionnelles de fréquentation des espaces domestiques dans de nombreux contextes, comme en témoigne la présence de matériaux de construction ou de tas de gravats dans certains environnements généralement utilisés à des fins résidentielles.

La complexité interprétative est encore accrue dans le cas de l'analyse de la culture matérielle ludique. En fait, seuls certains types d'objets, dotés d'une fonction ludique primaire, tels que les dés, les osselets et certains types de *tesserae lusoriae*, peuvent être considérés univoquement comme des jeux ; dans de nombreux autres cas, il est plus complexe d'estimer la valeur ludique d'un artefact, considérant également le fait que tout peut potentiellement être utilisé comme un jeu, même temporairement.[21]

Par conséquent, dans ce projet de recherche concernant l'étude du jeu à Pompéi, il a été considéré que la manière de procéder la plus correcte méthodologiquement était de considérer comme preuve d'activité ludique, tous les objets ayant une fonction ludique primaire, mentionnés ci-dessus, ou les *ludic assemblages*, l'association de ces derniers avec d'autres types de matériaux dont l'utilisation dans les activités de jeu est possible, bien que pas toujours démontrable :[22] par exemple les *fritilli* ou les pions en verre, soit deux typologies qui représentent

14 Sur les questions méthodologiques relatives à la valeur des témoignages archéologiques pompéiens voir Allison (1992); Berry (1997a); Berry (1997b); Allison (2001), 182; Allison (2004), 3-8; Allison (2006), 3-15; Berry (2007); Laurence (2007), 1-10; Zanella (2020); Coralini (2020).

15 Sur cette question voir Allison (2004), 23; sur les sources littéraires voir Sigurdsson (2007), 59-60.

16 Pappalardo (2001), 82.

17 Parslow (2001); Zanella (2019), 75-162.

18 Allison (2001); Allison (2004), 11-14; Allison (2007); Dardenay, Laubry (2020); Zanella (2020).

19 Allison (2004), 3-8; Allison (2006), 3-15; Berry (2007); Coralini (2020), 53-63.

20 Varone (1995); Sigurdsson (2007), 49-50.

21 Crawford (2009).

22 La proximité spatiale des objets, établie à partir des données des carnets de fouilles ou de la proximité des numéros d'inventaire, reportée dans la base de données, a servi de paramètre pour définir un '*ludic assemblage*'.

Fig. 2. 'Fritilli' pompéiens (céramique). a) Pompéi inv. 1469 (H. 12 cm), b) Pompéi 4481A (H. 10,1 cm), c) Pompéi inv. 9313A (H. 7,2), d) Pompéi inv. 55382 (H. 7,1 cm).

deux *cruces* interprétatives et pas uniquement pour l'horizon pompéien.

On est conscient qu'en choisissant cette approche il y a un risque de sous-estimer la diffusion réelle des jeux dans la ville, mais il est tout aussi vrai qu'elle représente le seul moyen d'éviter les discours circulaires dangereux, et par conséquent de les surévaluer.

LES *FRITILLI*: DE LA MORPHOLOGIE À LA FONCTION

Conventionnellement, le terme de *fritillo* désigne dans la littérature archéologique une classe de petits vases de morphologie variée (essentiellement cylindrique et piriforme) généralement interprétés comme des gobelets à dés[23] (fig. 2). Au fil du temps, on a souvent changé d'avis sur leur fonction réelle, au moins jusqu'à l'étude effectuée par Maria Annecchino qui, pour la première fois, a essayé de mettre de l'ordre dans la question. En se basant aussi sur le support de la donnée picturale, elle a proposé d'interpréter comme *fritilli* seulement les objets de forme piriforme et non pas les objets cylindriques, comme on le pensait jusqu'alors.[24] La proposition d'Annecchino – apparemment confirmée quelques années plus tard par une heureuse découverte dans une sépulture à Bevagna (PG), où deux spécimens de type piriforme ont été trouvés, chacun accompagné d'un dé[25] –n'a cependant pas définitivement clos l'affaire. D'autres chercheurs, tout en admettant la validité substantielle des conclusions de M. Annecchino, ont souligné qu'il est toujours risqué d'interpréter uniquement ce type de contenant en se basant exclusivement sur l'aspect morphologique, puisqu'une réutilisation ou utilisation secondaire ne peut être exclue.[26]

Penelope Allison s'est montrée particulièrement sceptique; selon elle, en effet, il ne serait pas possible d'établir une connexion univoque entre ce type d'objets et une fonction ludique, vu qu'un même objet, par ailleurs caractérisé par une forme très simple, pouvait être utilisé sans problème dans les activités les plus variées. Ainsi, pour l'auteur, la présence tout court d'un *fritillo* ne pouvait être considérée, *ipso facto*, comme preuve d'activité ludique, même en considérant que, à son avis, il n'existait aucun cas de *fritilli* retrouvés avec des objets indubitablement ludiques, dés en premier lieu.[27]

Les recherches effectuées dans les réserves de Pompéi ont permis d'éclairer la question sous un jour nouveau, en mettant en évidence, une fois de plus, la complexité de la réalité pompéienne. En raison du cadre circonscrit de cet article, on ne montrera ci-dessous que quelques contextes dans lesquels des *fritilli* ont été trouvés avec d'autres types de jeux, confirmant le fait que dans certains cas, ils pourraient effectivement être utilisés dans la sphère ludique.

La maison de M. *Fabius Secundus* e *Optata* (V 4, 13), également connue comme *Casa delle origini di Roma* (fig. 3), a par exemple livré, dans un compartiment arrière de la construction, un meuble en bois contenant entre autres choses un *fritillo* cylindrique avec cinq dés en os ; la présence de nombreux objets en verre relatifs à la toilette féminine pourrait suggérer l'attribution du set ludique à un propriétaire appartenant au *mundus muliebris*.[28]

La même association, entre un *fritillo* et des dés (attesté dans ce cas en neuf exemplaires) a été documentée dans la maison de *Iulius Polybius* (IX 13, 3), un somptueux bâtiment ouvert du côté nord de la *via dell'Abbondanza* (fig. 4). Le long du côté est du péristyle ont été documentées des armoires en bois avec à l'intérieur de l'une d'elles, parmi une variété de matériaux conservés, nos objets de jeu.[29] Dans ce cas précis, il semble évident que les *fritilli* aient été vraiment utilisés comme gobelet à dés.

23 Sur la tradition des études concernant les '*fritilli*' voir Boldetti (1720), 447; Rich (1861), 302; Martigny (1877), 392; Becq de Fouquières (1869), 367-368; Mau (1910); Saglio (1918), 1341, fig. 3297.

24 Annecchino (1977).

25 Il s'agit d'une sépulture à incinération, datée entre le Ier et le IIe siecle après J.-C.; Egidi (1983).

26 Pavolini (1980), 1012-1013; Pavolini (2000), 375-378.

27 Allison (1999), 62-63; Allison (2004), 58-59.

28 Berg (2020), 211-213.

29 Grimaldi (2015), 278.

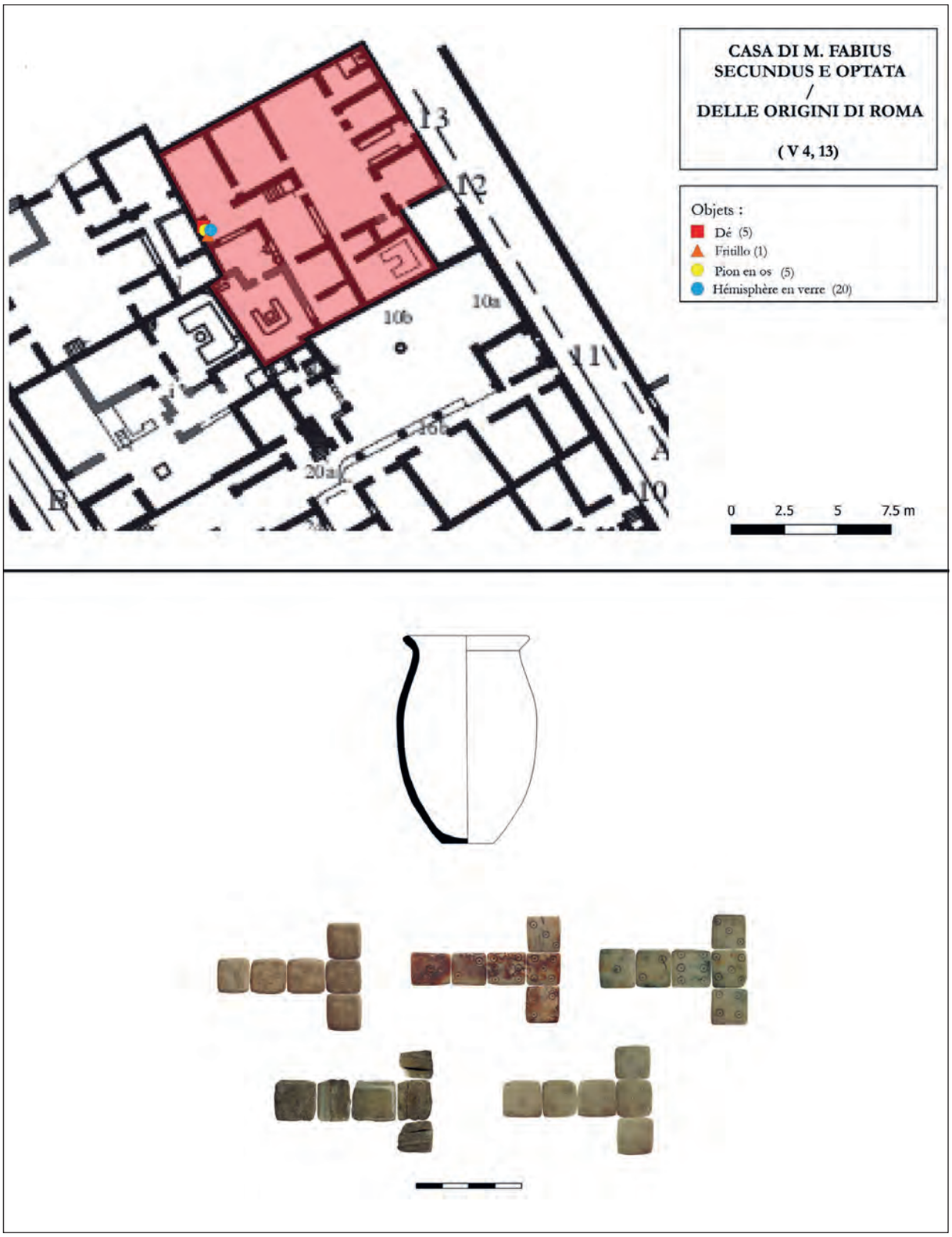

Fig. 3. Set de jeu de la 'Casa delle origini di Roma' (V 14, 13). Un 'fritillo' (céramique, H. 7,1 cm, Pompéi inv. 55382) et cinq dés (os, H. 1,2 / 1,4 cm, Pompéi inv. 55386-55390).

Cependant, cela ne signifie pas que tous les objets similaires ont été utilisés dans la même pratique de jeu. Dans une maison avec son atelier annexe (I 9, 8) des *fritilli* ont été trouvés associés à des et pions en os et à des hémisphères en verre (dont l'interprétation sera expliquée plus avant) (fig. 5). Dans ce cas, compte tenu de l'absence de dés, il est possible de proposer que les *fritilli* aient été utilisés différemment, vraisemblablement pour contenir le matériel ludique une fois le jeu terminé, comme le

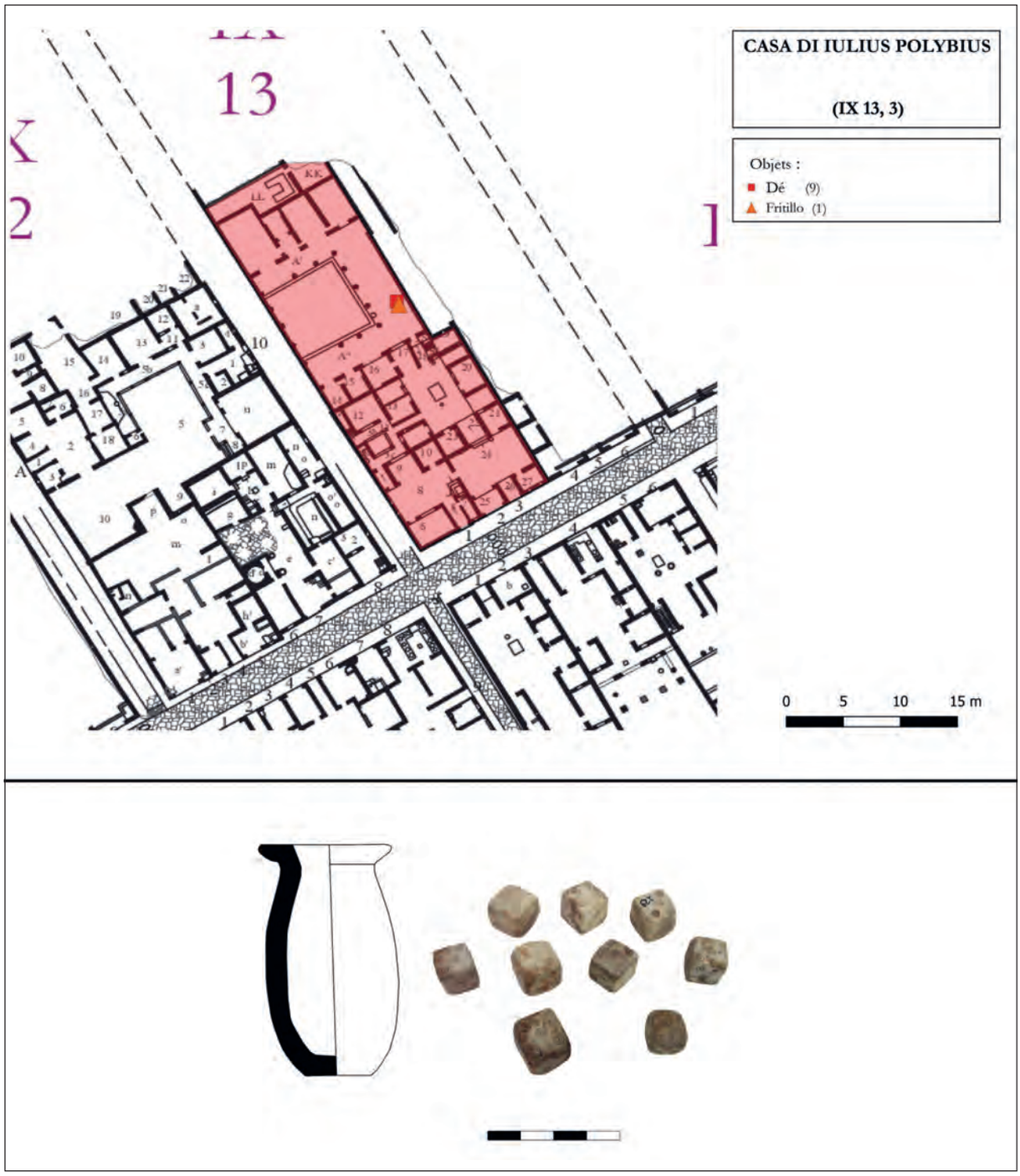

Fig. 4. Set de jeu de la 'Casa di Iulius Polybius' (IX 13, 3). Un 'fritillo' (céramique, H. 7 cm, Pompéi) et neuf dés (os, H. 1 / 2 cm, Pompéi inv. 229 – P22416).

suggère la présence d'un autre conteneur, de forme complètement différente des autres, mais défini malgré tout comme *fritillo* par les fouilleurs, et dans lequel furent trouvées plusieurs hémisphères en verre (fig. 6).

Ce qu'il faut souligner ici, c'est que l'aspect morphologique ne peut être considéré, à lui seul, comme un paramètre valable pour déterminer la fonction d'un objet. Un cas emblématique va dans ce sens: la découverte dans un espace situé juste à côté de l'entrée d'une *officina pigmentaria* (I 9,9) d'un grand nombre de conteneurs pyriformes avec des traces de substances colorées à l'intérieur,[30] à l'exception d'un seul, trouvé en association avec un dé en os et vingt cailloux portant des traces évidentes d'une intervention anthropique (fig. 7).

30 Ce serait une maison avec une *officina pigmentaria* annexe, voir Proto (2006), 18, fig. 5; 26; mais plus probablement c'est un atelier où l'on pratiquait la peinture à fresque ou sur chevalet, voir Tuffreau-Libre (1999), 69; Brun, Leguilloux, Borgard, Tuffreau-Libre (2003), 24.

Fig. 5. Set de jeu de une maison avec atelier (I 9, 8). Quatre 'fritilli' (céramique, H. 6 / 7,2 cm, Pompéi inv. 9313A-9313D), quatre pions (os, H. 2,2 cm, Pompéi inv. 9345-9346, 9348-9350) et six pions en verre (verre, H. 0,9 / 1,8 cm, Pompéi inv. 9360A).

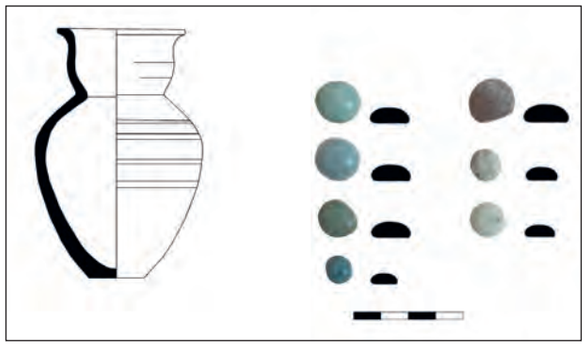

Fig. 6. Set de jeu de une maison avec atelier (I 9, 8). Petit pot (céramique, H. 8,6 cm, Pompéi inv. 9315A) contenant des pions en verre (verre, H. 0,9 / 1,5 cm, Pompéi inv. 9315B).

En observant ce qui a été présenté jusqu'à présent, il est clair que les récipients cylindriques et pyriformes pouvaient être utilisés comme *fritilli*; mais l'évidence pompéienne suggère plutôt que le terme *fritillo* doit être compris davantage dans un sens fonctionnel que dans un sens purement morphologique. C'est-à-dire que des récipients les plus divers pouvaient être utilisés, au besoin, dans les pratiques ludiques. Dans un cas, par exemple, les excavateurs ont découvert 6 dés en os à l'intérieur d'un "*vasetto col suo manico distaccato*",[31] donc un objet modifié, vraisemblablement, pour être plus ergonomiquement adapté à sa nouvelle fonction ; à une autre occasion,

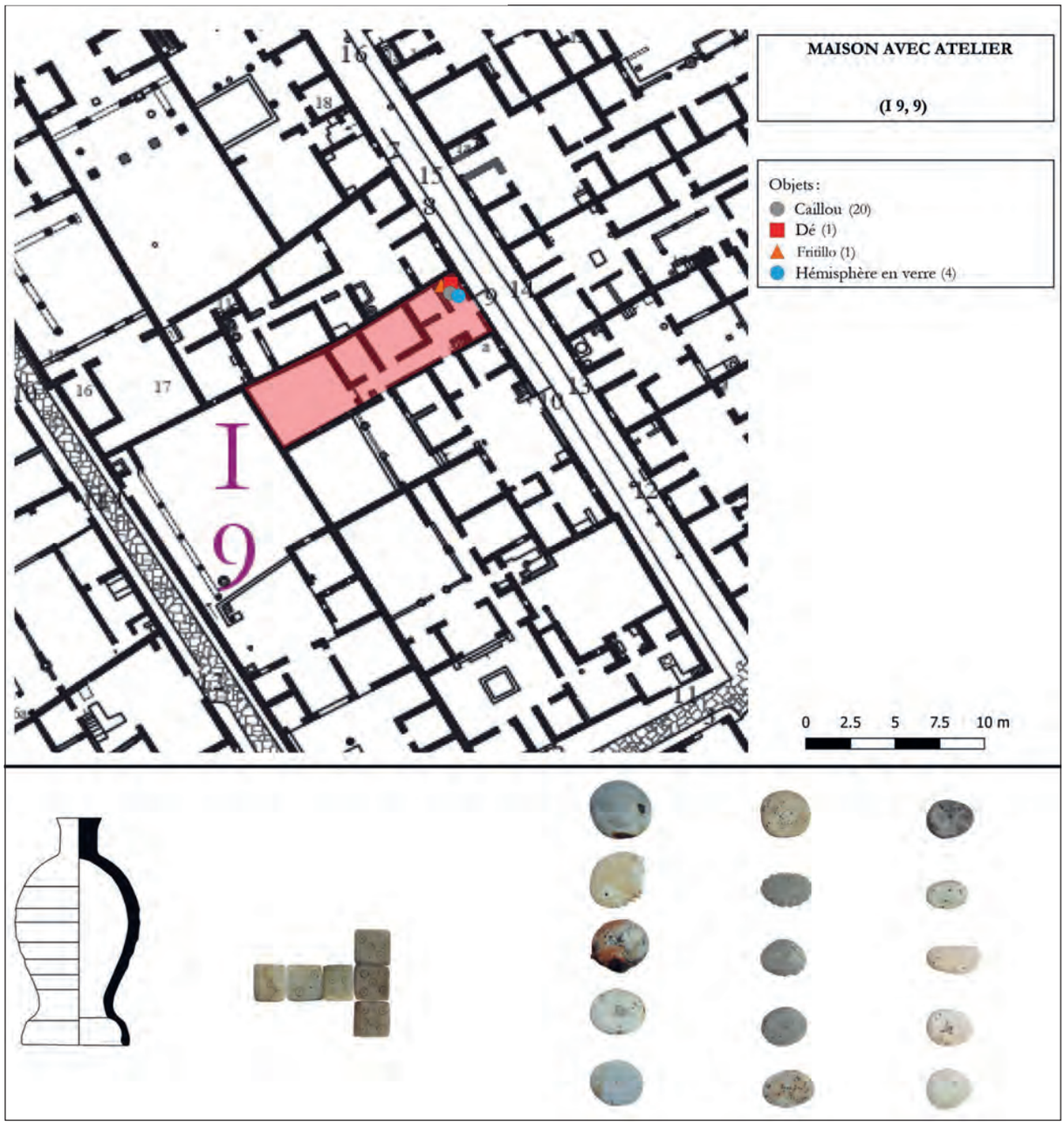

Fig. 7. Set de jeu de une maison avec atelier (I 9, 9). Un 'fritillo' (céramique, H. 8,9 cm, Pompéi inv. 9500), un dé (os, H. 1,3 cm, Pompéi inv. 9495), quinze cailloux (pierre, H. 1,7 / 2,2 cm, Pompéi inv. 9497).

31 Fiorelli (1861), 354.

un récipient en verre a été documenté contenant "*tre dadi in osso coi punti intagliati da uno a sei, una grande quantità di paste di vetro colorato in forma di bottone, cosiddetti calculi o latrones, sassolini da giuoco o da marca*".[32] Il apparaît donc évident qu'il est nécessaire d'abandonner l'approche traditionnelle, en valorisant au maximum les données contextuelles.

LES HÉMISPHÈRES EN VERRE. UNE VIELLE QUESTION

Une autre *énigme* concernant la culture matérielle ludique pompéienne est incarnée par les hémisphères de verre. Il s'agit de petits disques à surface d'appui plane et à section hémisphérique, présents de manière endémique dans toute la ville ;[33] dans la littérature archéologique, et pas seulement dans celle relative à Pompéi, ces hémisphères sont généralement interprétées comme des pions à déplacer à la surface des *tabulae lusoriae*,[34] sur la base de ce qui est décrit par certains auteurs latins.[35] Dans ce cas également, l'extrême simplicité morphologique, la sérialité de production et les faibles coûts de réalisation ont permis la mise sur le marché de nombreux spécimens qui pouvaient certainement être utilisés des manières les plus variées, évidemment pas seulement dans le cadre du jeu. Ainsi, la découverte de ces objets ne peut être considérée mécaniquement comme une trace d'activités ludiques. Un nouvel élan a été donné à la question récemment par Hilary Cool qui, étudiant le matériel provenant de l'*Insula* 1 du VI *Regio* de Pompéi, a proposé d'utiliser un paramètre dimensionnel pour essayer de mettre de l'ordre dans la matière.[36] La chercheuse a composé un *dataset* d'hémisphères en verre, provenant exclusivement de contextes funéraires, dont la fonction ludique a été certifiée par l'association avec d'autres matériels de jeu. L'analyse du matériau dans son ensemble a conduit Hilary Cool à identifier le '*dividing point*' à 1,5 cm pour en établir l'utilisation : ludique dessus, non ludique dessous. [37]

L'approche utilisée pour tenter de sortir de l'impasse est intéressante, mais n'est pas entièrement convaincante car trop rigide et linéaire pour s'adapter efficacement à la fluidité du comportement humain, bien exprimée par la culture matérielle pompéienne.

Une autre façon de procéder semble plus fonctionnelle, à développer de manière endogène, c'estàdire à partir de l'analyse des données archéologiques de la ville, plutôt que d'y appliquer des paramètres théoriques obtenus en combinant des données recueillies en dehors de celle-ci.

Concrètement, même dans le cas des hémisphères de verre, il a été décidé de procéder par '*ludic assemblages*', donc de ne considérer comme objets de jeu que les spécimens trouvés avec les types d'objets déjà mentionnés (dés, osselets et *tesserae lusoriae*) dotés d'une valeur ludique primaire. Cela évite non seulement de tomber dans des discours circulaires, mais permet également de mieux comprendre comment les hémisphères de verre ont été réellement utilisés dans le jeu.

L'association la plus courante est celle avec un ou plusieurs dés (généralement deux),[38] une association qui nous amène immédiatement à penser à l'un des jeux de «table» les plus connus du monde romain, c'est-à-dire le *ludus duodecim scriptorum* (fig. 8). Il s'agit d'un jeu comparable au backgammon moderne, pour lequel deux dés et 15 pions étaient nécessaires pour chaque joueur.[39]

Le nom dérive de la configuration particulière de la *tabula nécessaire à sa pratique, qui était divisée en 3* rangées de 12 cases (divisées en deux segments de 6) pour un total de 36 cases. Très souvent, au moins sur les spécimens de pierre qui ont été conservés, les cases individuelles étaient ornementées de lettres qui formaient six mots (*scripta*) de six lettres chacun (hexagrammes) et exprimaient des phrases avec des tons blagueurs (souvent adressées aux joueurs eux-mêmes).[40] Le but du jeu était d'enlever l'ensemble de ses pièces du plateau avant l'adversaire.[41]

Il serait bien sûr, beaucoup plus facile de réfléchir à ces problèmes si nous avions des *tabulae lusoriae*, mais aucun spécimen n'est documenté à Pompéi. Cela ne veut pas dire qu'elles n'existaient pas, mais très vraisemblablement qu'elles étaient réalisées en matériaux périssables (par exemple en bois), comme l'ont suggéré leurs représentations sur quelques célèbres fresques pompéiennes.[42]

Il faut donc ne prendre en considération que les objets mobiliers puisqu'il est impossible de connaître la surface sur laquelle ils ont été déplacés. Le principal problème d'identification d'un paramètre interprétatif est essentiellement lié au caractère

32 Gaedechens (1872), p. 241.

33 Cool (2016a), 157-159; Cool (2016b), 231-238.

34 Varone (2003); Allison (2004), 76; Allison (2006), 24-25; Castiglione Morelli (2015), 351; Cool (2016a), 157-157; Morsiani (2017).

35 Par exemple, *Laus Pisonis* 192-194 («*calculus et vitreo peraguntur milite bella, ut niveus nigro, nunc et niger alliget albos*»); Torre (2015), 18.

36 Cool (2016a), 164-166; Cool (2016b), 235-236.

37 Cool (2016a), 169.

38 Pour un aperçu général des données, voir Pace (2023), 313-316.

39 Voir *supra* le chapitre 'More than just fun and games: the past, present, and future of the materiality of play'.

40 Sur les *tabulae lusoriae* inscrites si veda Ferrua (2001); sur le *ludus duodecim scriptorum*, Schädler (1995); Purcell (2007); Torre (2015), 19; Lambrugo (2015a), 26-27.

41 Schädler (2019), 128-129.

42 On se réfère à la fresque dans la note *caupona* de *Salvius* (VI 14, 35-36) et à une autre dans une *caupona* située dans la *Regio* VI (VI 10, 1.19); Giacobello (2015), 37-38.

Fig. 8. Tabula pour le ludus duodecim scriptorum (Lambrugo 2015a, fig. 2).

composite, tant d'un point de vue numérique que chromatique, des *sets* d'hémisphères de verre associés aux dés, ce qui, du moins à nos yeux, les empêche d'être interprétés comme des pions utilisés pour le *ludus duodecim scriptorum*.

La seule découverte qui se prête à une lecture facile est celle faite dans la *Casa della statuetta indiana* (I 8, 5).[43] Cette grande maison, qui a probablement appartenu à une famille d'un niveau social moyen-élevé, du moins à en juger à la qualité des fresques, se compose d'un *atrium*, avec *tablinum* axial, d'*alae* latérales, et d'un péristyle arrière desservant des pièces de service[44] (fig. 9). L'objet éponyme de la structure, une statuette en ivoire (peut-être à l'origine le pied d'une petite table), provient d'un de ces espaces de service.[45] Trouvée en octobre 1938 à l'intérieur d'une armoire en bois,[46] elle représente une figure féminine, selon certains la déesse Laksimi.[47] Deux boites métalliques ont été retrouvées dans l'angle Sud/Ouest de l'atrium. L'une d'elle contenait deux dés en os et 20 hémisphères en verre (10 blancs et 10 noirs).[48]

Dans tous les autres cas, il est très difficile, voire impossible, de saisir le *ratio* avec lequel les hémisphères ont été collectés et utilisés ; par exemple, d'une petite pièce ouverte sur l'atrium de la riche *Casa del Menandro* (I 10, 4)[49] viennent deux dés trouvés avec 20 hémisphères en verre,[50] mais dans ce cas, d'une grande variété chromatique. On peut dire la même chose des matériaux trouvés dans la *Villa dei Misteri*,[51] ainsi nommée pour la célèbre fresque probablement liée aux cérémonies d'initiation (fig. 10). Il s'agit d'une somptueuse structure extra-urbaine, dont la partie d'habitation était associée à une zone de production, selon un schéma récurrent dans toute la campagne autour de Pompéi où un élément important de l'économie locale était lié à la production de vin.[52] Dans la zone du *torcularium* (le pressoir) de la Villa *Misteri*, deux *fritilli* étaient associées à deux dés en os et à 40 hémisphères en verre, également dans ce cas de couleurs différentes.[53]

Il faut dire aussi que trouver des hémisphères associés aux dés n'implique pas forcément leur utilisation comme pions; ils pourraient avoir été utilisés, par exemple, comme marqueur ou comme substitut d'argent à disputer entre les deux joueurs.[54]

Dans la susmentionnée maison située dans la Regio I (I 9, 8) a été documentée l'association ludique de 4

43 PPM I 1990, p. 797-801

44 Castiglione Morelli del Franco, Vitale (1989), 194.

45 Ferrari (2016), 116-117

46 Castiglione Morelli del Franco, Vitale (1989), 194.

47 Castiglione Morelli del Franco, Vitale (1989), 194; *contra* Ferrari (2016), 117.

48 *Giornale degli Scavi*, A VII 8, 27 Luglio 1939.

49 PPM II 1991, 241-397

50 Varone (2003), 193, M2; Allison (2006), 59, n. 14; 299.

51 Maiuri (1960), 51-84.

52 Pour des structures similaires voir villa Regina à Boscoreale - De Caro (1994), 35-46 - ceux trouvés à Terzigno, Civale (2003), 80.

53 *Giornale degli Scavi*, A VI 7 (1), 4 Marzo 1930.

54 Schädler (2002), 92.

Fig. 9. Set de jeu de la 'Casa della statuetta indiana' (I 8, 5). Deux dés (os, H. 1,8 / 2,3 cm, Pompéi inv. 7034A-7034B) et vingt pions en verre (verre, H. 1,3 / 2 cm, Pompéi inv. 7035).

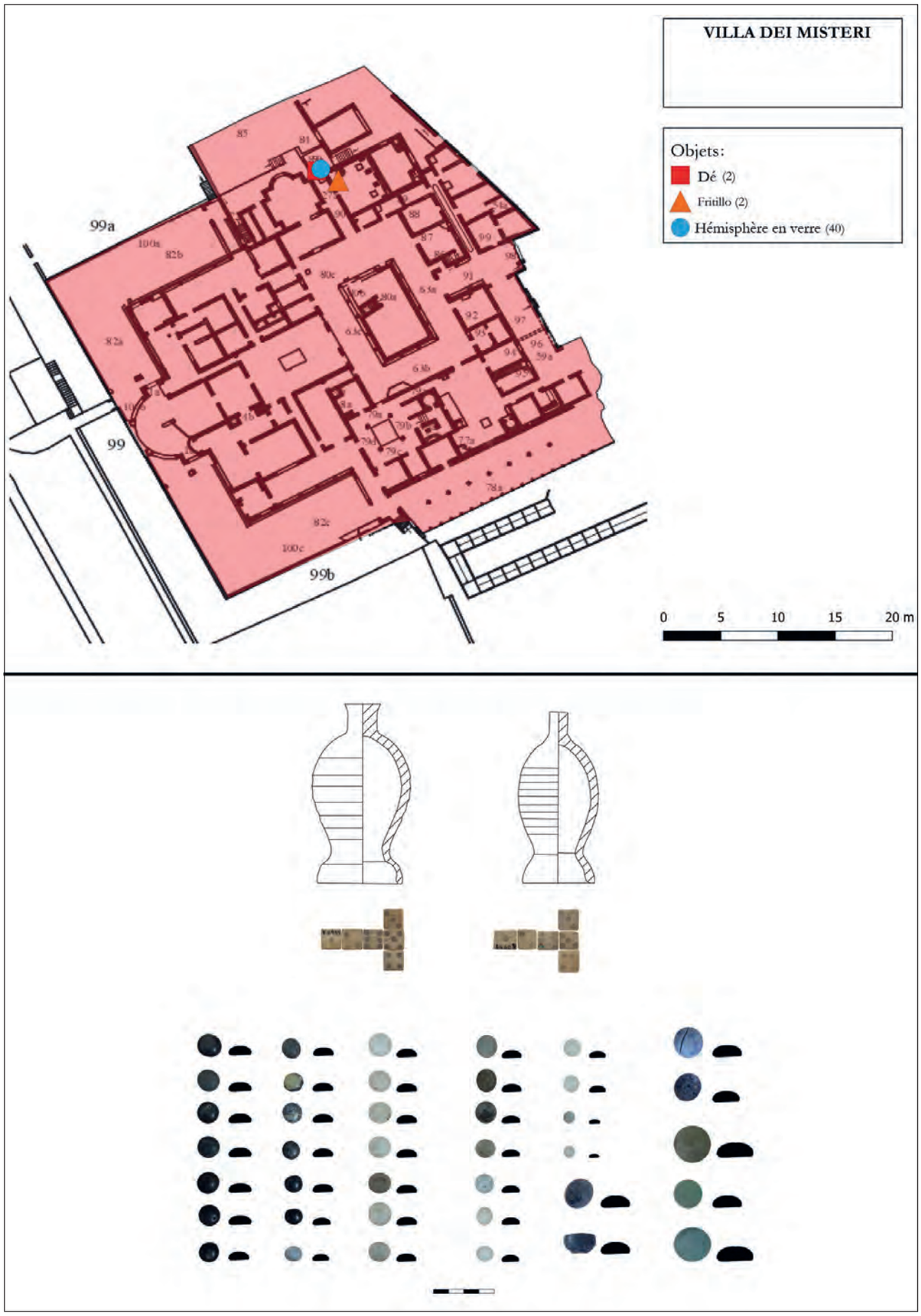

Fig. 10. Set de jeu de la 'Villa dei Misteri'. Deux 'fritilli' (céramique, H. 10,1 cm, Pompéi inv. 4481A-4481B), deux dés (os, H. 1,3 cm, Pompéi inv. 4460), trente neuf pions en verre (verre, H. 2,2 / 0,8 cm, Pompéi inv. 4461A-4461D).

fritilli, 5 pions en os et 15 hémisphères en verre; dans ce cas, il semble probable que les hémisphères en verre aient été utilisés pour remplacer les spécimens en os manquants, donc comme des pions. S'il en était ainsi, ce serait une preuve supplémentaire de la grande fluidité de la culture matérielle ludique en usage dans la ville, et pour l'interprétation de laquelle les paramètres modernes ne peuvent être appliqués, en raison de l'absence de *sets* de jeu avec des caractéristiques standards.

Ce dernier contexte permet d'aborder une autre question particulièrement complexe concernant une pratique ludique très appréciée des Romains, le *ludus latrunculorum*. Ce jeu peut être comparé, en quelque sorte, aux dames modernes et se jouait à l'aide de la *tabula latruncularia*, une sorte d'échiquier, sur lequel les *calculi* (pions) étaient déplacés dans le but d'éliminer ou d'emprisonner complètement ceux de l'adversaire.[55] C'était un pur jeu de stratégie, pour lequel aucun dé n'était nécessaire.[56]

Contrairement au *ludus duodecim scriptorum* ce plateau de jeu n'avait pas un format unique, mais pouvait varier en nombre de cases et par conséquent aussi en nombre de *calculi* nécessaires au jeu.

Ne pouvant faire usage d'aucun paramètre numérique, l'identification d'un groupe de *latruncules* à Pompéi est donc une tâche décidément complexe, même compte tenu de l'absence totale de *tabulae lusoriae* évoquée plus haut. Ce fait constitue une limite infranchissable au regard de nos paramètres interprétatifs. De nombreux groupes d'hémisphères pourraient en fait constituer des *sets* de pions à utiliser dans le *ludus latrunculorum* mais n'étant pas associés à d'autres types d'objets ayant une fonction ludique primaire (essentiellement les dés) il n'est pas possible de trouver un moyen de certifier de manière univoque leur implication dans des activités de jeu. D'autre part, nous sommes informés de la diffusion de ce jeu dans la ville également à partir d'autres types de sources, notamment épigraphiques. Dans un manifeste électoral bien connu, dont l'interprétation dans le contexte de la dynamique politique de la ville requiert néanmoins une certaine prudence, un certain *Popidius Montanus* s'est engagé à soutenir la candidature de *Lucius Popidius Ampliatus* à la fonction d'*aedilis* avec d'autres *latrunculari*, probablement un groupe de des amis avec qui il se réunissait pour jouer aux *latrunculi*.[57]

55 Voir *supra* le chapitre 'More than just fun and games: the past, present, and future of the materiality of play'.

56 Schädler (1994); Torre (2015), 18; Schädler (2019), 128.

57 *CIL* IV 7851; Varone (2007), 126; Varone, Stefani (2009), p. 413; Giacobello (2015), 40.

QUELQUES OBSERVATIONS CONCLUSIVES

Ce n'est pas ici le lieu pour aborder dans leur ensemble tous les problèmes relatifs à la culture du jeu à Pompéi, dont seuls quelques exemples ont été donnés ici. Ces derniers sont cependant suffisants pour illustrer les nombreux problèmes méthodologiques auxquels il faut se confronter.

Les perspectives de recherche mûries dans le cadre du projet ERC *Locus Ludi*, ont été déclinées et appliquées dans ce cas dans un contexte archéologique spécifique afin de proposer de nouvelles voies interprétatives à ces questions épineuses (comme celle relative aux *fritilli* ou aux pions en verre), qui avaient jusque-là souvent prisées une impasse.

Avant de commencer à analyser plus avant des questions plus complexes, comme celles relatives à la valeur sociale du jeu et aux habitudes ludiques des anciens habitants, il est en effet nécessaire de disposer d'un appareil méthodologique valide qui nous permette d'interpréter correctement les différents aspects de culture matérielle ludique pompéienne. Il convient en effet de définir clairement ce que l'on entend par 'objet ludique' avant de tirer des conclusions potentiellement fondées sur des données faussées. Ce n'est que dans un second temps que l'on pourra établir les *patterns* de distribution et les modalités d'utilisation des jeux dans la ville. Mais c'est là une autre histoire qui dépasse largement les objectifs de cette contribution.

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Did people play games in the countryside of Roman Italy?

INTRODUCTION

While analyses of gaming in the Roman world have drawn on material evidence, they still overwhelmingly informed by textual mentions of play, resulting in a bias towards urban contexts. Indeed, most of the contributions in this volume focus on evidence from urban contexts as this is where the best evidence is available. This urban-facing tradition risks writing leisure activities out of histories of the Roman countryside, painting a picture of a countryside inhabited only by automata concerned with economic production to ensure their own survival and to feed the empire's many cities. Scholars generally agree that in the Roman world, and especially in Italy, the majority of the population lived in rural areas rather than urban centres.[1] As a result, any study of Roman gaming practices that focuses solely on urban dwellers risks excluding the experiences and perspectives of most of the silent majority. It is therefore important to investigate the lives of rural inhabitants to gain a more complete understanding of Roman social history; without doing so, we risk perpetuating a skewed and incomplete picture of Roman society. We *must* consider patterns of gaming in the countryside to reach a fuller appreciation of the social fabric of play in the ancient world, and to study gaming practices in rural contexts we cannot rely on the textual evidence available for cities and must turn instead to material sources.

Interpreting material culture connected to gaming poses a series of methodological problems due to the uneven survival of evidence, the possibility that gaming-related items could be used for other purposes, and conversely the possibility that other items not typically associated with gaming could nevertheless be used for play. Yet this same material culture from rural sites including sanctuaries, small towns, villas, farmsteads, and burial sites does appear to show that a substantial cross section in the countryside of Roman Italy were familiar with (board) games, and probably played them. By examining this evidence, I set out to redress the balance and reintroduce the materiality of play into the study of the Roman countryside.

In this chapter, I review the urban-centric bias in existing scholarship on the place of gaming in the Roman world. I next look at some of the difficulties involved in researching gaming in rural areas, using evidence from Roman Italy. Insufficient evidence is published at present to allow a full and systematic analysis, and instead my goal is to outline important considerations for future studies of play in rural areas before further research is carried out. First, I will explain the limitations and uncertainties of the material evidence for gaming and the implications these have for any investigation into gaming in rural areas. Then, I will try to provide some preliminary answers to two related questions: who played games in rural areas and where did they play? Throughout, I will explore these questions using selected evidence related to gaming from the Italian countryside, but

1 For reviews of urban/rural population balances see e.g. Hanson (2016), 66-72; Scheidel (2007).

readers should be aware that further synthesis work will be necessary to expand our evidence base.

TEXTUAL VIEWS: GAMING AS AN URBAN PHENOMENON

Textual sources have provided important evidence for the social contexts of gaming and gambling in the Roman world, and a brief review of key passages is merited here. What follows is not an exhaustive review of textual attitudes towards gaming and gambling, and the moralising dimension has been more fully treated elsewhere, most notably in Nicholas Purcell's classic article on the subject.[2] It is also worth noting that surviving written sources discussing gaming in the Roman world were written almost exclusively by the urban-dwelling elite, for an audience of similar status and residence. Therefore, the passages that follow, whilst useful for the information they give regarding the general perception of urban gamers, their social connections, and the venues in which they played, offer significantly less about the social, spatial, and material aspects of non-urban play.

Elite writers draw a connection between the urban masses and the playing of games; this is, moreover, clearly a long-held attitude. Columella in the 1st century CE describes the urban *plebs* as "a lazy and snooty race of slaves, habituated to leisure, suburban promenades, the chariot races, the theatres, *dicing*, cookshops and brothels."[3] Similarly, Ammianus Marcellinus, writing during the later 4th century, asserts that gaming and gambling were major sources of intimate friendship at Rome, as well as a means by which the urban poor could get ideas above their station: "[y]ou sometimes […] see a low-born man, who knows all the secrets of the dice, put on a solemn and serious face because someone important has been preferred to him at a grand entertainment or assembly."[4] His disdain for such activities is underlined by a description of a snorting noise made by gamers and gamblers among the urban poor.[5]

The textual tradition sometimes also provides nods to the conception of gaming as an urban pastime. There is a tension between the laws against gaming in public and the fact that people clearly did take part in ludic activities. For example, under the Late Republic, Cicero criticised Mark Antony for restoring full civic rights to his gambling buddy, Licinius Lenticula, who had been censured for playing *alea* in the Roman Forum.[6] This practice was, at least at some times, prohibited in law.[7] Other texts paint a similar picture. For example, Paul the Jurist notes that "if someone makes sport of my slave or my son, even with his consent, I am thought to suffer damage - if, for example, someone takes him into a *popina* [bar], if he plays at *alea*."[8] Martial also places drunken game players in taverns, especially on the Saturnalia.[9] On the balance of this evidence, then, we might assume that gaming was largely a social practice which took place in cities.

It should be noted that a few texts *might* place gaming activities in non-urban contexts, but references to this are rare and difficult to use. For example, Suetonius recounts that the gambling-addicted emperor Claudius had a gaming board fitted in his litter so that he could play on the move, though this anecdote likely reflects urban elite attitudes rather than rural ones.[10] Moving into Late Antiquity, Sidonius Apollinaris describes playing board games on a riverboat in Gaul.[11] In both of these instances, gaming is portrayed as an activity to be undertaken while in transit, but again, there is no mention of playing games in specifically rural settings. Moreover, both of these texts refer to people very much at the pinnacle of ancient society: an emperor and an aristocrat, respectively. After all, the vast majority of people living under the Roman Empire could not afford a litter and passage by river (in a private boat?) was far from affordable either.[12]

The textual tradition outlined above has therefore been read by historians as suggesting that gaming and gambling primarily took place in urban milieus. This connection is made explicit in the title of Purcell's seminal article, already mentioned above—"Literate games: Roman urban society and the game of alea."[13] In Purcell's view, the thrill of gaming and gambling was a perk of urban society, enabled by the surplus currency and time available for such pursuits along with greater levels of literacy among the populations of the cities of the Roman Empire. The same assumptions are implicit in Jerry Toner's list of the locales where gaming and gambling took place, which is worth quoting at length here:

"Gaming-tables were scratched into pavements in porticoes, basilicas, and any flat public surface: these gambling graffiti have been found on the pavements of the Forum Romanum, the Basilica Julia, the Colosseum, the entrance to the temple of Venus and Rome, and even in the house of the Vestal Virgins. They are also particularly abundant in barracks.

2 Purcell (1995).

3 Columella, 1.8.2 (trans. Harrison Boyd Ash).

4 Ammianus Marcellinus, 28.4.21 (trans. John Carew Rolfe).

5 Ammianus Marcellinus 16.6.25.

6 Cicero: *Phillipics* 2, 55-6.

7 *Digest* 11.5.4. On Roman laws around gambling, see e.g. Faris (2012).

8 *Digest*, 47.10.26; trans by Purcell (1995), 27-28.

9 Martial 5.84.3.

10 Suetonius, *Claudius*, 5.33.2.

11 Sidonius Apollinaris, *Epistles*, 8.12.5.

12 See e.g. Apuleius, *Metamorphosis,* 11.28 for complaints about passage between Corinth and Rome costing a modest legacy.

13 Purcell (1995), particularly 17-37.

Within the household, gambling usually followed a meal, and parties relaxed with dice. Taverns were also one of the primary loci of popular gambling. Many of these establishments allowed clients to plug into the electricity of aleatory excitement by offering gaming rooms where bets could be laid and knuckle-bones rolled."[14]

This list clearly illustrates an openness to a variation of gaming and gambling venues. At the same time, however, there is no discussion of whether gaming took place in the countryside, and the focus clearly remains on urban spaces. The assumed connection between gaming and towns is sometimes also adopted by archaeologists.[15] Indeed, archaeological evidence in the form of gaming counters and boards identified in many Mediterranean cities as well as wall paintings in *tabernae* at Pompeii, underlines that board gaming, sometimes accompanied by gambling, frequently took place in Roman towns and cities.[16] Additionally, numerous graffiti from urban contexts allude to gaming and gambling.[17] At the same time this evidence does little to prove that gaming did not take place in non-urban settings.

But there is more: the textual evidence is not a neutral reflection of ancient society but reflects the preoccupations of the elite male literary class. Indeed, the texts briefly surveyed above betoken wider preoccupations about leisure (*otium),* and certain associated activities which those at the apex of Roman society considered to be a moral failing.[18] Gaming and gambling were prominent among the activities which sparked moral panic; a taste for gambling was a common literary device employed to signal a poor character.[19] This tendency is perhaps best exemplified by the late Roman author Macrobius, who warns that "[…] tomorrow [the Saturnalia] is a day that most people waste on board games."[20] In view of these considerations, it is therefore no longer possible to read the textual tradition on gaming and gambling as reflecting actual ancient practice.

Recent research has also emphasised the degree to which viewing town and country as distinct analytical categories hinders our understanding of the past. Astrid Van Oyen has critiqued tendencies to project the countryside as "Other," frozen in an antiquated past or an unchanging present, and urged that we consider the countryside on its own terms.[21]

14 Toner (1995), 90.

15 E.g. Swift (2017b), 127; Smith, Brindle, Fulford, Lodwick (2018), 67. The view is also embraced by ancient historians e.g. Fagan (2006), 375-376.

16 See e.g. Cool (2016) as well as papers in this volume.

17 Purcell (1995), 21, 27.

18 On *otium* see Fagan (2006), 369-371.

19 Toner (1995).

20 Macrobius, *Saturnalia*, 1.5.11 (trans. Robert A, Kaster).

21 Van Oyen (2019).

Indeed, the scholarly cliches which define gaming as an urban practice risk creating a view of the Roman countryside as inherently different from cities, and in doing so deny pleasure and leisure to those who lived in rural areas in antiquity. Instead, leisure in the countryside deserves to be explored, just as is starting to happen for other phenomena—such as literacy.[22] Within gaming studies, Mark Hall has already leveraged archaeological evidence to break down the urban/rural dichotomy when looking at the medieval period.[23] Little work, however, has been done to examine play in the countryside in antiquity.

ARCHAEOLOGICAL EVIDENCE FOR GAMING IN THE COUNTRYSIDE: PROBLEMS AND OPPORTUNITIES

Since texts do not help us to understand gaming practices in the countryside, we must turn to material culture. The only systematic study of gameplay in the countryside to have been undertaken anywhere in the Roman world to date focuses on Roman Britain. The Rural Settlement of Roman Britain (RSRB) project sought to harness the masses of unpublished ("grey literature") reports generated by decades of developer-led archaeology in order to provide a new framework for our understanding of life and death in the Roman countryside. While the focus of the project was primarily on landscape history and the economic development of the province over the nearly four centuries it was an imperial possession, it also collated evidence for leisure activities including gaming and gameplay.[24] The RSRB team found that the majority of items related to gaming and gambling came from larger settlement sites including villas and small towns, and only a small proportion of farmsteads produced evidence for private recreation—including gaming. They took this as indicating that "what was regarded as entertainment in Roman Britain may have had little to do with mainstream perceptions of recreation in the Roman period."[25]

This analysis provides an important challenge to prescriptive. one-size-fits-all notions of recreation in the ancient world, but it is not without its problems. For starters, it does not consider recent advances concerning the materiality of play in the ancient world, which show that play in the past was significantly more ambiguous and flexible than previously thought.[26] It should also be noted at this stage that recent studies of ancient gaming have been restricted due to the challenges imposed by the

22 On literacy in the countryside in Britain see e.g. Smith, Allen *et al.* (2018), 70-76.

23 Hall (2016).

24 Smith, Brindle *et al.* (2018), 66-69.

25 Smith, Brindle *et al.* (2018), 69.

26 See for example Penn, Pace and Schädler, this volume; Pace, this volume; Penn, Courts (2022); Hall (2019), especially 201.

material evidence. Not only is the material which does survive potentially ambiguous, but it is unclear to what degree it is representative of play among past societies. Gaming boards made of wood or other perishable materials like cloth or leather are unlikely to survive and might only be detected in well-recorded funerary contexts where bone or metal fittings survive and/or if counters are laid out upon them.[27] Societies both past and present are able to create means to play games through improvisation, for example, using just about any material in lieu of purpose-made counters, with possibilities including pebbles, broken ceramics or even camel droppings.[28] Similarly, boards might be scratched in the bare earth or marked in a perishable material such as chalk, charcoal, or even paint. None of these forms of play are likely to leave any trace in the archaeological record.

Archaeological work has also recently emphasised the flexibility of play. First and foremost in this field is the work of Alessandro Pace, who has shown that mixed assemblages from Pompeii contain gaming pieces and dice stored alongside other objects like melon beads, which archaeologists do not traditionally associate with play.[29] The evidence from Pompeii is particularly evocative, but is also a product of the exceptional preservation under the volcanic layers laid down by the eruption of Vesuvius in 79 CE. For our present purposes, however, this evidence highlights the degree to which items which are not uniquely, or even primarily, intended for gaming-related activities, could be used to play games. Similarly, work which I have undertaken in collaboration with Summer Courts shows that gaming assemblages from presumed sets across the Western Provinces are often made through an accumulation or amalgamation of different objects, as counters were regularly lost, given away, or even deposited in graves.[30] These losses had to be recovered and we have posited that this could take place using a range of specially made counters, but could also be done accomplished with objects which are not necessarily connected exclusively to gaming — like coins. Again, these objects would not be interpreted primarily as being connected to gaming if recovered as stray finds on an archaeological site and neither should we assume that anything other than a tiny proportion of such finds were ever used to play in games. In other words, the identifiable evidence for play and games reflects only a minimum level of sites where these activities were taking place in antiquity. For the remainder of this chapter, I will outline some of the challenges of studying gaming in rural settings, drawing on evidence from Roman Italy. The scale the Rural Settlement of Roman Britain's analysis cannot be replicated here, and my aim is not to present an exhaustive survey of the evidence, as this work will require a lengthy process of archival visits and fieldwork to catalogue the large volumes of unpublished gaming paraphernalia from the Italian Peninsula. Instead, in what follows, I hope to outline some important considerations for future studies of play in the countryside in advance of further work.

THE NATURE OF THE EVIDENCE

There are three problems facing us in our enquiry into gaming in rural areas. The first is to define what precisely we mean by 'rural' in antiquity. The distinction between 'rural' and 'urban' is in many senses an ideological, even arbitrary one, which harks back to the intellectual perspectives of antiquity itself.[31] The rural landscapes of the Roman world were extremely diverse constellations formed from an array of different site types, both nucleated (small towns, villages, roadside settlements) and dispersed (farmsteads, villas etc) at different periods in time. Moreover, the economic and social life of the Roman Empire may have been articulated around cities or other central places, which served a role as hubs, but the connections between town and country were wide-reaching and deep, reflecting different parts of a complex system. The countryside is therefore not a single, monolithic entity to be considered the diametric opposite of cities, but a scale ranging from the quasi-urban small towns, and villages, to sanctuaries, villas, and at the bottom of the settlement hierarchy, peasant houses—as well as tombs—all of which will be discussed in what follows.

Secondly, largescale data for the study of gaming across Roman Italy are not yet available. In the countryside, we essentially have four main types of gaming-related artefacts at our disposal when exploring play in rural contexts: gaming boards, counters, dice, and astragals.[32] None of these artefact classes have been subject to synthetic study in Italy. The closest approximation of a peninsula-wide study is provided by Antonio Ferrua's catalogue of gaming boards. This invaluable resource documents some 200 examples across the Roman West, most of which are in Italy, but he only discusses gaming boards for

27 For counters laid out in a grave see: Schädler (2007). For a cotton and silk gaming board of the Mongol period see British Museum As,SLMisc.1122; for a cloth board from 19th-century India, see British Museum As1959,12.1. For a leather board of early 20th-century date, from Nigeria, see British Museum Af1926,0414.4-36.

28 For pebbles, see Hall (2019), 201. For play with dried dung see Wood (2015), 250.

29 See Pace, this volume, with further references.

30 Penn, Courts (2022).

31 On urban ideology, defined in opposition to the countryside in antiquity see e.g. Erdkamp (2012) with further references.

32 Other types of gaming paraphernalia - like dice towers, see Cobbett (2010) and dice cups (see Pace (2022)) - are either too rare or too challenging to identify and are seldom discussed here. Additionally, Baratta's recent survey of *tesserae lusoriae* did not identify any finds from rural settings, see Baratta (2019), 89-91.

playing the backgammon-like games *XII Scripta/Alea*.[33] Admittedly, almost all these boards are in urban spaces, but the significance of this distribution remains difficult to assess given that other gaming board types are excluded. As a result, we do not have firm evidence for the overall distribution of gaming boards across the Italian Peninsula, and it is probable that many boards remain to be recorded. The same shortcomings apply to counters, dice, and astragals, none of which have been gathered in regional or Italy-wide catalogues.

Thirdly, much of the material evidence for play is not unambiguous—and that is certainly true of the four main kinds of gaming-related material culture found in the Italian countryside. The identification of gaming boards is often disputed. It has been proposed, for example, that gaming boards with a simple grid design could also have served as abaci.[34] Ulrich Schädler has suggested that some presumed gaming boards from funerary contexts, especially catacombs, around Rome could instead have played symbolic role in commemorating the dead.[35] Counters too are problematic; a range of other, non-gaming uses have been proposed in the scholarly literature. These include accounting tokens and, in some instances—especially when made of brightly coloured glass—inlays to be used in furniture, architectural adornment or jewellery.[36] Finally, dice and astragals could have been used for gaming but also for divination. This is clearest when we examine astragals, given that epigraphic evidence provides details of how these objects could be used in an oracular fashion.[37] It has been suggested that the outcome of rolls on cubic dice was intimately connected with the will of the gods, and if this is true, they too could be put to work to divine the future.[38] While these uses remain possible, at least on some occasions, dice, counters and even gaming boards (or the remains of them) are found together, especially in graves, but also in hoards, and this appears to suggest that at least some, if not most, glass counters were for gaming.[39] On balance then, in what follows, I cautiously treat all of these types of evidence as a proxy for some form of play in the past.

33 Ferrua (2001).

34 Eckardt (2017), 201 with further references.

35 Schädler (2021).

36 Tokens: Olesti Vila (2021), 122 n142; St Clair (2003), 111. Furniture and architectural inlays: Cool (2016). Jewellery: Olson (2001), 136-138.

37 Divination with dice: Graf (2005). For relevant recent work in Asia Minor see Talloen (2018); Nollé (2007).

38 Swift (2017a), 157; Swift (2017b), 123-124.

39 Penn, Courts (2022).

WHO PLAYED BOARD GAMES? AND WHERE DID THEY PLAY THEM?

Material evidence from a wide range of rural sites provides a window onto who was playing board games and where they played them. The analysis which follows relies on the concept of social distribution. The core assumption underpinning research of this kind is that the use of particular kinds of material culture reflects both the relevant economic means, as well as a conscious decision by the users.[40] Analysing the contexts in which these objects are found therefore elucidates the ways that objects were used by the occupants of the Roman countryside in Italy. It should be stressed that the evidence employed here is an incomplete survey, however, and further collation of a larger sample is required to confirm the preliminary conclusions presented here. In the following sections, I argue that evidence comes from semi-public sites, like sanctuaries, and perhaps small towns, through to more private venues, including villas both monumental and modest, and even humble farmsteads. Taken together, this material suggests that there was widespread participation in gaming and play-related activities in rural Italy.

PLAYING WITH THE GODS: GAMES IN SANCTUARIES

Rural temples, sanctuaries, and other cult sites served as focal points for social mixing and therefore probably also as a place in which board games were played. While the primary purpose of temples and other cult was religious in nature, recent scholarship has shown an increasing awareness that they played important wider roles within the social and economic life of the surrounding countryside, playing host, for example, to periodic markets and fairs, as well as perhaps tax collection, legal hearings, and other activities.[41] Gaming activity at sanctuaries is best exemplified by a tile or brick board incised with a possible merels board design (fig. 1 , cf. Appendix II, type 27) which comes from the Sanctuary of Minerva in Breno (BS).[42] Unfortunately, the find's context was unstratified, meaning it is not clear when and where within the site's history this gaming board was used, but the sanctuary remained in active use until at least the 4th century CE. Moreover, Serena Solano suggests that the limited use of brick throughout the sanctuary may indicate that this board was used for portable play.[43] The same sanctuary has also produced four glass counters: three were stray finds, but one comes from a layer dating to the reign of Domitian, which

40 Examples of social distribution studies in Roman archaeology include: Eckardt (2017); Eckardt (2005); Eckardt, Crummy (2008); Derks, Roymans (2002). This approach has been applied more fully to gaming boards from Roman Britain in Courts, Penn (2019); Courts, Penn in preparation.

41 On markets, see De Ligt (1993).

42 Solano (2015), 133-134, no. 1.

43 Solano (2015), 132.

Fig.1. Possible merels board the Sanctuary of Minerva in Breno (BS) from Solano *(2015), 134, tav. 16.*

further indicates that gaming activities were taking place at the site.[44] Additionally, a single unusual bone die featuring two number fives (one in place of a two) was recovered from an undated context in the so-called "Baths of Domitian" (RI), built around the *Aquae Cutiliae*, a hot spring sacred to Victory, which may also be characterised as a form of rural sanctuary.[45] Sanctuaries and temples across the ancient world which have been linked to gaming, like those at Delos and Didyma, have been shown to have been places for exchange and cultural interaction.[46] Limited evidence from Italy suggests that gaming was taking place in cult sites here too, though the scale of this activity remains to be ascertained and the strongest evidence for this to date comes from urban contexts.[47]

PLAY IN SMALL TOWNS: PUBLIC OR PRIVATE CONTEXTS?

Small, nucleated settlements with a range of different names and functions—*vici*, *fora, mansiones* etc—also provide material evidence for play. These various terms denote both diverse legal statuses, physical realities, and socio-economic roles within the wider landscape.[48] Analysing these distinctions lies beyond the scope of the present paper, and for now it suffices to note that several small towns in Roman Italy have produced material evidence for gaming. This evidence is at present, however, relatively limited because of the restricted number of detailed studies which these small towns have been subject to in recent research. Additionally, the very limited contextual information associated with these reports renders it difficult to tell whether these items were used predominantly in public contexts or within private domestic spaces.

Despite these limitations, gaming took place in at least some small towns in Roman Italy. For example, a possible merels board on a stone block reused in the wall of the church of S. Maria de Episcopio in Ventaroli di Carinola (CE) may come from the remains of the small town of *Forum Claudii* which it overlies (fig. 2a).[49] Other (possible) gaming boards from *Forum Clodii in lacu Salatino* (RM) and *ad Decimum* (RM) also indicate ludic activity in this sort of settlement (see fig. 2b-c, cf. Appendix II, type 25).[50] Less monumental gaming equipment comes in the form of gaming counters recovered, for example, at Cavaltone (CR), the ancient *vicus* of *Bedriacum*,[51] and glass and bone counters as well as bone dice are also reported at S. Lorenzo di Pegognaga (MN), another possible small town.[52] Future work may seek to expand this corpus of evidence from small towns and deepen our detailed contextual knowledge of where this practice took place within these settlements.

44 Solano (2015), 134-135, nos. 2-5.

45 Alvino (2015).

46 Widura (2015), 71-77 with further references.

47 E.g. Dal Monte, and Dionoso et al. this volume..

48 For *fora* see e.g. Zannini (2009), 223. For some work on *vici* see e.g. Iasiello (2007); Todisco (2011); Tarpin (2003).

49 Zannini (2009), 223.

50 The board at *ad Decimum* is discussed further below, for the board at *Forum Clodii,* see Ferrua (2001), 74, no. 48.

51 Medici (1996), 128-129, fig. 325.

52 Glass counters: Roffia (1996), 337-338, 368-369, nn. 97-98, fig. 44. Bone counters: Troso (1996), 390, nos. 24-26 with 389, fig. 37.24-6. N.b. however that no. 24 could be interpreted in several other ways including as a spindle whorl or button. Dice: Troso (1996), 390-391, nos. 27-8 with 389, fig. 37.27-8.

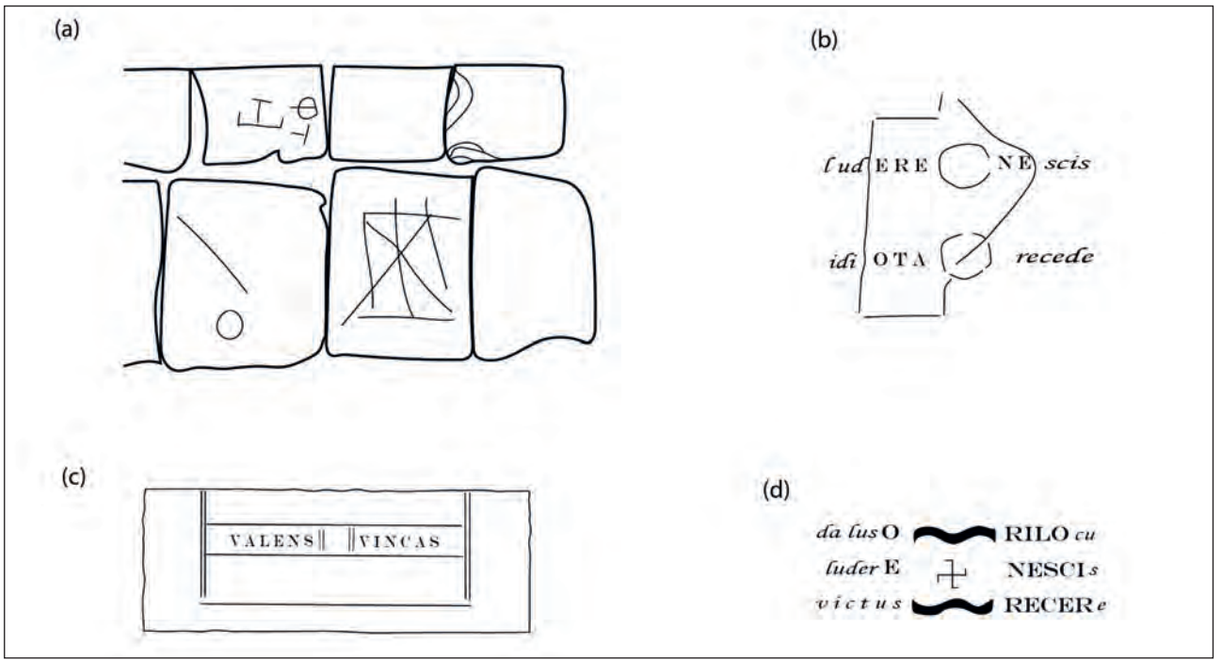

Fig. 2. Selected gaming boards from rural sites in Roman Italy. (a) the church of S Maria de Episcopio in Ventaroli di Carinola (CE), (b) Forum Clodii in lacu Salatino (RM), (c) ad Decimum (RM), (d) Villa of Diocletian (Redrawn after (a) Zannini (2009), 223; (b) Ferrua (2001), 74, no. 48.; (c) Ferrua (2001), 139, no. 109; (d) Ferrua (2001), 71, no. 45. All drawings by Summer Courts).

PRIVATE GAMING: GAMING ARTEFACTS IN RURAL SETTLEMENTS

Many people in the ancient world must have played boardgames at home. This much is clear even in urban contexts: Alessandro Pace's recent survey of gaming accoutrements from Pompeii found that despite textual traditions and iconographic representations which place gaming in public places like *tabernae* and *cauponae*, most gaming objects were found in domestic contexts.[53] The same may well have been true of gaming in the countryside, though it is important to note that more portable boards could have travelled between private and public or semi-public areas such as baths, where gaming was an appropriate pastime.

The strongest evidence for gaming in the countryside of Roman Italy comes from villas. This evidence appears to run from the Late Republic through to Late Antiquity. At the most monumental end of the scale, gaming boards are attested in imperial villas — the direct property of the emperor himself. For example, a gaming board for playing *XII Scripta/Alea* was found in the Villa of Diocletian (RM), some 30 meters south of the villa's theatre.[54] The text (fig. 2d, cf. Appendix II, type 61) has been partially restored as reading:

[------]	[------]
[lud]ere (circle) ne[scis]	You do not know how to play
[idi]ota (circle) [recede]	Go away, idiot

53 See e.g. Pace, this volume.

54 Ferrua (2001), 71, no. 45.

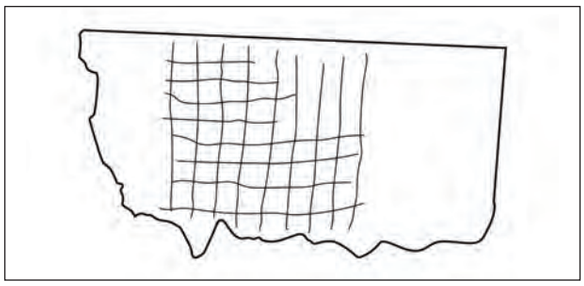

Fig. 3. Grid-design board set into the wall of the so-called Serapeum at Hadrian's Villa at Tivoli (RM) (From Bruno et al. (2011), 517, fig. 3)

We might rightly ask whether a gaming board from an imperial villa can truly be regarded as rural, given the strong connections between the owner and the City of Rome. However, we might posit that the presence of board gaming apparatus in the semi-public parts of some elite residences would have been visible to guests as well as non-elite occupants of villa—it cannot be excluded that they were able to use it on some occasions.[55]

Evocative evidence for non-elite play in imperial villas is also available from Hadrian's Villa at Tivoli (RM), which has produced at least four gaming boards to date.[56] These include a gridded design, perhaps for playing *Ludus Latrunculorum,* reused in a wall in the "Serapeum", now recognised as a dining room (fig. 3, cf. Appendix II, type 29), as well

55 For gaming boards in a house in Silchester see: Fox, Hope (1901), 231.note a. For a mosaic gaming board in a reception space in North Africa, see, for example, the mosaic in the probable meeting place of a private association in the Salle de Nutrix in Sidi Jdidi, published in Ben Abed, Hanoune (2004), 70-71.

56 Bruno, Carboni, Manderscheid (2011), 514-518.

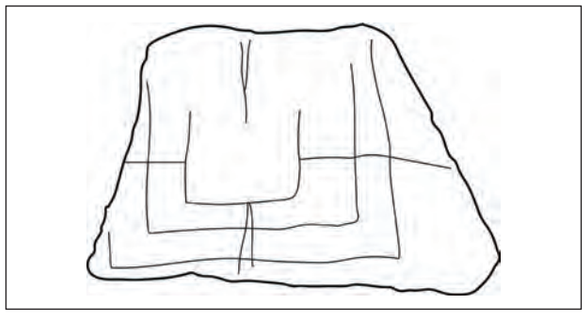

Fig. 4. Gaming board from the Small Baths at the Hadrian's Villa, Tivoli (from Blanco (2007), 194, fig. 15).

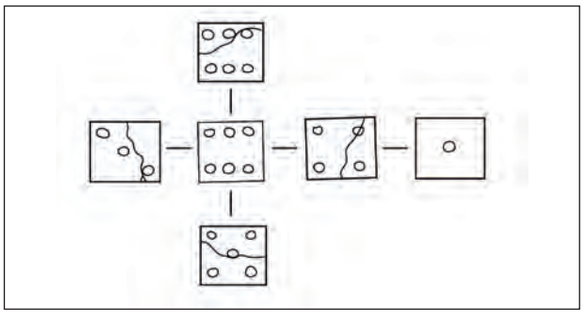

Fig. 5. A bone die with two sides with six pips from the villa at Settefinestre (GR). Not to scale. (Redrawn by Summer Courts from Famà (1985), 239, fig. 63.6)

as a merels board in the wall of the latrine (*forica*) of the small baths (fig. 4, cf. Appendix II, type 27). Since both of these boards were placed horizontally, several scholars have suggested that they were made and used by workmen during rest periods before the blocks were placed into their final positions in the walls.[57] An additional board, again for playing merels but this time done in charcoal, was found during the excavation of the cryptoporticus between the Large Baths and the northern end of the Canopus, and another board of similar design was carved on a block reused in a platform or bench in front of the rear wall of the Casino Fede.[58]

Much of the other gaming evidence takes less monumental forms. An oval-shaped dark blue glass object, published as a "imitation gemstone", but which could instead have been employed as a gaming counter, was recovered at the San Rocco villa in Francolise (CE), probably in a Late Republican phase.[59] Four lentoid glass objects, ranging in diameter from 0.9 cm to 1.5 cm were recovered at the villa at San Mauro in Buccino (SA).[60] These are published as "glass gem stones" and this interpretation might be supported by an incised dolphin on one of the examples, but one of the undecorated counters was c. 1.4 cm in diameter, making it similar in size many published gaming pieces.[61] The site was initially active between approximately the 1st century BCE and the 1st century CE but was reoccupied in the late Roman period. It is unclear which of these phases the piece relates to.

Moving into the imperial period, at Settefinestre (GR), at least four plain glass counters ranging in diameter from 1.0-1.9 cm were recovered in contexts belonging to the Severan period.[62] Another, smaller piece made of dark blue and yellow glass, which may not be a gaming counter on account of its smaller size, was found in a context dating to between the reign of Trajan and the Late Antonine period.[63] A bone die, with an unusual combination of pips, including two sixes (see fig. 5) was also found in a Late Antonine context at the same villa.[64] One particularly evocative Early Imperial period find comes from Mola di Monte Gelato (RM), where at least two possible glass counters were recovered from the fishpond, in a deposit dated to the later 2nd century CE.[65] These pieces are particularly interesting because they may simply reflect accidental losses from playing near water, a practice attested in both Britain and Asia Minor, but it is also possible that they were intentionally deposited in the well, either during a fit of pique at a substantial loss during play, or perhaps as a ritual offering thanking a deity for a win.[66]

Late antique gaming activity in villas may be represented, for example, by a single planar-convex glass counter unearthed in a refuse dump within the villa baths at Masseria de Carolis in Pollena Trocchia (NA).[67] Several dice as well as recut ceramic disks which may have served as either counters or as vessel stoppers from the same site remain unpublished.[68] Finds from this dump predominately date to 2nd through later 5th centuries CE, rendering the exact dating of these objects unclear, though it is worth noting that a majority of the pottery from these dumps is Late Antique in manufacture, and the same may hold true for the other material culture.

Most of the gaming-related finds from villas are even more broadly dated. For example, two glass counters and two bone dice were recovered at the loc. S. Maria

57 Blanco (2007), 194; Bruno, Carboni, Manderscheid (2011), 518.

58 Bruno, Carboni, Manderscheid (2011), 518. N.B a further board may have been found alongside the Casino Fede example but no further details are available at this time as these boards have only been summarily published.

59 Charlesworth (1985), 148, no. 36

60 Dyson (1983), 171, nos. 1-4.

61 Cool (2016), 164-166.

62 Poggesi, Famà (1985), 233, fig 140.

63 Poggesi, Famà (1985), 233, fig. 141.

64 Famà (1985), 240 and, 239, fig. 63.6.

65 Allason-Jones (1997), 254, nos, 142-143.

66 For Britain, a stone grid-type gaming board which was etched into the stone of a wellhead at the Chedworth villa, see the report in *Transactions of the Bristol and Gloucestershire Archaeological Society* 45, 1923, 285. For Asia Minor, see the example of the Place of Palms at Aphrodisias, examined by Russell *et al.*, this volume.

67 Penn (2018), 222, fig. 2, no. 25.

68 Vincenzo Castaldo and Ferdinando De Simone (Pers. Comms. February 2022).

villa by Lake Nemi (RM).[69] Four glass and three bone counters were identified at San Giovanni di Ruoti (PZ).[70] The glass assemblage from the villa at Faragola in Ascoli Satriano (FG) included a green glass counter.[71] A single cubic bone die was found in the villa at Poggio Gramignano (TR),[72] and lozenge-shaped die was recovered at Boscoreale (NA).[73] Occasionally, counters are also recovered in sites identified through field survey, as at the Remester 3 site in the territory of Remedello (BS), probably a villa, which has yielded a single glass paste counter.[74] None of these finds can be closely dated.

It is perhaps unsurprising that villas have produced substantial evidence for ludic activities – even if the survey presented over the previous paragraphs is clearly incomplete. The term 'villa' encompasses a wide range of structures and installations with a dizzying array of different scales and plans: some of these were clearly the country homes of the elite, though others were more likely rustic farmhouses, often belonging to absentee landlords.[75] The rich and sometimes monumental architecture associated with many villas has captured the attention of generations of past scholars and has resulted in them receiving the lion's share of attention in the history of studies of the countryside of Roman Italy. Additionally, many villas were owned by elites who often spent much of their time in urban environs as the places where power was exercised, business was done, and careers were made.[76] We should as a result expect a degree of knowledge transfer in all spheres—including about board games—between cities and these relatively elite rural settlements. Yet not everyone living in a villa was a member of the elite. After all, villas were worked, maintained, and made possible by a much larger population of administrators, labourers, and craftspeople, both free and enslaved. It may therefore be tempting to view the quantity of gaming finds from villa sites as reflecting practices of play among these wider communities, though this may have been mediated by contact with the city through a villa's elite owner.

Play was not restricted to the rural communities living in villas, and there is some evidence for play even among peasant communities living in relatively modest circumstances. Our understanding of the archaeology of rural everyday life further down the social hierarchy is considerably less well developed. Although this picture is now beginning to change, not least thanks to the work of the Roman Peasant Project, the result remains that we currently still lack a clear picture of the lived experience of ordinary people across much of the Italian Peninsula.[77]

It is therefore striking that, despite the very small number of non-elite rural dwellings which *have* been excavated, there is some evidence for artefacts linked to games and play. These include, for example, bone die and a counter at Podere Marzuolo (GR) in Tuscany, which were recovered in a building fill dating to the 2nd or 3rd century.[78] Similarly, the farmstead at Mezzocorona (TN), right at the northern border of Italy and *Raetia,* has yielded two counters (one in black glass and another in pink stone) and a worked ovicaprid astragal with a perforation allowing the insertion of a weight to aid gameplay (see fig. 6).[79] To be clear: these sites present only slender evidence, but they appear to suggest that gaming activities were both known to and undertaken by non-elite rural communities, even peasants, in Roman Italy.

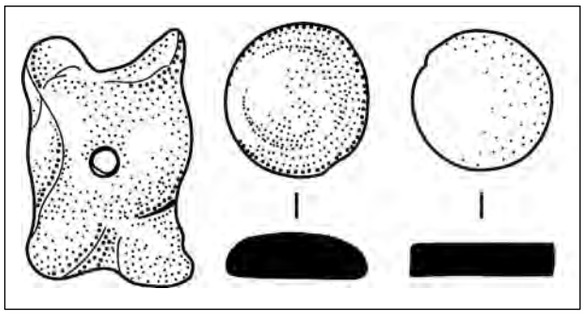

Fig. 6. Counters and a worked ovicaprid astragal from Mezzocorona (TN). Not to scale (Redrawn by Summer courts from Cavada (1994), *323, Tav. XVII, nos. 17-19.).*

This preliminary review of the social distribution of play-related material evidence from settlements in the Italian countryside hints that play and games were practiced in at least some parts of rural society. This picture appears to suggest that despite real material inequality in the countryside, people rich and poor had access to gaming materials. Where this material is absent, it cannot be definitively proven that people were not playing games, since the brief survey provided above is reliant on capturing evidence for archeologically visible "normative" ways of play which were more easily accessible to those with the means to purchase or otherwise acquire the necessary accoutrements. However, several archaeologically invisible methods of play were possible as well, which means that we cannot assume that those at the bottom of the social hierarchy of the Roman countryside were excluded from play and games, even when there is an absence of surviving evidence for play.

69 Counters: Poulsen (2010), 367, nos. 107-108 Dice: Moltesen (2010), 490, nos. 11-12.

70 Simpson (2016), 54, nos. 356-362.

71 Francesca Giannetti (Pers. Comms March 2002).

72 Soren *et al.* (2022), 166-167.

73 Feugère, Picod (2014), 40-41.

74 Botturi (2017), site 230.

75 For recent surveys see e.g. Marzano (2007); Marzano, Métraux (2018).

76 Marzano (2007), 4.

77 Bowes (2020).

78 Bowes (2020), Vol. 1, 344 with 348, fig. 10.72.

79 Bassi, Demetz, Endrizzi, Oberosler (1994), 146-147.

FUNERARY CONTEXTS

Additional evidence for who played games in the countryside is also visible in the funerary record. Funerary evidence for play requires careful handling because, as is well known, the dead do not bury themselves—grave assemblages and tombs are created and selected by their survivors, even if the living may impart their desires about how they wish to be buried before passing.[80] As a result, we cannot be sure that the deposition of gaming accoutrements with the deceased directly indicates that a given individual was engaged in play in life. Yet the decision to bury someone with objects linked to gaming still indicates that those responsible for a funeral: (i) had access to relevant material culture; (ii) felt able to part with it; and (iii) considered it appropriate and meaningful to include in a grave.

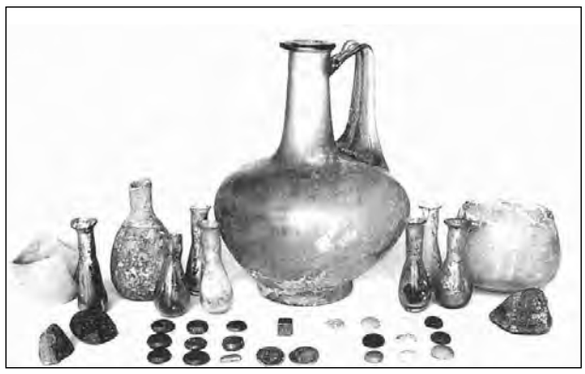

Fig. 7. Part of the artefactual assemblage, including counters and dice, as well as ceramic and glass vessels from the so called: grave of the "Giocatore" at Prunea di Sotto, Sant'Ambrogio di Valpolicella (VR) (From Bassi *(1996), 8, fig. 1).*

Unlike villas where we can only posit broad classes of individuals who may have been present and had access to a gaming board on the premises, funerary evidence gives us direct information about specific individuals who played, and their social class. One of the most evocative examples of a funerary context containing gaming materials in the countryside of Roman Italy is provided by a grave group from Prunea di Sotto in Sant'Ambrogio di Valpolicella (VR).[81] This grave contained 27 glass counters (white, blue, black, and green) and eight bone counters, as well as coins and ceramic and glass vessels (fig. 7). This grave clearly belonged to an individual of relatively high social status, as appears to be the pattern for complete gaming sets placed in graves elsewhere in the Roman world.[82] This set, then, would seem to reflect evidence of play for a relatively privileged member of local society. But less richly-appointed graves, like Tomb 40 at Cascina Trebeschi, Manerbio (BS) which contained just one glass counter alongside a handful of ceramic vessels, could indicate play among people of more modest social station.[83] It has, however, been noted in other parts of the Roman world that counters and dice are relatively uncommon in grave good assemblages, and though no systematic study of burials containing gaming kit has been undertaken in Italy, it seems the same holds in this area too.[84] Additionally, in Britain available evidence indicates that durable gaming equipment may have become less prestigious after the Early Empire, and many graves contain either single counters or dice or a small groups of these items.[85] Future research may examine if a comparable pattern emerges in Italy.

Gaming boards could also be (re-)used in funerary contexts. The strongest evidence for this is a board found in the catacombs *ad Decimum* near Grottaferrata (RM) on the tenth mile of the Via Appia, to the south of Rome. The board itself is now only partially preserved (fig. 2c), but Ferrua was able to identify two words: "valens --- vincas," which permitted him to attribute it to a wider type which reads in full: "Circus plenus / clamor magnus / valens vincas." ("The circus is full / a great applause / being strong, may you be victorious").[86] As we have already seen, it has been questioned whether gaming boards in the catacombs were actually intended for play, or whether they simply reflect the funerary symbolism of games in early Christian society.[87] Whichever side of the debate we come down on, though, the presence either of a gaming board or an object which mimics gaming boards in the countryside of Roman Italy indicates an understanding of the principles of board games, or otherwise the symbolic valence of the gaming board would be irrelevant.

These catacombs probably served a small road station, first known as *vicus Angusculanus*, attested by epigraphic evidence in the vicinity, though the name perhaps later changed to *ad Decimum*.[88] This later name reflects the importance of the settlement's position at the tenth mile of the via Latina, at the point where it intersected with the via Valeria, marking an important point in the communication network of Roman central Italy. The catacombs *ad Decimum* hosted around one thousand burial spaces, dating to between the 3rd and 5th centuries, indicating use over a relatively extended period. This, then, was clearly a Late Roman rural context, but no more detailed chronology for the gaming board itself can be established. Moreover, the board itself is suggestive of elite status, given that purchase and professional carving out of a substantial piece of stone is a costly

80 Parker Pearson (2003), 3.

81 Bassi (1996).

82 For this phenomenon in Britain, see e.g. Cool (2008), 107-109.

83 Portulano, Ragazzi (2010), 59, 114-115.

84 Philpott (1991), 185.

85 Cool (2008), 107-109 provides a useful overview of the evidence, but see now also Penn, Courts (2022).

86 Ferrua (2001), 139, no. 109.

87 Schädler (2021).

88 Palombi (2006).

undertaking, unlikely to have been accessible to large parts of the population.

The funerary connotations of board games—as something, which like life, must come to an end—across the ancient world is well documented.[89] The placement of gaming kit in graves can, as a result, be read on multiple levels. On the most basic level, gaming accoutrements were placed in or with graves as prestige items in order to denote the status of the deceased and their survivors, as well as perhaps reflecting memories of activities undertaken during their lifetimes and this practice was emulated further down the social chain by the less affluent, who sometimes included (or received) individual counters or dice in graves.[90] Yet funerals in Roman culture were intensely public affairs, intended to be attended and/or seen not just by the immediate family but by wider households and communities.[91] In this context, gaming kit were not just prestige goods, but may also have alluded to the skill or habits of players during life. Such symbolism would have derived some of its power from shared knowledge of what these items were for, and this suggests that games and play were familiar activities among many living the countryside. While evidence for elite play in the countryside is perhaps most clearly visible, but some evidence could also indicate non-elite play.

CONCLUSIONS

So, did people play games in the countryside of Roman Italy? This chapter had demonstrated that they did. This knowledge is the first step towards reversing the scholarly bias towards urban studies of play in the ancient world. This does not mean, of course, that the material circumstances and experiences of play were the same for everyone living in the countryside; the owners and/or occupiers of monumental villas equipped with permanent, well-cut stone gaming boards would have had a very different experience to those further down the social chain who played on boards made of perishable materials or even on temporary boards scratched in the dirt or laid out with paint or charcoal. Nor does it mean that the experience of playing in a domestic space, whether a villa or more humble farmstead, would have been the same as playing in a small town or village, or even in the more public venues presented by rural sanctuaries. Given that most of the population of the Roman Empire lived in the countryside, we must do more to explore the everyday lived experiences of these as of yet understudied individuals and communities. Though in recent years scholarly interest has begun to focus on everyday life in rural settings, much work remains to be done. It is my hope that this chapter will encourage not only scholars concerned with play in the past but also researchers concerned with other aspects of Roman social life to incorporate and interrogate rural data whenever possible.

The evidence presented in this contribution must be supplemented with a wider dataset drawn from a larger number of rural sites across Roman Italy in future. Such an undertaking will facilitate meaningful comparison with the lived experience of populations in other provinces, like the work already undertaken by the Rural Settlement of Roman Britain project. The paucity of *published* evidence from Roman rural sites in Italy underlines the ongoing need for fuller publication of small finds. The publication of small finds assemblages is crucial for obtaining the large quantities of data necessary for writing social history in Roman Italy. This holds true for many categories of small finds but is especially important for items related to gaming. For too long, such material has been considered trivial and not worthy of serious scholarly attention. As a result, gaming-related objects have not been studied systematically, and our understanding of the social and cultural aspects of gaming in the past therefore remains limited. However, recent scholarship has begun to address this gap, recognizing the importance of gaming-related material as a source for studying social dynamics and cultural practices. Therefore, it is essential that archaeologists and scholars prioritize the publication and analysis of these materials to gain a better understanding of Roman gaming and its role in shaping society and culture in Italy and beyond.

Despite the need for more investment in finds publication in future, the evidence for material culture recognisably related to gaming from the countryside of Italy under the Roman Empire suggests a degree of penetration of gaming-related practices in non-urban areas, at sites ranging from small towns and sanctuaries to villas and even the humblest non-elite dwellings. Roman board game habits were shared between urban and rural areas, indicating elements of a shared "ludic culture," as indicated, for example, by the range of overlapping gaming board designs known in both milieus. The similarities in gaming materials and practices suggest that the playing of board games was something people did regardless of where they lived. Further research is needed to better understand the nuances and extent of this shared ludic culture, but the evidence presented in this chapter suggests that Roman board game habits were a significant aspect of daily life and a means of socializing and connecting with others, regardless of one's place of residence. While we should not exclude the possibility of variations in local gaming practices or rulesets, portable material culture linked to gaming from rural sites is sufficiently similar to the

89 Schädler (2021); Dasen, Mathieu (2021); Banducci (2015); Widura (2015), 58-71; Whittaker (2004).

90 On gaming pieces and memory, see Penn, Courts (2022).

91 On Roman funerals: Hope (2009), 65-96, particularly 89-93.

evidence presented from the many Roman-period urban case studies in this book that we can posit that ludic culture was familiar in both town and country.

Methodological approaches to the archaeological evidence for Roman gaming require careful consideration of the ambiguity and potential biases present in the material. While dice, gaming counters, gaming boards, and astragals provide important evidence for ancient gaming, they could have also been used for other purposes, making identification of gaming-related material difficult. Furthermore, our knowledge of gaming is heavily influenced by urban-centric biases found in texts, which means we know more about gaming practices in towns — using these very same elements of material culture — than in rural areas. This produces a tension, as it is possible that forms of entertainment in the countryside, gaming-related and otherwise, exist that we do not yet know how to identify archaeologically. We must therefore consider whether there could be evidence of gameplay in rural areas that we do not recognise as such because we are thinking with an "urban" mindset, and whether the similarities in gaming materials found in both town and country are simply a function of the materials that have survived, such as counters, dice, or boards carved or scratched into stone. Further research and methodological developments are needed to address these issues and expand our understanding of ancient gaming beyond an urban-centric perspective.

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Ritual offerings or divination tools? Objects for play from the Roman Republican sanctuary of Diana in Nemi[1]

1. THE CONTEXT

1.1 The sanctuary and the divination activity

The sanctuary of Diana in Nemi is the largest of the monumental terraced sanctuaries of Republican Latium, covering about 5 ha across several levels. The site is in close dialogue with the surrounding landscape: the slopes of one of the craters of the Vulcano Laziale geological complex, south of Rome, the central part of which is occupied by a deep volcanic lake. The sanctuary belonged to the territory of the ancient Latin city of *Aricia*, hence the epithet *Aricina* given to the goddess Diana venerated there, together with that of *Trivia* and *Nemorensis*. The latter name derives from the spatial connotations of the area: a dense and dark wood (*nemus*) far from the urban center and reachable via a byway of the *via Appia*, which in its final stretch skirted the lake. During in the 6th century BCE, a *lucus* (sacred clearing) inside the *nemus* was dedicated to the goddess; a temple was built on this land and around it increasingly monumental structures and buildings developed until it reached its greatest extent in the 1st century CE (fig. 1). It is not possible here to retrace all the characteristics and diachronic evolution of the sanctuary[2] and we will necessarily limit ourselves to the essential details which will allow us to explore the meaning of the gaming-related objects found at the site.

Despite the lengthy life of the sanctuary and its large size, the objects presented in this paper belong to a relatively defined space and time. In fact, these are presumably ritual gifts datable between the 3rd and 1st centuries BCE coming from the area surrounding the temple of Diana. This is the only place in the sanctuary, in fact, from which we have evidence for offerings (fig. 2), demonstrating that the act of depositing such objects was concentrated in significant and predetermined areas. The chronological range (3rd-1st century BCE) straddles the monumentalization of the sanctuary as a terraced complex. At this time there must have been an artificial water basin in front of the temple, located between the sacred building and the lake; of this basin only traces of its architectural components remain, since it was probably destroyed during the last building phase in the area; in Julio-Claudian period the entire area in front of the temple was repaved and levelled, mixing materials offered to the goddess and materials previously stored elsewhere with the backfill.

One of the lesser-known aspects of the sanctuary of Nemi is that of the oracular activity which probably took place there. This was certainly not a major feature, but it was a feature common to many of the

1 Section 1 is by F. Diosono, Sections 2 and 3.1 by L. Lancini, and 3.2 by F. Grossi; Section 4 is the work of all three authors.

2 For a summary, see Braconi, Coarelli, Diosono, Ghini (2014); Diosono (2020a); Diosono (2021), with previous bibliography.

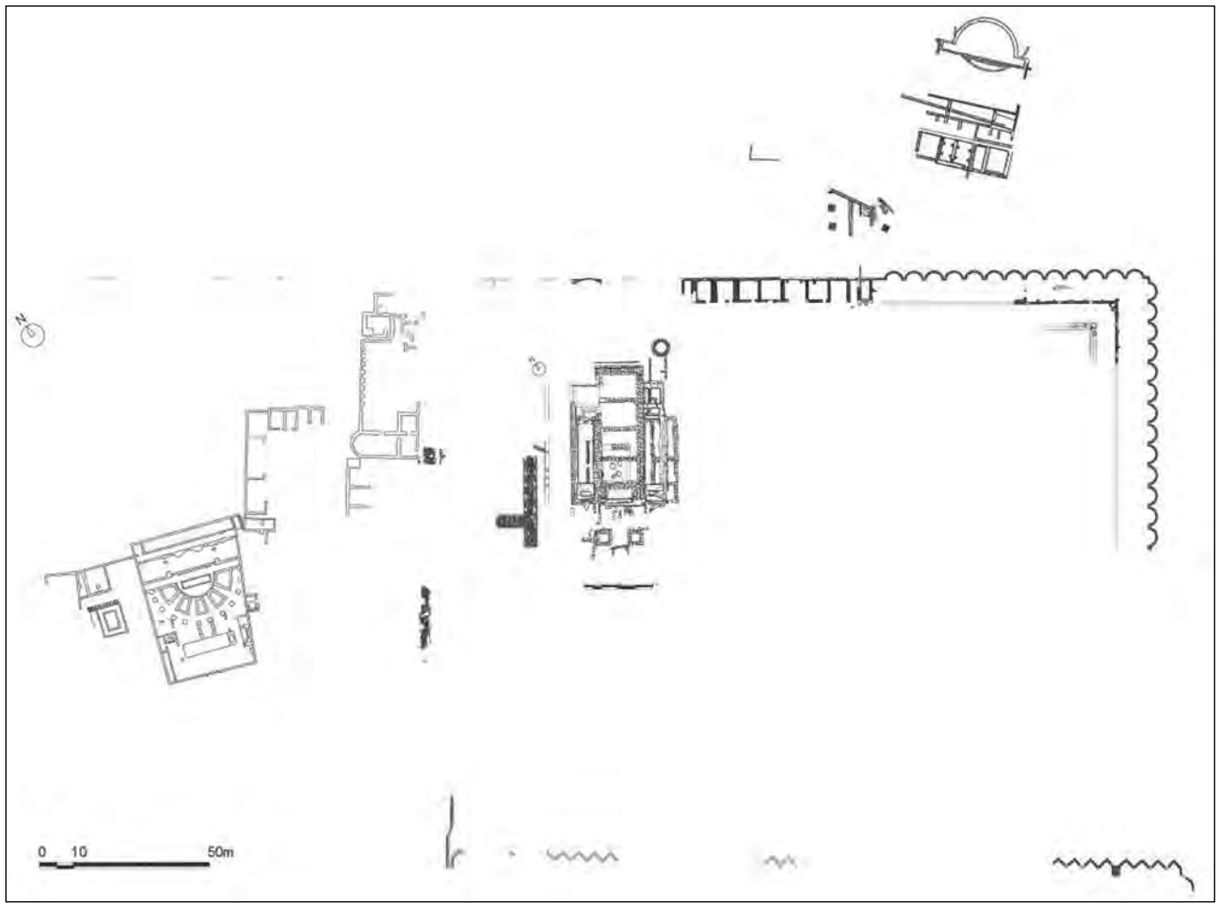

Fig. 1. The sanctuary of Nemi at its maximum extent: a plan of the structures known so far (from Diosono *2021, 100, fig. 2).*

other sanctuaries in Latium. The best known in this regard is undoubtedly the sanctuary of Fortuna at *Praeneste*,[3] where the drawing of *sortes* was entrusted to a child and divination was probably one of the greatest attractions for visitors. But oracles or in any case activities related to the prediction of the future through cleromancy are also attested in other sanctuaries in central Italy.[4] In the case of Nemi, the presence of oracular activities is attested by a large, fragmentary marble inscription[5] from the 1st century CE which reports:

A(ulus) S[ulp]ic̣ius A(uli) [f(ilius)] As[clepiodotus]
[--- aed]ic̣lam Dia[nae ---] f(ecit)? col[men
marmoreu?]m et sub sco[---]
[---]avit sortib[us ---]it d[---].

(Aulus Sulpicius Asclepiodotos, son of Aulus, built the small shrine for Diana with marble roofing and under…with/to the *sortes*…)

Among the structures built in the area around the temple dedicated to Diana there was therefore also a building connected to *sortes*. As Jacquelin Champeaux has observed, the Latins *sors* indicated both prophetic tablets and response to them, so that "les oracles que l'on consulte çà et là, dans les diverses régions d'Italie, sont, par définition, et jusque dans leur nom, de type cléromantique".[6] Ancient sources also refer to some sort of oracular role for Diana *Nemorensis* (who is furthermore linked to Hecate,and she had a liminal aspect in connection with the Underworld).[7] Indeed, Ovid mentions a soothsayer of the goddess: "No such thing results, we know, by Diana's command, yet the prophet has the wherewithal to live".[8] Other divinatory practices hypothesized in the area of Lake Nemi between the 2nd and 3rd century CE are linked to the high frequency of oil lamps,[9] which in a religious context were used in antiquity both for mantic purposes and for night-time rituals. In addition to the numerous pieces found inside the sanctuary, hundreds of lamps were recovered from the bottom of the lake, which is not far beyond the limits of the sanctuary

3 The rite is described by Cicero, *On Divination* 2.41. Zevi (1982); Coarelli (1987), 48-69.

4 Champeaux (1990a and b); Maggiani (1994); Gordon (2021), 178-181. For the drawing of *sortes* from the hands of a child in Rome, see Tibullus, *Elegies* 1.3.9-13.

5 *CIL* 14, 4184; *SupplIt Imagines - Latium* 1, 104 ; *EDR* 147045.

6 Champeaux (1990), 271.

7 Diosono (2020b), 149; Lancini, Diosono (forthcoming).

8 Ovid, *Ex Ponto*, I.1.41-2 (trans. A. L. Wheeler, Loeb): "*scimus ab imperio fieri nil tale Dianae: unde tamen vivat, vaticinator habet*". The identification with Diana *Nemorensis* is proposed by A. L. Wheeler, Loeb translator and editor (n. 7, p. 267).

9 Diosono, Cinaglia (2016); Diosono (2020b).

Fig. 2. Plan of the temple of Diana with indication of the excavation sectors mentioned in the text. Building Phase 1 in blue; Phases 2a and 2b in red and orange; Phase 3 in green (from DIOSONO 2021,102, fig. 4 modified by author).

itself. A sacred space in and of itself, the lake could have represented a means to communicate with the Underworld through the act of throwing offerings in the water, and it has been already noted that the lamps from the lakebed could have been used as a divination tool for lychnomancy.

1.2 The votive gifts

The materials presented in this contribution come for the most part from excavations conducted in Nemi between 2009 and 2019 by the University of Perugia and Ludwig-Maximilian University of Munich in collaboration with the former Soprintendenza del Lazio. Since 2014, thanks to the project by F. Diosono *Nemi – Das Heiligtum der Diana bei Rom: Kult, Topographie, Architektur, Organisation, Geschichte* supported by the Alexander von Humboldt Stiftung, alongside ongoing field research, it was possible to undertake new analysis of materials found during the various excavations conducted in the sanctuary from the middle of the 16th century until World War II; the study of these objects, which are about to be published together with that of the results of recent excavations, has involved a large number of scholars, museums, and scientific institutions and has made it possible to recontextualize these objects, comparing them with those found in documented and reliable stratigraphic contexts. It is clear that finds recovered mainly in the second half of the 19th century have neither a stratigraphic context nor a precise findspot, although we know the position of the excavation trenches from that period.

Among the finds, more than a thousand artefacts, including complete objects and fragments, can be interpreted as votive gifts. These include bronze and ceramic statues and statuettes and objects of various types, materials, and functions (clothes and accessories for men and women; jewels; coins; decorative objects; containers; tools) left at the temple as gifts to Diana. Substantial quantities of pottery were also left near the temple after being used for cooking, eating, drinking or as containers for food, drink, or perfumes. The offerings also included gifts in perishable or organic material that could only in some cases be identified during the excavations. These gifts are linked to the various characteristics of Diana and the related spheres of protection that she could exercise in the interest of the people who frequented the sanctuary. As a result, the study of these objects, integrated with that of the literary and numerous epigraphic sources, is allowing us to better clarify various aspects of the cult of Diana *Nemorensis*. In this contribution, we have chosen to call them ritual/sacred offerings/gifts as a terminological choice linked to their function, which was not, as we shall see, in itself votive — that is, necessarily linked to a vow expressed by the donor.[10]

Here, we will focus on the relationship that the goddess of Nemi had with the world of childhood. The material evidence indicates above all a connection with the birth of children and the protection of women in childbirth[11] (including a dedication by a *nutrix*;[12] statuettes of family groups with infants and of babies in swaddling clothes; a rare bronze representation of a nursing mother). However, these types of representations make up a small percentage of this class of objects, where adolescent and adult men and, even more so, women predominate; statuettes of children or objects that may refer to the transition from childhood to adulthood (such as some bronze *bullae* offered in the sanctuary on the occasion of this event) are rarer. Finally, representations of children's toys are very uncommon at the site; only two statuettes of donors carrying spherical objects have been found, which (in the absence of paint on surface that would have helped identify them) could be *pallae* (balls) or fruit, iconographic types both attested in the votive statuary of Republican *Latium*. Miniature vessels also appear in limited quantities and above all they are such a typical feature of this period central Italy in so many different cultic contexts that it does not seem correct to interpret them as toys for children; even if they had function before they were brought to the Sanctuary of Nemi, they would then be the only toys for infants present (as discussed below).

Although no children's toys have been recovered from archaeological excavations, some artefacts linked to board games have been found among the ritual offerings to the goddess. In particular, a single bone die has been found and a huge quantity of glass, stone, and clay counters were dedicated to Diana. It is also worth highlighting that astragals have been found at the site, and this class of objects can be linked to games since their use for gambling is well known. All these finds will be presented in the following sections. Each piece will then be interpreted, placing due importance on the specific sacred context.

2. BOARD GAMES

2.1. Dice

A single bone die (n° OLA38 – fig. 3) was found in Sector A (Fig. 2) in a very interesting layer, US 8750, as will be detailed below. A few astragals and counters together with other offerings were found in the same layer. The small die (1.2 x 1.2 cm) was broken into five fragments and each side is marked with pips from one to six. Only the faces with two and three pips are poorly preserved.

10 The authors thank I. Baglioni for his helpfulness in discussing this topic from a historical-religious perspective.

11 Green (2007), 135-138.

12 *CIL* 1^2, 45.

2.2 Counters

More than 150 counters have been found in the Sanctuary, almost all of them from Sector A. Many are made with glass, but there are also a few stone and ceramic counters (fig. 4).

The stone counters are for the most part quite polished and one of the faces is clearly flattened to slide on a board. Apart from one larger black piece, n° PG2.1 (2.6 x 1.8 cm and 0.95 cm high), the other 33 counters have more or less the same dimensions (ca. 1.1 x 1.6 and ca. 0.5 cm high). They have an oval/round (for example n° PA1 and PA3) or irregular shape (often tending towards a triangle, such as n° PA133) and, even if these counters are made of natural materials, they seem to have been chosen for their colour, since we can clearly distinguish light and dark stones.

Only two ceramic counters were discovered during the excavations: they are both very similar, approximately round, with diameters of 2.5 cm (n° PK1) and 2.9 cm (n° PG1.1) respectively, and their bottom sides are slightly concave; they are 0.5 cm high. The first one, from Sector K, is broken, and its clay is a brown Munsell 2.5YR 5/6 with calcite and mica inclusions. The second one, from Sector G1, is a Munsell 2.5YR 2.5/4 (very dusky red), with more frequent mica, augite and *chamotte* inclusions. The second piece also shows traces of burning.

The corpus of game-pieces is completed by 124 glass and glass paste counters. They mostly come from Sector A. At least six types of glass counters can be identified (fig. 5):

Type 1: six glass paste round counters plus one fragment; diameter: ca. 2 cm (except one item of ca. 1.5 cm) and height: ca 1.5 cm. Colours: black, brownish, yellow, reddish, light blue, greyish.

Type 2: 70 round glass counters; diameter: 1-1.5 cm and height: 0.5 cm. Colours: cobalt blue, black, dark violet, transparent white, orange amber, light pale blue, turquoise, pale green, transparent pale yellow.

Type 3: 35 oval-shaped glass counters plus one fragment. Variable diameters: 1-1.5 x 1-1.5 cm and height: 0.6 cm. Same colours as Type 2.

Type 4: six rectangular glass counters; diameter: 0.9-1.2 x 1-1.4 cm and height: 0.6 cm. Five are dark coloured and one is white transparent but on the upper side there are some decorative white lines.

Type 5: two drop-shaped glass counters; diameter: 1.5-2 cm and height: 0.6 cm. The first one is pale green, but when dried the surface becomes brownish; the second one is transparent white.

Type 6: three glass counters, one round-shaped and two oval-shaped; diameter: 1.5-2 x 1-1.5 cm and height: 0.6 cm. They were made using a different

Fig. 3. The only bone die, 1,2 x 1,2 cm, Nemi OLA38, 3rd-1st century BCE, (photo and graphic L. Lancini).

Fig. 4. Lithic and clay counters, all dated 3rd-1st century BCE: a) Big lithic counter, 1,8 x 2,6 cm, Nemi PG2.1; b) Lithic counter with triangular shape, 1,6 x 1,2 cm, Nemi PA133; c) Lithic counter with round shape, Ø 1,1 cm, Nemi PA1; d) Clay counter, Ø 2,9 cm, Nemi PG1.1 (Photo and graphic L. Lancini).

Fig. 5. The six glass counter types, all dated 3rd-1st century BCE. 1) Type 1, Ø 2 cm, Nemi PA33; 2) Type 2, 1,4 x 1,2 cm, Nemi PA94; 3) Type 3, 0,95 x 1,3 cm, Nemi PA 115; 4) Type 4, 0,9 x 1,2 cm, Nemi PA29; 5) Type 5, dimension, Nemi PA78; 6) Type 6, 2,1 x 1,2 cm, Nemi PA25 (Photo and graphic L. Lancini).

technique: they are bicoloured and are composed of two types of glass, with a visible join: white transparent and light pale blue in one case, white and blue in the other two cases.

Type 2 is by far the most common within the sanctuary (representing 60% of the total) and most of the counters come from Sector A (fig. 2), which is enclosed by the walls of Phases 2 and 3 of the temple; they are from layers characterized by the presence of many other offerings. It is interesting to note that astragals have been found more consistently in layers where counters are frequent. For instance, US 8750 contained bronze statues, and fragments of a marble statue, ceramics, seven astragals, nine counters, and the only die from the site. These counters possibly represent an almost complete set of gaming pieces, which was maybe kept in a small box since in the same context many bone inlay elements belonging to a small piece of furniture were also found. Other important layers with a huge quantity of offerings are US 8930 and the underlying layer US 8929. Numerous bone inlay elements and a small key were found in US 8929, so the assemblage can be interpreted as the remain of a small chest that may have originally contained some smaller pieces, like counters and astragals. The underlying layers, USS 8975 and 8999, contained both astragals and counters. These layers are related to a wall built along the west side of the temple podium (USM 8613). Significantly, all the votive objects have been found beyond and outside this wall, which made it impossible to place them directly in contact with the temple structure. Other layers containing both astragals and counters and laying on this wall are US 8871 and the underlying US 8903, where traces of a hearth for sacrifices have been found.

In order to analyse these pieces, it is useful to group them on the basis of dimensions and shape:

Group A: ceramic and glass paste counters (Type 1). Group B: stone and glass (Types 2 and 3). Group C: glass (Types 4, 5, and 6).

The two ceramic counters are the largest found in the sanctuary, immediately followed by the glass paste counters (Type 1), which are just slightly smaller. Therefore, Group A counters were probably used for games that needed larger pieces and should be considered compatible with one another. Stone and glass counters (Types 2 and 3) share similar dimensions and have colours spanning from darker to brighter and they have consequently been grouped together (Group B). Due to these similarities, these pieces may have been compatible for use together in the same types of games. It is unclear if stone and glass counters (Types 2 and 3) were part of the same sets or if these finds instead represent sets of different qualities, the glass one perhaps being more expensive. In the absence of more data, we cannot be sure that Group A pieces and Group B pieces were used in the same gaming set, even if it remains possible that all the counters were used for the same game/class of games that were perhaps played on boards of different dimensions (larger for Group A, smaller for Group B). It is also possible that counters of a different size and material were integrated into the same set as pieces bearing a special function or as replacements after a loss.[13]

Group C comprises glass pieces that greatly vary in dimension, shape, and other features like colour or appearance. Overall, these counters are less common than other type of glass pieces. There are therefore three possibilities. Group C pieces could have been used in different games, or they could have been variations of Group B counters, a 'fancier' set perhaps, but for the same game. A third possibility is that Group C pieces could be used together with counters from Group B. In this last case it could be assumed that counters with uncommon shapes and colours were used to indicate specific meanings in the game or to represent pieces with a particular value or task.

It is not surprising that only one die has been found, since the most widespread game was *Ludus latrunculorum:* the two players had a set of counters each, and pieces can be distinguished by colours,[14] whereas *Ludus XII Scripta/Alea* required the use of dice.[15] Different colours could therefore be useful to distinguish the pieces of each player, but it has also been proposed that different colours implied different values and that players instead had counters of different shape.[16] Another possibility must be considered: the diversity of colours and sizes of these items make it possible that some of them were used for another purpose, for example as pieces of interior decoration.[17]

3. ASTRAGALS

Astragals (known also as knucklebones) are cubic/rectangular-shaped bones of the mammalian ankle joint; those of sheep and goats were used in several games in Greece and Rome, either as a token to be

13 See for example Penn, Courts (2022).

14 The earliest historical reference of this game is found in Varro, *De lingua Latina* X.22, even if more information can be found by reading the 7th-century bishop Isidore of Seville, *Etymologies* (XVIII.67). See also Schädler (2001); Austin (1934).

15 See Austin (1935); Schädler (1995).

16 Tilley (1892), 335. For these two games and for a comparison with another context where counters, dice, and astragals were found together, see Boțan, Nuțu (2009).

17 For this aspect see Cool (2016). The difficulties in identifying play-related objects that can have an ambiguous function and the importance of context for their interpretation has been highlighted recently by Pace (2022a) and Pace (2022b).

thrown or with a function like that of a die.[18]

3.1 Bone and glass astragals

In total, 44 bone astragals and five glass astragals have been found in the sanctuary (fig. 6):

Sector A: five glass astragals and 31 bone astragals.

Sector C: one fully preserved bone astragal, one almost fully preserved and one fragment. OLC1 is a good exemplar of a reworked, smoothed, polished astragal.

Sector F: one fully preserved bone astragal and one fragment.

Sector G1: one partially preserved bone astragal, with one side probably bearing traces of burning.

Sector G2: one partially preserved bone astragal.

Sector H: one partially preserved bone astragal, with one side probably bearing traces of burning.

Sector K: five bone astragals from different layers. Two are well preserved while the others are in a poor state of preservation.

All the glass astragals have the same dimensions (length: 1.5-1.8, width: 1 cm, depth: 0.9 cm). They are all made of glass of different colours (light pale green, cobalt blue, amber brown, light pale blue, green aquamarine) and come from different layers, but it is interesting to note that they share the same mould: it could be argued that all these items were manufactured by the same workshop, possibly located near the sanctuary. The 31 bone astragals of Sector A come probably from the same ovo-caprid species since they have a dimension of ca. 2.6 x 1.8 x 1.2 cm or 3-4 x 2 x 2-2.4 cm.

Once again, Sector A, where large quantities of counters have been found, is characterised by the highest quantity of astragals. The presence of a hearth and charcoal residues indicates that sacrificial practices were performed in the area, such as for layers USS 8750, 8999, 8879, and 8817. Other layers such as USS 8930, 8929, 8871, and 8903 are clearly connected with the above-mentioned wall USM 8613, or they are related to the raising of the floor level for the temple in Phase III (US 8045). Only a few astragals come from other sectors. They probably come from the same ovo-caprid species and their dimensions span from 1.7 x 1.7 cm to 4 x 2.2 cm and vary in in height from 1.5-2.2 cm, except for two large astragals measuring 6 x 3.8/4.3 x 3/3.4 cm from Sector K.

Most astragals are polished (such as n°OLA11 and OLA21), some show clear signs of burning (such as n° OLA7 and OLA8), and a few have been re-

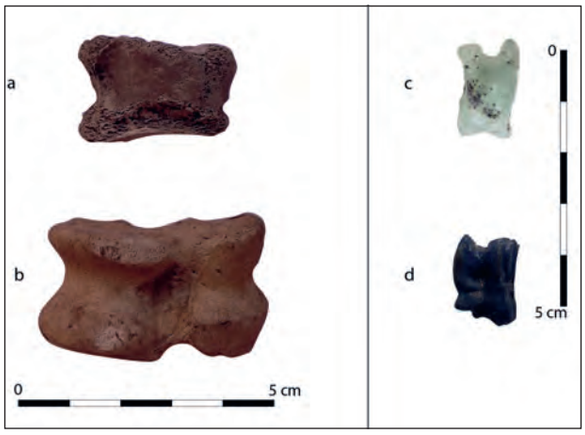

Fig. 6. Types of astragals, all dated 3rd-1st century BCE: a) Burnt astragal, 1,3 x 2,9 x 1,8 cm, Nemi OLA7; b) Polished astragal, 2,4 x 4 x 2,2 cm, Nemi OLA11; c) Glass astragal, 0,9 x 1,8 x 0,9 cm, Nemi VA4; d) Glass astragal, 0,9 x 1,5 x 1 cm, Nemi VA2 (Photo and graphic L. Lancini).

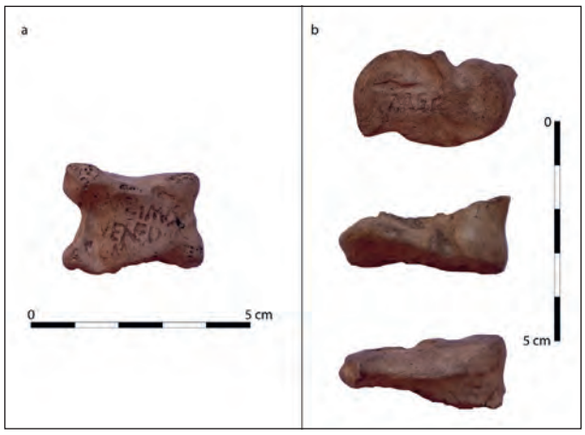

Fig. 7. Inscribed bone astragals, all dated 3rd-1st century BCE: a). Bone astragal, 1,7 x 3 x 2,1 cm, Nemi OLA13; b) Bone astragal, 2 x 3,5 x1,4 cm, Nemi OLA16 (photo and graphic L. Lancini).

worked and polished, like OLA28 and OLA43. One piece presents a green mark (n° OLA25) which has been interpreted as the result of prolonged contact of the astragal with a copper alloy object. Similarly, one of the inscribed astragals,[19] OLA 13 (fig. 7, a) bears a green mark as well. The inscription on this astragal is on the broad concave side (called in ancient Greek *hyptios*) and it is on two lines: the first line reads *SINUS* and the second line *VENER*. The second inscribed astragal, OLA16 (Fig. 7, b), is only half preserved; on the lateral side called *koos* (the only one entirely preserved) are the letters *MEC*, an opened *P* on the broad convex side called *pranes*, and *VE* on the *hyptios*. Since half of this astragal has not survived, there were probably other letters in the two other sides. Research has not yet allowed us, however, to establish the exact meaning of these inscriptions.

18 For summaries of the ancient games played with astragals see De Nardi (1991); Schädler (1996); Carè (2009-2010), 32-37; Bianchi (2015).

19 The authors thank L. Benedetti and C. Molle for their assistance in reading the inscriptions.

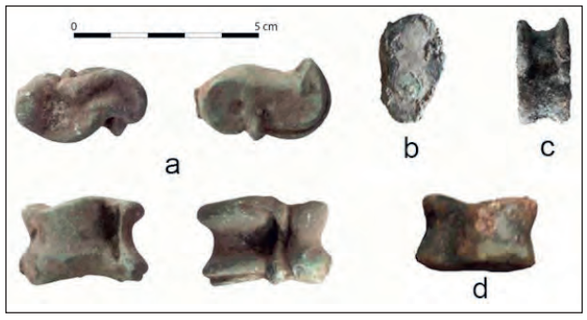

Fig. 8. Bronze astragals, all dated 3rd-1st century BCE. A) Bronze astragal, 3,6 x 2,1 x 1,6 cm, Nemi BRK2 from US 9563; b) Bronze astragal, 2,7 x 1,35 x 1,5 cm, Nemi BRK1 from US 8971; c) Bronze astragal, 2,75 x 1,2 x 1,5 cm, Nemi BRA1 from US 8705, III-I c. BC; d) Bronze astragal, 3,2 x 1,6 x 1,7 cm, Nemi BRG2_1 from US 9092 (photo and graphic F. Grossi).

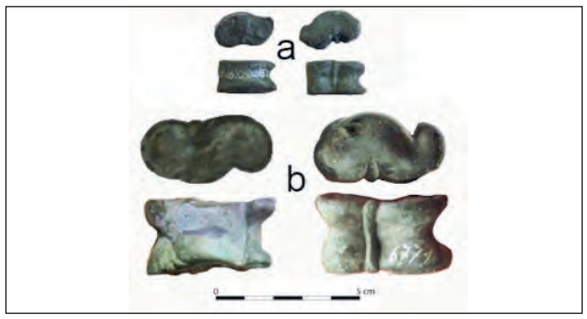

Fig. 9. a) Bronze astragal (2 x 1,2 x 1 cm), from Nemi in Nottingham Museum dated 3rd-1st century BCE; b) Bronze astragal (4,8 x 2,8 x 2,3) decorated with a silver spear from Nemi in Villa Giulia Museum, Rome, dated 3rd-1st century BCE (photo and graphic F. Diosono and F. Grossi).

3.2 Metal astragals

Several bronze astragals have also been found at the Sanctuary of Diana in Nemi (fig. 8):

- Sector A: one fully preserved astragal from US 8705, with two flat sides, one concave and one convex (BRA1).

- Sector G2: one fully preserved astragal from US 9092, with two flat sides, one concave and one convex (BRG2_1).

- Sector K: two fully preserved astragals, one from US 8971 with two flat sides and two concave (BRK1) and one from US 9563, with two narrowed sides, one concave and one convex (BRK2). Probably from the same sector, but found during earlier excavations, are two other fully preserved copper alloy astragals, which we will present below.

As we can see, metal astragals make up only a small proportion of the total number. They have been sporadically found along the west side of the temple (Sector A) and inside the podium of the temple itself (Sector G2), but especially in the layers positioned in front of the temple (Sector K).

All of them are fully preserved and very similar, but with small differences in their shape, size, and details. For example, the astragal from Sector A (BRA1) is fully cast and well-shaped, but it has smooth and flat sides, with rounded edges; moreover, it is overly symmetrical, resulting in a recognizable but idealized shape. On the contrary, the copper alloy exemplar from the inner space of the sanctuary in Sector G2 (BRG2_1) is also full cast and, again, has a recognizable shape, though less defined than the first one. It measures 3.2 cm in length, 1.6 cm in width, and 1.7 cm in height, while the astragal from US 8705 is 2.75 cm in length, 1.2 cm in width, and 1.5 cm in height. Neither of these examples have been conserved and remain encrusted in many layers of dirt and deposits that make it very difficult to examine them in detail.

The two examples from Sector K show some differences in dimensions and production: one is 3.6 cm in length, 2.1 cm in width and 1.6 cm in height (BRK2, US 9563), the other is 2.7 cm in length, 1.35 cm in width, and 1.5 cm in height (BRK1, US 8971). Both are fully cast, but BRK2 is more defined and detailed, with its narrowed sides indented with cavities and protuberances, like a real astragalus bone.

To complete the picture, there are two others copper alloy astragals, one in Nottingham and the other in Rome (fig. 9). The first one became part of the core collection of Nottingham City Museum (Nemi Collection, inv. n. NCM 1890-1355/651) in 1886 thanks to Sir John Savile Lumley, British Ambassador in Rome, after his excavations at Nemi.[20] The second one was the property of Prince Orsini, the landowner of the area where the Sanctuary was located, from which the Italian ministry purchased part of the materials found during excavations between 1886 and 1895 (Museo di Villa Giulia, inv. n. 6771).[21]

The astragal in Nottingham measures 2 cm in length, 1.2 cm in width, and is 1 cm thick, meaning it is slightly smaller than the others: it is fully cast, and it has a very recognizable shape with two flat sides, one concave one and one convex one (Fig. 9, a). The astragal in Rome (Fig. 9, b) measures 4.8 cm in length, 2.8 cm in width, and is 2.3 cm thick, so it appears larger than the others. It also has very unusual features, not only because it has smooth edges with detailed protuberances, but also because it is decorated. On the convex side there is a hollow in the form of a small spear with a plain shaft and a leaf-shaped head. The hollow is filled with silver to create a chromatic contrast with the copper alloy of the base. The spear is one of the attributes of Diana *Nemorensis* along with the bow and arrows and the torch.

Both these objects are without archaeological contexts: since they were found during excavations in the 19th century, it is impossible to provide

20 *Mysteries* (1983), 9-14.

21 *Mysteries* (1983), 21-24.

further information also about their provenance. Nevertheless, considering what we know about antiquarian excavations and research at Nemi, it is very likely they were found in the front area of the temple, and for this reason we are inclined to consider them among the finds from the space that is now known as Sector K (in which 19th-century excavation trenches have been identified). The astragal now in Rome could be the most significant example of all the astragals from the site, since the spear is one of the symbols connected to the goddess Diana.

Metal astragals have long been known and have been studied for the connection between their features and the context of provenance. Many hypotheses have been proposed to explain their daily use, their function, and their presence in different contexts, but we remain far from reaching a consensus. Several key questions are still to be answered: since it is not hard to obtain astragals from animals, why would someone have made artificial ones? And, moreover, why make one with different and, sometimes, very precious materials?[22]

For metal astragals, some scholars have shown a link with ancient metrology, based both on the fact that there is a similarity between the Latin words *talus* and *talentum*[23] and the weight of a knucklebone from Ras-Shamra/Ugarit: since this lead-filled object weighs exactly 30 times the weight of a local coin, it fits perfectly within the local metrological system and it may have been used for balancing goods in trading.[24] Other finds support this theory, like the giant bronze knucklebone from Susa: this object has a dedication from two citizens of Miletus dating to the third quarter of the 6th century BCE that seems to suggest not only it was part of a pair, but also that it was very significant, since it was a gift to Apollo. Oversized in dimensions, it is provided with handles and scholars agree it was formerly part of the property of the Sanctuary of Apollo in Didyma, near Miletus, and which Herodotus records was taken away by the Persians in 494 BCE.[25] It measures 23 x 37 x 21 cm and has a weight of around 93 kg, which corresponds to 220 *minae* in the local Milesian currency.[26]

A second theory considers the possibility that astragals were used as a means of exchange in Greek pre-coinage society: they were not true coins but could have been exchanged as a primitive kind of currency in transactions[27]. Barbara Carè, drawing on the work of Mario Alinei, explains the evolution from bone to metal, writing that "in this perspective, he postulated a passage from the natural form to a more or less realistic metallic reproduction - in analogy with objects of certain pre-monetary value - and solicited the systematic metrological survey of the evidence for a better understanding of this class of materials".[28]

Finally, there is the possibility that metal astragals were offerings or ritual gifts, taking on a special role and changing their meaning depending on context: this could be the case at Nemi, where the finds need to be related to their findspot and to one of the religious activities of the Sanctuary.

4. QUESTIONING THE FUTURE OR HONORING THE GODDESS? POSSIBLE INTERPRETATIONS OF PLAY-RELATED OBJECTS IN NEMI

4.1 The possibility of divination in the Sanctuary of Diana

Even if playing games at sanctuaries cannot be excluded, the sanctuary of Diana in Nemi has little connection with children and young boys or girls, and the presence of counters and astragals suggests we must nuance interpretations which assume a recreational role for the gaming-related objects found in this sacred place. The same goes for the possibilities that metal astragals were used there for trading or as weights: the sanctuary did not have a primary role in commerce and the quantity of objects found is too limited to hypothesize they were used there and exchanged as money or to make transactions of any kind (there are, for example, no finds that associate sets of astragals with scales).

It is fundamental to remember which contexts the astragals come from: except for some sporadic finds in other sectors (whose stratigraphy it would be too complex to illustrate here), the vast majority of astragals comes from Sectors A and K. In Sector A, the pieces (31 bone, five glass, and one bronze) were placed near the long side of the second phase temple (built at the end of the 4th century BCE) and incorporated into the podium following its extension in the third construction phase, during the second quarter from the 1st century BCE. Those (five bone and four bronze) from Sector K, the space in front

22 The oldest gold example is a pendant in form of an astragalus from the Varna necropolis in Bulgaria, dating to the 5th millennium BCE. See Ivanov, Avramova (2000), Slavčev (2010), 193-210, Hansen (2013), 141-142 and Leusch, Ambruster, Pernicka, Slavčev (2015), 353-376. For other samples in glass, marble, limestone, ivory, and resin, see Erlich (2017), 144, notes 26-27, Amandry (1984), 348, fig. 1 and Tait (1982), 38-41.

23 Alinei (1960-61).

24 Initially identified as a counter for a game still played in the area, it was discovered in a pit near the Late Bronze Age Royal Palace, comes from a cow, and was filled with lead to create a four-armed lead weight inside. See Schaeffer (1962), 103-105, figg. 64-65 and Minniti, Peyronel (2005), 14. For parallels in the Near East, see Gilmour (1997), 167-168, Affanni (2008), 79, Chahoud, Vila (2017), 204-205.

25 Greaves (2012), 194-196.

26 Hitzl 1996, 151-153; De Grossi Mazzorin, Minniti (2012), 214.

27 For a broader discussion of astragals and coinage, Holmgren (2004), Doyen (2021a) and Doyen (2021b).

28 Carè (2019), 159.

of the temple, were originally part of various sacred deposits dating from the 6th to the 1st century BCE, and they have been found in secondary deposition due to the need to build up the floor level in front of the temple during the Julio-Claudian period. Therefore, the location of the finds shows how they were probably used in some way within the sanctuary and then voluntarily left in the sacred area, and more specifically in a sector of it (Sector A, the long west side of the temple) and only in a particular period (3rd-1st of the half century BCE).

We know that some form of divination was performed in the sanctuary of Diana, probably in a form of divination which involved throwing small objects like dice, stones, and sticks or astragals (i.e. cleromancy/astragalomancy). It should not be surprising to argue that divinatory practices took place in a non-oracular sanctuary[29] since the desire to know the future and the will of the gods was an omnipresent concern in Greco-Roman antiquity, and a huge variety of divinatory practices responded to these needs.[30]

A comparison with similar sacred contexts, where it was believed that chthonic divinities could manifest themselves, demonstrates that astragals had a divinatory role in liminal and chthonic cults. The presence of artificial or natural freshwater as elements of the cult is frequent, and lamps also are particularly common in places associated with practices of predicting the future through oracles or through the use of specific tools, including the lamps themselves. For example, in Cetamura del Chianti there is the cult of Lur and Leinth (3rd-2nd century BCE), and since the two are deities of fate and fortune, they are both connected to divination. Some years ago, excavations uncovered a well or a cistern from the Etruscan period with a large quantity of astragals and it is probable that they were used in ritual divination practises as part of the water-related cult worshipped there.[31]

Another important example comes from the Corycian Cave, near Delphi (4th-3rd BCE), dedicated to the cult of Pan and the nymphs. In the entrance of the cave, over 2,000 astragals were found, most of them were modified, and some were inscribed with abbreviated names. We can recognise gods and heroes — Heracles, Achilles, Nike — but most were inscribed with just a couple of Greek letters (or even just one) or marks or dashes.[32] This provides an interesting parallel for our two inscribed astragals. Cave cults are often chthonic in nature. Furthermore, Pan is often associated to divination through his father Hermes, the liminal god *par excellence,* whose cult is often linked with caves: according to the *Hymn of Hermes*, Pan received the power of divination directly from Apollo. The case of Pan reinforces the hypothesis of a strong link between cave cults and divination practices.

Another interesting comparison comes from the Sicilian-Greek world: not far from Etna, in a place called Rocchicella di Mineo, Laura Maniscalco and Brian McConnell have uncovered the Sanctuary of the Divine Palikoi.[33] The sanctuary was located in the vicinity of a cave and with a water basin nearby in the form of the so-called Lake Naftia: this, nowadays drained, was a *mofetta*, a volcanic discharge consisting mostly of carbon dioxide. The gods worshipped here were therefore, according to the excavators, part of a chthonic cult. Furthermore, an oracle was present at the Sanctuary of Divine Palikoi at least since the Classical period. It is also interesting to highlight that an ordeal was performed in the Sanctuary of the Divine Palikoi, during which written tablets were placed on the surface of the lake: if they floated the accused was supposed not to be guilty. The written tablets therefore had a divinatory role[34] as, through the involvement of the deity and the ritual that follows, they were intended to interpret the divine will of the gods. This practice was therefore particularly close to divination. Moreover, some astragals have been found at the site, even if in secondary deposition. These may have had a votive and divinatory role, especially an inscribed bronze one found near the cave and some carved bone astragals (probably coming from the settlement on the top of the hill above the cave).[35]

Returning to Nemi, the propensity for chthonic and divinatory rituals around the lake and the sanctuary and the inscription that attests to the presence of *sortes* allow us to consider a divinatory use for the astragals found in the excavations at the sanctuary of Diana. The presence of some natural elements therefore appears to be a necessary condition as these elements were essential means for communicating with the divine or with the Underworld. If natural elements were already available, a sanctuary could become an appropriate place for such divinatory practices, but human interventions could meet the needs of cultic practices as well. In the case of Nemi, an artificial water basin dating to the Late Republican period has been identified in front of the temple.

29 See Bouillot (forthcoming).

30 For a general overview of divinatory practises see Abbey (2022).

31 Corbino, Fonzo (2017).

32 Amandry (1984).

33 For the figure of the Palikoi see Croon (1952); for the sanctuary see Maniscalco, McConnell (2003); Maniscalco (2008); Maniscalco (2018).

34 Macrobius, *Saturnalia*, 5.19.15-31. It could be a cleromantic practise, as cleromancy is *per se* divination by casting lots or throwing dice or similar objects. For this cultic practice see Cusumano (1990).

35 Arcidiacono (2008), 178; personal communication with the archaeological excavation director Laura Maniscalco. whom we would like to thank.

These sanctuaries were always extra-urban and they were often in rural areas with a strong contact with nature not mastered by man. Places with springs or water basins or sacred woods were often chosen for such sanctuaries. Such a situation can be often found in Italy as we can observe in other sanctuaries where cleromancy took place: this was the case, for example, at the oracle of Geryon in the hot spring of Abano Terme (PD)[36] or of the oracle of Clitunnus near Spoleto (PG).[37]

4.2 *Astragalomanteion* in Nemi

Now that we have established that Diana *Nemorensis* could have had a mantic role, we can turn out attention back to astragals. As Barbara Carè has noted, the massive presence of bone astragals in funerary contexts and in religious sites must have a different meaning, shifting the attention towards the votive value these objects could have as offerings.[38] This notion is strengthened by the existence of metal astragals, which are more precious and elaborate than the bone ones. At the same time, however, Carè rejects the idea they could be used for divinatory purposes, not only because they are not limited to oracular sites, but also because metal astragals alone are not sufficient to determine the presence of an oracular cult.[39] On the contrary, Alan Greaves argues in relation to Didyma that "the lead astragali found together with Archaic pottery at the altar in front of the temple provide the only direct archaeological evidence for any kind of activity that may be connected to divination."[40] In this way, the temple of Apollo at Claros, near Ephesus, is a clear example of the bond between astragals and divination: as a matter of fact, the five stone steps that lead to the temple itself have a bronze astragal under every joint, meaning the empty space between two stone blocks.[41] This way, every visitor knew that an oracular purpose was central to the whole structure, since bronze reproductions of real astragals even stood under their feet when climbing up the steps to the temple.

The use of astragals for games has been attributed to the Lydians by Herodotus,[42] and their extensive use in the Ancient Near East is attested by archaeological discoveries.[43] At the same time, animals in antiquity had an important place in divination since they can perceive and sense things undetectable for humans.[44] The two most popular techniques were the haruspicy and the interpretation of the flight of birds. Interpreting the will of a god with astragals could be an alternative way, similar to lot-casting, as well as being more practical and quicker. Moreover, astragals had been endowed with a strong symbolic value from the Middle Bronze Age onwards.[45] They are in fact connected with sacrifices, which were the privileged means of communication with the gods: because skinning after sacrifice started from the feet/ankles, astragals themselves naturally assumed a religious dimension.[46] Furthermore, astragals have a very particular and recognizable shape: they are handy and long-lasting, and this favours their daily use for many purposes.

Throwing astragals is a simple and immediate gesture that belongs both to games and to divinatory rolls in astragalomancy,[47] the result being subject to the law of probability, which makes it suitable for oracular practices, since the rules regarding the different possible combinations are more complex than with cubic dice.[48] The relationship with gaming is therefore very close, and Carlo Šebesta has suggested that the gaming dimension came after the sacred one, linked to the overcoming of difficult situations.[49] The appropriateness of considering a gaming-related object suitable for divination is well expressed by Sue Ann McCarty: "both gaming and divination are predicated on the assumption of uncertainty and the belief that seemingly random patterns contain information that is useful in making decisions for future action. Divination is a way to manage uncertainty, and skill, luck or prescience is manifest in the diviner, who throws and reads the bones".[50] Of course, we can wonder whether the letters on the astragals had a gaming-related meaning or they were part of cleromancy, i.e. using the astragali as *sortes*.

Since the above-mentioned inscription by *Aulus Sulpicius Asclepiodotus* refers to *sortes* in the Sanctuary of Nemi, it is appropriate to consider the possibility that astragals were used to this purpose. Cicero also considered astragals an example of lot oracles: "What is a lot (*sors*)? It is much like playing at *morra*, dice, or astragals (*talus*), in which recklessness and luck prevail rather than reflection and judgement".[51]

36 Suetonius, *The Twelve Caesars, Tiberius*, 14.3; see Bassani (2013).

37 Pliny the Younger, *Letters*, 8.8; see Maggiani (2005), 77.

38 See, for example, Carè (2010), Carè, Scilabra (2013).

39 Carè (2019), 164-165, note 62. She says that the first literary evidence refers to the Roman period, especially when Suetonius discusses *talos aureos*.

40 Greaves (2012), 195.

41 Moretti (2009), 163 and note 57.

42 Herodotus, *The Persian Wars*, 1.94.

43 See for example, Gilmour (1997) and Susnow, Horowitz, and Yahalom-Mack (2021).

44 Struck (2014).

45 De Grossi Mazzorin, Minniti (2013).

46 Affanni (2008), 85-86.

47 De Grossi Mazzorin, Minniti (2012), 214.

48 Rohlfs (1964). More generally on the magical-casual-fatalistic conception presupposed by cleromancy, see Sabbatucci 1964.

49 Šebesta (1993), 5-9. This is the opinion also of Greaves (2012).

50 McCarty (2013), 229.

51 Cicero, *On Divination,* 2.85 (trans. W.A. Falconer, Loeb, modified): "*Quid enim sors est? Idem prope modum, quod micare, quod talos iacere, quod tesseras, quibus in rebus temeritas et casus, non ratio nec*

Oracles using astragals, or *astragalomanteia*, are a variation of dice oracle, and the difference lies in the different shape, since the die is a cube (i.e. six-sided) and the astragal has only four sides. Each side had a name and a number associated: Πρανής, the broad convex side was number 4; Ὕπτιος, the broad concave side was number 3; Κῷος, the narrow flat edge was number 6 and Χῖος, the narrow concave edge was number one.[52] It was the different combinations of these numbers that mattered for divination, since many astragals were thrown on the same time and each combination was associated with an answer. Luckily, Pausanias provides a detailed description of *astragalomanteia* as it was practiced in Boura in Achaia:

"On descending from Boura towards the sea you come to a river called Bouraïcus, and to a small Heracles in a cave. He too is surnamed Bouraïcus, and here one can divine by means of a tablet and astragals. He who inquires of the god offers up a prayer in front of the image, and after the prayer he takes four astragals, a plentiful supply of which are placed by Heracles, and throws them upon the table. For every figure made by the astragals there is an explanation expressly written on the tablet."[53]

A scholium to Pindar also refers to a divinatory consultation of the same type.[54] Even if Pausanias does not provide a list of the answers, we have some examples from Anatolia in the form of epigraphic documents. Dice oracles inscriptions dating to the 2nd and 3rd centuries CE were written on large monolithic pillars, often with a statue of Hermes on top, set up in public places: 56 complete oracular texts of this kind have been found to date. The response is always given in the same way: the sum of the combinations appears, so that the person throwing the astragals could recognize their combination, followed by the name of a god to whom the combination belongs, and finally provides an advice to follow or an answer.[55] Numerous examples of responses of this type are epigraphically attested between the 2nd and 3rd centuries in south-western Asia Minor, together with others, known as alphabetic oracles, in which small objects were extracted with engraved letters to which a response was associated.[56] This method allows a quick and easy consultation of the god's will, probably without the need for a specialist practitioner and it perfectly suits a sanctuary, like the one of Diana *Nemorensis*, where oracular practices were only subsidiary. Moreover, there were other ways to predict the future using astragals: in a tomb in 24 oracles were inscribed, one for each letter of the alphabet: people visiting the deceased threw the astragals and then read the appropriate answer.[57] It was even possible to propose that one form of divination was to throw astragals with words, letters, or symbols which held some significance about the future.[58] These words and symbols could function as the Boura oracle described by Pausanias so that the combination of these symbols gave an appropriate response. This is possibly the case for our astragals in Nemi: those that are not inscribed may have been used to look for a combination of numbers given by the value of their sides, while those inscribed, having no meaning that could link them to gaming, may have been part of an astragalomancy ritual where the inscribed letters were directly associated with an oracular answer.

From this point of view, it is evident that the link between astragals and oracles seems to support some kind of relation with the divination practice in Nemi;[59] but at the same time it seems reasonable that metal and glass replicas of original bone astragals should be interpreted as ritual gifts and symbolic offerings rather than as instruments to predict the future, especially because, as we can see, they are only a small part of the wider assemblages of material given as donations to the temple; it could be, for example, that these were donated as precious offerings in exchange for a good verdict.

If we look at other important Latin sanctuaries in the Hellenistic and Republican periods, the question has not already been addressed, because many of these sites were excavated before the adoption of modern stratigraphic methods, which requires the recording of all finds, including small ones and non-precious materials. The recovery of astragals, counters and dice is usually interpreted as offerings made in the sanctuary to solemnize the transition from childhood to adult life (as was the case in Greece and Magna Graecia at the same time),[60] but this depends on the context in which they are found and on the type of cult and divinity. Such an interpretation is convincingly proposed, for example, for the sanctuary of Minerva in *Lavinium* or of Bona Dea in *Fregellae*,[61] where both these types of objects and ceramic and bronze statuettes bearing astragals as offerings to

consilium valet".

52 Greaves (2012), 183-4.

53 Pausanias, *Description of Greece,* 7.25.10 (trans. W.H.S. Jones, Loeb, modified).

54 *Schol. vetera in Pind. Pyth.* 7.337-338b.

55 On this aspect see Graf (2005).

56 Guarducci (1978), 105-109; Fontenrose (1978), 219-238; Nollé (2007). On the alphabetic oracles in *Praeneste* and Cuma see Zevi (1982).

57 Stoneman (2011), 141.

58 Greaves (2012), 189.

59 The topic is also explored in Lancini, Diosono (2023).

60 A summary of examples of dedicating toys in sanctuaries as a rite of passage from childhood to adulthood in Greece and *Magna Graecia* in Classical and Hellenistic times can be found in Dasen (2020), 108; Castiglione (2020), 105-106.

61 Torelli (1984), 139; Fenelli (1989-1990), 497; Chiarini, Decantis, Gallo (2019), 190-191. Another offering attested by the clay statues of girls in those two sanctuaries is the ball.

the goddesses have been found. A different case is presented, for example, by the Republican sanctuary complex at Monte Sant'Angelo, in Terracina, where several divinities were venerated and where an oracle is traditionally also believed to have operated.[62] Here recent excavations conducted by the Ludwig-Maximilian University of Munich have brought to light both astragals with engraved letters and a lead token with an inscription in relief that can be interpreted as a *sors*.[63]

In the light of what has been presented so far and the study of the finds in progress, we could therefore hypothesize a line of continuity in the divinatory activities carried out by the visitors of the sanctuary of Diana di Nemi which is attested earlier (between the 3rd century BCE and the 1st century CE) by the presence of *sortes*, astragals, and other objects suitable for cleromancy near the temple, and at a later time (between the mid-1st century BCE and the beginning of the 3rd century CE) by the oil lamps found in the lake. This also shows a diachronic evolution of the type of rites witnessed and of the fact that they could be more or less closely connected to the cult of Diana that took place inside the sanctuary. The demonstration of this hypothesis certainly requires a deeper analysis and more data, but at the same time it is to be hoped that the study of excavation results in the sanctuaries of Central Italy will pay more and more attention to the analysis of these types of finds and their possible ritual uses.

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Appendix I
Games in the Ancient World

IMMATERIAL GAMES

Ancient name	Modern name / description	Material	Main source(s)	Main bibl. ref.
Apodidraskinda	Hide and Seek		Pollux, Onom. 9, 117. Wall painting in Herculaneum, IV.21, Casa dei cervi (Mus.Arch. Naz. Napoli inv. 9178).	Bayardi 1757, tav. XXXIII, 173; Costanza 2019, 150, 237-42.
Basilinda	Follow your leader		Pollux, Onom. 9, 110	Costanza 2019, 135-138, 224-31; Costanza 2020.
Dielkystinda	French and English		Pollux, Onom. 9, 112	Costanza 2019, 143-44, 235-37; St. John 1842, 155.
Myinda	Blindman's buff Blinde Kuh Mosca cieca		Pollux, Onom. 9, 113	Costanza 2019, 144, 237-42; St. John 1842, 149.
Chytrinda	Frog in the middle Hotcockles Selling of pears Hoe many plumbs for a penny		Pollux, Onom. 9, 113-14	Costanza 2019, 145-46, 242-45; St. John 1842, 151.
Kynetinda	kissing game (Florentine kiss)		Pollux, Onom. 9, 114-15	Costanza 2019, 146-48, 245-47; St. John 1842, 152.
Akinetinda	competition of resting immobile		Pollux, Onom. 9, 115	Costanza 2019, 148, 247-48.
Ephedrismos	Huckepack		Pollux, Onom. 9, 113	Costanza 2019, 152-53, 250-56.
En Kotyle/Hippada/Kybaesinda	a variant of Ephedrismos Pick back Pick-a-back		Pollux, Onom. 9, 122	Costanza 2019, 159-60, 250-56; St. John 1842, 151.
Chalke Myia	variety of Blindman's buff		Pollux, Onom. 9, 123	Costanza 2019, 160-61, 237-42.
Exech' o Philelie	singing game "Come forth, beloved sun"		Pollux, Onom. 9, 123	Costanza 2019, 161-62, 263.
Cheli Chelone	Turtle little turtle		Pollux, Onom. 9, 125	Costanza 2019, 164-65, 265-79.
Skantharizein	striking the nose of somebody using the middle finger		Pollux, Onom. 9, 126	Costanza 2019, 165, 279-80.
Rathapygizein	kicking someone's buttocks		Pollux, Onom. 9, 126	Costanza 2019, 166-67, 279-80.
Kollabizein	La main chaude		Pollux, Onom. 9, 129	Costanza 2019, 173, 292-94.
Phitta maliades	moving game		Pollux, Onom. 9, 127	Costanza 2019, 168, 281-82.
Phitta roiai	moving game		Pollux, Onom. 9, 127	Costanza 2019, 168, 281-82.
Phitta meliai	moving game		Pollux, Onom. 9, 127	Costanza 2019, 168, 281-82.
Micare (digitis)	Morra	stick	Cic., de off. 3, 77; 3, 90; Petron., sat. 44; Augustin., de trin. 8, 5.	Väterlein 1976, 60-61; Dasen/Ventrelli 2019.
	Piggyback fight		sarcophagus Mus. Chiaramonti 662	Rieche 1984, 25-26 Abb. 6b.

MATERIAL GAMES

A. Games using natural or recycled objects

Ancient name	Modern name(s), Description	Material	Main source(s)	Main bibl. ref.
Artiasmos Par-impar	Odd or Even	knucklebones	Pollux, Onom. 7, 206; 9,101. Sarcophagi Mus. Chiaramonti 1302, British Mus. London 1865.0103.7, Kunsthist. Mus. Vienna I 1129	Costanza 2019, 115-117, 210-11; Rieche 1984, 13 Abb. 2, 3; Barbanera 2005; Behling 2012, 34 fig.4.
Ostrakinda	catching game: fugitives and pursuers decided by the throw of a shell	shard	Pollux, Onom. 9, 111-12	Costanza 2019, 138-43, 231-34.
Phryginda	producing a sound	beans, shards	Pollux, Onom. 9, 114	Costanza 2019, 146, 231-34.
Schoinophilinda	Hiding the rope Hunt the slipper Der Plumpsack geht um	rope	Pollux, Onom. 9, 115	Costanza 2019, 148, 235-37; St. John 1842, 154.
Skaperda or Helkystinda	Tug of war	rope	Pollux, Onom. 9, 116	Costanza 2019, 148-49, 235-37.
Streptinda	tossing game	shell, coin	Pollux, Onom. 9, 117	Costanza 2019, 150, 248-49.
Pleistobolinda	game of the highest roll	knucklebones	Pollux, Onom. 9, 196, 117	Costanza 2019, 97-99.
Chalkismos	spinning game	coin	Pollux, Onom., 7, 105; 7, 206; 9, 118	Costanza 2019, 150-51, 248-49.
Askoliasmos	hopping on one foot; balancing on a wine skin	wine skin	Pollux, Onom. 9, 121	Costanza 2019, 155-59, 259-62.
Himanteligmos	Pricking the garter, also Fast and loose Riemenstechen	belt or cord	Pollux, Onom. 7, 206; 9, 118	Costanza 2019, 151-52, 249-50.
Epostrakismos	Skipping stones Ducks and drakes	shell	Pollux, Onom. 9, 119; Minucius Fel. Oct. 3, 5-6	Väterlein 1976, 38; Costanza 2019, 153-54, 211-15; St. John 1842, 153.
Kyndalismos	tossing game	sticks	Pollux, Onom. 9, 120; 10, 246	Costanza 2019, 154-55,257-59.
Trygodiphaesis/Tantali ludus	Bob cherry	wine, apple	Pollux, Onom. 9, 124	Costanza 2019, 162, 264; St. John 1842, 157.
Pentelitha	Five stones	knucklebones or pebbles	Pollux, Onom. 9, 126	Väterlein 1976, 37-38; Costanza 2019, 167-68, 211-15.
Telephilon	divinatory amusement	leaf	Pollux, Onom. 9, 127	Costanza 2019, 169-70, 282-92.
Sperma melon	divinatory amusement	core of an apple	Pollux, Onom. 9, 128	Costanza 2019, 171, 282-92.
Krinon	divinatory amusement	flower	Pollux, Onom. 9, 128	Costanza 2019, 170, 282-92.
Platagonion	divinatory amusement	leaf	Pollux, Onom. 9, 127	Costanza 2019, 168-69, 282-92.
	Teufel an der Kette Jeu du pivot La Poire The Craw	stick, rope, towels or branches	wall painting Herculaneum, IV.21 Casa dei cervi (Mus.Arch.Naz. Napoli inv. 9179); relief Bodemuseum Berlin Nr. 4690; sarcophagus Mus. Chiaramonti 662	Bayardi,1757, tav. XXXII, 171; Helbig 1886, 147sq. n. 753); Rieche 1984, 25, Abb. 6b, 42, 43; Schmidt 2005, Nr. 216.
Melolanthe	letting a beetle, tied with a thread, fly in circles	beetle	Pollux, Onom. 9, 124-25	Costanza 2019, 163-64, 264-65.
	games with animals such as dogs, birds, hares			Väterlein 1976, 50.
Ortygokopia	beating quails	quails	Pollux, Onom. 9, 108-09	Costanza 2019, 132-35; 222-23.
	cock fight	cocks	Platon, Leg. VII, 789b	Bruneau 1965, Hoffmann 1974.
Nuces castellatae	Cobcastle	nuts	Nux elegia. Sarcophagi Mus. Chiaramonti 662, 1304; Brit.Mus. London 1865.0103.7; Kunsthist. Mus. Vienna I 1129; wall painting Herculaneum, IV.21, Casa dei Cervi, cryptoporticus 28.	Väterlein 1976, 34-37; Rieche 1984, 10-12, Abb. 2, 3, 6a; Amedick 1991, 97-100; Barbanera 2005; Behling 2012, 29- 34 figs. 1-6, Behling 2013.
Tropa	tossing game	nuts, knucklebones	Pollux, Onom. 9, 103	Väterlein 1976, 34-37; Costanza 2019, 119, 211-15.
Delta	tossing game	nuts, board drawn on the ground	Nux elegia	Väterlein 1976, 34-37.
Orca	tossing game	nuts, vase	Nux elegia. Sarcophagus Lancelotti	Väterlein 1976, 34-37; Rieche 1984, 13; Barbanera 2005; Behling 2012, 35 fig. 5.
Clivum tabulae?	rolling nuts, marbles, balls or "bobbins" down a wooden board	nuts, marbles or balls, „bobbins", wooden board	Nux elegia. Sarcophagi Mus. Chiaramonti 662, Mus.Naz.Rom. 67612, Louvre Ma 99.	Väterlein 1976, 34-37; Rieche 1984, 12 Abb. 6a, 45; Amedick 1991, 97-100; May 1991, 98-99 fig. 83; Barbanera 2005; Behling 2012, 34 figs. 3, 7.
Omilla	tossing game	knucklebones, circle drawn on the ground	Poll., Onom. 9, 98-99, 102	Väterlein 1976, 34-37; Costanza 2019, 117-119, 211-15.
Capita aut navia	Heads or Tails	coin	Macrobius, sat. 7, 22; Aurelius Victor, Origo gentis Romanae 3, 5.	Väterlein 1976, 25.

MATERIAL GAMES

B. Games using properly produced material

Ancient name	Modern name(s), description	Material	Main source(s)	Main bibl. ref.
Kottabos, Latages	tossing game	Kottabos stand (bronze), kylix	Pollux, Onom. 6, 110; 9, 94-95; 9, 128	Costanza 2019, 63-76, 171-73, 180-186.
Ephetinda	ball game	ball (see Martial, Epigr. 14, 45-48)	Pollux, Onom. 9, 117	Väterlein 1976, 39-42; Costanza 2019, 149-50, 216-222; Wegner 1938; Hübner 1992.
Ourania	throwing a ball high in the air	ball (see Martial, Epigr. 14, 45-48)	Pollux, Onom. 9, 106	Costanza 2019, 125-26, 216-22; Wegner 1938; Hübner 1992.
Phaininda/ Harpaston	Rugby-like team game	ball (see Martial, Epigr. 14, 45-48)	Athen. I, 14-15; Pollux, Onom. 9, 105; Isidore, Etym. 18, 69 („arenaria"?)	Väterlein 1976, 41-42; Costanza 2019, 121-25, 216-22; Wegner 1938; Hübner 1992.
Trigon / Trigonaria	three player ball game	ball (see Martial, Epigr. 14, 45-48)	Isidore, Etym. 18, 69	Väterlein 1976, 40-41; Wegner 1938; Hübner 1992.
Episkyros/ Ephebike/ Epikoinos	ball game	ball (see Martial, Epigr. 14, 45-48)	Pollux, Onom. 9, 104, 107	Costanza 2019, 120-21, 216-22; Wegner 1938; Hübner 1992.
Aporrhaxis	bouncing ball game	ball (see Martial, Epigr. 14, 45-48)	Pollux, Onom. 9, 107; Sarcophagus Louvre Ma 99	Costanza 2019, 127-131, 216-22; Wegner 1938; May 1991, 98-99 fig. 83; Hübner 1992.
Lusus cubitalis	Rugby-like team game	ball (see Martial, Epigr. 14, 45-48)	Isidore, Etym. 18, 69	Wegner 1938; Hübner 1992.
Keretizein	Hockey	ball, clubs	relief Athens NAM Inv. 3476.1	Wagner 1959; May 1991, 95 fig. 80.
	balls in a net-"micado"	net, balls	Ovidius, ars am. III 361-362	
Trochos, trochus, circuli?	hoop and stick Reifen treiben	hoop, bobbin, wheel; stick	Sarcophagi Mus.Naz.Rom 67612, Mus. Chiaramonti 662, Rome, Sta. Cecilia; Palace mosaic, Constantinople	Väterlein 1976, 46-47; Rieche 1984, 26 Abb. 6b, 45, 46; Brett 1942, 36-37; Lambrugo 2013; Weiss 2013; Dasen 2018; Dasen 2019.
ocellati, piluli	marbles	marbles made of stone or clay; lanes carved into marble slabs such as steps or thresholds	Suet., aug. 83; Augustin., conf. 1, 19, 30	Väterlein 1976, 37; Schädler 2013, Penn/Courts/Schädler 2023.
	"Franc du carreau"	board drawn on the ground; discs or coins	mosaic in Villa del Casale at Piazza Armerina	Schädler 2018.
	tossing game "Five in a row"	discs or coins	mosaic in Villa del Casale at Piazza Armerina	Schädler 2018.
	tossing game?	board with parallel lines and symbols; coins or discs	marble boards Villa Albani: CIL XIV 4125 ; Basilica Iulia : Jordan 1877, 279 Nr. 41	Schädler 1999.
Pleistobolinda	Meistwurfspiel	dice	Pollux, Onom. 9, 196, 117	Costanza 2019, 97-99.
Pentelitha	Five stones	knucklebones made from glass, ivory, bronze, wood		Väterlein 1976, 37-38; Schädler 1996.
Polis		game board; countersw	Pollux, Onom. 9, 98	Costanza 2019, 103, 193-96; Schädler 2002; Nelson 2020.
Diagrammismos		game board, counters, dice?	Pollux, Onom. 7, 206; 9, 98-99	Costanza 2019, 104, 193-96.
Pente grammai		game board, 2 x 5 counters; die	Pollux, Onom. 7, 206; 9, 97	Costanza 2019, 99-103, 193-96; Schädler 1998; Schädler 2009; Kidd 2017.
Grammai?		game board; 2 x 11 counters; 2 dice		Schädler 1998; Schädler 2009.
Naumachia?		game board; counters; dice?	Pollux, Onom. 7, 206	Nelson 2020.
Ludus latrunculorum		game board (grid), counters	Varro, De lingua latina 10,22; Laus Pisonis, 173-196; Ovidius, ars.am. III 357-360; Tristia II 477-480; Martial, 14,17; 14,20.	Väterlein 1976, 57-59; Schädler 1994.
Ludus Duodecim scriptorum / Alea	Game of the Backgammon family	game board (3 x (2x6) squares); 2 x 15 counters (bone, etc.); dice (mostly bone); fritillus, pyrgus (turricula) (bone, bronze)	Isidore, Etym. 18, 60-64	Väterlein 1976, 55-57; Schädler 1995; Schädler 2016.
	Three men's morris Kleine Mühle	game board, 2 x 3 counters	Ovidius, ars am. III 365-66; Ovidius, Tristia II 481-82	Väterlein 1976, 59; Rieche 1984, 20-21.
	Circus race game	board, balls	marble board Musei Vaticani, Museo Gregoriano Profano, Inv. 5149.2	Valeri 2017, 200-203 fig. 9-12; Piranesi 1778, Fol. 14.
Equi lignei	"Kugelspiel"	marbles, apparatus	CJ 3.43.2; Joh. Balsamon, Commentary to Photius' Nomokanon; „Kugelspiel", Berlin, Sammlung und Museum für Byzantinische Kunst, Inv.Nr. 1895	Reinsch 2003; Effenberger 2007.
	Miniature chariot races	chariot, animals	Iuv. sat. 5, 142; wall paintings Herculaneum IV.21 Casa dei cervi (Mus. Arch.Naz. Napoli inv. 9178), Pompeji IX.12.9 Casa dei pittori al lavoro; Pompeji VI.15.1 Casa dei Vettii; mosaic floor in Villa del Casale at Piazza Armerina; sarcophagus of Cornelius Statius, Louvre Ma 659; various sarcophagi	Bayardi 1757, 173 tav. XXXIII Huskinson 1996, 17-18; Donati 2005; D'Ambra 2007; Bell 2024.

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Appendix II: A guide to recognising carved pavement signs in the Greek and Roman World

INTRODUCTION

When walking on an archaeological site around the Mediterranean and beyond, it is common to stumble across carved pavement signs, but interpreting their function can be frustratingly complex. This appendix seeks to provide a guide to recognizing the main carved pavement signs found across the ancient world (here with a focus on Greek and Roman periods). Our starting point is the morphology of boards, playing surfaces, and floor markings which have sometimes been interpreted — with or without firm evidence — as game boards or surfaces for playing games which are not board games (e.g. throwing or rolling games). The scholarly community has undertaken extensive analyses of these markings, but little work has been done to provide a unitary framework for identifying them: most existing work focuses on specific board types, topics, themes or regions, and the information is dispersed across a diverse range of book chapters and journals, as well as the occasional monograph.

The most serious problem students of ancient carved pavement signs must face is the difficulty of understanding which designs (traced on any medium) should be interpreted as a game. We have therefore decided to propose a list of the main designs that are known from antiquity, and to accompany each of the main macro-categories of designs with a historiographical discussion. But we do not wish to limit ourselves only to proposing an updated typology; our aim is instead to advance functional interpretations. Accordingly, for each type presented in this guide we specify in the tables below whether a connection with gaming has been posited in past scholarship. In the accompanying text we briefly note, where possible, any historiography associated with the floor markings. As games research is ongoing, these interpretations are provisional.

For the sake of consistency, we build on the typologies proposed by Charlotte Roueché and R. C. Bell based on work undertaken at Aphrodisias in Caria ("Graeco-Roman Pavement Signs and Game Boards: A British Museum Working Typology." In *Ancient Board Games in Perspective: Papers from the 1990 British Museum Colloquium, with Additional Contributions*, ed. I. L. Finkel, London, The British Museum Press 2007, 106–109). This earlier work provides an important descriptive framework and is a firm foundation for the guide presented here. As such, in this appendix the typologies already proposed by Roueché and Bell appear in their entirety (with some additions). In presenting these markings, along with the gaming boards themselves, we hope to provide a sort of easy and ready-to-use guide or *vademecum* for anyone approaching this area of research.

The reader should note that by identifying the use of a given design for a game, we mean whether it was used for one of the main games known in antiquity. We are acutely aware that the principle of affordances, discussed by Penn, Pace and Schädler (this volume),

means that even in instances where the use of a given layout for games which are attested in texts or iconography can be excluded, the possibility that they were used for other unknown games remains open. For example, **Type 4** traditionally interpreted as 'round merels' is no longer considered to be used for a *known* board game, but nothing excludes that it, or other circular floor markings, were used for a type of tossing game (i.e. *tropa* or *omilla*).[1] Other, uses, unrelated to gaming, have also been advanced in recent years: for example, Charlotte Roueché has suggested that this marking have played a role as a *topos* marker or place markers for the illiterate.[2] Elsewhere, it has been argued that these markings, which have not infrequently been found in and around temples, could be used for divination.[3] Ine Jacobs has also noted that a circle with eight spokes (**4-6**) could be read as a monogram resolving: ΙΧΘΥΣ i.e. "Ἰησοῦς Χριστός, Θεοῦ Υἱός, Σωτήρ." ("Jesus Christ, Son of God, Saviour").[4] Likewise, we cannot tell whether the signs commonly interpreted as board games have been used (even if only temporarily) for other purposes.

In this appendix, we encounter first a group of markings consisting of circles that can be intersected by two or more lines, with increasingly complex patterns (**1-20**). Square-shaped signs also come in all manner of variations (**21-28**), with several linked to merels-type games, including tic-tac-toe. These range in size and elaborateness from the simple tabula for Three Men's Morris (**23**) and that for the Nine Men's Morris (**27**). Some other types (e.g. **25**) have also been linked with other merels type games.[5] We then move on to the various grids, made up of series of squares ranging from 6 x 6 to 11 x 16 (**29-30**); in the literature these are usually connected with *polis* and its probable later form *ludus latrunculorum* and it is now known that there is a wider variety of board layouts (see Walter Crist et al., in this volume) than originally proposed by Roueché and Bell ; some may not have been suitable for *ludus latrunculorum*.[6] Finally, we move on to the groups of points, boxes, depressions, or lines that can be organized in different ways to form smaller or larger playing surfaces; many of these are intended for well-known games such as *pente grammai* (**31, 33, 35, 37-38, 42, 44-46, 65-68**) or perhaps mancala,[7] as well as *ludus duodecim scriptorum* and/or *alea* (**52-63**).[8] One particular group comprising larger depressions with diameters of 4-10 cm, and often accompanied by a pair of parallel lines (**64-66**), may have been used for playing marbles-type games.[9] We then look at several types of floor which at present seem unlikely to be connected to gaming, and may have had other functions (**71-76**) — for example, some floor markings included in this section seem to have served as *abaci*.[10]

1 Behling (2013); Schädler (2018). On the circular series of shallow cup-shaped cavities surrounding a central hole see Talloen in this volume with additional bibliography.

2 Roueché (2007), 100.

3 Höckmann (1996), 259-261; Widura (2015), 73-75; Schädler (2018), 92-94.

4 Jacobs (2013), 619; Schädler (2018), 93.

5 Bell (1977).

6 Austin (1934); Austin (1935); Lafaye (1900); Schädler (1994a); Schädler (2001).

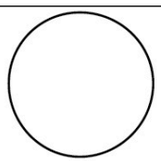
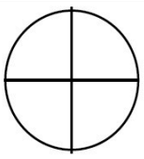
7 *Pente grammai:* Kidd (2007); Schädler (2009). Mancala and its relation with *pente grammai:* Schädler (1998).

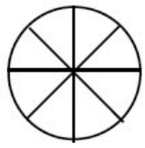
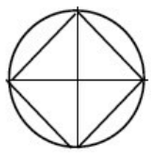
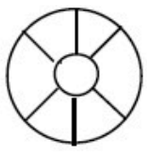
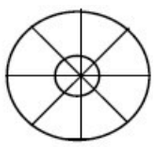
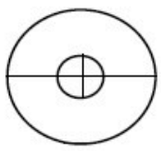
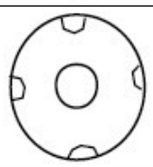
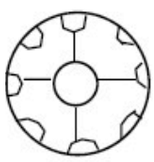
8 Schädler (1995); Schädler (1999).

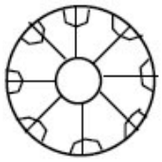
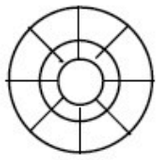
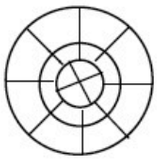
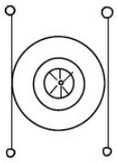
9 Schädler (1994b); Schädler (2013); Schädler (2019); see also Penn, Courts, Schädler 2023.

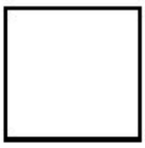
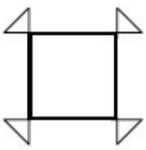
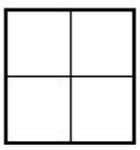
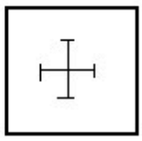
10 Pritchett (1968); Dasen, Gavin (2022).

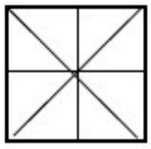
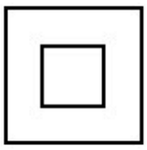
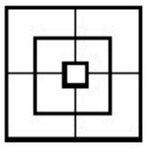
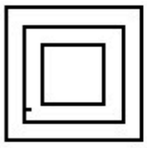
TYPOLOGY

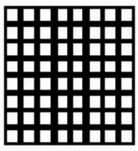
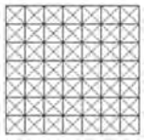
CIRCLES				
Type	**Form**	**Typology (Roueché-Bell)**	**Description**	**Interpretation**
1		C.1	A circle	Not a boardgame, but use for a throwing game such as *tropa* or *omilla* cannot be excluded
2		C.2	A circle enclosing a cross	Not a boardgame, but use for a throwing game such as *tropa* or *omilla* cannot be excluded
3		C.3	A circle enclosing three intersecting lines	Christogram ? (not a boardgame, but use for a throwing game such as *tropa* or *omilla* cannot be excluded)

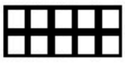
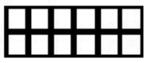
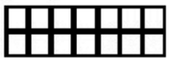
4		C.4	A circle enclosing four intersecting lines	Christogram or topos marker ? (not a boardgame, but use for a tossing gamesuch as *tropa* or *omilla* cannot be excluded)
5		C.5	A circle enclosing four intersecting lines; four semicircles join the ends of the lines	Not a boardgame, but use for a throwing game such as *tropa* or *omilla* cannot be excluded
6		C.6	A circle enclosing four intersecting lines; eight semicircles join the ends of the lines	Not a boardgame, but use for a throwing game such as *tropa* or *omilla* cannot be excluded
7		C.7	A circular enclosing a diamond, within which are two intersecting lines	Not a boardgame, but use for a throwing game such as *tropa* or *omilla* cannot be excluded
8		CC.1	Two concentric circles joined by six radial lines	Not a boardgame, but use for a throwing game such as *tropa* or *omilla* cannot be excluded
9		CC.2	Two concentric circles joined by eight radial lines	Not a boardgame, but use for a throwing game such as *tropa* or *omilla* cannot be excluded
10		CC.3	Two concentric circles joined by four intersecting lines	Not a boardgame, but use for a throwing game such as *tropa* or *omilla* cannot be excluded
11		CC.4	Two concentric circles bisected by a long line; a shorter, perpendicular line divides the long line in two within the innermost circle	Not a boardgame, but use for a throwing game such as *tropa* or *omilla* cannot be excluded
12		CC.5	Two concentric circles. Four semicircles on inside of outermost circle	Not a boardgame, but use for a throwing game such as *tropa* or *omilla* cannot be excluded
13		CC.6	Two concentric circles; eight semicircles on inside of outermost circle	Not a boardgame, but use for a throwing game such as *tropa* or *omilla* cannot be excluded
14		CC.7	Two concentric circles; eight semicircles on inside of outermost circle; four radial lines between innermost circle and some semicircles	Not a boardgame, but use for a throwing game such as *tropa* or *omilla* cannot be excluded

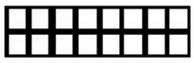
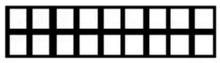
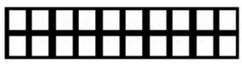
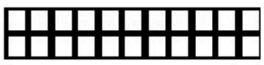
15		CC.7	Two concentric circles; eight semicircles on inside of outermost circle; eight radial lines connecting inner and outer circle	Not a boardgame, but use for a throwing game such as *tropa* or *omilla* cannot be excluded
16		CC.8	Two concentric circles with 16 intersecting lines, joined at the edges by 8 arches	Not a boardgame, but use for a throwing game such as *tropa* or *omilla* cannot be excluded
17		CCC.1	Three concentric circles, joined by eight radial lines	Not a boardgame, but use for a throwing game such as *tropa* or *omilla* cannot be excluded
18		CCC.2	Three concentric circles, joined by eight radial lines; the innermost circle encloses a cross	Not a boardgame, but use for a throwing game such as *tropa* or *omilla* cannot be excluded
19		CCC.3	Three concentric circles, with by four intersecting lines; alternating semi-circles and crosses on the interior of the outermost circle	Not a boardgame, but use for a throwing game such as *tropa* or *omilla* cannot be excluded
20		CCCC.1	Four concentric circles flanked by two lines each terminating in small circles; the innermost two circles are linked by six radial lines	Not a boardgame, but use for a throwing game such as *tropa* or *omilla* cannot be excluded

SQUARES				
Type	**Form**	**Typology (Roueché-Bell)**	**Description**	**Gaming function**
21		S.1	A square	Not a boardgame, but use for a throwing game such as *tropa* or *omilla* cannot be excluded
22		S.2.	A square with a triangle at each long corner	Not a boardgame, but use for a throwing game such as *tropa* or *omilla* cannot be excluded
23		S.3	A square enclosing a cross (also called cross-in-square)	Yes: Tic-Tac-Toe / Three Men's Morris
24		S.4.	A square enclosing a small Greek cross	Not a boardgame, but use for a throwing game such as *tropa* or *omilla* cannot be excluded

25		S.5	A square enclosing four intersecting lines	Yes: Three Men's Morris
26		SS.1	Two concentric squares	Not a boardgame, but use for a throwing game such as *tropa* or *omilla* cannot be excluded
27		SSS.1	Three concentric squares; the outermost two are intersected by two short lines	Yes: Nine Men's Morris
28		SSS.2	Three concentric squares	Not a boardgame, but use for a throwing game such as *tropa* or *omilla* cannot be excluded

GRIDS				
Type	**Form**	**Typology (Roueché-Bell)**	**Description**	**Gaming function**
29		SG	A grid formed by a variable number of squares (from 6 x 6 to 15 x 17 or 18 x 18)	Yes: *polis* / *ludus latrunculorum*
30		/	A grid formed by a variable number of squares, with each square divided by diagonal crosses	Yes: *polis* / *ludus latrunculorum*

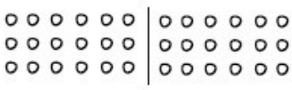
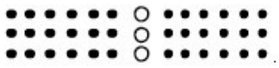
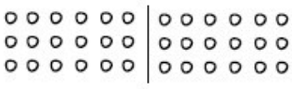
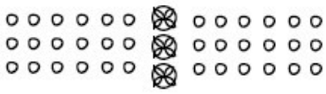
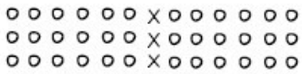
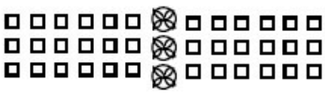
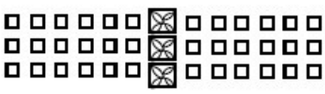
RECTANGLES				
Type	**Form**	**Typology (Roueché-Bell)**	**Description**	**Gaming function**
31		R.1	Two rows of five squares	Yes: *pente grammai* / mancala (?)
32		R.2	Two rows of six squares	mancala (?) / a use for a throwing game cannot be excluded
33		/	Two rows of seven squares	Yes: *pente grammai* / mancala (?)

34		R.3	Two rows of eight squares	mancala (?) / a use for a throwing game cannot be excluded
35		/	Two rows of nine squares	Yes: *pente grammai* / mancala (?)
36		R.4	Two rows of 10 squares	Mancala (?) / a use for a throwing game cannot be excluded
37		/	Two rows of 11 squares	Yes: *pente grammai* / mancala (?)
38		R.5	Two rows of five squares, each enclosing a circular depression (the depression may also be just circles)	Yes: *pente grammai* / mancala (?)

HOLES **(When consulting this typology in the field, it is necessary to distinguish between deep cup holes, small holes, and simple chisel marks. The difference can be decisive for understanding the function of a board)**				
Type	**Form**	**Typology (Roueché-Bell)**	**Description**	**Gaming function**
39		H.1	Two rows of three circular depressions	Not a boardgame, but use for a throwing game such as *tropa* or *omilla* cannot be excluded
40		H.2	Two rows of four circular depressions	Not a boardgame, but use for a throwing game such as *tropa* or *omilla* cannot be excluded
41		H.3	Two rows of four circular depressions, divided by a row of two circular depressions	Not a boardgame, but use for a throwing game such as *tropa* or *omilla* cannot be excluded
42		H.4	Two rows of five circular depressions	Yes: *pente grammai* / mancala (If the depressions are large enough)

43		H.5	Two rows of six circular depressions	mancala (If the depressions are large enough)
44		/	Two rows of seven circular depressions	Yes: *pente grammai / mancala (?)*
45		/	Two rows of nine circular depressions	Yes: *pente grammai / mancala (?)*
46		/	Two rows of 11 circular depressions	Yes: *pente grammai / mancala (?)*
47		H.6	Three rows of six circular depressions	Not a boardgame, but use for a throwing game such as *tropa* or *omilla* cannot be excluded
48		H.7	Three rows of three circular depressions	Not a boardgame, but use for a throwing game such as *tropa* or *omilla* cannot be excluded
49		H.8	Five rows of five circular depressions	Sija[11]
50		H.9	Seven rows of seven circular depressions	Sija
51		H.10	A larger circular depression surrounded by 12 (or 10 or 11) smaller circular depressions	Maybe: Schalchenkreise or marbles or a throwing gaming such as *tropa* or *omilla* ?

11 The game of Sija (also transliterated as Seega, Seejeh or Sidjah) is a strategy game of Egyptian origin; it is not certain when it first developed, and it may not be ancient. The players take turns to move their pieces on a game board, and have to try to eliminate those of their adversary.

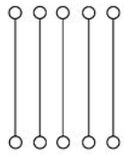
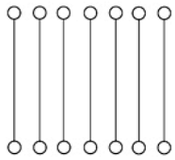
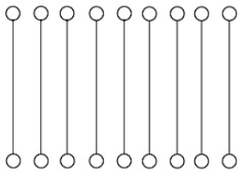
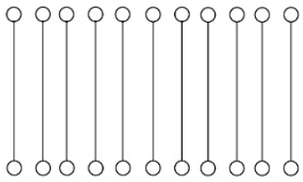
ROWS (3X12) (This section contains gameboards for ludus duodecim scripta and alea. Here we report only the most common types but there are many other forms,e.g. boards with connected squares, boards with vertical strokes, boards with symbols, boards with letters in squares, boards with letters in squares or circles and so on and so forth).[12]				
Type	**Form**	**Typology (Roueché-Bell)**	**Description**	**Gaming function**
52		3Rows.1	Three rows of 12 dots divided by a line	Yes: *duodecim scripta* / *alea*
53		3Rows.2	Three rows of 12 dots divided by small circles	Yes: *duodecim scripta* / *alea*
54		3Rows.3	Three rows of 12 small circles divided by a line	Yes: *duodecim scripta* / *alea*
55		3Rows.4	Three rows of 12 small circles divided by rosettes enclosed by circles	Yes: *duodecim scripta* / *alea*
56		3Rows.5	Three rows of 12 small circles divided by crosses	Yes: *duodecim scripta* / *alea*
57		3Rows.6	Three rows of 12 squares divided by rosettes	Yes: *duodecim scripta* / *alea*
58		3Rows.7	Three rows of 12 squares divided by rosettes enclosed by circles	Yes: *duodecim scripta* / *alea*
59		3Rows.8	Three rows of 12 squares divided by rosettes enclosed by squares	Yes: *duodecim scripta* / *alea*

12 There are also different forms of separating symbols, including almost the all possible combinations of shapes of squares and separators. The separating symbols are usually circles, sometimes filled with a six-leafed petal, a Christian cross or other Christian symbols, or a square in the centre (semi-circle or half square in the outer rows), X or simply a line or an empty space.

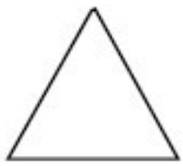
60		3Rows.9	Three rows of 12 squares divided by a blank field	Yes: *duodecim scripta* / *alea*
61	CIRCUS PLENVS CLAMOR INGENS IANVAE TENERE	3Rows.10	Three rows of 12 letters divided by rosettes enclosed by circles	Yes: *duodecim scripta* / *alea*
62		3Rows.11	Three rows of 12 small circular depressions divided by a line	Yes: *duodecim scripta* / *alea*

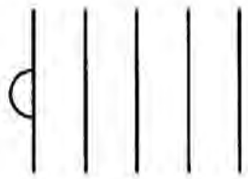
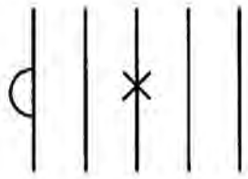
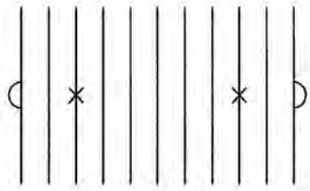
ROWS (2X12) (This section contains gameboards for alea. Here we report only the most common types and there are many more uncommon forms, e.g. boards with connected squares, boards with vertical strokes, boards with symbols, boards with letters in squares, boards with letters in squares or circles and so on and so forth).				
Type	**Form**	**Typology (Roueché-Bell)**	**Description**	**Gaming function**
63		2Rows.1	Two rows of four squares divided by interlocking leaves	Yes: *alea*

ROWS OF HOLES (Pockets are normally hemispherical but sometimes 'special' rectangular pockets are also present)				
Type	**Form**	**Typology (Roueché-Bell)**	**Description**	**Gaming function**
64		/	A pyramidal arrangement of hemispherical pockets, often adjacent to two parallel lines.	Yes: marbles lane
65		/	A dense cluster of hemi-spherical pockets, often adjacent to two parallel lines.	Yes: marbles lane
66		/	Sparse irregularly arranged hemispherical pockets, often adjacent to two parallel lines.	Yes: possible marbles lane

LINES (Each line can feature a depression, bowl or pocket at each end)				
Type	**Form**	**Typology (Roueché-Bell)**	**Description**	**Gaming function**
67		/	Five parallel lines (the circular endings are usually cavities, but they can varies); in some instances a parallel line can divide the field into two halves	Maybe: *pente grammai*
68		/	Seven parallel lines (the circular endings are usually cavities, but they can vary); in some instances a parallel line can divide the field into two halves	Maybe: *pente grammai*
69		/	Nine parallel lines (the circular endings are usually cavities, but they can vary); in some instances a parallel line can divide the field into two halves	Maybe: *pente grammai*
70		/	11 parallel lines (the circular endings are usually cavities, but they can varies); in some instances a parallel line can divide the field into two halves	Maybe: *pente grammai*

STAR				
Type	**Form**	**Typology (Roueché-Bell)**	**Description**	**Gaming function**
71		Star.1	Three intersecting lines forming a star or asterisk	Not a boardgame, but use for a throwing game such as *tropa* or *omilla* cannot be excluded

TRIANGLE				
Type	**Form**	**Typology (Roueché-Bell)**	**Description**	**Gaming function**
72		T.1	Three lines forming a triangle	Not a boardgame, but use for a throwing game such as *tropa* or *omilla* cannot be excluded

UNCERTAIN				
Type	**Form**	**Typology (Rouec-hé-Bell)**	**Description**	**Gaming function**
73			Five parallels lines with a semicircle on one side	Maybe: this could be used as boardgame for *pente grammai* or as an abacus
74			Five parallels lines with a cross in the midline and semicircle on one side	Maybe: this could be used as boardgame for *pente grammai* or as an abacus
75			Eleven parallels lines with a cross in the third and ninth line and semi-circles on two sides	No (*Abacus*)

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GAMES IN THE ANCIENT WORLD: PLACES, SPACES, ACCESSORIES

RÉSUMÉS / ABSTRACTS

Marie-Lys Arnette

A Community of players. Board games at Deir el-Medina (Egypt)

Le village de Deir el-Médina, dans la région de Louqsor, abritait les travailleurs et les artistes qui œuvrèrent à l'élaboration des tombes des toutes proches Vallée des Rois et Vallée des Reines, sous le Nouvel Empire égyptien. Le village comme les tombes qui le bordent, fouillés de longue date, ont livré un important matériel archéologique ainsi que des textes et des images, qui éclairent les pratiques ludiques des habitants et des habitantes de Deir el-Médina. L'article propose non seulement une synthèse de la documentation déjà connue, mais présente aussi un vaste corpus archéologique resté inédit – prélude à la publication d'un ouvrage entièrement dédié aux jeux de plateau à Deir el-Medina (Ifao).

Mots clés: astragales, Deir el-Médina, jeu de vingt cases, pions, plateau de jeu, scène de jeu, *senet*

The village of Deir el-Medina, in the Luxor region, was home to the craftsmen and artists who worked on the tombs of the nearby Valley of the Kings and Valley of the Queens during the Egyptian New Kingdom. The village and its surrounding tombs have long been excavated, yielding a wealth of archaeological material, texts and images that shed light on the playful practices of Deir el-Medina's inhabitants. The article offers a synthesis of previously known documentation, and also presents a vast corpus of unpublished archaeological objects – as a prelude to the publication of a book entirely dedicated to board games at Deir el-Medina (Ifao).

Keywords: astragals, Deir el-Médina, game board, game of twenty squares, game scene; pawns; *senet*

Ian Stern

Game boards from Hellenistic Period Maresha: predicting the future or simply passing the time?

Recent excavations at Maresha have uncovered 16 stone fragments identifiable as portable game boards. The ancient city of Maresha, located in the Judean foothills 22 miles (c. 35 km) east of Ashkelon and 25 miles (c. 40 km) southwest of Jerusalem was a thriving city in the Hellenistic period. The city was abandoned following the conquest by the Hasmonean king, John Hyrcanus I in ca. 112/111 BCE providing a terminus ante quem for all the game boards. The fragmentary nature and poor state of preservation of most of these portable boards limits us to only tentative identification of the specific games. However, many of the game boards were discovered in contexts that contained astragals, pessoi, shell counters, as well as divination material. Games in antiquity are understood to have been both a means of entertainment as well as a tangible medium through which to communicate with the gods. This paper will discuss the numerous game boards and other "gaming" items discovered at Maresha and suggest their possible functions within the different contexts they were unearthed.

Keywords: counters, divination, knucklebones, *latrunculi*, Maresha, *pente grammai*, *petteia*

Les fouilles récentes de Maresha ont mis au jour 16 fragments de pierre identifiables comme des plateaux de jeu mobiles. L'ancienne ville de Maresha, située dans les contreforts de Judée c. 35 km à l'est d'Ashkelon et c. 40 km au sud-ouest de Jérusalem était une ville prospère à la période hellénistique. La ville a été abandonnée après sa conquête par le roi hasmonéen, Jean Hyrcan Ier vers 112/111 avant J.-C. fournissant le *terminus ante quem* de tous les plateaux de jeu. La nature fragmentaire et le mauvais état de conservation de la plupart de ces plateaux limitent l'identification provisoire de jeux spécifiques. Cependant, beaucoup de plateaux de jeu ont été découverts dans des contextes contenant des osselets, des jetons, des coquillages ainsi que du matériel de divination. Dans l'Antiquité, les jeux étaient à la fois un moyen de divertissement et de communiquer avec les dieux. Cet article abordera les nombreux plateaux de jeu et autres objets « ludiques » découverts à Maresha et suggérera leurs fonctions possibles selon leurs différents contextes de découverte.

Mots-clés : divination, *latrunculi*, Maresha, *pente grammai,* pions, osselets, *petteia*

Walter Crist, Éric Piette, Dennis J. N. J. Soemers, Matthew Stephenson & Cameron Browne

Computational approaches for recognising and reconstructing ancient games: the case of ludus latrunculorum

The study of games in the ancient world has long been hindered by the loss of rules because they were rarely written down. The Digital Ludeme Project aims to apply computational methods to the available evidence for games throughout history to expand the scope of how games can be studied. This involves a two-pronged approach based on documenting evidence of known game rules in specific times and places, and simulation of candidate rule sets borrowed from similar games to calculate gameplay metrics. As an example, this methodology is applied to the Roman game Ludus Latrunculorum, which involves the relatively uncommon custodial capture rule. Adapting documented rule sets featuring this rule and applying them to known Roman era boards, various game metrics are examined to engage with how computational methods can shed light on potential rule differences or preference in game experience. Finally, future applications and improvements of our methodology are discussed.

Keywords: artificial intelligence, board games, computational methods, *ludus latrunculorum*, Roman empire,

L'étude des jeux du monde antique a été longtemps entravée par la perte de leurs règles car elles étaient rarement écrites. Le Digital Ludeme Project vise à appliquer des techniques algorithmiques sur les témoignages historiques disponibles afin d'élargir le champ d'études des jeux. Notre approche est en deux volets, basée d'un côté sur les témoignages concernant les règles connues dans différents lieux et moments historiques, et de l'autre sur la simulation d'ensembles de règles potentielles empruntées à des jeux similaires pour calculer des métriques de jouabilité. À titre d'exemple, cette méthodologie est appliquée au jeu romain Ludus Latrunculorum (le jeu des Latroncules) en appliquant la règle relativement peu fréquente de capture. En adaptant l'ensemble des règles attestées avec ce principe et en les appliquant à des plateaux connus de l'époque romaine, diverses métriques de jouabilité sont examinées pour déterminer comment des méthodes algorithmiques aider à saisir les différences potentielles de règles ou les préférences dans l'expérience de jeu. Enfin, des applications futures et des améliorations de notre méthodologie sont discutées.

Mots-clés: algorithmique, empire Romain, intelligence artificielle, jeu de plateaux, *ludus latrunculorum*

Luca Dal Monte

Su alcune tavole lusorie dai Fori Imperiali

This paper focuses on some gaming boards preserved in the area of the Imperial Forums of Rome, in particular from the Forum of Augustus, the Forum of Caesar, the Forum of Trajan and the complex of the Markets of Trajan. These examples of *tabulae lusoriae* (so often called) are carved on the pavement remains of porticoes and squares, on the paving stones of streets and on some marble blocks reused as thresholds or steps. The gaming bords are decontextualised and probably represent only a part of the original *corpus*, but are nonetheless very significant as they offer a very heterogeneous typological and topographical picture, which allows us to acquire interesting data on the type of use of the most monumental area of Rome in Late Antiquity.

Keywords: gaming boards, ancient types of games, Imperial Forums, Late Antiquity.

Cet article se concentre sur une série de plateaux de jeux conservés dans la zone des Forums impériaux de Rome, en particulier sur le Forum d'Auguste, le Forum de César, le Forum de Trajan et le complexe des Marchés de Trajan. Ces exemples de *tabulae lusoriae* sont gravés sur le pavement de portiques et de places, sur les pavés des rues et sur certains blocs de marbre réutilisés comme seuils ou marches. Les jeux sont décontextualisés et ne représentent probablement qu'une partie du corpus original, mais sont néanmoins très significatifs car ils offrent une image typologique et topographique très hétérogène qui nous permet d'acquérir des données intéressantes sur le type d'utilisation de la zone la plus monumentale de Rome dans l'Antiquité tardive.

Mots-clés : antiquité tardive, forums impériaux, *ludus latrunculorum* marchés de Trajan, marelle, plateaux de jeu

Peter Talloen

Games and gaming in southwestern Asia Minor

Gaming is a well-attested social activity in the region of Southwestern Asia Minor, as could be established on the basis of game boards that were carved into the stone surfaces of four well-documented urban centres. These testimonies of sociability are found at all major public venues of these cities, identifying gaming as an important part of urban daily life. Different types of board games could be identified in this region, generally representing games that are known throughout the Mediterranean world during the Roman Imperial period. They add to the characterization of Southwestern Asia Minor as part of the vast cultural zone created under Rome. Having said that, some regional specifics could be pointed out as well. While the rules of the game and configurations of the boards remain largely

unchanged, certain aspects of board games can be sensitive to their socio-cultural environment. Especially the materiality of the *Alea* game boards, in the sense of their monumental form, stands out. It illustrates the different reception the concept of a game could undergo, in response to cultural traditions.

Keywords: *alea,* Asia Minor, *duodecim scripta*, *ludus latrunculorum*, game boards, materiality, Roman Imperial period, *pente grammai*, public space,

Le jeu est une activité sociale bien attestée dans la région du sud-ouest de l'Asie Mineure, comme cela a pu être établi sur la base de plateaux de jeu gravés sur les surfaces de sol en pierre de quatre centres urbains bien documentés. Ces témoignages de sociabilité se retrouvent dans tous les grands lieux publics de ces villes, identifiant le jeu comme une part importante de la vie quotidienne urbaine. Différents types de jeux de société ont pu être identifiés dans cette région, des jeux généralement connus dans tout le monde méditerranéen à l'époque impériale romaine. Ils ajoutent à la caractérisation du sud-ouest de l'Asie Mineure comme partie de la vaste zone culturelle créée sous l'empire romain. Certaines spécificités régionales pourraient également être soulignées. Si les règles du jeu et les configurations des plateaux restent largement inchangées, certains aspects des jeux de société peuvent être sensibles à leur environnement socioculturel. La matérialité des plateaux de jeu d'*Alea* se démarque par leur forme monumentale. Cette diversité illustre la réception différente du concept de jeu selon les traditions culturelles.

Mots-clés: *alea,* Asie Mineure, espace public, *duodecim scripta*, *ludus latrunculorum*, plateaux de jeu, matérialité, *pente grammai*, période impériale romaine

Ben Russell, Angelos Chaniotis & Andrew Wilson

Gaming in the Place of Palms at Aphrodisias

The Place of Palms at Aphrodisias contains the highest concentration of gameboards identified to date at any Roman site. Following years of careful study, the extensive corpus of informal inscriptions from this complex, roughly half of which are gameboards, has been documented, mapped, and analysed. In this contribution we introduce the Place of Palms and explain its remarkable archaeology and architecture, and what we now know of its development over more than six centuries. We then turn to the mass of gameboards inscribed on the marble surfaces within this complex, and what their distribution, the range of game types represented, and the texts and decoration that accompany them reveal about the use of this space and the chronology of gaming within it.

Keywords: *alea*, Aphrodisias, Asia Minor, boardgames, graffiti, *duodecim scripta*, mancala, *pente grammai*

La place des Palmiers à Aphrodisias contient la plus forte concentration de plateaux de jeu identifiés à ce jour sur un site romain. Après des années d'études approfondies, le vaste corpus d'inscriptions informelles de ce complexe, dont environ la moitié sont des plateaux de jeu, a été documenté, cartographié et analysé. Dans cette contribution, nous présentons la Place des Palmiers et expliquons son archéologie et son architecture remarquables, et ce que nous savons maintenant de son développement sur plus de six siècles. Nous nous tournons ensuite vers la masse de plateaux de jeu inscrits sur les surfaces de marbre de ce complexe, et sur ce que leur répartition, leur variété, ainsi que les textes et le décor associés aux jeux gravés révèlent sur l'utilisation de cet espace et la chronologie du jeu.

Mots-clés: *alea*, Aphrodisias, Asie Mineure, graffiti, *duodecim scripta* mancala, *pente grammai*

Ulrich Schädler

Roman, Byzantine, and Medieval Games in Ephesus: preliminary survey results

In this chapter the author presents preliminary results of a survey on Roman, Byzantine, Arabic or Turkish games found at Ephesus in Western Asia Minor. The survey was conducted during two campaigns in 2007 and 2008 to document pavement signs and gaming tables. During this fieldwork, more than 300 game boards and other floor markings were documented. The survey encompassed two archaeological sites: the area of the Graeco-Roman town on the one hand and the Ayasoluk hill on the other. The main questions considered in this chapter are: which of the pavement signs and markings were used for playing games? Which were the games played in these public spaces? Is there a difference between the games played in the Graeco-Roman town and in the Byzantine and later settlement on the Ayasoluk? The author presented some of the aspects discussed here in numerous papers given on various occasions during the last 15 years, but these ideas and data are presented here in print for the first time.

Keywords: Alquerque, Ayasoluk, board games, Ephesus, *duodecim scripta*, marbles, Seega, St. John, Tâb, topos marker, wheel pattern

Dans ce chapitre, l'auteur présente les résultats préliminaires d'une enquête sur les jeux romains, byzantins, arabes ou turcs trouvés à Éphèse en Asie Mineure occidentale. L'enquête a été menée pendant deux campagnes en 2007 et 2008 pour documenter les panneaux de trottoir et les tables de jeu. Au cours

de ce travail sur le terrain, plus de 300 plateaux de jeu et autres marquages au sol ont été documentés. L'étude a porté sur deux sites archéologiques : la zone de la ville gréco-romaine d'une part et la colline d'Ayasoluk d'autre part. Les principales questions abordées dans ce chapitre sont les suivantes : quels panneaux et marquages ont été utilisés pour jouer à des jeux ? Quels étaient les jeux joués dans ces espaces publics ? Y a-t-il une différence entre les jeux joués dans la ville gréco-romaine et dans la colonie byzantine et plus tard sur l'Ayasoluk? L'auteur a présenté certains des aspects discutés ici dans de nombreux articles donnés à diverses occasions au cours des 15 dernières années, mais ces idées et données sont présentées ici en version imprimée pour la première fois.

Mots-clés : Alquerque, Ayasoluk, billes, Ephesus, *duodecim scripta*, motif de roue, plateaux de jeu, Seega, St. John, Tâb, topos marker

Ulrich Schädler & Mark A. Hall

Europe's playful frontiers: Roman board games in the Barbaricum, from Britain and across the Rhine and Danube lands

Through this contribution, the authors seek to explore the presence, meanings and values of board games along the edges of the Roman Empire in central and NW Europe, spanning Britain to the Danubian Provinces and also in the successor states as the Western Empire collapsed and Rome's centre of gravity moved fully to Constantinople. The paper draws together evidence from sites across the various frontier zones, including Clickimin in the Orkneys, Stanway in England, Vimose and Brøndsager in Denmark and Poprad in Slovakia as well as the well-known sites in Germany (Leuna, Gommern, Neudorf-Bornstein, Heiligenhafen etc.) and Poland (Pielgrzymono, Zgliczyn Pobodzy, Zakrzów etc.). The purpose is to explore the ways board games moved across the frontier, the cultural interactions they were part of (military, diplomatic, trade and exchange) and ideas around the innovations indigenous communities are imagined having made to these games. Thus, the coverage will include how some of these games may consequently have changed, and in several cases 'returned' to their Roman roots with population movements through the second half of the first millennium AD, including the Langobards, the Alemanni, the Vikings and the Normans.

Keywords: Barbaricum, Britannia, Danube, dice, magic, Rhine, Roman board games, supernatural,

Par cette contribution, les auteurs cherchent à explorer la présence, les significations et les valeurs des jeux de société le long des frontières de l'Empire romain en Europe centrale et nord-ouest, Il s'étend de la Grande-Bretagne aux provinces danubiennes et aussi dans les États successeurs lorsque l'Empire occidental s'effondre et que le centre de gravité de Rome se déplace entièrement vers Constantinople. L'article rassemble des preuves provenant de sites situés dans les différentes zones frontalières, notamment Clickimin dans les Orcades, Stanway en Angleterre, Vimose et Brøndsager au Danemark et Poprad en Slovaquie, ainsi que des sites bien connus en Allemagne (Leuna, Gommern, Neudorf-Bornstein, Heiligenhafen, etc.) et la Pologne (Pielgrzymono, Zgliczyn Pobodzy, Zakrzów, etc.). L'objectif est d'explorer les façons dont les jeux de société se sont déplacés à travers la frontière, les interactions culturelles auxquelles ils ont participé (militaires, diplomatiques, commerce et échanges) et les idées autour des innovations que les communautés autochtones imaginent avoir apportées à ces jeux. Ainsi, la couverture inclura la façon dont certains de ces jeux peuvent avoir changé par conséquent, et dans plusieurs cas «sont retournés» à leurs racines romaines avec des mouvements de population au cours de la seconde moitié du premier millénaire après J.-C., y compris les Langobards, les Alemans, les Vikings et les Normands.

Mots-clés: Barbaricum, Britannia, Danube, dés, magie, plateaux de jeu Romains, Rhin, surnaturel

Raimon Graells i Fabregat & Miguel F. Pérez Blasco

The Iberians played too

This contribution aims to highlight a neglected aspect of the daily life of the Iberians. Our contribution has considered only a part of these games, those of hazard and strategy played with tokens, dice and astragali. A brief contribution that shows how the Iberians played both the games that were practised throughout the Mediterranean and different local variants.

Keywords: élite, bone astragals, glass counters, ivory dice, mercenaries.

Cette contribution entend mettre en évidence un aspect négligé de la vie quotidienne des Ibères. Notre contribution s'intéresse à une sélection de jeux, ceux de hasard et de stratégie joués avec des pions, des dés et osselets. L'objectif est de montrer comment les Ibères ont pratiqué à la fois les jeux répandus dans toute la Méditerranée et différentes variantes locales.

Mots-clés: billes, dés en ivoire, élite, mercenaires, osselets en os, péninsule ibérique, pions en verre

Ilaria Truzzi

The gaming material from Empúries, Catalunya

Empuriés was founded as a commercial entrepôt in the 6th century BCE by Phocaeans of Massalia. It became a permanent and rich city thanks to

its strategic location for Mediterranean trade, continuing its existence during the Roman conquest of Iberia down until the early Roman Empire, and reaching its zenith during the 1st century CE when acquired the title of *Municipium Emporiae*. Now the site is called Empuriés which refers in Catalan to the two cities — the Greek one and the Roman one. Excavations have found gaming material in both cities. The research presented in this article focuses on the astragals from the Greek cemeteries and on the counters and the dice from the Roman city, where there also seems to be a complete set of gaming counters. Most of the finds can be interpreted as material for *Latrunculi* or *XII Scripta*. There is also a series of *tesserae lusoriae*. The large quantity and rich variety of game materials found here so far provide us with important information about the history of games and entertainment among the inhabitants of this site.

Keywords: Empúries, Greek astragals, *duodecim scripta, ludus latrunculorum* Roman counters, Roman dice, *tesserae lusoriae*

Empurias a été fondée comme entrepôt commercial au VIe siècle avant J.-C. par les Phocéens de Marseille. Elle est devenue une cité prospère grâce à son emplacement stratégique pour le commerce méditerranéen, continuant son existence pendant la conquête romaine de l'Ibérie jusqu'au début de l'Empire romain, et atteint son apogée au cours du Ier siècle de notre ère lorsqu'elle obtient le statut de *Municipium Emporiae*. Le nom actuel du site, Empuriés, fait référence en catalan aux deux villes, grecque et romaine. Des fouilles ont livré du matériel de jeu dans les deux villes. La recherche présentée dans cet article se concentre sur les osselets des nécropoles grecques et sur les dés, pions ou jetons de la ville romaine ; nous analyserons aussi ce qui semble constituer un ensemble complet de pions de jeux. La plupart des découvertes peuvent être interprétées comme du matériel pour le *Ludus latrunculorum* ou *XII Scripta*. Il y a aussi une série de *tesserae lusoriae*. La grande quantité et la riche variété de matériel de jeu trouvé ici jusqu'à présent nous fournissent des informations importantes sur l'histoire des jeux et du divertissement parmi les habitants de ce site.

Mots-clés: dés romains, Empúries, *duodecim scripta, ludus latrunculorum*, osselets grecs, pions romains, *tesserae lusoriae*

Yves Manniez

Le mobilier de jeu antique dans l'habitat de la cité de Nîmes

Cette étude, basée sur un corpus de 880 objets issus des fouilles menées sur le territoire de l'ancienne cité de Nîmes, ces 50 dernières années, donne une vision réaliste, car basée essentiellement sur des données de fouilles, de ce qui composait le mobilier ludique dans l'Antiquité dans cette région de l'Empire romain. Si elle révèle le caractère répétitif des grandes catégories et la rareté des jouets, la prise en compte d'un grand nombre d'éléments trouvés en contexte nous permet de préciser la date d'apparition de certains artefacts, de mettre en lumière des différences notables entre les pratiques ludiques rurales et urbaines et de percevoir une évolution dans l'apparition des différents types de jeu.

Mots-clés : Antiquité, astragales, dés, habitat, jetons, Nîmes, pions

This study, based on a corpus of 880 objects from excavations carried out in the territory of the ancient city of Nîmes over the last 50 years, gives a realistic view, based essentially on excavation data, of what made up the play furniture in Antiquity in this region of the Roman Empire. Although it reveals the repetitive nature of the main categories and the rarity of toys, the consideration of a large number of elements found in context allows us to specify the date of appearance of certain artefacts, to highlight notable differences between rural and urban play practices and to perceive an evolution in the appearance of different types of play.

Keywords : Anitquity, astragals, dice, counters, habitat, Nîmes, token

Natasha Harlow

Wrote for luck? Unofficial literacies and gaming counters from Roman Britain

Lathe-turned bone gaming counters are ubiquitous finds on Roman sites across the northwest provinces. Many examples have Latin numerals, letters and other symbols scratched onto their surfaces, suggesting that local variants of well-known board games were being played, or that counters were used for other practices, such as accountancy or divination. This paper examines the range of different markings on game pieces, with examples from Romano-British sites including *civitas* capitals and forts, and how they relate to the spread of literacy and numeracy in the provinces and the democratisation of these practices in everyday life. The use of magical or apotropaic scripts is also well-attested in the Roman provinces and the influence of the gods may have been invoked in games of chance. Gaming can be a subversive practice, enabling varied groups to mingle and providing opportunities to invert the social order. Were people in Roman Britain appropriating key skills such as writing and numeracy, more usually applied in official circumstances of tax collecting and administration, for these purposes? Such unofficial literacies may have allowed subject populations to integrate with, and perhaps influence, the occupying forces.

Keywords: gaming counters, Roman Britain, inscriptions, graffiti

Les jetons en os tournés au tour sont des trouvailles omniprésentes sur les sites romains des provinces du nord-ouest. De nombreux exemples ont des chiffres latins, des lettres et d'autres symboles gravés sur leurs surfaces, suggérant que des variantes locales de jeux de société bien connus étaient jouées, ou que des jetons étaient utilisés pour d'autres pratiques, telles que la comptabilité ou la divination. Cet article examine la variété des différentes marques sur ce type de pièces de jeu en se basant sur des exemples de sites romano-britanniques, y compris les cités et les forts militaires. Quel lien peut-il être établi avec la diffusion de l'alphabétisation et de la numératie dans les provinces et leur démocratisation dans la vie quotidienne ? L'utilisation d'écritures magiques ou apotropaïques est également bien attestée dans les provinces romaines et des puissances divines sont parfois invoquées dans les jeux de hasard. Le jeu peut être aussi une pratique subversive, permettant à des groupes variés de se mêler en offrant l'opportunité d'inverser l'ordre social. Les habitants de la Grande-Bretagne romaine se sont-ils appropriés grâce au jeu des compétences clés telles que l'écriture et le calcul, utilisées généralement pour la collecte et l'administration des impôts ? Ces alphabétisations non officielles ont peut-être permis aux populations soumises de s'intégrer, et peut-être aussi dd'agir sur les forces d'occupation romaines.

Mots-clés: alphabétisation, *Britannia*, graffiti, inscriptions, pions

Frances McIntosh

Casino at Coria? Evidence for gaming at Roman Corbridge

Coria was a fort and a town for over 350 years on the north-western edge of the Roman Empire. There are over 380 circular discs cut down from Samian vessels at the site, along with over 100 of other ceramic fabrics. This paper looks at the context (if known) of these items alongside other gaming paraphernalia from the site to consider what this can tell us about gaming, and the production of the material required for playing games at this site.

Keywords; Corbridge, *Coria,* counters, Hadrian's Wall, Samian,

Coria a été un fort et une ville pendant plus de 350 ans à la limite nord-ouest de l'Empire romain. Plus de 380 disques circulaires découpés dans des récipients samiens ont été retrouvés sur le site, ainsi que plus de 100 autres productions céramiques. Cet article analyse le contexte de trouvaille de ces artefacts ainsi que d'autres accessoires de jeu du site en examinant l'apport de leur témoignage sur les pratiques ludiques et le mode de production du matériel nécessaire pour jouer à des jeux sur ce site.

Mots-clés: Corbridge, *Coria*, mur d'Hadrien, pions, Samian, jetons

Mark A. Hall & Katherine Forsyth

On pegged gaming pieces (with particular reference to a Late Celtic set from Lough Sewdy, Ireland)

The use of pegged gaming pieces and reciprocally holed gaming boards is attested from at least as early as the Middle Kingdom of Ancient Egypt. They re-surface in Egypt in Early Medieval/Coptic times. They seem not to have been common in the Roman period either in Italy or much of the Empire (including Egypt) but are possibly linked with the Celtic-speaking provinces in France and Britain and also in Ireland. This use continues in post-Roman times, when textual and archaeological evidence combines to suggest renewed interest in pegged gaming sets among Celtic-speaking and Scandinavian elites. Having laid out this historical context, we combine archaeological and literary evidence to explore the nature and significance of pegged gaming pieces, with a particular focus on the previously unpublished set of Late Celtic, gilt-copper-alloy and bone pegged pieces, recovered through metal-detecting at Lough Sewdy, Ireland. The paper will put this set in the particular context of the facility of such sharply pointed pieces to become weapons, both during play and away from the board.

Key words: Ancient board games, *fidchell*, *hnefatafl, hounds and jackals*, *fifty-eight holes*, *the Coptic board game/the game of thirty points*, pegged pieces, peg-boards

L'utilisation de pièces de jeu chevillées et de plateaux de jeu à trous est attestée au moins dès le Moyen Empire de l'Égypte ancienne. Ils réapparaissent en Égypte au début du Moyen Âge/époque copte. Ils ne semblent pas avoir été répandus à la période romaine, ni en Italie ni dans une grande partie de l'Empire (y compris l'Égypte), mais sont probablement liés aux provinces de langue celtique en France et en Grande-Bretagne ainsi qu'en Irlande. Cette utilisation se poursuit à l'époque post-romaine, lorsque les preuves textuelles et archéologiques se combinent pour suggérer un intérêt renouvelé pour les jeux des élites celtiques et scandinaves. Après avoir exposé ce contexte historique, nous combinons des témoignages archéologiques et littéraires pour explorer la nature et la signification des pièces de jeu, avec un accent particulier sur l'ensemble inédit de pièces celtiques tardives en alliage de cuivre doré et en os récupéré par la détection de métal à Lough Sewdy (Irlande). Le document mettra cet ensemble dans le contexte particulier de la facilité de ces pièces pointues à devenir des armes, à la fois pendant le jeu et loin de la carte.

Mots-clés: Egypte copte, fidchell, hnefatafl, Irlande, le jeu de plateau copte/jeu de trente points, jeu des cinquante-huit trous, jeu des chiens et chacals, pions en cheville, plateaux de jeu

Regine Fellmann Brogli

Spielen in Vindonissa. Spielsteine und Würfel im militärischen Kontext

Les jetons de jeu et les dés sont bien attestés parmi les découvertes de *Vindonissa* (Windisch, canton d'Argovie, CH), un camp légionnaire entouré d'une agglomération civile datant du 1er siècle. ap. J.-C. Plus de 800 jetons de jeu et plus de 80 dés sont actuellement enregistrés dans la base de données archéologique du service archéologique cantonal d'Argovie. La longue histoire des recherches et l'histoire complexe de la structure bâtie de *Vindonissa* ne facilitent pas l'interprétation de la répartition des jetons et des dés. Sur la base de quatre dépôts et d'une sélection de jetons et de dés publiées, la question est discutée dans quelle mesure la répartition des objets permet de tirer des conclusions sur les lieux de jeu possibles à l'intérieur et à l'extérieur du camp et si on peut dire quelque chose sur l'identité des joueurs.

Mots-clés: agglomération civile, camp légionnaire, dépôt de jetons de jeu, dés, jetons, *Vindonissa*

Gaming pieces and dices are well documented within the finds from *Vindonissa* (Windisch, Canton Aargau, CH), a legionary fortress with a surrounding civil settlement of the 1st century A.D. Over 800 tokens and more than 80 dice are currently recorded in the archaeological database of the Kantonsarchäologie Aargau. The long history of research and the complex structural development of *Vindonissa* make it rather difficult to interpret the distribution of the gaming pieces and dice. Based on four deposits and a selection of published gaming pieces and dice, the question is discussed, what conclusion on possible playing zones may be drawn based on the distribution of finds inside and outside the legionary fortress and if we can say something about who was playing.

Keywords: civil settlement, deposit of gaming pieces, dice, gaming piece, legionary fortress, tokens, *Vindonissa*

Chiara Bianchi

Oggetti per il gioco di epoca romana: rinvenimenti in contesti archeologici in Lombardia

This contribution aims to carry out a critical review of the existing documentation on some objects related to board games (dice, counters, tokens) found in the territory of the current region Lombardy.

The contexts of discovery are presented by geographical areas corresponding to the cities that have returned evidence, such as *Mediolanum*, *Brixia*, *Cremona*, *Ticinum*, as well as some sites in extra-urban territories, such as in the case of the provinces of Brescia and Pavia.

In a chapter devoted to the critical analysis of the documentation, data on contexts are discussed in more detail, distinguishing between finds from necropolis (cremation and burial tombs) and those from urban areas designated for residence or worship (domus, rustic buildings, sanctuaries).

Keywords: dice, counters, tokens, Roman period, Lombardy, bone, ivory, glass

Cette contribution examine la documentation relative aux objets liés aux jeux de société (dés, pions, jetons) trouvés sur le territoire de la Lombardie actuelle.

Les contextes de découverte sont présentés par zones géographiques correspondant aux villes qui ont livré du matériel, telles que *Mediolanum*, *Brixia*, *Cremona*, *Ticinum*, ainsi que certains sites dans des territoires extra-urbains, comme dans le cas des provinces de Brescia et Pavie.

Dans un chapitre consacré à l'analyse critique de la documentation, les données sur les contextes sont discutées plus en détail, en distinguant les découvertes de nécropoles (crémation et sépultures) et celles des zones urbaines désignées pour résidence ou culte (*domus*, bâtiments rustiques, sanctuaires).

Mots-clés: dés, époque romaine, jetons, ivoire, Lombardie, os, pions, verre

Alessandro Pace

Les jeux de Pompéi. Réflexions sur la culture matérielle ludique de la ville romaine

We know that many different typologies of gaming tools were used in the Roman time, but for the modern scholars it is quite impossible to understand how the most part of them were really employed in the ludic activities.

Normally, counters, marbles and various typologies of so-called '*tesserae*' are founded in the tombs, but the data from Pompeii allow us to have new perspectives on the ludic habits of the daily-life in a Roman city of the first imperial age.

This new insight into the Pompeian game culture show how the modern categories aren't efficient enough to understand the complexity and the fluidty of the ludic habits of the ancient inhabitants.

Keywords : dice, glass counters, knucklebones, Pompeii, tokens

Nous savons que de nombreuses typologies différentes de jeux ont été utilisées à l'époque romaine, mais pour les chercheurs modernes, il est tout à fait impossible de comprendre comment la

plupart d'entre eux étaient réellement utilisés dans les activités ludiques.

Normalement, des pions, des billes et diverses typologies de '*tesserae*' sont fondés dans les tombes, mais les données de Pompéi nous permettent d'avoir de nouvelles perspectives sur les habitudes ludiques de la vie quotidienne dans une ville romaine du premier âge impérial.

Ce nouvel aperçu de la culture des jeux de Pompée montre comment les catégories modernes ne sont pas assez efficaces pour comprendre la complexité et la fluidité des habitudes ludiques des anciens habitants.

Mots-clés : astragales, dés, pions en verre, Pompéi, tokens

Tim Penn

Did people play games in the countryside of Roman Italy?

Existing scholarship on gaming often assumes that board games were primarily played in towns under the Roman empire and textual sources leave us in no doubt that game-playing was an important part of the urban experience. But it is also important to consider the extent to which games were played in the countryside. This contribution seeks to set the agenda for future research into playing and games in Roman rural settings by interrogating the urban-centric biases of literary sources. It juxtaposes the town-centric view provided by the textual tradition with the archaeological evidence from selected rural sites of different types across Roman Italy. This approach provides new insights into play and leisure in non-urban contexts.

Key words: *alea*, boardgames, countryside,Roman Italy, *duodecim scripta*, *ludus latrunculorum* merels, necropolis, Rome

Les études sur le jeu partent souvent du principe que les jeux de société étaient principalement joués dans les villes de l'Empire romain. Cette hypothèse est soutenue par les sources textuelles qui ne laissent aucun doute sur l'importance du jeu en contexte urbain. Il est également important de chercher dans quelle mesure les jeux ont été pratiqués à la campagne. Cette contribution vise à ouvrir les pistes de recherches futures sur les jeux en milieux ruraux romains en s'écartant des sources littéraires. Il compare la vue centrée sur la ville fournie par la tradition textuelle avec les preuves archéologiques de sites ruraux de différents types en Italie romaine. Cette approche fournit de nouvelles perspectives sur le jeu et les loisirs dans des contextes non urbains.

Mots-clés: *alea*, campagne, Italie romaine, *duodecim scripta*, *ludus latrunculorum* marelle, necropolis, plateaux de jeu

Francesca Diosono, Federica Grossi and Loredana Lancini

Ritual offerings or divination tools? Objects for play from the Roman Republican sanctuary of Diana in Nemi

Recent research conducted at the sanctuary of Diana at Nemi entailed both fieldwork and a re-examination of finds from earlier excavations in the area. Diana protects women (especially in childbirth), slaves, children, and young people in times of status transition. Offerings of objects of play or human representations bearing toys in the sanctuary space should be viewed as relating to the latter, as is usual in other sanctuaries in ancient *Latium*. Among the thousands of objects found in Nemi, the objects of this type are relatively few, while real toys for small children are altogether absent. Figurines of dedicatees carrying games and children with animals are rare: it is also not clear whether they are simply replicas of widespread moulds or have a particular meaning. Depictions of children are also uncommon, though there is one statuette of a nursing mother. The games we have at the sanctuary of Nemi are above all counters and astragals, and their analysis within the context of the sanctuary provides new insights for the study of these items. Our working hypothesis is that there was a possible relationship between astragals (and maybe other gaming-related objects) and activities related to predicting the future in the sanctuary at Nemi (i.e. cleromancy). This contribution therefore explores the complexity of the data, aiming to analyse the materials found in the sanctuary of Diana *Nemorensis*.

Keywords: astragals, cleromancy, counters, Latium, Nemi, oracle, Roman Republican period

Les recherches récentes dans le sanctuaire de Diane à Nemi se sont concentrées à la fois sur le travail de terrain et sur un réexamen des matériaux des fouilles archéologiques plus anciennes. Une des sphères de compétences de la déesse Diane était la protection des femmes (en particulier dans l'adolescence), des esclaves, des enfants et des jeunes pendant la phase de transition d'un statut à un autre. Demander cette protection pouvait être la raison d'offrir des jouets dont témoignent les représentations de dédicants dans plusieurs sanctuaires du Latium. Toutefois, malgré le rôle de transition et de passage de Diane, peu d'objets de ce type ont été retrouvés dans son sanctuaire à Nemi ni aucun jouet de petit enfant. Presque absentes sont aussi les représentations de dédicants avec un jouet ou d'enfant avec des animaux et il nous échappe également s'il s'agissait des répliques de célèbres moules ou s'ils avaient une signification particulière. Seule une statuette représente une mère qui allaite. Le matériel ludique retrouvé dans le sanctuaire est composé en majorité de pions et osselets dont la présence en contexte religieux ouvre de nouvelles perspectives d'étude. Nous proposons l'hypothèse d'une relation possible

des osselets (et peut-être des autres objets ludiques) avec des activités oraculaires de cléromantique dans le sanctuaire de Nemi. Au travers d'une approche envisageant la complexité des données, nous allons dans cette recherche présenter une interprétation inédite des objets ludiques retrouvés dans le sanctuaire de Diana *Nemorensis*.

Mots-clés: cléromancie, époque romaine républicaine, Latium, Nemi, oracle, osselets, pions