

# A STUDY ON THE LATE ANTIQUE BOARD GAME DUODECIM SCRIPTA/ALEA FROM STRATONIKEIA AND LAGINA

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**Abstract.** This study examines a group of graffiti board games found in the public areas of Stratonikeia, one of the important cities of the Inner Carian Region in the Late Antique Period (Late 5th and 6th centuries AD), and Lagina, which was politically affiliated to it, and aims to contribute these games to the existing literature. This game, known as "*ludus duodecim scriptorum*" or "*duodecim scripta*" during the Roman Imperial Period and resembling backgammon, continued to be played under the name *alea* in the Late Antique Period. The 5 examples of *alea* identified in Stratonikeia and Lagina show less prevalence compared to other graffiti games documented in the city – three-in-a-row, nine men's morris, and mancala. These games were created by carving them practically and carelessly into the marble surfaces of architectural elements, rather than using specially produced luxury gaming tables. Four of these games are located in the public areas of Stratonikeia that are open to the public, while one is located on the stylobate of the Hekate Temple in Lagina. Although a decline in pagan beliefs was observed with the collapse of the Roman Empire and the acceptance of Christianity as the official religion of the state, it is understood that board games continued to be played in many cities under Imperial rule. In this context, this study conducted through the examples of Stratonikeia and Lagina aims to reveal how the religious and social transformations experienced in the Late Antique Period were

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reflected in leisure and entertainment practices—especially board games—through archaeological data.

**Keywords:** Late Antique Period, Caria, Stratonikeia, Lagina, Roman games, *XII scripta, alea*

### Introduction

Stratonikeia, one of the important settlements of the ancient Carian Region, developed rapidly especially from the 2nd century BC during the Hellenistic Period and became one of the main centers of the region with the structures built during the Roman Imperial Period.<sup>1</sup> In the Late Antique Period, it managed to maintain its importance despite changing political and economic conditions.<sup>2</sup> Thanks to excavation work conducted for 12 months recently, the settlement fabric of the city belonging to the Eastern Roman (Byzantine) Period has also been partially brought to light. Especially in the last two years, numerous graffiti of different types have been found in the structures and spaces uncovered in excavations conducted in the southern section of the city's western street. At the same time, in simultaneous work conducted at the Hekate Sanctuary in Lagina located outside the city,<sup>3</sup> various graffiti and ancient game traces, mostly containing religious symbols, have been identified and documented. These findings shed light on both Stratonikeia's social and cultural life and the daily practice of the period.<sup>4</sup>

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<sup>1</sup> For the foundation and historical process of the city, see SÖĞÜT 2013, 605-623; SÖĞÜT 2015, 1-8; SÖĞÜT 2019, 20-26.

<sup>2</sup> ÖZTAŞKIN 2015, 175. For detailed information about Late Antique Period structures and construction, see SÖĞÜT 2019, 93-179.

<sup>3</sup> Stratonikeia and Lagina are connected by a sacred road approximately 8.2 km long (SÖĞÜT 2019, 243).

<sup>4</sup> In our graffiti catalog work conducted in Stratonikeia and Lagina Hekate Sanctuary between 2013-2023, many graffiti types have been identified and documented. In addition to textual and pictorial graffiti, numerous graffiti belonging to six different game types have also been recorded: *three-in-a-row*, *nine men's morris*, *mancala*, *qirkat/alquerque*, *ludus latruncularum* and *XII Scripta/Alea*. As excavation work progresses, both the number and variety of graffiti increase; therefore, the typology of graffiti is updated every year.

An overview of research on ancient game culture from the 17th century to the present, see also, DASEN- SCHÄDLER 2024.

### **Ludus Duodecim Scriptorum (XII Scripta) – Alea**

The game called "*Ludus duodecim scriptorum*" or simply "*duodecim scripta*" was first mentioned by the Roman poet Publius Ovidius Naso (43 BC-17 AD) in his work *Ars Amatoria* (The Art of Love) completed in 8 AD.<sup>5</sup> According to Ovid, the game means 'twelve marks' or 'twelve points game'.<sup>6</sup> Three rows located on a rectangular game board are separated by a gap or mark in the middle with two sections of six squares each.

Especially in the Latin-speaking western provinces of the Roman Empire, these written rows replaced traditional square or circular game areas.<sup>7</sup> R.G. Austin stated that this game was a race game similar to backgammon, played with three dice (according to U. Schädler, two dice)<sup>8</sup> and 15 pieces for each player.<sup>9</sup> Although the exact rules of the game are not known, Austin reconstructed the rules based on a game board found in Ostia<sup>10</sup> and clarified the direction of movement. Schädler, on the other hand, suggested that the term "scripta" refers to the dots on the dice and therefore the game was played with two six-sided dice.<sup>11</sup> Over time, changes occurred in the rules of the game; first the *alea* form played with three dice developed, then a new variant called *tabula* emerged by reducing the three-row arrangement to two rows in order to speed up the game.<sup>12</sup> Whether or

<sup>5</sup> OVID, *Book III, Part VIII*, 55-56.

<sup>6</sup> AUSTIN 1934b, 31; SCHÄDLER 1995, 83; TALLOEN 2018, 104; DASEN 2020, 310.

<sup>7</sup> For three-row examples consisting of twelve letters in the British Museum, see AUSTIN 1934b, 31, Figure 3. See also TALLOEN 2018, 116.

<sup>8</sup> SCHÄDLER 1995, 84.

<sup>9</sup> AUSTIN 1934b, 33.

<sup>10</sup> For the original of the game board found in Ostia, see SCHÄDLER 1995, Figure 8; SELVÍ-BENER 2013, Res. 64.

<sup>11</sup> In the game board prepared for beginners, the direction of the game follows the letters from A to E. In this version, three dice were thrown alternately and pieces were introduced into the game from the middle row marked A...A and moved upward and to the left following the letter sequences. However, if a piece left alone in a square during progression was captured by the opponent, this piece had to be introduced into the game from the very beginning, from row A. Players would only win when they brought all their pieces to row E (i.e., the finish row). The side that collected all its pieces was considered the winner of the game. For reconstructed game rules and history supported by written sources and archaeological evidence, see PURCELL 1995; SCHÄDLER 1995; SCHÄDLER 2019a, 128-129. For detailed information about the game, see also AUSTIN 1934b, 31-34; SCHÄDLER 1995, 73-84; LAMBRUGO 2015, 26; TALLOEN 2018, 105; DE VOOGT 2019, 91, 98).

<sup>12</sup> SCHÄDLER 2013c, 64. During the time of Eastern Roman Emperor Zeno (425-491 AD), the number of rows was reduced from three to two. The removal of one row allowed

not the game was called *tabula* is a matter of debate. There is no source, which would definitely prove that this was the name of a game.<sup>13</sup>

Not being bound to a specific social class but widely played in both lower and upper classes,<sup>14</sup> *XII scripta/alea* are among the most popular dice-based<sup>15</sup> board games<sup>16</sup>. These games are chance-based racing games played by two adults sitting opposite each other by throwing dice. Each player has 15 pieces that differ from each other in color or shape, and the aim of the game is to advance all the pieces on the game board toward the finish line using dice and move them off the game board.<sup>17</sup> Although the rules remain unclear, conceptually these games are not different from the medieval and modern backgammon games of which they are the predecessors.<sup>18</sup> They were played with great affection for long centuries across a wide geography where the Roman Empire ruled, such as the capital Rome, Italy, Anatolia, and North Africa. The shape of the game spaces on the game board can vary. The XII Scripta game, where letters were used instead of abstract marks, gained popularity especially in the Latin section of the Roman

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players to play more games in a single time period. For the epigram by Agathias of Myrina depicting Zeno (474-491 AD) playing a board game, see *Anth. Pal. IX.482*; AUSTIN 1934a,<sup>13</sup> Baumgartner 1981, 155.

<sup>14</sup> According to literary sources about ancient games, it is known that Roman Emperors Claudius and Marcus Aurelius had great interest in dice games (*alea*). Especially Claudius (41-54 AD), in his book *De arte aleae* (Suet. Claud. 33) about the *alea* game he was addicted to, focused on how to win the game. Augustus (Suet. Aug. 71, 3), the founder of the Empire, also played dice gambling at the dinner parties he hosted. Emperor Caligula (Seneca, *Polybius*, 17.4) withdrew from the people by playing *alea* to forget his sister Drusilla's funeral ceremony (AUSTIN 1935, 76-77; SCHÄDLER 1995, 73; PURCELL 1995, 3).

<sup>15</sup> AUSTIN 1935, 76.

<sup>16</sup> The game is attributed to Palamedes, who is said to have spent his time playing this game during the long siege of Troy (PURCELL 1995, 3; KURKE 1999, 249-250). Although ancient authors (*Paus. X. 31. 1*; *Hdt. 1.94*) claimed that board games were invented by the ancient Greeks and Lydians, research has revealed that these games spread to the Mediterranean world from the ancient Near East and Egypt, probably since Neolithic times (TALLOEN 2018, 97). For details about the history and rules of board games, see also PARLETT 1999; REITH 1999. Perhaps the most famous of ancient games is the *Senet* game played by the Egyptians. Claims that modern games like *chess*, *mancala* or *backgammon* or other ancient games like *pente grammai*, *ludus latruncularum* or *XII Scripta* derived from *senet* are not based on archaeological evidence (CRIST 2021, 13, 19).

<sup>17</sup> For the history of games, see AUSTIN 1934b, 31-33; AUSTIN 1935, 76-79; PARLETT 1999, 30-34, 72-73; SCHÄDLER 1995, 73-84; PURCELL 1995, 4; LAMBRUGO 2015, 26; TALLOEN 2018, 105; DE VOOGT 2019, 91, 98.

<sup>18</sup> SCHÄDLER 1999.

Empire<sup>19</sup> and appears to have been transmitted for centuries with only minor changes.<sup>20</sup>

In Anatolia, where Greek culture was influential in ancient times, examples of lettered game boards are quite limited; today they are known only from Ephesus<sup>21</sup>, Sagalassos<sup>22</sup>, Xanthos<sup>23</sup>, Kos, Halikarnassos and Tripolis. Other known examples<sup>24</sup> from Anatolia generally consist of game areas arranged in square, circular, recessed square, or recessed circular forms. When the examples obtained from these centers are considered, it is understood that the dividing mark in the middle was not used according to a common template; it shows diversity in terms of shape and size.

During the Roman Imperial Period, the name *XII scripta* is no longer mentioned in late antique sources. This situation has brought up claims that the game was the predecessor of *alea*. *XII Scripta*, which was widely played until the 4th century AD, continued its development under the name *alea* until the end of the 6th century AD. In the 5th century AD, one of the rows on the game board was removed, resulting in a simpler 2x12 layout, and the game evolved into *Tabula*.<sup>25</sup> *Tabula* is a board game from the Roman era. Structurally, it shares similarities with other early games such as *XII scripta* and *alea*, but none of these games are considered direct evolutionary ancestors of modern backgammon. The historical origin of the backgammon widely played today can be traced to the game of Nard, which gained popularity in the Arab world and developed particularly in the Persian region during the Sasanian period (before 800 BCE).<sup>26</sup> In this context, *Tabula*, *XII scripta*, and *alea*, while historically significant among board games, are not direct predecessors of modern backgammon; rather,

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<sup>19</sup> SCHÄDLER 1995, 81.

<sup>20</sup> AUSTIN 1935, 77; LAMBRUGO 2015, 26; DE VOOGT 2019, 91; DASEN 2020, 305, 310; SCHÄDLER 2013c, 64; SCHÄDLER 2022, 382, 385. Three-row game boards continued to develop until the end of the 6th century AD; then evolved into the two-row game board with twelve marks that emerged in the 5th century AD and was the predecessor of backgammon (TALLOEN 2018, 121).

<sup>21</sup> TALLOEN 2018, Figure 3; TALLOEN 2024, Figure 6.

<sup>22</sup> TALLOEN 2018, Figure 2; TALLOEN 2024, Figure 9.

<sup>23</sup> TALLOEN 2024, Figure 7.

<sup>24</sup> Aphrodisias, Ephesus, Miletos, Xanthos, Kibyra, Sinope, Laodikeia ad Lycum, Tripolis, Sagalassos, Side, Perge etc.

<sup>25</sup> AUSTIN 1935, 78; TALLOEN 2018, 121, 127. For detailed information, see SCHÄDLER 1995, 82, 95.

<sup>26</sup> BELL 1969, 42.

they are examples representing different historical and cultural branches of the same gaming tradition.

During the Roman Imperial Period, the name *XII scripta* is no longer mentioned in late antique sources, which has led to claims that it was the predecessor of *alea*.<sup>27</sup> However, the almost negligible number of *XII scripta* or *alea* boards identified in settlements suggests, as R. G. Austin<sup>28</sup> also proposed, that these games may have been played only on the two outer rows, ignoring the middle line. Indeed, it is evaluated that a board found in the Sagalassos agora may have been obtained by cutting from a three-row XII Scripta/*alea* board.<sup>29</sup> Similarly, *tabula* boards with 2x12 arrangement are also known from Sardis, Didyma, Ostia and even Rome.<sup>30</sup> However, the marked absence of contemporary two-row examples reveals that caution should be exercised when interpreting Byzantine period game boards that have survived to the present day. Ultimately, this game has evolved and

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<sup>27</sup> Isidore, Bishop of Seville (560-636), described a specific game in detail in his work *Origins* (Isidore, *Origins*, 18.64). This book, which does not give the rules, only contains information about the shape of the board, the use of game pieces, dice, and the *pyrgus* used to eliminate cheating. Isidore's explanation closely resembles the *XII Scripta* game. Isidore claimed that the name of this board game was "*alea*" (ISIDORE 1911). A group of closely related poems in the Latin Anthology about a board game played with dice is also called "*De tabula*" and has been associated with the game board described by Isidore. Through analysis of the poems in the Latin Anthology, U. Schädler concluded that *XII Scripta* and *Alea* were synonymous and could be used interchangeably (SCHÄDLER 1995, 83-84). These explanations by U. Schädler also support R. G. Austin's claim that *XII Scripta* evolved into *Alea*. R. G. Austin explains as follows: "But these games generally develop over time as the history of chess also shows, and even if the *Alea* game played by Claudius was really *XII Scripta*, this does not mean that it remained unchanged in Isidore's time" (AUSTIN 1935, 76). According to this explanation by R. G. Austin, it can be concluded that *Alea* and *XII Scripta* could be substituted for each other and over time this game could transform into two different games. The fact that the name *XII Scripta* does not appear in any text from the late antique period confirms R. G. Austin's view. H. J. R. Murray says that the only difference between the two games is the shape of the game board. According to Murray, *Alea* (2x12) is the Roman version where the third row of *XII Scripta* (3x12) was removed and thus shortened the path, the game method remains unchanged (MURRAY 1952, 31). This change stems from the description of a game played by Byzantine Emperor Zeno (425-491 AD). (AUSTIN 1935, 77). Most scientists agree that *XII Scripta* should be the *Alea* game, but as R. G. Austin explained, "Zeno used a board with only two rows of game spaces for the movement of pieces. Therefore, according to this description made by Zeno, *XII Scripta* must have evolved to be played on a 2x12 board. U. Schädler has discovered at least three games where an outer row has been removed (SCHÄDLER 1995, 89).

<sup>28</sup> AUSTIN 1935, 77-78.

<sup>29</sup> TALLOEN 2018, 112-113, Figure 5.

<sup>30</sup> SCHÄDLER 1995; TALLOEN 2018, fn. 113.

taken its final form as "tavli" (τάβλι)<sup>31</sup> in Greece and "tavla" in Turkey as known today.

The *XII scripta/alea* game, which was quite widespread in ancient Roman geography, has spread to many regions of the ancient world. However, only very few of these examples have been published and documented in detail. Apart from Stratonikeia and Lagina, both floor boards carved on architectural elements and specially made independent game tables have been identified in many Roman cities in Anatolia.

Among these examples, settlements such as Aphrodisias,<sup>32</sup> Ephesus,<sup>33</sup> Xanthos,<sup>34</sup> Miletos, Didyma,<sup>35</sup> Kibyra,<sup>36</sup> Sinope,<sup>37</sup> Laodikeia ad Lycum,<sup>38</sup> Tripolis, Sagalassos,<sup>39</sup> Side,<sup>40</sup> Perge,<sup>41</sup> Çarşamba,<sup>42</sup> and Halikarnassos

<sup>31</sup> KOUKOULES 1948, 200-204.

<sup>32</sup> ROUECHÉ 1989, Pl. XV: 59, Pl. XVI: 69; Pl. XVII: 70; ROUECHÉ 1993, Pl. XII: 45.36 (stadium, inscribed, carelessly worked, game spaces circular, dividing mark circular in the middle, semicircular in other rows); SELVÍ-BENER 2008, Lev. XXXIV: 66, Lev. XXXIV: 67, Lev. XXXVI: 71; NUZZO 2018, Tav. XXII: 56, Tav. XXIV: 60-61; TALLOEN 2018, Figure 8; RUSSEL-CHANOTIS-WILSON 2024, Figure 10e, Figure 13, 17.

<sup>33</sup> MERKELBACH 1978, 48-50 (The game mentioned here as *ludus latruncolorum* is actually the *XII scripta/alea* game); SCHÄDLER 1995, Figure 5b; SCHÄDLER 2016, 519-523, Taf. 251, MI 1 and 2; NUZZO 2018, Tav. X: 31; SCHÄDLER 2019c, 86; SCHÄDLER 2013b, 39; SCHÄDLER 2013c, 64; TALLOEN 2018, Figure 3, 9; YILDIRIM 2020, Res. 11; FEISSEL 2020, Taf. 8: 1-2; SCHÄDLER 2022, Figure 1.

<sup>34</sup> TALLOEN 2024, Figure 6.

<sup>35</sup> LAMBRUGO 2015, Figure 3.

<sup>36</sup> DEMİRER 2015, Res. 1 (Professionally cut, three parallel rows, game spaces recessed square, dividing mark in the middle rectangular motif with profiled edges, 5th-6th century AD); Res. 2 (Professionally cut, three parallel rows, game spaces in recessed circular form, dividing mark in the middle four-leaf rosette motif, 5th-6th century AD).

<sup>37</sup> YILDIRIM 2020, Res. 1, 3, 4 (Professionally cut, three parallel rows, game spaces concentric circle within square, dividing mark in the middle + x motif in other rows, Late Roman).

<sup>38</sup> ŞİMŞEK 2014, 50, Res. 20 (Syria street, professionally cut on portico, three parallel rows, game spaces in recessed circular form, dividing mark in the middle Maltese cross within circle, two-leaf rosette motif in the other two rows).

<sup>39</sup> TALLOEN 2018, Figure 2, 4, 5, 6, 7.

<sup>40</sup> SELVÍ-BENER 2008, Lev. XXXIX: 77; Lev. XLV: 86-87; SELVÍ-BENER 2013, Res. 74-76.

<sup>41</sup> SELVÍ-BENER 2008, Lev. XXXVI: 68, Lev. XLI: 79, Lev. XLIV: 85A-B; SELVÍ-BENER 2013, 61, Res. 77 (South bath, in situ); LAMBRUGO 2015, Figure 2; NUZZO 2018, Tav. XXII: 55; YILDIRIM 2020, Res. 10.

<sup>42</sup> LEVICK-MITCHELL, 1993, 107: 330; TALLOEN 2018, 119 (Game board made of professionally cut gray-white marble found in a village garden in Çarşamba village northwest of the city of *Kotiaieion* in Phrygia, three parallel rows, game spaces square,

stand out, and the games are generally dated between the 3rd and 6th centuries AD.<sup>43</sup>

Examples outside Anatolia have been documented in centers such as ancient Britain,<sup>44</sup> England,<sup>45</sup> Italy/Minturnae,<sup>46</sup> Rome/Piazza Colonna,<sup>47</sup> Greece/Athens,<sup>48</sup> Switzerland/Aventicum,<sup>49</sup> and especially Abu Sha'ar<sup>50</sup> and Kom Ombo<sup>51</sup> in Egypt.<sup>52</sup> These finds show that different types and local variations of the game were adopted and practiced over a wide geography.

Additionally, figurative depictions of people playing the *XII scripta/alea* game have been included in mosaics from Hatay/Antioch,<sup>53</sup> Tunisia/El Jem (Thysdrus),<sup>54</sup> and Tunisia/Carthage (Carthago).<sup>55</sup> Similarly, people

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dividing mark in the middle diamond motif within circle with cross in the center, half diamond with cross in the center in the other two rows, both long edges inscribed "*May the One Living Here Not Conflict with God*" and "*May the Grumbler Be Calm*", cross marks at the beginning and end of each line, 4th-5th century AD according to inscription, possibly 6th century AD).

<sup>43</sup> SCHÄDLER 2022, 373.

<sup>44</sup> COURTS-PENN 2019, Figure 7.

<sup>45</sup> MACGREGOR 1976, 3-4.

<sup>46</sup> BELLINI-ZAGAROLA 2016, Figure 1-6 (marble, partially preserved three parallel rows, game spaces in the first two rows consisting of letters forming sentences –VTERE FORTUNA/ VTERE FORTUNA– third row in small semicircle form; dividing mark circular in middle row, semicircular in other two rows, 2nd-4th century AD).

<sup>47</sup> NUZZO 2018, Tav. XII: 35.

<sup>48</sup> SCHÄDLER 1995, Figure 1-4 (3 separate game boards carved into the ground, careless, game spaces square, partially preserved three parallel rows, Athens/Roman Agora); CARÉ 2022, 235-236, Figure 6 (careless, game spaces square, three parallel rows).

<sup>49</sup> DANIAUX 2019, Figure 2.

<sup>50</sup> MULVIN-SIDEBOTHAM 2004, 604-608, 614; SCHÄDLER 2013b, 39; SELVĪ-BENER 2008, Lev. XXXVIII: 75; SELVĪ-BENER 2013, 60, Res. 72-73; NUZZO 2018, Tav. XXVII: 64,2; YILDIRIM 2020, Res. 12.

<sup>51</sup> VOOGT 2019, Figure 5-6.

<sup>52</sup> DE VOOGT 2019, 92, Figure 2.

<sup>53</sup> NUZZO 2018, Tav. XV: 43; DASEN 2020, Figure 9a-b (Yakto/Megalopsychia Mosaic, found in a wealthy villa called the Yakto Complex in Daphne (Harbiye), mid-5th century AD); DASEN 2020, Figure 8 (game area bounded by frame, game space square, dividing mark in the middle tile with inward curved edges within circle, half tile motif within semicircle in outer rows).

<sup>54</sup> NUZZO 2018, Tav. XI: 33 (in the Triclinium of a wealthy villa, mid-3rd century AD).

<sup>55</sup> NUZZO 2018, Tav. XII: 34 (in a room of a house, early 4th century AD).

playing this game are depicted on an amulet medallion found in Paris.<sup>56</sup> These visual representations show that the game was not limited only to physical boards but also found a place on the iconographic level. On the other hand, a miniature XII Scripta game table made of lead recovered from the Monte S. Angelo sanctuary in Italy/Terracina<sup>57</sup> has been recorded as a remarkable find revealing that the game was also used as a votive object. Additionally, in a depiction on the discus decoration of an African lamp found in Sicily (mid-6th century AD–end or early 7th century), a game table resembling a two-row backgammon game is depicted.<sup>58</sup> This example provides an important clue about the game's evolution in the late antique period and its reflections in visual culture



**Figure 1** General view of the Latrina, Roman bath-1 (A) and “Mosaic Villa” (B) located on the western street (B) and to its south.

<sup>56</sup> DASEN 2019, Figure 1; DASEN 2020, Figure 1a-b (silver-plated lapis lazuli carved seal, on front Anubis and a naked man playing *alea* game, three-line inscription on back, 1st-3rd century AD).

<sup>57</sup> SCHÄDLER 2013a, 23; DARANI 2021, Figure 8 (game spaces in relief circle form, middle dividing mark  $\vee$ ,  $\wedge$  in outer rows, second half of 2nd century AD. For another lead miniature game table found in Italy, see also DARANI 2021, Figure 9 (game spaces in relief circle form, middle dividing mark circle).

<sup>58</sup> There are similarities with the backgammon board depicted in medieval manuscripts in the 13th century AD. For detailed information, see WILSON 2011, 273, Figure 10.

### XII Scripta/Alea Game Boards and Spatial Distribution

*Alea*, the late antique period variant of the *XII scripta* game was widely played in Roman settlements until the 4th century AD, was created practically and quickly compared to other games identified in Stratonikeia and carved on floor boards.<sup>59</sup> A total of 5 *alea* game examples have been documented, 4 in Stratonikeia and 1 in Lagina. The games identified in Stratonikeia were played on floor boards created in a practical manner compared to the Lagina example.

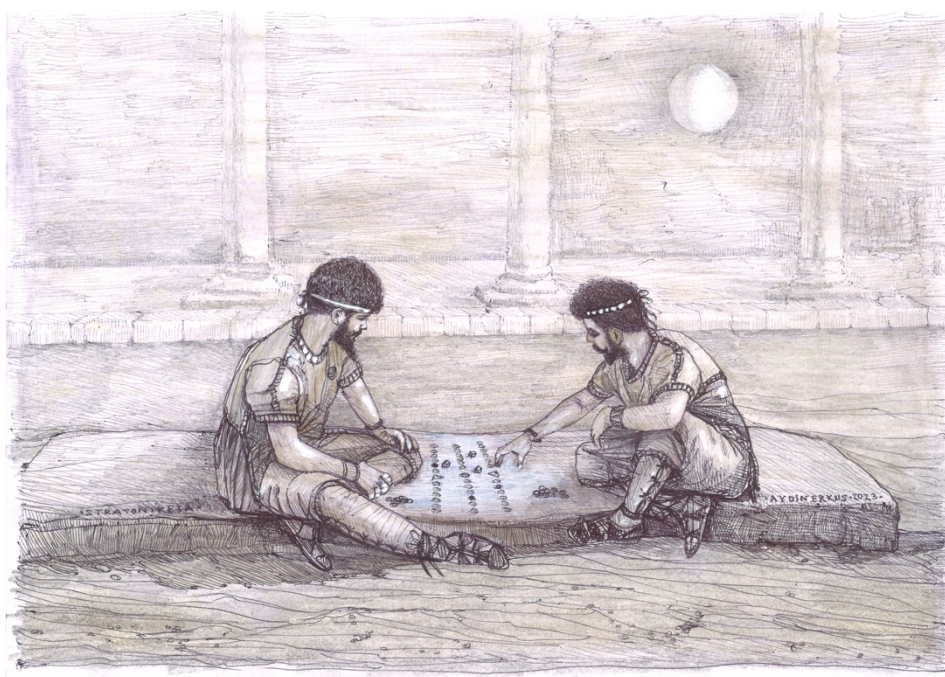
The first of these games was identified in the space called "Honor Hall" on the northern boundary wall axis of the Roman bath-1 structure, located immediately south of the beginning part of the Western Colonnaded Street and where excavation work continued in 2022 (Figure 1A, 2, 4, 5). The game is located on a large-sized door threshold (3.22 × 0.78 m) used as spolia. Although it initially appears to be one of the board games commonly played in Roman baths,<sup>60</sup> it has been understood that the structure was later converted into a fountain and a different structure whose function cannot be fully determined. Sounding work conducted in the area revealed that the door threshold containing the game arrangement was previously used as an architrave belonging to the Doric order. This architrave was turned upside down in its second use and its lower fascia was shaved to gain threshold

<sup>59</sup> DURNAGÖLÜ-SÖĞÜT 2024, 400.

<sup>60</sup> In addition to streets and squares, baths where much time was spent bathing and doing sports also served as special spaces for games. Ball games were especially popular in baths open to public access and actual game rooms were known in this direction (SCHÄDLER 2013b, 39). The existence of special game rooms reserved for board games is known from Aphrodisias excavations. In the Hadrian bath, based on game boards carved into the floor of a room in the northwest of the structure, it was thought that this could be a game room. 5 of the identified games belong to the *alea* game and the inscription "Chance (Aphrodite) Ourania" was also associated with the games. Additionally, professional *alea* game tables donated by the city's notables for public use were also found near this hall (ROUECHÉ 1989, 112; SCHÄDLER 2013b, 39; SCHÄDLER 2013c, 64; NUZZO 2018, 181-182). In this context, *alea* is the only Roman Period board game for which professional marble cutters made luxury game tables (SCHÄDLER 2013c, 64). Similarly, Roman legionnaires stationed at the Egypt/Abu Sha'ar fortress in the 4th century AD not only played in baths but also had a complex designed as an actual game hall (MULVIN-SIDEBOTHAM 2004, 604-608, 614). An in situ room containing approximately 20 games designed for playing *alea*, *mancala* and even *marbles* was uncovered in the southern part of the fortress. 10 of these belong to the *mancala* game while the other 10 belong to other games such as *alea* and marbles. This has also entered the literature as one of the earliest archaeological evidence of the *alea* game (SCHÄDLER 2013b, 39).

function.<sup>61</sup> On both sides of the threshold, roughly hewn surfaces where the jambs of this second use phase sat are preserved.

On the upper fascia, there is an inscription in Ancient Greek "ΣΑΠΙΟΕ". The "Honor Hall", thought to be contemporary with the Roman Bath dating to the 2nd century AD, was converted into a pool structure in a later phase. A pithos identified at the same level as this pool and a bronze coin<sup>62</sup> (383–403 AD) recovered close to the ground level show that the structure was refunctionalized in the 4th–5th centuries AD. Based on other coins, it is understood that use continued until the end of the 5th century AD. In this context, the spolia architrave block containing the game also belongs to a phase after the pool structure and was reused as a threshold stone in a shop or residence located on the southern axis of the western street.<sup>63</sup> The *XII scripta/alea* game on it most likely dates between the late 5th and 6th centuries AD.



**Figure 2** Reconstruction of the XII scripta/alea game on spolia block in Stratonikeia Roman Bath in its original position (drawing: A. Erkuş).

<sup>61</sup> The block is 3,22 m long, 0,78 m wide, and 0.375 m high.

<sup>62</sup> 17SRH1-S14

<sup>63</sup> No material that would provide any information about the superstructure could be reached in the work conducted in the space.

The wide and flat surface of the block used as spolia has also allowed it to be preferred as a game area. The game board carelessly carved on the threshold stone is approximately  $90 \times 70$  cm in size and has circular marks of approximately 3.5 cm diameter on it. These marks are arranged in a four-row arrangement consisting of a total of twelve circles, with six squares on each side. One of the rows is divided in half with an equilateral triangle-shaped dividing mark in the middle. In the second row, there is a pit-shaped mark as a dividing element; around this mark there is a randomly drawn circle. Considering the general scheme of the game, it is thought that this outer circle was added later and is not directly related to the game arrangement.

Another important detail that attracts attention in the game area is a small cross mark carved at the beginning of the top row and an olive branch motif consisting of thin leaves.<sup>64</sup> It is thought that these symbols were carved believing that they provided protection and brought luck. The four-row structure of the board distinguishes it from the more common three-row



**Figure 3** Games located at Didyma Apollo Temple (from Lambrugo 2015, 27, Figure 3).

<sup>64</sup> The cross symbol accompanying games can also be traced through other games. For example, on the threshold stone belonging to the entrance southeast of Roman bath-1, there is a  $2 \times 5$  mancala game board and immediately below it a small-sized Latin cross with forked ends.

examples. A similar four-row arrangement has also been documented in a game area consisting of squares at the Didyma Apollo Temple (Figure 3).<sup>65</sup> Additionally, in this example from Stratonikeia, there are two more cross marks on the game area, and these symbols shed light on the religious and cultural context of the game in the Late Antique Period.

When comparative examples are considered, the fact that a board with a four-row game arrangement has been documented only at the Didyma Apollo Temple suggests that the game played as *XII scripta/alea* in Stratonikeia may have evolved into the  $2 \times 12$  arrangement *tabula* game in later periods. This situation brings up the possibility that two different game forms may have been played on the same game board.

Apart from the Roman Bath example in Stratonikeia (Figure 4–5), the number of rows in other games identified in the city cannot be clearly determined. In three examples, the row arrangement cannot be read due to surface wear, and in one example due to the board being broken (Figure 12). However, it is also theoretically possible to play the *tabula* game by disabling one of the outer rows in three-row *alea* games. However, there is no direct archaeological evidence for the *tabula* game in the city. Therefore,



**Figure 4** The position of the block containing the *XII scripta/alea* game board within the Honor Hall space.

<sup>65</sup> LAMBRUGO 2015, 27, Figure 3.

interpretations about the existence of such a transformation can only be made based on the Roman Bath example (Figure 4–5).



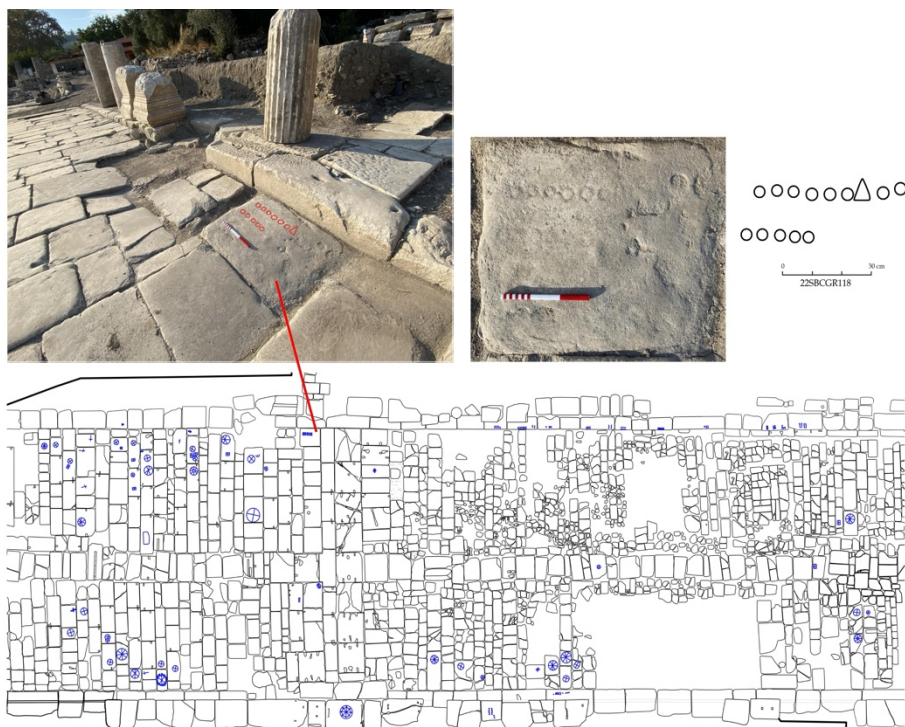
**Figure 5** Detail and drawing from the Late Antique XII scripta/alea game (drawing: N. Durnagözü).

The second game board<sup>66</sup> identified in Stratonikeia is located close to the northern peristasis of the Western Colonnaded Street<sup>67</sup> (Figure 1B, 6). This game board, carelessly carved on the floor paving, has an arrangement showing similarity to other examples. The game area, measuring approximately 70 x 35 cm, is located on a pavement measuring 80x67 cm. In the game area consisting of a total of twelve circles arranged in three horizontal rows, each circle is approximately 3.5 cm in diameter. The circles, arranged in groups of six squares in each row, are separated from each other by an isosceles triangle motif in the middle. Unfortunately, only part of the game areas in the first two rows has survived to the present day. While seven game squares and the triangular dividing mark in the first row can be clearly traced, only five game squares have been preserved in the second row. It is thought that the triangular motif in the middle, when compared with the Roman Bath example (Figure 5), was repeated in reverse direction in other rows as well. The reason why the game board was carved at this point can be explained by the aim of benefiting from the shade

<sup>66</sup> DURNAGÖLÜ-SÖĞÜT 2024, 403, Figure 9.

<sup>67</sup> On both sides of the 10 m wide street, the stylobate is reached from the street floor with a single step (SÖĞÜT 2019, 84).

provided by the columned gallery rather than the heavy human traffic on the street.



**Figure 6** Partially preserved Late Antique XII scripta/alea game board on Stratonikeia western colonnaded street floor and its position on the street (from DURNAGÖLÜ-SÖĞÜT 2024, Figure 4, 9)

Some arrangements dating to the Late Antique Period were made in the portico and peristasis sections of the Western Street belonging to the Late Hellenistic Period. That these arrangements belong to the Late Antonine Period (138-192 AD) is confirmed by inscriptions and architectural data recovered in the area. Considering the long-term use of game boards generally carved irregularly in public areas and city streets, it is quite difficult to assign a definitive chronological date to such examples. However, it is understood that this game located on the Western Street floor is related to the mentioned late period arrangements and was carved after these interventions. Taking the Roman bath example as reference and

considering other examples<sup>68</sup> of similar type, it is anticipated that the game board on the Western Street can be dated to the end of the 5th century and early 6th century AD. Although it is possible to make an estimate about the date of the game<sup>69</sup> (Figure 6) based on these evaluations, a definitive date is still difficult. The third game board identified in Stratonikeia is located on the floor paving of the Northern Colonnaded Street, one of the city's main arteries (Figure 7).<sup>70</sup> This example shows typological parallelism with its counterpart on the Western Colonnaded Street (Figure 6). The large block, measuring approximately 210 × 100 cm, has allowed it to be chosen as a game area. Indeed, on the block, in addition to rectangular *mancala* and *alea* games, there is also a cross motif enclosed in a circle and various other symbols. The *alea* game, as in other examples, was created by carving practically and carelessly on the floor paving.

On the game board, a single row consisting of twelve circles of approximately 5.5 cm diameter and approximately 92 cm long has been preserved. Other rows could not survive to the present day due to natural deterioration on the marble surface. In each row, two groups of six squares are separated from each other by an upright triangle motif in the middle. The cross motif enclosed in a circle on the pavement is located within the *alea* game area, but was probably carved at a later period than the game.

It is known that the Northern Colonnaded Street underwent a serious reconstruction process from the 4th century AD onwards after its destruction by an earthquake along with the Northern City Gate, Fountain Monument, and the square in front of the gate.<sup>71</sup> In this context, it can be easily said that the mentioned *alea* game also belongs to the 4th century AD arrangement of the street and may have been carved at least after this date. Considering similar examples such as the Western Colonnaded Street (Figure 6), the Roman Bath example (Figure 4-5), and other typologically

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<sup>68</sup> Similar type game boards carved on the floor have also been brought to light in Ephesus and Aphrodisias. All are in the form of three rows consisting of 2 x 6 game spaces. Unlike the Stratonikeia examples (Figure 5, 6, 7, 9, 11), the shapes of the dividing marks in the middle are different.

<sup>69</sup> DURNAGÖLÜ-SÖĞÜT 2024, 400-401, Figure 4.

<sup>70</sup> For detailed information about the rectangular *mancala* game on the block, see KÜRÜM-DURNAGÖLÜ 2015, 113-114, Res. 10-11.

<sup>71</sup> SÖĞÜT 2019, 73.

similar<sup>72</sup> games, this game board can be dated between the late 5th and 6th centuries AD.



**Figure 7** Partially preserved Late Antique XII scripta/alea game board on Stratonikeia northern colonnaded street floor and its representation with drawing

The fourth game identified in Stratonikeia was used as spolia material in the 2022 excavation work on sounding wall numbered 22SS03 where arrangements from different periods<sup>73</sup> were observed on the city's southern street (Figure 8-9). This triangular-shaped block acquired this form as a result of breakage. The absence of any decoration or profile traces and the thickness of the block suggest that rather than being a specially carved game table piece, it most likely belongs to a flat pavement block removed from the

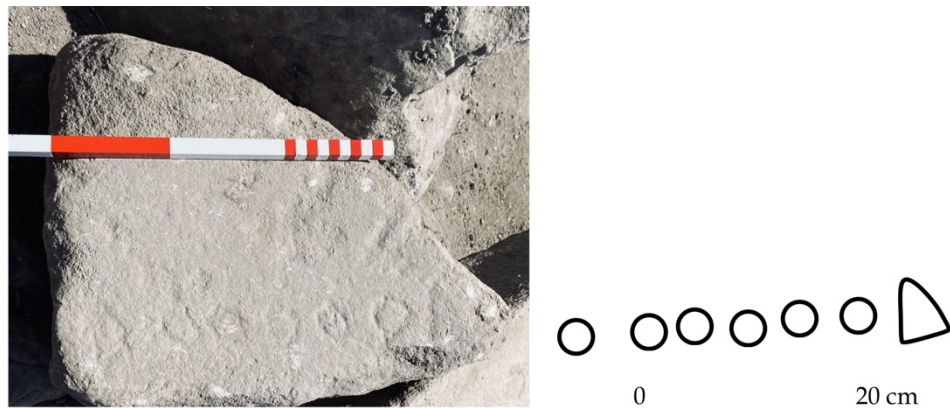
<sup>72</sup> For similar type games dated to the definite or possible 4th-6th century AD range, see Aphrodisias (Late 5th-6th century AD): ROUECHÉ 1989, Pl. XV: 59, Pl. XVI: 69; Pl. XVII: 70; ROUECHÉ 1993, Pl. XII: 45.36; SELVİ-BENER 2008, Lev. XXXIV: 66, Lev. XXXIV: 67, Lev. XXXVI: 71; NUZZO 2018, Tav. XXII: 56, Tav. XXIV: 60-61; TALLOEN 2018, Figure 8. Çarşamba (4th-5th century AD): LEVICK-MITCHELL 1993, 107: 330. Ephesus (6th century AD): FEISSEL 2020, Taf. 8, Figure 1-2. Sagalassos (5th-6th century AD): Talloen 2018, Figure 4-6. Kibyra (5th-6th century AD): DEMİNER 2015, Res. 1. Sinope (Late Roman): YILDIRIM 2020, Res. 4. Perge (Late Roman): LAMBRUGO 2015, Figure 2; YILDIRIM 2020, Res. 10; SELVİ-BENER 2008, Lev. XLI, Res. 79. Antioch (mid-5th century AD, mosaic): DASEN 2020, Figure 8-9; NUZZO 2018, Tav. XV: 43.

<sup>73</sup> Finds belonging to Late Roman, Middle and Late Eastern Roman, and Republican periods were recovered in the space.

street floor, as in the examples seen on the western and northern colonnaded streets (Figure 6-7) (approximately 42 x 24 cm). The game arrangement carved quite carelessly and practically on the stone surface consists of six squares (approximately 37 cm long) in a single row composed of circles of approximately 3 cm diameter and an isosceles triangle-shaped dividing mark in the middle. The absence of any game traces in the upper part of the block shows that the other rows of the game board were located in the broken lower section. This example shows typological similarity to the game boards documented on the western and northern colonnaded streets and was most likely used in the same period.



**Figure 8** Block fragment used as spolia material in a wall belonging to a space located on Stratonikeia southern colonnaded street and the XII scripta/alea game on it



**Figure 9** Detail from partially preserved XII scripta/alea game board with game areas carved in circular form

The fifth game example dating to the Late Antique Period is located on the stylobate of the Lagina Hekate Temple (Figure 10–11). The surface of the floor block, measuring approximately  $116 \times 95$  cm, has darkened due to natural factors, making it difficult to perceive the game arrangement holistically. However, the first game row visible to the naked eye (approximately 55 cm long) can be clearly traced. This row contains six squares consisting of circles of approximately 3 cm diameter on each side and is divided in half by an isosceles triangle-shaped dividing mark in the middle. With this arrangement, it shows typological similarity to other examples in Stratonikeia. Thus, it is understood that the triangular form was a conscious choice as a dividing element in this game played in Stratonikeia and Lagina. The basic feature that distinguishes the Lagina example from others is the careful workmanship in its application. The circular squares are both equal in diameter and located almost on the same plane; the distance between them shows great equality. This regularity suggests that a template was used in carving the squares.

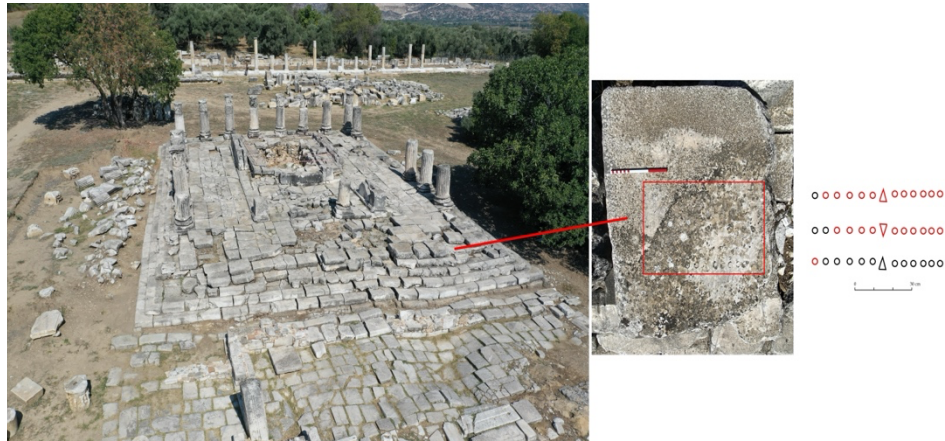
The Lagina Hekate Temple example is noteworthy in showing that spaces once considered sacred gradually became part of daily life and entertainment. Although the exact timing of this transformation cannot be determined, the *alea* and similar game arrangements located on the stylobate and steps of a temple dedicated to Hekate and considered



**Figure 10** Aerial view of the *XII scripta/alea* game board in the southern peristasis of Lagina Hekate Temple

untouchable can be evaluated among the concrete evidence of this transformation.

In studies conducted to date, game boards have generally been classified according to their decorative features and a typology<sup>74</sup> has been created in this direction. However, it is also possible to classify these boards according to their usage forms—for example, those carved on floor paving versus specially prepared portable game tables. Indeed, all of the Stratonikeia examples (Figure 12) are carved permanently and quite carelessly on immovable marble surfaces, and in this respect can be called "floor boards." When compared with game boards known from different centers of the Roman Empire, it is seen that most of these examples were carefully worked on large rectangular blocks.



**Figure 11** XII scripta/alea game on Lagina Temple stylobate and drawing proposal.

It is thought that some marble game tables dating to the 6th century AD, especially in Aphrodisias, were made with remarkable craftsmanship and these tables were donated by private individuals, thus may have been made available for public use.<sup>75</sup> Another important observation is that the game boards recovered in the same city show diversity in terms of the arrangement of game areas and the form and size of the dividing marks in the middle, both within themselves and when compared with examples

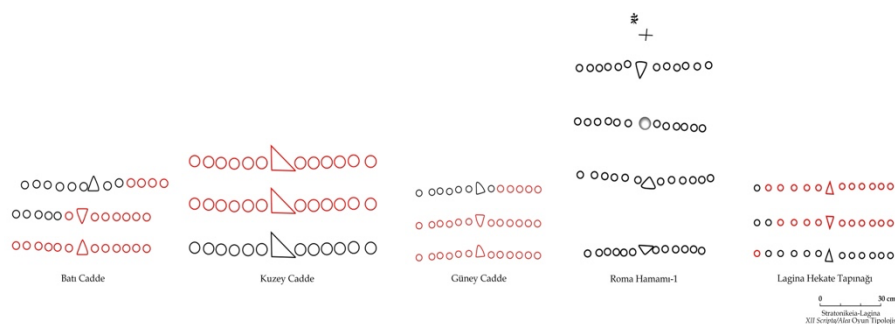
<sup>74</sup> ROUECHÉ 2014, 141-158; PACE-PENN-COURTS 2024, 360-369; see especially Type 52-62.

<sup>75</sup> ROUECHÉ 1989, 112; SCHÄDLER 2013b, 39; SCHÄDLER 2013c, 64; NUZZO 2018, 181-182).

from other centers. Especially the recently published Sinope<sup>76</sup> and Kibyra<sup>77</sup> examples have further enriched the existing typology and reinforced this diversity.

When the game boards identified in Stratonikeia and Lagina are evaluated in general, it is observed that both the game areas and the dividing marks are based on a common template. These floor boards, where the game spaces consist of carelessly carved circles, similarly appear in Aphrodisias<sup>78</sup> and Perge.<sup>79</sup> However, in these examples, the dividing mark in the middle is "X" shaped, unlike the triangular form in Stratonikeia and Lagina (Figure 13).

The Aphrodisias and Perge examples also show similarity to the Ephesus examples where the game areas consist of squares. In contrast, the triangular dividing motif preferred in Stratonikeia is unique among examples published both in Anatolia and outside Anatolia. This original form is also not included in the typology study created by C. Roueché<sup>80</sup> on pavement designs and game boards in 1993 and expanded in 2014. This situation reveals that the existing typology needs to be updated in light of new findings.<sup>81</sup>



**Figure 12** Stratonikeia-Lagina XII scripta/alea game boards typology and completion proposal.

<sup>76</sup> YILDIRIM 2020, Res. 4.

<sup>77</sup> DEMİRER 2015, Res. 1-2.

<sup>78</sup> SELVİ-BENER 2008, Lev. XXXIV, Res. 67.

<sup>79</sup> SELVİ-BENER 2008, Lev. XXXVI, Res. 68.

<sup>80</sup> ROUECHÉ 2014, 141-158.

<sup>81</sup> ROUECHÉ 1993, 249-252; ROUECHÉ 2014, 155-157. See also BELL-ROUECHÉ 2007.

The Stratonikeia examples make important contributions to the existing typology with their distinctive design. The fact that in all examples in Stratonikeia and Lagina the game areas are circular and the dividing mark is triangular suggests that these games were reproduced from a single prototype and carved in the same period. The increase in the number of games within the city indicates that this prototype was taken as a model and spread, pointing to the existence of a local production process.

### Games in the Context of Public Space and Social Life in Stratonikeia in the Late Antique Period

Board games hold an important place in the social life of every culture. These games have been not only a means of entertainment in the societies where they were played but also part of cultural transmission. Some game types such as *mankala*<sup>82</sup> have spread to different geographies through this transmission.<sup>83</sup> A similar process has taken place in Stratonikeia, a city open to cultural interactions; some games have been adopted and continued within the local culture. Indeed, the immovable board games permanently carved into street floors in Stratonikeia show that these games have become an inseparable part of daily life. The fact that these games could be played in public areas without any fear of social pressure or reaction provides important clues about the social function of public space.



**Figure 13** Aphrodisias and Perge XII scripta/alea floor boards (from Selvi-Bener 2008, Res. 67-68).

<sup>82</sup> For detailed information about the ancient mancala game played in Stratonikeia, see KÜRÜM-DURNAGÖLÜ, 2015; DURNAGÖLÜ-SÖGÜT 2020.

<sup>83</sup> CRIST 2021, 22.

Among the game tools recovered in the city are examples made of clay, stone, marble, and bone, mostly colored glass. Additionally, game boards carved into the marble floors of architectural elements constitute the physical traces of games played in open areas. However, considering that dice are a fundamental element in backgammon-type games, it is noteworthy that although many game stones and pieces have been found in the city, no dice examples have been encountered. All these game arrangements identified as carved in Stratonikeia can actually be evaluated as permanent floor versions of portable board games made from wooden material<sup>84</sup> that could not survive to the present day. In this respect, they provide important archaeological data both for the preservation of material culture and for monitoring social life.<sup>85</sup>

All XII scripta/alea games identified in Stratonikeia (Figure 12) are located on street floors. These game arrangements carved into the ground point to the existence of a game culture played in public areas. Their immovable nature clearly reveals that these games belonged to the public.

Christian graffiti drawn on streets and pavements show that these areas were continuously used; numerous examples of different game types such as three-in-a-row, nine men's morris, and mancala prove that these regions were popular spaces for socialization. This situation is not coincidental. The

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<sup>84</sup> A group of underground tombs designed for ruling dynasties and their families was discovered in Lower Nubia in Roman Egypt. In tomb number 3, a *duodecim scripta* game board made of wood with ivory inlay found by W. B. EMERY and his colleagues was recorded as a very important find. There are square game spaces in a 2 x 6 pattern arranged in three rows. The dividing mark is circular in the middle row and slightly elongated semicircular in the other two rows. The game board and game pieces recovered intact with a leather bag are the best preserved example of the *duodecim scripta* game in archaeological records. Under the board, which was found face down in the tomb, a wooden pyrgus, 15 ivory pieces, 15 ebony game pieces, 5 cubic dice made of ivory, and a dice box were recovered. The game spaces on the board consist of three rows in square form decorated with ivory inlays. The dividing mark in the middle is circular with semicircles on the edges. It must have been the entertainment tool played by the tomb owner while alive. For detailed information, see EMERY 1948; SCHÄDLER 1995, 80; NUZZO 2018, Tav XIV: 41; DE VOOGT 2019, 95, Figure 4. For depictions of *pyrgus* (Roman dice box in the shape of a military tower) on mosaics, see also DASEN 2020, 182, Figure 9 (Antioch).

<sup>85</sup> *XII Scripta* game board made by carving on a game table recovered in Ephesus (2nd century AD) clearly demonstrates this imitation. For detailed information, see SCHÄDLER 2013b, 39; SCHÄDLER 2016, 519-523, Taf. 251, MI 1 and 2; NUZZO 2018, Tav. X, Figure 31. Indeed, when compared with the portable game board made of wood from the Egyptian tomb find (see fn. 35), the handle details are noteworthy.

concentration of games especially on flat surfaces such as street floors, pavements, and steps is related both to physical suitability and to people's preference for crowded areas as game spaces. This preference can be thought to be connected to players feeling more comfortable within society. Indeed, the gymnasium located at the beginning of the city's western street is one of the points where intra-city mobility is most intense. In this context, it is understood that players did not seek special areas for playing games, spaces were not predetermined, and even existing areas were transformed according to gaming purposes.

The games played by individuals who gathered at certain hours of the day on these crowded streets must have served an instructive function not only for players but also for spectators. Spectators contributed to the spread of these games by repeating the games they learned through observation. The finding of numerous games dating to the same period in close proximity to each other clearly reveals the spatial traces of this spread.

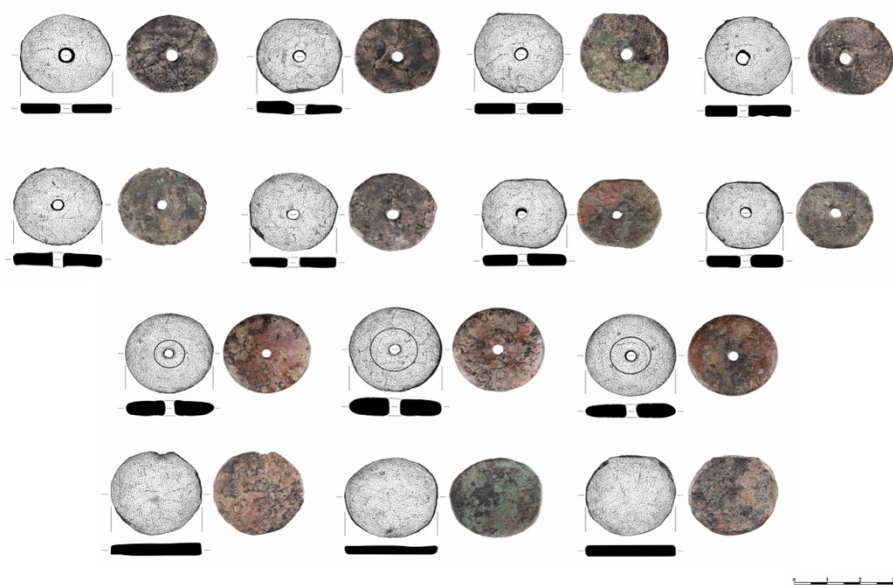
Various game board types, different application methods, and the contextual diversity in which they emerge clearly reveal that game playing was quite widespread in the Late Antique Period and was not an activity specific to a particular social class.<sup>86</sup> An important example of this situation is the finds recovered from Room 6 (Figure 1C) of the residential complex called "Mosaic Villa" in 2022, located east of the Stratonikeia Roman Bath, south of the western colonnaded street. In this space, 14 bronze game pieces found collectively in two sets (Figure 14) point to the existence of a portable game table belonging to a backgammon-like game. Although this table, thought to be made of wooden material, has not survived to the present day, the bronze pieces are among such rare finds and provide quite valuable archaeological evidence. This complex consisting of seven rooms is thought to belong to one of the city's upper-class administrators or aristocratic segment.<sup>87</sup> Indeed, it is known that wealthy houses of the period had personal wooden game tables. The bronze game pieces recovered from Room 6 also support that this structure belonged to an elite class. Unlike the floor boards directly carved into stone floors identified in the city (Figure

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<sup>86</sup> NUZZO 2018, 182-183.

<sup>87</sup> The number of circular bronze game pieces recovered scattered at the same elevation level in Room 6 is 14. Of these, 11 are perforated in the center while 3 are flat. The average diameter of the pieces varies between 2.7-2.9 cm, and their thickness varies between 3-4 cm. Excavation of the rooms belonging to "Mosaic Villa" continues.

12), the portable wooden game table in question here, while serving the same purpose, reflects a different social context. This situation shows that game culture held an important place not only in public areas but also in private living spaces. Archaeological data reveal that the structure belongs to the Roman Period and its use continued until the second half of the 4th century AD. A total of 14 bronze game pieces in two different forms, perforated and flat, date to the Late Roman Period according to stratification data and point to an earlier period than the graffiti XII scripta/alea games identified in Stratonikeia and Lagina.



**Figure 14** Bronze game pieces found in Stratonikeia/Mosaic Villa (drawing: N. Durnagözü).

### Conclusion

As seen in this study, ancient period games have reached their current forms through a natural evolutionary process. The focus of this study, the XII scripta/alea and the subsequent tabula game, is one of the rare games that has maintained its persistence in almost every culture it reached. However, although these games hold an important place in the historical context of board games, they are not direct precursors of modern backgammon; rather, they represent different historical and cultural branches of the same game tradition. The historical origins of the widely played backgammon today are based on the Nard game, which became

popular in the Arab world and especially developed in the Persian region during the Sassanid period. Indeed, backgammon, which evolved from this game and is still widely played in regions such as Anatolia today, seems to have the potential to maintain its influence on a global scale. These carved games, which allow us to better understand the social and cultural dimension of the game in ancient societies, also contribute to the identification of actual game boards; in these respects, they are met with increasing interest in terms of archaeological research. The games documented in Stratonikeia also contain important data that contribute to this understanding.

The identification and interpretation of such game boards and game tools is generally not easy. All of the examples in Stratonikeia have been evaluated by taking the find located in the Roman Bath (Figure 4–5) as reference; these games have been dated to the period between the late 5th and 6th centuries AD based on their spatial positions and comparisons with similar type examples. The fact that the other game boards have been preserved intact in their original positions, except for a single example (Figure 9), shows that this gaming habit continued until the 7th century AD when many cities were abandoned and the late antique age when Christianity was influential. Indeed, in the Roman Bath example, a simple cross motif located on the short side of the game area points to the existence of a tolerant atmosphere in the city and reveals that the game was appreciated even during the Christian period. Similarly, game tables with cross symbols and more carefully crafted workmanship are encountered in centers such as Ephesus, Sagalassos and Laodikeia ad Lycum. In these examples, the dividing mark in the middle of the game area is generally worked in the form of a Maltese cross. This situation suggests that these games were not only met with tolerance in these cities, but there may also have been a perception that they were played under divine protection. Probably in the late period, especially with the increase of religious influences, these games, which initially had a gambling nature, lost this characteristic; they have transformed into social activities that are part of daily life as they are today.

In addition to the game pieces recovered in Stratonikeia and Lagina, the existence of numerous carved games of different types reveals that playing games was a popular leisure activity in these settlements. The concentration of these games on the floor pavements of the city's western and northern

streets, which are still being excavated, indicates that these public areas functioned as social gathering spaces where people came together to play games. Additionally, other carved games identified on streets, pavements, and steps besides *XII scripta/alea* clearly show that individuals could sit in these areas without worry of being disturbed and actively socialized in these environments.

### Primary Sources

*Paus.*: (= Pausanias, *Periegesis tes Hellados*) Used text and translation: Description of Greece. Ed. W. H. Jones, vols. I, III-IV. W. H. Jones – H. A. Ormerod, vol. II. R. E. Wycherley, vol. V (Illustrations and Index). New York 1918-2004.

*Hdt.*: (= Herodotos, *Historiae*) Used text and translation: *Herodotus*. With an English Translation by A. D. Godley. I-IV. London, New York 1926 (The Loeb Classical Library).

*Suet. Aug.*: Suetonius: The Life of Augustus

*Suet. Claud.*: Suetonius: The Life of Claudius

*Anth. Pal.*: Anthologia Palatina

### References

- Austin, R. G. 1934a. "Zeno's Game of τάβλη (*A.P.* ix. 482)." *JHS* 54: 202-205.
- Austin, R. G. 1934b. "Roman Board Games. I". *Greece and Rome*, Vol. 4 No. 10. 24-34.
- Austin, R. G. 1935. "Roman Board Games. II". *Greece and Rome*, Vol. 4 No. 11. 76-82.
- Baumgartner, A. J. 1981. *Untersuchungen zur Anthologie des Codex Salmasianus*. Baden: Köpfl.

- Bell, R. C. 1969. *Board and Table Games from Many Civilizations*. Dover Publications, 1969, 24–30.
- Bell, R. C.- Roueché, C. 2007. Bell, R. C. and Roueché, C., ‘Graeco-Roman pavement signs and game boards: a British Museum working typology’, in I. L. Finkel (ed.), *Ancient Board Games in Perspective* (London 2007), 106-109.
- Bellini, G. R.- Zagarola, M. 2016. Una Tabula Lusoria da Minturnae, in H. Solin (ed), *Le epigrafi della valle di Comino. Atti del dodicesimo convegno epigrafico Cominese, Atina, 29-30 maggio 2015*. San Donato Val di Comino (FR), Associazione Genesi, 141-144.
- Carè, B. 2022. “Pavement Designs And Game Boards From Public Spaces Of Ancient Athens: A Review Across The Board”, *Board Game Studies Journal* Volume 16/1, 225-249.
- Crist, W. 2021. Debunking The Diffusion of *Senet*, *Board Game Studies Journal* Volume 15/ 1, pp. 13–27.
- Courts, S.- Penn, T. 2019. “A Corpus of Gaming Boards from Roman Britain”, *Lucerna* 57, 4-12.
- Daniaux, T. 2019. “Plateaux et Jetons de Jeu D’Aventicum (Suisse)”, in Dasen, V. (dir.), *Ludique. Jouer dans l’Antiquité, Catalogue de l’exposition, Lugdunum-musée et théâtres romains, 20 juin-1er décembre 2019*, Gent, Snoeck, 2019, 88-89.
- Darani, L. 2021. “Iulia Graphis: Miniature e Mors Immatura”, *Kentron* 36, 2021, 121-156.
- Dasen, V. 2019. “Jeu magique”, in Dasen, V. (dir.), *Ludique. Jouer dans l’Antiquité, Catalogue de l’exposition, Lugdunum-musée et théâtres romains, 20 juin-1er décembre 2019*, Gent, Snoeck, 2019, 80-81.
- Dasen, V. 2020. “Play with Fate”, in A. Mastrocinque, J. E. Sanzo, M. Scapini (eds.), *Ancient Magic: Then and Now*, Stuttgart, Franz Steiner Verlag, 2020, 173-191.

- Dasen, V.-Schädler, U. 2024. Introduction. Where the study of games comes from... in A. Pace, T. Penn, & U. Schädler (eds.), *Games in the ancient world: Places, spaces, accessories* (Monographies Instrumentum, Vol. 79, 7–12.
- Demirer, Ü. 2015. “Kibyra kazılarında bulunan iki adet duodecim scripta tablası”, Teke Yöresi Sempozyumu Bildiriler Kitabı Cilt- 1 (04-06 Mart 2015), 741-748.
- De Voogt, A. 2019. “Traces of Appropriation: Roman Board Games in Egypt and Sudan”, *Archimède Archéologie Et Histoire Ancienne* N°6, 89-99.
- Durnagözü, N.- Söğüt, B. 2020. “Stratonikeia’da Antik Dönem Oyunlarından Örnekler”, *UTKM IV*, Bodrum 2022, 97-110.
- Durnagözü, N.- Söğüt, B. 2024. Antique Graffiti Games, B. Söğüt (Ed.), *Stratonikeia from Antiquity to Modern Times*, İş Bankası Kültür Yayınları, 396-417.
- Emery, W. B. 1948. *Nubian Treasure: an account of the discoveries at Ballana and Qustul*. Methuen, London.
- Feissel, D. 2020. Invocations chrétiennes à Éphèse (Taf. 8–9), *TYCHE* 35, 35-45.
- Isidore, 1911. *Origins*. Ed. W. M. Lindsay. Oxford: Oxford University Press, Transcribed by Bill Thayer.
- Kurke, L. 1999. “Ancient Greek board games and how to play them”, *CPh* 94, 247-267.
- Kürüm Durnagözü, N. 2015. “Antik Mankala Oyununun Stratonikeia’daki İzleri”, B. Söğüt (Ed.), *Stratonikeia Çalışmaları-1, Stratonikeia ve Çevresi Araştırmaları*, İstanbul, 2015, 107-124.
- Koukoules, P. 1948. *Byzantinôn bios kai politismos: Vie et Civilisation Byzantine*, Vol. 1. Athènes: Institut Français d'Athènes.
- Lambrugo, C. 2015. “Giocare per terra e...per mare!”, F. Slavazzi, con A. M. Fedeli (a cura di), I materiali della Collezione Archeologica “Giulio

- Sambon” di Milano, vol. I: Tra alea e agòn: giochi di abilità e di azzardo, Firenze, 25-30.
- Levick, B. M.- Mitchell, S. 1993. Monuments from the Upper Tembris Valley, Cotiaeum, Cadi, Synaus, Ancyra and Tiberiopolis, (Monumenta Asiae Minoris Antiquae 10), London.
- MacGregor, A. 1976. *Finds from a Roman Sewer System and an Adjacent Building in Church Street, York*, London.
- Merkelbach, R. 1978. “Eine tabula lusoria für den ludus latruncularum”, *ZPE* 28, 48–50.
- Murray, H. J. R. 1952. *A History of Board Games Other Than Chess*. Oxford, 29-34.
- Mulvin, L.- Sidebotham, S. E. 2004. “Roman game boards from Abu Sha’ar (Red Sea Coast, Egypt)”, in *Antiquity* 78: 602–617.
- Nuzzo, D. 2018. “Spazi e strumenti dei giochi nei ritrovamenti Archeologici” in Il gioco nella società e nella cultura dell’alto medioevo. LXV Settimana di studio della Fondazione Centro italiano di studi sull’alto medioevo (Spoleto, 20-26 aprile 1017), Spoleto 2018, 153-194.
- Öztaşkın, M. 2015. “Stratonikeia Bizans Dönemi Cam Buluntuları”, *Stratonikeia ve Çevresi Araştırmaları* 1, 175-188.
- Pace, A.-Penn, T. & Courts, S. 2024: Appendix II: A guide to recognising carved pavement signs in the Greek and Roman World. In A. Pace, T. Penn, & U. Schädler (eds.), *Games in the ancient world: Places, spaces, accessories* (Monographies Instrumentum, Vol. 79, 359–370.
- Parlett, D. 1999. *The Oxford History of Board Games*. Oxford, 58-87.
- Purcell, N. 1995. “Literate games: Roman urban society and the game of alea”, *PastPres* 147, 3-37.
- Reith, G. 1999. *The Age Of Chance: Gambling And Western Culture*. London: Routledge.

- Roueché, C. 1989. *Aphrodisias in Late Antiquity*. Journal of Roman Studies Monographs 5, London.
- Roueché, C. 1993. *Performers and Partisans at Aphrodisias in the Roman and Late Roman Periods* (JRS, 6. London 1993).
- Roueché, C. 2014. “Using civic space: identifying the evidence”, in P. Funke (ed.), *Öffentlichkeit - Monument - Text* (Berlin 2014), 135-158.
- Russel, B.-Chaniotis, A. & Wilson, A. 2024. Gaming in the Place of Palms at Aphrodisias. In A. Pace, T. Penn, & U. Schädler (eds.), *Games in the ancient world: Places, spaces, accessories* (Monographies Instrumentum, Vol. 79, 107–126.
- Selvi-Bener, S. 2008. “Eski Yunan ve Roma’da Oyun ve Oyuncaklar”, İstanbul Üniversitesi Sosyal Bilimler Enstitüsü Arkeoloji Ana Bilim Dalı Klasik Arkeoloji Bilim Dalı, (Yayımlanmış Yüksek Lisans Tezi), İstanbul 2008.
- Selvi-Bener, S. 2013. Antikçağda Oyun ve Oyuncaklar, İstanbul.
- Schädler, U. 1995. “XII Scripta, Alea, Tabula – New evidence for the Roman history of backgammon”, A. de Voogt (ed.), *New Approaches to Board Games Research. Asian Origins and Future Perspectives*, IAS Working Papers Series 3, Leiden, 73-98.
- Schädler, U. 1999. Damnosa alea – Würfelspiel in Griechenland und Rom. In *5000 Jahre Würfelspiel. Homo Ludens supplement*. Salzburg. 39-58.
- Schädler, U. 2013a. “Table de jeu miniature”, V. Dasen – U. Schädler (eds), *Jeux et jouets gréco-romains*, *Archéothéma* 31, 23.
- Schädler, U. 2013b. “Les lieux du jeu,”, V. Dasen – U. Schädler (eds), *Jeux et jouets gréco-romains*, *Archéothéma* 31, 39.
- Schädler, U. 2013c. “Les jeux de pions,”, V. Dasen – U. Schädler (eds), *Jeux et jouets gréco-romains*, *Archéothéma* 31, 64-65.
- Schädler, U. 2016. *Der Spieltisch im Peristylhof 38b*. In Hanghaus 2 in Ephesos, die Wohneinheit 7: Baubefund, Ausstattung, Funde, Band VIII/10,

- Textband 2, edited by Ingrid Adenstedt, Elisabeth Rathmayr, Johanna Auinger. Wien: Verlag der Österreichischen Akademie der Wissenschaften, 519-523.
- Schädler, U. 2019a. “Quelques règles de jeux de plateaux et de pions”, in Dasen, V. (dir.), *Ludique. Jouer dans l'Antiquité, Catalogue de l'exposition, Lugdunum-musée et théâtres romains, 20 juin-1er décembre 2019*, Gent, Snoeck, 2019, 127-129.
- Schädler, U. 2019c. “Les lieux de jeu”, in Dasen, V. (dir.), *Ludique. Jouer dans l'Antiquité, Catalogue de l'exposition, Lugdunum-musée et théâtres romains, 20 juin-1er décembre 2019*, Gent, Snoeck, 2019, 86-87.
- Schädler, U. 2022. Catacomb games: Reused game boards or funerary inscriptions?, *Board Game Studies Journal* 16/1, 369-395.
- Schädler, U. 2024. Roman, Byzantine, and Medieval games in Ephesus: Preliminary survey results. In A. Pace, T. Penn, & U. Schädler (eds.), *Games in the ancient world: Places, spaces, accessories* (Monographies Instrumentum, Vol. 79, 127–140.
- Schädler, U.-Dunn-Vaturi, A.-E. (2016). *Board games in pre-Islamic Persia*. Encyclopædia Iranica. <http://www.iranicaonline.org/articles/board-games-in-pre-islamic-persia> (Accessed May 19, 2016).
- Söğüt, B. 2013. “Stratonikeia’da Hellenistik Dönem Öncesi”, M. Tekocak (Ed.), Levent Zoroğlu’na Armağan, 605-623.
- Söğüt, B. 2015. Stratonikeia ve Çevresi Araştırmaları 1.
- Söğüt, B. 2019. Stratonikeia (Eskihisar) Kutsal Alanları, İstanbul.
- Şimşek, C. 2014. Lykos vadisi içinde yer alan Laodikeia, in C. Şimşek (Ed.), 10. Yılında Laodikeia (2003-2013 Yılları), *Laodikeia çalışmaları* 3, İstanbul, 2014, 33-69.
- Talloon, P. 2018. “Rolling the dice: Public game boards from Sagalassos”, *HEROM*, 7/1-2, 97-132.

- 
- Talloon, P. 2024. Games and gaming in southwestern Asia Minor. In A. Pace, T. Penn, & U. Schädler (eds.), *Games in the ancient world: Places, spaces, accessories* (Monographies Instrumentum, Vol. 79, 89-106.
- Wilson, R. J. A. 2011. "Funerary Feasting in Early Byzantine Sicily: New Evidence from Kaukana", *AJA* 115: 2 263-302.
- Yıldırım, N. 2020. "Sinope'den bir duodecim scriptorum tablası", *Karadeniz Araştırmaları Enstitü Dergisi*, 6/9, 1-8.