

Game Boards and Playing Tokens from Ayla: Unique Socio-Cultural Practices in an Early Islamic Urban Context

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لوحات اللعب وقطع اللعب من آيلة: نظرة على ممارسات

اجتماعية وثقافية فريدة في سياق حضري إسلامي مبكر

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الملخص:

حظيت آيلة الإسلامية بعدد من الحفريات الأثرية، والدراسات المستفيضة التي تناولت جوانب عديدة، إلا أن الجانب الترفيهي والحياة اليومية لسكانها من أقل الجوانب دراسة وتوثيقاً، وفي ضوء مواسم التنقيب لعامي 2025/2024 تم الكشف عن أربع لقى أثرية، تمثل ألواحاً للعب، إضافة إلى مجموعة من كسر الفخار التي استخدمت قطعاً للعب. اعتمدت الدراسة المنهجين الوصفي والتحليلي؛ لتحديد هوية هذه الألعاب، ومقارنتها بنماذج إسلامية، وما قبل إسلامية. وكشفت النتائج عن تمييز واضح بين ممارسات الترفيه العام والخاص، إذ تعكس لوحات اللعب الحجرية المنحوتة في الفضاءات العامة كمدخل المسجد ثقافة ترفيهية شعبية، في حين تشير لوحة الفخار المزجج المحمولة إلى ترفيه النخبة. كما تظهر الأدلة استمرارية هذه الألعاب حتى العصر الحديث؛ مما يعكس عمقها في الموروث الثقافي الإقليمي. الكلمات المفتاحية: لوحات اللعب، آيلة، قطع اللعب، الحجارة، الخزف.

Abstract:

The Islamic city of Ayla has been the subject of extensive archaeological excavations and studies addressing numerous aspects of its history and architecture; however, the recreational activities and daily life of its inhabitants remain among the least studied. Four artifacts representing game boards were uncovered during the 2024/2025 excavation seasons, along with a group of polished pottery sherds that served as playing tokens. The study employs descriptive and analytical approaches, also, it identifies the unearthed games and compares them with Islamic and pre-Islamic parallels. The study suggests a clear distinction between public and private recreational practices: stone game boards carved into public spaces, such as the mosque entrance, reflect a popular gaming culture, while the portable glazed pottery board points to elite leisure activities. Furthermore, the evidence demonstrates the continuity of these games into the modern era, underscoring their deep roots in the regional cultural heritage.

Keywords: Game board, Ayla, tokens, stones, ceramics.

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Introduction:

Problem statement:

The Islamic city of Ayla has been excavated in the last century, and most studies have focused on its significant architecture, urban planning, and economic history. However, there are few studies addressing leisure time and how the residents of Ayla spent their daily lives and engaged in recreational practices. This study addresses the lack of detailed analysis of board games and gaming tokens as indicators of social stratification and cultural continuity in early Islamic urban contexts.

Objectives of the Study

This paper aims to achieve the following:

- To identify and classify the gaming artifacts (game boards and tokens) discovered during the 2024/2025 excavation seasons in Ayla.
- To explore the social significance of these games, specifically how their placement in public versus private spaces reflects social hierarchy and community interaction.

Significance of the Study

The significance of this research lies in providing new empirical evidence regarding the leisure activities of medieval Islamic societies. By documenting artifacts like Mancala, Tab and Merrills, the study highlights the role of Ayla as a cultural crossroads where regional traditions were both preserved and adapted.

Methodology

The study employs a descriptive-analytical methodology to categorize the physical attributes of the artifacts (material, form, and decoration). Additionally, a comparative historical approach is used to link the Ayla discoveries with broader regional trends and historical texts, ensuring a comprehensive socio-cultural interpretation of the archaeological data.

Historical Background of Board Games in the Near East

Traditional board games, though rarely seen in contemporary settings, continue to be played by older generations in some parts of the Middle East for leisure and social engagement. These games exhibit diverse formats and rules, with slight variations—such as the number or arrangement of depressions—often leading to different local names and playing styles. Their continued presence reflects a deep historical legacy and remarkable cultural adaptability. Among these traditional games, Mancala stands out for its wide historical and geographical distribution. The earliest known archaeological evidence for Mancala comes from the Neolithic site of 'Ain Ghazal in Jordan, dating to the Pre-Pottery Neolithic B (PPNB) period. A limestone board with two rows of four shallow depressions was uncovered there (Rollefson, 1997, p. 46). Similar boards have been discovered at the Neolithic site of Beidha in Jordan and at Chagha Sefid in western Iran; another example was identified in Kenya (Vesna Bikic, 2010, pp. 194–195).

Arabian historical references to Mancala begin to appear in the 10th century CE, notably in the writings of the Arab scholar Abū al-Faraj (897–967). Moreover, Al-Jahiz,

in his historical account, the book of *al-Bayān wa al-Tabyīn*, mentioned some kinds of game boards that had spread among Muslim societies. (Abushaqal, 2016, p. 82) The game subsequently spread across regions connected by Islamic and Arab trade networks, including large parts of Africa, South Asia, and Southeast Asia. (Bikic, 2010, pp. 192–193), its appearance also in medieval literature, such as *The Arabian Nights*, specifically in *The Third Kalandar's Tale*, illustrating its cultural significance during medieval times. (... I made him a mancala cloth, and we played and ate sweets, and we played again and took our pleasure until nightfall...) (Vesna Bikie, 2010, p. 183). Gradually mancala became one of the most widespread classical board games across both Islamic and global contexts. (Schädler, 1998, p. 10). Its popularity persisted throughout the Islamic ages, reflecting both cultural continuity and widespread appeal. Archaeological evidence substantiating the ongoing utilization of Mancala comprises numerous playing tokens and three distinct game boards discovered in various contexts to date. This paper explores the significance of the recently discovered game boards and playing tokens found during the 2024/25 excavation seasons at Islamic Ayla (Fig.1). Although this is not the first discovery, previous excavations unearthed some of the game boards and playing tokens that were uncovered under the supervision of Whitcomb and Damgaard; moreover, some of these games are exhibited in the archaeological museum of Aqaba. These findings highlight the rich history of gaming in the region, offering valuable insights into the social and cultural practices of medieval Islamic civilizations. Recent excavations at the site reveal some of game boards and playing tokens, most of which were reused from broken pottery by polishing the surrounding edges.

The inhabitants of the city were using broken pottery regardless of the size or shape or even color. This paper highlights the pivotal role of the games in Muslims' daily life and asserts that they played an essential role in their daily life routine, which was clearly evidenced by the incorporation of a game board among the foundation stones in the main entrance of the Masjed; they also made a portable game board to accompany them everywhere. Studying these uncovered artifacts will enrich our knowledge about understanding different aspects of Muslims' daily life and how they spent their spare time; provide insight into the cognitive and cultural frameworks of Ayla's inhabitants and shows the interaction with these games as a part of their cultural heritage. Additionally, this kind of study is a tracing of some game boards that spread in the Middle East, considered as an element of cultural heritage. Further, it reveals broader patterns of cultural interaction. By comparing the Ayla finds with similar examples across the Islamic world, the paper seeks to underscore the social, recreational, and cognitive roles of traditional board games in medieval Islamic urban life.

Whitcomb characterizes Ayla as a reflection of a distinctive social, political, and economic organization. It is not merely a space for gathering people but also an organizing principle—an agent of regional integration and a creator of effective space. Furthermore, Islamic cities functioned as nodes within interactional networks characterized by institutional exchanges of both information (encompassing administrative and ritual functions) and material goods (serving primary economic functions). These administrative, ceremonial, and economic activities have archaeological expressions in architectural features that mark urban sites. Thus, the presence of a *dār al-imīra* (governor's residence), a congregational mosque, and a *sūq* necessarily indicate urban functions linking a particular settlement to a broader regional system (Whitcomb, 2021, p.160). The emergence of these new urban forms also reflects

a transformation in the structure of Islamic society, signifying the introduction of class divisions that may indicate the growing distance between the caliphs and the general populace. The separation of Muslim rulers from the people and the establishment of a class system—contrasting with the egalitarian society envisioned by the Prophet—illustrate a transformation of Islamic values and a shift from equality to hierarchy within both the social and urban structures of the Abbasid period (Karimian, 2011, pp. 265–266).

Playing Piece

Human beings have used tokens since prehistoric times, when small clay objects were produced to count or exchange goods long before the invention of coins. A token can be broadly defined as a small, often circular, object fabricated for local or regional use within a specific community. They often served as instruments of access: they granted entry to temples or public buildings, enabled participation in festivals, or allowed the holder to receive goods and services. In some cases, the token would be surrendered upon use, such as during communal feasts or banquets. A notable example comes from Palmyra (Syria), where substantial clay tesserae were distributed to local groups to attend special feasts. In the Classical world, tokens were generally referred to as "symbola" by the Greeks and "tesserae" by the Romans (M. E. Gkikaki, 2023, p. 238). Their use is well attested across the Mediterranean, particularly during the Hellenistic period. Athens was a major production center for symbola, while in Roman contexts, tesserae were commonly used to access thermal baths, festivals, and other public events. However, due to their variety in form and function, it is difficult to offer a single, standard definition of a token—it strongly depends on the cultural and social context in which it was produced and used (Antonino Crisà, 2023, pp. 160-161).

Tokens were crafted from diverse materials, including clay, bone, stone, wood, terracotta (Clare Rowan, 2023, P12), bronze, and brass. Many metal tokens, particularly brass examples, have traditionally been identified as gaming pieces (Clare Rowan, 2023, P5). Some even depict scenes of two men or boys playing a board game, suggesting their use in recreational settings (Clare Rowan, 2023, P14). Archaeological evidence confirms the widespread use of tokens as playing pieces. Excavations have uncovered small tokens made of stone or vitreous (glass) paste, as well as astragali and bone dice objects frequently found in tombs alongside grave goods and weaponry (Graells, 2021, p. 215). At the Augustan-period Villa del Xarquet, a bronze die and gaming tokens were discovered. Similarly, tokens cut from amphora walls have been found in rubbish pits at the Villa de Plans and at the sanctuary of La Malladeta. Comparable finds were also uncovered in the fill of the fossa fastigata at the Sertorian. These ceramic tokens—often repurposed from broken containers—were likely used for gameplay (Graells, 2021, p. 110). Thus, we can distinguish between two types of tokens: some served as access entries to public spaces and were often decorated with inscriptions, while others were repurposed from broken pottery to be used as gaming pieces. This tradition of improvising tokens from ceramic fragments is notably reflected in the Islamic city of Ayla (modern Aqaba), where they were employed for playing board games.

Pottery of various sizes and shapes was frequently reused across different civilizations, serving as burial objects; as strainers by incising numerous holes in the middle and lower parts of jugs or jars; or for other purposes. Moreover, even the potsherds themselves were reused, with some shards polished into rounded disks. These

small, polished, rounded, or square shapes, recorded over a long excavation period, vary in size from approximately 2–4 cm; some of them bear a hole. These sherd disks probably functioned as tokens or gaming pieces; this suggests a continuity of ancient practices, where communities recycled ceramic materials for gaming (Taxel, 2010, 112–13).

The unearthed game board and polished pottery tokens at Ayla reveal how social hierarchies were performed and materialized through recreational culture. Carved stone gaming boards, likely used by the public in communal spaces such as the entrance of the mosque, contrast with pottery game boards that appear to represent private leisure activities among the elite. Their archaeological contexts—found in residential areas associated with administrative and merchant elites rather than in common spaces—demonstrate that gaming was socially and culturally meaningful, embedded within elite domestic life (Karimian, 2011, pp. 265–266). The finds, ranging from Roman terracotta to Byzantine and Islamic-period pottery, have various thicknesses of sherds depending on whether they were reused from amphorae, storage jars, jugs, juglets, or smaller utensils. The tokens were reused fragments derived from broken pottery, including cooking wares and amphorae. Some fragments exhibit a coarse fabric typical of utilitarian pottery, while others—particularly those reshaped from Roman sherds—are made of fine, well-levigated clay. However, all of these tokens appear to have been used by the public regardless of fabric type, reflecting that the material origin of the fragment did not determine access or usage. Some bear traces of glaze, and most have shapes ranging from circular to square, while others take irregular, token-like forms with smoothed edges (Kurke, 1999, p. 263). Typically measuring between 1.5 and 2.5 cm, these pieces lack distinctive markings to differentiate one player’s counters from another’s—likely because, in all variants of Mancala, the playing pieces are identical. Instead of contrasting colours such as “black” and “white,” players traditionally relied on objects readily available in their environment, such as pebbles, seeds, or shells (Vesna Bikie, 2010, p. 188). Ultimately, the use of tokens reflects a continuous human tradition of symbolic, recreational, and practical engagement with small objects—an enduring feature of everyday life across civilizations. Based on this evidence, it may be inferred that the small, polished pottery shards found at Ayla were indeed used in such gaming practices. (Fig. 2).

Game boards

Game boards such as Mancala involve moving small pieces from one hollow to another based on the opponents’ moves, typically using tokens such as stones or beans (Kowalski, 2004), bones (Mapko, 2008, p. 8), or pebbles. Some ancient authors likened pebbles to people, whose positions on the board determined whether they held low or high status (Dasen, 2022, p. 273). Additionally, elderly individuals who played these games often referred to each token as *kelb* (means dog in Arabic language). In the absence of game boards, they improvised by drawing hollows in the sand with their fingers. Importantly, the inhabitants of Ayla played *mancala* on carved stone boards, some of which have survived as archaeological evidence. While it is likely that they also played in the sand, such ephemeral setups would leave no physical trace, making it impossible to study these instances or gain further insight into their leisure activities. Interestingly, the preserved boards offer valuable evidence of the recreational practices of Ayla’s population. Extensive excavations in the Islamic city revealed three distinct types of game boards that have been found throughout the excavated work: game board made of stones: This kind of game board was unearthed in two places

First: Mancala:

This carved board game was unearthed attached to the entrance platform at the southern entrance of the congregational mosque. The stone lies beneath the current platform, which dates to the Fatimid period. The board is not directly associated with any diagnostic pottery that could provide an exact date; however, pottery sherds unearthed around the entrance—dating from the eighth to tenth centuries A.D.—correspond to the Abbasid period (Walmsley, 2022, pp. 99-107). The archaeological context of the carved stone suggests a complex history of reuse and adaptation. It is possible that the board was originally carved during the Roman or Byzantine periods and subsequently integrated as spolia into the mosque's platform during a second construction phase. Alternatively, the board may have been carved directly by Muslim inhabitants while gathered at the mosque entrance, perhaps while waiting for the call to prayer. In either case, its placement within the congregational mosque—a transition from the limestone of the first phase to the diverse masonry of the second—underscores the mosque's role as a focal point for social interaction and continuity across different eras. This type of board game is difficult to assign to a specific period, as similar examples were widely used throughout the Middle East. The game, formed over a limestone block by hammer and chisel, measuring 50 × 65 cm, features two aligned rows, each containing five circular depressions with diameters ranging from 4 to 5 cm (Fig. 3). Typical boards with two parallel rows of depressions—two by six, but often also two by five—can still be seen at various archaeological sites in the eastern part of the Roman Empire, likely influenced by the Persian game “nard” (Schädler, 2012, p. 3). The location of the board in the mastaba likely suggests that people played games either before or after performing prayers, or perhaps during their leisure time while sitting around the mastaba. Apparently, playing in public was a common practice during Roman and Byzantine times, and it persisted to the Islamic ages. There were many public places in the Roman Empire where the gameboards were found, carved in stone (Depaulis, 2024, p. 64), such as several gameboards that have been unearthed in Eastern Cardo Street in Jerusalem (Sebbane, 2019, p. 147). Finding these board games in public provides significant evidence to understand the role of the board games in daily life in Ayla during the Islamic ages. The board game was incorporated into the congregational mosque. The game does not belong to a specific person, but it belongs to the public in the city. Public board games were a common feature in the urban landscape of Hellenistic, Roman, and Byzantine cities (Sebbane, 2019, p. 148), and this feature persisted in urban Islamic cities. The Mosque of Ayla wasn't the only instance of practicing games in religious buildings; the archaeological excavations in al-Yamāma, a place near Al-Kharj, in central Saudi Arabia, unearthed a late Islamic mosque (16th–18th century), laid over an earlier mosque dating to the 8th–10th century CE. It is on the plaster floor in the prayer hall of the earlier mosque that scratched gameboards were found. Twenty-eight engraved game boards were identified (Depaulis, 2024, pp. 48-52). These findings suggest that recreational activities were closely intertwined with religious practices, offering valuable insights into the social dynamics of the era. Such discoveries challenge traditional perceptions of sacred spaces, revealing them as multifunctional environments where community life and spiritual devotion coexisted. Although the city was eventually abandoned, the tradition of playing these games endured for many decades, persisting even into the modern age. The inhabitants were eventually compelled to relocate eastward after less than four hundred years

(Whitcomb, 2010, p. 174). Subsequently, during the Mamluk period, a settlement known as al-‘Aqaba developed in the vicinity of the present castle, suggesting that an earlier fortification may have been located there (Al-Shqour, De Meulemeester, & Herremans, 2009, p. 642). It is within this transitional area of the Aqaba Fort that a game board remains carved onto a threshold step, marking a site where people continued to gather and engage in the same social practices established by their ancestors in Ayla.

Second: The Ṭāb Board:

This board was unearthed on the northern side of the Pavilion House. It consists of four aligned rows, each containing six carved hollows (Fig. 4). One of the interior lines has a shallow hollow, probably carved by mistake during the carving of the depressions using sharp tools such as a hammer and chisel. Dating this board remains problematic: although a board game was uncovered within a rich pottery context dating to the Fatimid/Abbasid period, this particular board may date to an earlier or later period beyond that context. The variation in the number and arrangement of the hollows suggests it may have been used for a variant or different type of game. Among the most commonly attested games in Islamic contexts are ṭāb, Siege, and mancala. Ṭāb is typically played on a board with four rows of small holes and is often associated with the spread of Islam (Alex de Voogt, 2017, p. 93). Siege, or Siga, generally features a 5×5 grid of squares or depressions (Vincent Charpentier, 2014, p. 116; Alex de Voogt, 2017, p. 94). Mancala boards usually consist of two or four rows of larger, cup-shaped depressions (Alex de Voogt, 2021, p. 2). Some two-row mancala examples have twelve pits—six in each row (Vesna Bikie, 2010, p. 186). The diversity of board configurations and the existence of numerous game variants can make it difficult to identify the exact game represented by a given archaeological find (Vincent Charpentier, 2014, p. 116).

Third: Merrills, or Nine Men's Morris

This is a fragment of a stone game board with most of the original stone missing. It was unearthed during construction work on the blocking wall of the southern arched entrance in the Pavilion House. Probably this stone dates to the Roman period, but the conducted excavations in the site confirmed there are no evidence or remains of the camp of the 10th Fretensis legion as it was suggested before (Whitcomb, 1995, p. 278). It appears that the Muslims reused this block from an abandoned Roman structure in the city. The discovery is not surprising, as another stone block bearing a Latin inscription mentioning names of some Roman emperors was found on the northeastern side of the eastern entrance of the same building. It features vertical and horizontal lines forming three squares of different sizes arranged concentrically (one inside the other), with lines connecting the corners of each square. Additional lines link the corresponding sides between the squares (Fig. 5). This type of game is known as Merrills, or Nine Men's Morris—an ancient board game that has been played for at least 2,000 years. Its origins remain unknown, and it is unclear whether it was invented independently or evolved from an earlier game. The game's distinctive grid pattern has been found carved into countless stone and wooden surfaces across ancient Roman and Byzantine sites, as well as in later cultural contexts. (Mamoun, 2020, p. 239) Although the Merrills game is not widely attested in ancient archaeological contexts, it is known from a single example in Ancient Egypt around 1400 BCE and later appeared in other regions in the Middle East and Europe (Kent Palmer, 2024, P7).

Fourth: A Fragment of a glazed Game Board

The sherd from this type of game board has been found among the debris (Fig. 6). The fragment represents part of a portable game board, made of glazed ceramic, featuring broad, circular-shaped depressions. It is probably dated to the Abbasid period, the hollows are surrounded by two parallel lines, with another pair of lines dividing them into organized parts. Between each hollow is a decorative motif, possibly a floral pattern, resembling a three-petal design surrounding each hollow from four directions. Several examples of ancient game boards from Asia Minor share this typology, which dates back to the Roman period, typically characterized by an oblong rectangular frame, divided into two rows of five hollows, separated by a central line running parallel to the long sides of the board. According to archaeological surveys in Asia Minor, out of fifty-two recorded examples, ten boards feature two rows of five squares, while forty-one have two rows of five circular hollows, possibly used for placing game pieces (Schädler, 1998, P12). This game board was likely fabricated for elite individuals, designed to be easily carried wherever the player went. Its portability highlights the significance of playing mancala, suggesting that the game held a notable place in the daily lives of Muslims.

Conclusion

The discovery of different game boards from the Islamic city of Ayla made of various materials provides valuable insights into the recreational activities that persisted and evolved from the Roman period through the Byzantine era and Islamic period in Ayla. These findings highlight not only the cultural exchanges in the city between different societies but also the innovative ways in which games adapted to local customs and available resources. As a result, the finds reveal compelling evidence of social interaction and leisure that extended beyond geographical boundaries. Evidence suggests that residents of Ayla engaged in playing various kinds of game boards, such as Mancala, Tab, and Nine Men's Morris. The adaptations of these games in Ayla over time illustrate how play fostered interaction and understanding among diverse communities. Moreover, uncovering game boards carved into the entrance of the mosque underscores the role of the religious building in Ayla as a communal social hub. The discovery of the portable glazed pottery board, whose high cost identifies it as a luxury item, further reveals clear social distinctions between public and elite gaming practices, while the daily routines across these social strata shared commonalities, the modes of leisure were distinctly different. While common residents engaged in gaming within shared public spaces, elite individuals possessed portable luxury boards for private use. Historical sources attest to the popularity of such games among Arab communities even before the advent of Islam, and their continued use throughout various Islamic periods reflects cultural continuity and adaptation. These discoveries underscore the value of studying recreational artifacts as windows into the social and cultural complexity of medieval Islamic urban life.

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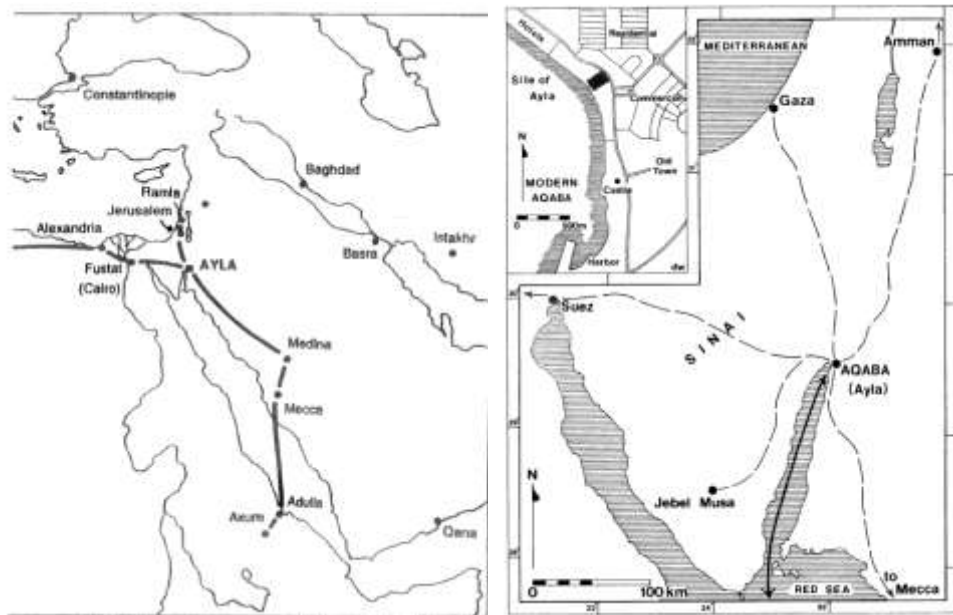


Figure 1: (Map of Ayla) The strategic location of Ayla within the network of major Islamic cities and medieval trade routes (Whitcomb, 1994).



Figure 2. Different shapes of tokens unearthed from the Islamic city of Ayla.



Figure 3. Stone game board with two rows of circular depressions, carved into the mosque's southern entrance platform (mastaba).



Figure 4. Stone game board comprising four rows of hollows, found north of the Pavilion House.



Figure 5: Stone fragment with the Merrills (Nine Men's Morris) pattern, reused in the Pavilion House structure.



Figure 6: Sherd of a portable glazed ceramic game board