



Ancient Egyptians at Play

Board Games Across Borders

Walter Crist, Anne-Elizabeth Dunn-Vaturi
and Alex de Voogt



B L O O M S B U R Y

Bloomsbury Egyptology
Series editor: Nicholas Reeves

Ancient Egyptian Technology and Innovation, Ian Shaw
Archaeologists, Tourists, Interpreters, Rachel Mairs and Maya Muratov
Asiatics in Middle Kingdom Egypt, Phyllis Saretta
Burial Customs in Ancient Egypt, Wolfram Grajetzki
Court Officials of the Egyptian Middle Kingdom, Wolfram Grajetzki
The Egyptian Oracle Project, edited by Robyn Gillam and Jeffrey Jacobson
Hidden Hands, Stephen Quirke

The Middle Kingdom of Ancient Egypt, Wolfram Grajetzki
Performance and Drama in Ancient Egypt, Robyn Gillam

Ancient Egyptians at Play

Board Games across Borders

Walter Crist

Anne-Elizabeth Dunn-Vaturi

Alex de Voogt

Bloomsbury Academic

An imprint of Bloomsbury Publishing Plc

BLOOMSBURY

LONDON • OXFORD • NEW YORK • NEW DELHI • SYDNEY

Contents

List of Illustrations

Acknowledgments

Egyptian Chronology

1 Ancient Egyptians at Play: An Introduction

A range of casting devices

Board games across borders: Identifying Egyptian games

2 *Mehen and men*: The First Signs of Egyptian Board Games

Mehen: The game of the coiled serpent

Mehen boards

Mehen pieces

Rules of *mehen*

Pictorial evidence

Textual evidence

Archaeological evidence and social context

The demise of *mehen* in Egypt

Mehen in Nubia

Mehen in the Levant and Mesopotamia

Mehen in Cyprus and the Aegean

Men

Two rows of thirteen and forty-two and pool

3 *Senet* across Borders

Early evidence for *senet*

- Old Kingdom: Ritual use and graffiti
 - Middle Kingdom: Changes and consistency
 - New Kingdom: Religious meaning
 - Later history of *senet*
 - Playing pieces
 - Senet* in Nubia
 - Senet* in the Levant
 - Senet* in Cyprus
 - The *game of thirty-three*
- 4 The *Game of Twenty*: A Foreign Acquisition
- Origins and chronological distribution
 - Beni Hasan playing scenes
 - Ancient names
 - Boards for the *game of twenty*
 - Special squares and decorations
 - Archaeological contexts
 - Rules for the *game of twenty*
 - “Uniting of the twenty squares” or *thirty-one*
 - The Levant and Cyprus: Games as heirlooms
- 5 The Game of *Hounds and Jackals*: From Thebes to Susa
- Boards for *hounds and jackals*
 - Gaming pegs
 - Beni Hasan playing scenes
 - The game outside of Egypt
 - Reconstructed rules
 - Symbolism of the game
 - The Coptic board game
- 6 Roman Board Games Crossing the Borders of Egypt
- The sources

The game of *five lines* or *πέντε γραμμαί*
Duodecim scripta or *ludus duodecim scriptorum*
Latrunculi or *ludus latrunculorum*
Merels or *mill* game
Marbles
Remaining configurations
The borders of Egypt

7 Arab and Ottoman Invaders Scratching the Surface

Graffiti games
Seeja or *siga*
Seeja playing rules
Tâb
Mancala

8 The Role of Board Games in Understanding Antiquity

Spread of board games
Religiosity of board games
Site use
Unidentified board games and new approaches

References

Author Index

Subject Index

Illustrations

Figures

All drawings, unless otherwise indicated, were made by Jennifer Steffey at the American Museum of Natural History in New York, who also designed the maps for each of the chapters. Dimensions of objects are indicated when available either as a scale on the photograph or in the caption.

- 1.1 Casting devices from Egypt and Sudan.
- 2.1 Map of sites mentioned in Chapter 2.
- 2.2 *Mehen* board demonstrating a Predynastic rendering of the game.
- 2.3 *Mehen* board bearing the name of Hor Aha.
- 2.4 Second Dynasty *mehen* board accompanied by spherical playing pieces.
- 2.5 Painting from the tomb of Hesy-Re showing *mehen*, *senet* and *men*.
- 2.6 Ivory *mehen* piece from Abydos in the form of a couchant lion.
- 2.7 *Mehen* game from Episkopi *Phaneromeni*, Cyprus.
- 3.1 Map of sites mentioned in Chapter 3.
- 3.2 Drawing of *senet* patterns, showing markings common during different periods.
- 3.3 Drawing of scene from the mastaba of Nikauhor showing *senet* playing.
- 3.4 Facsimile of a painting from the tomb of Nefertari.
- 3.5 *Senet* boards on terracotta platters from Twenty-Sixth Dynasty fortress at Tell Defenneh.
- 3.6 Playing pieces collected by F.G. Hilton Price.
- 3.7 Drawing of Merenptah playing *senet*.
- 3.8 *Senet* game from Arad, with drilled depressions as the playing spaces.
- 3.9 *Senet* game from Hazor, with the *game of twenty* on the opposite side.
- 3.10 *Senet* games from the Episkopi region, Cyprus.
- 3.11 *Senet* game of Late Period date, with the *game of thirty-three* on the

opposite face.

- 4.1 Map of the *game of twenty* from the mid-third to the first millennium BCE.
- 4.2 The *royal game of Ur* with gaming pieces and tetrahedrons.
- 4.3 The *game of twenty* in the second and first millennia BCE, and the route of play.
- 4.4 Playing scenes A, B and C in the tombs of Baqet III and Khety, Beni Hasan.
- 4.5 *Game of twenty* from Thebes with *senet* on the opposite side.
- 4.6 Ostracon from Deir el-Medina.
- 4.7 Drawing of the Turin Papyrus with four games.
- 5.1 Map of the game of *hounds and jackals* during the second and first millennia BCE.
- 5.2 Game of *hounds and jackals* from Thebes.
- 5.3 Violin-shaped game board.
- 5.4 Drawing of hippopotamus-shaped game board.
- 5.5 Turtle stand or simulacra from Dra Abu el-Naga.
- 5.6 Playing scene in Beni Hasan, probably from Tomb 17.
- 5.7 Boards from the deposit of the temple of Inshushinak, Susa.
- 5.8 Reconstruction of the numbering sequence of the holes.
- 5.9 Coptic board game.
- 6.1 Map of sites mentioned in Chapters 6 and 7.
- 6.2 Example of a Roman games context at Palmyra, Syria.
- 6.3 *Five lines* at the Luxor temple and at Qasr al Ghweita.
- 6.4 Drawings of *duodecim scripta* boards from Qustul and Dawwi.
- 6.5 *Duodecim scripta* boards at Kom Ombo.
- 6.6 Drawing of a terracotta game board.
- 6.7 *Latrunculi* board at Kom Ombo.
- 6.8 *Merels* boards at Dendera, Kom el-Dekka, Kom Ombo and Silsila.
- 6.9 Drawing of a *nine-men's-morris* board as found on a column at the Ramesseum.
- 6.10 Drawing of a marble lane.
- 6.11 Two unidentified game boards at Beni Hasan and Silsila.
- 6.12 Possible *seeja* board at the Kharga Oasis.
- 7.1 Example of an Arab or Ottoman games context at Petra, Jordan and on Sai Island, Sudan.

- 7.2 Placement of first pieces on a *seeja* board.
- 7.3 Examples of *seeja* boards at Silsila, Medamoud, and el-Kab.
- 7.4 Examples of *tâb* boards at el-Kab.
- 7.5 Drawing of a *mancala* board at the “Third Pyramid, Gizeh.”
- 7.6 Sudanese *mancala* boards carved in the temple of Tiye, Sedeinga, and on the temple of Soleb.

Table

- 4.1 Table with types of marking and distinct shapes for special squares in Egypt.

Acknowledgments

First of all, we would like to thank Nick Reeves for initiating this book, Anna MacDiarmid and the staff at Bloomsbury Academic Press for their support in the process as well as two anonymous reviewers for their constructive and valuable comments.

At the Metropolitan Museum of Art, we are indebted to the Department of Egyptian Art, led by Lila Acheson Wallace Curator in Charge Diana Craig Patch, for allowing us to study games in the collection, and in particular to Niv Allon, Elizabeth Fiorentino, Janice Kamrin, Marsha Hill, Adela Oppenheim, Catharine Roehrig, Morena Stefanova, as well as Ann Heywood from the Sherman Fairchild Center for Objects Conservation for their assistance in object or text studies and/or image requests. We wish to acknowledge the Department of Ancient Near Eastern Art, and Curator in Charge Joan Aruz, for their considerable support, and especially Blair Fowlkes-Childs, Elizabeth Knott and Michael Seymour for their contributions.

Ben Haring and Olaf Kaper (Leiden University), Pavel Onderka (Narodni Muzeum, Prague), Rudolf Haensch (Kommision für Alte Geschichte und Epigraphik des Deutschen Archaeologischen Instituts), Dennys Frenez (Università di Bologna), Mark Kenoyer (University of Wisconsin), Jennifer Webb and David Frankel provided us with helpful information, and special mention should be made of our colleagues at Arizona State University, Nancy Serwint, Leif Jonsson and Kostalena Michelaki, as well as Annie Caubet (Musée du Louvre) and Francesco Tiradritti (Università di Enna Unikore) for their invaluable contribution to the progress of our research.

Thanks to Dr. Abdel-Hamid (Egyptian Museum, Cairo), Sara Al-Ashmawi (Egyptian Museum, Cairo), Nadine Cherpion (Institut Français d'Archéologie Orientale, Cairo), Nevine Kamal (Institut Français d'Archéologie Orientale, Cairo), Yael Barschak (Israel Antiquities Authority), Christopher Sutherlands (British Museum), Tracey Golding (Petrie Museum), Vincent Rondot (Musée du Louvre) and Isabelle Bardies-Fronty (Musée de Cluny) for facilitating access to images and granting permission.

Special thanks to Maria Nilsson (Lund University) and John Ward for their generosity in supplying multiple images for this publication, to Paul Whelan for his illustration, and also to Stuart Swiny for photographs, insightful discussion and access to unpublished material. We are grateful to Vincent Francigny (Section Française de la Direction des Antiquités du Soudan), Alexandra Christopoulou (National Archaeological Museum, Athens), Eleni Tournas (National Archaeological Museum, Athens), Marie-Noël Bellessort (École du Louvre), Olga Fast (Ägyptisches Museum, Bonn), Irving Finkel (British Museum), Stephen Quirke (Petrie Museum), Rachael Sparks (Institute of Archaeology, London), Ashley Cook (World Museum, Liverpool), John Wyatt (Griffith Institute and Bodleian Library, Oxford), Christopher Dobbs (University of Missouri), Jay VanRensselaer (Johns Hopkins University, Baltimore), Jack D.M. Green (Oriental Institute Museum, Chicago), Linda Evans (Macquarie University, Sydney), Naguib Kanawati (Australian Centre for Egyptology), María Antonia García Martínez (Tamkang University of Taipei), Christine Lilyquist and Peter Michaelsen for answering our inquiries. We owe particular thanks to Rozenn Bailleul-LeSuer (University of Chicago) for valuable advice, Ulrich Schädler (Swiss Museum of Games) for his insights and Constance Dickmeyer for commenting on our text. Finally, we are most grateful for the many drawings provided by Jennifer Steffey at the American Museum of Natural History in New York.

Egyptian Chronology

This chronology has been compiled on the basis of Shaw (2000:xiii–xiv) and Francigny *et al.* (2014:7–8). Dates for the Late Period and onwards are absolute. All other dates are approximate. During the Intermediate Periods, dynasties may overlap. Dates relevant for regions outside of Egypt are included in the text with those for Nubia taken from Rilly and de Voogt (2012:187), those for the Levant from Sharon (2014:62) and those for Cyprus from Knapp (2013:27).

PREDYNASTIC PERIOD 5300–3100 BCE

Naqada

EARLY DYNASTIC PERIOD 3100–2686 BCE

First–Second Dynasties

OLD KINGDOM 2686–2181 BCE

Third–Sixth Dynasties

FIRST INTERMEDIATE PERIOD 2181–2055 BCE

Seventh–Eleventh Dynasties

MIDDLE KINGDOM 2055–1650 BCE

Eleventh–Fourteenth Dynasties

SECOND INTERMEDIATE PERIOD 1650–1550 BCE

Fifteenth–Seventeenth Dynasties

NEW KINGDOM 1550–1069 BCE

Eighteenth–Twentieth Dynasties

THIRD INTERMEDIATE PERIOD 1069–747 BCE

Twenty-First–Twenty-Fourth Dynasties 1069–715

LATE PERIOD 747–332 BCE

Twenty-Fifth Dynasty (Kushite Period)
Twenty-Sixth Dynasty (Saitic Period)
Twenty-Seventh Dynasty (First Persian Period)
Twenty-Eighth–Thirty Dynasties
Second Persian Period

PTOLEMAIC PERIOD 332–30 BCE

ROMAN PERIOD 30 BCE–395 CE

BYZANTINE PERIOD 395–640 CE

ISLAMIC PERIOD 640 CE–present

Ancient Egyptians at Play: An Introduction

The material culture of board games in Egypt has long been a topic of interest for archaeologists, ethnographers and lay people alike. The climatic conditions of the Nile Valley afford for the preservation of perishable materials, and thus a multitude of evidence to sustain this interest. Game boards and their paraphernalia have been identified among the material culture of ancient Egypt since the early days of archaeology (e.g., Prisse d’Avennes 1847:9). The number of well made, easily identifiable boards and pieces, as well as the variety of games represented in the archaeological record is striking in comparison to other ancient cultures. As early as the 1910s, Georges Bénédite compiled the *Catalogue Général des Antiquités Égyptiennes du Musée du Caire* for games, but his manuscript remains unpublished (Drioton 1940:182, note 2). In this book, we synthesize the material evidence in Egypt from Predynastic through Islamic times, in order to aid in the identification of board games in archaeological contexts at sites within Egypt as well as in the neighboring regions. This scope also provides evidence for a wider discussion on how games are transferred across cultural boundaries, as the long history of Egypt demonstrates the facility with which board games are able to cross borders both real and imagined.

Previously, scholars have made an invaluable contribution to the study of Egyptian board games by compiling the material, textual and artistic evidence for the various board games that existed in Egypt. In particular, Pusch (1979), Piccione (1990b), Decker and Herb (1994) and Rothöhler (1996) accomplished the monumental task of compiling catalogs of the known surviving game boards from Predynastic and Pharaonic Egypt, as well as texts about games and representations of game playing. Reproducing their work here would be unnecessarily repetitive as few games have been found since, but they prove to be invaluable resources for any researcher interested in the topic. Instead, this volume seeks to build from their work by expanding the scope spatially and chronologically. Archaeological evidence in the past thirty years increasingly suggests that Egyptian games may have spread to neighboring local populations where Egyptians were economically or politically active, and in some cases even beyond Egypt’s sphere of influence. Furthermore, the presence of Greco-Roman and Islamic games on Pharaonic monuments demonstrates the contextualization

of those structures within succeeding cultures.

Egyptian texts have helped to describe the religious significance of board games, while shorter inscriptions have given snapshots of gameplay. Much of the early scholarship on board games in Egypt focused on possible game rules. Evidence from the boards themselves, paraphernalia found with games, captions accompanying playing scenes and longer religious texts led to multiple theories on the modes of play (Ranke 1920; Murray 1951; Vandier 1964:486–512; Kendall 1978; Piccione 1990a, 1990b), though some are particularly speculative (e.g., Falkener 1892; Breyer 2010). Even when board games are depicted in art, it is important to note that it can be difficult to identify a painting or relief as a particular game, as the board surface is commonly not shown, according to Egyptian artistic convention. As a result, inferences must be made from textual evidence or based on artistic conventions. Apart from rules used for games in Roman Egypt and the period thereafter, the playing rules of ancient Egyptian games remain largely unknown. The changes in rules or the variations of play are also beyond what we can currently learn from the archaeological record. There is one exception for the *game of twenty*, for which a Babylonian tablet from the Seleucid period has provided relevant details. These rules written in a region outside of Egypt and in a time period postdating the game's existence in the Nile Valley remain the main advance in game rule research (Finkel 2007).

As with most aspects of Egyptian life, board games were imbued with meaning connected with the journey into the afterlife. This is made explicit in art and texts from Pharaonic times, and is particularly striking for the games *senet* and *mehen*. Board games, particularly *senet* and to a lesser degree *mehen*, appear in the religious literature of ancient Egypt, including the Pyramid Texts, Coffin Texts and the Book of the Dead. The religious nature of *senet* is particularly prominent in the Great Game Text, which also provides some evidence for the nature of play (Piccione 1990b:191–241). New texts on this subject in the last decades are largely absent, and a reinterpretation of well-documented and sometimes contentious texts is outside the scope of this work. Often, interpretations of texts by Egyptologists interested in games may differ from canonical translations as they may see aspects of gaming in the texts that may be overlooked by other epigraphers. These texts offer crucial insight into the meaning of these games, but offering new interpretations of texts is a task that would fill a volume on its own. Likewise, depictions of games in tomb paintings and reliefs often depict the play of games in ritual contexts. Social historians have pointed out the similarity of ritual and play (Huizinga 1950:15–27; Sutton-

Smith 1997:169). As a consequence, and because tomb assemblages make up the majority of the archaeological evidence in Egypt, much of what is known about games in Egypt is limited to their ritual use. The works of Kendall (1978, 2007) and Piccione (1990a, 1990b, 2007) demonstrate the connections of game playing and mortuary symbolism. Piccione's works in particular collected both material and textual evidence to comprehensively discuss the religious implications for the games of *senet* and *mehen* for the first time. Since their extensive explorations of the topic there has been little advancement in the discussion of this aspect of Egyptian board games, and for this reason we summarize earlier arguments made from textual evidence while drawing new conclusions and parallels by expanding the scope of material evidence considered.

The problems with understanding game rules and the detailed work on the ritual use of board games cannot be overcome by simply reexamining board games in the archaeological record of Egypt. New discoveries of game boards or texts about games from Egypt have been rare since the 1990s, and thus focusing on gaming within Egypt itself is limited to reexaminations of existing evidence. This stands in contrast with the number of games that have been discovered outside of Egypt, which has increased dramatically over the past thirty years. Since 1980, when Stuart Swiny first published his article identifying *senet* and *mehen* in Cyprus (Swiny 1980), analogous games have been found throughout the island as well as in the Levant, which have greatly increased our knowledge of these games outside of Egypt. The rate at which these games have been found has been so high that the number of *senet* and *mehen* games found in the Levant and Cyprus is now greater than that in Egypt itself. Similarly, Roman and Arab/Ottoman games have been discovered in Egypt, but are commonly excluded in literature on Egyptian games. Archaeological evidence from regions outside of Egypt provide significant insight on these board games, and understanding their morphology and chronology can help to prevent misidentification and provide interesting layers to discussions of site histories. In other words, the study of Egyptian board games benefits from a comparative approach that includes insight gained outside of Egypt and allows a context of these games across borders.

In recent years there is also a shift in Egyptological research as games have been identified carved into pavements at Egyptian monuments or traced on limestone ostraca, which point to non-elite Egyptians playing these games just as much as royalty and the nobility. Much like the Cypriot and Levantine boards, for instance, these artifacts are cruder in their construction than the manufactured

Egyptian game boards found in royal tombs. The differences in layout and markings on boards made of different materials add a new layer of understanding the use and variation of board games.

While archaeological research in Cyprus and the Levant has thus far produced more game boards than Egypt, the Nile Valley has greater variety of types as well as a longer history of board games, allowing for an examination of how they change through time. Similar artifacts found in neighboring regions help attest to foreign interactions with Egypt, including Nubia, the Levant and Cyprus. This process includes games introduced into Egypt as well as from Egypt to nearby lands. The variety of games preserved in Egypt's archaeological record presents an ideal setting in which to examine games and exchanges in the ancient world.

Since patterns carved on rock faces and ostraca have, so far, received little attention in the literature, the following chapters will focus on boards made of a variety of materials and the process of identifying board games based on those types. Graffiti games are often not datable to the same time the monument was built, which makes it important to understand the possibilities and to be able to identify whether such games are Pharaonic, Greco-Roman or Islamic in origin. Collated material of this kind is presented in a roughly chronological manner, focusing on the major games of Pharaonic Egypt, followed by Greco-Roman and later games to highlight chronological changes, facilitate game identification and inform a site's history.

Playing pieces, accompanying a board or found in isolation, may also be diagnostic and aid in the identification of games where the board may not have survived. Casting devices that accompany a board add detail both in the possible age and the variation of play. Advances in understanding of these game paraphernalia outside of Egypt assist in contextualizing Egyptian game practices. Introductions to these elements of board games present a first understanding of the complexity of the material and the possibilities of comparing Egypt with its neighbors. Furthermore, types of casting devices are often not specific to certain games, and are best introduced before the games themselves in order to facilitate discussion of the individual games without digression. They also provide a microcosm of the variation seen in the types of games found in this book, with a long chronological range as well as foreign types mirroring the dispersal of games throughout the ancient world. In some cases, casting devices comprised games on their own, that remain outside the scope of our survey. They may have inspired some of the earliest forms of board games as has been suggested in the

New World, where evidence may indicate that early board games were essentially counting mechanisms for a game involving casting sticks (Voorhies 2013). While it is not possible with current evidence to suggest that Egyptian board games evolved from games where the casting devices were the main element, these randomization tools appear early in the archaeological record and are common paraphernalia accompanying games throughout Egyptian history.

A range of casting devices

Ancient Egyptians used different kinds of casting devices to determine the number of squares on a gaming board on which they would move playing pieces including sticks, astragali, teetotums and cubic dice (see fig. 1.1). The latter is the only accessory that has not been found in direct association with any game board from the Pharaonic period while the three others were discovered with *senet* and the *game of twenty*. Throwing sticks may have been used for *mehen* but this is not certain and no *hounds and jackals* game was preserved with casting equipment.

Casting or throwing sticks functioned as the principal randomizing agent from the Predynastic period through the New Kingdom and are still used today in Egypt and Sudan (Kendall 1982:271). Sticks appear in archaeological assemblages in sets of two, three or more. Sometimes two sets of distinct throwing sticks were found together, which may indicate that each player used their own set. The players would give values to the different sides as one side is marked, and/or tinted, the other one unmarked. The sticks would have been thrown together, mikado like, and the player would count the number obtained depending on the sides facing up.

At Predynastic Ballas, Petrie and Quibell found ivory rods decorated on one side with incised lines or with motifs imitating reed joints (Petrie & Quibell 1896:14, pl. VII). From the First Dynasty onwards, throwing sticks took the form of semi-cylindrical strips of wood, bone or ivory corresponding to split reeds or palm branches; in cross section one side was rounded, the other flat. The sides could also be distinguished by the color or the decoration. The size of the sticks can vary greatly: in First Dynasty tombs at Saqqara, ivory sticks more than 28 cm long with incised decoration were discovered with gaming pieces in Tomb 3504 (Emery 1954:56–7, fig. 61, 59, fig. 67), while three strips of ivory measuring between 4.7 cm and 9.4 cm long were found with tall cylindrical and semi-circular gaming pieces in Tomb 3471 (Emery 1949:62). A painting in the

Third Dynasty tomb of Hesy-Re at Saqqara depicts two pairs of sticks and two sets of seven playing pieces accompanying the *senet* game (see fig. 2.5). The sticks are decorated with three cross-bands consisting of two lines, and each pair is distinguished by the color of the lines, which are either red or black. Throughout the period of their use, incised lines were the main decoration on sticks.

During the Second Intermediate Period and New Kingdom, the ends of sticks were often carved in the form of human fingertips or the head of a canine, and this imagery certainly contributed to the symbolism of *senet* (Hayes 1959:26, 200) (fig. 1.1, top left). In the Great Game Text, the player whose “seven pieces are in front of [his] fingers like the jackals that tow the solar bark” may refer to such throwing sticks (Kendall 1982:272) or a square called the “House of Towing” (Piccione 1990b:149). The animal with a pointed snout and long ears lying back along the sides of the stick is interpreted as a jackal, a fox or a fennec (Tait 1982:32–6). There is a similarity with animal heads found on opposite ends of magical wands from the Middle Kingdom (Tait 1982:33). We may explain the appearance of this motif on throwing sticks as a shift from the magical wand, a device that disappeared in the New Kingdom. A unique set of two pairs of ivory sticks representing foreign captives was found in the tomb of Tutankhamun and is now in the Egyptian Museum, Cairo, henceforth Egyptian Museum (JE 62059) (Tait 1982:36, pl. XIII). Small figurines of captives were also used as playing pieces (see Chapter 3).

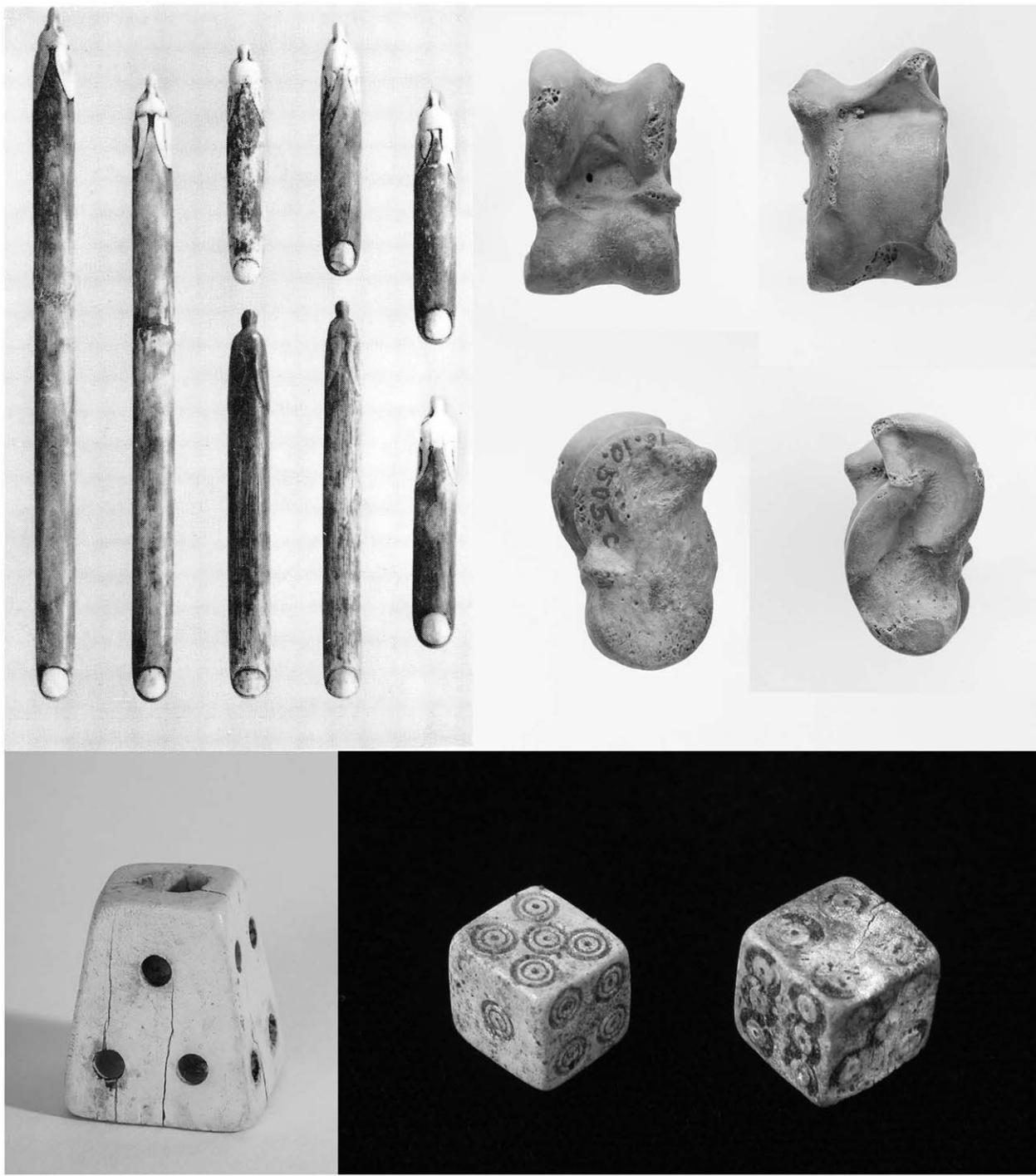


Figure 1.1 Egyptian casting devices dating to the New Kingdom and a set of cubic dice from the third century CE, Sudan. Top left: throwing sticks, max. 22.8×1.4 cm. The Metropolitan Museum of Art, Rogers Fund, 1919, 19.2.19–27a,b. Top right: four sides of an astragal from Thebes, 2.5×1.6 cm. The Metropolitan Museum of Art, Rogers Fund, 1916, 16.10.505c. Image © The Metropolitan Museum of Art. Bottom left: teetotum from Qau, $2.4 \times 2 \times 1.4$ cm. © Petrie Museum of Egyptian Archaeology, University College London, UC26284. Bottom right: cubic dice from Sedeinga, Sudan, 2.5 cm. Photograph courtesy of Vincent Francigny.

The relationship between fingers and throwing sticks is traced back to the Old Kingdom at Giza, both in archaeological and epigraphic material (Kendall 1982:271–2). A wooden finger measuring 14.7 cm long was excavated by the Harvard University-Boston Museum of Fine Arts Expedition in the Western Cemetery at Giza from Pit G 2385 A dated to the Sixth Dynasty (Museum of Fine Arts, Boston, 13.3441). It could be an early example of the throwing stick with fingertip. It has been suggested that $\text{db}^{\text{c}}\text{w}$, fingers, served to indicate throwing sticks, also used as a counting device (Kendall 1982:271). The word db^{c} is often described in *senet*-related inscriptions and it is translated as “finger” since we are not sure about its secondary meaning (Piccione 1990b:60, note 114). In the Sixth Dynasty tomb of Idu at Giza, a player warns his opponent about the decisive role of $\text{db}^{\text{c}}: r\ddot{\text{d}}\dot{\text{i}}.(i) s\ddot{\text{s}}m \text{db}^{\text{c}}.(i) r pr hb$ translated as “I cause my finger to be led to the house of the plough … [or] the house of the ibis” (Simpson 1976:25) or “I will cause my finger to lead the way … to the house of penetration or humiliation” (Piccione 1990b:60). As the different translations show, the name of the field—referred to as a house—is uncertain but it could be the unlucky square twenty-seven where the opponent is supposedly drowned according to the Great Game Text (Kendall 1982:272).

Throwing sticks were excavated in Sudan in the 1910s by the Harvard University-Boston Museum of Fine Arts Expedition at the capital city of the Kingdom of Kerma. Five ivory sticks decorated with black-filled incised chevrons were discovered with nine cylindrical and ten conical playing pieces in Tomb K6002:1 (Museum of Fine Arts, Boston, 15-3-281). Another lot decorated with black-filled incised lines comes from Tomb K2100 (Museum of Fine Arts, Boston, 20.1522). Both groups date to the Kerma period (c. 2500–1500 BCE).

The French excavations at the coastal site of Ugarit in Syria have brought to light three ivory throwing sticks with incised decoration of unknown context and an undecorated one from a Late Bronze Age III level, dating to the thirteenth century BCE (Gachet-Bizollon 2007:212, 307, pl. 50). While Egyptian-type playing pieces are found at several sites in the Levant, including at Ugarit (Gachet-Bizollon 2007:212), these sticks are the only ones known to date for that region, confirming the significant influence of Egyptian culture at Ugarit, an important trading center during the second millennium BCE. The presence of playing pieces and throwing sticks at Ugarit attests to the practice of board games. Ivory plaques have been retrieved at the site but so far no gaming board has been identified definitively.

Another method to determine the number of spaces moved by the pieces was the use of knucklebones. “Knucklebone” is an inaccurate term for the astragalus, a small bone found within the tarsal joint of hooved animals more commonly referred to as the talus in anatomical terminology. Mainly sheep and goat bones were used. This bone is useful as a randomizing device because it has four sides on which it could land when cast, with none of these sides alike. Two long sides are noticeably broader: one is concave, while the other is convex. One narrower long side is indented and the other is flat. The astragal can land on one of the four long sides with the opposite side facing up, so each one was assigned a name and a different numerical value. Figure 1.1 shows the four sides from top left to bottom right, followed here by the value applied in Classical times: dorsal (three), plantar (four), lateral (six) and medial (one) (Amandry 1984: 348–9). Sets of astragali of different size may have functioned for distinctive throws (Finkel 2007:21, note 12). Imitations of astragalus bones were also made from wood, clay, ivory, stone or metal. In Egypt, artificially produced astragali seem to occur more often than natural bones (Gilmour 1997:170).

Astragali are frequently found in the Near East as early as the Chalcolithic period in Anatolia (5500–3000 BCE) (Muscarella 1974:80–1, note 21). Astragali were used also for games of skill as well as divination. Although an astragal was found at Abydos, possibly in the tomb of Den, king of the First Dynasty (Hayes 1953:46; Kendall 1982:270) (Metropolitan Museum of Art, 01.4.92), their use by the Egyptians is better attested from the Seventeenth Dynasty on and is likely related to the introduction of the *game of twenty* (Finkel 2008). Astragali have been photographed with the Theban game of *hounds and jackals* (Pritchard 1954:fig. 213), but in this case they are not likely to belong to the game board as they are not listed in the excavation report along with the itemized accoutrements of the game. Egyptians adopted the astragali to play *senet* and they are the only casting devices represented in New Kingdom playing scenes (Pusch 1979:pls. 18, 28, 30) (see cover image).

Astragali are normally found in pairs with game sets. A pair of ivory astragali was found at el-Asasif (Lansing 1917:26), pairs of ivory and resin—of notably different size—in the tomb of Tutankhamun (Tait 1982:38–41), and a pair of wooden astragali at Saqqara (Quibell 1909:114). While most of the archaeological evidence comes from burials, a few are reported from domestic contexts at Deir el-Medina (Dunn-Vaturi 2012a) and el-Amarna (Frankfort & Pendlebury 1933:25, pl. 29.2).

During the Greco-Roman period, cubic dice become more common and

gradually replaced astragali for use with board games. Despite this phenomenon, playing pieces dating to this period show a continued connection between astragali and board games. Two baboon-shaped playing pieces carefully integrate the contour of an astragalus to the body of the animal as if it had been carved from a natural knucklebone (Arnold 1995:60) (Metropolitan Museum of Art, 66.99.75; Walters Art Museum, 71.512). These pieces are stylistically attributed to an Alexandrian workshop active around the third century BCE.

A group of stone astragali carved with enigmatic scenes was not meant for an ordinary game but imbued with magical powers (Dandoy 2006:133; Piccione 2007:58). Three examples, said to be from Egypt and attributed to the Ptolemaic or Roman period, have been identified in museum collections (Musée du Louvre, E 11171; Metropolitan Museum of Art, O.C. 428; Petrie Museum, UC44997). The worn reliefs on the Louvre example are difficult to interpret (two standing figures, scorpion?). The steatite astragal now in London shows an erotic scene on one side (Petrie 1927:57, no. 227, pl. 49) while the gabbro astragal in New York shows a nude crouching female on the plantar side—possibly Omphale—and standing figures on the narrow sides (for the iconography of Omphale and magical gems see Dasen 2008).

During the New Kingdom, a four-sided teetotum was also used as dice equipment. A teetotum is a truncated four-sided pyramidal die, its faces numbered with one to four dots and pierced with a plug or rod allowing it to be spun. This new shape came to Egypt from the Levant where examples dating to the early second millennium BCE are attested at Beth Shean (Albright 1938:48), Tell el-Ajjul (Petrie 1934:pl. XXIV, XXXVI, 25) and Tell Beit Mirsim (Albright 1938:48, pl. 21,b; Pritchard 1954:fig. 214). The ivory teetotum from Stratum D at Tell Beit Mirsim measures 1.7 cm in height, 1.75 cm in width at the base, 1.3 cm in width at the top; it still has the ivory plug running through it. Albright (1938:48, note 48) estimated the examples from Tell el-Ajjul were cruder than his find at Tell Beit Mirsim but stated that they “all follow the same principle, with spots only on the four sides.”

Kendall (1982:267) described the teetotum as possibly “the earliest prototype of the cubic die known in Egypt.” Two ivory examples from Egypt are known to the authors so far. One was found with a double-sided game box in a tomb dating to the mid-Eighteenth Dynasty at Zawiyet el-Aryan (Dunham 1978:72–3, pl. LIX) (Museum of Fine Arts, Boston, 11.3096). The other one, found at Qau, is assigned to the New Kingdom (Petrie Museum, UC26284) (fig. 1.1, bottom left).

Cube-shaped dice represent “an invaluable mental and artistic performance. It functions as a randomizing agent only if its body … is manufactured with great geometrical precisions.” (Schädler 2007:13). Schädler considers the mid-third millennium BCE dice from Tepe Gawra in Mesopotamia to be the earliest evidence of cubic dice. Others trace its origin to the Indus Valley, where many terracotta, stone and faience examples have been discovered at the sites of Mohenjo-daro, Harappa, Alamgirpur and Lothal (Dales 1968:18–19). The use of both cubed and oblong dice is attested at these Harappan sites around 2300 BCE (Brown 1964:34). The opposite sides are numbered consecutively, so that one is opposite two, three opposite four, and five opposite six. Cubic dice with the number dots arranged like the Indian dice are attested in Mesopotamia since the mid-third millennium BCE, but their use in the Near East remained rare (Dales 1968:18) and they have never been found clearly associated with any board game, in contrast to the more popular tetrahedral and oblong dice.

Cubic dice were not common in Egypt until the Ptolemaic period (Petrie 1927:57, pl. XLIX), although isolated finds dating to the New Kingdom are reported from el-Amarna and Lish (Hayes 1959:405) as well as Deir el-Bahari (Carnarvon & Carter 1912:58). During the Ptolemaic period, the numbering of the sides is standardized, with opposite sides always adding up to seven, as in modern dice: 1+6, 2+5 and 3+4. During Roman times, the proliferation of dice games was abetted by the movements of soldiers throughout the empire. Dice were thrown with the hand or small boxes were used as throwing cups to prevent manipulations.

Most of the dice are numbered from one to six but some sides may have letters or words. A cubical limestone die, dating from the Ptolemaic period, is inscribed with hieroglyphs. Names of gods appear on each side: Osiris, Horus, Isis, Nephthys, Hathor and Har-Behdety (Petrie 1927:57, pl. XLIX.233; Tait 1998) (Petrie Museum, UC38176). A large faience die dating to the Byzantine period, in the fifth century CE, and now in the Swiss Museum of Games (2762), combines numbers one to six and Greek letters: alpha (one), delta (four), beta (two), eta (eight), sigma (six), iota (ten). Questions are still raised whether this type of die was used to play or was involved in magical/divinatory rituals (Schädler 2007:13–14).

A similar problem is found with twenty-sided dice as it is unclear if and how these dice were used for games. They are exclusively found in Greco-Roman contexts with most examples in the literature attested in Egypt. They normally feature the Greek letters alpha through upsilon and Pedrizet (1931) has shown

that examples found in Alexandria point to the end of the Hellenistic period in Egypt. Their occurrence is part of the meager evidence that exists of direct Greek influence on possible gaming materials. At the same time they are a helpful tool to date archaeological sites (e.g., Francigny *et al.* 2014).

Board games across borders: Identifying Egyptian games

While divination and religious ritual have been a focus of discussion with regard to ancient board games, their role in facilitating interactions across social boundaries is more useful for studying the social implications of gaming (Crist 2015; Crist *et al.* in press). In order to identify games of Egyptian origin, as well as foreign games within Egypt, it is necessary to first examine what is known about them and which games existed where and at what times. Furthermore, descriptions of the different forms these games assume will aid archaeologists in identifying them in surveys and excavations. Recent work (de Voogt 2010, 2012; Jacquet-Gordon 2003) has discovered graffiti games at previously excavated sites, indicating that games may exist at other sites awaiting discovery and identification. In the following chapters, we discuss the major games that existed from the Predynastic through the Islamic periods, in order to aid scholars in recognizing what games belong to antiquity and which are more recent.

The early history of Egyptian board games is discussed in Chapter 2, where *mehen* and other, lesser-known games are first introduced. *Mehen* takes prominence as the most popular of the Predynastic board games in Egypt, and indeed it was the first that is known to have crossed into other regions. It also sets the trend of board games in religious and mortuary contexts, which can be seen throughout Pharaonic Egypt. After discussing the forms and contexts of *mehen* in Egypt, its appearance in the Levant and Cyprus is discussed, along with an examination of the cultural circumstances under which the games arrived in these lands. Finally, the game known as *men*, as well as two other early but poorly understood board games are briefly discussed, as they are not as well known as most of the other games discussed here.

Chapter 3 focuses on the most famous of Egyptian board games, *senet*. Its development into the most prominent and religiously important board game in Egypt shows that it may have changed through time, which is to be expected for any game that was played over roughly three thousand years. The transmission of *senet* to the Levant, Cyprus and Nubia is also not surprising in consideration of its popularity in the Nile Valley, but it is clear that it took on a different kind

of social context than it did in Egypt. At the end of the chapter, we also discuss the enigmatic *game of thirty-three*, found on the opposite side of *senet* boards during the Late Period. The playing pieces for *senet* and the *game of twenty* are also discussed in this chapter, since both games used pieces of the same type.

The *game of twenty*, which is the focus of Chapter 4, was the first foreign game to be widely played in Pharaonic times. This game is originally attested at the Royal Cemetery of Ur during the third millennium BCE and only arrived in Egypt much later and in a different form. It had been popular in Mesopotamia and the Levant, and was introduced to Egypt perhaps as early as the Middle Kingdom, reaching the pinnacle of its popularity during the New Kingdom. During this period it was a popular game seemingly related to interregional elite gift exchange and its boards were likely kept as heirlooms throughout the Eastern Mediterranean. It was never fully Egyptianized though, as can be seen in its decoration and its abandonment after the interaction networks of the Late Bronze Age collapsed (c. 1050 BCE). A more complete discussion of the rules of play is allowed by the aforementioned tablet found in Babylon.

Hounds and jackals is covered in Chapter 5. The different types of boards are discussed, as this game was manufactured in a number of varying styles. It is another game that originated in Egypt and spread abroad, but these mechanisms are less well understood because it has been found as far away as Anatolia without strong direct connections. The unique playing pieces in the form of pegs may point to the existence of the game in places where the boards have not survived. New interpretations of pictorial evidence suggests that the game may have been depicted in playing-scene contexts during the Middle Kingdom.

Chapters 6 and 7 focus on later games that were introduced to Egypt from foreign lands. Understanding the presence of these games on Pharaonic monuments will help to correctly identify them and to understand site histories. Chapter 6 focuses on Greco-Roman games, particularly *five lines*, *latrunculi* and *duodecim scripta*, while Chapter 7 focuses on Arab and Ottoman games, including *seeja*, *mancala* and *tâb*, which are still played today. These later games have rarely been discussed in conjunction with Pharaonic games, and by emphasizing them in these chapters we present mounting evidence for their existence in Egypt alongside an understanding of how they were played and by whom.

The final chapter summarizes some of the main themes that are apparent from the study of games in Egypt. Focusing on the roles games played in ancient Egypt, the process of how games transcended borders in Egypt and the ancient

Near East is highlighted, and the often over-emphasis of religion with relation to games is discussed. Finally, there is an examination of the broad interest board games have received in anthropological and Classical archaeology and how this volume may assist these fields and Egyptology in particular.

Mehen and Men: The First Signs of Egyptian Board Games

Mehen: The game of the coiled serpent

The Fourth Dynasty tomb of Prince Rahotep at Meidum provides the earliest known names associated with specific board games anywhere in the world. In a list of offerings for the king to use in the afterlife are three different games: *mn*, “men,” *zn.t*, “*senet*” and *mhn*, “*mehen*.” Translated as “to coil” or “the Coiled One” (Ranke 1920:372–5), *mehen* shares its name with the god Mehen, an immense coiled serpent associated with the netherworld, whose primary function was to envelope the sun god Ra in his many coils, thus protecting him from all evil (Piccione 1990a:43; Rothöhler 1999:12–19). Accordingly, *mehen* boards used in the game reflect the typical coiled serpent form of this god. The playing field is laid out in the form of a spiral, sometimes with the tail and head of a serpent depicted on the board itself (Ranke 1920:4).

Of the three games appearing in the offering lists of Rahotep, *mehen* seems to be the oldest, judging from the archaeological record. *Mehen* boards vary in their morphology in ways the other more standardized Egyptian games do not. First of all, the playing spaces do not always take the form of bounded squares as they often do in *senet*, rather the playing spaces can be delineated by a number of alternating bosses and recesses, with each boss or each recess apparently being one playing space (Vandier 1964:486–7). Another method of delineating the playing spaces was to deeply incise the divisions between the spaces (Vandier 1964:487). In addition to this, the number of playing spaces represented on the boards and in the pictorial evidence is not standardized. Unlike *senet*, in which every known example of the game has three rows of ten spaces, *mehen* has a wide variation of possible numbers of spaces. Boards have been found with as few as forty-nine spaces, and some had as many as four hundred (Swiny 1986:57). There also was not a predetermined number of circles in the spiral, with as few as two (e.g., Petrie & Quibell 1896:Pl. 43) and as many as seven (e.g., Quibell 1913:Pl. XI, see fig. 2.5) known from archaeological contexts. The serpent could also be coiled in either a clockwise or counterclockwise direction (Piccione 1990a:47).



Figure 2.1 Map of sites mentioned in Chapter 2.

Mehen boards

Of the few boards that have good archaeological provenance, the oldest comes from the late Naqada Tomb 19 at Ballas, now in the Ashmolean Museum (Petrie & Quibell 1896:42), and dates to the end of the fourth millennium BCE (Rothöhler 1999:11). Found covering a pot, it was likely a votive representation of a *mehen* board rather than one used for play, since it was only 10.5 cm in diameter (Kendall 2007:37), but appears in the form of other full-sized game boards. There is a pierced rectangular protrusion extending from the circular board, a feature paralleled in many other *mehen* games. The body of the serpent is divided into squares, with the head and tail of the snake differentiated from the other segments.

Three other boards have been compared to this artifact and, because of their similar execution, may be dated around the same time as the Ballas *mehen*. While their provenance is incomplete, one is rumored to have been found at Quft (Petrie & Quibell 1896:42; Vandier 1964:488), now in the Egyptian Museum in Cairo (JE 27354), and another said to have been found at Abydos now is in the Bode Museum (13868) in Berlin (Scharff 1926:145). The third game is in the Petrie Museum in London, but its provenance is unknown (UC20453, see fig. 2.2) (Petrie 1914:25).

They all contain a similar execution of the snake motif, with segmented bodies making up the individual playing spaces and differentiated heads and tails. They also exhibit a protrusion on one end, though these are smaller and more rounded in comparison to that on the Ballas *mehen*. It has been suggested the type of protrusion shared by these three games is a representation of a turtle's head (Fischer 1968:17). This connection may be corroborated with a turtle in the Metropolitan Museum of Art (61.33) that has a series of concentric circles carved on it, and interpreted as a votive *mehen* board. The Petrie and Bode boards also are pierced, which suggests they may also have had some sort of amuletic function (Kendall 2007:36) which Petrie suggested was protection from serpents (Petrie 1914:25), an interpretation which he even admitted is questionable.



Figure 2.2 *Mehen* board demonstrating a Predynastic rendering of the game. 28.8 × 3.4 cm. © Petrie Museum of Egyptian Archaeology, University College London, UC20453.

A *mehen* board in the Metropolitan Museum of Art (58.125.1, see fig. 2.3) is incised with the name of the First Dynasty pharaoh Hor Aha on its rectangular protrusion. It has been argued that this game may be a forgery (Kendall 2007:38), based on presumed increasing realism in the execution of *mehen* boards continuing from the Second Dynasty. Indeed, while the manner in which the serpent is incised is unusual when compared to the rest of the corpus of games, the number of *mehen* boards we have is small, with only fifteen examples, and so all of the variation in style that may have existed in antiquity may not be reflected in the games that have been preserved. In any case, the execution of the snake with its head and tail, along with the presence of a rectangular protrusion, is reminiscent of the boards already discussed, though it is not pierced. Results of an examination of the board by Ann Heywood at the Metropolitan Museum of Art suggests the artifact is ancient rather than modern as Heywood found calcium carbonate accretions and what appears to be soil deposits in the hieroglyphic and *mehen* carvings. The hieroglyph—the authenticity of which has been doubted by I.E.S. Edwards and Gunter Dreyer

(Diana Craig Patch 2014, personal communication)—appears to have been made around the same time as the *mehen* board, but probably by two different individuals based on the manner in which they are carved (Ann Heywood 2014, personal communication).



Figure 2.3 *Mehen* board bearing the name of Hor Aha, shown before restoration, 32.1 × 27 × 2.2 cm. The Metropolitan Museum of Art, Dick Fund, 1958, 58.125.1. Image © The Metropolitan Museum of Art.

Another *mehen* game without provenance, now in a private collection, may

have been a jar lid much like the Ballas game as it is only 4.5 cm in diameter and unlikely to have been used for play considering it contains 336 very small spaces (Kendall 2007:37). It depicts a coiled serpent, with a tail and head, much like the others already discussed, but with an important distinction: four holes were drilled on different parts of the serpent and may have been filled with a colored paste or some kind of inlay, distinguishing those spaces from the others (Kendall 2007:37). The protrusion on this board is broken, so it is uncertain whether it was rectangular or of the “turtle head” type.

The Predynastic and First Dynasty boards stand in marked contrast to those dating to the Second Dynasty, all of which depict a more abstract rendering of the game (see fig. 2.4). Five are known, four from the tomb of Pharaoh Peribsen at Abydos (Amélineau 1899:494–5, plate 47) and another with unknown provenance in the British Museum (1961,0408.1) (Shore 1963:Plate 33A). All of these artifacts are made of faience. In these examples the representation of the serpent becomes more abstract; the board in the Musée Royal de Mariemont (B.102.0) has a coil in its center resembling a snake’s body, and the board in the British Museum has a stylized serpent’s head in the center while in the examples from Peribsen’s tomb (Musées Royaux d’Art et d’Histoire, Brussels, E.4180; Musée du Louvre, E 29891) the serpent’s head and tail are not well executed (Kendall 2007:35–6). During this period, spaces were no longer delineated by incised lines. Instead, the playing spaces consist of alternating rectangular bosses and recesses producing a checkerboard pattern on the playing field.

Further diverging from the standards of earlier *mehen* boards, the spaces on the Second Dynasty boards were no longer always arranged in a spiral pattern. The spaces on one of the Peribsen *mehens* were positioned in concentric circles, while another had four spiraling tracks, and a third had spaces in concentric circles that connected with each other, thus allowing for a spiral-like movement along the board (Kendall 2007:35). Swiny (1986:55) suggests the arrangements of the Peribsen games make their identification as *mehen* suspect, but the Mariemont *mehen* also has a pattern of concentric circles rather than a spiral, and there is a definite, though abstract, depiction of a serpent’s head at the center of this board. Rather than arguing against its use as a *mehen* board, Kendall (2007:35) suggests certain spaces on this artifact may have originally been marked to indicate when a player would advance to the next circle, thus effectively allowing it to function as a spiral. Whatever the case, these boards are markedly different from those known from any other *mehen* boards currently known, and suggest the Second Dynasty was a time in which some

experimentation was underway in the design of the boards.

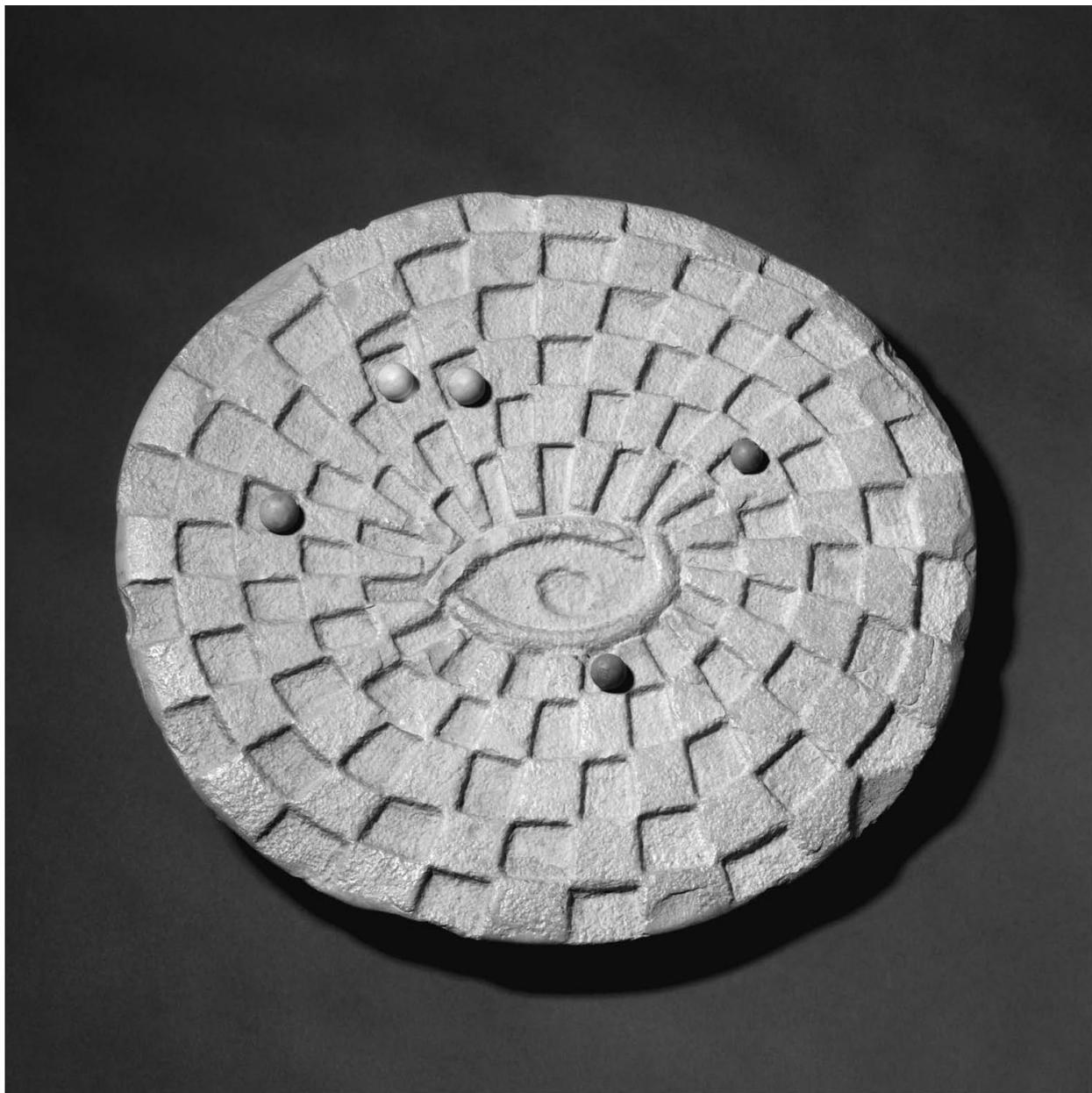


Figure 2.4 *Mehen* board of unknown provenance demonstrating a Second Dynasty type accompanied by spherical playing pieces, 37 × 7 cm. The British Museum, 1961,0408.1. © The Trustees of the British Museum.

The next datable *mehen* is not a board that can be played, but a pictorial representation (see fig. 2.5). It is the earliest known depiction of a *mehen* board and was found in the Third Dynasty mastaba of Hesy-Re at Saqqara (Quibell 1913:18–21; Emery 1961:248–51; Kendall 2007:33). The paintings on the walls

of this mastaba depict different types of equipment considered to be necessary for the deceased in the afterlife, and include not only *mehen* but also the first known depictions of the games of *senet* and *men*, accompanied by sets of gaming pieces (see below). This representation is the only painting or relief of a *mehen* board in which the individual spaces and the head and tail of the snake are shown. Some of the divisions of the spaces are not well preserved, although it does seem that the seven spirals of the snake were divided evenly, and, if the number of spaces is extrapolated considering the size of those preserved, the total number of spaces is roughly four hundred (Swiny 1986:57). The trapezoidal appendage, always shown when *mehen* is represented in art (in contrast to the *mehen* boards themselves that do not always have a protrusion), is depicted for the first time. If this *mehen* board is accurate, it could represent a new type, since it is markedly different from the Second Dynasty boards and seems to return to many of the conventions seen before in the Predynastic and First Dynasty *mehens*.

The Louvre (E 25430), the Oriental Institute Museum (16950) in Chicago and the Fitzwilliam Museum (e.g. A. 4464.1943) in Cambridge each have a *mehen* board without provenance (Vandier 1964:488; Swiny 1980:69; Piccione 1990a:46–7). These boards are all morphologically quite similar to *mehen* boards predating the Second Dynasty, but exclude any kind of protrusion. The segments of the snake's body are all carefully delineated, and the head of the snakes are all carefully executed on these three boards. None has a protrusion, though Shore (1963:91) argues there is evidence one did exist on the Fitzwilliam game. In the center of the spiral, the head of the serpent takes up more space than on the games predating the Second Dynasty, leaving considerably more negative space in the center.

The example from the Louvre is supported by a foot, a feature that has led to questions regarding its authenticity (Swiny 1986:55, note 482); however, the Quft and British Museum *mehens* also have feet to support them, so its presence on the Louvre game does not preclude it from being an authentic artifact. Kendall's (2007:38–9) suggestion that these boards date to the Third Dynasty or later is probably correct, since they deviate from the earlier types only slightly.

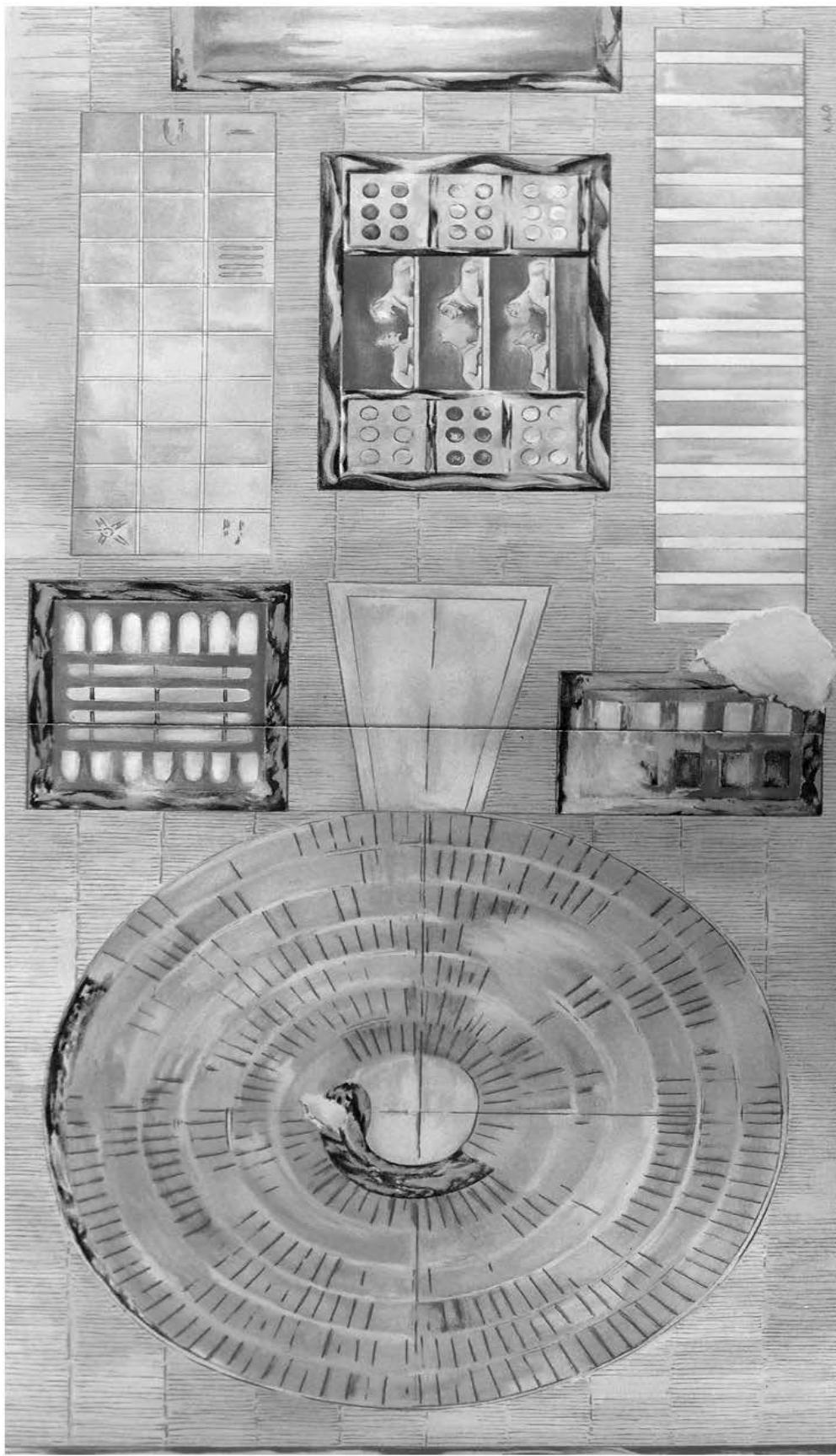


Figure 2.5 Drawing of a painting from the tomb of Hesy-Re, dating to the Third Dynasty and showing the games *mehen* (left), *senet* (top right) and *men* (bottom right) along with their playing pieces and throwing sticks. Drawing reproduced from Quibell (1913:Pl. XI).

Another way the Louvre and Chicago games differ is that, instead of a clearly defined tail, the head of some kind of waterfowl (probably a duck or goose) is carved on the outer edge of the board. There is probably a connection here with the “Great Cackler,” the primordial goose that, in one early creation myth, laid the egg from which Ra was hatched (Rundle Clark 1991:55–6, 213; Kendall 2007:40), which, in turn, is related to the solar connections of the god Mehen (see below). The Fitzwilliam *mehen* differs in one other way in that five of the spaces are crosshatched, perhaps marking them as special spaces important for the play of the game (Swiny 1980:69; Kendall 2007:39). This is similar to the drilled spaces in the jar lid discussed above in the New York private collection *mehen*.

The materials out of which *mehen* boards were made—stone, ivory or faience—are all materials that are well preserved in the archaeological record. It is possible that *mehen* boards may also have once been made of wood, but did not survive. There have been multiple tombs that have produced sets of *mehen* pieces of the type depicted in the tomb of Hesy-Re without an accompanying board, which argues the board itself has decomposed. Indeed, no *mehen* pieces have been found associated with a board (Kendall 2007:34–5), so it is very likely there were boards made out of perishable materials that have not been preserved; however, decomposed boards should not be inferred in every case, and such conclusions should only be made when complete or near-complete sets are found.

Mehen pieces

Mehen pieces are depicted next to the *mehen* board in the painting in the tomb of Hesy-Re, the only complete depiction of a set of *mehen* pieces anywhere (Quibell 1913:Pl. XI, see fig. 2.5). The set pictured there contains thirty-six marbles, grouped by color into six groups of six, as well as six white couchant lions. The six sets of pieces may suggest the game could be played with up to six players, which could be supported by the pictorial evidence from later in the Old Kingdom (see below). It is important to note that no dice are pictured with the

mehen pieces on the Hesy-Re painting, nor are they depicted on playing scenes. Throwing sticks have been found with *mehen* pieces, but only in tombs where *senet* and/or *men* pieces have also been found, so it is unclear whether they were associated with the *mehen* pieces as well. When found alone, *mehen* pieces have never been found along with throwing sticks. While it has been suggested that *mehen* was a race game (Kendall 2007:35), the absence of dice or other randomization devices may mean *mehen* was less likely to have been a race game, but may have been some kind of strategy game instead.

Mehen pieces have typically been found in graves in Egypt, mostly from the Predynastic period through the Second Dynasty (see fig. 2.6). A full set has never been preserved, but the closest was found in Tomb 3504 at Saqqara, in the same cache that contained a complete set of *senet* pieces (Emery 1954:58). The couchant lions found there were made of ivory, and the spherical pieces, thirty-nine in number, were made of limestone. Other sets of *mehen* pieces are incomplete. At Abu Rawash, Tombs I and VIII both produced *mehen* pieces. Tomb I produced three lions and three lionesses made of ivory, and Tomb VIII produced a nearly complete set, with a full complement of lions and lionesses and a series of spherical pieces in two colors: white and red (Montet 1946:189). Another incomplete set comes from Tomb 100 at Naqada, where four lions, eight spherical pieces and a couchant hare were found (Petrie & Quibell 1896:35, pl. 7). Tomb 3507 at Saqqara produced a fragment of an ivory lion piece, and also a number of spherical pieces made of amethyst and one of rock crystal (Emery 1958:84). It is possible, though not conclusive, these objects form part of a set of *mehen* pieces. A First Dynasty private tomb near that of Zer-Ta at Abydos produced four couchant lion pieces (Petrie 1901:23). Petrie notes that the bottom surfaces of the lions are worn smooth, probably through extensive use, and also that the details of the lions' physique has been partially worn through extensive handling, probably in the course of gameplay. In some cases, hounds appear to have been substituted for lions (Scharff 1926:56, 63; Kendall 2007:34). Other marbles and couchant lions called *mehen* pieces have been found in tombs throughout Egypt (de Morgan 1896–7:192–4; Amélineau 1899:Pl. 31; Capart 1905:140, 178–9; Petrie 1920:11, 1925:6–7; Schweitzer 1948:12; Saad 1969:45; Kaiser *et al.* 1976:86; Spencer 1980:69–70), but it is nearly impossible to ascribe them this function without boards as the lions could be votive objects and the marbles could have served multiple purposes. One set of pieces from Naqada, in which only four marbles remain, may have been part of a *mehen* set, because they were found alongside pieces of types consistent

with *senet* and *men* pieces, as shown on the walls of Hesy-Re's tomb. Interpreted by Petrie as a game of *skittles* (Petrie & Quibell 1896:Pl. 7; Vandier 1952:405), it seems more likely the pieces did not make up one game together, but rather were incomplete sets for the games *senet*, *mehen* and *men*.



Figure 2.6 Ivory *mehen* piece from Abydos in the form of a couchant lion, 8.7 × 4.3 × 3.2 cm. The Metropolitan Museum of Art, Gift of Egypt Exploration Fund, 1903, 03.4.13. Image © The Metropolitan Museum of Art.

Rules of mehen

Much like *senet*, the rules for playing *mehen* are unknown, although some aspects of the course of play can be determined through textual evidence and the artifacts themselves. As mentioned above, *mehen* appears to have been played with a number of playing pieces in the shape of couchant lions or lionesses, or in the shape of small spheres (Quibell 1913:Pl. XI, see fig. 2.5). Many have classified this game as a hunting-type game (Vandier 1964:492), and Montet (1955:195–7) constructed an elaborate set of rules based on representations of hunting in Predynastic Egypt, which, Vandier (1964:492) admitted, was going too far. Indeed, the only way to reconstruct a convincing set of rules for the game is to find textual evidence suggesting a sequence of play, as has been somewhat possible for *senet*, but not for *mehen* (see Chapter 3).

Some evidence for the method of playing *mehen* has been found on one of the known *mehen* boards. The board in the Oriental Institute appears to have once been painted with brown pigment and is worn away on the long spiraling grooves outlining the body of the snake, while the paint in the grooves dividing the individual spaces is still thickly applied. Piccione (1990a:47) believes this suggests the spherical playing pieces associated with *mehen* were moved along this spiraling channel.

Pictorial evidence

Aside from the depiction of *mehen* on the wall of the tomb of Hesy-Re, other scenes from Old Kingdom tombs depict the playing of *mehen*. Five *mehen* playing scenes come from the tombs of the nobility of the Fifth and Sixth Dynasties (Decker & Herb 1994:634–6). These scenes typically show two men sitting opposite each other across the *mehen* board, with the board shown as it is seen from above. One feature of the *mehen* boards as depicted in these scenes that has caused some degree of discussion in the literature is that of the so-called trapezoidal appendage, ubiquitous in the pictorial evidence, but not clearly attributable to a feature of the actual game boards known archaeologically (Montet 1955; Vandier 1964; Swiny 1986). The debate stems from a disagreement as to whether this appendage represents some form of foot on which the game board rested as Swiny (1986:56) seems to be suggesting or if it was an extension of the game board itself. A foot would make it into a sort of table. The extension is typically interpreted as a sort of “garage” for the playing pieces, which played a part in the course of the game, i.e., in the form of a “turtle head” or rectangular protrusion (Montet 1955:196). Usually the appendage is rather vestigial and probably incapable of functioning as the type of “garage” suggested. Without more conclusive archaeological evidence, the function of the trapezoidal appendage depicted in the tomb paintings cannot be identified. It also seems unlikely to have been a foot, since only one of the scenes depicts the appendage facing down, and in this case it is depicted resting on a table (Simpson 1976:25, fig. 38).

In one case the spherical gaming pieces are shown being moved on the board (Vandier 1964:490). The individual spaces are never depicted on the board, and likewise there is no known depiction of the lion or lioness pieces being used on one (Montet 1955:139).

Judging from the scenes, it is apparent *mehen* was typically played with the

board on the ground, while the opponents likewise sat on the ground (or floor) opposite one another while they played. One scene shows the game resting on a table, but the players are still depicted as sitting on the floor, rather than seated. It is perhaps important to note that all of the *mehen* playing scenes that have been found accompany *senet* playing.

The earliest scenes come from the tomb of Rashepses, vizier of the pharaoh Isesi of the Fifth Dynasty, at Saqqara (Lepsius 1849:Fig. 61b). These two scenes are similar, and both depict what appears to be four players, or two players with two spectators, engaged in a game of *mehen*. These scenes are also the only ones depicting pieces on the board as what appear to be marbles, which are found toward the center of the snake, though the lion or hound pieces are nowhere to be seen. The caption accompanying the scene reads *ḥb mhñ*, “playing *mehen*.” They appear among *senet* playing scenes, as well as depictions of singers and dancers, a common placement of games throughout the Fifth and Sixth Dynasty reliefs.

In the Sixth Dynasty tomb of Kaiemankh at Giza, two *mehen* players can be seen next to a game of *senet* the deceased is playing (Junker 1940:35–8). Much like the depiction of *mehen* from the tomb of Rashepses, this scene is accompanied by images of musicians and dancers, as is a poorly preserved scene from the Fifth–Sixth Dynasty tomb of Isesi-mery netjer at Giza (Pusch 1979:29–32). Music and dancing are even more apparent in the reliefs from the Sixth Dynasty tomb of Idu at Giza, where *mehen* is played alongside two *senet* games, and musicians, dancers, as well as sports are depicted. The text introducing the scene reads: *īnd ḥr. t̄m ḏnh Ḥwt-Ḥr swt k₃.t ḥpti nb̄. t̄imrt nfrw*, “Hail, to you in life, O Hathor, the places of your *ka* are propitiated, that you should glow is what the *nfrw* desire” (Simpson 1976:25), and suggests these games are funerary games and celebrations in honor of that goddess (Kendall 2007:40).

There is one enigmatic depiction from the First Intermediate Period that could possibly represent a *mehen* board. It comes from the tomb of Ankhtifi at Moalla and depicts a scene of woodworking (Vandier 1952:81–2). In this scene, there is an object that could be interpreted as a *mehen* board viewed from the side, with two (one incompletely preserved) couchant lions placed atop it. This relief is far from definitive as to whether it depicts a *mehen* board. If it is, it is the only known representation of the board from a side view. It also is the only evidence *mehen* may have survived the end of the Old Kingdom, which was not thought to have been the case previously (Vandier 1964:489; Swiny 1986:56; Piccione 1990a:47).

In spite of this, two Twenty-Sixth Dynasty reliefs appear to depict *mehen* in very much the same way the Old Kingdom reliefs do. One was found in the tomb of Ankhefensakhmet at Memphis, and is now in the Walters Art Museum in Baltimore (Capart 1938:13–18), while the other was found in the tomb of Aba in Thebes (Wilkinson 1878:55). Both scenes show the game flanked by four men, two on each side, sitting on the floor and interacting with each other, facing away from the board. The inscription accompanying these scenes describe the players as playing *senet*, *mehen* and the enigmatic game $\ddot{t}w$ (Pusch 2007), though only two game boards are shown in each relief. Vandier (1964:489) suggests the scenes are so alike they shared a common model, most likely the tomb of Iby at Deir el-Gabrawi, which dates to the Fifth Dynasty, and is known to have been the inspiration for the decoration in the tomb of his Twenty-Sixth Dynasty namesake. Ranke (1920:13–14) agrees that tomb scenes from the Saite period were often inspired by Old Kingdom prototypes. While, unfortunately, no *mehen* scene was preserved in the tomb of Iby, there were a considerable number of reliefs that did not survive (Davies 1902:11), and it is entirely possible the original *mehen* scene once existed in this tomb.

Textual evidence

There is little textual evidence on *mehen* to provide clues as to the rules of play for the game, or the settings in which it was played. Most of the captions accompanying the *mehen* playing scenes are statements such as $\dot{h}b\ m\dot{h}n$, “playing *mehen*” or, $\dot{h}b\ k(wi)\ mn\dot{h}$ (sic) *r.k.*, “I am playing *mehen* against you” (Kendall 2007:40). In the tomb of Kaiemankh, the caption may indicate some events in the play of the game. The caption above the player to the right reads $\dot{i}\dot{t}.t\ m\dot{h}n$, “seizing *mehen*,” which Kendall (2007:40) interprets as possibly meaning, “gaining advantage in *mehen*,” “seizing the lead in *mehen*,” or “my turn,” while the other responds $ms.\ (i)\ r.k.\ \dot{h}b.(i)\ r.k.$, “I take aim at you and play towards you.” While these passages do not further enlighten the rules of the game, they do indicate it certainly was competitive in nature.

Other texts give indications that may reveal the religious connotations the game had during the Fifth and Sixth Dynasties. In the Pyramid Texts, the name of the god Mehen contains the determinative for the game *mehen* for the first time, suggesting that by the Fifth Dynasty there was a connection between the god and the game that extended beyond a shared iconography. Pyramid Text Utterance 332, in the pyramid of Teti, reads: “Teti is that one who emerged from

the Coiled One: Teti has emerged from his fiery blast, while he is turned away” (Allen 2005:69). Kendall (2007:41) interprets this as the king passing along the coils of the game to the head and back, reflecting an ascension to heaven and resurrection on earth. Rothöhler (1999:14–15) interprets this text differently, suggesting an alternate translation in which the king ascends to heaven as *mehen*. Allen (2005:69) offers a better interpretation, asserting the text refers to the successful conclusion of the game that symbolizes the escape from Mehen, who tries to inhibit the passage of the sun through the *duat*. Utterance 659, from the pyramid of Pepi II (also appearing in the pyramid of Pepi I), commands the king to move his “teeth” along the board, with “teeth” as a metaphor for white ivory playing pieces (Piccione 1990a:48). Allen’s translation (2005:268) “You have received your white teeth, Pepi Neferkare, and the coils that go around them, as an arrow, in their identity of an arrow.” is less clear. From the pyramid of Neith, Utterance 758 describes the birth of the queen into the afterlife, and her wishes to be with Re-Horakhty and in the coils of *mehen* (Rothöhler 1999:16). Allen’s translation (2005:329) contains no mention of *mehen*.

These texts suggest a connection between the protection Mehen gives within his coils and the resurrection of the soul. Indeed, Middle and New Kingdom texts concur that Mehen was instrumental in protecting Ra in his nightly journey through the underworld (Piccione 1990a; Rothöhler 1999; Kendall 2007:41–2). It is also generally accepted that the goal of the game was to reach the center of the coiled serpent, to achieve either protection or union with Ra (Piccione 1990a:52; Rothöhler 1999:16; Kendall 2007:42). In any case, the symbolism contained within the boards (coiled serpent, primordial goose, turtle-head appendages) is consistent with solar ideology, particularly in relation to the journey of Ra through the netherworld, with obvious connotations of rebirth into the afterlife for the deceased. Later Egyptian texts suggest the “Roads of Mehen” were a circuit of nine concentric roads in the netherworld, at the center of which the god Ra sat on his “throne of millions of years.” The deceased was required to journey through this path and approach Ra without succumbing to the dangers of the roads (Piccione 1990a:44).

Archaeological evidence and social context

Mehen boards are comparatively homogenous in their manufacture, but show variation through time. Some of the boards, as well as the playing pieces, are made out of luxury materials such as faience and ivory, suggesting their use by

the upper class of Egyptian society. Indeed, the presence of game boards in the tomb of Pharaoh Peribsen, as well as its listing in the tomb of Prince Rahotep as funerary equipment, and its depiction in the mastabas of other nobility such as Hesy-Re, Idu, Kaiemankh and Rashepses indicate wealthy Egyptians played the game, but there is less evidence that lower classes of Egyptians played the game, unless it is inferred that the players depicted in the playing scenes were of lower class. It should be noted, though, that the children of Idu are all depicted among the dancers and players in the scene containing *mehen* play, and are not distinguished by size, thus indicating relatively equal status with those around them. Indeed, Idu's son, Qar, is depicted playing *senet* with the scribe Isi in the relief in Idu's mastaba, and they are depicted on the same scale as the *mehen* players. It is not impossible that Egyptians of lower status also played the game, but their gaming equipment has not survived because they were likely made of more perishable materials, such as wood, or were made into the sand, as is common practice for board games (Merriam 1953:170; Pankhurst 1971; Tournay & Tournay 1971). It should be noted, however, that graffiti games, like the *senet* games found in Fifth and Sixth Dynasty mortuary temples, which were crudely scratched into pavements, have never been found in a *mehen* pattern. Since all of the evidence for *mehen* in Egypt comes from elite burial contexts, as is most of the archaeological material discovered in Egypt, a clear bias exists in the data for the interpretation of social aspects of gaming.

The players shown with *mehen* on tomb reliefs are exclusively men. *Mehen* is mentioned in the Pyramid Texts of Queen Neith, but there is no indication that this means she played the game. In the mastabas that show gaming in conjunction with dancing and music, the dancers and musicians may be men or women, but the *mehen* players (or, indeed, *senet* players that accompany them) are never shown to be women. Cross-culturally, games are often restricted, at least officially, to a certain sex, and it can be considered inappropriate for certain genders to play certain games (e.g. Pankhurst 1971; Popova 1976:439–40). It is entirely possible that such social rules existed in Old Kingdom Egypt, though this may also be a reflection of the limited amount of information that has survived regarding *mehen*.

It is clear that one social context of *mehen* was its inclusion in religious celebrations dedicated to Hathor as part of mortuary ritual, as can be inferred from the playing scenes of Fifth and Sixth Dynasty tombs, which is logical considering the funerary symbolism evoked by Mehen as represented on the game. Further archaeological evidence for a ritual use of the game comes from a

set of eight lion and lioness gaming pieces which were found in a First Dynasty temple at Abydos (Petrie 1903:24, pl. III). The play of the game outside of these ritual contexts, for example for everyday leisure, is less clear, as no evidence has appeared to suggest this—though its appearance outside of Egypt (see below) argues against its sole use as a ritual game.

The demise of *mehen* in Egypt

Aside from Saite reliefs—which are likely copied from Old Kingdom originals and thus not evidence for the presence of *mehen* in that period—the latest appearance of the game *mehen* is the aforementioned painting on the wall of the First Intermediate Period tomb of Ankhtifi at Moalla. There are no boards, representations, or textual references to this board game from Middle or New Kingdom Egypt. Kendall (2007:42–3) argues it may have been forbidden by religious authorities as the segmentation of the snake’s body into squares was actually a symbolic killing of the god Mehen, which would have been a serious taboo. Several coiled serpent boards resembling a *mehen* game, but with uncut serpents, are known and may reinforce Kendall’s argument (e.g., Ranke 1920:Fig. 8; Piccione 1990a:Fig. 4; Kendall 2007:Fig. 41.9).

The demise of *mehen* is concurrent with the increasing popularity of *senet*. During the Predynastic and Early Dynastic Periods, *mehen* appears to have been the more popular of the two games as there are more intact boards and pieces of *mehen* type than *senet* before the Old Kingdom. *Senet* was more popular in the later years of the Old Kingdom since it appears more frequently than *mehen* in Fifth and Sixth Dynasty tomb reliefs. Furthermore, after the disappearance of *mehen*, *senet* increased dramatically in popularity through the Middle and New Kingdoms, and by the New Kingdom explicitly had taken on the netherworld associations that *mehen* had during the Old Kingdom. It is possible that, rather than a top-down moratorium imposed on *mehen* play, its abandonment was more a reflection of changing popular tastes in gaming.

Mehen in Nubia

Before *mehen* fell out of popularity in Egypt, it may have spread to the regions bordering it where there is some evidence suggesting that *mehen* was played in Nubia. Excavations at the A-Group (c. 3100–2800 BCE) Royal Cemetery at

Qustul produced lions and lionesses, as well as hippopotami and marbles of different colors that closely parallel the lions and lionesses and marbles typically used in Egyptian *mehen* games (Williams 1986:130).

An interpretation put forth by Kendall (1989, 2007:43–4) suggests a game observed in 1921 by Davies (1925:145–6) is a descendant of *mehen*. The game, which was played in a series of holes scooped out of the sand in a spiral pattern, was called *li'b el merafib* (“Hyena Game”) and was observed being played by the Kababish nomads in central Kordofan, in Sudan. Other spiral games are known throughout Saharan Africa, but their connection to *mehen*, if any, is unclear (Depaulis 2001:55). Drawing connections to the equipment and presumed rules of play for ancient *mehen*, Kendall (1989) concludes it is the ancient ancestor of this game among the Sudanese. While it is certainly a possibility, without historical and archaeological continuity of the game from antiquity it is impossible to conclude with any amount of certainty this game does represent a modern version of *mehen*.

Mehen in the Levant and Mesopotamia

Mehen may also be represented in the archaeological record of the Levant and Mesopotamia, particularly in Canaan, perhaps not surprising considering the level of activity the Egyptians undertook in the Levant, discussed further in the section about *senet* in the Levant (see Chapter 3). There are three games from the third millennium BCE that are analogous to *mehen*. These games are more crudely fashioned than those from Egypt, and consist of a series of depressions pecked into limestone blocks in a spiral pattern. Only one of these comes from a clearly datable archaeological context. This example is from Bâb edh-Dhrâ‘ and was found in the destruction debris within the walls of the town, datable to the Early Bronze Age II–III (c. 3300–2500 BCE) (Rast & Schaub 2003:637). This game may be described as *mehen* since it appears at the site alongside apparent *senet* games in similar style (see Chapter 3). The other two stones come from the cave dwellings at Lachish that were occupied throughout the third millennium BCE (Tufnell 1958:40), placing them within the period that *mehen* was used in Egypt. One of these has a clear spiral pattern, while the other may have a spiral pattern, although it is less certain (Tufnell 1958:Plate 21).

Also questionably identified as *mehen* is a large limestone object with a spiral of pecked depressions found at Tell Brak in Mesopotamia and dated to the third millennium BCE (Oates *et al.* 2001:266). Its location on a brick pavement

outside a building is consistent with the typical placement of games in open air spaces known from antiquity. It is possible that these are *mehen* games, but without contemporary *senet* boards from Lachish or Tell Brak (though another fragmentary board at Tell Brak could be identified as *senet*, see Chapter 3) the identification is tentative, even if they are all contemporary with *mehen* in Egypt.

Mehen in Cyprus and the Aegean

In Cyprus, *mehen* appears with similar morphology to that found in the Levant in limestone blocks with pecked depressions laid out in a spiral formation (see fig. 2.7). First identified as such by Swiny (1980; see Crist 2015 for a reassessment), because some of these patterns appear on the opposite side of apparent *senet* games, thirty-nine *mehen* games have since been found at fourteen sites, intriguingly producing more games than have been preserved in Egypt itself. A fragmentary *mehen* game was found at Lemba *Lakkous*, and is the earliest game of any type to have been found on the island (c. 2700–2500 BCE) (Swiny 1982). Often, there is a larger depression at the center or at the beginning of the outer ring of the spiral (sometimes both), which seems to mimic the differentiation of these places on the Egyptian boards (as the head and tail of the snake), though the serpent imagery is absent from the Cypriot games. Like the Egyptian examples of the game, the number of depressions varies, with twenty to ninety depressions present on the known examples, and the spiral can run either clockwise or counterclockwise.

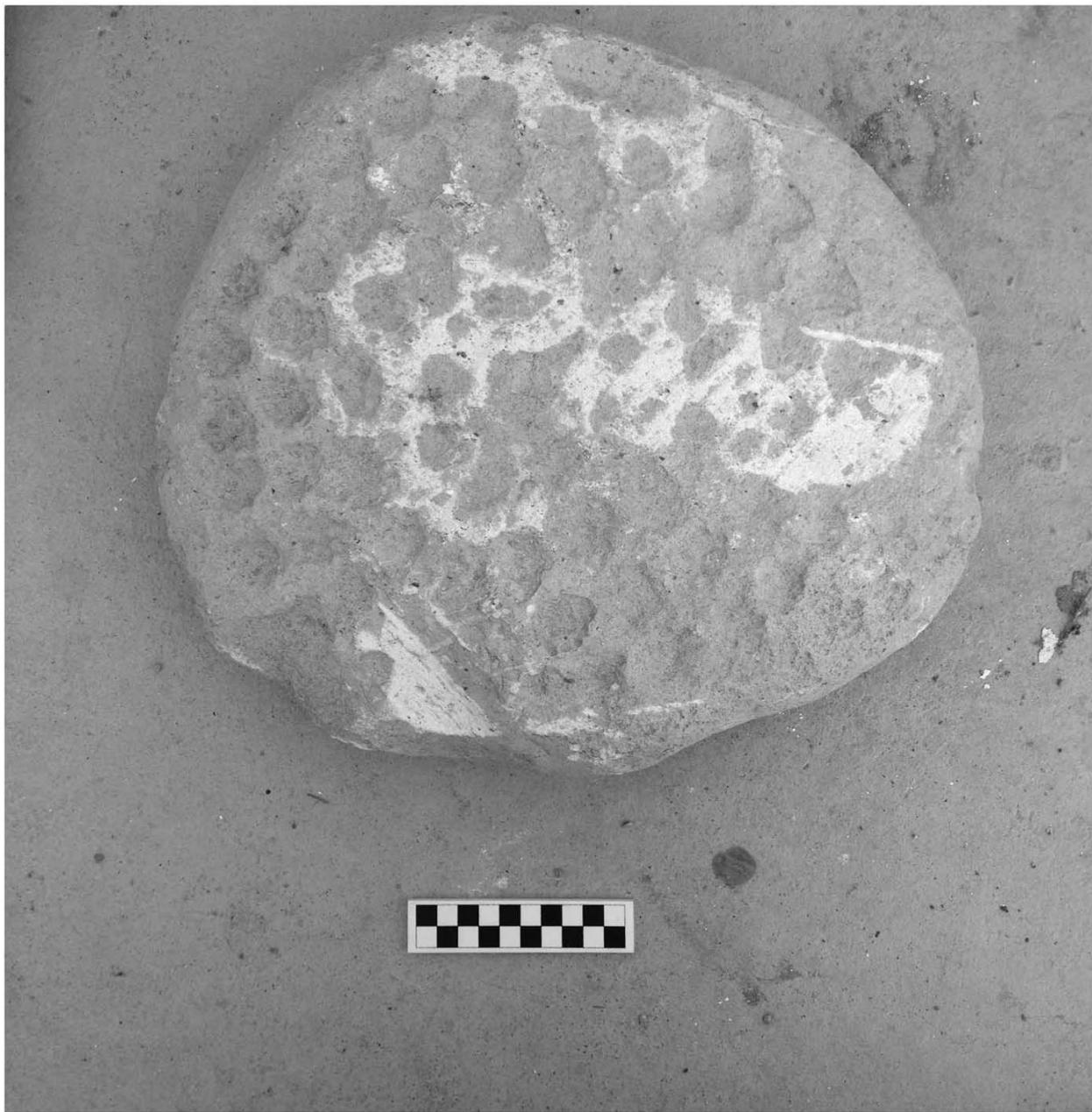


Figure 2.7 *Mehen* game from Episkopi *Phaneromeni*, Cyprus. Kourion Museum, CHM RR325. Photograph by Walter Crist, 2012.

What is remarkable about the *mehen* games found on Cyprus is the degree to which they were adopted wholesale into Cypriot society. While the same is true for *senet* (discussed below), *mehen* was the first game adopted onto the island and incorporated into public and domestic life as it played a part in public feasting events as well as domestic and perhaps mortuary games (Crist 2015). It continued to be a part of Cypriot life well after the game was no longer played in

Egypt; the latest *mehen* game found on Cyprus was found at Kition *Kathari*, and dates to the very end of the second millennium BCE (Karageorghis 1976:880, 1985:242), nearly a thousand years after it was abandoned in Egypt. This stands in stark contrast to the appearance of *mehen* in the Levant, where it appears during the first half of the third millennium BCE, and disappears after Egypt became less reliant on middlemen in Canaan after it seized control of the copper mines in Sinai (see below with regard to *senet* in the Levant), never to reappear again. It is possible Canaanites held a close association between the game and its Egyptian origin that was not shared in Cyprus. Canaanites would have seen Egyptians playing *mehen* more frequently than Cypriots, who may have first acquired the game at Byblos, where there was a sizable Egyptian colony. A similar process is discussed in further detail in Chapter 3 with regard to *senet*, for which there is better evidence (Dunand 1954:310, 1958:531, 573, 661). Only certain individuals would have made the journey to Byblos, and when they brought the game back to the island it lost the Egyptian connotation when played with other Cypriots since they likely never encountered an Egyptian playing the game. It may have still held an esoteric meaning originally as a foreign practice (Crist 2015, in press). It seems that after the upheavals that brought about the end of the Bronze Age throughout the Eastern Mediterranean also brought a final end to *mehen* in the region as it was no longer played in Cyprus thereafter.

Similar stones have been identified in the Aegean, but there is little agreement on their function. They have been interpreted variously as astronomical devices, offering tables or games (van Effenterre 1955; Bardanis 1966, 1988/89; Hood 1995; Hillbom 2003, 2011). Few of these patterns appear to be spirals. Most of these come from Naxos, but many of them are on vertical rock faces, precluding them from use as a game, so their identification as such is unlikely. Only one spiral has been found on Crete, from Zakros (Hillbom 2011:172). Hillbom (2011:114–15) hesitates to call this spiral a *mehen* game, and, as the single instance of this pattern on the island, it is impossible to conclude that it is a *mehen* game. It dates to the Middle Minoan period (c. 2000–1700 BCE), which is outside the time period when it was played in Egypt, so if it was in fact played as a game, it was more likely to have been inspired by the Cypriot version of *mehen*. Regardless, considering the level of contact with Egypt, the scarcity of spiral patterns, and the date of the game, it is impossible to call it a *mehen* board without further evidence.

Men

Also listed among the games offered to Prince Rahotep is the game of *men*, which is one of the oldest games of Ancient Egypt, but one of the least understood. It is never shown in playing scenes, and only a few examples of the game or its pieces have been found from archaeological contexts. *Men* may also appear in the painting in the tomb of Hesy-Re. While the three games appearing in this painting are not identified by name, *mehen* and *senet* are immediately recognizable from later boards and inscriptions, but the third is never depicted elsewhere, so it is inferred to be a board for the game *men* based on its inclusion in the list of Rahotep. No other games dating to the Old Kingdom have been identified by name, and the archaeological evidence suggests *mehen*, *senet* and *men* were sometimes included together in funerary equipment, and so it is likely the third game depicted in the tomb of Hesy-Re is *men*. The painting shows a long rectangular board with sixteen lines transecting its width. Accompanying the board is a set of playing pieces, which consists of two sets of five rectangular or possibly cubic pieces.

Men apparently predates the Old Kingdom as it was found in Mastaba 3504 at Saqqara, dated to the reign of Djed, third king of the First Dynasty (Emery 1954:1). In one of the sub-magazines of the mastaba itself, a slate palette with ten incised lines was found (Emery 1954:66, pl. 30), which is very reminiscent of the painting of the *men* board in the tomb of Hesy-Re. No pieces were found associated with it, so it is impossible to definitively say whether this is an early version of *men*, or if it was a game at all. Playing pieces were found scattered throughout the tomb and subsidiary burials (Emery 1954:31, 58), so it would not be unusual that *men* should appear in this mortuary complex. One grouping seems to be a complete game set of board and pieces, and was found with one of the subsidiary burials at this mastaba (see below).

Perhaps the best-preserved and most convincing example of a *men* board was actually found in the Royal Cemetery of the A-Group at Qustul in Nubia, where one intact and one fragmentary board were found (Williams 1986:130). The intact board, found in Tomb L-23, is a limestone plaque with sixteen grooves, exactly replicating the configuration seen in the Hesy-Re painting. While there were no other apparent gaming paraphernalia associated with this board, playing pieces associated with *mehen*, as well as ivory plaques that resemble the *men* pieces seen in the tomb of Hesy-Re, were found in Tomb L-24, which produced a fragmentary *men* board. This board, roughly half of which is preserved judging

from the eight grooves that remain, was pierced in two places on one end, which Williams suggests could be for suspension or for mounting legs. Considering that *mehen* boards were often pierced for suspension, it is possible *men* boards were similarly pierced in order to be hung on the wall for storage. While there is a suggestion that *mehen* boards could have been hung for amuletic purposes, such an indication for *men* is not apparent since its ritual or symbolic significance is unknown due to its absence in the Egyptian textual record.

Men seems to have never been as popular as *mehen* or *senet*, and it is unclear if it was played after the Old Kingdom since all boards, pieces and textual evidence for *men* date to the Fourth Dynasty or earlier. An example of *men* from the Middle Kingdom may exist on the ship model found in the tomb of Nefwa, now in the Ashmolean Museum (E2301). This scene, which has often been assumed to be a representation of *senet* playing in the literature (May 1992:141), shows two sailors playing a board game on a warship (Garstang 1905:220). Closer examination of the board itself, however, shows the playing surface of the board is marked with eight transverse lines. While not an exact replication of the sixteen grooves seen on *men* boards, it is a closer approximation in miniature to that game than a *senet* board, which would be expected to have crossed lines forming rows of squares. Such identification can only be tentative due to the rarity of evidence for *men* playing in Egypt.

Two rows of thirteen and forty-two and pool

Not attested in the textual or pictorial record, a sole example of *two rows of thirteen* is known from subsidiary Grave 16 in Mastaba 3504 at Saqqara, dated to the First Dynasty (Emery 1954:31, pl. 29). The board was wooden, inlaid with ivory, forming two rows of thirteen playing squares. It had been placed lengthwise along the spine of the interred. The playing pieces were found in a tight cluster, and appear to have been contained in some kind of bag, which had since decomposed. Thirteen tall and thirteen short pieces were found, corresponding to the number of spaces in the board found in this tomb, and thus likely belonging to the same set. The bag containing the pieces was placed where the missing skull of the burial should have been, which likely had some kind of symbolic meaning. Kendall (2007:33, note 8) suggests this game may be a version of *men*, but there is no evidence suggesting *men* was played with this type of domed piece, or that the board ever took this form. It is more likely a less-popular game (at least among the upper classes of Egyptian society) than its

contemporaries.

Another game is named *forty-two and pool* by Petrie (1927:55). Found on a block of limestone at Memphis, this game board consists of three rows of fourteen drilled depressions, with one larger cup hole located to one side. Petrie interprets this game as having been played in a similar fashion to *senet*, and that the gameplay involved the taking of pieces, which were then stored in the large cup hole, though there is no evidence of the rules of this game. He goes on to suggest beans or chips of pottery were utilized as playing pieces, due to the small size of the depressions. Petrie does not offer a date for this artifact, and so without further evidence it cannot be dated securely. Nevertheless, it is presented here with the range of unique games from early Egypt, as later Egyptian periods have produced a different range of games most of which are well documented and appear multiple times in the archaeological record.

Senet across Borders

Perhaps the best-known board game from ancient Egypt, *senet*, also appears in the offering list in Prince Rahotep's tomb (see Chapter 2). As it was for *mehen*, this is the oldest known inscription offering the name of this game that is well attested in New Kingdom contexts. Much like *mehen*, this game also appears to have held strong connotations with the afterlife. The word *zn.t* means “passing” in Egyptian, and though any specific religious meaning the game may have held is unclear before the New Kingdom, its name does suggest at least a similar connection with the passing of the *ba* through the *duat* that is made explicit in the Book of the Dead (Kendall 1978:28–31). Piccione (2007:54) believes the full name of the game, *zn.t n.t h^cb*, “the passing game,” comes from the nature of gameplay where the pieces pass each other on the board. A canonical *senet* board is between 12 and 55 cm long, laid out in three rows of ten playing spaces, often with certain spaces marked, likely indicating a special outcome during the play of the game, as is shown below. Piccione (1990b:1–2) points out that the name *senet* is only directly attributed to this pattern of spaces in the New Kingdom, and that Egyptologists have assumed that, when it appears in earlier texts, it refers to the same game. Without any evidence to suggest the name was once used for a different game, it is Piccione’s judgment the name *senet* referred to the same game in the Old and Middle Kingdoms as it did in the New Kingdom.

Early evidence for *senet*

The origins of *senet* in Egypt are confusing as there are no intact game boards that date before the Fifth Dynasty, though fragmentary boards, playing pieces and textual and representational art have been found to suggest its earlier existence. One of the more controversial and earliest game boards known from Egypt is a clay gaming table found in a Predynastic grave at el-Mahasna (Ayrton & Loat 1911:30). This artifact has been described by some as the earliest known *senet* game (Vandier 1952:406; Kendall 1978:7; Pusch 1979:156–7), but the game displayed is not in the canonical *senet* form because it displays three rows

of six, rather than three rows of ten playing fields. While the table itself and the pieces associated with it anticipate later *senet* gaming sets, it cannot be said that this artifact is definitively an early version of the game. There are patterns found in Pharaonic Egypt that could have been games, but which only occur once in the archaeological record. A 3×6 game may have been one of them rather than a game that morphed into *senet* at a later date. A recent interpretation of the board and pieces has been offered describing them as a potential offering table with votive garlic bulbs (Eyckerman & Hendrickx 2011:414).



Figure 3.1 Map of sites mentioned in Chapter 3.

Even before the appearance of fragmentary *senet* boards in the archaeological record, the appearance of a game board with three rows of spaces appears in the hieroglyphic writing system. The hieroglyph *mn* appears in early sealings, particularly those associated with Narmer (Petrie 1901:Plates XIII, XIV, XXIII), as well as in other sealings dating to Dynasty 0 and the First Dynasty. The hieroglyph typically depicts three rows of squares with a series of pieces placed on the board, and should not be confused with the game *men*, which uses a different determinative in Rahotep's list.

Fragmentary game boards that resemble later *senet* boards appear in the First Dynasty. One, found by Petrie at Abydos (Petrie 1901:36) and now in the University of Pennsylvania Museum (E9368), still has two rows of squares, but is likely to originally have had three, based on the breakage pattern (Piccione 1990b:382). Another likely candidate for an early *senet* game was found in Tomb M1 at Abu Rawash and dates to the reign of Den (Montet 1946:185). All that remained of this board were twenty-five ivory squares, three of which were marked in ink in a fashion similar to later *senet* boards (Piccione 1990b:37). Another similarly marked set of an undetermined number of ivory squares was found in the same tomb, and may be another *senet* board (Montet 1946:184; Piccione 1990b:38). A final candidate for an early *senet* board, the present location of which is unknown (Piccione 1990b:382), was discovered at Saqqara, and was a fragmentary alabaster board, like the one discovered by Petrie, “engraved with three rows of squares” (Emery 1958:14).

Sets of gaming pieces are also known from the First Dynasty and later and may have accompanied gaming boards that have not been preserved. Piccione (1990b:17–18, note 51) enumerates many references to Early Dynastic Period playing pieces in excavation reports. A set of seven tall and seven short conical pieces, found together with a set of *mehen* pieces and some throwing sticks, were found in a cluster at Abydos (Emery 1954:58). Similarly, conical pieces that were likely used for *senet* were found alongside *mehen* and *men* pieces at Naqada (Petrie & Quibell 1896:Pl. 7; Vandier 1952:405). The set at Abydos, if it is complete, suggests that a full complement of seven pieces per player was typical for *senet* during the Early Dynastic Period, though this would later change (Piccione 1990b:18). The set of domed pieces associated with the 2×13 game found at Saqqara is similar to those typically attributed to *senet*, so one

must be careful in attributing partial sets of pieces to a certain game since different games may have used pieces of similar types.

Old Kingdom: Ritual use and graffiti

During the Third Dynasty, a game that took the form of three rows of ten squares was important enough to be included in the painting of funerary equipment in the tomb of Hesy-Re (see fig. 2.5), alongside *mehen* and *men* (Quibell 1913:18–21). As with those two games, *senet* is accompanied in this painting by gaming pieces, i.e., two sets of seven domed pieces (one short and one tall set) along with four throwing sticks, which seem to have been the favored type of randomizing agent. Throwing sticks are known from First Dynasty and later tombs (Piccione 2007:56) and appear as markings on the aforementioned Abu Rawash playing spaces as well as on the twenty-sixth square of the Hesy-Re painting. In this painting, several squares are marked, including square one with *sbȝ*, “star,” squares eleven and twenty-one with “ten,” square twenty-seven with “four” and square thirty with “one.” The numbers “four” and “one” are rendered as throwing sticks rather than strokes. This pattern anticipates, but differs significantly from, the canonical sets of markings that can be seen from at least the Middle Kingdom onwards.

The existence of *senet* is also attested during the Fourth Dynasty by its inclusion in Rahotep’s list of funerary offerings. Actual game boards are rare from Old Kingdom contexts, and those that do exist are not definitively datable to this period. All extant boards are graffiti on Fifth and Sixth Dynasty funerary monuments (Piccione 1990b:45–8; Pusch 1979:169–77), or surface finds associated with Late Old Kingdom–First Intermediate Period finds at Abu Ballas and Muhattah Jaqub in the Dakhleh Oasis (Förster 2007:4, 22). It is important to note that graffiti games are notoriously difficult to date, and their location in Fifth and Sixth Dynasty monuments only provides a *terminus post quem* for those games, rather than the date at which they were used. Furthermore, the finds from the Dakhleh Oasis were found on the surface, and although associated finds were of late Old Kingdom or First Intermediate Period date, the game could also have been later in date. Despite this, if the game found at Abu Ballas (Förster 2007:22) is of Old Kingdom or First Intermediate Period date as the excavators suggest, it would be the oldest intact *senet* game preserved.

The markings in some of the squares on the graffiti games appear in patterns that are commonly known from games that are datable to the Middle Kingdom and

later, but it is an open question as to whether they represent the earliest appearance of the canonical pattern, or if they allow those games to be dated to a later period. For example, the game at the pyramid temple of Userkaf shows *nfr*, “good” or “beautiful,” in square twenty-six, “X” in square twenty-seven, “three,” in square twenty-eight and “two” in square twenty-nine (Pusch 1979:169). This pattern also appears twice in the mastaba of Ptahshepses (Pusch 1979:171–3; Piccione 1990b:384–6). The board scratched into the vestibule of the mastaba of Seshemnefer IV contains “three,” “two,” and “one” in squares twenty-eight to thirty. Only the board pictured in the tomb of Hesy-Re and a New Kingdom board from Zawiyet el-Aryan (Dunham 1978:72) depict “one” in square thirty. The pattern of markings in the *senet* from Seshemnefer IV’s mastaba more closely resembles that seen in the tomb of Hesy-Re, as they both lack important elements of the later canonical markings (i.e., *nfr* in square twenty-six and “X” in square twenty-seven), which seems to suggest that this graffiti is early in date, probably not later than the Old Kingdom.

Senet is better documented in pictorial evidence, as it is attested already fifteen times in tomb paintings and reliefs, particularly during the Fifth and Sixth Dynasties. These scenes are rather similar in their composition, in that they typically depict two players facing each other across a *senet* board either in the act of moving a piece or about to move it. Often, a brief caption of dialog accompanies the scene, usually one line from each player.

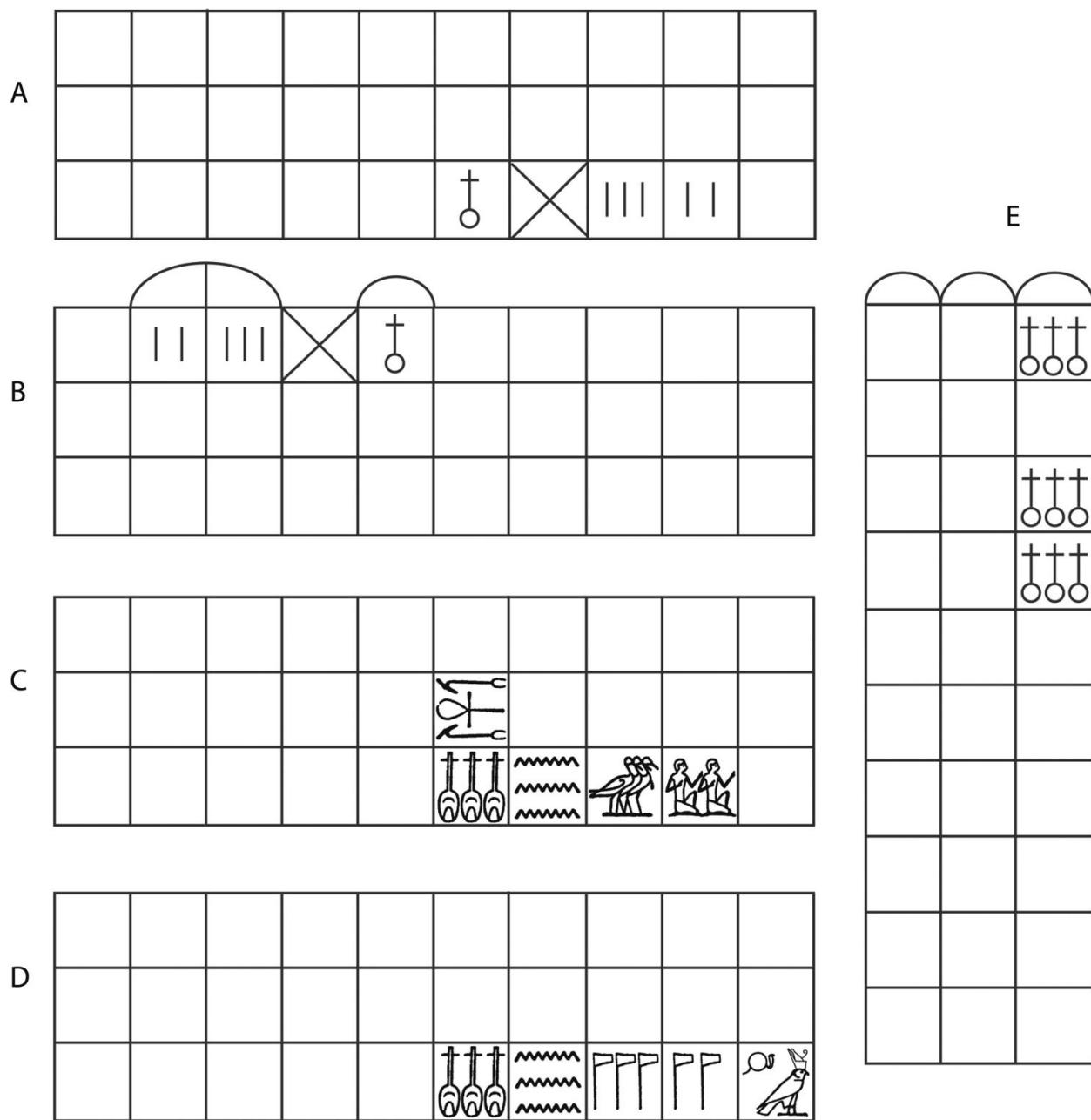


Figure 3.2 Drawing of *senet* patterns, showing markings common during the Old Kingdom (A), Middle Kingdom (B, after Egyptian Museum CG 37794), New Kingdom (C, after Egyptian Museum JE 62058), Late Period (D, after British Museum 102396) and an ostracaon (E, after Egyptian Museum CG 25183).

The majority of the known Old Kingdom depictions of *senet* are playing scenes. Most of these, nine in all, show at least one pair of players sitting opposite one another with a *senet* board allayed with pieces in between, but in the context of funeral celebrations dedicated to Hathor (Piccione 1990b:79–82), as is also true for *mehen*, which accompanies *senet* in some of these reliefs.

These celebrations frequently included musicians, dancers and sports (see fig. 3.3). Singers and musicians are the most common accompanying groups, who, along with the presentation of offerings to the deceased, are frequently depicted adjacent to scenes of *senet* playing, as in the mastabas of Ankhmare (Piccione 1990a:49), Nikauhor (Piccione 1990a:51), Isesi-merynetjer (Pusch 1979:29–32), Pepiankh-heryib (Blackman 1924:31) and Nebkauhor (Hassan 1975:5).

The addition of dancers is notable in the scenes known from the mastabas of Neferireteneb (Mariette 1889:324–8), Rashepses (Quibell 1909:79–82), Idu (Simpson 1976:19) and Kaiemankh (Junker 1940:35–40). A unique context for a *senet* game is found in the wall paintings of the mastaba of Mereruka. This playing scene is shown in the context of agricultural activities and the harvesting and presentation of funerary offerings to the deceased, who is depicted on an enlarged scale (Saqqara Expedition 1938:2). The context of the funerary ritual remains the same as those discussed above, yet the clearly celebratory nature of those scenes is absent from this example.

The depictions of *senet* in the Sixth Dynasty tombs of Kahep and Kheni at el-Hawawish in Upper Egypt (Kanawati 1980:21, 1981:22) do not depict the playing of *senet*, but rather show *senet* boards included among mortuary equipment in a carpenter's workshop (Piccione 1990a:43). The remaining scenes, namely those from the mastabas of Metjetji (Goedicke 1958:18) and Kairere (Lauer 1976:77), are without context with regard to their place in the mortuary rituals of the deceased as they are fragmentary and much of the adjacent scenes is not preserved.

The inclusion of *senet* in these rituals may be indicative of a relationship between the game and the afterlife, but its presence in the ritual celebrations of Hathor is the only indication of this use. *Senet* is not mentioned in Old Kingdom texts in relationship to the afterlife in the same way that *mehen* is. The markings on the *senet* boards of this time period also do not provide a religious meaning as they do in the New Kingdom. Speaking to the state of the evidence, Piccione (1990b:79) argues that *senet* had an underlying religious meaning, though for the most part it was a secular device used in a religious setting. It is interesting to note that after *mehen* fell out of fashion after the Old Kingdom, *senet* appears to have taken on at least some of its religious connotations since during the Middle Kingdom its symbolism with respect to the afterlife becomes clearer. It remains an open question as to whether these meanings became more prominent for *senet* in the Middle Kingdom where *mehen* is no longer attested. One can imagine a scenario in which *senet* and *mehen* both held similar religious meanings, and in

which *senet*'s increasing popularity eventually eclipsed *mehen*'s importance in ritual activity, forcing the game out of favor. It is apparent from the archaeological and pictorial evidence that *mehen* was more popular at the beginning of the third millennium BCE, while *senet* was more popular towards the end. Regardless of the possible relationship between *senet* and *mehen*, *senet* survived for two thousand years longer than *mehen*, and its place in Egyptian society continued to change through those years.

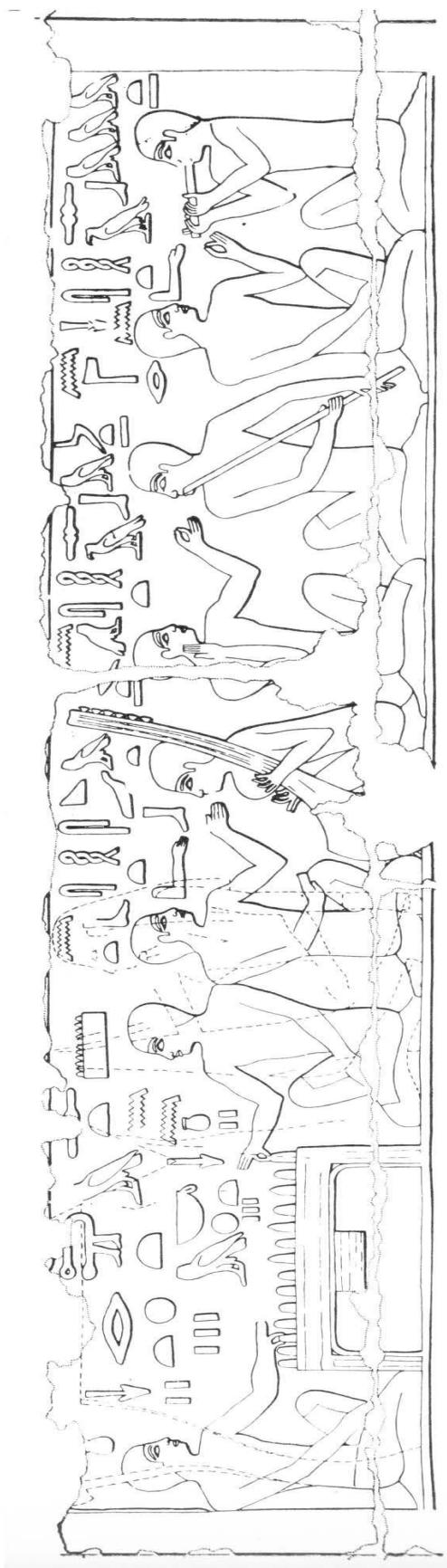


Figure 3.3 Drawing of scene from the mastaba of Nikauhor showing *senet* playing alongside singers and musicians. The Metropolitan Museum of Art, Rogers Fund, 1908, 08.201 (Hayes 1953:Fig. 59).

Middle Kingdom: Changes and consistency

Beginning in the First Intermediate Period and extending throughout the Middle Kingdom, it is apparent that *senet* began to be represented differently in art, in the execution of the game boards, and, for the first time, in textual sources. The first representation of *senet* to post-date the Old Kingdom is a painted scene on the side of a wooden model granary depicting Antef playing against Mery in a more quotidian setting than earlier depictions, with a servant girl fanning Antef with a palm frond and holding a jar of (presumably) beer (Blackman 1920:206; Kendall 1978:15; Piccione 1990b:65–6).

Game boards of the Middle Kingdom, most of which are datable to the Twelfth Dynasty, contain more consistent decoration with features that may be diagnostic of this time period (see fig. 3.2B). When marked, the spaces on the boards consistently contain an “X” in spaces fifteen and twenty-seven, *nfr* in space twenty-six, “three” in space twenty-eight and “two” in space twenty-nine. This pattern of markings has its origins in the Old Kingdom (see fig. 3.2A), but is more consistently applied in Middle Kingdom game boards. The orientation of *nfr* indicates a change in the orientation of the boards of Middle Kingdom date. In earlier and later boards, the decoration of *senet* boards is always oriented in such a way that the decorated squares twenty-six through twenty-nine are on the bottom right, but in the Middle Kingdom *nfr* would be upside down in this position, therefore indicating that the preferred placement of the decorated spaces was at the top left, a 180 degree difference compared to *senet* boards of other time periods (Piccione 1990b:3).

Another feature of Middle Kingdom boards that does not appear on *senet* boards of other periods are curved or pointed projections drawn above square twenty-six, twenty-eight and twenty-nine. It is unclear what this new feature of the boards indicates, but Piccione (1990b:48) argues it was not a regional variation, since boards laid out in this manner have been found in different regions of Egypt.

So far there are nine boards dating to the Middle Kingdom in the archaeological record. Two of these come from Abydos, one from the temenos of the tomb of Senusret II (Petrie 1927:53), and another from the cenotaph of Senusret III (Pusch 1979:189–90). The second example is the oldest known game outlined in ink on a limestone ostracaon, more of which are known from the

New Kingdom, particularly in the Valley of the Kings and Deir el-Medina, as is discussed below. These games are typically interpreted as having been played by the builders of the structures/tombs with which they were associated (Piccione 1990b:390).

One *senet* board was drawn in red ink on the inside of a box lid from Lahun (Manchester Museum, no. 73), in the type of box that was often used for infant burials in the houses at this site (Petrie 1890:24, 30; Piccione 1990b:391). It shows a typical Middle Kingdom orientation of the board. Another *senet* game, now in the Narodni Muzeum in Prague, was painted in black ink on the inside of a box lid of New Kingdom date (Narodni Muzeum n.d.). The markings on this board, though not well preserved, indicate its orientation was not of the Middle Kingdom type. Instead, the markings are typical of boards dating to the New Kingdom.

A graffiti game, found at Shatt el-Rigal, north of Silsila, was carved on the floor of the valley (Petrie 1888:15; Pusch 1979:184–5; Piccione 1990b:393–4), and is datable to the Middle Kingdom based on the presence of curved projections over squares twenty-six, twenty-eight and twenty-nine. At the fortress of Buhen, a game was discovered on a building block, which may have been either a pavement or reused block, and displays the diagnostic Middle Kingdom *senet* pattern (Emery 1979:146, 220; Piccione 1990b:394–5). Another graffiti game at the tomb of Baqet III at Beni Hasan was found perpendicular to the wall, which seems to indicate that players would sit across from each other adjacent to the longer sides of the board (Piccione 1990b:394), though they are typically shown in paintings and reliefs, in all periods, to be sitting on the shorter ends of the board. Other boards from this period came from Lahun (Manchester Museum, no. 262), Tell el-Hisn (Egyptian Museum, CG 37794) and one with an unknown provenance now in the Brooklyn Museum (36.2) (David 1979:13, 15; Pusch 1979:183, 191; Piccione 1990b:392–3).

Middle Kingdom scenes of *senet* playing are rare, and only two are known, from the tombs of Baqet III and Khety at Beni Hasan. The painting in Baqet III's tomb is discussed in great detail with relation to the *game of twenty* (see Chapter 4) together with a painting found in the tomb of his son, Khety, being very similar. In both tombs, *senet* is played by two men with a caption reading *ḥ̄b 5*, “playing five,” likely an allusion to some aspect of gameplay (Piccione 1990b:68–73). What is most interesting about these reliefs is that they show *senet* being played on gaming tables with zoomorphic feet, which have not been found archaeologically on *senet* gaming tables earlier than the New Kingdom.

Piccione (1990b:393) suggests that the well-made *senet* board from Tell el-Hisn may have once been set in a gaming table similar to those seen here.

The appearance of *senet* in the Coffin Texts marks the first of rare discussions of *senet* in Egyptian religious literature. Only three spells, 335, 405 and 1019, mention the game, and even these spells are exceedingly unusual, with 405 attested only twice, 1019 only once, and the relevant passage in 335 only as an epilogue that appears once. Spell 405 seems to reflect a non-ritual context for the play of *senet*. This spell appears on only two coffins: Egyptian Museum JE 42909 and Metropolitan Museum of Art 12.182.132, the latter of which does not contain the line that refers to *senet*. Both were found in a necropolis at Meir. The coffin in the Egyptian Museum, containing the only complete version of the spell, belonged to the daughter of the nomarch of the Fourteenth Nome during the Twelfth Dynasty (Piccione 1990b:83). One line in the spell is from the tribunal of the gods, saying “Let him play *senet* with those who are on earth.” (Piccione 1990b:84), just as in the tomb reliefs of Kaiemankh, Isesi-merynetjer and Mereruka, where the deceased play *senet* with still-living Egyptians. The subject is also bestowed with various other abilities, including the capability to sing and dance, to inspect his children and to go to his house (Faulkner 1977:56). The everyday nature of these activities suggests that *senet* not only held religious significance during the Middle Kingdom, but also was used for pleasure.

Coffin Text 1019 is more problematic as it is fragmentary, and only exists in one example, written on papyrus and now in the British Museum (EA 10676). It reads in one section “when you shall be removed from the *senet* board,” an apparent allusion to the conception of the afterlife as a journey through the *senet* game (Piccione 1990b:86–8). If this interpretation is correct, it represents the earliest attestation of this belief, which is well known from the New Kingdom and later. Faulkner (1978:121) offers a different translation, suggesting “you are saved from the cutting-table.” The fragmentary nature of the text does not offer contextual evidence for either translation.

An epilogue to Coffin Text 335 on the coffin of Mentuhotep in the Ägyptisches Museum und Papyrussammlung in Berlin (coffin 9), appears only once and refers to the deceased “mooring happily with Osiris ... going out into the day, playing at draughts (i.e., *senet*) and sitting in a booth after death” (Faulkner 1973:269). This passage is analogous to Chapter Seventeen of the Book of the Dead in which the *ba* plays *senet* in a pavilion, allowing passage between the land of the living and the dead. This suggests some continuity of belief in the importance of *senet* from the Middle to New Kingdom, when a

connection with the afterlife comes to the forefront in the textual and pictorial evidence.

New Kingdom: Religious meaning

Toward the end of the Second Intermediate Period, *senet* game boxes appear in the archaeological record, though they probably existed earlier. While *senet* only appears in the material record as slabs or graffiti prior to the Second Intermediate Period (Piccione 1990b:3–11), beginning in the Seventeenth Dynasty game boxes start to appear in Egypt. This type of board consists of a box, typically with a drawer that usually features a sliding bolt that locks the drawer shut (Piccione 1990b:11–12). The two boxes from the Seventeenth Dynasty are also the earliest known examples of the *game of twenty* to have been found in Egypt, and, as such, will be discussed in greater detail in Chapter 4. Throughout the New Kingdom, these games appeared together on opposite sides of game boxes and boards, thirty of which have survived. Considering that forty-one *senet* boards have been found that can be dated securely to the New Kingdom, it is significant that so many of them also exhibited the *game of twenty*. Game boards and boxes were found made out of a variety of materials, including wood (often with faience, ivory or glass inlays), ivory, faience and limestone as well as graffiti in limestone pavements and drawn in ink on limestone ostraca.

The orientation of the New Kingdom boards changed back to the Old Kingdom variation, i.e., with the decorated squares placed to the bottom left (with two notable exceptions: Hall 1925:203–5; Needler 1953:Fig. 3), and the projections above spaces twenty-six, twenty-eight and twenty-nine disappeared. One board, found in a Seventeenth Dynasty tomb at el-Asasif (Carnarvon & Carter 1912:36), was drawn in ink on a writing tablet and maintained the Middle Kingdom orientation of the board, but without projections (Egyptian Museum, JE 41790). It may indicate that this orientation survived into the Second Intermediate Period, as the other two *senet* boards from this period, another from el-Asasif (Metropolitan Museum of Art, 16.10.475) (Hayes 1959:24–5), the spaces of which are unmarked, and one from Dra Abu el-Naga (Egyptian Museum, JE 21462), which is reconstructed (Pusch 1979:195–8), cannot speak definitively to the orientation of Seventeenth Dynasty *senet* boards. It is certain though that by the early Eighteenth Dynasty the orientation reverted back to the way it was during the Old Kingdom.

The decoration of squares during the New Kingdom was more elaborate on some boards than it was during the Old and Middle Kingdoms, while maintaining the key elements of the decoration (*nfr* in square twenty-six, “X” or some kind of hazard in square twenty-seven, “three” in square twenty-eight and “two” in square twenty-nine). Piccione (1990b:242–8) lays out a chronology of the changes in the decoration of the final four spaces of the board. While he provides a general guide to the changes in style through time, it should be noted that some boards are difficult to date, and the decoration does not necessarily determine that a board was made during a certain dynasty as these were styles that came and went throughout time, and were likely chosen based on the function of a board. Those placed in tombs are more likely to carry religious iconography than those made as graffiti boards, which were likely more for leisure than ritual.

According to Piccione’s (1990b:242–7) ordering, in the early Eighteenth Dynasty the preferred markings were *nfrw* in square twenty-six, *mw* (unanimously interpreted as some kind of hazard related to water) in square twenty-seven, *bȝw*, in square twenty-eight and two men in square twenty-nine (see fig. 3.2C). During the reign of Hatshepsut, a new preference replaced this, with three men appearing instead of *bȝw* as well as the deification of some of the symbols, e.g., Ma’at holding *nfr*, Hapy in square twenty-seven (Daressy 1902:Pl. 9; Hayes 1935:32–4). Hippopotami could also appear as the hazard instead of *mw*. Only one board is known from the Eighteenth Dynasty in which square thirty is decorated (birds among papyrus). In the Nineteenth Dynasty, *ntrwy*, “two gods,” appears in square twenty-nine and square thirty is decorated with the sun disk, and henceforth is almost always decorated whereas previously it rarely was marked. By the Twentieth Dynasty, deities became the focus of the final five squares, with the preferred arrangement being *nfrw*, Hapy, *ntrw* “three gods,” *ntrwy*, and Horus (see fig. 3.2D). The “gods” in squares twenty-eight and twenty-nine could be represented by specific deities, which were somewhat standardized, with Thoth, Shu and Ma’at sometimes appearing together in place of *ntrw* and Ra and Atum appearing in place of *ntrwy*.

Other squares aside from the final five were occasionally decorated. The most common was square fifteen (as in fig. 3.2C), which could be marked in a checkered pattern (Hayes 1935:Fig.18), a rosette (Pieper 1909:Fig. 5), or with *nḥ wȝst* (Tait 1982:Fig. 1). Squares other than these were sometimes marked after the late Nineteenth Dynasty, but without an obvious pattern.

Two *senet* games represented on the Twentieth Dynasty Turin Papyrus 1775,

henceforth Turin Papyrus, appear to have once contained symbols in every square, though not all of them are preserved (see fig. 4.7). Piccione (1990b:311–17) provides a progression of symbols from squares one through thirty, interpreting the hieroglyphs in the two fragmentary depictions along with relevant passages from the Great Game Text. This system by which the squares are named corresponds to the text of the Great Game Text, and is a reflection of the passage of the deceased in the *duat*, recreating the passage of Ra under the protection of the god Mehen (Piccione 1980, 1990b). The markings on the boards themselves are also reflective of those found on the Turin Papyrus game and in passages from the Great Game Text, which suggests a consistent meaning to the marked squares.

The Great Game Text—versions of which appear in the Cairo Papyrus 58037 (Wiedemann 1897; Pieper 1931; Röder 1961:258–61; Piankoff & Jacquet-Gordon 1972:119–20), on the opposite side of the depictions of game boards on the Turin Papyrus, and in the tomb of Inherkau at Deir el-Medina (Bruyère 1930:42)—dates to the Twentieth Dynasty, and Piccione (1990b:97–8, 105–6) suggests the different versions are within two generations of each other, with the Cairo text probably dating to the reign of Rameses III. He provides an in-depth analysis of the texts (Piccione 1990b), as they relate to other evidence for *senet*, and discusses the many ways in which this text encompasses most of the beliefs and practices suggested in other texts, representations and on the boards themselves. A comprehensive discussion of the Great Game Text is outside the scope of this volume, but these texts essentially describe the course of the game as a struggle between the deceased and an unnamed opponent for the life of the *ba*, and, upon winning the game, the deceased is declared justified, whereas the opponent is drowned in the water (Piankoff & Jacquet-Gordon 1972:118). It depicts the journey of the player as a religious process, which is clearly paralleled in the Egyptian literature relating to the passage through the *duat* (Piccione 1990b:197–241). The correspondence of spaces with events highlighted in the Great Game Text has led to some suggestions about the course of play of the game (e.g., Kendall 1978:59–67).

Similarly, Chapter Seventeen of the Book of the Dead describes the *ba* playing *senet* in a pavilion in the *duat* (see fig. 3.4), and performance of this spell allows the *ba* to move back and forth between the world of the living and that of the dead (Piccione 1990b:292–302). This particular passage is a derivative of Coffin Text 405, which mentioned *senet* in a similar light (Piccione 1990b:290–1), and is directly presaged by Coffin Text 335, which describes the

deceased playing *senet* in a booth (Faulkner 1973:269). Vignettes of this scene depict the deceased playing *senet* without a visible opponent inside a pavilion, the *ba* perched on the tomb, indicating that, “through *senet*, the deceased in the pavilion has ‘gone forth’ as a living *ba*” (Piccione 1990b:303). Twenty-one of these scenes appear in various media, including papyri, tomb reliefs/paintings and coffin paintings (Piccione 1990b:259–60), most of them from the Nineteenth and Twentieth Dynasties.



Figure 3.4 Facsimile of a painting from the tomb of Nefertari, depicting the queen in the *senet* playing vignette from Chapter Seventeen of the Book of the Dead. The Metropolitan Museum of Art, Rogers Fund, 1930, 30.4.145. Image © The Metropolitan Museum of Art.

Five scenes that include *senet* games are known from the Eighteenth Dynasty, and they do not portray this vignette from the Book of the Dead. Two of them, that from the tomb of Amenemhat (Davies & Gardiner 1915:70, pl. 26) and that of Neferhotep (Bénédite 1894:Pl. 2) depict the game played between two players, and in the Neferhotep scene in the context of funerary offerings and musicians (Piccione 1990b:266). The third, from the tomb of Sennefer, depicts the game next to the chair of the deceased as he receives funerary offerings (Piccione 1984:178). Two other depictions of *senet* boards, where they are not in play, were painted on walls in the tomb of Rekhmire (de Garis Davies 1963:Pl. 79, 93). These depict a gaming table being carried as funerary equipment, and sitting in a garden, near a pool among a grove of trees.

Some later scenes that do not invoke Chapter Seventeen of the Book of the Dead still show the influence of the scene in depicting the playing of *senet*, as in the tomb of Piay, where the deceased and his wife sit beside each other in the pavilion, though they are typically not interpreted as playing against each other (Pusch 1979:Pl. 23; Piccione 1990b:261). In the tomb of Nebenma'at (Maystre 1936:Pl. 6), he is shown playing *senet* against his wife Meretseger, who is depicted as being of greater or equal status as her husband (Piccione 1990b:279–80), but not in a pavilion.

Other scenes unrelated to the Book of the Dead (Piccione 1990b:275–6, 280, 282) illustrate the player facing another person, who stands on the opposite side of the board, as exemplified by the scene on the game box of Imenmes (see cover image). These scenes are typically in the context of drinking as the person opposite holds a drinking cup in the scenes of Imenmes, Neferhotep and one of the scenes on the Eastern High Gateway of the temple of Medinet Habu, of Rameses III playing *senet* in his harem (Pusch 1979:Pl. 31), while a large drinking jug is included in the scene in the tomb of Khonsumose (Pusch 1979:Pl. 29). These scenes appear to demonstrate the game in a more everyday setting, and may indicate that it was accompanied by drinking, though this is never shown in scenes with a religious meaning. A second *senet* scene accompanying the previous one at Medinet Habu has no evidence of drinking, but the relief is in fragmentary condition. Alternatively, Piccione (1990b:424–5) also sees a similarity to offering scenes in the one depicted on the Imenmes box.

It is important to note that the nature of archaeological evidence from Egypt, which is primarily funerary, biases our understanding of the connotations games had in different socio-economic classes. While most of the games dating to the New Kingdom were placed in tombs of the nobility and the pharaohs (including

four from the tomb of Tutankhamun, and one each from the tombs of Hatshepsut and Thutmose IV), it is still apparent that lower classes on the socio-economic scale also played *senet*, as evidenced by the appearance of games on limestone ostraca at Deir el-Medina and in the Valley of the Kings. These games seem to indicate a divergence from the canonical representation of *senet* as seen among the upper classes of Egyptian society.

Two ostraca from the Valley of the Kings, which Dorn (2011:322, pl. 314–15) dates to the middle of the Twentieth Dynasty, depict *senet* boards in a dramatically different fashion from that which is seen on manufactured boards and game boxes. One ostracon has *senet* patterns painted on both sides which, when viewed so the three rows of squares run vertically, have dome-shaped projections above the final squares on one side. Pusch (1979:362) interprets such extra spaces as representations of gaming pieces seen above game boards in pictorial representations, but it is not consistent with the iconography of game boards from any time period in Egypt where the pieces are shown arrayed along the long side of the board, when depicted.

The other ostracon, which shows an incomplete pattern of squares, shows decoration in what appears to be the middle row. Dorn (2011:322) recognizes this is not typical for a *senet* pattern, and all of the squares should be marked when squares in the central row are marked in this fashion. These markings are even more divergent from the typical pattern in the *game of twenty* (see Chapter 4), leaving *senet* as the most likely candidate for identifying this game.

Another ostracon, found in the tomb of Rameses V and VI again shows *senet* with dome-shaped projections (Pusch 1979:361, pl. 97b) (Egyptian Museum, CG 25183), this time identifiable as being above squares ten, twenty and thirty (see fig. 3.2E). Squares twenty-seven, twenty-eight and thirty are marked with *nfrw*, the only time this symbol appears in these positions. It does not conform to the interpretation of these spaces on other boards, namely that square twenty-seven is a hazard. Furthermore, *nfrw* is oriented so that the board is to be viewed vertically, suggesting the players would sit across from each other on the short ends of the board, something never seen in manufactured *senet* boards.

A final ostracon, found in more recent excavations in the Valley of the Kings, has markings in squares twenty-six, twenty-eight and twenty-nine, but it is impossible to determine what the markings are or their orientation from the photograph (Hawass 2011:70).

The extensive graffiti on the roof of the temple of Khonsu at Karnak include three *senet* games. One of these presents a *senet* pattern arrayed vertically with

domed projections that must have been used as playing spaces on this board, since there are only three rows of nine squares if they are not included (Jacquet-Gordon 2003:78, pl. 84). Moreover, the decoration in the squares only conforms to the typical pattern (*nfrw*, *mw*, “three,” “two”) if the domed projection is an unmarked square thirty. The placement of the marked squares on the left-hand side is particularly unusual, and is unknown on any other *senet* board. Another board, apparently unfinished, was marked with “three” and “two” (Jacquet-Gordon 2003:84, pl. 92).

The decoration and orientation of these boards may indicate that those who made them were not familiar with the canonical representation of the *senet* board, or that the preferences shown in funerary board games was not necessary for everyday gaming. Nevertheless, one graffiti game from the Temple of Khonsu demonstrates that the person who scratched it into the surface had the requisite knowledge of the canonical representation to produce it for their personal use (Jacquet-Gordon 2003:30, pl. 22). This game reflects the decoration that was most common during the Twentieth Dynasty, but it remains difficult to date any graffiti games, as the structures in which they were carved merely provide a *terminus post quem*.

An example of graffiti games which could be significantly later than their host structure are two graffiti boards found in the north colonnade of the First Court of the temple of Medinet Habu (Pusch 1979:320–1). These two *senet* patterns were found parallel to each other roughly twelve centimeters apart, and set perpendicularly to the wall. Because of this arrangement, the players would have had to sit along the long sides of the board with both *senet* games between them. This arrangement is also seen at the small boat ramp of Taharqo (r. 690–664 BCE) at the temple of Amun at Karnak (Piccione 1990b:436–7), and so must date to later than the Twenty-Fifth Dynasty. Since this is the only other example in Egypt where players used two *senet* games at the same time, the Medinet Habu patterns are possibly close in date to those on the Taharqo ramp, and not necessarily earlier than the Twenty-Fifth Dynasty.

Later history of *senet*

After the end of the Twentieth Dynasty, the material evidence for *senet* is less frequent since only sixteen boards and four scenes are known. Literary evidence may suggest that *senet* maintained some form of religious connection during this period, but it appears to differ in some ways from that of the New Kingdom. It is

likely that increasing foreign influence during the Late Period had an effect on the cultural contexts of gaming in Egypt due to incursions of Libyans, Kushites, Assyrians, Persians, Greeks and eventually Romans.

None of the surviving boards from the Third Intermediate Period onwards were on game boxes of the type known from the New Kingdom. Furthermore, none of them contain the *game of twenty* on the opposite face because this game appears to have disappeared from Egypt after the end of the New Kingdom (see Chapter 4). Instead, a new game is preserved on the opposite side of *senet*, the *game of thirty-three* that appears on the verso of five *senet* game boards. This game is not well understood, but its origins may lie in the Near East, as discussed at the end of this chapter.

The decoration in the squares of late *senet* boards appears to continue the tradition observed in the New Kingdom, with *nfr* or *nfrw*, often seen in square twenty-six, *mw*, “X” or Hapy in square twenty-seven, “three” or *ntrw* in square twenty-eight, “two” or *ntrwy* in square twenty-nine and Horus in square thirty. One board from the Twenty-Sixth to Thirtieth Dynasty contains *s3*, “protection” (Petrie Museum, UC2317), though this is not necessarily a new phase as interpreted by Piccione (1990b:247–8). One might interpret a wider trend toward the dismantling of the canonization of the iconography of *senet* in the later periods as the religious meaning trended away from that which it held in the New Kingdom.

A recently discovered game from Heliopolis, likely dating between the Twentieth and Twenty-Second Dynasties (Iskander 2010), has elaborate inscriptions in the final five spaces that include the typical pattern of *nfr*, *mw*, *b3w*, two (ladies in this case) and Horus. It differs from earlier games in that the playing spaces are not laid out as squares, but as rectangles, and also that spaces ten and eleven are marked. The inscription in these squares, probably meant to be read together, invokes the name of the board’s owner, Keramit, and her title as priestess of Mut. This reflects the invocation of Mut in the Great Game Text (Iskander 2010:125) and depiction of the same goddess on the Turin Papyrus in square eleven (fig. 4.7).

Three *senet* boards scratched into circular terracotta platters, the locations of which were unknown to Piccione (1990b:444–5) and Pusch (1979:370–1), are now located in the British Museum (EA 22323, EA 23802 and EA 23803, see fig. 3.5). These were found in Chamber 9 in the fortress at Tell Defenneh, and are dated to the Twenty-Sixth Dynasty (Petrie 1888:74). EA 23803 shows decorations in the final squares, the only one of which that can be identified is

Horus in square thirty. The appearance of these games on circular terracotta platters is unknown during any other period of Egyptian history. They were found alongside other patterns of squares carved into stone slabs, though Petrie did not describe or illustrate these patterns (Petrie 1888:74), but the possibility that they were games found near these ceramic platters at a fortress points to a later pattern seen at the Roman fort at Abu Sha'ar, where several Roman games were found (see Chapter 6).

Piccione (1990b:449–51) has identified, but did not illustrate, three *senet* boards on the roof of the temple of Dendera, dated to the Ptolemaic or Roman period. The patterns exhibited on this structure are different from all other *senet* games from Egypt in that the board is laid out as a series of depressions rather than rows of squares. This manner of delineating a *senet* pattern is well known from contexts in the Levant and Cyprus, but is rarely documented within Egypt. It is difficult to verify these patterns as *senet* without further documentation. Other patterns are known from this roof that were manufactured in this manner but that are not arranged in three rows of ten and therefore were meant for some other use.

Senet scenes are rare from later Egyptian history. Two are known from the Saite period, and seem to be copies of Old Kingdom reliefs (Piccione 1990b:286–7). These two were from the tomb of Ankhefensakhmet, now in the Walters Art Museum in Baltimore, and the tomb of Ibi, both also mentioned earlier with reference to *mehen*. With these reliefs alone it would be difficult to place *senet* within the Late Period, but the presence of *senet* graffiti on the boat ramp of Taharqo does indicate that the game survived at least that long. A later scene, in the tomb of Petosiris and dating to the reign of Darius III (r. 336–332 BCE) or Alexander the Great (r. 332–323 BCE), depicts two men playing a game (Kendall 1978:40; Piccione 1990b:288–9) that has three rows of eleven squares. It is possible this game was not meant to be *senet*, but rather the game of *thirty-three*, but it is important to note that representations of games in reliefs did not always depict the correct number of squares on *senet* boards. These reliefs offer little in the way of interpretation of the use of *senet* during the Late and Ptolemaic periods.

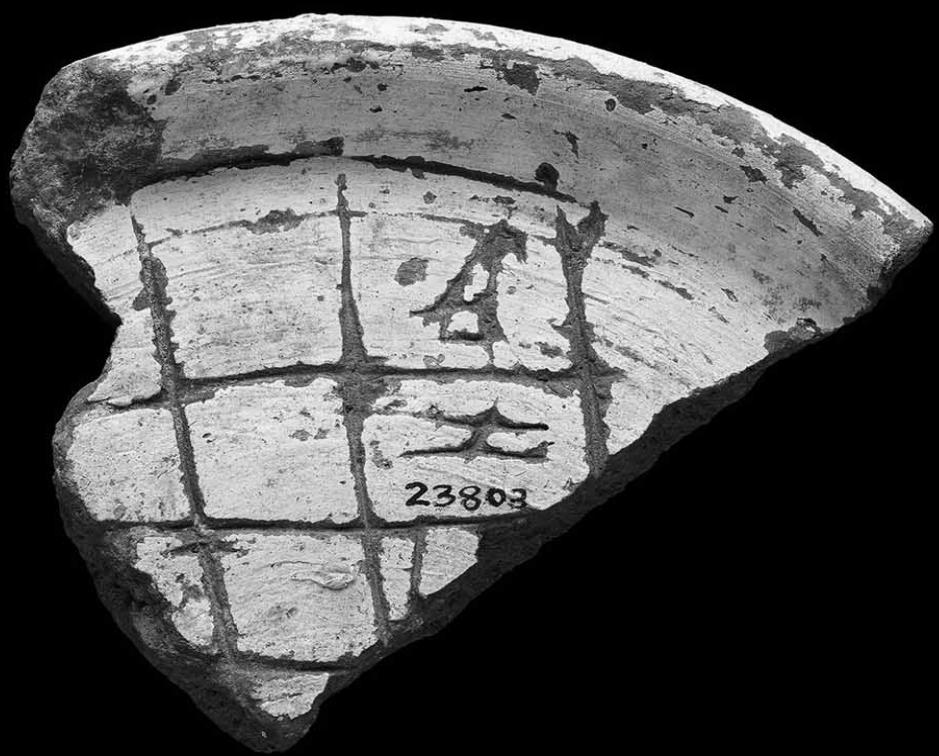


Figure 3.5 *Senet* boards on terracotta platters from Twenty-Sixth Dynasty fortress at Tell Defenneh, one showing the thirtieth square marked with Horus. Top: 31.5 × 2.5 cm. Bottom: Original 27 × 3.1 cm. The British Museum, EA 22323 (top) and EA 23803 (bottom). © The Trustees of the British Museum.

Textual evidence provides some hints that at least some of the understanding of *senet*'s earlier use in connection with mortuary ritual may have continued into the Late Period. Herodotus, writing in the fifth century BCE, recounts the legend of King Rhampsinitus (Rameses III), told to him by Egyptian priests, that describes his descent into the underworld, where he played dice with Demeter/Isis (*Histories* 2.122). This may have been an altered telling of Chapter Seventeen of the Book of the Dead (Piccione 1990b:333–6). A third century BCE Demotic text tells the tale of Setne who played three games of *senet* against Nineferkaptah in an attempt to gamble for the lost book of Thoth (Piccione 1990b:336). This story depicts gambling by *senet* for the first time, though gambling is likely to have existed in other forms (Tait 2007:49–51). The passage refers to the playing pieces as *īwīw*, “hounds,” which Piccione (1990b:337) relates to a Nineteenth Dynasty scene of Merenptah at the Osireion playing *senet* with dog-shaped playing pieces (see fig. 3.7). Considering this text comes from the Ptolemaic period, as well as the Hellenic custom of referring to playing pieces as dogs (Schädler 2013a:2844), it is probably more likely interpreted as a Hellenizing influence on Egyptian gaming vocabulary.

The final text referring to *senet* is very late, dating to the third century CE. Oxyrhynchus Papyrus 470 describes a device called a *πεσσευτήριον*. Eustathius (*Commentarii in Homeri Odysseam* 1,28.1. line 23) states Plato knew of such a device, which he claims the Egyptians used for astronomical measurements. More likely, the name of this device is related to the Greek *πέσσοι* or *πεπτεία*, which may be translated as “board game” (Kurke 2002:15–30). In the text, certain aspects of the description of this device suggest that it is, indeed, a *senet* board that is being described (Piccione 1990b:344–6). There are thirty squares in the device, and the counters used on it are referred to as *κυῶν*, “dogs.” The twenty-sixth square is called in Greek *φερβούσι*, which is likely a Hellenization of the Egyptian *pr nfr*, “good house,” while the thirtieth square is called *φόρωρ* “*Ωρου ὄικος*. *Φόρωρ* is a Hellenized transcription of the Egyptian word *pr Hr*, “House of Horus,” which is then translated into Greek “*Ωρου ὄικος*.” Therefore, it seems, even at this late date, squares twenty-six and thirty held the same meaning as they did at least as early as the New Kingdom, as attested on *senet* boards containing analogous decoration in those squares. Piccione (1990b:346–

68) goes on to describe potential astronomical and astrological meanings behind *senet* boards. Whether these connections were truly Egyptian ideas relating to the game, or were misinterpreted by the Greeks, this debate is outside the scope of this overview. Regardless, this late text is the final reference to *senet* in the historical or archaeological record, and represents the end point of a game that can be documented for three millennia, longer than any other known board game in human history.

Playing pieces

For *senet* and the *game of twenty*, each player controlled a set of uniform pieces whose number could vary. Playing pieces are well known from visual representations as well as archaeological finds, and both help the attribution of hundreds of pieces recorded as pawns or draughtsmen in museums and private collections (fig. 3.6). They are sometimes the only evidence of the practice of board games because—apart from rare wooden examples—most of them were made of non-perishable materials such as clay, faience, stone, ivory, bone and bronze. Isolated finds of playing pieces point to the possible deterioration of boards. Opposite teams were differentiated by the shape, size and/or color of the pieces. On the inner side of the wooden door from the tomb of Sennedjem at Deir el-Medina, the excellent state of preservation of the playing scene shows the distinction of the light-and dark-colored playing pieces (Bruyère 1959:2, pl. XVII) (Egyptian Museum, JE 27303). Pawns could be distinguished by different arrangements of colored bands, with, for example, alternating natural ivory and red painted bands on pieces from the tomb of Tutankhamun (Tait 1982:30, pl. XII). Faience allowed many variants of colored glazes and striped motifs (Hayes 1959:198, fig. 113).

The earliest form of *senet* included two sets of seven domed playing pieces (see fig. 3.3). The sets were distinguished by the size of the pieces or by the addition of a knob at the top. During the New Kingdom, *senet* and the *game of twenty* shared their equipment as they were associated on double-sided boxes. The most common game sets consisted of geometrically simple forms like in the earlier periods. The two opposite types were conical pieces often with a knob at the top, and spool-shaped pieces (see fig. 4.5). The latter would sometimes be mushroom-shaped (Nash 1902:345, pl. IV, 10–11). The conical shape is referred to as halma type, after similar pawns from the modern game called Halma. This is the model for the hieroglyph used to designate a playing piece. This sign is

related to the word *ib*³, “dance,” so playing pieces are called “dancers.” A link to the word *b*, “ivory,” had initially been proposed because many pieces are made of ivory (Birch 1865:59).

PLATE I.

Proc. Soc. Bibl. Arch., June 11, 1902.

ANCIENT EGYPTIAN DRAUGHTS-MEN.
Belonging to F. G. Hilton Price, Dir. S.A.

Figure 3.6 Playing pieces collected by F.G. Hilton Price and now in museum collections, such as the Musées Royaux d'Art et d'Histoire, Brussels, E.06165 c, f, h, i (nos. 1, 3, 4, 6: max. 3.5 × 2.2 cm), and the Metropolitan Museum of Art, 26.7.1452 (no. 10: Head of a leopard with the name of Hatshepsut, 3.2 × 3 × 3.5 cm). Plate reproduced from Towry-Whyte (1902:Pl. I).

Playing pieces could also be figurative. They would be given elaborate shapes like prisoners with Nubian or Asiatic features (Kendall 1982:269; Franco 2004:229). The captives, with their elbows tied behind their backs, are represented naked or wearing a flaring skirt that molds the curve of the base. Music and board games were part of the same sphere as illustrated by the juxtaposition of musical and playing scenes in tomb decorations. The Hilton Price collection holds a flute player and a figurine with an instrument described as a musician or an archer (Towry-Whyte 1902:262, pl. I, 6; May 1992:146–7, figs. 134–5) (Musées Royaux d'Art et d'Histoire, Brussels, E.06165i–j) (fig. 3.6, no. 6). An extraordinary game set of ten Bes-headed figures is interpreted as the underworld deities, called *Ahau*, the “fighters” who defended the sun god in the netherworld (British Museum, 1893,0514.42-57). These images would protect the player on the board (Kendall 1982:269). This group, made of molded green faience, is dated according to the glaze technique to the Nineteenth or Twentieth Dynasty. The jackal was also a designated representative for players, in his capacity of protector of the dead and the sun god (Kendall 1982:269). Jackal figurines were popular as well as representations of a recumbent or seated jackal on disc-shaped and conical pieces (Nash 1902:345, pl. III, 10–11). As seen in fig. 3.7, Merenptah in the Osireion at Abydos is represented playing *senet* with dog/jackal-shaped playing pieces (Kendall 1978:36–7, fig. 28). By the Ptolemaic period, gaming pieces were actually called dogs/hounds, for example in the Tale of Setne, when the gaming episode refers to a board with *iwīw*, its “hounds” (Piccione 1994:199). Echoes of this tradition may be found today in playing pieces called *kelb* in Arabic (Wilkinson 1878:57, note 1). The name of the Babylonian game *pack of hounds* or *pack of dogs* might be derived from its playing pieces (Kendall 1982:269) although no such pieces are known from Mesopotamia.

Animal forms include other species such as lion, baboon, bird, ram, horse and cat (Towry-Whyte 1902:262; Petrie 1927:54). Most of the figurative pieces are isolated finds that entered museum collections without their original board so their attribution to a specific game is difficult and their identification as gaming pieces is even sometimes doubtful. Baboon-shaped figurines from the Ptolemaic

period are identified as playing pieces because they carefully integrate the contour of an astragalus to the body of the animal (Arnold 1995:60, no. 82) (Metropolitan Museum of Art, 66.99.75; Walters Art Museum, 71.512). A few playing pieces are inscribed with the name of a pharaoh—Hatshepsut (Dunn-Vaturi 2012b) (Metropolitan Museum of Art, 26.7.1452) and Nekau (Breyer 2010:28–9) (Musée du Louvre, E 5115)—as well as private names (fig. 3.6, nos. 8, 10). Finally, floral motifs are also represented on playing pieces (fig. 3.6, no. 9).

The number of pieces for each player seems to vary across time and probably decrease from seven to five. Representations of the number of pieces—like the number of squares—is not standard so they are not reliable. Variations may even occur within scenes dating from the same period. The pieces are usually aligned on the board either with alternating opposing gaming pieces, or with opposing gaming pieces arranged in two camps (see fig. 4.4). Only one representation, on the Imenmes gaming box, shows one spool-shaped piece on top of another one (see cover image).

Senet in Nubia

With the great popularity of *senet* in Egypt, it is no surprise that it has been found in other regions that have had contact with Egypt. Considering the history of Egyptian activity in Nubia, it is also expected that *senet* has been found there. The earliest example of a *senet* game in Nubia comes from the fortress at Buhen. It was inscribed on a building block that was reused (Emery 1979: 146, 220). Since the context in which it was found was mixed (ranging from the Middle Kingdom to the Seventeenth Dynasty), it is difficult to date this artifact stratigraphically. The gaming surface is rendered in the typical Middle Kingdom pattern, though this pattern is known in the Seventeenth Dynasty in Egypt (Piccione 1990b:394–5). It is possible that the block on which the game was carved once served as a paving block, and the game was carved on it while it was still part of the pavement.

A fragmentary *senet* game was found in Tomb 109 at Kubban Cemetery 110 (Firth 1927:49, 83). Thirty-six faience inlay squares were found and were reconstructed into three rows of twelve. Three of the squares are decorated: one with *mw*, one with *bȝw* and one with three standing men. Considering the conventions of New Kingdom Egyptian boards, Piccione (1990b:420–1) and Pusch (1979:223–9) both interpret these squares as belonging to two *senet*

boards, which are incompletely preserved, since the three standing men and *bȝw* are two representations of square twenty-eight.

During the Kushite Twenty-Fifth Dynasty when Egypt was ruled by Nubian kings, the desire of these foreign pharaohs to emulate Egyptian practices was strong, and thus it is no surprise it was during this period that there was pictorial and archaeological evidence for *senet* far up the Nile Valley. Ivory playing pieces in the shape of sitting lions and lions with rams' heads were found in the tomb of Shabaqo (Dunham 1950:Pl. 24), reminiscent of the sitting animal pieces shown in the *senet* scene of Merenptah at the Osireion (see fig. 3.7, Kendall 1978:36).

Ivory inlays were found in the tombs of Neferukekashta, wife of Pianky, and an unnamed wife of Shabataqo at el-Kurru (Dunham 1950:85, 108; Kendall 1978:37). Kendall interprets these belonging to fragmentary *senet* boards, though only two squares were preserved from Neferukekashta's tomb, and eight from the other. The decoration on the plaques does not adhere exactly to that known on well-preserved Egyptian boards, but there are some, such as Horus, papyrus marsh, and potentially the god figures that have parallels in the Egyptian corpus. The Kushite kings may not have followed the canonical decoration since at this time it was not always followed in Egypt itself.

Even after the Kushite Dynasty was expelled from Egypt, *senet* appeared in a tomb relief of the deposed dynasty, which continued to rule Nubia. A relief in Napatan style, now in the Museum of Fine Arts in Boston, attributed to the pyramid of King Aramatelqo (Piccione 1984:173), depicts a *senet* scene that appears to be of Old Kingdom inspiration, with perhaps two pairs of opponents playing *senet* (Piccione 1990b:288), much like the aforementioned *senet* scenes of the contemporary Twenty-Sixth Dynasty. This is the latest evidence for *senet* in Nubia.



Figure 3.7 Drawing of Merenptah playing *senet* with dog-or jackal-shaped pieces at the Osireion, Abydos (after Naville 1911–12:pl. II.6).

Senet in the Levant

As in Nubia, *senet* appears in the Levant during periods when the Egyptians were most involved in the region. It appears to have arrived in Canaan early in the third millennium BCE, roughly contemporary with the appearance of *mehen* there. Games that may be versions of *senet* have been found at sites stretching from the edge of the Negev desert in the south to Syria in the north.

The site that has produced the greatest number of *senet* games so far is Tel Arad in southern Canaan. Dating to the Early Bronze Age II (c. 3000–2850 BCE), thirty-five *senet* gaming boards were found at this site (see fig. 3.8). The boards are strikingly different from those found in Egypt, and are most analogous to graffiti games found there, though they are generally portable objects, typically made of locally available limestone (Sebbane 2001). The *senet* patterns are executed in three different ways: by the incision of squares, by the drilling of holes and by a combination of these techniques where the holes are drilled in the center of the incised squares. The preference seems to have been for the drilled type, which makes up sixty percent of the assemblage, probably because pebbles (or seeds) were used as playing pieces (Sebbane 2001:218). It is important to note that none of the *senet* games found at Arad had playing spaces that were

specially marked in any way.

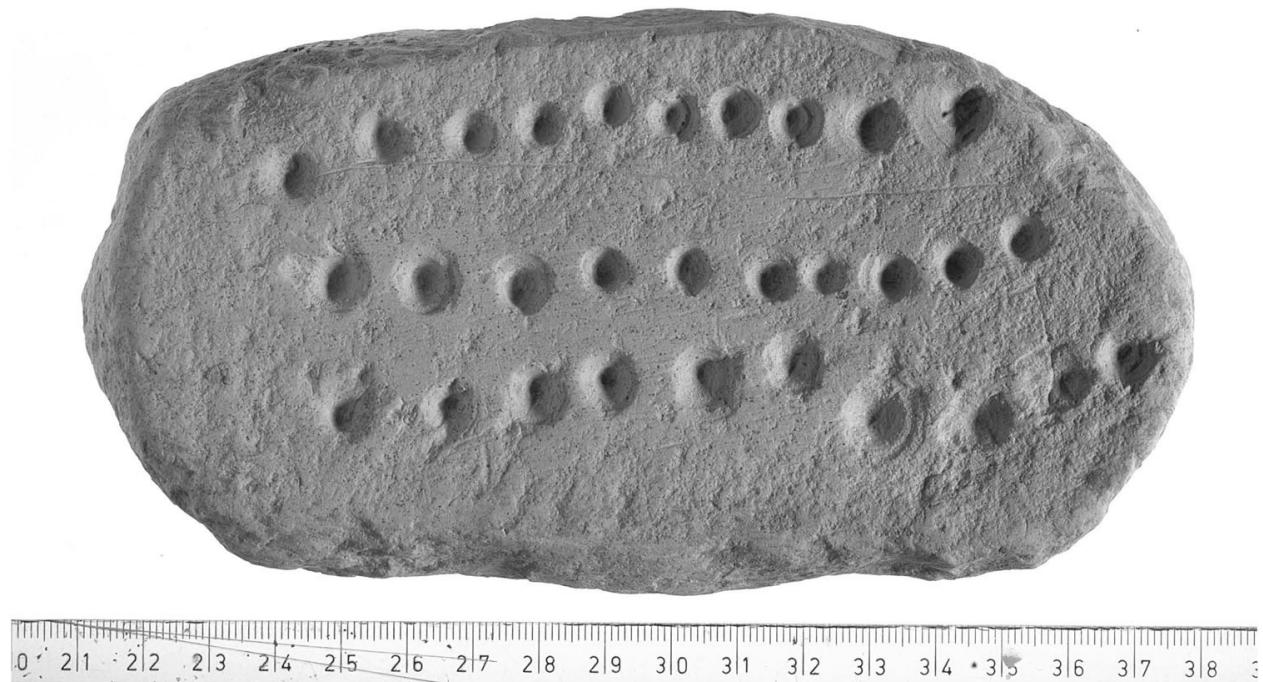


Figure 3.8 *Senet* game from Arad, with drilled depressions as the playing spaces. Israel Museum, 1989-422. Photograph by Marlana Salzberger. Courtesy of the Israel Antiquities Authority.

Sebbane states that the games were found in domestic contexts as well as public spaces, and some of those in open public areas were on stones that appear to have been stationary, due to their large size (Sebbane 2001:219). The excavations remain incompletely published, so other possible game board patterns near these games are unknown at Arad.

Roughly contemporary with the games at Arad were nine similar patterns at Bâb edh-Dhrâ' (Lee 1982; Rast & Schaub 2003:636–7). They differ from the boards at Arad in that the *senet* patterns are all delineated by the pecking of small cupules into flat limestone slabs. None of the Bâb edh-Dhrâ' games have incised squares. Though these games were surface finds, they are likely to be from the Early Bronze Age II, during which the site was at its greatest extent, and for historical reasons discussed below.

The existence of these games during the Early Bronze Age II is likely linked to increased Egyptian activity in the area during this period. Roughly contemporary with the First and Second Dynasties, this period saw an influx of Egyptian artifacts at Arad and other sites (Amiran 1978:51; Ilan & Sebbane 1989:153; Schulman 1989:443; Brandl 1992; Porat 1992:437; Kaplony

2002:487; Sowada 2009). Arad itself appears to have been attractive to the Egyptians as it functioned as a terminus of the trade in copper out of Sinai (Ilán & Sebbane 1989). The inhabitants of Bâb edh-Dhrâ‘, further afield, probably only rarely interacted with Egyptians, explaining why their games are morphologically much different from the Egyptian games than those found at Arad, where the inhabitants would have regularly interacted with Egyptians and probably played on Egyptian boards (i.e., with squares). Once the pharaohs of the Third Dynasty seized the Sinai copper mines, Egyptian activity in the Levant turned toward the coast (Stager 2001), and *senet* disappeared from Arad and presumably Bâb edh-Dhrâ‘.

Senet games from Tell es-Safi, i.e., ancient Gath, exhibit markings in their squares, though they do not exactly fit the Egyptian canon. One of these (Shai *et al.* 2014:Fig. 11.1a) has an “X” in two squares, which appear to be squares fifteen and twenty-nine. It could be a simpler way of marking two spaces important for the play of the game rather than using potentially unfamiliar Egyptian conventions. This game and another found at the site are both fragmentary, and therefore, the possibility exists that they are not *senet* games. They display a pattern of incised squares on the opposite side (Shai *et al.* 2014:38) that could also be some form of game. These games were found in Stratum E5, dated by the excavators to the end of the Early Bronze Age III (c. 2850–2500 BCE) (Shai *et al.* 2014:28). The appearance of potential Egyptian games here parallels the shifting trading activity toward the coast.

Another artifact, found while dismantling a wall at Megiddo, displays three rows of nine depressions, though it is damaged and may have originally displayed three rows of ten, and therefore possibly an example of *senet* (Guillaume 2013:1106). This game is difficult to place chronologically, but is probably Early Bronze Age in date.

Further up the coast in modern Lebanon, *senet* games were found at Byblos, which has long been known to host an Egyptian trading colony, particularly for the procurement of cedar (Gale *et al.* 2000:349; Stager 2001:629). While no *senet* board of Egyptian type has been found here, four games of similar type to those from other Levantine sites were discovered at the site (Dunand 1954:310, 1958:531, 573, 661). These games are most like the ones from Arad as they reflect both incised, drilled and a combination of both methods (Sebbane 2001:218), which may reflect that at both sites there was a greater familiarity with the Egyptian games than in other sites. Despite this, one of these games, excavation number 12202, has each square in the outer two rows marked, one

row with “X” in each space and the other row with either a box with an “X” or a mark similar to a Minoan double axe (Dunand 1958:505). A pattern may be seen here similar to that in Nubia, where some license in the manner of decoration of the squares may have been taken, as a result of cultural unfamiliarity of some of the religious aspects of the game, if indeed they existed in this early period. Dunand suggests these games may date to the Middle Bronze Age (c. 2200–1540 BCE) (Swiny 1986:41 note 314), though the manner of excavation of this site makes it nearly impossible to date them stratigraphically.

Other games outside of these sites are isolated and more difficult to interpret. One was found at Har Yeroham (Kochavi 1967: 120), two at Mashabei Sade (Cohen 1986:56, 301; 1999:266) and one at Khirbet Iskander (Richard & Boraas 1984:83), all of which date to the Early Bronze Age IV/Intermediate Bronze Age (c. 2500–2200 BCE). One example comes from Hama in Syria and is a well-made example of a Levantine type *senet* with squares and depressions (Fugmann 1958:76, 80). A final artifact from Tell Brak in Mesopotamia (Oates 2012) is fragmentary, but exhibits the same morphology. These sites are all well away from the coastal areas of Egyptian mercantile activity, so their presence is more difficult to explain. They all either contain or incorporate the drilled method of manufacturing games, suggesting an interpretation similar to that offered for Bâb edh-Dhrâ‘, whereby those who were playing them were probably not playing *senet* with Egyptians, but more likely other Levantine peoples, thus they were not mimicking the Egyptian prototypes. In this way, *senet* may have spread as far as Mesopotamia during the third millennium BCE, likely due to the intense Egyptian activity in Byblos.

Four later games come from the Levant, two from Kamid el-Loz in Lebanon (Meyer 1986:126–36), dating to the Late Bronze Age (c. 1640–1110 BCE), while two come from later periods at Hazor (see fig. 3.9), dating to the ninth century BCE (Yadin 1960:6, 34) and Lachish, likely dating to the eighth century BCE (Sebbane 2004).

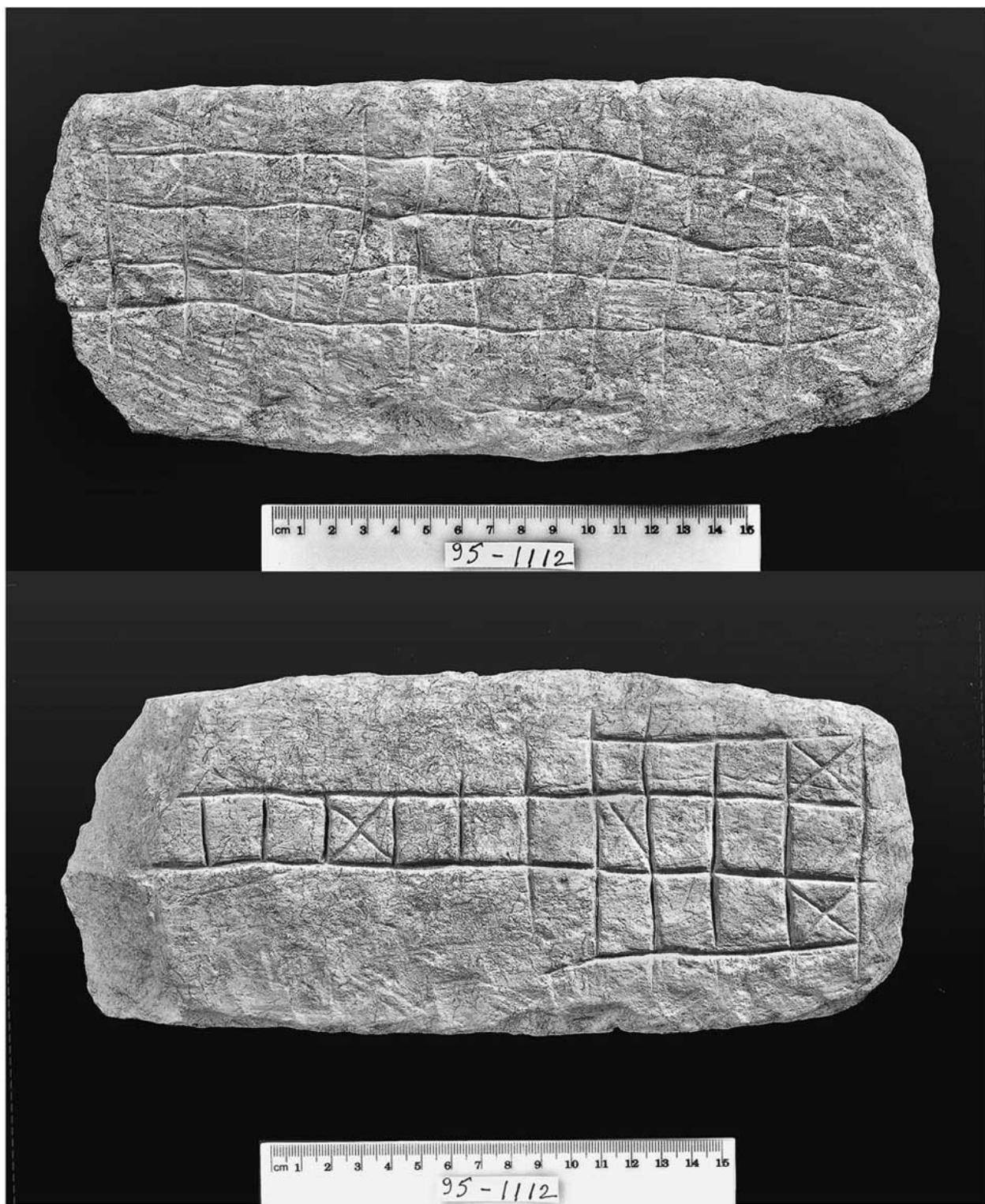


Figure 3.9 *Senet* game from Hazor (top), with the *game of twenty* on the opposite side (bottom). Israel Museum, 1995-1112. Photograph by Marlana Salzberger. Courtesy of the Israel Antiquities Authority.

Three of these games were found on the opposite side of a *game of twenty*.

Those from Kamid el-Loz were likely exchanged as greeting gifts (see Chapter 4 for *game of twenty*), since they were found in the treasury at the site. The games from Hazor and Lachish suggest that during the Iron Age (c. 1200–550 BCE), non-elites may have played *senet*. The game from Hazor was found in the “Pillared Building,” interpreted as a storehouse (Yadin 1960:6). That from Lachish was found in debris in the inner gatehouse of the city, probably as graffiti on steps (Sebbane 2004:690). The game from Hazor has no markings, but the Lachish game has an “X” in squares fifteen and twenty, as well as a depression in square thirty. Squares ten, eleven and thirty are dome-shaped, though they are not separate domed markings like those seen in New Kingdom Egyptian graffiti, thus suggesting either an evolution from this earlier type not yet attested in Late Period Egypt, or a misrepresentation or adaptation of the Egyptian pattern by Israelites attempting to reproduce this type of board.

Senet in Cyprus

The island of Cyprus has produced more *senet* games than any other region, including Egypt (see fig. 3.10). The current count of games is nearly four hundred (Crist 2015), even though this artifact type was only first identified in 1976 (Swiny 1976, 1980, 1986; Buchholz 1981, 1982). These games appear with surprising regularity, as they have been found at nearly every Bronze Age site excavated on the island since the 1980s. They are also morphologically similar to one another because they are of the pecked type and almost always made of limestone, analogous to those found at Bâb edh-Dhrâ‘. No *senet* game from Cyprus has markings in any of the playing spaces, also because they were depressions and thus not easy to mark.

The identification of *senet* on Cyprus is contingent on its appearance on the opposite side of a pattern of cupules in a spiral pattern, a Cypriot manifestation of *mehen* (Crist *et al.* in press). The earliest *senet* games appear on the island toward the end of the third millennium BCE at Sotira *Kaminoudhia* and Marki *Alonia* (Swiny *et al.* 2003:231–3; Frankel and Webb 2006:246; Crist 2015), later than the appearance of *mehen*, which appeared at the beginning of the third millennium BCE. The timing of the arrival of these games parallels the popularity of the games in Egypt, where *mehen* was more popular during the Early Dynastic Period, while *senet* was more common during the late Old Kingdom.



Figure 3.10 *Senet* games from the Episkopi region, Cyprus. Photograph courtesy of Stuart Swiny.

It seems likely that the Cypriots learned the game from Levantines, rather than Egyptians, since there are no examples of games where the Cypriots were reproducing Egyptian boards with squares and markings. This likelihood is also in agreement with the material record of Prehistoric Bronze Age (c. 2400–1700 BCE) Cyprus, where direct contact with the Levant is well documented (Philip *et al.* 2003; Webb *et al.* 2006; Knapp 2008:119–29, 2013:309), whereas contact with Egypt itself is less common (Merrillees 2009). Evidence for foreign contact is concentrated in sites on the north coast of the island, and indeed a *senet* game was found on the surface at Bellapais *Vounous* (Swiny 1986:35). Nevertheless, because games were only identified on Cyprus in 1976, the current political status of the island has prevented archaeological research in the northern part of the island, and so evidence for games at Bronze Age sites is concentrated in the Republic of Cyprus. The question of whether Levantines brought the game to Cyprus, or if Cypriots traveled to the Levant and brought the games back is an open question, and cannot be resolved with current evidence.

It is apparent that, once adopted on the island, *senet* was incorporated into many aspects of Cypriot life as it has been found in domestic, mortuary, public and ceremonial spaces. In some cases, clusters of portable games were found associated with drinking and pouring vessels, which likely indicates that *senet*

playing accompanied drinking and/or feasting events (Crist 2015, in press). One *senet* game was found pecked into the bedrock at the cemetery of Deneia *Kafkalla*, though the extent to which it is connected to mortuary ritual is unclear (Herscher 1998:320; Frankel & Webb 2007:149). *Senet* games have been found at cemeteries in the island, but two in particular stand out since they appear to have been placed intentionally in tombs. One, found in the burial chamber of a looted tomb at Marki *Kappara* (Frankel & Webb 1996:86, 102) contained *senet* patterns on both faces, but the game was obstructed by large pecked depressions on each face, rendering the game unplayable. It is possible that this was a form of ritual “killing,” which has been seen in other artifacts on the island when placed in burials (Keswani 2004:75; Crist 2015).

The other *senet* deliberately placed in a tomb was a unique terracotta votive object, claimed to have been found at Kotchati (Swiny 1986:33) but likely to have been found at Marki (Jennifer Webb 2012, personal communication), last known to be in the Hadjiprodromou Collection in Famagusta. It clearly shows three rows of well-made depressions, and it appears to be a rendering of a limestone game in terracotta, and was not likely to have been used for playing.

Senet appears to have been popular at Cypriot sites through the Protohistoric Bronze Age (c. 1700–1050 BCE), though seemingly less popular than during the Prehistoric Bronze Age (Crist 2015). Despite this, game boxes appear on the island for the first time during the Protohistoric Bronze Age, including the famous Enkomi game box (Murray *et al.* 1900:12). Piccione (1990b:430) incorrectly identifies this game box as double sided with the *game of twenty* on the upper surface and *senet* on the bottom. There currently is no *senet* pattern on the box, though it was incompletely preserved and has been reconstructed. It is possible that there was once a *senet* pattern on this artifact, but there is no evidence for it. Tombs at Morphou *Toumba tou Skourou* and Kalavasos *Ayios Dhimitrios* have produced square inlays that were likely squares on game boards (Vermeule & Wolsky 1990:221, 240, 332; South 1996:167), but these are likely to have been for the *game of twenty* rather than *senet* (Crist *et al.* in press).

There is little evidence that *senet* was played in Cyprus after the Bronze Age. Artifacts similar to Bronze Age games have been found at Iron Age sites, particularly at Amathus (Fourrier 2003), but only surface finds and those that have been built into walls contain a distinctive *senet* pattern. One game, found in the dromos of a Cypro-Geometric tomb (c. 1050–750 BCE) at Kouklia *Skales*, contains a *senet* board delineated with etched squares, along with examples of the *game of twenty* (Karageorghis 1983:122). Because this game is the only

example of its kind, and dates to after the disappearance of the more typically Cypriot *senet* pattern with depressions, it seems likely that this is a new, albeit brief, reintroduction of the game on the island. Since there is no apparent tradition of playing *senet* on a field of squares in Bronze Age Cyprus (although, it must always be kept in mind that games made of wood or other perishable materials may have once existed), this new rendering may be evidence for Iron Age Cypriots imitating contemporary Egyptian *senet*, rather than Cypriots playing the traditional local version of the game. This would further suggest that the societal changes that brought about the end of the Bronze Age affected the ludic sphere in Cyprus, and a game that had been played for roughly two thousand years in Cyprus became forgotten.

The *game of thirty-three*

During the Late Period, another game appeared in Egypt that seems to have achieved a certain level of popularity (see fig. 3.11). Typically found on the opposite side of *senet* boards, this game contains three rows of eleven circles, and, since its ancient name is unknown, it is most often referred to as the *game of thirty-three circles*, or simply the *game of thirty-three* (Pusch 1979:377; Piccione 1990b:441–8).

Nine examples of this game are known, and all but one of them appear on the opposite side of *senet* boards. Only three of these boards have known provenance. Two are from the Sacred Animal Necropolis at Saqqara (Martin 1981:45, 55) and one was found near the pyramid of Senusret I at Lisht, but dated to the Nineteenth Dynasty (Pusch 1979:365–7). The two from Saqqara are firmly dated to the Late Period, which corresponds to Petrie's dating of four unprovenanced boards to that era (Petrie 1927:53; Piccione 1990b:446–8). Two boards are dated to the Nineteenth or Twentieth Dynasty by Piccione and Pusch. One is currently in the British Museum (102396) (Pusch 1979:309; Piccione 1990b:427) and the other is now in the Yale University Art Gallery (1937.161) (Pusch 1979:311; Piccione 1990b:429). The reasoning for the early dating of these boards is unclear, and, due to the lack of documentation on their archaeological provenance, it seems more likely that they date to the Late Period, based on the presence of the *game of thirty-three* on one face.

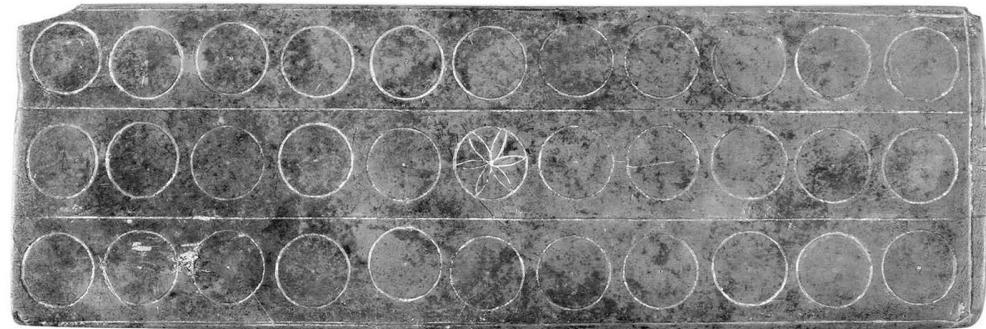
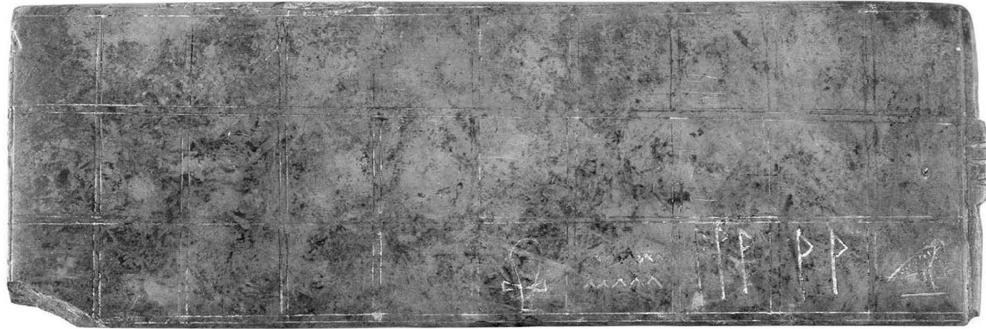


Figure 3.11 *Senet* game of Late Period date (top) with the *game of thirty-three* on the opposite face (bottom). 25.4 × 8.7 × 0.7 cm. © Petrie Museum of Egyptian Archaeology, University College London, UC2317.

The manner in which the game is rendered on the board's surface is fairly standardized across the corpus. Four of the games have the gaming spaces depicted with three rows of eleven circles inside squares, while three have just circles in the same arrangement. Sometimes the circles have a depression in the center, which led Petrie (1927:55) to call it "*the Game of Thirty-Three Holes*." Four of the games have spaces marked with rosettes, but perhaps others contained markings as well since they are incompletely preserved. The most commonly marked space is the sixth space of the central row, and a rosette appears in this position on four of the marked examples. The Yale game is the only *game of thirty-three* board that has other marked spaces: it contains rosettes

in spaces three and nine of the central row in addition to that in the sixth space.

Rosettes are an unusual motif to appear on Egyptian board games, as only the *game of twenty* is marked in this way occasionally in Egypt. Rosettes are commonly used to mark the *game of twenty*, and examples from the Levant, Cyprus and Mesopotamia contain this form of decoration, though none of the boards found in Egypt contain it. Based on the presence of the motif (which also features prominently in the bands dividing the three rows of spaces in the British Museum game), it is possible that the game has its origin in Western Asia, perhaps Mesopotamia or Persia. Though no examples of this game have been found elsewhere, it is possible that they have not survived, and only the Egyptian games remain due to the preservation afforded by the climate in the Nile Valley. The Late Period, during which the *game of thirty-three* first appeared, was a period during which the Assyrians and Persians conquered Egypt, and these foreigners could have brought the game to Egypt. It is important to note that the rosettes are particular to the *game of thirty-three* as *senet* games on the opposite face of these boards contain hieroglyphs in the marked spaces. The rosettes, therefore, do not appear to be a stylistic choice adopted for use in games more generally.

Whether the game was an Egyptian invention or a foreign introduction cannot be determined at this point in time, but its presence in Egypt appears to have been confined to the Late Period, with no boards known from the Ptolemaic period or later, though of course the unprovenanced status of much of the corpus makes chronological inferences difficult. Nevertheless, the *game of thirty-three* appears to have been the latest board game introduced into Pharaonic Egypt before the Greco-Roman period.

The Game of Twenty: A Foreign Acquisition

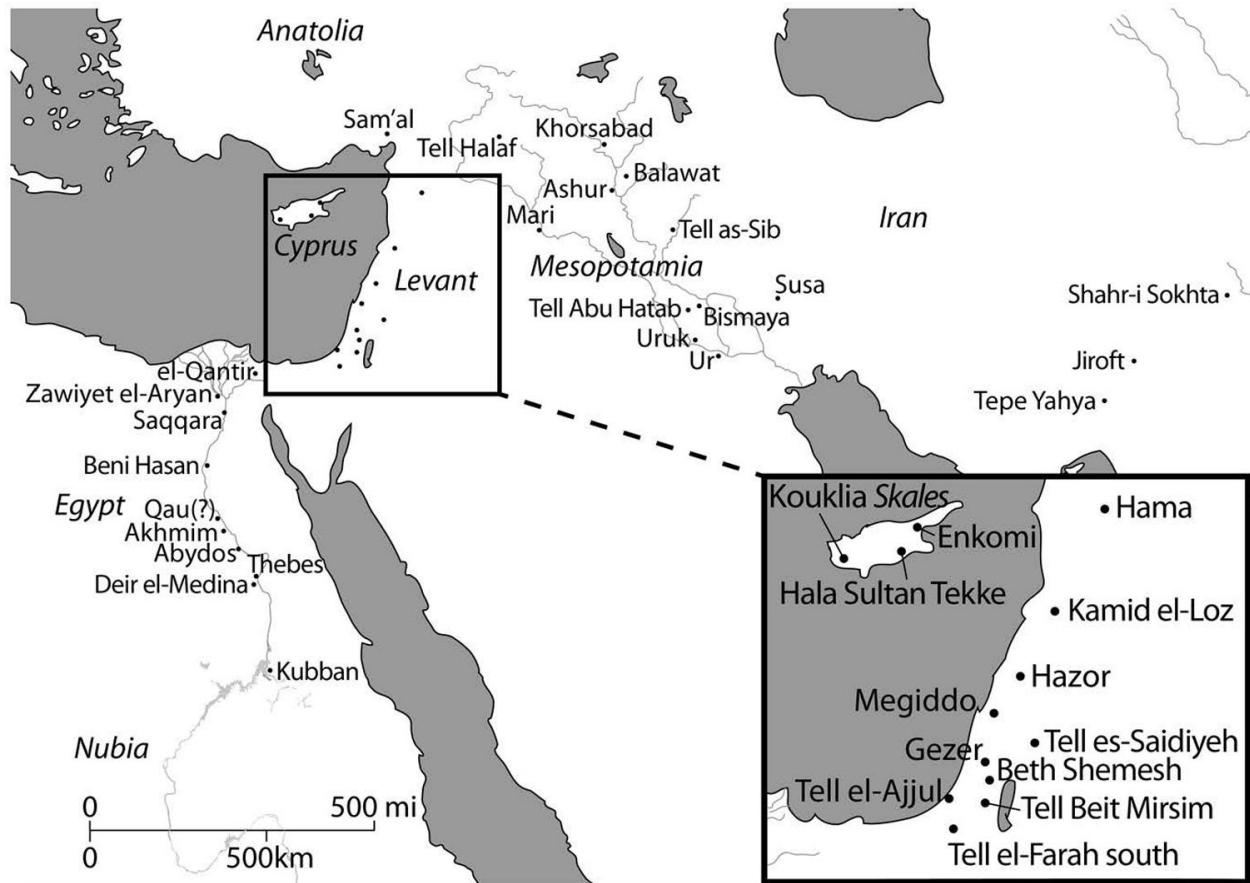


Figure 4.1 Distribution of the *game of twenty* in Egypt and the Near East from the mid-third to the first millennium BCE.

The *game of twenty*, named after the number of playing squares it contains, was one of the most popular games in the ancient Near East. From the mid-third to the mid-first millennium BCE, the *game of twenty* was distributed in far-flung regions, from Iran to the Levant (Finkel 2007:17; de Voogt *et al.* 2013) (fig. 4.1). The game appears in the Egyptian archaeological record for a shorter period, from the Seventeenth to the Nineteenth Dynasty, where it was combined with *senet* on reversible boxes. Egyptian carpenters were already accustomed to manufacturing game boxes with drawers to keep the playing pieces and dice for the game of *hounds and jackals* (see Chapter 5). We may attribute to Egypt the

invention of the bifacial game box with a drawer for the shared accessories but this innovation could also have been elaborated in the Levant where both *senet* and the *game of twenty* were known by the early second millennium BCE. The Egyptian climate may explain the large number of better-preserved examples from the game box category.

Origins and chronological distribution

The game is also known as the *royal game of Ur*, after the famous boards from Sumer in southern Mesopotamia (modern Iraq) (fig. 4.2). Several boards made of wood, inlaid with shell, red limestone and lapis lazuli, were discovered in the 1920s by Leonard Woolley at Ur in the Royal Cemetery (Woolley 1934:274–9, pls. 95–8; Becker 2007). They were found with sets of seven round gaming pieces as well as two kinds of dice: four-sided sticks and tetrahedrons. The Sumerian board, dating to about 2600–2400 BCE, consists of a rectangle of twelve squares (4×3) joined by two squares to a smaller rectangle of six squares (2×3). It has been claimed that the game originated in the Indus Valley on the basis of finds from sites that flourished during the Harappan civilization (2600–1900 BCE). Possible fragments of the *game of twenty* were discovered at Mohenjo-daro (Mackay 1938:575–6, pl. CXLII.82) and Lothal (Rao 1985:504, pl. CCXIX.1) whereas a characteristic block of 3×4 squares, with one additional square from the broken middle row, is recorded at Dholavira (Soni & Bagchi 2011:75–6; Bisht 2015:594–6, figs. 8.308–11). The possible Indian origin of the *game of twenty* is often accompanied by its comparison to *pachisi*, a traditional race game played in India (Parlett 1999:65). It would be rash to rely on such evidence because the origins of *pachisi* remain uncertain. Its earliest testimony in India dates to the sixteenth century CE (Finkel 2004:47).

The emergence of the *game of twenty* in widely separated areas attests to the cultural contacts across the vast region that stretches between the Euphrates and Indus rivers during the mid-third millennium BCE. The Indus cities were involved in the long-distance trade of semi-precious stones such as lapis lazuli and carnelian (Aruz 2003:243). Sites like Shahr-i Sokhta, in the eastern Iranian region called Seistan, were part of this commercial network (Tosi & Lamberg-Karlovsky 2003:349). A wooden board with the twenty fields outlined by the coils of a snake, carved in relief, was found by the Italian expedition at that site, again in a funerary context (Piperno & Salvatori 1983).

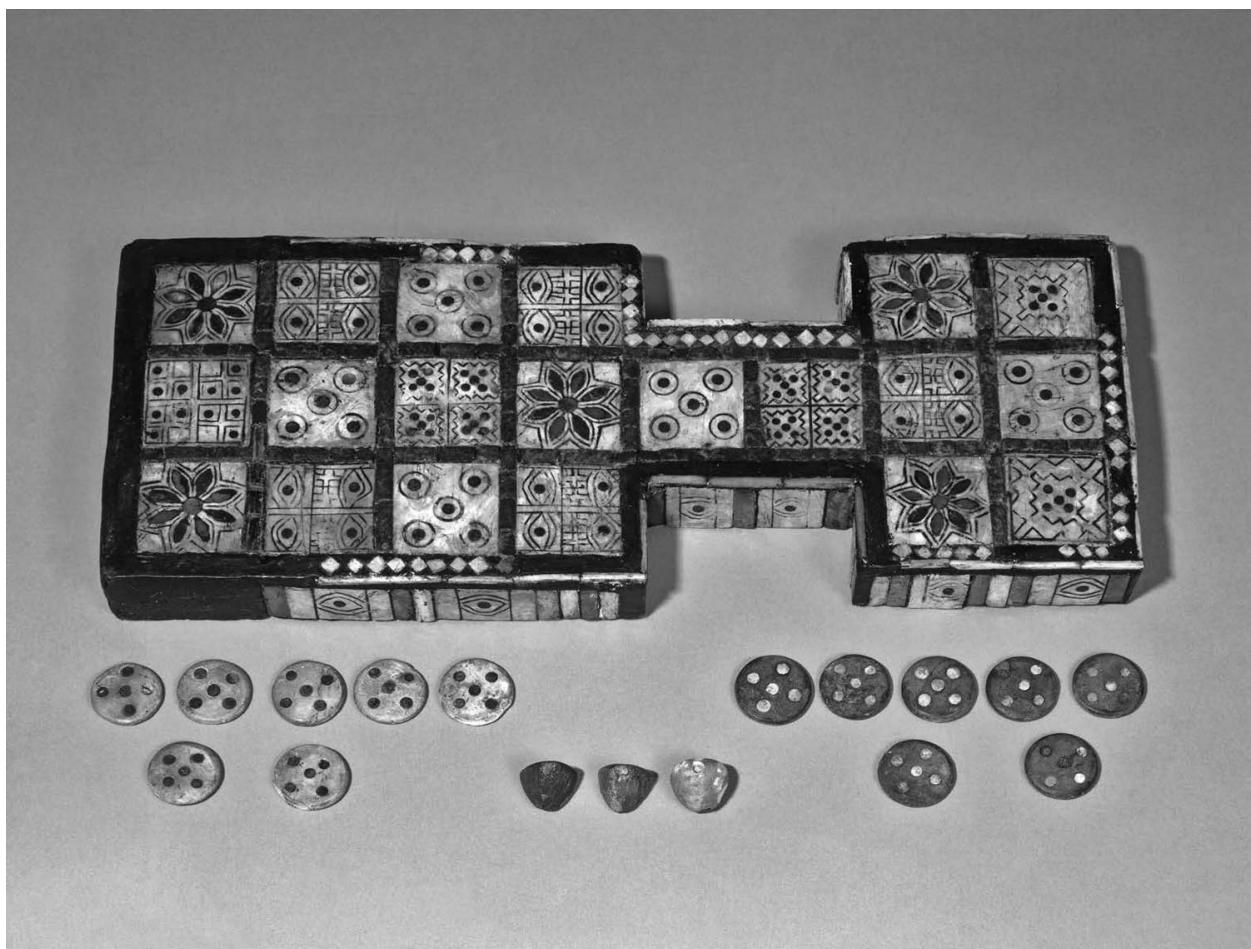


Figure 4.2 The *royal game of Ur* with gaming pieces and tetrahedrons, board: 30.1 × 11 × 2.4 cm. The British Museum, 120834, 1928,1009.379a-n. © The Trustees of the British Museum.

At the turn of the third to the second millennium BCE, the playing surface underwent a slight change. It unfolded the rightmost squares of the *royal game of Ur* into a straight tail (fig. 4.3). The middle row extending a further eight squares lead to the appellation “head-and-tail” type (Dunn-Vaturi & Schädler 2009). The reduction of the number of playing pieces from seven to five is attributed to the same period. Special squares can be marked every fourth square. The new arrangement of the track was first observed at two sites, Tepe Yahya and Jiroft, in the Kerman region in southern Iran (Finkel 2004:95; Dunn-Vaturi & Schädler 2006). At Jiroft, illicit “excavations” in the early 2000s brought to light several stone gaming boards in the shape of birds of prey, scorpions and fantastic creatures (Dunn-Vaturi & Schädler 2006:4–6, pls. 1–3). These figures are characteristic of the so-called Intercultural Style visible on carved chlorite vessels and handle-weights. Kerman, Tepe Yahya in particular, is an important

production center of these objects distributed from Central Asia to Syria (Aruz 2003:325). The active network of trading routes facilitated the development of the evolved form of the game elsewhere in the early second millennium BCE, especially in Mesopotamia. Several games scratched on pavement bricks attest that the game was played at the time of the Amorite king Zimri-Lim (c. 1775 BCE) in the palace of Mari, an important trading center on the Euphrates banks (Parrot 1958:12–13, 47, 182, 247, 275; Sauvage 1991). The Mariote grid usually bears three special squares marked with “X”, i.e., squares eight, twelve and sixteen. The game, probably known a few centuries earlier as a graffito, was found on a brick inscribed with the name of Ilum-ishar, Shakkanakku of Mari, c. 2064 BCE (Dunn-Vaturi 2012c), unless the game was added later.

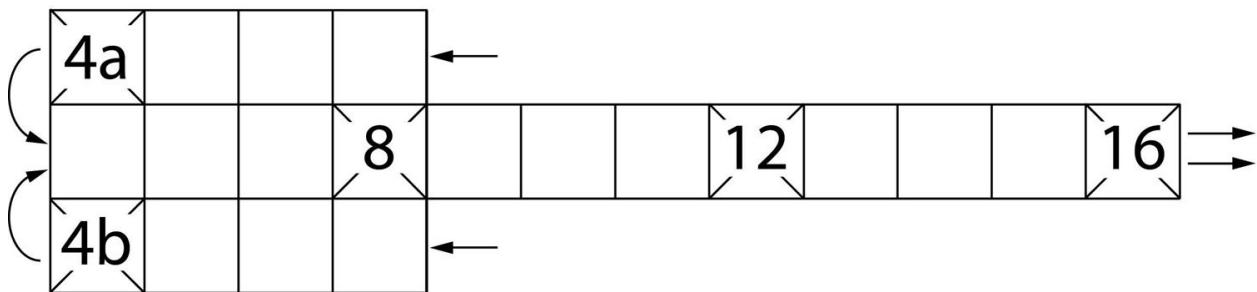


Figure 4.3 The *game of twenty* in the second and first millennia BCE, and the route of play.

The spread of the Amorite culture throughout the Levant from 1900 to 1700 BCE resulted in the foundation of Amorite dynasties (Burke 2014:405). Mariote texts at the beginning of the Middle Bronze Age II (c. 1750 BCE) mention long-distance trading caravans traveling to the Eastern Mediterranean regions (Burke 2014:407). Sites in the southern Levant—Tell el-Ajjul, Tell Beit Mirsim—have yielded examples of the *game of twenty* from contexts dating to the Middle Bronze Age II and III (c. 1750–1640/1540 BCE) (Petrie 1933:Pl. 28, 25–9; Albright 1938:49, pl. 37, a). From there, the game would soon be transmitted to Egypt.

Beni Hasan playing scenes

Some scholars think that the *game of twenty* may have been introduced in Egypt as early as the Middle Kingdom and is depicted at Beni Hasan (Jéquier 1922:18; Kendall 1982:265). Their theory is based on the association of two playing scenes painted side by side in the tomb of the nomarch Baqet III (Tomb 15), and

appearing in reverse order in the tomb of his son Khety (Tomb 17) (Newberry 1893:Pls. 7, 13; Needler 1953:64–5) (fig. 4.4). The tombs of Baqet III and Khety, generally dated to the Twelfth Dynasty, have been redated to the Eleventh Dynasty on the basis of textual, archaeological and artistic evidence (Spaniel 2001:176). The two scenes, indicated as A and B, show two players engaged in games occurring on tables. Scene A has two sets of seven alternating opposing gaming pieces and scene B has five opposing gaming pieces arranged in two camps. The captions of scene B, read *ỉsb* or *ỉsb*, are unknown in other game contexts, whereas the legend *ḥb 5*, “playing five” above scene A is attested in Old Kingdom scenes related to *senet* (Jéquier 1922:18; Kendall 1982:265). Jéquier suggests that scene B is the *game of twenty* because it is associated with *senet* just as these games are found together on double-sided games in later times. The paintings in the tombs of Baqet III and Khety could prefigure the later connection between the two games. However, the inscription *ỉsb* was tentatively translated “consumed”—implying that the game was finished—by Birch (1865:62) so that some scholars are inclined towards interpreting the scenes as two stages of *senet* (Nash 1902:347; Petrie 1927:51). Hoerth (1961:4, 85) argues that the scenes describe a second form of *senet* because the pieces do not fit the reconstruction of the *game of twenty* whereas Kendall (1982:265) in contrast states they correspond “precisely to what one would expect in a view of ‘twenty squares.’”

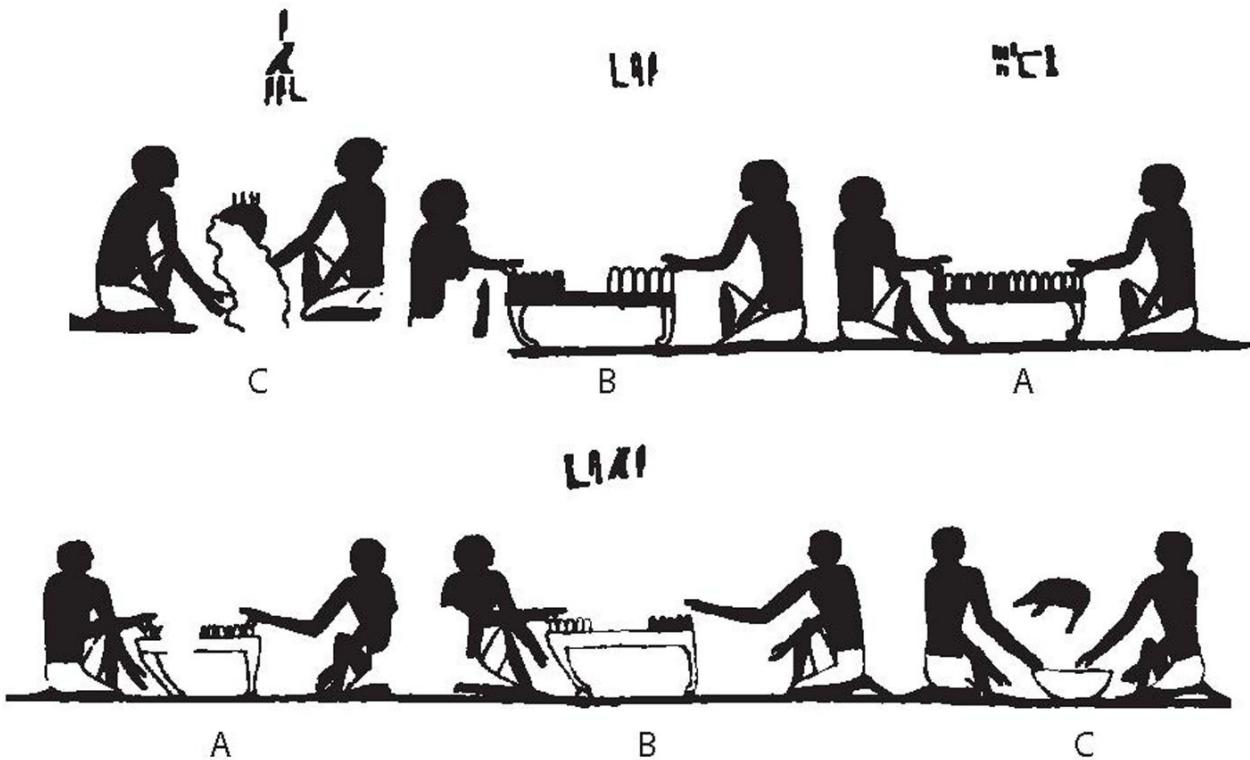


Figure 4.4 Playing scenes A, B and C in the tombs of Baqet III and Khety, Beni Hasan. Drawing reproduced from Newberry (1893:Pls. 7, 13).

If the *game of twenty* is described at Beni Hasan, it means that the game was known much earlier than the Hyksos period, which is the date generally considered for the introduction of the game in Egypt (Finkel 2008:152). One possible source for the transmission of the game is immigrants coming to settle in Egypt, such as foreigners employed in the Egyptian army or in the mines. Long-distance caravans of Western Asiatic peoples, identified as a group of migrant workers, are depicted carrying foreign objects at Beni Hasan in the tomb of Khnumhotep II (Tomb 3) dated to the Twelfth Dynasty (Kamrin 1999:94–5). The *game of twenty* could have been brought to Egypt on such an occasion. The grid may have been on perishable material (such as textile) or simply reproduced on the ground, which would explain the absence of evidence for three hundred years, until it became standard in New Kingdom burial equipment. Although this interpretation is conceivable, there is to date no archaeological or physical evidence for the *game of twenty* in Egypt during the Middle Kingdom. Nash (1902:343) reports the presence in the British Museum of a wooden board “marked out with 20 squares only” from a Twelfth Dynasty tomb at Deir el-Bersha. This information is problematic since this board could not be located at

the time Pusch worked on the British Museum boards (Pusch 2007:70, note 19).

Ancient names

The ancient name of the *game of twenty* is still a subject for debate. In the nineteenth century, Egyptologists thought it to be called the *game of tjau*, which translates as “*game of the robbers*,” because the name *tjw* is associated with playing scenes in the Late Period tomb of Aba at Thebes (Pusch 2007:69). This incorrect identification is often repeated although Pusch (2007:84) suggested that the term *tjw*, previously translated “robbers,” meant in fact “marbles” and described a game “combining dexterity and guessing” (Decker 1992:133).

The game may have been known as *isb* or *išsb*, if scene B in Beni Hasan proves to represent the *game of twenty*. The difference of spelling between the two captions in Tomb 15 and Tomb 17 is not meaningful as the interchange of *i* and *š* is common, particularly at the beginning of words. They may be written with either of the two, or a combination of both, and has no further significance. The indefinite term *isb* has been compared to the Babylonian name, *patti apsu* (“canal of the deep”), listed among the gifts sent by Tushratta, King of Mitanni (c. 1365–1330 BCE), to Amenhotep III on the occasion of his marriage to a Mitanian princess (Kendall 1982:265). The objects described in the Amarna letter EA 22 (Column II, line 54) have been interpreted as games because astragali are associated but some authors suggest that, in fact, two bows with astragal-ornaments were listed (Cochavi-Rainey 1999:65). Finally the root has been linked to the Egyptian word *isb.t* “beam/throne,” also used with the form *isb*, as it could refer to the block of wood used to carve the game (Jéquier 1922:19, 219).

On the Turin Papyrus, described below, it is inscribed: “Uniting of the twenty squares” (see fig. 4.7) above the representations of the game of *thirty-one*, which is a combination of two *game of twenty* tracks. This inscription suggests that this game was simply known as “*twenty squares*” (Pusch 1977:209–11).

Boards for the *game of twenty*

Due to its Near Eastern origins, the *game of twenty* is generally believed to have been introduced to Egypt by the Hyksos, Asiatics who ruled the eastern Nile Delta in the Second Intermediate Period, because it is first attested

archaeologically during this period (Pusch 2007:70; Finkel 2008:152). But it should be noted that to date no evidence of that game is reported from Hyksos levels at sites in the Delta.

Excavations in Egypt have revealed a great number of *games of twenty* thanks to the climate in the Nile Valley. The reversible game box is the most represented type in Egypt with at least thirty-two examples, dating from the Seventeenth to the Nineteenth Dynasty. A wooden box with the *game of twenty* on its top surface, said to be from Akhmim, was purchased by Breasted in the 1890s for the Oriental Institute Museum in Chicago (E 371A) (Hoerth 1961:33). It could be a precursor because it has no *senet* on its reverse. Some games are too fragmentary to be assigned to a specific category. Three ostraca with a *game of twenty* have been identified so far and several ostraca with *senet* are known too (see Chapter 3) but no double-sided ostraca are recorded. Boxes are typically made of solid wood, solid faience or wood with ivory, bone or faience inlays. They are usually provided with a drawer locked by means of a bolt sliding in three staples. In most of the cases, the *game of twenty* is on the uppermost side, with *senet* on the reverse, according to the orientation of the hieroglyphs or scenes on side panels. The playing surface consists of twenty rectangular (rather than square) spaces because the twelve fields of the middle row have to fit within the same length as the ten squares fields of the *senet* game on the opposite side (Pusch 2007:70, note 10).

The earliest examples of the *game of twenty* come from Thebes and are dated to the late Second Intermediate Period, when the Theban rulers of the Seventeenth Dynasty began to drive the Hyksos kings from the Delta. The oldest excavated example is a wooden and ivory (or bone according to Tiradritti 2010:338) box found in the tomb of Hornakht at Dra Abu el-Naga North and now in the Egyptian Museum (JE 21462, CG 68005). The tomb was excavated by Luigi Vassalli while working for Auguste Mariette, during the 1862–3 season on the West Bank of Thebes. The name Hornakht inscribed on the coffin was initially misread Aqhor (Tiradritti 2010:336, note 44). Mariette (1889:17, pl. LI) described the box as a double board with twenty squares and thirty-six squares but only illustrated one surface with thirty-six squares, according to the Italian excavator's sketch and notes ("schizzo della tavola da gioco con le case numerate da 1 a 12") (Tiradritti 2010:Pl. 117). Therefore this board has been repeatedly misinterpreted as a single playing surface with thirty-six squares including a track for the *game of twenty* (Murray 1951:17, fig. 6; Hoerth 1961:23; Parlett 1999:68, fig. 4.7).

The reconstructed box ($26 \times 7.6 \times 4.7$ cm) has, in fact, a *senet* on the verso and Pusch suggested a reconstruction for the *game of twenty* with eight panels along the middle row (Pusch 1979:197, pl. 45; Decker & Herb 1994:665–6; Rothöhler 1996:102–3). The object has been assigned to the Sixteenth Dynasty (Allen 2002) but the tomb is generally dated to the reign of Taa, ruler of the Seventeenth Dynasty, after a cartouche carved on a throwing club. Ivory carved reliefs are divided into three panels on the long side. They show a wild goat, a pair originally, eating from a tree in the central panel framed by a pair of Egyptian couchant sphinxes. Only the sphinx on the left panel is preserved. It is a typical figure of the International Style, a set of artistic conventions common throughout the Near East and Aegean worlds (Caubet 1998:109). In its protective appearance, the sphinx is here associated with symbols of life and renewal. This is the earliest *game of twenty* attested in Egypt so it is not surprising to see the influence of the Near East in the decoration of the imported game. The motif of a pair of ibex or goats flanking a tree belongs to a long Near Eastern tradition (Ornan 2005:155). Known since the third millennium BCE in Mesopotamia, the motif spread in the Levant during the second millennium BCE. It is attested on two other ivory game boards from the Levant (Megiddo) and Cyprus (Enkomi) dating to the thirteenth and twelfth century BCE. The Hornakht board shows the adoption of the Horus hieroglyph to mark the special squares usually indicated by “X” on the foreign playing surfaces. Horus falcons were incorporated like other Egyptian motifs into the Syro-Levantine glyptic repertoire during the Middle Bronze Age (Teissier 1996:90). Different orderings of the three squares marked with Horus have been proposed (Mariette 1889:Pl. LI; Falkener 1892:97; Wiedemann 1897:40). Mariette’s placing of birds in the eighth and twelfth squares conforms better with the majority of the other known boards (Hoerth 1961:23–4). According to Mariette, the game box was accompanied by seven playing pieces, spool-shaped and conical, made of different material (Mariette 1889:17, pl. LI), but Vassalli referred to only one conical “pawn” in the drawer (Tiradritti 1994:70). Finally, Falkener is the only one to mention an oblong die with sides numbered one to four preserved with this game, but his description cannot be verified (Falkener 1892:97–8). Hornakht’s burial held several objects inscribed with prominent individuals’ names. He must have played a key role at the Theban court (Tiradritti 2010:340) and this could explain the presence of the game box, a newly introduced element in elite burials.



Figure 4.5 *Game of twenty* from Thebes with *senet* on the opposite side, board: 25 × 6.7 × 5 cm. The Metropolitan Museum of Art, Rogers Fund, 1916, 16.10.475. Image © The Metropolitan Museum of Art.

The next datable board was discovered during the Metropolitan Museum of Art expedition in 1915–16 in a late Seventeenth–early Eighteenth Dynasty burial at el-Asasif in western Thebes (Lansing 1917:26; Finkel 2008:152–3) (fig. 4.5). It is a double-sided game box restored in modern wood overlaid with ivory squares and panels acquired by the Metropolitan Museum of Art in the division of finds (16.10.475). None of the squares are marked but the panels flanking the middle row are decorated with animal scenes. One panel shows a lion facing two gazelles, while on the other panel is a lion facing a hound. The animals are rendered in a manner called the “flying gallop,” characteristic of the International Style. This object is not only remarkable for its decorations but also for its extensive assemblage in ivory, comprising six conical pieces, six spool-shaped pieces and two knucklebones. The six wands from Pit 3 associated with this set (Hayes 1959:25–6) were not found with it in chamber E but in chamber B (Christine Lilyquist, personal communication, June 4, 2015) (see Lilyquist forthcoming).

Ivory panels with pastoral scenes depicted in the International Style were similarly placed on either side of the tail of a *game of twenty* whose original wood structure did not survive (Egyptian Museum, JE 40680, CG 68183). They depict bulls, hunting lions, feeding antelopes, brush, bushes and rosettes (Piccione 1990b:398). Parallels in the Levant and Cyprus are discussed below.

The bulk of the game boxes in the archaeological record date to the New Kingdom (Eighteenth to Nineteenth Dynasty), with a peak during the Eighteenth Dynasty. The majority was excavated in Upper Egypt (fifteen from the Theban region, two from Abydos, one from Qau) while only three examples were found in Lower Egypt (Zawiyet el-Aryan, Saqqara and el-Qantir). Fifteen examples, now in museum collections and often said to be from the Theban region, are missing a precise provenance. The southernmost example of a box with the *game of twenty* and *senet* on opposite sides was found in the cemetery of Kubban in Nubia (Firth 1927:49, 83) (Nubia Museum Aswan, 664). It is dated between the sixteenth and thirteenth centuries BCE when this region was part of Egypt. The structure of the game boxes remained the same throughout the period and the changes mainly affected the special squares and/or the decoration outside the playing surface.

Special squares and decorations

Special squares, which are placed every fourth square, are attested on fifteen boards and three boards have their final square made in a distinct shape (table 4.1). Marks are found in all five positions (four a, four b, eight, twelve and sixteen) or only in three (eight, twelve and sixteen) (Pusch 2007:71). Sixteen boards are unmarked and eight examples are either too fragmentary or not adequately described to determine whether they had plain squares or not. They may originally have been emphasized, but motifs have disappeared; others were probably left blank because the squares did not always need to be differentiated. In the Near East, special squares are either marked with a rosette or “X”, whereas in Egypt more variants are attested. The Egyptian labels have been assigned to three groups that include “X” and geometric symbols (Group I), sacred symbols (Group II), titles and owner’s names (Group III) (Pusch 2007:71–3, fig. 8.3).

Table 4.1 Table with types of marking and distinct shapes for special squares in Egypt. * indicates a distinct shape (hieroglyphs taken from Pusch 2007:Fig. 8.4).

Period	Site	Square 4 (a)	Square 4 (b)	Square 8	Square 12	Square 16	Present location
18th Dynasty	Abydos	-	-	X	[X]	[X]	Metropolitan Museum of Art, 01.4.1a
New Kingdom?	unknown	-	-	X	X	X	Ägyptisches Museum, Bonn, 941
18th Dynasty	unknown	-	-	rectangle	rectangle	rectangle	Musée du Louvre, E 913
18th Dynasty	Thebes	-	-	checkered	checkered	checkered	Egyptian Museum, JE 65372
18th Dynasty	Abydos	unknown	unknown	unknown	checkered	unknown	World museum, Liverpool, 55.82.9
18th Dynasty	Valley of Kings	-	-	-	-	*square	Egyptian Museum, JE 62060
18th Dynasty	Valley of Kings	-	-	-	-	*square	Egyptian Museum, JE 62061
19th Dynasty	unknown	-	-	-	-	*semi-circle	Egyptian Museum, CG 68007
17th Dynasty	Thebes	-	-				Egyptian Museum, CG 68005
18th Dynasty	Valley of Kings						Egyptian Museum, JE 62059

New Kingdom	Deir el-Medina	unknown	unknown		unknown	unknown	Institut Français d'Archéologie Orientale, Cairo, inv. 4116
New Kingdom	Deir el-Medina		unknown	unknown	unknown	unknown	unknown
18th Dynasty	Valley of Kings	-	-				Egyptian Museum, JE 62058
18th Dynasty	Deir el-Medina						Museo Egizio di Torino, 8451
18th Dynasty	unknown	-	-				Ägyptisches Museum und Papyrussammlung, 10756
19th Dynasty	Saqqara						Egyptian Museum, CG 68001
19th Dynasty	unknown						Musée du Louvre, E 2710
New Kingdom	unknown	-	-				Sammlung Nassau Altertümer, Wiesbaden, 2308

The use of “X”, widespread in the Near East, is attested on two Egyptian boards. One was found at Abydos in Tomb D99 of the scribe Merymaat dated to the reign of Thutmose III by a scarab bearing a cartouche of this pharaoh (Metropolitan Museum of Art, 01.4.1). The board was previously restored with three crossed lines in positions eight, twelve and sixteen (Pusch 2007:Fig. 8.4). Only one complete faience square with a painted “X” was retrieved from the tomb of the scribe Merymaat. Therefore the new reconstruction of the wooden box displays the unique crossed square at the twelfth square while the other special squares were left plain (Metropolitan Museum of Art 2015). According to Hoerth (1961:29): “It is uncertain where, or even whether, this crossed square fits into the twenty-square surface.” This symbol could belong to the *senet* track since it is also used to mark the *senet* squares fifteen and twenty-seven on a board from Abydos dating to the Twelfth Dynasty (Piccione 1990b:390). On square fifteen it is a boon, according to the Great Game Text of the New Kingdom (Piccione 1990b:391), whereas on square twenty-seven, it designates a hazard or a pitfall (Kendall 1982:264; Piccione 1990b:244). The other board with an “X” on squares eight, twelve and sixteen and not on every special square as described by Pusch (2007:72–3), has an unknown provenance (Ägyptisches Museum, Bonn, 941).

Other geometric patterns indicated special squares on boards dating to the Eighteenth Dynasty. Every fourth square is filled with a slightly smaller and darker rectangle on the Hatshepsut board at the Louvre (E 913) (May 1992:145, fig. 137b). A checker pattern is preserved on three squares on a Theban board now in the Egyptian Museum (JE 65372) (Hayes 1935:33, fig. 18) as well as on square twelve on the fragmentary faience board from Tomb 499 A'08 at Abydos (World Museum, Liverpool, 55.82.9). Square sixteen, the final square, on game boards 393 and 585 from the tomb of Tutankhamun is precisely square whereas the other fields are, as usual, slightly oblong (Tait 1982:18). Apart from its shape, Tait did not describe any difference in the appearance of this square, so Hoerth's comment about the square of board 585 being darker might just be due to the shade on the photograph (Hoerth 1961:30). The final square on a limestone board dated to the Nineteenth Dynasty has a semi-circle (Pusch 2007:Fig. 8.4) (Egyptian Museum, CG 68007).

The oldest example of the *game of twenty* in Egypt, found in the tomb of Hornakht and already discussed above, illustrates the adoption of the Horus falcon, an Egyptian sacred symbol, to mark at least three positions. During the

New Kingdom, other symbols are attested such as *nh*, “life,” *nfr*, “good,” double *nfr* and *wdjt*. Some of these signs were also used for *senet* as well as the game of *hounds and jackals* to mark special positions. Board 345 (JE 62058) from the tomb of Tutankhamun has sacred symbols incised in three positions that could be read as a short formula: *hh hbw-sd nh-ddw s*, “Millions of sed-festivals, life, eternity and well-being.” (Pusch 2007:72) (see table 4.1). Five boards from the Eighteenth and Nineteenth Dynasties have the titles and names of the board’s owner marked, broken into five groups corresponding to the total of special squares (Pusch 2007:72–3, fig. 8.4).

Markings were painted, and when incised they could be filled with pigment or stone inlays. The special squares of the game 593 from the tomb of Tutankhamun were, according to Carter’s records, “faintly marked upon the ivory in white paint” so Tait (1982:25) suggested “that a pigment contained in this paint has faded, or possibly that a gold leaf laid over it has entirely disappeared.”

During the New Kingdom, boards bore decorations outside the playing surface that differ from the pastoral scenes seen on the earliest boards. Decorations and offering formulae were along the tail, on each panel bordering the central row, as well as on the long and short sides of the box. One theme was “tied to the meaning of the *senet* game as offering ritual” (Piccione 1990b:406). *Senet*-playing scenes are accompanied with food offerings in vignettes of Chapter Seventeen of the Book of the Dead. This episode is often represented on the tomb walls from the Eighteenth and Nineteenth Dynasties. Boxes are adorned with offering formulae as well as acts of gift scenes (food, lotus and wine). Two wooden boxes with unknown provenance, now in Berlin and New York, show a banquet scene on the end opposite the drawer. The owner of the box is seated in front of a table with offerings. On the box from the Ägyptisches Museum und Papyrussammlung in Berlin (10756), Sennefer is accompanied by his wife and they both sniff lotus blossoms (Piccione 1990b:406–7). The box from the Metropolitan Museum of Art (12.182.72) shows Taya and his wife seated opposite her mother who is sniffing a lotus (Piccione 1990b:418–19). Both boxes are dated to the Eighteenth Dynasty. The Berlin box is dated to the reign of Thutmose III or Amenhotep II after the style of the incised scene (Kendall 1982:267) whereas the Metropolitan Museum of Art box is dated to the reign of Thutmose IV or Amenhotep III. The back end of box 585 from the tomb of Tutankhamun shows “the King seated upon a throne with the Queen standing before him offering a lotus flower” (Tait 1982:18, note 4, pls. IX, XXIV). On a

box dated to the Nineteenth Dynasty a playing scene is depicted (Dunn-Vaturi 2012d) (Musée du Louvre, E 2710). The deceased Imenmes is probably playing with an invisible opponent as the person, standing on the other side of the table and offering him a drinking cup, does not seem to engage in the game (see cover image and discussion in Chapter 3). The conic pawns are differentiated from the reel-shaped ones and two knucklebones are also represented.

The back end of game boxes can hold apotropaic motifs such as Bes on the faience box inscribed with the name of Hatshepsut (Deveria 1897:88). The image is not clear so it was identified as a *sema tawy*, a stylized representation of the windpipe flanked by lungs and tied with the lotus and the papyrus, representing the unification of Upper and Lower Egypt (Pusch 1979:207). In fact, the figure of Bes holding snakes has been confirmed by the Louvre curators (see object file E 913). The decoration of the small side on the board of Ptahmay, “overseer of the craftsmen” during the reign of Amenhotep IV, is described as funerary with *nfrw* centered between two *wd^ȝt* eyes, all surmounting *nbw*, “gold” (Sammlung Nassau Altertümer, Wiesbaden, 2308). A fragment of a limestone board from Deir el-Medina shows, on one of the long sides, a kneeling man probably with his hands in front of his mouth as a blessing gesture, but most of the object is missing so the scene cannot be fully interpreted (Pusch 1979:297–8, pl. 98). Other boxes have repeated motifs on the long sides. The ivory plaques of box 593 from the tomb of Tutankhamun are carved and stained with a floral pattern (Tait 1982:20, pls. X, XI).

Hieroglyphic offering formulae are attested on about ten game boxes in the New Kingdom whereas the previous examples did not have traces of such inscription. The board from the tomb of Hornakht may have been inscribed but the inscription was not preserved. Maspero (1871:78) wrote that this object bore the name of “Tūaū”/Thuyu (Winlock 1924:258, note 3) so it is repeated by Piccione (1990b:395) but no indication of the board being inscribed with its owner’s name appears in the archaeological report (Mariette 1889:17). Plain panels of game boxes may have originally held painted inscriptions or motifs.

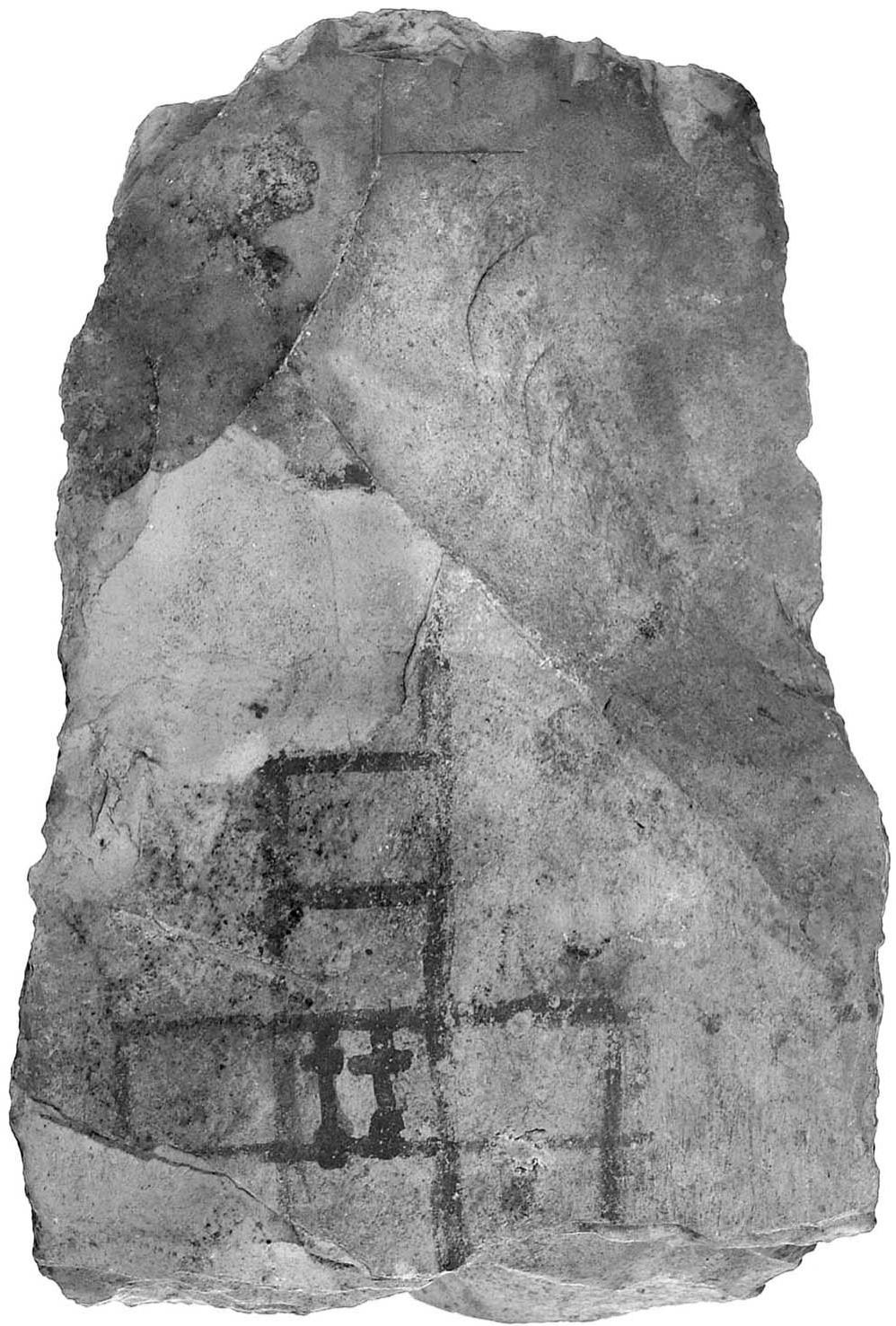
Archaeological contexts

Game of twenty boards were mostly found in funerary contexts. Smith’s studies of Theban funerary assemblages point to the presence of double-sided game boxes in middle-to high-status tombs (Smith 1992:204, 218–19). The tomb of Tutankhamun housed at least four double-sided game boards, including one

prestigious ebony and ivory example on a sledge-stand identical to those described in the tomb of Sennefer and Rekhmire (Piccione 1990b:412) as well as “pocket-size” editions (Tait 1982; Reeves 1995:160–2) (Egyptian Museum, JE 62058-62061).

The range of appearances, from ornate boxes made of exotic material to graffiti on slabs, show that the game was popular with Egyptians of different social classes. To date only one example in a domestic context is known. It is a slab of limestone probably hastily engraved with the game by an inhabitant of the village of Deir el-Medina, home to the craftsmen who decorated the tombs in the nearby Valley of the Kings (Dunn-Vaturi 2012a). Other ostraca were found at Deir el-Medina but they are fragmentary and no information about their findspot is known to the authors. One ostracon bears the *game of twenty* painted in red, its eighth square marked with double *nfr* (Vandier D’Abbadie 1959:231, pl. CLIX) (fig. 4.6). Originally described as an architectural plan, the configuration of the game can be recognized despite its fragmentary state of preservation. It is now in the collection of the Institut Français d’Archéologie Orientale, Cairo (inv. 4116). Another grid for the *game of twenty* (of which only the last seven squares of the “tail” remain) is visible on a delicately painted ostracon depicting a nude dancer with a long flute that is stylistically dated to the Nineteenth Dynasty. It was found by the German expedition in 1913 and is now in the Ägyptisches Museum und Papyrussammlung in Berlin (21445) (Brunner-Traut 1956:63–4, no. 59, pl. XXIII).

The faience *game of twenty* from the private apartments in the palace of Rameses II at el-Qantir was part of a vast program of glazed decoration (Hayes 1959:338; Pusch 1979:303) (Metropolitan Museum of Art, 35.1.140). The board, which is very fragmentary—only one complete and three broken squares are preserved—may have been for a game table. It is inscribed with the name of Rameses II on the side and, on the top surface, on a panel bordering the middle row.



0 5 | 4116

A scale bar at the bottom left indicates a length of 5 units, with a mark at 0 and another at 5. To the right of the scale, the number "4116" is written vertically.

Figure 4.6 Ostracon from Deir el-Medina. Institut Français d'Archéologie Orientale, Cairo, inv. 4116.

Rules for the game of twenty

Unlike the descriptions of *senet* there is not much information as to the rules of the *game of twenty* in Egyptian sources. It is generally assumed that the two players started on each of the opposite sides of the board (Kendall 1982:265; Finkel 2007:27) (see fig. 4.3). Then they moved their pieces down the central aisle until the final field and then off the board to win the game. The new version, the “head-and-tail” type, with a single path all the way to the end increased the difficulty of the game as a player about to win could be overtaken at the last minute (Finkel 2007:18). Special squares, signaled by a rosette, another symbol or inscriptions, are marked every fourth square. These squares may have functioned as lucky fields, so that a playing piece was safe from being captured or that the player was given another throw.

A late Babylonian cuneiform tablet dating to 177–176 BCE provides significant detail on how the game proceeds (Finkel 2007) (British Museum, 33333B). The game is called “a pack of dogs,” whereas the pieces, five on each side, bear the names of birds. They are moved according to the throw of two astragali, one belonging to a sheep and another from an ox, and special results are needed to enter each of the bird-counters into the game. The obverse of the tablet is inscribed with a zodiacal divinatory diagram, and one would be tempted to interpret the five birds of the game and its central row of twelve squares in an astrological context. The foretelling aspect of the *game of twenty* is corroborated by Late Bronze Age liver-shaped boards from the Levant, which refers to hepatoscopy or divination by the liver of an animal or bird (Meyer 1982; Finkel 2007:25–6). Finally, a link has been proposed between the first Book of the prophet Nahum (c. 615 BCE), and the *game of twenty* (Guillaume 2009). Guillaume’s concordance of the Psalm verses of Nahum 1, interpreted as a set of rules, to the squares of the board, is based on alphabetic acrostics. The use of sacred texts for biblical divination supports the possible connection established between the writings of Nahum and the *game of twenty*, but with the current state of evidence only speculations about the practice of this particular prophetic scripture remain.

“Uniting of the twenty squares” or *thirty-one*

Most authors refer to the existence of the *game of twenty* in Egypt up to the Twentieth Dynasty because they consider that the game was replaced by a

variant of the *game of twenty* with “folded symmetry” (Decker 1992:131). Two blocks of 3×4 squares are linked by a bridge of seven squares. This new version, with thirty-one squares and every fourth square marked by a rosette, is known to us in Egypt through three examples dating to the Twentieth and the Twenty-First Dynasties: one drawing annotated with the inscription “Uniting of the twenty squares” upon the Turin Papyrus (fig. 4.7) and two boards with *senet* on the opposite side (Pusch 1977:199–212) (Egyptian Museum, JE 88006; British Museum, EA 38429). A similar layout was seen by E.J. Banks on a baked clay board in a shop in Baghdad in 1904–15 (Banks 1912:355–6). Thus, it has been suggested that this game with rosettes, a typical motif for special squares on Near Eastern game boards, could have a Babylonian origin (Kendall 1982:265). Unfortunately, we lack information about the provenance and date of the Iraqi board to relate it to the Egyptian examples.

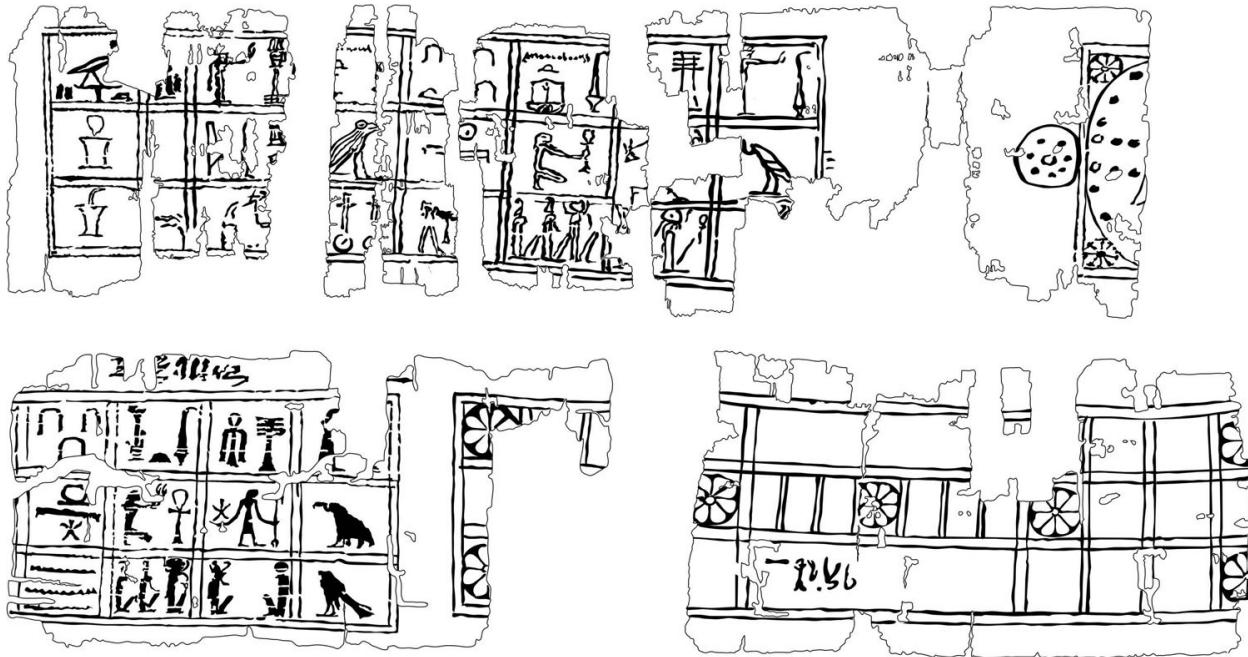


Figure 4.7 Drawing of the Turin Papyrus with four games: Two times *senet*, *hounds and jackals* and *thirty-one*, c. 70×13 cm. Museo Egizio di Torino, 1775. Drawing after Decker and Herb (1994:pl. CCCLXXXV).

The track may have been modified in the late New Kingdom to include thirty-one squares for a religious meaning (Pusch 2007:70). The Great Game Text refers to the deceased’s desire to be admitted into the divine pantheon as the thirty-first god: “[that they might permit] me to enter the Council Chamber of the Thirty, [so that I may become a god, as the thirty-first]” (Piccione

1990b:123). For this wish to be fulfilled, one may have had to win this new version of the game.

The Levant and Cyprus: Games as heirlooms

Among the great variety of game boards that existed in the Levant during the Bronze Age and the Iron Age (Macalister 1912:299, pl. CCI), the *game of twenty* is the best represented. A tradition of game boards with ivory or bone inlays existed in the Levant from the Middle Bronze Age until the Iron Age. Despite the fragmentary state of preservation of the earliest examples, dating to the Middle Bronze Age II and III (c. 1750–1640/1540 BCE), it is more likely that they were for the *game of twenty* and that they may have inspired the Egyptian production. An ivory fragment of 3×4 squares, which could correspond to the block of twelve squares, was found with two kinds of playing pieces—one with rounded tops, the other with pointed tops—and a teetotum die at Tell el-Ajjul in Tomb 364 dated to the Fifteenth Dynasty (Petrie 1933:Pl. 28, 25–9). At Tell Beit Mirsim, twenty ivory squares originally from a wooden game board were retrieved in the Palace Stratum D, dated by the excavator to the Middle Bronze Age III, late seventeenth to early sixteenth century BCE (Albright 1938:49, pl. 37a). Among the square inlays was only one field marked with “X”. Albright estimated that the board measured at least 26 cm long. Thin ivory strips were inserted between the rows of squares and wider inlays may have been set on both sides of the middle row of squares. Ten faience playing pieces—five cones and five three-cornered pyramids—and an ivory teetotum were excavated in the adjacent room (Albright 1938:48, pl. 21, b).

The double-sided ivory game box from Thebes decorated in the International Style finds parallels in the Levant and Cyprus in the Late Bronze Age (Finkel 2008:152–3). Such artifacts were important components of the social practices and exchanges taking place in the Eastern Mediterranean in the second millennium BCE. Moreover, game boxes (e.g., Kamid el-Loz, Enkomi) and containers (e.g., Hazor, Morphou *Toumba tou Skourou*) with incised inlays, produced sometime in the sixteenth to early fifteenth century BCE, were passed on from one generation to the next resulting mainly in the discovery of such boxes in a much later context dating to the thirteenth to twelfth century BCE (Ben-Tor 2009:52–4).

Cypriot examples of the *game of twenty* represent the westernmost evidence of this game (Crist et. al. in press). The practice of the *game of twenty* in Cyprus

seems restricted to Protohistoric Bronze Age (c. 1700–1050 BCE) contexts and is therefore connected to the exchanges between elites, whereas it remains vivid during the early first millennium BCE in the Levant (Bieliński & Taracha 1992:50, fig. 7). There are three examples of the *game of twenty* etched on a limestone block from the cemetery of Kouklia *Skales* (Karageorghis 1983:122), which may demonstrate a brief reintroduction during the Cypro-Geometric period (c. 1050–750 BCE). Crete is sometimes suggested as a possible destination for this game (Finkel 2007:17) but no firm archaeological evidence from a Minoan context is known to the authors. This statement is made by analogy with the unique so-called *royal draughtboard* discovered by Evans at Knossos and compared to the boards from the Royal Cemetery of Ur (Hillbom 2011:255–8) (Archaeological Museum of Heraklion, YE 46). Yet, the layout of the cells on the Knossos game board is different from the *game of twenty* so comparisons can only remain general.

In Egypt and the Levant, the *game of twenty* accompanied *senet* on double-sided boxes and stone slabs as described above (see fig. 3.9) from the second to the early first millennium BCE. Physical associations of the *game of twenty* to other race games are not attested in Egypt. In contrast, during the second millennium BCE in the Near East, it has been linked to the game of *hounds and jackals*, a discussion of which follows in Chapter 5, as illustrated by the prestigious boards from Megiddo and Susa.

The Game of Hounds and Jackals: From Thebes to Susa



Figure 5.1 Distribution of the game of *hounds and jackals* in Egypt and the Near East during the second and first millennia BCE.

The archaeological evidence for the game of *hounds and jackals* points to its origin in Egypt at the turn of the second millennium BCE. The oldest material for this game was found in the necropolis of the capital Thebes and at provincial sites in the region of the Fayum (Sedment, Lahun and Lisht). *Hounds and*

jackals is almost exclusively attested during the Middle Kingdom within Egypt, and later boards are dated stylistically but lack solid archaeological provenance. Military campaigns and trade relations facilitated the game's spread to Nubia and to central Anatolia as early as the beginning of the second millennium BCE. The game was popular throughout the Near East, including the Iranian plateau, until the mid-first millennium BCE (fig. 5.1). There are about seventy known examples of boards. Seven are from Egypt, three from Nubia, eight from Anatolia, thirty from Mesopotamia, eight from Iran, ten from the Levant and two from Syria (de Voogt *et al.* 2013:1718–19, fig. 3, table 2).

The ancient name of the game is not known but many modern descriptive names have proliferated such as *hounds contra jackals* or *palm tree game*—after a unique set from Thebes—, *pegs and holes* and *shield game* (Parlett 1999:68–9). Other designations derive from the track of peg holes that characterizes the game. Petrie (1927:55) was the first to use the term *game of fifty-eight holes*, which refers to the two parallel rows of twenty-nine holes. The field is completed at the end by a thirtieth hole, larger or at least specially marked. This led to the appellation *game of thirty points* (Drioton 1940:186).

Boards for *hounds and jackals*

Early examples were found in funerary and domestic contexts dating from the First Intermediate Period and the Middle Kingdom. The shape of these boards is compared to an axe-blade (Carnarvon & Carter 1912:56) or a shield (Drioton 1940:188, fig. 4). The boards measure from 6.2 to 19.7 cm long, 3.7 to 14.3 cm wide, and the tables are between 5 and 8.4 cm high. They follow the same arrangement but two boards are adorned with additional holes, interpreted as starting posts. Six pairs of special holes plus the goal are made distinct by their larger size and/or a mark. A *nfr* sign, meaning “good” or “beautiful,” marks holes fifteen and twenty-five whereas lines connect holes six and twenty and holes eight and ten.

The game found in 1921 at Sedment in a disturbed shaft tomb, Grave 2122, has been assigned different dates from the Ninth to Eleventh Dynasty (Petrie & Brunton 1924:7–8, pls. XXI,14, XXII, 8–9; Petrie 1928:18) to the early (Petrie Collection Online Catalogue) or late Middle Kingdom (Miniaci & Quirke 2009:349). The board is resting on three legs (Petrie Museum, UC31348). A square storage space was carved on the reverse and closed by a door fastened by a bolt. The loops, bolt and hinge pins were made of horn.

A board found at Deir el-Bahari, Thebes, in the cemetery dated to the Eleventh Dynasty is considered the oldest known (Winlock 1928:10) (Metropolitan Museum of Art, 26.3.154). It is a small wooden table resting on four animal legs with only one original leg left. The drawer is missing but one metal loop remains. Its small size could argue for a votive function, but Winlock, on the contrary, thought that the patch in the outer right row indicates that the holes were worn out because it was played often (Winlock 1928:10). The repair resulted in the loss of a hole between numbers ten and fifteen that “was overlooked by Drioton who included the missing hole in his drawing” (Hoerth 1961:61, note 4). The engraved line at the bottom of the board may imitate the cutout visible on the Sedment board.

In 1910, a unique game set was found in the tomb of Reniseneb (CC 25) at el-Asasif, Thebes (Carnarvon & Carter 1912:56, pl. L) (fig. 5.2). The tomb is dated to the Twelfth Dynasty after a toilet box with the name of Amenemhat IV that was found there. The board of sycamore wood overlaid with ivory and ebony rests on four bull legs (Metropolitan Museum of Art, 26.7.1287a–k). The course of play took place around an incised palm tree. The track has no starting holes, in contrast to the two previous examples. The final position is surrounded by the hieroglyph *šn*, commonly interpreted as meaning “eternity.” A bolted drawer was built-in for storing the playing pieces. This game set has become iconic not only due to its elegance, but also because it is the only example that retains all of its pegs, five per side. The pegs are described below.

Despite the small number of examples known to date, the importance of the game of *hounds and jackals* as a burial gift is evident. The game table represented in the object frieze on the coffin of It from the Twelfth Dynasty could be a game of *hounds and jackals* (Lieblein 1873:55, pl. 11) (State Hermitage Museum, 769). The fragmentary inscription accompanying the object, *hntš.f m^cb³ prw nj sn.t* “He delights in the senet (?) game board of the thirty fields” (Pusch 1979:55–6), could refer to the thirty holes of each track rather than the thirty squares for *senet*. Moreover, rather than *senet*, the appearance of the game leans more in favor of *hounds and jackals*. The game is resting on lion feet turned inwards and eight dots are drawn on the upper surface of the board. *Senet* games on animal feet are represented in playing scenes but no archaeological evidence is known prior to the game from the tomb of Tutankhamun, whereas all the games of *hounds and jackals* discovered in a Middle Kingdom funerary context are game tables. Playing pieces represented with *senet* are usually dome shaped or conical, so the dots on the game in St.

Petersburg could correspond to the track of holes.



Figure 5.2 Game of *hounds and jackals* from Thebes, board: 6.8 × 10.1 × 15.6 cm. The Metropolitan Museum of Art, Purchase, Edward S. Harkness Gift, 1926, 26.7.1287a–k. Image © The Metropolitan Museum of Art.

Among the finds illustrative of daily life during the Middle Kingdom in the town of Lahun is a rough clay board measuring almost 20 cm long and dating to the Twelfth Dynasty (Petrie 1890:30, pl. 16) (Petrie Museum, UC16722). Also, a wooden board with a drawer is stylistically assigned to the same period because its track is similar to the earliest examples (Hoerth 1961:63). It is now in the Egyptian Museum (CG 68128) but its provenance is unknown. The *nfr* signs indicated next to the twenty-fifth holes (Petrie & Brunton 1924:Pl. XXII, 12) are missing on Drioton's drawing (Drioton 1940:Fig. 7). Drioton may have omitted this detail as he worked from a photograph of the board because it was not

available for study at the time of his research (Hoerth 1961:63, note 2). A pair of eyes incised above the central rows may have indicated a starting point, whereas a “butterfly” motif is located at the bottom of the track and pierced. Drioton (1940:190–1) suggested a later date for this example because it does not rest on legs and he compares it therefore to the *senet* boxes of the New Kingdom.

After the Middle Kingdom, Egyptian examples are scanty and chronologically disparate. The increasing importance of *senet* in funerary rituals during the New Kingdom may explain this phenomenon. The older practice of *senet* would resume during the early New Kingdom (Miniaci & Quirke 2009:361, note 127). The late examples of *hounds and jackals* in Egypt belong to a category of ellipsoidal boards, described as violin/fiddle-shaped, with a round appendage added at the top of the board. It has been suggested that this appendix, referred to as “the labyrinth” by Drioton (1940:193), represents the goal. The additional holes, varying from six to eight around a centrally marked hole, would receive the winning pieces at the end of the game. The connecting lines and the hieroglyphs no longer need to mark the special positions.

A wooden plank, cut in the shape of a violin, was brought to the Egyptian Museum by Eugène Grebaut from his trip to Upper Egypt in 1888 (CG 68127) (Drioton 1940:193, fig. 9) (fig. 5.3). It resulted from a purchase (Miniaci & Quirke 2009:350), not from the excavations at Dra Abu el-Naga (DuQuesne 2002). The special positions are surrounded by incised circles. The numbering of the holes is not evident because there is no distinction or space between the central rows and the finishing holes. We may deduce the numbering from the tenth holes that are marked at the bottom of the middle rows. An incision in the center of the board frames holes three to seven. The fourth holes are placed side by side with the twentieth holes. This is atypical as it is the sixth hole that is usually connected to the twentieth. This board is morphologically dated to the New Kingdom by comparing it to similar excavated examples outside Egypt.

The next datable evidence of *hounds and jackals* in Egypt belongs to the Twentieth or Twenty-First Dynasty. It appears as a fragmentary drawing on the Turin Papyrus, also illustrated by two detailed *senet* boards and a *thirty-one* (Decker & Herb 1994:686–7, pl. CCCLXXXV) (see fig. 4.7). The presence of the round appendix—seven plain holes around a special hole—indicates that the board is of the violin-shaped type. The ellipsoidal board is inscribed in a rectangular frame. Rosettes placed in the corner of the frame may indicate an influence from the Near Eastern boards, whose special positions are usually marked by rosettes. The German scholar Seyffarth examined the papyrus in the

Turin museum in the early nineteenth century, during a time in which knowledge concerning Egyptian games was nascent, so he produced two fanciful circular reconstructions with a celestial interpretation of the dots (Seyffarth 1833:Pl. III).



Figure 5.3 Violin-shaped game board, 17.5 × 9.5 cm. Egyptian Museum, Cairo, CG 68127. Photograph by James VanRensselaer.

When Petrie found the board in Lahun in the late nineteenth century, he wrote, “no such game is known in Egypt as yet” (Petrie 1890:30, pl. 16). In fact, a unique piece was already in the Louvre collection since 1827 but was not identified as a game until Petrie and Brunton (1924:7, pl. XXII, 25) published it with other games a century later (fig. 5.4). This object was part of the vast collection of the British consul Henry Salt (no. 832) purchased by Jean-François Champollion for the Louvre (N 3043). No further information about its provenance is known. It had been catalogued in the inventory as a faience frog-shaped writing case, the larger holes being interpreted as ink-cups and the smaller holes as holders for the brushes (Guichard 2013:228). This game board

stands out from the others as much for its large size (21.5 cm × 18 cm) as for its zoomorphic shape, that of a hippopotamus not a frog. Drioton (1940:198) dated this object to the Twenty-Second Dynasty based on the style of the rosette motif in the border. This dating has been revised to a later date (Pierrat-Bonnefois 1998:219). The turquoise faience (fine and matte) and the colorful glass decoration indicate a date during the Late Period, between the Twenty-Seventh and Thirtieth Dynasties, around the sixth to fourth century BCE. During the Twenty-Seventh Dynasty, Egypt was under Persian rule. This exquisite piece may have been manufactured for the elite close to the Persian satrap who came from a region where this type of game was still played after it had declined in Egypt. The arrangement of identically-sized holes on the back of the animal follows the elliptic track of the violin-shaped boards. Holes six and twenty, which are connected by lines on the early examples, are here placed side by side on the same horizontal bar painted in red. Additional holes on the head of the animal could correspond to the labyrinth. The open mouth of the hippopotamus is broken so that two extra holes can be imagined to correspond to the nostrils.

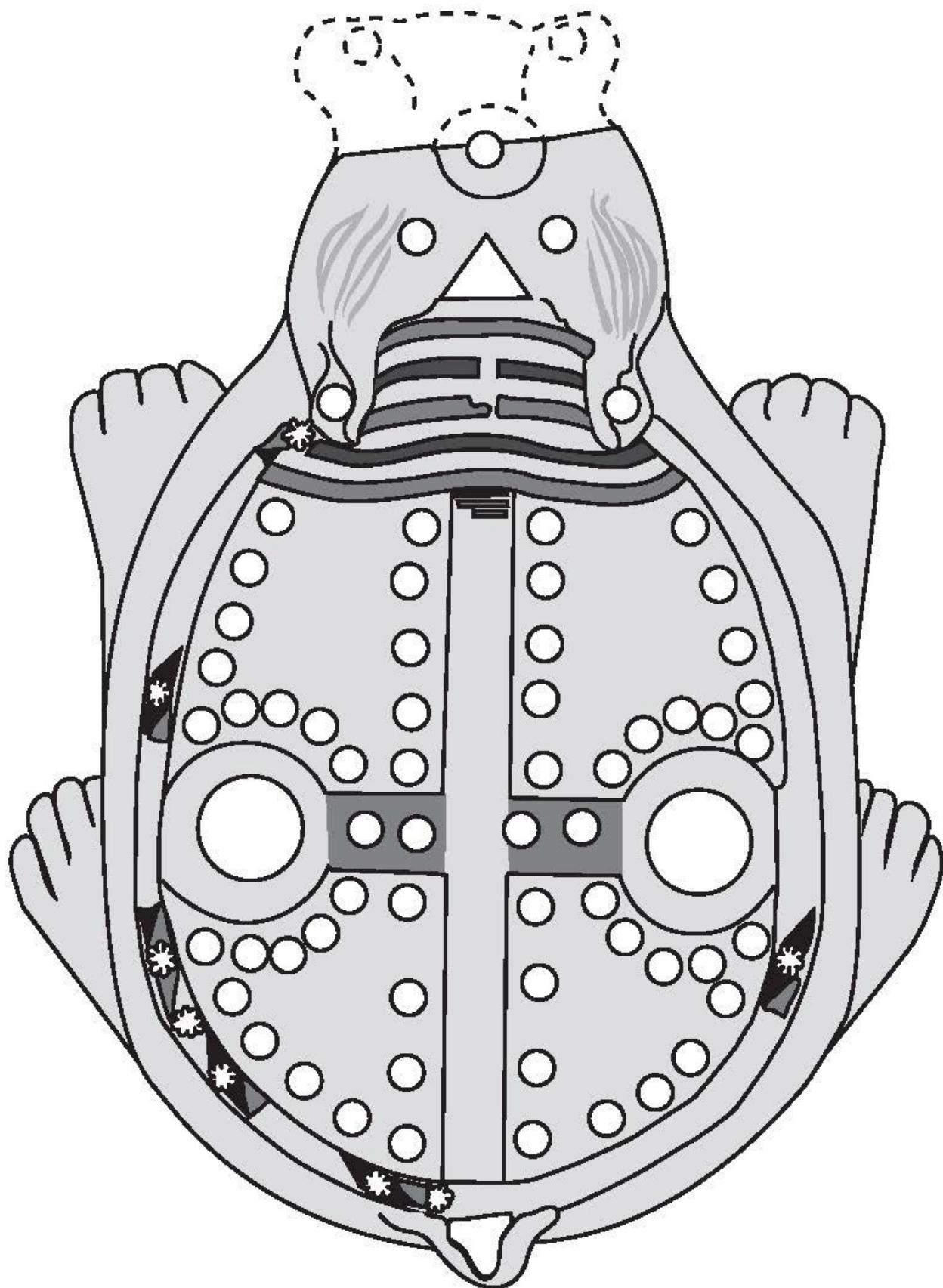


Figure 5.4 Drawing of hippopotamus-shaped game board based on an illustration by Christian Décamps and Nathalie Couton-Perche, Musée du Louvre, N 3043.

Gaming pegs

The ivory board from Thebes is the only extant set found with its gaming pieces (fig. 5.2). Many pegs, being made of wood, have perished. Others have probably been ignored or erroneously catalogued as hairpins. The opposing pieces in the ivory sets from Thebes were differentiated by their decoration and their size. Five pegs end with the head of a lop-eared hound (6 cm to 6.8 cm in height) and five taller pegs end with the head of a jackal with pricked ears (7 cm to 8.5 cm in height). Residues of red pigment indicate that color might have contributed to their distinction. Thanks to the Theban assemblage we know what the pieces look like and isolated finds could be identified rightly as gaming pieces when boards are missing. Some pegs attributed to later periods are evidence of the continuity of the game in Egypt, which is questionable after the Middle Kingdom (Hayes 1959:38, 199–200; Hoerth 2007:65). The presence of pegs with a jackal head as well as pegs with disk-shaped heads or plain knobs in the North Cemetery at Lisht points to the existence of the game at this site (Metropolitan Museum of Art, 22.1.721, 15.3.946–50). Such wooden and ivory pins are known in other museum collections (May 1992:156–9, figs. 153, 155) (Musée du Louvre, N4265 A; British Museum, EA 13594; Museo Egizio di Torino, cat. 6934). The canine animals described as hounds and jackals are sometimes referred as dogs and foxes, or as two kinds of dogs. During the Middle Kingdom, dogs are portrayed frequently and with a great variety, notably in the Beni Hasan tombs. The creature with upstanding, pointed ears is “frequently seen as the sacred animal of the god Anubis” (Hayes 1959:250). In any case, the choice of fast-running animals for playing pieces is appropriate for a race game.

A group of six ivory pegs, five with the head of a hound and one with a head of a jackal (between 5.4 and 7.9 cm long), was discovered in the tomb of Neferhotep at Dra Abu el-Naga (fig. 5.5). This burial previously assigned to the Sixteenth or Seventeenth Dynasty has been re-examined and dated to the mid-Thirteenth Dynasty (Miniaci & Quirke 2009:357). The sticks were originally described as hairpins and associated with a wooden turtle-shaped “pincushion” having four rows of five and one row of three holes, found in the same tomb (Bénédite 1911:19, pl. X) (Egyptian Museum, JE 6146–6152, CG 44414). The function of the pegs as gaming pieces was later established by Bénédite but the

identification of the turtle as a gaming board has been questioned due to the abnormal number and configuration of the holes (Fischer 1968:33–4). The turtle, measuring only 5.5 cm long, is considered, rather, as a holder for gaming pieces (DuQuesne 2002; Miniaci & Quirke 2009:349–50). No parallel for a peg stand is known so another interpretation is conceivable. Amulets of the game of *fifty-eight holes* with an irrelevant number of holes bored into them were deposited in tombs in Iran (Dunn-Vaturi 2012f:22–3). The turtle could be a miniature board imitating the game to function as simulacra for the next world. Its presence in the tomb of Neferhotep may be related to a birth theme like other burial goods deposited there (Miniaci & Quirke 2009:361).

The Drovetti collection in Turin holds bronze pieces with jackal or sparrow-hawk heads and pointed ends (Museo Egizio di Torino, cat. 6327, 6328). The Turin sticks were included in the *hounds and jackals* section in the exhibition *Jouer dans l'Antiquité* held in Marseille but they measure 32 cm high so they would be rather tall for this game (May 1992:156, fig. 154). They may have been used as stakes for the game known today as *horseshoes* (Donadoni Roveri 1988:247, fig. 350).

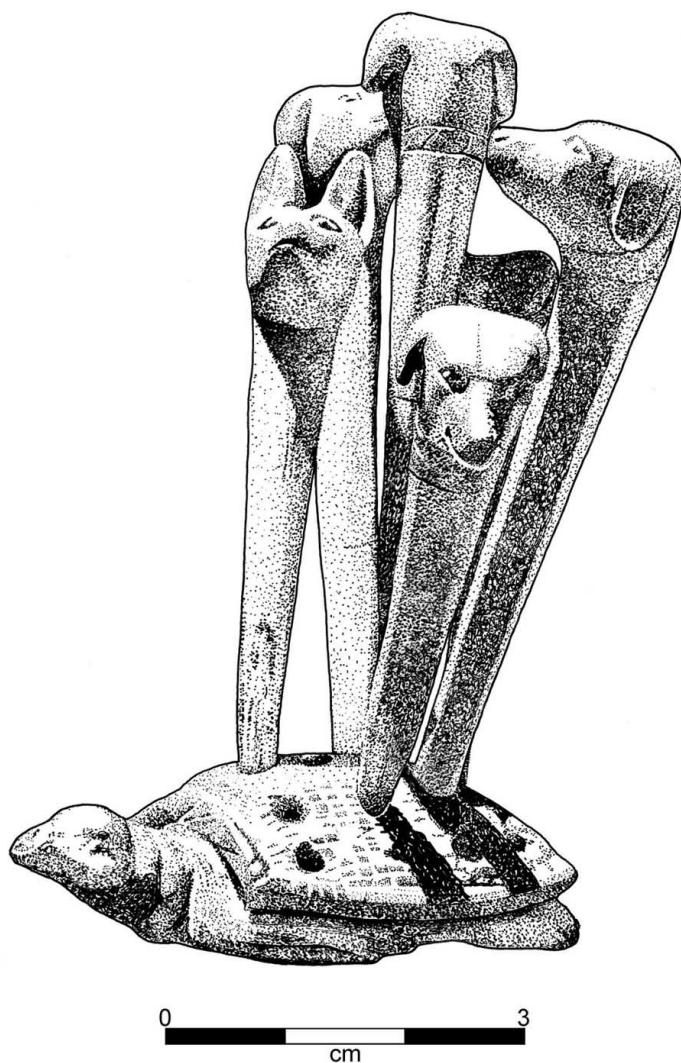


Figure 5.5 Turtle stand or simulacra from Dra Abu el-Naga. Egyptian Museum, Cairo, CG 44414. Drawing by Paul Whelan.

Beni Hasan playing scenes

Mehen and *senet* playing scenes are extensively described in ancient Egypt, whereas the depiction of *hounds and jackals* is uncertain—apart from the drawing on the Turin Papyrus—and remains absent from the game literature. In fact, it may have been associated with the double board games scenes at Beni Hasan discussed in Chapter 4, relative to the possible representation of the *game of twenty* in the tombs of the nomarch Baqet III (Tomb 15) and his son Khety (Tomb 17). The scenes painted side by side in both tombs but in a different order are indicated here with letters A, B and C (Newberry 1893:Pls. 7, 13) (see fig. 4.4). Scene C, on the left in Tomb 15 and on the right in Tomb 17, could

represent the same or a similar game. These scenes, which are situated in the lower part of the decorated walls, are fragmentary. They have been reconstructed differently by Rosellini (1834:Pl. CIII,C), Wilkinson (1853:194, fig. 211, right) and Newberry (1893:Pls. 7, 13), because by the time Newberry recorded these tombs in 1890, the paintings had been damaged.

Rosellini, who visited the site in 1828, published a drawing without indicating its provenance that is probably more complete than Newberry's version of Tomb 17 (fig. 5.6). The drawing shows two players engaged around a large bowl sitting on the floor with a zoomorphic table above. The table imitates a long-snouted animal unless the orientation of the legs implies that the appendix represents the tail. The five sticks mounted on the table are missing on Newberry's plate (see fig. 4.4, scene C). This scene could be a representation of *hounds and jackals*, which would perfectly fit a Middle Kingdom context of playing scenes. Two examples of game tables with animal feet for the game of *hounds and jackals* from Thebes were described above, whereas the number of sticks could refer to one set of playing pegs. The bowl may have been used by the players in which to throw the equivalent of dice and can be compared to the cut boulders used as a rolling device discovered at Megiddo in the southern Levant (Guillaume 2013:1111–12).

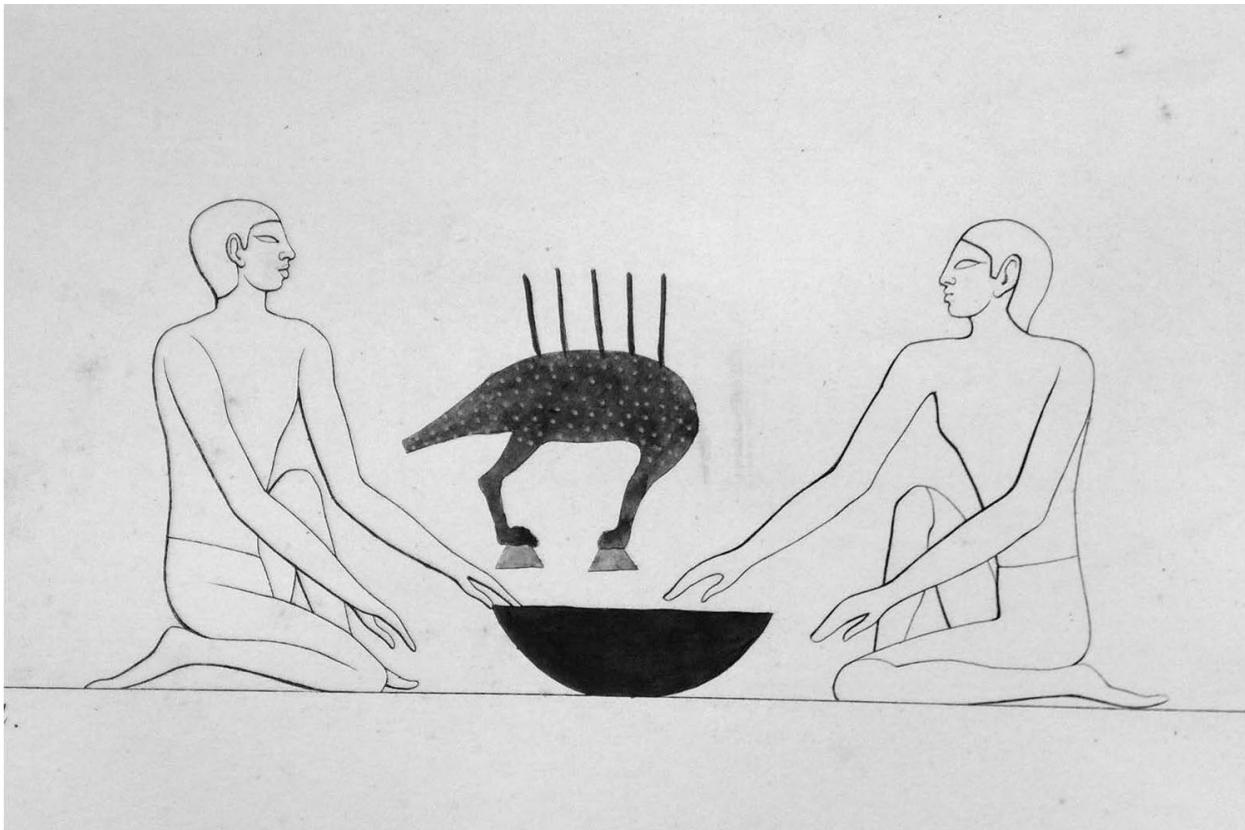


Figure 5.6 Playing scene in Beni Hasan, probably from Tomb 17. Drawing reproduced from Rosellini (1834:Pl. CIII, C).

Scene C in Tomb 15 shows four sticks mounted on a base—the lower part of this element is missing—between two players. The caption above is rendered *imby*. Decker and Herb (1994:631, pl. CCCLII, P.8.3) include this scene in their group of guessing/counting games whereas Vandier (1964:511–12, fig. 280, right) records it in an undetermined category. A similar scene with two players, a bowl and four sticks on some sort of zoomorphic base—resembling a hippopotamus with an open mouth—has been published by Wilkinson with games of guessing/counting (Wilkinson 1853:194, fig. 211, right). No indication about the tomb is given but Wilkinson sketched this scene next to a type B scene so it could well correspond to the scenes in Tomb 15 (MS. Wilkinson dep. a. 21, fol. 292, Bodleian Library, Oxford). The pegs in Wilkinson’s drawing have flat horizontal heads possibly imitating the jackal’s long muzzle. The caption is rendered *i³bi* with a possible playing piece determinative. Elements from different scenes may have been mixed in the reconstruction. Future campaigns *in situ* might help understand what was originally described.

The game outside of Egypt

The military, diplomatic and commercial relations that connected Egypt and its neighbors facilitated the spread of board games. The game of *hounds and jackals* crossed more borders than any other Egyptian game. It traveled to Nubia and had a wide diffusion in Western Asia as far as Anatolia northward, and Iran eastward.

In the Middle Kingdom, Lower Nubia was conquered by the Egyptians, who built a chain of fortresses along the Nile to guard their frontiers. During the Twelfth Dynasty, under Senusret I a huge fortress was built at Buhen and restored by Senusret III. Buhen was not only a military stronghold, but also a trading and dispatch post of economic importance. Egyptian soldiers lived and played here. Clay fragments of gaming boards are attested from Buhen but unfortunately not from stratigraphically sealed contexts (Emery 1979:145–6). They were found in the debris of the east inner ramparts, and at the south inner ditch between Towers 1 and 2. Middle Kingdom and New Kingdom pottery and objects were found in the debris from the town site so it is difficult to ascertain a date other than stylistically. One fragment (932) is similar to the rough clay version from Lahun so it probably dates to the Middle Kingdom. Two other fragments (I9 and J9), which may belong to the same board, probably date to the New Kingdom as they recall the violin-shaped board with an appendix (Petrie Museum, UC21182 and Sudan National Museum, 14140).

No playing pieces were recorded at Buhen but finds from Serra East, Amara West and el-Kurru give an idea of the pieces used in Nubia. An undated bone peg carved with a dog or jackal head was retrieved at Serra East (Oriental Institute Museum, E 19794). Recent British Museum excavations in the cemetery of the New Kingdom town of Amara West brought to light twelve ivory sticks in grave 244 (F9835) (Vandenbeusch & Salvador 2014). The sticks are of two distinct lengths, i.e., seven shorter (about 11 cm) and five taller ones (about 14 cm). The tops of the sticks are decorated with red painted patterns. Six of them have a horizontal band and a vertical band while four of them have a zigzag motif. Finally, the continuity of the game in Nubia during the first millennium BCE is deduced from an ivory set of opposing pegs from the site of el-Kurru. Three pegs carved with the heads of hounds and three with the heads of horses were discovered in Tomb Ku.72 dated to about 698–690 BCE (Dunham 1950:81, fig. 28f; 102, fig. 35h, pls. 35D–E, 36D) (Museum of Fine Arts, Boston, 24.1037a–f).

Although examples with additional posts have a total of holes exceeding sixty, the appellation *fifty-eight holes* is preferred when talking about the Near East because no pegs with hounds and jackals were found at Near Eastern sites. The game was transmitted to the Near East during the beginning of the second millennium BCE. It is attested during the nineteenth to eighteenth centuries BCE in Anatolia. At this time the Old Assyrian merchant colonies were active and traders from the northern Mesopotamian city of Ashur were established at a number of central Anatolian cities. It suggests that Anatolians learned this game from the Assyrian merchants responsible for the introduction of writing and cylinder-seals in Anatolia. Central Anatolia was part of a vast trading network that took place in the Eastern Mediterranean in the second millennium BCE, so the game also could have been passed to that region without the Mesopotamians playing a role. A trade route connected Cappadocia and Egypt overland and, when maritime connections were favorable, by sea via ports of Ugarit, Tell Sukas, Byblos, Ashkelon and ancient Gaza, among others (Collon 2008:99). The Middle Bronze Age is a time during which, not only at Byblos but also further north at Syrian Ebla, we find an imposing Egyptian artistic presence but no evidence of the game is attested at these sites. Only one clay board, said to be from Tyre in Lebanon, is attributed to this period, dating to about 2000–1500 BCE (Museum of Fine Arts, Boston, 1996.62). Middle Kingdom imports and examples of Egyptian influence are known from sites in central Anatolia. The growth of the Anatolian corpus since the 1960s raises the question of the dispersal of the game. Seven examples of games of *fifty-eight holes* are recorded from this region. Two complete boards were found in merchant houses at Kültepe, ancient Kanesh, four fragmentary gaming boards—one in Egyptian blue—in a palace at Acemhoyük as well as one fragment at Karahoyük (Dunn-Vaturi 2012e). The oldest example, from level II (c. 1919–1840 BCE) at ancient Kanesh, shows linkages between unusual holes whereas the special holes on the other boards, dated to the eighteenth century BCE, are distinguished by their size and/or inlays. No evidence was found in the home city Ashur where the levels corresponding to the Assyrian colonies in Cappadocia were barely brought to light. In the end, the Mesopotamians may not be responsible for the diffusion of the game in Anatolia.

Games of *fifty-eight holes* have been circulating in the rest of the Near East during the beginning of second millennium BCE but the dating of early examples from Mesopotamia and Iran is difficult. Boards attributed to this period lack clear archaeological contexts. Further discoveries may help to better

understand how these games spread in the Near East. Five fragmentary stone gaming boards and astragals have been discovered in the deposit of the temple of Inshushinak, a group of objects found in the temple precinct of the city god of Susa (fig. 5.7). This deposit, buried at the end of the Middle Elamite period, in the late twelfth century BCE, gathers objects from different periods. The boards have been assigned to the early second millennium BCE after an unprovenanced game with a carved scene stylistically attributed to the Old Babylonian period, around the mid-nineteenth century BCE (Ellis & Buchanan 1966:199) (Yale Babylonian collection, YBC 2439). One of the Susa boards, Sb 2911, has preserved a contrasting inter-hole link that physically shows that pieces could cross from side to side, involving interaction between the players. This element is also repeated on later Iranian boards dating to the beginning of the Iron Age, at the turn of the second to the first millennium BCE (Musée du Louvre, AO 19438; British Museum, 1991,0720.1 and 2003,1201.1).

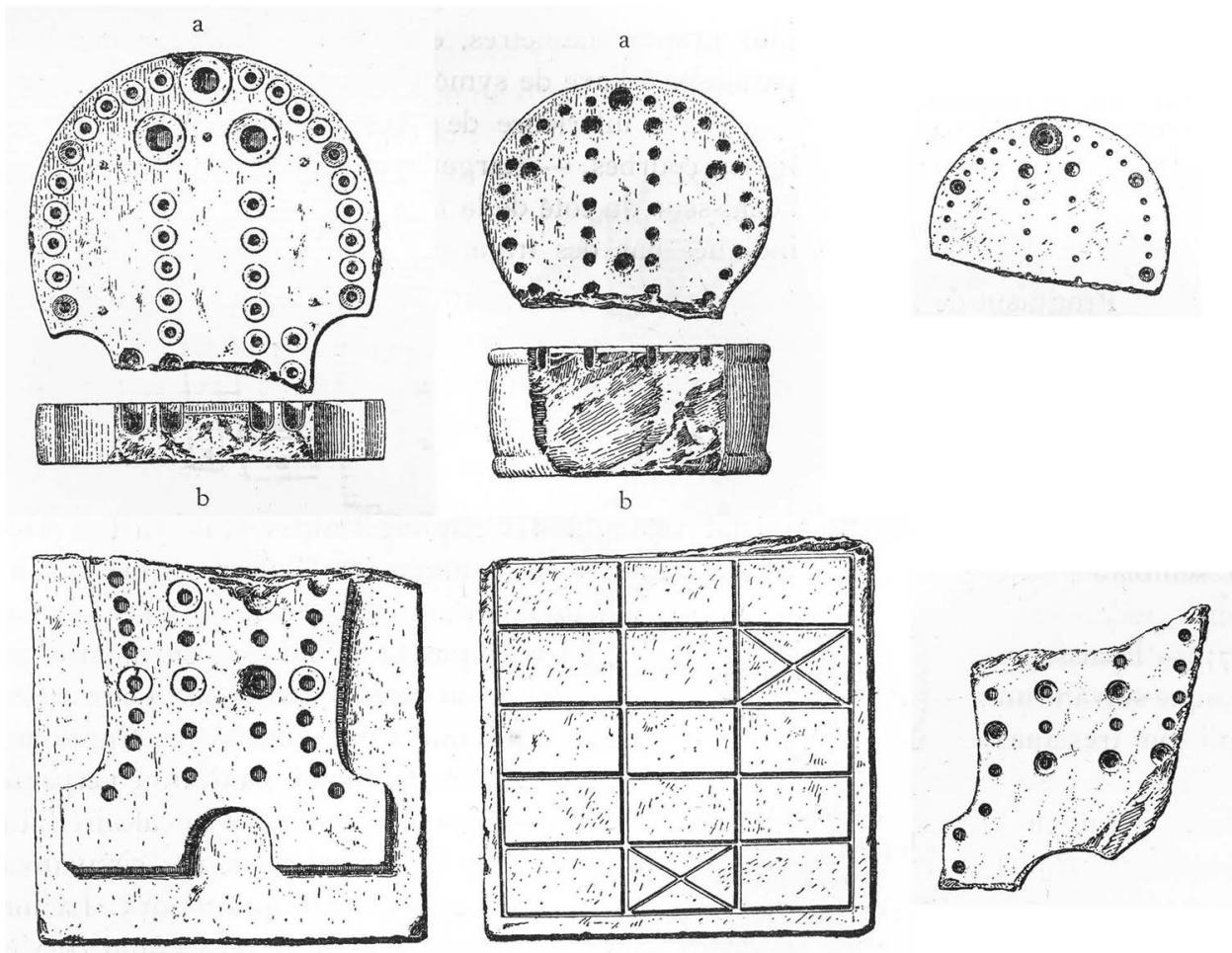


Figure 5.7 Boards from the deposit of the temple of Inshushinak, Susa, max. $10.5 \times 10.5 \times 1.5$ cm. Musée

du Louvre, Sb 2911, Sb 10190, Sb 10189 (top row, left to right), Sb 2912 (bottom row, first two on left), Sb 10191 (bottom row, right). Drawings reproduced from Mecquenem (1905: Figs. 345–50).

During the New Kingdom, the Egyptian empire embraced Nubia and parts of the southern Levant, and these regions shared the same type of violin-shaped board, also referred to as Palestinian-type boards (Hoerth 2007:65). The elaborate boards found in the Ivory Hoard of the palace at Megiddo are the most famous (Loud 1939:9–10, 19, pls. 47–50). Special holes are indicated by a rosette as well as blue paste and gold inlays. Other boards were found in the southern Levant, at Gezer (Macalister 1912:416, fig. 501), Tell Jemmeh, previously identified with ancient Gerar (Petrie 1928:18, pl. 39, 22) and Beth Shean (Oren 1973:Figs. 41, 37 and 45, 23). They are dated from the fifteenth to the twelfth centuries BCE.

As stated earlier, no pegs with hounds and jackals were discovered in the Near East but new interpretations of Mesopotamian texts suggest that such zoomorphic playing pieces existed. Vermaak (2011:124) connects the Sumerian words *gishellag* and *gishillar*, generally translated “wooden throw stick,” to a game board. Vermaak’s new translation is based on a Sumerian proverb “a fox/jackal walked around the game board” (SP 8 Sec B 34). In other proverbs, dogs and foxes are defined as opposites and could reflect the gaming pieces carved in the shape of two distinct animals. These Sumerian proverbs fit well in the context of our game. Most of the proverbs date from the first half of the second millennium BCE, a time when the game of *hounds and jackals* travels out of Egypt.

Tapered pegs with notched heads possibly imitating the pointed ears of the jackals were used at Megiddo (Palestine Archaeological Museum, 38797; Oriental Institute Museum, A22316, A 22364, A 22367). Erdös (1986:83) might refer to these when she mentions ivory pins with a dog or jackal head from Megiddo. Some pins identified as hairpins in the archaeological literature may in fact be game pegs, like those found in Neferhotep’s tomb discussed above. It has been suggested that ivory and metal pins with animals at the top found at Kültepe/Kanesh in central Anatolia were used to play (Michel 2008:359). Finally, monkey-headed pins found in the deposit of the temple of Inshushinak at Susa may have been used with the fragmentary boards from the same hoard (Dunn-Vaturi 2000:109–10). Examination of traces of use at the end of pins may help identify their real function.

Reconstructed rules

A description of the rules has not survived, but several attempts have been made to reconstruct them (Carnarvon & Carter 1912:58–9; Petrie & Brunton 1924:7; Murray 1951:15–16; Bell 1979:21; Hoerth 2007:66–8). Archaeologists and experts on the history of games unanimously interpreted it as a race game in consideration of the arrangement of the board, despite the absence of casting implements directly associated with any board in Egypt. Disks with one side marked, accompanying boards at Megiddo in the southern Levant and Nippur in Mesopotamia, are presumably counting devices (Hoerth 2007:64). Astragali were found in the same contexts as boards at Susa and Tepe Sialk in Iran and their use with the Theban ivory board has been suggested, but in Egypt they are better attested from the Seventeenth Dynasty and later so we are not sure how Egyptians were induced to move their pegs along the board.

Carter's reconstruction shown in fig. 5.8 is the most likely route of play because the middle rows of holes are separated from the central position at the top that clearly stands out as the goal. One side of the board is attributed to each player. The players competed by moving their pieces down the center of the board, of either ten or eleven holes, around the outer edge, of nineteen holes, and up to the thirtieth and ending position. A separation between the two tracks is indicated on some boards so it is suggested that no interaction was happening between the opposing pieces. Connecting lines incised on some Near Eastern boards show that, at least in this region, pieces did come into conflict. Each player had five pegs according to the number of pieces found with the Theban board. Carter's rule about each opponent having only one piece at a time on the board may not be valid. If players have more than one piece on the board at a time, a piece may simply not be moved to an occupied space. Other aspects remain unknowable, such as how a piece enters the board and how its final move to the goal was determined if the result of the dice was higher than the spaces to be traversed. Some boards bear additional holes that are considered as starting posts. The progress of the race was affected by inter-hole links and hieroglyphs. Two pairs of holes (six and twenty, eight and ten) are linked by lines. The links could be shortcuts or penalties, like in the modern game *snakes and ladders*, with a playing piece sent forward or backwards. From ten onwards, every fifth hole is emphasized. It is assumed that *nfr*, marked on two positions, i.e., fifteen and twenty-five, was beneficial to players that landed on them, similar to square twenty-six on *senet* boards. The goal is a larger hole clearly surrounded on the

example from Thebes by the hieroglyph *šn*, “eternity,” that may have meant “end of the track.” This ultimate destination counts as space number thirty, an important number in ancient Egypt. The player who reached this sign won the game and possibly succeeded in his quest for immortality.

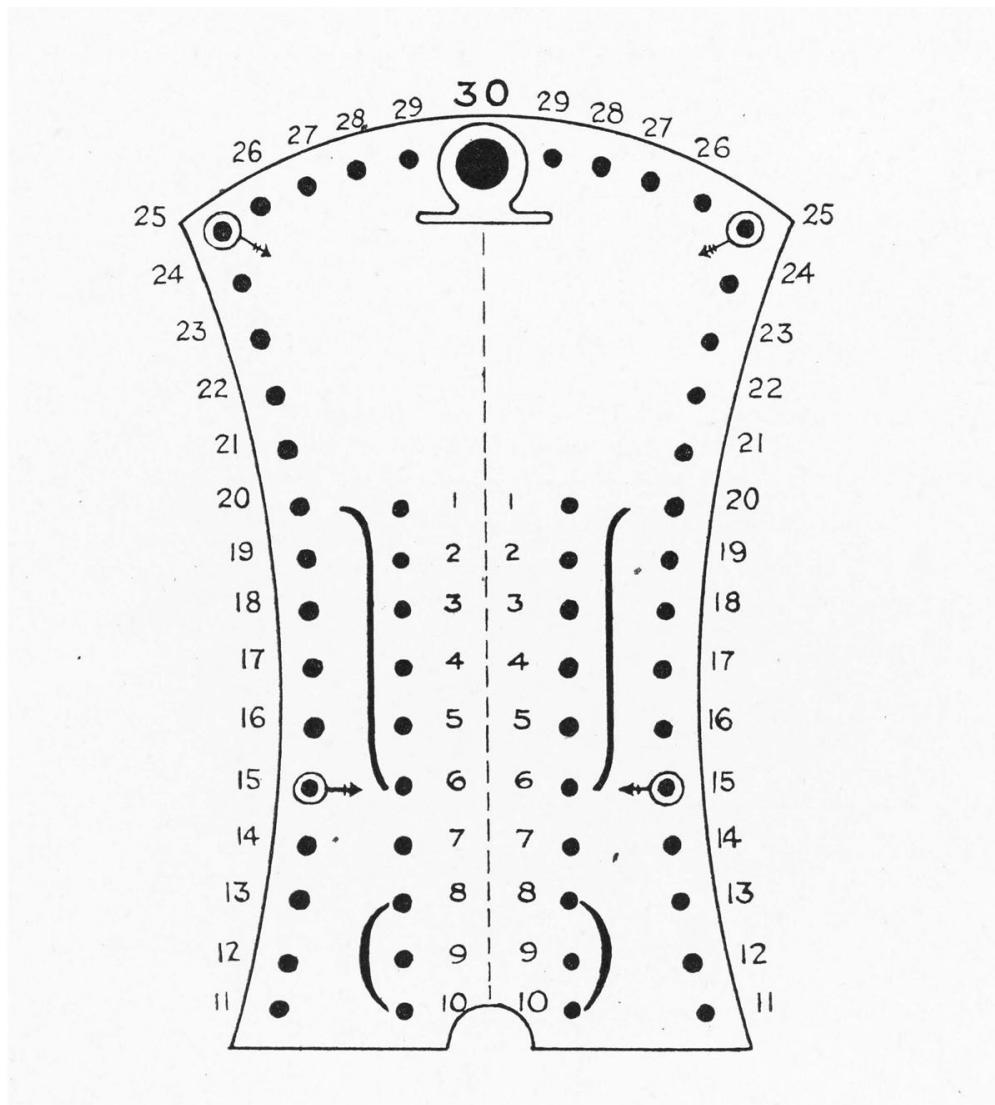


Figure 5.8 Reconstruction of the numbering sequence of the holes. Drawing reproduced from Carnarvon & Carter (1912:57, fig. 14).

Symbolism of the game

Playing accessories, as well as objects imitating games, are linked to the deceased’s journey to the afterlife and the game of *hounds and jackals* often found in funerary contexts seem to be no exception. The jackal deity, Anubis,

whose imagery was part of the gaming pegs, was symbolically responsible for mummification and protection of the dead through the netherworld. His connection to games used as funerary devices is relevant and may also be illustrated by the throwing sticks decorated by a canine head and the action they command (DuQuesne 2002; for passage about jackals in the Great Game Text, see Chapter 1).

The development of the game board into an anthropoid format occurs in the course of the second millennium BCE (Vermaak 2011:118). The connection between the game and a human representation with the additions of anatomical details, such as eyes, was made relatively early if we consider the Cairo board CG 68128 to be from the Middle Kingdom. Anatomical vocabulary is used to describe the head and the feet of the boards from Susa (Ellis & Buchanan 1966:195). The Gezer board initially identified as a “degenerated Ashtoreth plaque” by the excavator (Macalister 1912:416, fig. 501) may have reinforced the anthropomorphic and religious implications for the boards with a round projection.

The anthropomorphism of the board supports the idea of rebirth, essential in ancient funerary rituals. Erdös (1986:118–19) suggests that the insertion of pegs into the sequence of holes would allow the deceased to be reborn. Anubis pegs could perform the necessary ritual on the board, which would symbolize the deceased’s body. Schuster and Carpenter (1996:665) also include the game of *hounds and jackals* in the “Rebirth Gaming board” category and make comparisons with a traditional Indian game, an antecessor of *snakes and ladders*, which functions like a genealogical chart, a path to be followed into the afterworld. Furthermore, Schuster and Carpenter (1996:671–5) compare the shield-shaped boards to a drawing made by the Malekulans of Vanuatu, located in the otherwise unconnected region of Melanesia in Oceania, to achieve reunion with one’s ancestry by connection with joint-marks: “The Malekulan artist first punched a framework of dots in the sand, then drew an unbroken, never-ending line around these dots to form a figure identified as, simultaneously, Human Ancestor and Cosmic Turtle.” The special holes of our game would correspond to joint-marks. Twelve marks—a complete set with shoulders, elbows, wrists, hips, knees and ankles—are observed on certain boards. It is interesting to note that the ellipsoidal board with an appendix has been interpreted as a human form, but has also been compared to a turtle (DuQuesne 2002) whereas the stand or votive game in Neferhotep’s tomb adopts the shape of a reptile.

The wooden turtle from Dra Abu el-Naga as well as the miniature game table

from Deir el-Bahari are votive artifacts deposited in the tomb for the next world. Amulets imitating the game of *fifty-eight holes* with an irrelevant number of holes bored into them were found among burial offerings at Tepe Sialk and Dinkha Tepe, in Iran (Dunn-Vaturi 2012f:22–3). At Susa, games had an important place in the foundation deposit of the temple of Inshushinak. Five broken boards, some double-sided with the *game of twenty* or a *game of thirty* squares, astragali and possible pegs were dedicated to the god Inshushinak, the Lord of the city of Susa, who had among other attributes, that of the judge responsible for the last judgments of the deceased.

The recreational function of games is a subject of debate, especially in the absence of casting devices and textual evidence. Some board games offer astronomical and astrological references. The sequences of twenty-nine or thirty holes equivalent to the number of days in a lunar month have been considered as a device to record the phases of the moon (Novacek 2011:50). It has also been suggested recently that the fifty-nine-hole board was a calendrical tool for lunarsolar synchronism, like the Greek calendar with holes that would develop into a Coptic version (García Martínez 2014).

The Coptic board game

A board with peg holes, attested by five examples, is designated as the Coptic board game (Decker & Herb 1994:687–8, pl. CCCLXXXVII). Two game boxes, measuring 18.1 cm and 19.5 cm long, are made of wood and ivory plaques (Musée du Louvre, E 11717, E 21047). Three smaller examples, between 11.5 cm and 13.2 cm long, are carved out of solid bone (Egyptian Museum, JE 78126; Musées Royaux d'Art et d'Histoire, Brussels, E 2667; Swiss Museum of Games, 2282) (fig. 5.9). Drioton (1940) insisted on shared characteristics with the game of *hounds and jackals* and drew up the inventory of the pieces known at that time. The game boxes have a step-type structure divided in three parts. The lower landing is the longest one; it has two groups of twenty holes. The intermediate landing has ten holes on the outside and a varying number of positions in the center. This part is described as a labyrinth and compared to the projection of the violin-shaped boards (Drioton 1940:185, 192–3). The upper part is the smallest one. There is a central hole, considered the goal, surrounded by other holes. Some perforations, not fully formed, served as decorations. Drioton (1940:184–6) reconstructed a track of twenty-nine holes—ten downward and nineteen upward—for each player plus the goal, and suggested

calling it the game of the *thirty points*. Despite the similarity of their structure, nothing can relate this game to a late version of *hounds and jackals* (May 1992:164; Finkel 2008:154). The playing pieces were stored in a drawer or a hollow in the reverse of the board but none have an archaeological context so it cannot be known what a complete assemblage would be. Bone pegs associated with the game are decorated with human heads or with moldings and knobs (Drioton 1940:180–1, 183, fig. 2, pl. II). Rounded disks made of bone with two different types of markings were probably used as dice (Drioton 1940:181, 183).



Figure 5.9 Coptic board game, 12.4 × 2.9 × 3.1 cm. Swiss Museum of Games, 2282.

Only one such game, previously in the Guimet museum and now in the Louvre (E 21047), has a documented provenance and illustrates the continued presence of games in a funerary context. It was discovered in 1901 by Albert Gayet at Antinoë in a female burial attributed to St Thaïs by Gayet who identified the pierced box as a prayer marker (Gayet 1902:47–8, 51). The burial was dated to the fourth century CE (May 1992:164) or sixth century CE (Drioton 1940:186) but is now considered to date to the second part of the seventh century CE after C14 analysis of textile and human remains (Calament & Durand 2013:330). The other step-type boards are attributed to the Byzantine period in general.

Boards for the game of *hounds and jackals*, or *fifty-eight holes*, have been found in elaborate and humble versions, in materials ranging from gold-inlaid ivory to wood and clay, suggesting that the game was played by members of all classes. The present study shows that problems of identification of the gaming equipment should be addressed not only archaeologically (fragments of boards with consistent arrangement of special holes, pegs versus pins, associated randomizing implements) but also visually and epigraphically, such as recent attempts at identifying the game in Sumerian proverbs.

Roman Board Games Crossing the Borders of Egypt

The Ptolemaic period began with Ptolemy I Soter in 305 BCE, some years after the death of Alexander the Great in 323 BCE. It was followed by the Roman conquest of Egypt in 30 BCE when Egypt became a province of the Roman Empire. During the Ptolemaic period there was a strong Hellenistic influence throughout Egyptian material culture that may be reflected in board games of the times but other than dice with Greek lettering (Pedrizet 1931), there is no physical evidence for Greek gaming practices. The ensuing Roman conquest may have introduced games played by Roman soldiers who were based in the country and evidence for such games is still increasing. Some game practices are likely to have continued until at least the Arab conquest in the seventh century CE even though datable finds in Egypt have been limited to account for the period after the fourth century. Although one board game of Greek origin is discussed below, it is the gaming practices of the Romans that are found in the archaeological record thus far and that are discussed here in some detail.

The climate of Egypt played an important role in the preservation of game boards, playing pieces and dice; even if Egyptians played only a marginal role in the distribution of Roman board games, with the possible exception of providing a link to present-day Sudan, the examples from the Egyptian archaeological record are numerous. Preserved Roman game boards remain rare even in Egypt and Roman games have mostly been found carved in pavements and buildings. The presence of these latter so-called graffiti games in Egypt has confused archaeologists working on different time periods. Games found on monuments or next to other games have been frequently but erroneously associated with the period and the people associated with the building. This problem, which was touched upon in previous chapters as well, has also given several board games an Egyptian origin while the carvings may have occurred centuries after the building's erection.

Despite the presence of Roman games on several archaeological sites in Egypt, most of this material has remained unpublished. A study by Mulvin and Sidebotham (2003) as well as the work by Brun (2003, 2011) and Matelly (2003) are important exceptions to materials found in fortresses in the eastern desert of Egypt. The year 2003 also provided a publication of all the graffiti, including

games, found on the roof of the temple of Khonsu in Karnak, Luxor, by Jacquet-Gordon. Most other publications refer to games found elsewhere in the Roman Empire or on sites in Sudan. They also include earlier studies of the Latin and Greek sources that provide the necessary background on game rules and game names.

With the help of the photo archive of the Gebel el-Silsila Survey Project in Egypt conducted by Maria Nilsson and John Ward, it was possible to confirm the presence of Roman game boards in a series of sites. The dimensions of these boards have not yet been recorded and their presence on each of these sites still needs further analysis. The study of game boards found at Silsila, Egypt and the games found at Sedeinga, Sudan, are part of current research projects by Alex de Voogt together with Maria Nilsson and Vincent Francigny, respectively. This is, therefore, a preliminary overview of Roman gaming practices in Egypt and serves as a reference for ongoing and future research on Roman games in this region.

The sources

Both Greek and Roman game boards are occasionally found as grave goods but more frequently as carved outlines on rock faces, temple rooftops and pavements. This complicates the possible association of a game board with playing pieces and dice. Dice may be found in tombs or as surface finds unassociated with boards, and typically cannot be linked with game boards carved in public spaces. Casting devices including cubic dice, throwing sticks and astragali are associated with most board games of antiquity but may also have been part of dice games not requiring a board. Which Greek or Roman dice games were then popular in ancient Egypt remains unclear. Cubic and twenty-sided dice with Greek lettering have been attested in Egypt but their particular use is unknown. Instead the graffiti game boards can tell us only about which Roman board games were played in Egypt as Greek game boards are still absent from the archaeological record.



Figure 6.1 Map of sites mentioned in Chapters 6 and 7.

From the literary and iconographic sources, four board games have been given most of the attention. For instance, Rieche (1986) mentions *ludus latrunculorum* (henceforth *latrunculi*), *duodecim scripta* as well as *three-men's-morris* also known as the Roman *mill* or *merels* game (henceforth *merels*), for which the Latin name is unknown. Her work already suggests that the written and art historical sources do not necessarily describe all Roman board games found in the archaeological record. Lamer (1927) and, more importantly, Schädler (1998) added the Greek game of *five lines* to this list. Schädler analyzed the Roman and possible Byzantine forms that are as ubiquitous as the other Roman games. It is not possible to claim that this list is complete, moreover, as Schädler (1998) already pointed out, some game boards may have been used for multiple games and some games may have been played on different configurations of boards. The discussion of the material is only a starting point rather than a definitive statement on these board games in Egypt.

Mulvin and Sidebotham (2003) attested *mancala*, *merels* (although with only one unclear example), several *duodecim scripta* boards as well as multiple partial and complete *latrunculi* boards. This provides a convincing context for Roman games, except that *mancala* should probably be reinterpreted as the game of *five lines*. Jacquet-Gordon (2003:17, 18, 21) in her work on the temple roof in Karnak mentions a few unfinished *seeja* boards (see Chapter 7) that in some cases can also be interpreted as unfinished examples of *five lines*. Since no other known Roman game boards were attested, it leaves these circular depressions open to explanations unrelated to Roman gaming practices. In the eastern desert, more specifically in the fortresses of Dawwi and Didymoi, fragments of *latrunculi* and *duodecim scripta* are attested mostly from datable strata going back to the second century CE (Brun 2003, 2011). From the Gebel el-Silsila Survey Project, the temple of Kom Ombo, built in the Ptolemaic period, shows multiple examples of *merels* and *duodecim scripta* as well as *latrunculi* and a game of *five lines*. Again this provides a clear example of Romans playing multiple games in the province Aegyptus. An agglomeration of different games or games context (see fig. 6.2) facilitates the interpretation of the time period and the players if they are all acknowledged Roman games. Unfortunately, configurations that cannot yet be interpreted, as well as Arab or Ottoman games discussed in the next chapter, complicate such efforts.

In the Greco-Roman period the types of board games found in antiquity are beginning to multiply in the archaeological record. Games popular in Pharaonic Egypt are joined by Roman games and may have coexisted with them. Setting precise dates for Roman graffiti games is usually impossible (see Lamer 1927:2010 for a possible exception). Although only a relative date for these graffiti games can be ascertained, some excavated boards have been dated and, unlike the Pharaonic examples, the rules of play are better understood. The sources that hint at games' rules are found in literary texts in both Greek and Latin. The Latin sources mention books written by Suetonius on Greek children's games and by Emperor Claudius on board and dice games (Lamer 1927). While the works have not been preserved, references to them in later texts as well as poetic allusions and dictionary entries in both Greek and Latin allow some knowledge to be gleaned about the rules of play.

Apart from allusions to game rules, the written and iconographic sources also provide information about the presence of dice with a game board, the contexts of game play and their role in society. This information on Roman play culture may be identical in the Egyptian context. However, Roman games as well as Ottoman and Arab games, as discussed in the following chapter, are often associated with soldiers. This limits the players' group and may affect the common play contexts in Egypt. Descriptions of men and women playing board games together as found in Ovid's *Ars Amatoria* (for a discussion, see Rieche 1986:42, 44) may not apply to Egypt. Despite the richer contextual information provided by the Roman sources, it is this societal part that is most likely different in Egypt. On the other hand, the game rules and board designs are not likely to be affected as studies of other board games in antiquity have already shown in detail (de Voogt *et al.* 2013).

Apart from the occasional game board or dice that can be dated as part of an excavation, the monuments on which Roman games were incised provide a *terminus post quem* for the game and are not necessarily of the same time period. The ability to identify a pattern as Greek, Roman, Arab and/or Ottoman, as explained in this and the following chapter, is essential for identifying the correct time period to which these games belong rather than the other way around. Buildings rarely provide a useful date for the graffiti games found upon their stone.

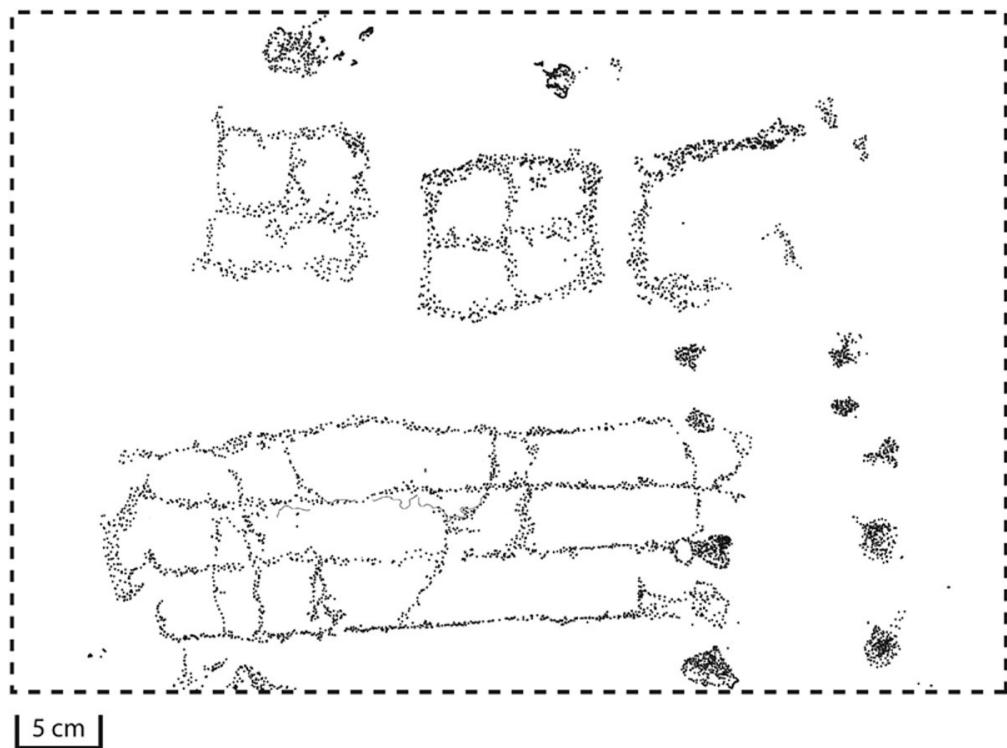


Figure 6.2 Example of a Roman games context at Palmyra, Syria: *merels*, *five lines* and the outline of *duodecim scripta* (de Voogt 2010:1060).

The game of five lines or πέντε γραμμαί

Schädler (1998) was the first to link the different appearances of two rows of five playing fields in Greco-Roman contexts. These two rows may consist of lines, holes, squares or a combination thereof. When the configuration consists of rows of holes or sets of squares they can be classified as the Roman version of the Greek game of *five lines* (Schädler 2008, 2013c:65). This shape has been attested in multiple contexts throughout the Roman Empire and often in the context of other Roman games. Despite Schädler's observation, this configuration also continues to be interpreted as *mancala*, in most cases a problematic assumption that is discussed in more detail in the following chapter.

The game has been discussed comprehensively in several sources either using its Greek name *πέντε γραμμαί* or the English equivalent *five lines*. Although it is originally a Greek game it seems closely connected with the Roman Empire as well and its introduction to Egypt can, at this stage, not be disentangled from the Roman games.

As Schädler (1998:16) mentions, the existing literary and archaeological evidence gives a good picture of the game. The game was probably part of Suetonius's book on Greek dice games, to which some references exist. The

literary references have been discussed at length (e.g., Lamer 1927). It is said that both players of this game owned five lines and between these was the sacred line. The player who first managed to place his pieces on the sacred line was the winner. According to Schädler (1998, 2008, 2013c) two players played either on five or eleven lines or on separate groups of five lines. The earliest reference dates to the sixth century BCE and is attributed to the Greek poet Alkaios or Alcaeus who speaks about the rules (Schädler 2008:174). For that same period Schädler (2008:175) also mentions a terracotta model of a gaming table from Attica that approximates the game. The game rules and other artistic representations suggest the use of one cubic die, possibly two. The consistent design of two rows of exactly five cells in Roman Asia Minor made the possibility of *five lines* more plausible than that of a very early form of *mancala*. The same situation exists in Egypt.

Mulvin and Sidebotham (2003:605–8) identified a number of configurations of two rows of five as *mancala* games at Abu Sha’ar. The context alongside other Roman games strongly suggests that here also the game of *five lines* was intended. Other than that a configuration of holes resembles a modern *mancala* game, there is neither any evidence nor a necessity to identify them as representations of *mancala* as it is only rows of five or fewer fields that have been attested in Abu Sha’ar.

Two rows of holes that have been scratched in rock surfaces and monuments are easily confused with so-called *mancala* games. Both *five lines* and *mancala* games were found in Palmyra, for instance, where rows of five holes were used by Romans and rows that were longer than five holes were used by Arabs or, more likely, Ottomans (de Voogt 2010). The latter may even have expanded the Roman carvings to accommodate their own game. Schädler (1998) goes as far as to suggest that *mancala* may have succeeded *five lines* in late antiquity, possibly before the arrival of the Arabs in the seventh century. The evidence known from Egypt does not support this suggestion as the arrival of *mancala* is so far connected only with the presence of the Ottomans and not the Christian and later Arab influences in the region.



Figure 6.3 Five lines at the Luxor temple (top) and at Qasr al Ghweita (bottom), which is located south of the Kharga Oasis, based on photographs from the Gebel el-Silsila Survey Project. Courtesy Maria Nilsson and John Ward.

The Gebel el-Silsila Survey Project photographed a few examples of two rows of five depressions, one at the Luxor temple and one at Qasr al Ghweita, which is located about 18 km south of the town of Kharga (fig. 6.3). Elsewhere in the Kharga Oasis, some designs suggest a similar game but, unfortunately, the site does not provide much of a context for Roman games apart from one *merels* game design with two diagonal lines.

Duodecim scripta or ludus duodecim scriptorum

Despite the predominance of incised games, Egypt, or more precisely, the Egyptian border with Sudan, is home to one of the best-preserved wooden examples of the Roman game *duodecim scripta*. This particular board was found in a grave at Qustul dating to the period after the fourth century CE (Emery & Kirwan 1938:345). It shows three rows of squares arranged in the same manner as the many examples of this game recorded throughout the rest of the Roman Empire (fig. 6.4). The wooden example from the Qustul grave, found in near perfect condition in Sudan, illustrates that a tradition of wooden boards may have escaped the archaeological record in most of the Empire.

The game of *duodecim scripta* or the *game of twelve signs* is considered a precursor of the modern game of *backgammon* with which, according to Austin (1934) and Schädler (1995), it shares a number of characteristics. First, it consists of rows of twelve fields, visibly separated in the middle making two sections of six, and is played by two players using two cubic dice. A later version, called *alea* or *dice*, was played with three instead of two dice, on a similar board using fifteen pieces for each player. Games tables from the fifth and sixth centuries CE from Aphrodisias and Ephesos, but also the example from Qustul, confirm the survival of this game into the centuries up until the Arab conquest.

The most common representation of *duodecim scripta* in the archaeological record is a carving into a marble slab where the game is formed by rows of letters, each letter indicating a playing field. These ranges of letters look rather different and Lamer (1927:2010) and Merkelbach (1978), among others, did not

believe this game to be *duodecim scripta*, but a different thirty-six-fields game or a *latrunculi* board. Since the work of Austin (1934, 1935) this is, or should no longer be, in contention. The letter combinations make so-called hexagrams, often witty comments categorized by Austin (1934:32, note 1) as “(a) maxims for players, (b) jeers ..., (c) references to the circus, eating and other pleasures.” There are examples using a Greek text (Lamer 1927:2010; Merkelbach 1978) but the remainder seems to be exclusively in Latin for which the hexagram was popular. The following example was found on a board in Trier, Germany (Austin 1934:31):

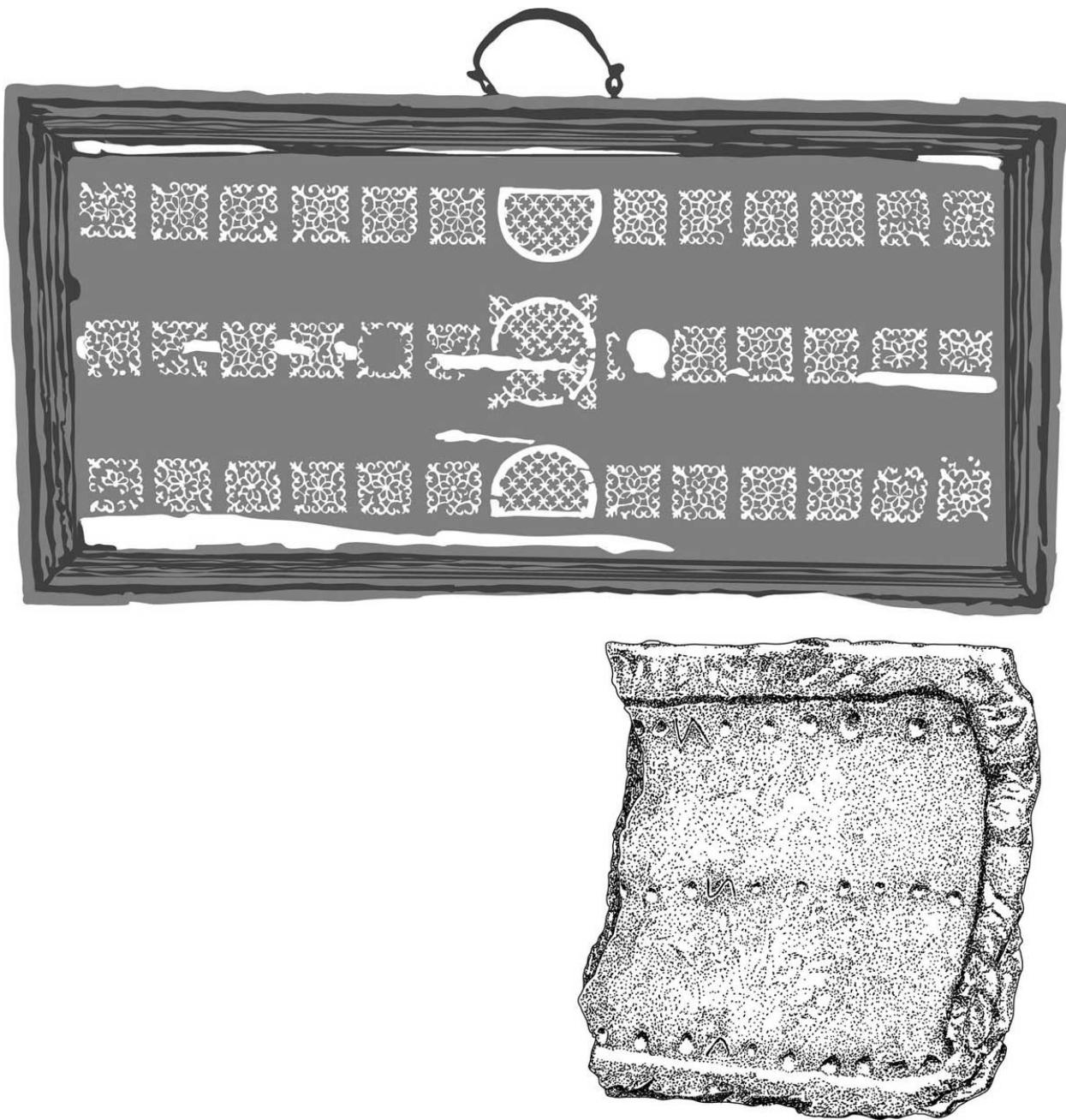


Figure 6.4 Top: Drawing of the wooden *duodecim scripta* board from Qustul, 77.5 × 37 cm (after Emery & Kirwan 1938:pl. 87). Bottom: Drawing of a partially preserved stone *duodecim scripta* board from Dawwi for which no dimensions were recorded (after a photograph by J.-P. Brun 2003:184).

VIRTUS IMPERI
HOSTES VINCTI
LUDANT ROMANI

In English this hexameter could take the following form (tr. Alex de Voogt):

EMPIRE LAUDED
RIVALS BEATEN
ROMANS AT PLAY

Egyptian locations have so far not rendered any *duodecim scripta* boards of this kind. The boards attested in Abu Sha'ar, Dawwi and Kom Ombo have small depressions, a feature that is sometimes found in addition to the lettering or instead of circles, squares, vertical bars, leaves, crosses and crescents (Murray 1951:30). The three boards at Abu Sha'ar date to the third and no later than the fourth century CE after which the fortress was abandoned. The table-size board at Dawwi can be dated to the second century CE (Brun 2003:134). It has been partly preserved with three rows of small black circles of which about eight are still visible in each row. The marks separating each set of six fields are also visible (see fig. 6.3). A small fragment of a possible *duodecim scripta* board was found at Qusur al-Banat with only four small playing circles preserved as well as an outline of a semi-circle divider (Matelly 2003:594, 605), but this example is too small for a positive identification. The often rough carvings of graffiti games referring to *duodecim scripta* in Egypt are in contrast with the decorative or more appealing examples found elsewhere but it is also possible that hexameters on stone in Egypt have not yet been recognized as referring to a board game.

Qustul (Emery & Kirwan 1938:345–6, pl. 87) provides one of few wooden examples of the game: a perfectly preserved inlaid board with three rows of twelve squares divided in the middle to create six sets of six fields. It is associated with fifteen black wood and fifteen white ivory pieces. In addition, a *pyrgus* or dice tower was preserved as well as five ivory cubic dice. Due to the extraordinarily good preservation of objects in these graves, the practice of playing on wooden boards can be attested and may indicate that many boards once existed in Egypt in the private sphere that have not been preserved. The grave in Qustul dates to the Post-Meroitic era, i.e., after the fourth century CE.

Another example of a wooden board of which the ivory inlays are preserved together with some wood fragments is found across the border in Sedeinga, Nubia. This find is part of ongoing research on the game board discoveries at this location by Vincent Francigny and Alex de Voogt. Most of the material dates to the first centuries CE and was found in a rich elite cemetery of the Meroitic Kingdom. One grave had two associated cubic dice with fifteen black and thirteen white glass pieces preserved. Another had three dice associated with

twenty-seven gaming pieces, some of black wood and others of white ivory as well as several game board fragments. It is evidence that the game was not just played in Roman Egypt but crossed the frontier of the Empire and found its way into the Meroitic Kingdom where at least two graves claimed this game among their grave goods.

The presence of *duodecim scripta* outside the Roman Empire was already attested for Germania (in Vimose, Denmark) where wooden remnants of the board were also found. Krüger (1982:163) remarks that letters that make up the playing fields are understandably less common in this region as, in general, the players would not have understood Latin. In Germania Krüger (1982:162) attests two bifacial boards that feature *duodecim scripta* on one side and *latrunculi* on the other. It is again evidence that these games coexisted and were played by the same people.

In addition to the examples at fortresses in the eastern desert, the Gebel el-Silsila Survey Project identified four *duodecim scripta* boards near the temple in Kom Ombo (fig. 6.5) showing that their presence is not limited to soldiers' quarters. The presence of *duodecim scripta* boards carved in monuments or pavements is relatively limited compared to other Roman games. The preservation of this game in Qustul confirms, however, that the game's popularity was widespread and crossed into enemy territory.

Each of the game boards recorded here has three rows of play. A variation of *duodecim scripta* with two rows is known as *alea* and became the standard in Rome during the first century CE (Schädler 1995). This variation has not been attested in Egypt. The practice of playing *duodecim scripta* continued after the fourth century CE as examples from Aphrodisias and Ephesos already indicated but which is also illustrated by the find at Qustul. Today's game of *backgammon* was preceded by the Arab version known as *nard*, which has been attested throughout the Islamic Empire. *Nard* most likely replaced the Roman version in Egypt.

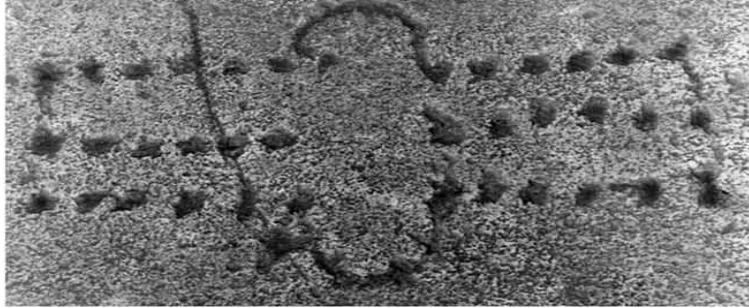
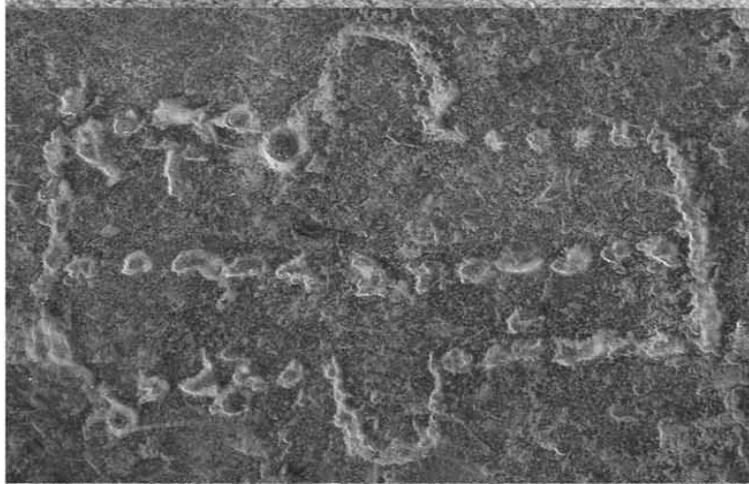


Figure 6.5 *Duodecim scripta* boards at Kom Ombo based on photographs from the Gebel el-Silsila Survey Project. Courtesy Maria Nilsson and John Ward.

Latrunculi or ludus latrunculorum

Falkener (1892:39) suggested that *ludus latrunculorum* had its origin in Egypt, equating it with the Egyptian game of $\ddot{\tau}\text{w}$ (see Chapter 4 for a discussion of this game). His comments are part of a long and problematic tradition in which board games from outside of Egypt are given an Egyptian origin. Falkener had only Latin descriptions of the rules for the Roman game and Egyptian depictions of the board for the Egyptian game, i.e., representations of people playing a board that was shown in profile. Only the pieces and not the configuration of the spaces on the board were visible to him when observing Egyptian iconography. Today it is clear that none of the Egyptian game boards have a configuration even comparable to *latrunculi*; that there is no reason to assume that *latrunculi* was played by the ancient Egyptians; and that their connection can no longer be supported. Connections with later games such as *chess* and *checkers* are equally problematic. Austin (1934:25) correctly points out that there is no proof that *five lines* or *latrunculi* have any connection with *chess* and finds such a suggestion “inaccurate and misleading.”

The Roman game of *latrunculi* or *ludus latrunculorum* has been found at the far ends of the Roman Empire (Schädler 1994a). The configuration of this board varies but a field of 7×8 squares is quite common. Schädler (2013c) includes 7×7 , 8×8 , 9×9 , 9×10 , 10×11 and even 12×12 in the range of possibilities. Unlike *duodecim scripta* this game does not require any dice. The game does not seem to have a modern counterpart despite its popularity in antiquity. The Greek game $\pi\circ\lambda\iota\varsigma$, which is also played on a grid with pieces of two colors and without dice, is understood to be largely the same as the Roman game *latrunculi* (Schädler 2013a:2844). This game is not discussed here as there is little evidence even outside of Egypt to assist the Egyptologist with identifying a board of this kind and to distinguish it from a *latrunculi* board. Apart from graffiti boards and the occasional gaming table, *latrunculi* is also attested in literature and art, and as a board game in progress in terracotta (see Schädler 1994a). An example of the latter was also found in the Fayum in Egypt and is now in the Petrie Museum (UC59258). It shows a board of 6×7 squares with seventeen “low domed” playing pieces, neatly placed on the individual squares (fig. 6.6). The placement of the pieces was evidence for Petrie (1927:55) that this was not a *checkers*

game. Instead its configuration fits the description of a *latrunculi* board, although a small one.

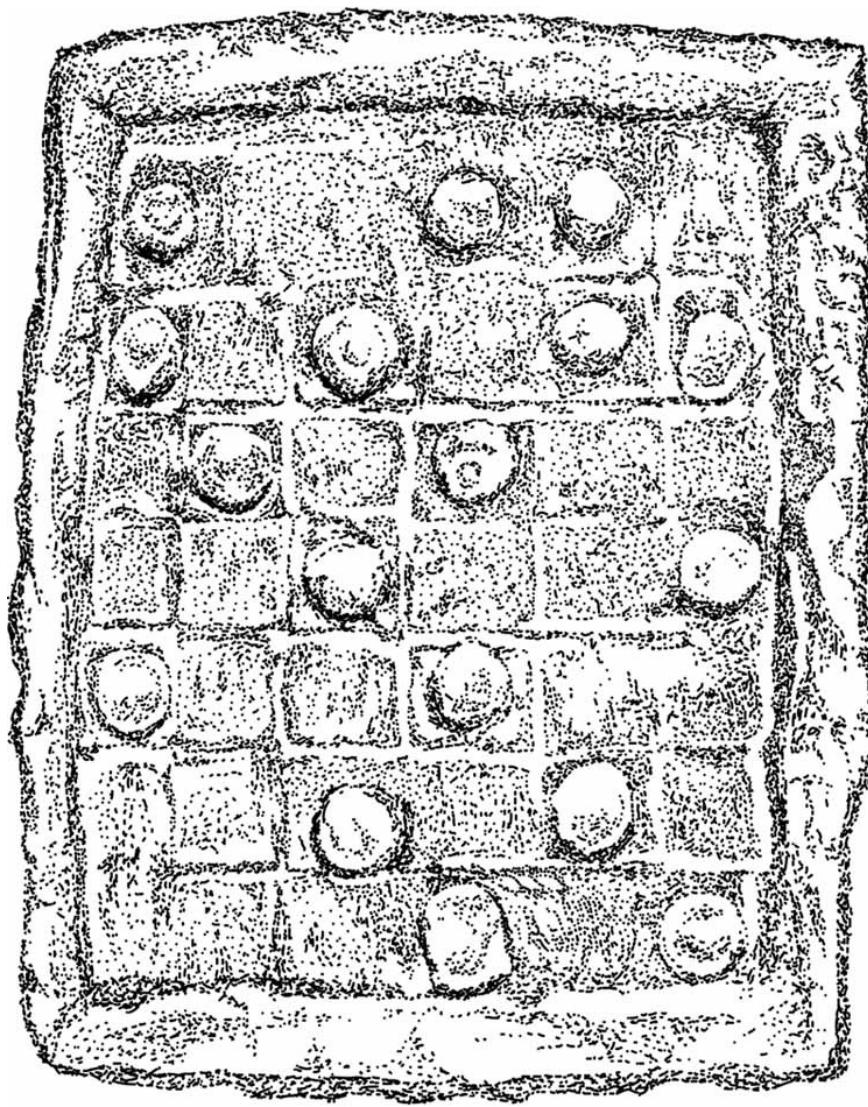


Figure 6.6 Drawing of a terracotta game board, 9×7.3 cm. Petrie Museum, UC59258 (after Petrie 1927:pl. XLVIII.177).

Rose (1996:160) speaks of a “chequerboard” in the Meroitic temple complex of Qasr Ibrim, which was a Roman-Egyptian outpost as well as a Meroitic one. The board on which she reports, consisting of 8×7 squares of approximately four by four centimeters each, has the appearance of a game. Modern gaming boards, such as those for *chess* and *checkers*, can have eight rows of eight squares and perhaps that is the reason why she mentions a possible eighth line in her notes. South of Qasr Ibrim there were images of 8×7 squares found in

Mussawarat el-Sufra (location 526.524.02) as well as one with 7×14 squares (location 529.525s.26). At this site, the period in which the board was made is less clear since graffiti of many time periods has been attested along its walls and pavements and in large quantities. In line with other Roman games, it is likely that *latrunculi* also reached the Meroitic Kingdom, which adopted its playing practice.

In the study of the fortress at Abu Sha'ar, Mulvin and Sidebotham (2003) found multiple examples carved in stone blocks, dating to the third and no later than the late fourth century CE. Brun (2011) reports several fragments of *latrunculi* boards excavated at Didymoi that can be dated with more precision with the help of an archaeological context. The corner of a board with four rows of three squares still visible is dated to 96 CE or not long thereafter (Brun 2011:121, 143). A fragment with seven rows of at least four squares and another with three rows of three squares discernible comes from the period between 123 and 150 CE (Brun 2011:126, 153). The latter was found with fragments of boards featuring small circles and lines that may point to another game. At the fortress of Krokodilo, Matelly (2003:594, 605) reports on a board of which at least five rows of seven squares are visible. At this fortress two playing pieces made of quartz and one of stone as well as one cubic die made of stone were reported. These finds also date to the beginning of the second century CE.

At the stone quarry of Silsila, recent surveys have uncovered a number of board games from Roman and later periods, including at least two *latrunculi* boards. In the associated Gebel el-Silsila Survey Project it became clear that *latrunculi* may also be found in Kom Ombo (fig. 6.7). Although the game has been associated mainly with soldiers, these sites suggest that its appearance is not restricted to the fringes of the Roman Empire nor the outposts of its soldiers, but is found throughout Egypt and likely across its southern border in the heart of the Meroitic Kingdom as well. Its future after the seventh or even the fourth century CE is unclear as no comparable board games datable to that period have been attested so far.



Figure 6.7 *Latrunculi* board at Kom Ombo based on photographs from the Gebel el-Silsila Survey Project. Courtesy Maria Nilsson and John Ward.

Merels or mill game

Although the *merels* game (Murray 1951:37) played by the Romans seems insignificant in shape, it stands out as an easily recognized carved game in

several excavations throughout the Empire, including Egypt. Mulvin and Sidebotham (2003) attested only one that was partially preserved and difficult to interpret, but the Gebel el-Silsila Survey Project revealed clear examples in the Kharga Oasis, Bachias in the Fayum Oasis, Dendera, Kom Ombo and Kom el-Dekka (Alexandria). The shape of these examples allows for nine intersecting points (fig. 6.8). The final shape, as recorded in Egypt, is a square intersected by two perpendicular lines. In Silsila there is also a version with additional diagonals, which can be considered just a different type (Schädler 2013a:2844).



Figure 6.8 *Merels* boards at Dendera (top left), Kom el-Dekka in Alexandria (top right), two boards together at Kom Ombo (second row), three single boards at Kom Ombo and a board at Silsila (bottom right) based on photographs from the Gebel el-Silsila Survey Project. Courtesy Maria Nilsson and John Ward.

Although there is no Latin name known for this game, the rules have been deduced from two poetic lines in Ovid's *Ars Amatoria* (see for a discussion Rieche 1986). Väterlein (1976:59) remarks that it is the same as the *Kleine Mühle*, a game still known in German-speaking Europe. It is indeed related to the *merels*, *mill* and *three-men's-morris* game, and is perhaps the only board game dating to Roman times that survived the ages without any significant change. Each player tries to move his or her three pieces into a row. Although many variations of this game have been described and found around the world, today the basic principle is still the same.

Instead of a square, there have been frequent finds of circles intersected by three lines, making eight intersections with the circle and one in the center where all three lines overlap. Heimann (2014) has questioned the fact that this is the same game or even a game at all. An analysis of the rules has shown that a “loop takes effect also in everyday playing.” Behling (2013) has argued that this is akin to a children’s dexterity game described in ancient Greek literature in which nuts are thrown into the circle where they should not touch the lines. It suffices to state that circular patterns with intersecting lines are different from the *merels* game.

According to Schädler (2013a), the game of *nine-men's-morris* or *larger merels* (Murray 1951:43), which is a more complicated version of this game, does not appear in the record until Byzantine times. In Egypt, the Gebel el-Silsila Survey Project photographed one such game next to one of the columns in the Ramesseum, across the river Nile from today’s city of Luxor (fig. 6.9). Similar to the game of *three-men's-morris*, this game and this game board have a wide distribution far beyond the Middle East. Acknowledging its presence in Egypt may assist in documenting this international presence and the people associated with carving them in monuments. The particular design of the one example spotted in the Ramesseum should not be considered a Roman game.

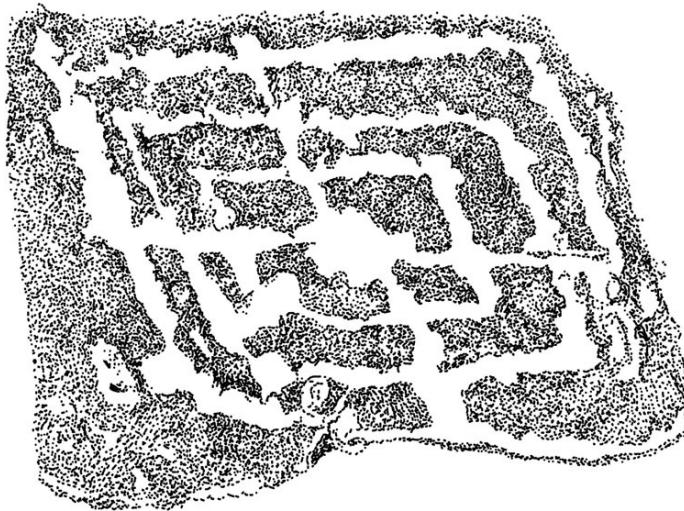


Figure 6.9 Drawing of a *nine-men's-morris* board as found on a column at the Ramesseum based on a photograph from the Gebel el-Silsila Survey Project.

Marbles

The Greco-Roman period in Egypt resulted in the introduction of multiple games, including dexterity games and sports. Although only game boards and dice are given attention here, designs meant for dexterity games may sometimes interfere with the interpretation of the archaeological finds, such as the circle with intersecting lines described above.

Rieche (1986) explains that board and dice games were played by adults, both men and women, while children played dexterity games such as *marbles*. The game of *marbles* is particularly relevant as it may use a marble lane carved in stone that confuses the identification of similarly carved board games.

Suetonius is credited with a *liber de lusibus puerorum* or a book on children's games, which, similar to his book on Greek dice games, has not been preserved (Väterlein 1976:13). Rieche (1984:10–13) mentions games played with (wal)nuts and Väterlein (1976:37) even mentions the possibility of *marbles* but neither go beyond the references made in the Latin sources. Schädler (1994b, 2013b) described and illustrated marble lanes as found on archaeological sites in Rome and pointed out their relevance (fig. 6.10).

In the basis, a marble lane consists of parallel or irregular rows of holes at one end and a line from which to start at the other end. The irregularly placed holes prevent the marble player from rolling into the holes at the very end, while the line indicates the starting position, possibly with a depression to store some marbles.

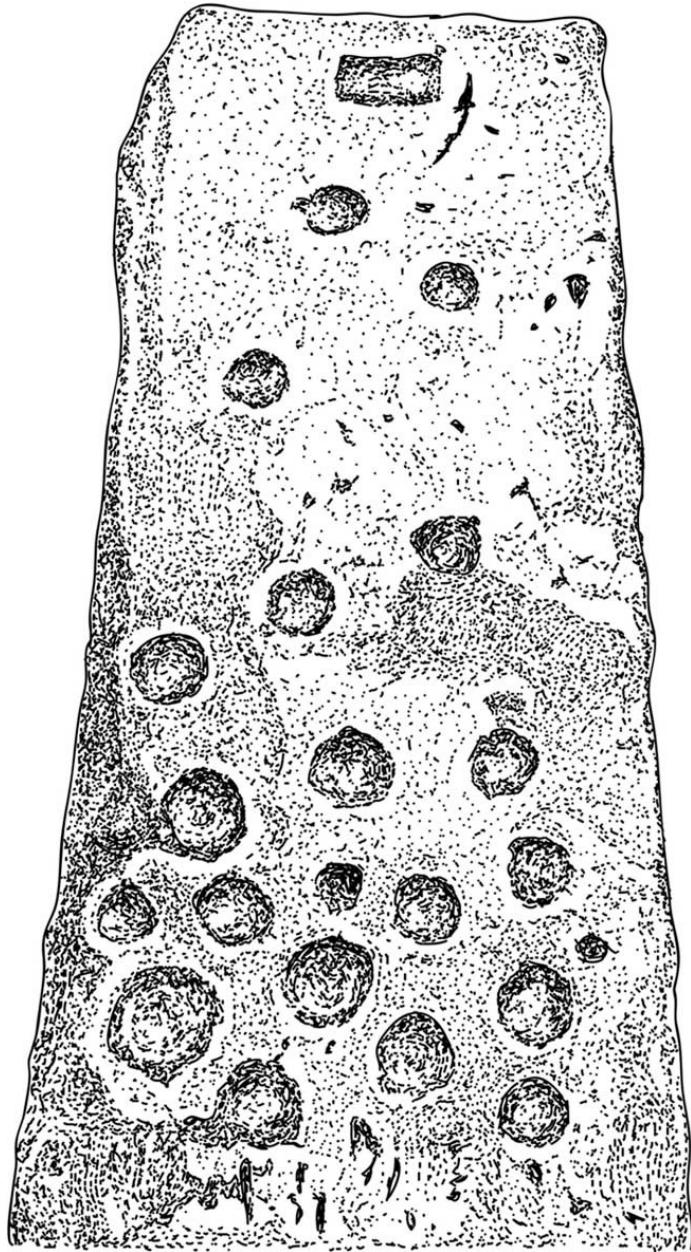


Figure 6.10 Drawing of a marble lane (after Schädler 1994b:56).

The immediate relevance of this game is not found in the assumption that many children used marble lanes in Egypt, although this may be possible but cannot be ascertained at this time. Rather it encourages the archaeologist who encounters a group of holes in an irregular order to consider the possibility of a marble lane. This could consist of a starting line a few feet away from these holes, preferably with a largely flat surface, interspersed with an occasional hole, between them. Documentation of groups of holes rarely includes a survey of the

vicinity that could point to or exclude such a possibility.

Remaining configurations

There remain a number of configurations of squares and holes that are placed systematically and intentionally so that their presence does not appear random or coincidental. They may be variations of boards that are already known, incomplete, corrected or amended shapes, or they may be part of games not yet described. It is, of course, also possible that they are not game boards at all even if an alternative purpose is unknown. In any case, it is necessary to depict at least some of these examples for future comparison as these configurations commonly remain unpublished. Indeed, the suggestion of a new gaming practice is reinforced if the same configurations are found in different sites as well as in the presence of other game boards.

In the Beni Hasan quarries a clearly defined board design of two rows of eight square fields was photographed during the Gebel el-Silsila Survey Project. A similar design of two rows of seven squares is found in Silsila West (fig. 6.11). Such game configurations complicate an interpretation of *mancala* as it is rather awkward to play on a square field without depressions needed to hold the multiple counters used in a *mancala* game. These game configurations are not yet understood and it is appropriate to state that the games in Egypt are only part of a much larger puzzle.

One example from the Kharga Oasis illustrates how a complicated set of lines can be interpreted multiple ways. In this figure about six rows of ten squares can be distinguished (fig. 6.12). In the center of the configuration, there is a column of squares that has an unusual shape and the bottom row looks eroded. It is possible to distinguish a 5×5 *seeja* board (see Chapter 7) as part of the right-hand side of this configuration. The carving at closer inspection suggests a number of attempts at creating a *seeja* board while there is a possibility that a *tâb* board was attempted as well. Since these are only suggestions, the presence of a game in this configuration requires a games context or other supportive evidence in this location to make a more educated guess.

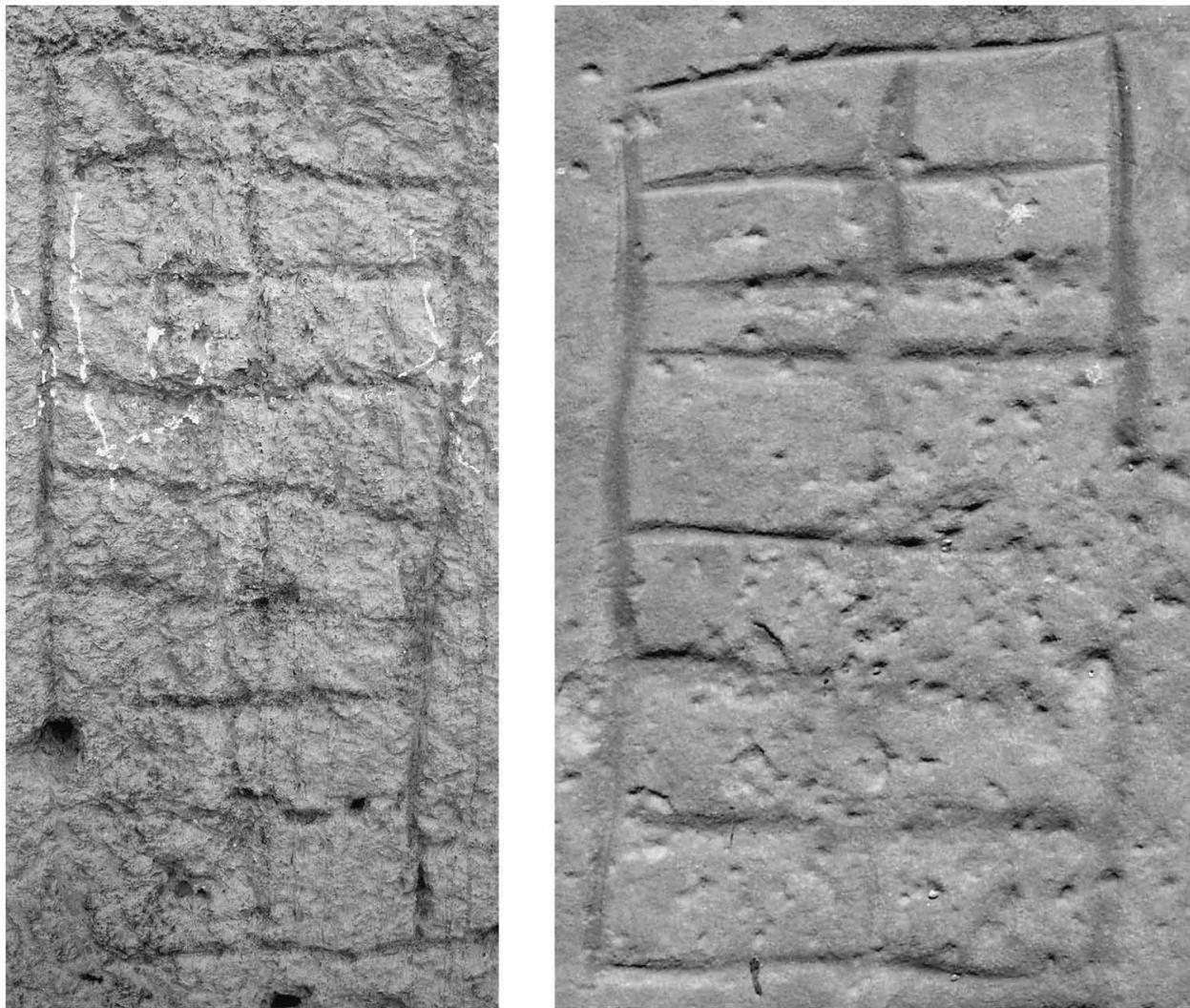


Figure 6.11 Two unidentified game boards at the Beni Hasan (left) and Silsila (right) quarries based on photographs from the Gebel el-Silsila Survey Project. Courtesy Maria Nilsson and John Ward.

Although a long list of possible game board designs could follow, most examples are better explained as eroded, partially completed or non-game designs. Without at least one comparable example elsewhere there is also no need to assume a “new” game board design. It remains essential that projects such as the Gebel el-Silsila Survey Project document such carvings in addition to the archaeologists active on a site.

The borders of Egypt

The board games discussed in this chapter were illustrated with examples from

Roman sites in Egypt and across its southern border. Towards the south is Qasr Ibrim, a temple complex and fortification that was conquered by Romans but with Meroites alternatingly having control of the site. Qustul, the location of one of the best-preserved *duodecim scripta* boards, was never Roman and dates to the Post-Meroitic period, i.e., after the fourth century CE. It became part of the Christian kingdoms in Sudanese Nubia, outside of the Roman Empire. Sedeinga with its cubic dice and possible evidence of *duodecim scripta* is squarely located in the Meroitic Kingdom and the discovery of games in that location coincides with the time of Roman Egypt. It was never conquered by the Romans and was an important center within the Meroitic Kingdom.

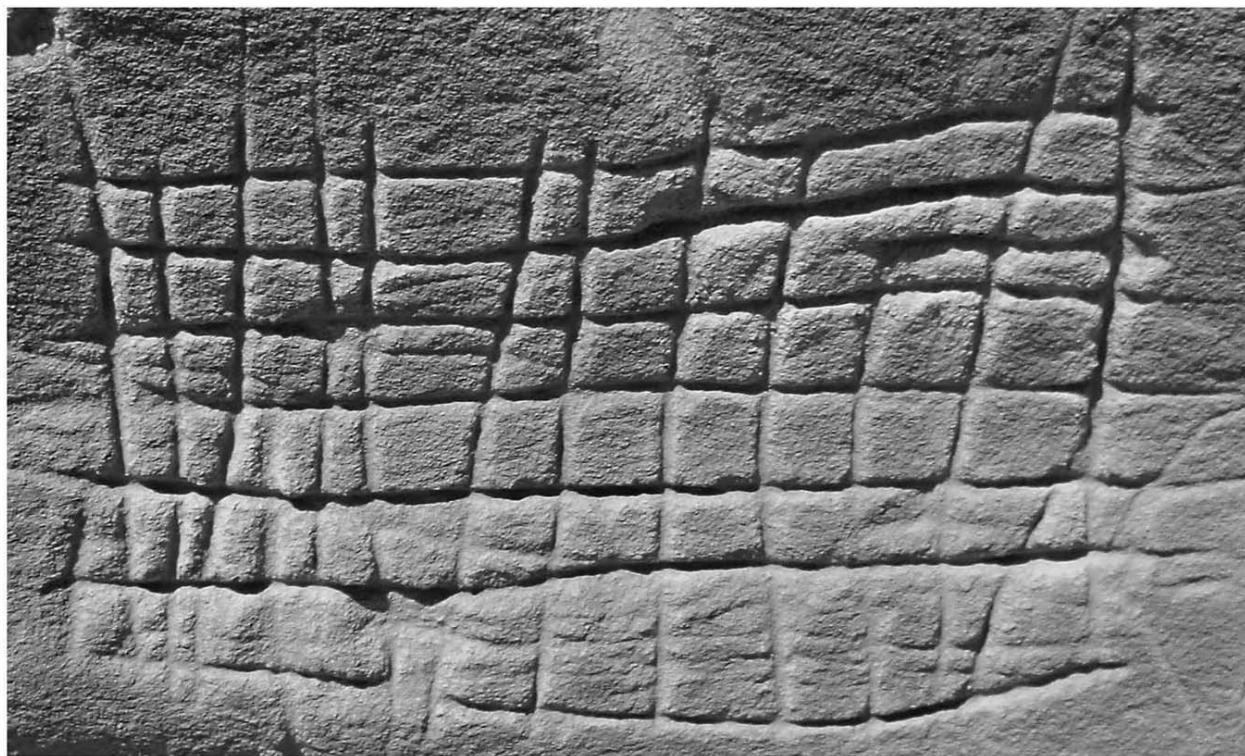


Figure 6.12 Possible *seeja* board at the Kharga Oasis based on a photograph from the Gebel el-Silsila Survey Project. Courtesy Maria Nilsson and John Ward.

Abu Sha'ar is on the Red Sea Coast and its location can be securely placed within Roman Egypt. Its function as a military fortress follows the popularity of the games among the Roman military. Fortifications on the borders of Egypt (Brun 2003, 2011; Matelly 2003) and other parts of the Empire, such as at Hadrian's Wall (Austin 1934:26), show a similar pattern. So far only the work of Mulvin and Sidebotham (2003) is specifically dedicated to Roman games in

Egypt. Most isolated examples have not yet been published or were part of studies that did not focus on the understanding of games. The various examples provided with the help of the Gebel el-Silsila Survey Project indicate that the presence of Roman games is much more prevalent than the published literature suggests. Although Roman soldiers may still be the main group of players, the games are not limited to fortresses on the border of the Roman Empire. The quarry site of Silsila and the Ptolemaic temple at Kom Ombo both feature multiple Roman games that complement the inventory of games found at the borders of the Roman sphere of influence.

This chapter provides the background for future studies of Roman games in Egypt. Game boards can be more readily recognized and interpreted in the context of the sites discussed and their interpretation is facilitated by comparisons with existing finds from Roman Egypt and the Roman Empire in general.

Arab and Ottoman Invaders Scratching the Surface

Although the history of modern board games in Egypt cannot be covered in a single chapter and is not part of our study, both Arab and Ottoman game practices have sometimes confused the understanding of ancient games. These games are mainly found scratched on pavements and monuments, erroneously suggesting an ancient history by their association with Pharaonic architecture. They can also be found next to games that date to Roman or Pharaonic times, so that even the games context in which they are found gives rise to confusion. Only an understanding of these games in contexts outside of Egypt allows them to be differentiated. This chapter disentangles the graffiti games introduced after the Arab conquest up to modern times from the Roman and earlier game practices in the record by describing their main characteristics and by pointing at possible problems of identification.

Graffiti games

Game boards that have been confused with those from antiquity have been uniquely and consistently discovered as graffiti games. If more recent games are scratched in existing buildings it is the date of the building or the presence of earlier games from antiquity that may lead to misconceptions. As emphasized in the previous chapter, the date of the building does provide a *terminus post quem* for the date of the game, but does not imply the game was played at the same time the building was built, or even in use. Whenever possible, an understanding of the taphonomy of the building in which games were found may provide some understanding of the date of inscribed games.

The types of games that can be found as graffiti are limited. They can be a configuration of holes, usually small depressions, or a grid of lines creating a board with square fields. An instant recognition of these games is particularly helpful to identify the era in which the incisions were made, or at least to attribute them to the relevant population.

The time period in which Arab and Ottoman games were made is stretched between the seventh century CE and the present day, as some of these games are

still being played in Egypt and neighboring countries. Even if this occurred in recent memory the local population may no longer be familiar with these games. Some games can only be attributed to Ottoman invaders, usually soldiers. This appears particularly true for *mancala* games that are rarely found on rock faces or monuments outside the Ottoman sphere of influence. Research on this Ottoman tradition of carving games in stone is ongoing and the date and origin of such games is refined each time new finds are made (see de Voogt 2010, 2012; Charpentier *et al.* 2014).

There are three games that have been associated with the Arab and Ottoman Empires. The game of *seeja* commonly consists of five rows of five fields, either small depressions or squares. The game of *tâb* often has four rows of seven or more fields, frequently seen as small depressions as well. Finally, the game of *mancala* usually has two rows of six or more cup-shaped holes, usually larger than those found for *seeja* and *tâb*. The variation that is found with each of these games and the occasionally overlapping configurations between games has to be taken into account whenever a game board is identified on an archaeological site (see fig. 7.1).

Arab and Ottoman games can be found together with Roman games since they often share the location of play. More problematic for the archaeologist are those games that were reused by later Arab or Ottoman players. Examples include a reused *latrunculi* board for making a *seeja* board at Silsila—which is part of ongoing research on games in collaboration with Maria Nilsson and John Ward —, possible extensions of the game of *five lines* to create *mancala* boards at Palmyra (de Voogt 2010) and contexts such as the roof of the temple of Khonsu where games from Pharaonic times are joined by *seeja* and possibly *mancala* or *five lines* games (Jacquet-Gordon 2003). Without an understanding of the latest of additions in such a games context, it is impossible to disentangle the different origins and time periods in which these games were made.



Figure 7.1 Example of an Arab or Ottoman games context at Petra, Jordan (top) with a 7×7 *seeja* board,

c. 40×35 cm and a 4×12 *tâb* board, c. 78×29 cm, and on Sai Island, Sudan (bottom) with mostly 2×6 *mancala* boards, a 5×5 *seeja* board, c. 40×33 cm and a 4×12 *tâb* board, c. 72×21 cm. Photographs by Alex de Voogt in 2014 and 2010, respectively.

Seeja or siga

In 1694 Thomas Hyde remarked on “an interesting game called *seejeh* or *sutreng*” as played by the Bedouin of Israel (translation Keats 1994:97). Without further explanation he states that the game is “mentioned in Egyptian papyri, and played in Ancient Persia, using glass pieces on carved stone boards.” His description is in the context of his history of *chess*, and although it is “quite unlike chess, and should not be confused with it,” Hyde is probably one of the first Western games historians who became part of a long tradition of relating certain board games to ancient Egypt.

Seeja—a transliteration of Arabic that has variations such as *sija*, *siga* and *seega*—is a board game that does not resemble other games from antiquity. It commonly consists of five rows of five holes or squares, unlike most other games discussed here, which have either two, three or four rows of playing fields. It cannot be found in documents dating to Pharaonic Egypt nor is the placement of this game on ancient monuments evidence of its supposed long history. On the contrary, there is no evidence in Egypt or in neighboring countries that *seeja* was played before the Arab invasion and in several cases before the Ottoman presence in the region.

Jacquet-Gordon (2003:12) in her study of the graffiti of the Khonsu temple roof states that she has no reason to suppose that the game, which she spells as *siga*, is not ancient. She states that the dating of the graffiti on the temple remains obscure. However, on two occasions this game covers earlier graffiti, in one case “a tiny figure of Khonsu” and in the other a lion, suggesting a players’ group that is not associated with the imagery of these figures. These two games consist of only two rows of five holes, which she interprets as an unfinished *seeja* game (Jacquet-Gordon 2003:17–18) but, as has been discussed elsewhere, it is more likely to be an example of the game of *five lines*.

Seeja playing rules

The 5×5 configuration of *seeja* is easily recognized and helps to date the games to the period after the Roman era. The grid can be found as a set of twenty-five

squares or as a set of small depressions. The variation reminds one of the game of *five lines* in that the appearance of the board is either a set of fields, small depressions or a combination of the two. In some cases the nature of the material may explain these preferences. Apart from the variation of squares and holes, there are multiple examples where the grid is slightly larger or smaller, usually not larger than seven rows of five or seven fields and commonly not smaller than four rows of four although the latter is often interpreted as an unfinished example.

Seeja uses two distinct sets of playing pieces (Murray 1951:54–5). When played in the sand, differently colored sticks can be used that are then stuck into the board. On stone, any pebble, seed or small piece may do as long as the two opponents can be differentiated. There are no dice needed for this game and the number of players or sides is limited to two.

Seeja is still played today and the board has different sets of rules. For instance, in Sudan a similar and popular game is called *dhala*, which uses the same grid, often in the shape of depressions in the sand. Lane (1908:356–7) has described what he called *seegà* for modern Egyptians with rules similar to those found elsewhere in the Middle East. He describes the board as commonly consisting of five rows of five holes, or seven rows of seven or even nine rows of nine. As in the game of *tâb* and the game of *mancala*, the size of the board varies but the rules are usually identical.

Lane (1908) calls a hole *eyn* (eye) and a playing piece *kelb* (dog). For a game played on a five-by-five board there are twelve pieces for each player. The two sets of twelve are differentiated by appearance. Lane has the first two pieces of each player placed as shown in fig. 7.2.

After this initial placement, players take turns putting two of their pieces on the board with each turn. They may be placed in any empty space except the central one. Once all the pieces have been placed, one player starts by moving one of his or her pieces from an adjacent field into the empty central space. If the opponent has no adjacent piece to place into the newly emptied space, the first player loses a piece as he or she is required to open up a place. If such a situation occurs again in the game, the same rule applies. Lane formulates the aim of the game as follows (Lane 1908:357):

The aim of each party is to place any one of his kelbs in such a situation that there shall be, between it and another of his, one of his adversary's kelbs. This, by doing so, he takes; and as long as he can immediately make

another capture by such means, he does so, without allowing his adversary to move.

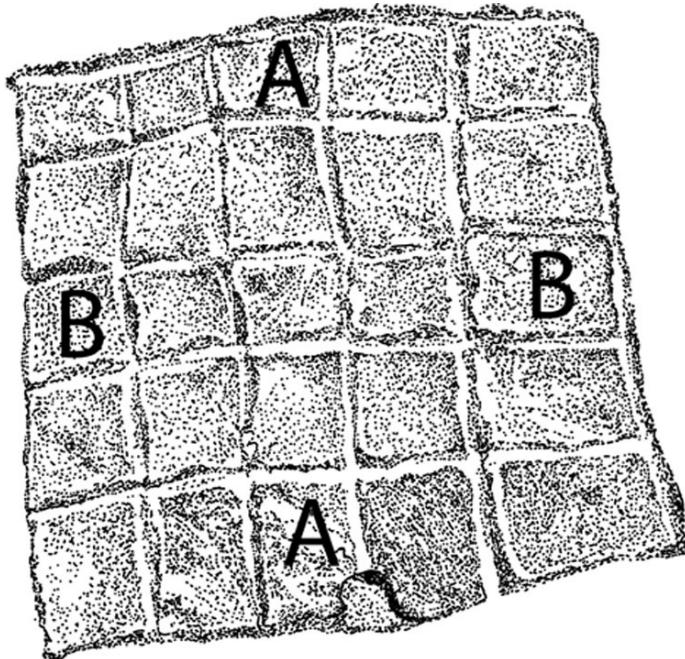


Figure 7.2 Placement of first pieces on a *seeja* board as discussed by Lane (1908).

Other sets of game rules may be present in Egypt but the rules above suffice to explain the nature of the game and the design of the playing board that comes with it. Lane (1908:357) adds that several boards “have been cut upon the stones on the summit of the Great Pyramid, by Arabs who have served as guides to travelers.” This early observation by Lane should inform those who need to interpret the history of this game on top of ancient monuments in Egypt.

The Gebel el-Silsila Survey Project revealed examples of *seeja* in el-Kab, Medamoud and several at Silsila (fig. 7.3). Also there are examples of four rows of five holes found at Edfu that may be related. In Silsila there are a few examples where more rows of depressions are found but where the five-by-five configuration stands out. Transformations of one game into another by adding or accentuating the desired configuration have been attested across time periods in Palmyra (de Voogt 2010) but can also be found in Silsila where a *latrunculi* board was partially reused for *seeja*.

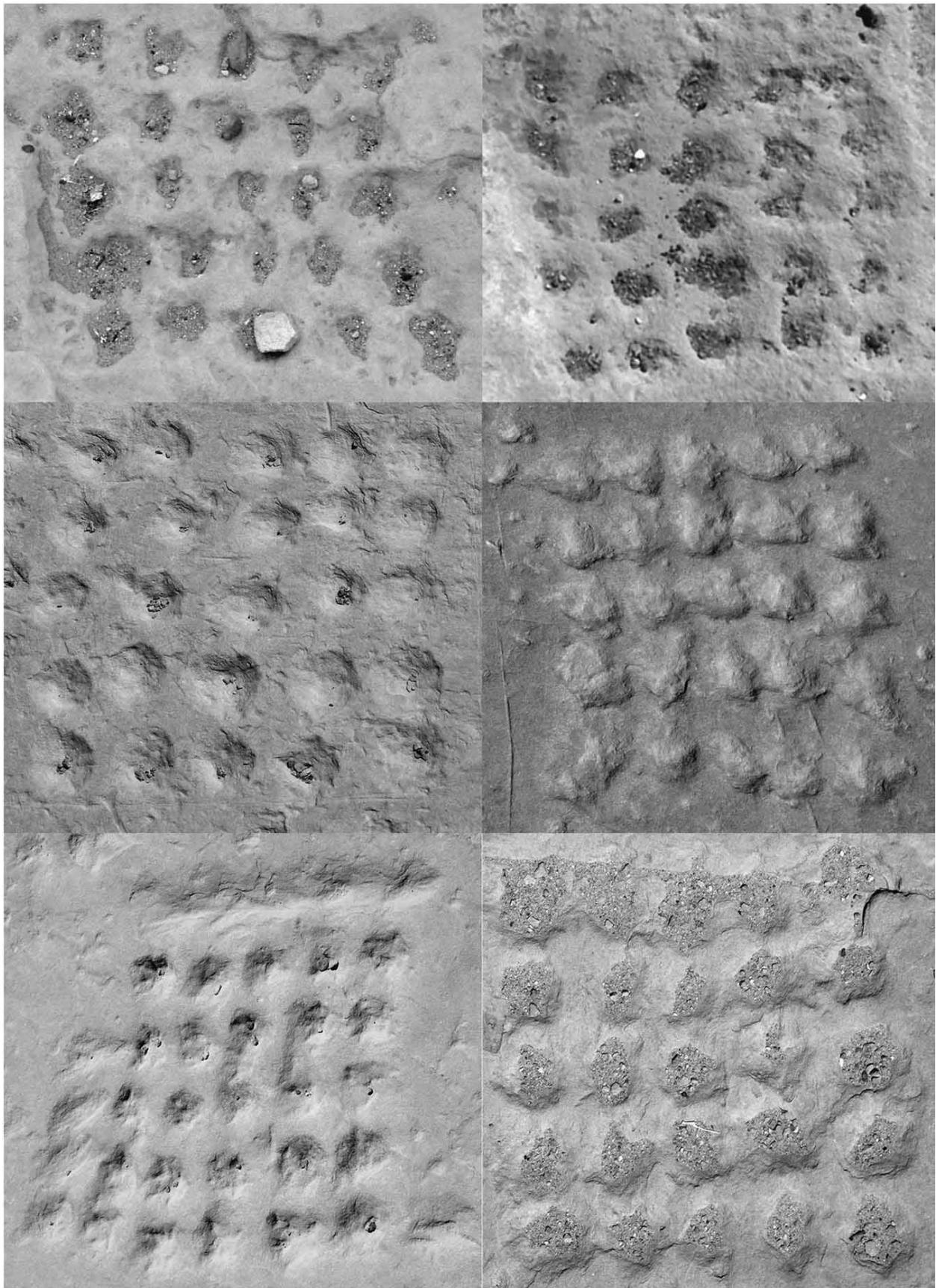


Figure 7.3 Examples of *seeja* boards at Silsila (top left), Medamoud (top right) and four at el-Kab, based on photographs from the Gebel el-Silsila Survey Project. Courtesy Maria Nilsson and John Ward.

Tâb

The game of *tâb* is not as well known today as the game of *seeja* but it is also found in the Middle East, including Egypt and Sudan. Four rows of seven or more depressions are used while the players use a set of throwing sticks or stick dice as the preferred randomizer for the moves. The game is played by two opposing sides, each moving one set of colored pieces around the board. Each opposing side may have two players that work as a team. The team members alternate throwing the dice to determine the next move.

Unlike *seeja*, which uses five rows and often has fields, the four rows of holes used for *tâb* create a similarity with *mancala* games. Four-row *mancala* boards that are known for East Africa can be identical in configuration to a *tâb* board. The size of the playing holes is likely to be different. In *mancala* games, the holes should be able to contain multiple counters at a time while in *tâb*, each depression usually holds just one or two pieces.

Tâb, which is a transliteration of Arabic, has different spellings including *ṭáb* as it is used by Lane (1908:353–6). It is attested for modern Egypt with a published complete description of the rules as they are used today. Similar descriptions are found in Niebuhr (1774:188–9) and the earliest attestation of this game in the Western literature is found with Thomas Hyde (see Depaulis 2001:56).

The game commonly requires four sticks, according to Lane often cut from a palm-branch. They are cut so that they have two sides; one is called white and the other black (Lane 1908:353):

Next, it is necessary to be provided with a “seegà.” This is a board, divided into four rows of squares, called “beyts” or “dárs,” each about two inches wide; or it consists of similar rows of holes made in the ground, or in a flat stone: the beyts are usually seven, nine, eleven, thirteen, or fifteen, in each row.

As Lane points out, the board varies in size and the size merely affects the duration of the game but not the playing rules. The value of the throws of the

sticks are defined by the number of white (or flat) sides that are visible. Each white side counts for one. For example, three whites and one black scores three. The only exception is four black sides, which score six. A score of one—called *tâb* or *weled* (child)—, four or six requires the player to throw again and the player only stops throwing when a two or three is thrown in which case it is the turn of the opponent.

Each player owns two rows of *beyts*, the outer rows are commonly filled with pieces, also called “dogs” according to Lane (1908:354). The word “dog” for gaming piece is also found in ancient Greece (Schädler 2002) and Pharaonic Egypt (see Chapter 3), but contrary to Falkener’s suggestion (Falkener 1892:39) that does not link the game boards or game rules. The game of *hounds and jackals* (see Chapter 5), also features dog-shaped pieces so that a continuous tradition of such pieces can be ascertained from ancient Egyptian to ancient Greek and Ottoman times. In each period, however, the games are known to be different and the majority did not originate in Egypt.

In order for a piece to move from the outer row the player has to throw a one. After this piece leaves the back row counterclockwise, it circulates in the inner two rows in a clockwise direction. If it lands on a field with an opponent’s piece, then this piece is captured and removed from the board. If it joins a piece of its own, it may move as one, i.e., two or even three pieces move as if they are one piece. A three-piece combination is made by either moving a set of two to a field with one piece, or by moving one piece onto a field with already two. They can only be separated again by throwing a one. Once a player moves a piece into the outer row of the opponent, it can no longer be captured although it may capture pieces that have not been removed from that row by the opponent. The object of the game is to capture all the opponent’s pieces. This technical information about the playing rules is relevant here since it determines the size of the playing fields as well as the playing pieces. Each field ideally accommodates three pieces, at least where the Egyptian variation is concerned (see also Murray 1951:95).

The game has been attested for Sudan, on the island of Sai (de Voogt 2014), where it was found carved next to a series of *mancala* games as well as one *seeja* game. In the context of two-row *mancala* and *seeja*, *tâb* is shown to belong to a particular group of people active in a specific time period. So far, this time period has coincided with the presence of the Ottomans but the period between the arrival of the Arabs and the colonial conquests of the French and the British in the nineteenth century is such that perhaps other periods can be associated

with these games for other sites. In the Gebel el-Silsila Survey Project, only the site of el-Kab showed possible examples for the game of *tâb* (fig. 7.4).



Figure 7.4 Examples of *tâb* boards at el-Kab with one possibly combined with a *seeja* board, based on photographs from the Gebel el-Silsila Survey Project. Courtesy Maria Nilsson and John Ward.

Mancala

As with almost any board game discussed here, the origins of *mancala* have at some point been placed in ancient Egypt. Parker (1909:589–91) enumerates

several examples of rows of holes cut “in the roof-slabs of the Kūrna temple in Upper Egypt,” “on the summit of the damaged portion of the great pylon built in Ptolemaic times at the entrance to the temple of Karnak, as well as on the tops of the walls there” and “at the Luxor temple.” These were also mentioned by Murray (1951), Walker (1990:34–5) and mentioned but finally criticized by Schädler (1998). Parker (1909:Fig. 256) adds a photograph of the holes at the “Third Pyramid, Gizeh” (fig. 7.5), an image that is not much dissimilar of the rows of holes found on the remains of the temple of Tiye at Sedeinga or those found on top of the Soleb Temple, two New Kingdom Egyptian monuments both found in Sudan (fig. 7.6). Also, the Gebel el-Silsila Survey project revealed two such games at Dendera; one consisting of two rows of six holes and the other of two rows of five holes with two end-holes, i.e., an additional hole at each far end.

Johnston (1913:384) states that as early as 4000 BCE “there came all musical instruments superior to the musical bow and the drum, several types of games played with hollowed or divided boards and counters, and a good many Egyptian notions about religion” that “began to penetrate Negro Africa.” Again this comment was picked up and repeated by Murray (1951:159) and Walker (1990). While Johnston placed the origin of all these matters in ancient Egypt, Schweinfurth (1874, 2:28) speaks about a game known by the Nubians as “mungala.” He stated it to be “singular that this pastime be so familiar to the Mohammedan Nubians, who only within the last twenty years have had any intercourse at all with the negroes of the south; but in all likelihood they received it in the same way as the guitar, as a legacy from their original home in Central Africa.” The accompanying illustration (Schweinfurth 1874, 2:26) shows a board of two rows of eight holes with two end-holes, a design and configuration unknown in the Middle East. Today’s Nubians do not seem to play this game anymore and it does not seem to have traveled down the Nile. Although these early twentieth-century sources may be considered dated, and today it is difficult to find Nubians playing this game, the connection with Egypt is not a thought that has vanished.



Figure 7.5 Drawing of a *mancala* board at the “Third Pyramid, Gizeh,” dimensions not recorded (after Parker 1909:Fig. 256).

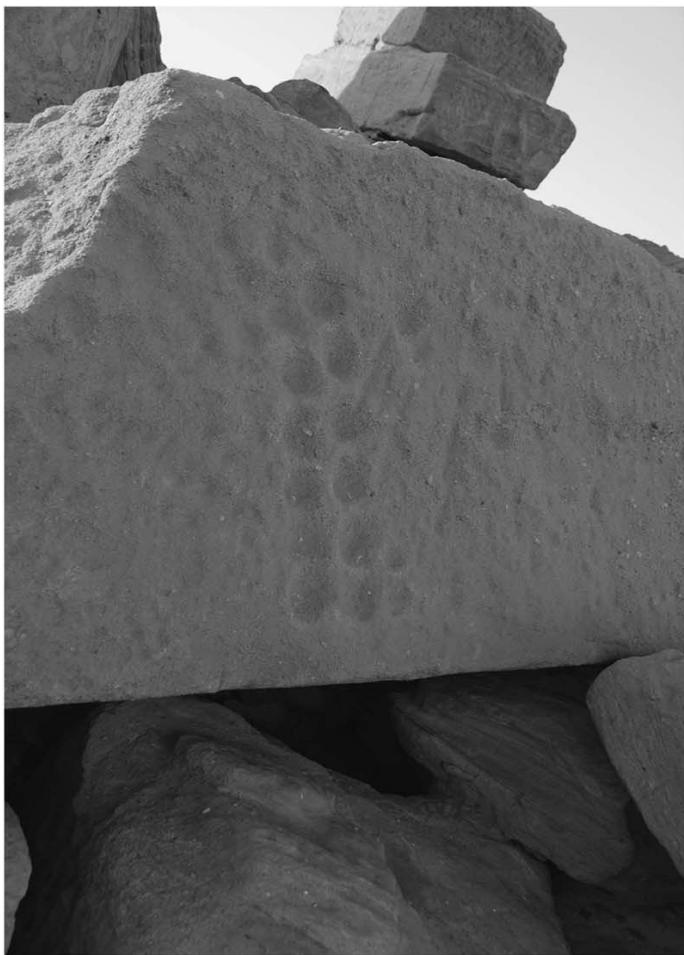


Figure 7.6 A 2×6 *mancala* board carved in the temple of Tiye, Sedeinga, Sudan, c. 21×61 cm, and a partly eroded 2×6 *mancala* board on top of the temple of Soleb, Sudan, c. 20×54 cm. Photographs by Alex de Voogt, 2011.

The esteemed games researcher Bell (1979:12), who based his view partly on rows of holes found on Egyptian ruins, suggested that it may have originated from “black Africa and had been taken to Egypt at a very early date.” A previous publication edited by Grunfeld (1975:20) but with Bell acting as a consultant states: “*mancala* games … have been played for thousands of years in Egypt, where boards have been found carved into the stone of the pyramid of Cheops and the temples at Luxor and Karnak.” It is the presence of games on Egyptian monuments that has created a series of other connections as the temple of “Kurna” is mentioned to feature an unfinished “*alquerque diagram*” (Grunfeld 1975:38) as well as a *nine-men’s-morris* game “probably carved by the workmen who built the temple around 1400 B.C.” (Grunfeld 1975:59). Both the identification of the game and the associated date are problematic. It cannot be emphasized enough that the date of the erection of a building is not necessarily related to the period in which the game was scratched into its roof.

Graffiti games on Egyptian, Nubian, Roman or other monuments from antiquity should not be immediately interpreted as dating to the time of the monument itself. The latter can only be assumed if the games are revealed within an archaeological context that leaves no doubt as to its origin and age. The accessibility of the temple at Karnak, but also structures such as the Nubian pyramids (de Voogt 2012) and the many monuments dating to Roman times (Schädler 1995, 1998; Mulvin & Sidebotham 2003; de Voogt 2010, 2012) have shown that games from different periods and origins can be present. Contrary to the beliefs of Grunfeld, Bell and other authors on game history, the temples of Kūrna and Khonsu feature games played by the ancient Egyptians as well as later Roman or Arab and Ottoman visitors that came after them.

Jacquet-Gordon attested a “twelve-hole game board” (Jacquet-Gordon 2003:13) consisting of two rows of six holes on the roof of the temple of Khonsu but refrains from speculating that this is a *mancala* game or that it was carved by ancient Egyptians. She mentions two games that were not assigned an entry number, one of which obliterated an older inscription. Only one “coherent graffito” is assigned a number, i.e., it received a separate graffito entry number, representing this board configuration. The presence of games covering inscriptions also makes an ancient Egyptian origin less likely.

Mulvin and Sidebotham (2003) identified two and three rows of holes of mostly five and sometimes four holes. They concluded that *mancala* games were present and, in light of the games context and the presence of *mancala* games in nearby geographical locations in today's world, this seemed a correct conclusion. But the places where *mancala* is played on two rows of five or four are few. *Mancala* games with three rows have been attested in modern times as well but only with six holes per row. More importantly, the game of *five lines* is a more likely candidate and has already been attested in other Roman sites and fits with the limited number of holes per row as well as the presence of several other Roman games present on their particular site. The absence of any additional evidence that Romans played *mancala*, such as imagery or literary references, further questions the conclusion of Mulvin and Sidebotham.

The Gebel el-Silsila Survey recorded two boards at Dendera that have a configuration and an appearance consistent with *mancala*. They are not found in a context that could identify their makers. More extensive examples were documented for Sudan, particularly on Sai Island (de Voogt 2014) where also an Ottoman games' context is present (see also fig. 7.1).

Modern Egyptians play a version of *mancala*, but they are not known to use the rows of holes carved in rock and monuments even though that may not have been the case in Ottoman times. This is also true for its immediate neighbor to the south, Sudan. In South Sudan, i.e., south of Sudan, there is a lively tradition of *mancala* that does not seem to have reached the Nile Valley since they prefer four rows of holes and do not prefer rock but rather sand to play their games. The same is true for Ethiopia and Eritrea where *mancala* is popular, mostly found as wooden boards, and quite distinct from the *mancala* versions in South Sudan and the rest of the Middle East. If anything, the Nile Valley has been an obstacle in the distribution of *mancala* games with games from the Middle East not traveling further south, and games from sub-Saharan Africa not traveling further north.

The earliest description of *mancala* rules, as opposed to possible game boards, in modern Egypt is probably by Carsten Niebuhr in 1774 who mentions Maronites playing in Cairo (Niebuhr 1774:185). The board has two rows of six holes and a starting configuration of six counters in each hole. A player picks up the contents of one of the holes on his or her side and spreads them one-by-one in counterclockwise direction. If the last counter ends up in a hole where the contents becomes either two, four or six, the player can capture its contents and also the contents of the holes directly preceding this hole if these holes happen to

have two, four or six counters as well. The rules are similar to those still found in the Middle East. For instance, in Tartus, Syria, the board has two rows of seven holes but the rules of play are similar with captures of all those that have two or four in one hole (Alex de Voogt, field notes).

Ottomans are known to have played *mancala*, as there is evidence found in illustrations and within the historical geographical confines of the Ottoman Empire. For instance, there is a banquet scene found in a sixteenth-or seventeenth-century Turkish album of miniatures and calligraphy that shows men drinking coffee, playing *backgammon* and *mancala* (Chester Beatty Library/Bridgeman Art Library CBL71659, Ms 439 f.9r). *Mancala* games are still found in Turkey and Syria that share a more or less common appearance. There is also a frequently quoted reference to *mancala* in Arabic (Murray 1951:165), a name of a game from which today's word *mancala* has been derived. Yet, outside of the Ottoman Empire there has been little evidence that *mancala* games were played on stone surfaces and, even on the illustration mentioned above, it is a wooden game board. Since the ancient history of *mancala* is not sufficiently known, the attribution of stone or graffiti *mancala* boards to ancient Egypt cannot be accepted without additional evidence.

The identification of *mancala* games in rock is complicated by the fact that they may be confused with other games such as *tâb* or the game of *five lines* or it may not be a board game at all but a game of *marbles* or part of an area where other activities using stone give the appearance of a set of playing holes. Identifying *mancala* on a rock surface requires a careful outline of two rows of at least six holes, each hole with a size that accommodates a small hand, and a location that seems suitable for playing games. Even with these characteristics one cannot always be sure, but usually other games in the vicinity may point to the possible origin and may create a so-called games context that could confirm the presence of *mancala*.

There is no archaeological evidence that the ancient Egyptians played *mancala* or *seeja*, nor *alquerque* and *nine-men's-morris* for that matter. When *mancala* boards appear in the archaeological record they are always found in locations where an Ottoman or late Arab presence can be assumed. When *mancala* boards are found at archaeological sites in Syria, Sudan and Egypt, usually *seeja* boards are present as well, suggesting that these games were played by the same people. Boards with two rows of five holes, particularly in the vicinity of Roman games, can be safely dated to Roman times and were most likely used for the game of *five lines* (Schädler 1995, 2008). The material found

in Egypt does not contradict this reading of the evidence.

The Role of Board Games in Understanding Antiquity

The archaeological and historical records of Egypt have supplied about five thousand years of games history. The documentation of such continuity is a rare but crucial occurrence for understanding the roles board games played in the ancient world. The overview in this volume shows commonalities in the ways board games were harnessed for societal processes, as well as a changing array of social niches in which they were preferred. This kind of research into ancient games is only a beginning and the evidence that is currently available should advance rather than finalize the conversation about the role of games in culture.

Spread of board games

The major board games in Egypt were either transmitted to neighboring regions or came to Egypt from foreign lands. Even in the third millennium BCE *mehen* spread to Cyprus and possibly Mesopotamia. Shortly thereafter, *senet* was brought to the Levant and Cyprus. Perhaps as early as the Middle Kingdom, the *game of twenty* found its way from Mesopotamia and the Levant to Egypt, and became popular during the New Kingdom, only to disappear quite suddenly during the Late Period. *Hounds and jackals* found its way rather quickly from Egypt to Anatolia and Mesopotamia, and maintained a long popularity outside of Egypt. *Five lines*, *duodecim scripta* and *latrunculi* all came to Egypt once increasing Greek and Roman influence took hold in the years following the conquests of Alexander and Augustus. Finally, *tâb*, *seeja* and *mancala* appear to have arrived through Arab and Ottoman invasions and occupations.

This simplified narrative of game playing in Egypt masks multiple kinds of interactions that were relevant to the spread of all of these games. For *mehen* and *senet*, trade is likely the primary mechanism by which the games were introduced into new lands. For *senet* in particular, the changing pattern of game board-producing sites appears to reflect what we know of shifting trade patterns. Trade is accompanied by migration as a mechanism by which games arrived in different regions, and evidence for the *game of twenty* suggests that it initially came to Egypt through the migration of Levantine peoples during the Middle

Kingdom. Migration may be seen in the appearance of *tâb* and *seeja* as well. The diffusion of *hounds and jackals* outside of Egypt is less obvious, as it seems to have spread very quickly to distant regions that lack strong cultural or exchange relations (e.g., Anatolia), suggesting there is a lacuna in the evidence for the existence of this game in other portions of the Near East.

Greco-Roman games in Egypt can be explained by a complex combination of conquest, trade and emulation. Of course, the incorporation of Egypt into the Hellenistic world after the conquest of Alexander and the subsequent division of his empire into autonomous regions with Greek rulers led to the promulgation of Hellenic culture throughout the Near East, which encouraged the migration of Greeks and emulation of them by the indigenous population. Similar processes happened during the Roman Empire when legionnaires were stationed throughout the eastern part of the Empire. Complex interactions between Roman citizens living outside of Italy and local peoples led to processes of Romanization that were neither one-directional nor universal, and games can be seen as part of this process.

All of these processes—trade, migration, emulation—are ways in which people address a need to interact with one another across linguistic, political, socio-economic and religious boundaries. The concept of a “social lubricant,” a practice that facilitates interaction across such boundaries, is relevant here. Research on social lubricants has traditionally focused on intoxicants and psychoactive substances, but games function similarly with regard to the facilitation of interaction. Board games are commonly played by two people. This requires people to interact before a game can take place, and thus the location of a game board may point to places where people were in contact with one another. The liminal nature of games, which allows for people to ignore socially-constructed boundaries (Turner 1982:27), functions similarly to ingested social lubricants in that they often take place in specific places and times, during which relationships can be strengthened, changed or created (Crist 2015; Crist *et al.* in press). Unfortunately, the archaeological evidence from Egypt is predominantly mortuary in nature such that it is difficult to identify places and spaces in which games were played. Instead, the broader geographic distribution of the games and comparison to contemporary social processes may provide insight on this function of Egypt’s games.

Since the appearance of *mehen* around 3000 BCE, board games have shown a regional popularity. When *senet* increased in popularity, Egypt’s main interactions with the outside world were to build relationships with local peoples

with the purpose of creating economic ties in order to secure important goods that were absent from Egypt itself, such as copper and cedar, as discussed in Chapter 3. The appearance of *hounds and jackals* in Anatolia and Mesopotamia could point to a similar economic impetus, although the specific mechanisms by which they would have traveled to these regions are not readily apparent.

Though migration was the process that initially brought the *game of twenty* to Egypt, it was the popularity of the game among Late Bronze Age elites throughout the Near East that appears to have led to its adoption by the Egyptian nobility. The game was decorated in the distinctive International Style, using shared symbols of power among the elites. This form of emulation was the primary cause of the spread of this game, and not the Egyptian conquest of the Levant. Little evidence for the presence of *senet* exists in the Late Bronze Age Levant even though it was at the height of its importance in Egypt. After the region-wide Late Bronze Age collapse, the *game of twenty* disappeared from Egypt, never to reappear, as its functionality was eliminated along with the extinction of the system of elite exchanges.

More emulation can be seen in a potential re-introduction of *hounds and jackals* during the Persian occupation of Egypt, as well as the arrival of Greco-Roman and later games. Whereas previously the clearest evidence for the adoption of a foreign game into Egypt was the *game of twenty*, all of these later games demonstrate the changing political realities in Egypt, in which the Nile Valley's power was diminished but played a key role in the empires to which it was subject. It was through an influx of transplanted Greeks and Romans, such as at the fortress at Abu Sha'ar, that brought Greco-Roman games to the Nile Valley, but the state of the evidence at present makes it difficult to determine the degree to which these games were played by local Egyptians. Attitudes toward pagan practices likely brought about a changing landscape of games with the adoption of Christianity, and a Coptic game gained in popularity during Late Antiquity, as did *tâb*, *seeja* and *mancala* during the Islamic periods.

This discussion of the changing landscape of games is again simplified, as the interactions that brought games to new places and the processes that affected their popularity across complex social networks are difficult to assess in the archaeological record. Ongoing archaeological research and new approaches to board games in Egypt will enrich, correct or confirm the above histories.

Religiosity of board games

In researching cultural transmission of board games, de Voogt *et al.* (2013) found that games cross cultural boundaries with remarkable fidelity. They retain much of their morphology and, likely, many of the rules. That is not to say that people adopting a new game will assign it similar social connotations. One cannot assume that the religious connotations a game had in one culture were transferred to the adopting society.

The religious use of *senet* is found prominently during the New Kingdom when texts, representations, and symbols on the boards themselves demonstrate its importance in this arena of life. What is less understood is whether the game *always* had this connection. Its importance in mortuary ritual is made clear, as is its presence in tomb assemblages, but the nature of the archaeological record in Egypt does not provide much evidence for how it was played in domestic contexts. Graffiti games from various sites do suggest a non-cultic use, as does its presence in the Levant and Cyprus. In contrast, Levantine and Cypriot contexts do not support a religious or ceremonial function for *senet* or for *mehen*, which also had strong cultic symbolism in Egypt (Sebbane 2001; Crist 2015). The symbolism of these games was not translated into the cultures receiving these games; rather, they were adopted into existing cultural milieux.

The connection between divination and the *game of twenty* outside of Egypt did not translate to its use in the New Kingdom. While it is possible the practice existed among the Levantine peoples settling in Egypt, there is no indication in the textual evidence that Egyptians used it for this purpose once it became popular among the nobility. Its divinatory use continued in Mesopotamia and the Levant alongside its symbolic use by elites, and lasted long after its demise in Egypt. The *game of twenty* also does not appear to have been adopted into any form of Egyptian cosmology relating to the afterlife. Though it appears opposite *senet* on game boxes, texts and scenes are silent on the game. This suggests a non-religious use for the *game of twenty*, like many of the other games found in Egypt about which texts reveal no information.

Greek and Roman games, particularly those involving dice, are associated with gambling practices rather than divination and religious practice. *Senet* did not become part of this tradition, and, with its eventual demise, the religious connotation of games disappeared from Egypt. At the rise of Christianity during Late Antiquity, pagan symbolism related to Egyptian games was long abandoned, and games from then on and continuing throughout the Islamic periods appear to have been strictly a secular practice.

Site use

As has been stressed throughout this volume, attribution of graffiti games to certain time periods or practices requires care, as the structure on which they are found merely provides a *terminus post quem* for the game pattern itself. The appearance of a Roman or Islamic game on a Pharaonic monument does not imply that the appearance of the game in Egypt should be ascribed to the date of that monument, rather it implies that the monument was in use or at the least unburied during later periods, and was utilized as a place in which to play a game, for whatever reason the players deemed fit.

Identifying the game itself is a crucial first step in dating the carved pattern. Some patterns, such as *merels*, *duodecim scripta* and the *game of twenty* are sufficiently diagnostic that their presence on monuments allow for an easy identification. Others, such as *mancala*, *five lines* and *latrunculi* are open to interpretation, and require further lines of evidence to positively identify them. Site taphonomy helps to ascribe graffiti games to certain time periods and aids archaeologists in understanding the chronology of the individual games' existence. Much of this information is lost, since major Egyptian monuments were excavated before scientific methods were adopted by archaeologists, but ongoing and future excavations identifying graffiti games already help in understanding how and when some of these monuments were buried and which populations visited the remains.

Unidentified board games and new approaches

There are patterns that do not easily fit any of the currently known types. They are arranged as intersecting lines making fields of squares or rectangles as well as rows or other patterns of cupules. While it is likely that games existed in Egypt that we have yet to discover, the identification of patterns as games can only be made in conjunction with other kinds of evidence. These include patterns that appear multiple times, have associated gaming paraphernalia (playing pieces or casting devices), exist alongside other known games in games contexts (de Voogt 2010; Crist *et al.* in press), have a certain social context from the archaeological record (Crist 2015) or appear with corroborating textual or artistic evidence.

While efforts to identify new games are ongoing, there are undocumented

examples of known types throughout Egypt as well. Newly found games at Palmyra in Syria, as well as at the pyramids of Meroe (de Voogt 2010, 2012), and those documented at various sites by Pusch (1979), Piccione (1990b) and Jacquet-Gordon (2003) suggest that there is a wealth of evidence for games that remains mis- or unidentified. For Egypt, this volume not only adds a range of Roman games found through the Gebel el-Silsila Survey Project but also contributes unpublished examples of graffiti *senet*, misinterpreted *hounds and jackal* boards, unpublished photographs of a series of Egyptian games and a scientific examination attempting to authenticate a long-disputed *mehen* board as well as corrections of interpretations in earlier scholarly texts.

The discovery of games outside of Egypt has helped to refine our understanding of the ways in which Egyptian games were adopted and further elucidates the types of interactions Egyptians had with local peoples. In the past forty years, evidence for Egyptian games in Cyprus has ballooned significantly to the point where there are now more *senet* boards that have been found outside of Egypt than within. Cyprus experienced this increase of awareness during the late 1970s and 1980s, and now most Bronze Age sites excavated since then have produced games. The Levant may be experiencing a similar expansion of awareness of this artifact type, as more games have been identified there over the past decade and a half than had been found previously.

Methods from anthropological archaeology (de Voogt *et al.* 2013; Crist 2015) examine existing material in the light of cultural and anthropological theory. This interest from other disciplines coupled with a better identification of cruder examples of games helps to reinvigorate the study of games in Ancient Egypt. Our work serves as a basis for Classical and anthropological archaeology as well as the field of Egyptology in general to provide a thorough understanding of existing evidence and an overview of the sources used for identifying and interpreting games in Egypt.

References

- Albright, W.F. 1938. The Excavation of Tell Beit Mirsim. *Annual of the American Schools of Oriental Research* XVII, Vol. II. New Haven: American Schools of Oriental Research.
- Allen, J. 2002. Senet game. In E. Hornung & B.M. Bryan (eds), *The Quest for Immortality: Treasurers of Ancient Egypt*. Washington: National Gallery of Art, and Copenhagen: United Exhibits Group, 156.
- Allen, J. 2005. *The Ancient Egyptian Pyramid Texts*. Leiden: Brill.
- Amandry, P. 1984. Chapitre IX: Os et coquilles. *Bulletin de correspondance hellénique, Supplément* 9, 347–80.
- Amélineau, E. 1899. *Les nouvelles fouilles d'Abydos 1895–96*. Paris: E. Leroux.
- Amiran, R. 1978. *Early Arad: The Chalcolithic and Early Bronze Age City*. Jerusalem: Israel Exploration Society.
- Arnold, D. 1995. An Egyptian Bestiary. *The Metropolitan Museum of Art Bulletin* 52(4).
- Aruz, J. (ed.). 2003. *Art of the First Cities: The Third Millennium B.C. from the Mediterranean to the Indus*. New York: The Metropolitan Museum of Art.
- Austin, R.G. 1934. Roman board games. I. *Greece & Rome* 4(10):24–34.
- Austin, R.G. 1935. Roman board games. II. *Greece & Rome* 4(11):76–82.
- Ayrton, E. & W.L.S. Loat. 1911. *Pre-Dynastic Cemetery at El-Mahasna*. London: William Clowes & Sons, Ltd.
- Banks, E.J. 1912. *Bismaya, or the Lost City of Adab*. New York and London.
- Bardanis, M. 1966. Στοιχεία ἀπό τις Ἀστρονομικές γνώσεις τῶν προϊστορικών Κυκλαδιτών. *Δελτίον Βιβλιοθήκης Νίκου Ν. Γλέζου*, 71–80.
- Bardanis, M. 1988/9. Στοιχεία ἀπό τις Ἀστρονομικές γνώσεις τῶν προϊστορικών Κυκλαδιτών. *Ἀπεραθίτικα* 3:433–46.
- Becker, A. 2007. The Royal Game of Ur. In I.L. Finkel (ed.), *Ancient Board Games in Perspective: Papers from the 1990 British Museum Colloquium, with Additional Contributions*. London: British Museum Press, 11–15.
- Behling, C.-M. 2013. Le mystère de la marelle ronde. *Archéothéma: Histoire et archéologie* 31:47.
- Bell, R.C. 1979. *The Boardgame Book*. New York: Viking.
- Bénédite, G. 1894. Tombeau de Neferhotpou fils d'Amenemanit. *Mémoires publiés par les membres de la mission archéologique française au Caire (Paris)* 5:489–540.
- Bénédite, G. 1911. *Objets de toilette. Catalogue général des antiquités égyptiennes du musée du Caire*, no.

- 44301–44638. Cairo: Imprimerie de l’Institut Français de l’Archéologie Orientale.
- Ben-Tor, A. 2009. A decorated jewellery box from Hazor. *Tel Aviv* 36:5–67.
- Bielinski, P. & P. Taracha. 1992. Board games in the Eastern Mediterranean. Some aspects of cultural interrelations. *Studia Aegaea et Balcanica in honorem Ludwika Press*. Warsow: Wydawnictwa Uniwersyteta Warszawskiego, 41–52.
- Birch, S. 1865. Le Roi Rhampsinite et le Jeu de Dames. *Revue archéologique*, NS 12: 56–65.
- Bisht, R.S. 2015. <https://www.scribd.com/doc/262316120/Excavations-at-Dholavira-1989-2005-RS-Bisht-2015> [accessed 10 June 2015].
- Blackman, A. 1920. A painted pottery model of a granary in the collection of the late Jeremiah James Coleman, Esq of Carrow House, Norwich. *Journal of Egyptian Archaeology* 6:206–8.
- Blackman, A. 1924. *The Rock Tombs of Meir*. London: Egypt Exploration Fund.
- Brandl, B. 1992. Evidence for Egyptian colonization in the Southern Coastal Plain and Lowlands of Canaan during the EBI Period. In E. van den Brink (ed.), *The Nile delta in Transition: Fourth-Third Millennium BC*. Jerusalem: Israel Exploration Society, 441–7.
- Breyer, C. 2010. *Jeux et jouets à travers les âges*. Brussels: Safran.
- Brown, W.N. 1964. The Indian Games of Pachisi, Chaupar, and Chausar. *Expedition* 6:32–5.
- Brun, J.-P. 2003. Dawwî. In H. Cuvigny (ed.), *La route de Myos Hormos: L’armée romaine dans le désert Oriental d’Égypte*. Institut Français d’Archéologie Orientale 48/I, 133–5, 184.
- Brun, J.-P. 2011. Le dépotoir. In H. Cuvigny (ed.), *Didymoi: Une garnison romaine dans le désert Oriental d’Égypte*. Institut Français d’Archéologie Orientale 64/I, 115–55.
- Brunner-Traut, E. 1956. *Die altägyptischen Scherbenbilder (Bildostraka) der deutschen Museen und Sammlungen*. Wiesbaden: F. Steiner.
- Bruyère, B. 1930. *Mert-Seger à Deir el Medineh*. Cairo: Imprimerie de l’Institut Français d’Archéologie Orientale.
- Bruyère, B. 1959. *La Tombe no. 1 de Sennedjem à Deir el Médineh*. Cairo: Imprimerie de l’Institut Français d’Archéologie Orientale.
- Buchholz, H.-G. 1981. Schalensteine in Griechenland, Anatolien und Zypern. In *Studien zur Bronzezeit, Festschrift für W. A. v. Brunn*. Mainz am Rhein: Philipp von Zabern, 63–94.
- Buchholz, H.-G. 1982. Bronzezeitliche Brettspiele aus Zypern. *Acta Praehistorica et Archaeologica*, 13/14:67–73.
- Burke, A.A. 2014. Introduction to the Levant during the Middle Bronze Age. In M.L. Steiner & A.E. Killebrew (eds), *The Oxford Handbook of the Archaeology of the Levant c. 8000–332 BCE*. Oxford: Oxford University Press, 403–13.
- Calament, F. & M. Durand (eds) 2013. *Antinoé, à la vie, à la mode: visions d’élégance dans les solitudes*. Lyon: Fage.
- Capart, J. 1905. *Primitive Art in Egypt*. London: H. Grevel & Co.
- Capart, J. 1938. A Neo-Memphite bas-relief. *Journal of the Walters Art Gallery* 1:13–18.

- Carnarvon, Earl of, & H. Carter. 1912. *Five Years' Exploration at Thebes*. London: Oxford University Press.
- Caubet, A. 1998. The International Style: A point of view from the Levant and Syria. In E.H. Cline & D. Harris-Cline (eds), *The Aegean and the Orient in the Second Millennium: Proceedings of the 50th Anniversary Symposium, Cincinnati, 18–20 April 1997*. Aegaeum 18. Liège and Austin, 105–13.
- Charpentier, V., A.J. de Voogt, R. Crassard, J.-F. Berger, F. Borgi, & A. Al-Ma'shani. 2014. Games on the seashore of Salalah: the discovery of mancala games in Dhofar, Sultanate of Oman. *Arabian Archaeology and Epigraphy* 25:115–20.
- Cochavi-Rainey, Z. 1999. *Royal Gifts in the Late Bronze Age, Fourteenth to Thirteenth Centuries B.C.E.* Beersheba: Ben-Gurion University of the Negev Press.
- Cohen, R. 1986. *The Settlement of the Central Negev in the Light of Archaeological and Literary Sources during the Fourth–First Millennia BCE*. Unpublished Ph.D. Dissertation, Hebrew University of Jerusalem.
- Cohen, R. 1999. *Ancient Settlement of the Negev I: the Chalcolithic Period, the Early Bronze Age and the Middle Bronze Age I*. Jerusalem: Israel Archaeological Reports.
- Collon, D. 2008. Cappadocia and the Eastern Mediterranean. In C. Michel (ed.), *Old Assyrian Studies in Memory of Paul Garelli*. Leiden: Nederlands Instituut voor het Nabije Oosten, 99–100.
- Crist, W. 2015. *Games of Thrones: Board Games and Social Complexity in Bronze Age Cyprus*. Unpublished Ph.D. Dissertation, Arizona State University.
- Crist, W. in press. The gaming stones. In S. Swiny, E. Herscher, & P. Roberts (eds), *Sotira-Kaminoudhia II*. Boston: American Schools of Oriental Research.
- Crist, W., A. de Voogt, & A.-E. Dunn-Vaturi. in press. Facilitating interaction: Board games as social lubricants in the Ancient Near East. *Oxford Journal of Archaeology*.
- Dales, G.F. 1968. Of dice and men. *Journal of the American Oriental Society* 88(1):14–23.
- Dandoy, J.R. 2006. Astragali through time. In M. Maltby (ed.), *Integrating zooarchaeology: proceedings of the 9th Conference of the International Council of Archaeozoology, Durham, August 2002*, 131–7.
- Daressy, G. 1902. *Fouilles de la Vallée des Rois 1989–1899*. Cairo: Imprimerie de l'Institut Français d'Archéologie Orientale.
- Dasen, V. 2008. Le secret d'Omphale. *Revue archéologique* 2008/2, 46:265–81.
- David, A.R. 1979. Toys and games from Kahun in the Manchester Museum Collection. In J. Ruffle, G. Gaballa, & K. Kitchen (eds), *Glimpses of Ancient Egypt: Studies in Honor of H.W. Fairman*. London: Aris & Phillips, 12–15.
- Davies, N. 1902. *The Rock Tombs of Deir el-Gebrawi*. Vol.1. London: Egypt Exploration Fund.
- Davies, N. & A. Gardiner. 1915. *The Tomb of Amenemhet (No. 82)*. London: Egypt Exploration Society.
- Davies, R. 1925. Some Arab games and puzzles. *Sudan Notes and Records* 8:137–52.
- de Garis Davies, N. 1963. *Scenes from some Theban Tombs IV*. London: Aris & Phillips.
- de Morgan, J. 1896–7. *Recherches sur les origines de l'Égypte*. Paris, E. Leroux.

- de Voogt, A.J. 2010. Mancala players at Palmyra. *Antiquity* 84(326):1055–66.
- de Voogt, A.J. 2012. Mancala at the pyramids of Meroe. *Antiquity* 86(334):1155–66.
- de Voogt, A.J. 2014. The introduction of mancala to Sai Island. In J.R. Anderson & D.A. Welsby (eds), *The Fourth Cataract and Beyond, Proceedings of the 12th International Conference for Nubian Studies*. London: British Museum Publications on Egypt and Sudan 1, 1017–20.
- de Voogt, A.J., A.-E. Dunn-Vaturi, & J.W. Eerkens. 2013. Cultural transmission in the ancient Near East: twenty squares and fifty-eight holes. *Journal of Archaeological Science* 40:1715–30.
- Decker, W. 1992. *Sports and Games of Ancient Egypt*. New Haven: Yale University Press.
- Decker, W. & M. Herb. 1994. Bildatlas zum Sport im Alten Ägypten. *Corpus der Billichen Quellen zu Liebesübungen, Spiel, Jagd, Tanz, und Verwandten Themen*. Leiden: Brill.
- Depaulis, T. 2001. Jeux de parcours du monde arabo-musulman (Afrique du Nord et Proche-Orient). *Journal of Board Games Studies* 4:53–76.
- Deveria, Th. 1897. Les jeux de dames en Égypte. In G. Maspero (ed.), *Mémoires et Fragments II. Bibliothèque Egyptologique* 5. Paris, 83–96.
- Donadoni Roveri, A.M. (ed.) 1988. *Egyptian Civilization. Daily Life*. Turin: Istituto Bancario San Paolo di Torino.
- Dorn, A. 2011. *Arbeiterhüttern im Tal der Könige: Ein Beitrag zur altägyptischen Sozialgeschichte aufgrund von neuem Quellenmaterial aus der Mitte der 20. Dynastie (ca. 1150 v. Chr.)*. Basel: Schwabe Verlag.
- Drioton, E. 1940. Un ancien jeu copte. *Bulletin de la Société d'Archéologie copte* VI:177–206.
- Dunand, M. 1954. *Fouilles de Byblos 1933–1938 Tome I*. Paris: Maisonneuve.
- Dunand, M. 1958. *Fouilles de Byblos 1933–1938 Tome II*. Paris: Maisonneuve.
- Dunham, D. 1950. *El-Kurru*. Cambridge: Harvard University Press.
- Dunham, D. 1978. *Zawiyet el-Aryan, The Cemeteries adjacent to The Layer Pyramid*. Boston: Museum of Fine Arts.
- Dunn-Vaturi, A.-E. 2000. “The Monkey Race”—remarks on board games accessories. *Journal of Board Games Studies* 3:107–11.
- Dunn-Vaturi, A.-E. 2012a. Jeu de 20 cases, Pions, Osselets. In I. Bardies-Fronty & A.-E. Dunn-Vaturi (eds), *Art du Jeu, Jeu dans l'Art. De Babylone à l'Occident médiéval*. Paris: Réunion des musées nationaux, 57.
- Dunn-Vaturi, A.-E. 2012b. Pion inscrit au nom de Hatchepsout. In I. Bardies-Fronty & A.-E. Dunn-Vaturi (eds), *Art du Jeu, Jeu dans l'Art. De Babylone à l'Occident médiéval*. Paris: Réunion des musées nationaux, 107.
- Dunn-Vaturi, A.-E. 2012c. Brique avec jeu de 20 cases, inscrite au nom d’Ilum-ishar. In I. Bardies-Fronty & A.-E. Dunn-Vaturi (eds), *Art du Jeu, Jeu dans l'Art. De Babylone à l'Occident médiéval*. Paris: Réunion des musées nationaux, 54.
- Dunn-Vaturi, A.-E. 2012d. Boîte de jeu d’Imenmès. In I. Bardies-Fronty & A.-E. Dunn-Vaturi (eds), *Art du*

- Jeu, Jeu dans l'Art. De Babylone à l'Occident médiéval.* Paris: Réunion des musées nationaux, 127.
- Dunn-Vaturi, A.-E. 2012e. Un jeu de 58 trous parmi les ivoires Pratt. *Histoire Antique et Médiévale HS* 33:62–7.
- Dunn-Vaturi, A.-E. 2012f. Amulettes et simulacres en forme de jeu dans l'Antiquité. *Histoire Antique et Médiévale HS* 33:22–5.
- Dunn-Vaturi, A.-E. & U. Schädler. 2006. Nouvelles perspectives sur les jeux à la lumière de plateaux du Kerman. *Iranica Antiqua* 41:1–29.
- Dunn-Vaturi, A.-E. & U. Schädler. 2009. <http://www.iranicaonline.org/articles/boardgames-in-pre-islamic-persia> [accessed 27 February 2015].
- DuQuesne, T. 2002. Hounds and jackals playing set, mounted on a turtle-shaped base, with gaming board. In E. Hornung & B.M. Bryan (eds), *The Quest for Immortality: Treasurers of Ancient Egypt*. Washington: National Gallery of Art, and Copenhagen: United Exhibits Group, 157–8.
- Ellis, R. & B. Buchanan. 1966. An Old Babylonian gameboard with sculptured decoration. *Journal of Near Eastern Studies* XXV(3):192–201.
- Emery, W.B. 1949. *Excavations at Saqqara: Great Tombs of the First Dynasty I*. Cairo: Service des Antiquités.
- Emery, W.B. 1954. *Excavations at Sakkara: Great Tombs of the First Dynasty II*. London: Egypt Exploration Fund.
- Emery, W.B. 1958. *Excavations at Sakkara: Great Tombs of the First Dynasty III*. London: Egypt Exploration Fund.
- Emery, W.B. 1961. *Archaic Egypt*. Baltimore: Penguin Books.
- Emery, W.B. 1979. *Fortress of Buhen: Archaeological Report*. London: Egypt Exploration Society.
- Emery, W.B. & L.P. Kirwan. 1938. *Mission Archéologique de Nubie 1929–1934. The Royal Tombs of Ballana and Qustul*. Volume I & II. Government Press, Bulaq, Cairo.
- Erdös, S. 1986. *Les Tabliers de jeux de l'Orient ancien*, Unpublished M.A. Thesis. Université Paris I Sorbonne.
- Eyckerman, M. & S. Hendrickx. 2011. The Naqada I Tombs H17 and H41 at el-Mahâsna, a visual reconstruction. In R.F. Friedman & P.N. Fiske (eds), *Egypt at Its Origins 3. Orientalia Lovaniensia Analecta 205*. Leuven: Peeters, 379–429.
- Falkener, E. 1892. *Games Ancient and Oriental and How to Play Them*. London: Longmans, Green, and Co.
- Faulkner, R.O. 1973. *The Ancient Egyptian Coffin Texts. Volume I: Spells 1–354*. Warminster: Aris and Phillips.
- Faulkner, R.O. 1977. *The Ancient Egyptian Coffin Texts. Volume II: Spells 355–787*. Warminster: Aris and Phillips.
- Faulkner, R.O. 1978. *The Ancient Egyptian Coffin Texts. Volume III: Spells 788–1185*. Warminster: Aris and Phillips.

- Finkel, I.L. 2004. Round and round the houses: The Game of Pachisi. In I.L. Finkel & C. Mackenzie (eds), *Asian Games: The Art of Contest*. New York: Asia Society, 46–57.
- Finkel, I.L. 2007. On the rules for the Royal Game of Ur. In I.L. Finkel (ed.), *Ancient Board Games in Perspective: Papers from the 1990 British Museum Colloquium, with Additional Contributions*. London: The British Museum Press, 16–32.
- Finkel, I.L. 2008. Board games. In J. Aruz, K. Benzel, & J. Evans (eds), *Beyond Babylon. Art, Trade, and Diplomacy in the Second Millennium B.C.* New York: The Metropolitan Museum of Art, 151–4.
- Firth, C.M. 1927. *The Archaeological Survey of Nubia. Report for 1910–1911*. Cairo.
- Fischer, H. 1968. *Ancient Egyptian Representations of Turtles*. New York: The Metropolitan Museum of Art.
- Förster, F. 2007. With donkeys, jars, and water bags into the Libyan Desert: the Abu Ballas Trail in the late Old Kingdom/First Intermediate Period. *British Museum Studies in Ancient Egypt and Sudan* 7:1–36.
- Fourrier, S. 2003. Pierres à cupules d’Amathonte. *Cahiers du Centre d’Études chypriotes* 33:89–98.
- Francigny, V., A. de Voogt, J. Kahn, & W. Harcourt-Smith. 2014. At the border between Egypt and Nubia: Skeletal material from el-Hesa cemetery 2. *Journal of Ancient Egyptian Interconnections* 6(1):5–10.
- Franco, I. 2004. Pions de jeu en forme de prisonniers. In *Pharaon*. Paris: Institut du monde arabe, 229.
- Frankel, D. & J. Webb. 1996. *Marki Alonia: An Early and Middle Bronze Age Town in Cyprus. Excavations 1990–1994*. Jonsered: Paul Åströms Förlag.
- Frankel, D. & J. Webb. 2006. *Marki Alonia. An Early and Middle Bronze Age Settlement in Cyprus. Excavations 1995–2000*. Sävedalen: Paul Åströms Förlag.
- Frankel, D. & J. Webb. 2007. *The Bronze Age Cemeteries at Deneia in Cyprus*. Sävedalen: Paul Åströms Förlag.
- Frankfort, H. & J. Pendlebury. 1933. *The City of Akhenaten*, pt. 2. London: Egypt Exploration Society.
- Fugmann, E. 1958. *Hama: Fouilles et recherches 1931–1938 II.1: L’architecture des périodes pré-hellénistiques*. Copenhagen: Fondation Carlsberg.
- Gachet-Bizollon, J. 2007. Les ivoires d’Ougarit et l’art des ivoiriers du Levant au bronze récent. *Ras-Shamra Ougarit XVI*. Paris: Éditions Recherche sur les Civilisations.
- Gale, R., P. Gasson, N. Hepper, & G. Killen. 2000. Wood. In P. Nicholson & I. Shaw (eds), *Ancient Egyptian Materials and Technology*. Cambridge: Cambridge University Press, 334–71.
- García Martínez, M.A. 2014. Astronomical function of the 59-hole boards in the Lunar-Solar synchronism. *Aula Orientalis* 32/2:265–82.
- Garstang, J. 1905. *Burial Customs of Ancient Egypt, as Illustrated by Tombs of the Middle Kingdom*. London: Kegan Paul.
- Gayet, A. 1902. *Antinoë et les sépultures de Thaïs et Sérapion*. Paris: Société française d’éditions d’art.
- Gilmour, G.H. 1997. The nature and function of astragalus bones from archaeological contexts in the Levant and Eastern Mediterranean. *Oxford Journal of Archaeology* 16(2):167–75.
- Goedicke, H. 1958. Zwei Inschriften aus dem Grabe des Mttj aus Sakkara. *Zeitschrift für ägyptische*

- Sprache und Altertumskunde* 83:18–27.
- Grunfeld, F. 1975. *Games of the World: How to make them, how to play them, how they came to be*. New York: Holt, Rinehart and Winston.
- Guichard, S. (ed.). 2013. *Notice descriptive des monuments égyptiens du Musée Charles X by Jean-François Champollion*. Paris: Louvre éditions, Éditions Khéops.
- Guillaume, P. 2009. Nahum 1: Prophet, senet, and divination. In E. Ben Zvi, D.V. Edelman, & F. Polak (eds), *A Palimpsest: Rhetoric, Ideology, Stylistics, and Language Relating to Persian Israel. Perspectives on Hebrew Scriptures and its Contexts* 5. Piscataway, NJ: Gorgias Press, 129–59.
- Guillaume, P. 2013. Games. In I. Finkelstein, D. Ussishkin, & E. Cline (eds), *Megiddo V: The 2004–2008 Seasons*. Tel Aviv: Emery and Claire Yass Publications in Archaeology, 1106–14.
- Hall, H.R. 1925. Review of *Relazione sui lavori della missione archeologica italiana in Egitto. Vol. 2: La tomba intatta dell'architetto Cha*, by E. Schiaparelli. *Journal of Egyptian Archaeology* 14:203–5.
- Hassan, S. 1975. *The Mastaba of Neb-Kaw-Her: Excavations at Saqqara, 1937–1938*. Cairo: Service des Antiquités.
- Hawass, Z. 2011. *Excavation West of the Valley of the Kings near the Tomb of Thutmose III. Proceedings of the Colloquium Theban Archaeology at the Supreme Council of Antiquities Nov. 5, 2009*. Cairo: Supreme Council of Antiquities.
- Hayes, W.C. 1935. The tomb of Nefer-khawet and his family. *Bulletin of the Metropolitan Museum of Art* 30(2):17–36.
- Hayes, W.C. 1953. *The Scepter of Egypt* I. New York: The Metropolitan Museum of Art.
- Hayes, W.C. 1959. *The Scepter of Egypt* II. New York: The Metropolitan Museum of Art.
- Heimann, F.U.M. 2014. The loop within circular three mens morris. *Board Games Studies Journal online* 8:51–61.
- Herscher, E. 1998. Archaeology in Cyprus. *American Journal of Archaeology* 102:309–54.
- Hillbom, N. 2003. *For Games or for Gods? An Investigation of Minoan Cup-Holes*. Sävedalen: Paul Åströms Förlag.
- Hillbom, N. 2011. *Minoan Games and Game Boards: An Archaeological Investigation of Game-Related Material from Bronze Age Crete*. Saarbrücken: Verlag Dr. Müller.
- Hoerth, A.J. 1961. *Gameboards in the Ancient Near East*. Unpublished M.A. Dissertation, Department of Oriental Languages and Civilizations, University of Chicago.
- Hoerth, A.J. 2007. The game of hounds and jackals. In I.L. Finkel (ed.), *Ancient Board Games in Perspective: Papers from the 1990 British Museum Colloquium, with Additional Contributions*. London: The British Museum Press, 64–8.
- Hood, S. 1995. Minoan Cup-Marks. *Eirene* 31:7–43.
- Huizinga, J. 1950. *Homo ludens: A Study of the Play-element in Culture*. Boston: Beacon Press.
- Ilan, O. & M. Sebbane. 1989. Copper metallurgy, trade, and the urbanization of Southern Canaan in the Chalcolithic and Early Bronze Age. In P. de Miroschedji (ed.), *L'Urbanisation de la Palestine à l'âge du*

- Bronze ancien*. Oxford: British Archaeological Reports, 139–62.
- Iskander, J.M. 2010. A recently discovered *senet*-board from Heliopolis. *Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo* 66:122–9.
- Jacquet-Gordon, H. 2003. *The Graffiti on the Khonsu Temple Roof at Karnak: A Manifestation of Personal Piety*. Oriental Institute Publications 123. Chicago: University of Chicago Press.
- Jéquier, G. 1922. Matériaux pour servir à l'établissement d'un dictionnaire d'archéologie égyptienne. *Bulletin de l'Institut français d'archéologie orientale* 19. Le Caire: Institut français d'archéologie orientale, 1–271.
- Johnston, H.H. 1913. Survey of the ethnography of Africa, and the former racial and tribal migrations in that continent. *Journal of the Royal Anthropological Institute* ILIII:375–421.
- Junker, H. 1940. *Giza IV: Die Mastaba des Kai-em-anhk*. Vienna: Hölder-Pichler-Tempsky A.G.
- Kaiser, W., G. Dreyer, A. Gempeler, P. Grossman, P. Haeny, H. Jaritz, & F. Junge. 1976. Stadt und Tempel von Elephantine. *Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo* 32:67–112.
- Kamrin, J. 1999. *The Cosmos of Khnumhotep II at Beni Hasan*. London and New York: Kegan Paul International.
- Kanawati, N. 1980. *The Rock Tombs of el-Hawawish: The Cemetery of Akhmim, Volume I*. Sydney: Macquarie Ancient History Association.
- Kanawati, N. 1981. *The Rock Tombs of el-Hawawish: The Cemetery of Akhmim, Volume II*. Sydney: Macquarie Ancient History Association.
- Kaplony, P. 2002. The ‘en Besor seal impressions-revised. In E. van den Brink & T. Levy (eds), *Egypt and the Levant: Interrelations from the Fourth through the Early Third Millennium B.C.E.* London: Leicester University Press, 487–98.
- Karageorghis, V. 1976. Le quartier sacré de Kition: campagnes de fouilles 1973–1975. *Comptes rendus des séances-Académie des inscriptions et belles-lettres* 120(2):229–47.
- Karageorghis, V. 1983. *Palaepaphos-Skales: An Iron Age Cemetery in Cyprus*. Konstanz: Universitätsverlag.
- Karageorghis, V. 1985. *Kition V: The Pre-Phoenician Levels*. Nicosia: Zavallis Press.
- Keats, V. 1994. *Chess its Origin. A Translation with Commentary of the Latin and the Hebrew in Thomas Hyde's De Ludis Orientalibus (Oxford, 1694)*. Oxford: Oxford Academia Publishers.
- Kendall, T. 1978. *Passing Through the Netherworld: The Meaning and Play of Senet, an Ancient Egyptian Funerary Game*. Belmont, MA: Kirk Game Company.
- Kendall, T. 1982. Games. In R. Freed (ed.), *Egypt's Golden Age: The Art of Living in the New Kingdom 1558–1085 B.C.* Boston: Museum of Fine Arts, 263–72.
- Kendall, T. 1989. An Ancient Egyptian boardgame among the Kababish? An ethnoarchaeological ponderable in Kordofan. In S. Donadoni & S. Wenig (eds), *Meroitica 10: Studia Meroitica 1984*. Berlin: Akademie Verlag, 711–15.
- Kendall, T. 2007. Mehen: The Ancient Egyptian game of the serpent. In I.L. Finkel (ed.), *Ancient Board*

- Games in Perspective: Papers from the 1990 British Museum Colloquium, with Additional Contributions.* London: The British Museum Press, 33–9.
- Keswani, P. 2004. *Mortuary Ritual and Society in Bronze Age Society*. London: Equinox.
- Knapp, A.B. 2008. *Prehistoric and Protohistoric Cyprus: Identity, Insularity and Connectivity*. Oxford: Oxford University Press.
- Knapp, A.B. 2013. *The Archaeology of Cyprus from Earliest Prehistory through the Bronze Age*. Cambridge: Cambridge University Press.
- Kochavi, M. 1967. *The Settlement of the Negev in the Middle Bronze (Canaanite) I Age*. Unpublished Ph.D. Dissertation, Hebrew University of Jerusalem.
- Krüger, T. 1982. *Das Brett- und Würfelspiel der Spätlatènezeit und römischen Kaiserzeit im freien Germanien*. Neue Ausgrabungen und Forschungen in Niedersachsen 15. Hildesheim: Archäologische Kommission für Niedersachsen, 135–324.
- Kurke, L. 2002. Greek games and ideologies in the Archaic and Classical Periods. *Paragrapna* 11:15–50.
- Lamer, H. 1927. Lusoria tabula. In A.F. Pauly & G. Wissowa, *Paulys Real-Encyclopädie der classischen Altertumswissenschaft*. Band XIII, Halbband 26. Stuttgart: J.B. Metzler, 1900–2029.
- Lane, E.W. 1908. *Manners and Customs of the Modern Egyptians*. London, New York: J.M. Dent & Co., E.P. Dutton & Co.
- Lansing, A. 1917. The Egyptian Expedition 1915–16. *The Metropolitan Museum of Art Bulletin* 12(5):1–31.
- Lauer, J.-P. 1976. *Saqqara, Royal Cemetery of Memphis*. London: Thames and Hudson.
- Lee, J. 1982. Early Bronze Age game stones from Bâb edh-Dhrâ', Jordan. *Levant* 15:171–4.
- Lepsius, C.R. 1849. *Denkmäler aus Ägypten und Äthiopien*, Vol. 2. Berlin: Nicolaische Buchhandlung.
- Lieblein, J.D.C. 1873. *Die aegyptischen denkmäler in St. Petersburg, Helsingør, Upsala and Copenhagen*. Christiana: A.W. Brøgger.
- Lilyquist, Ch. forthcoming. *Excavations at Thebes: The Earl of Carnarvon and The Metropolitan Museum of Art at Carnarvon 62 and Surrounds*. [Online]
- Loud, G. 1939. *The Megiddo Ivories*. Oriental Institute Publications 52. Chicago: University of Chicago Press.
- Macalister, R.A.S. 1912. *The Excavation of Gezer, Volumes II and III*. London: J. Murray.
- Mackay, E.J.H. 1938. *Further Excavations at Mohenjo-daro: Being an official account of archaeological excavations at Mohenjo-daro carried out by the Government of India between the years 1927 and 1931, Volume 1 and 2*. Delhi: Manager of Publications.
- Mariette, A. 1889. *Les mastabas de l'Ancien Empire*. Paris: F. Vieweg.
- Martin, G. 1981. *The Sacred Animal Necropolis at North Saqqara*. London: Egypt Exploration Society.
- Maspero, G. 1871. Une Enquête Judiciaire à Thèbes au temps de la XXe Dynastie. Étude sur le papyrus Abbott. *Mémoires de l'Académie des Inscriptions et Belles-Lettres* VIII:1–85.
- Matelly, M.-A. 2003. Les petits objets. In H. Cuvigny (ed.), *La route de Myos Hormos: L'armée romaine dans le désert Oriental d'Égypte*. Institut Français d'Archéologie Orientale 48/II, 589–617.

- May, R. (ed.) 1992. *Jouer dans l'Antiquité*. Marseille: Musée d'Archéologie Méditerranéenne, Réunion des musées nationaux.
- Maystre, C. 1936. *Tombes de Deir el-Medineh: La tombe Nebenmat (no. 219)*. Cairo: Imprimerie de l'Institut Français d'Archéologie Orientale.
- Mecquenem, R. de. 1905. *Offrandes de fondation du temple de Chouchinak*. In J. de Morgan & G. Jéquier (eds), Mémoires de la Délégation en Perse VII. Paris: Recherches archéologiques, 61–130.
- Merkelbach, R. 1978. Ephesische Parerga (12): Eine Tabula Lusoria für den Ludus Latrunculorum. *Zeitschrift für Papyrologie und Epigraphik* 28:48–50.
- Merriam, A. 1953. The game of Kubuguza among the Abatutsi of North-East Ruanda. *Man* 53:169–72.
- Merrillees, R. 2009. The stone vases of the Philia culture from Vasilia: Cypriot, Egyptian, or other? In D. Michaelides, V. Kassianidou & R. Merrillees (eds), *Egypt and Cyprus in Antiquity*. Oxford: Oxbow, 23–8.
- Metropolitan Museum of Art 2015. <http://www.metmuseum.org/collection/the-collection-online/search/544775?rpp=30&pg=1&ft=01.4.1&pos=1&imgNo=2&tabName=gallery-label&imgno=2&tabname=label> [accessed 25 February 2015].
- Meyer, J.-W. 1982. Lebermodell oder Spielbrett. In R. Hachmann (ed.), *Kamid el Loz 1971–1974*. Bonn: Rudolf Habelt, 53–79.
- Meyer, J.-W. 1986. Die Spielbretter KL 78:534 und KL 78:536 bis. In R. Hachmann (ed.), *Bericht über die Ergebnisse der Ausgrabungen in Kamid el-Loz in den Jahren 1977 bis 1981*. Bonn: Rudolf Habelt GMBH, 123–43.
- Michel, C. 2008. Ecrire et compter chez les marchands assyriens du début du IIe millénaire. In T. Tarhan, A. Tibet & E. Konyar (eds), *Muhibbe Darga Arma ani*. Istanbul: Sadberk Hanım Müzesi, 345–64.
- Miniaci, G. & S. Quirke. 2009. Reconceiving the tomb in the Late Middle Kingdom. The burial of the Accountant of the Main Enclosure Neferhotep at Dra Abu al-Naga. *Bulletin de l'Institut français d'archéologie orientale* 109:339–83.
- Montet, P. 1946. Tombeaux de la première et de la quatrième Dynasties à Abou-Roach. *Kemi* 8:157–227.
- Montet, P. 1955. Le jeu du Serpent. *Chronique d'Égypte* 30:189–97.
- Mulvin, L. & S.E. Sidebotham. 2003. Roman game boards from Abu Sha'ar (Red Sea Coast, Egypt). *Antiquity* 78:602–17.
- Murray, A., A. Smith, & H. Walters. 1900. *Excavations in Cyprus*. London: British Museum.
- Murray, H.J.R. 1951. *A History of BoardGames other than Chess*. Oxford: Clarendon Press.
- Muscarella, O.W. 1974. The Iron Age at Dinkha Tepe, Iran. *Metropolitan Museum Journal* 9:35–90.
- Narodni Muzeum, n.d. *Praxisbericht Tschechisches Nationalmuseum Prag-Náprstek Museum Asiatischer, Afrikanischer und Amerikanischer Kulturen*, 18–31.
- Nash, W.L. 1902. Ancient Egyptian draughts-boards and draughts-men. *Proceedings of the Society of Biblical Archaeology* 24(December):341–8.
- Naville, E. 1911–1912. Excavations at Abydos. In F.L. Griffith (ed.), *Egypt Exploration Fund*

- Archaeological Report 1911–1912*. London: William Clowes & Sons, Ltd, 1–4.
- Needler, W. 1953. A thirty-square draught board in the Royal Ontario Museum. *Journal of Egyptian Archaeology* 39:60–75.
- Newberry, P.E. 1893. *Beni Hasan II*. London: Paul, Trench, Trübner & Co.
- Niebuhr, C. 1774. *Reisebeschreibung nach Arabien und andern umliegenden Ländern*. Zürich: Manasse Verlag.
- Novacek, G.V. 2011. *Ancient Israel: Highlights from the collections of the Oriental Institute, University of Chicago*. Chicago: The Oriental Institute of the University of Chicago.
- Oates, D., J. Oates, & H. McDonald. 2001. *Excavations at Tell Brak. Vol 2: Nagar in the Third Millennium B.C.* London: British School of Archaeology in Iraq.
- Oates, J. 2012. A new game at Tell Brak. In P. Quenet & M. al-Maqdissi (eds), ‘L’heure immobile’ entre ciel et terre: *Mélanges en l’honneur d’Antoine Souleiman*. Turnhout: Brepols Publishers, 117–20.
- Oren, E.D. 1973. *The Northern Cemetery of Beth Shan*. Leiden: Brill.
- Ornan, T. 2005. The triumph of the Symbol. *Orbis Biblicus et Orientalis* 213. Fribourg: Academic Press Fribourg.
- Pankhurst, R. 1971. Gabata and related board games of Ethiopia and the Horn of Africa. *Ethiopia Observer* 14:154–206.
- Parker, H. 1909. *Ancient Ceylon: An account of the aborigines and of part of the early civilization in Sri Lanka*. New Delhi: Asian Educational Services.
- Parlett, D. 1999. *The Oxford History of Board Games*. Oxford, New York: Oxford University Press.
- Parrot, A. 1958. *Mission archéologique de Mari, II. Le Palais*. Paris: P. Geuthner.
- Pedrizet, P. 1931. Le jeu alexandrin de l’icosaèdre. *Bulletin de l’Institut Français d’Archéologie Orientale* 30:1–16.
- Petrie, W.M.F. 1888. *Tanis Part II: Nebesheh (Am) and Deffeneh (Tahpanhes)*. London: Egypt Exploration Fund.
- Petrie, W.M.F. 1890. *Kahun, Gurob, and Hawara*. London: Paul, Trench, Trübner & Co.
- Petrie, W.M.F. 1901. *Royal Tombs of the Earliest Dynasties II*. London: Gilbert & Rivington Ltd.
- Petrie, W.M.F. 1903. *Abydos, Part II*. 1903. London: Egypt Exploration Fund.
- Petrie, W.M.F. 1914. *Amulets*. London: Constable & Company.
- Petrie, W.M.F. 1920. *Prehistoric Egypt*. London: British School of Archaeology in Egypt.
- Petrie, W.M.F. 1927. *Objects of Daily Use*. London: British School of Archaeology in Egypt.
- Petrie, W.M.F. 1928. *Gerar*. London: British School of Archaeology in Egypt.
- Petrie, W.M.F. 1933. *Ancient Gaza III*. London: British School of Archaeology in Egypt.
- Petrie, W.M.F. 1934. *Ancient Gaza IV*. London: British School of Archaeology in Egypt.
- Petrie, W.M.F. & G. Brunton. 1924. *Sedment*. London: British School of Archaeology in Egypt.
- Petrie, W.M.F. & J.E. Quibell. 1896. *Naqada and Ballas*. London: Aris & Philips Ltd.
- Philip, G., P. Clogg, & D. Dungworth. 2003. Copper metallurgy in the Jordan Valley from the Third to the

- First Millennia BC: Chemical, metallographic and lead isotope analyses of artefacts from Pella. *Levant* 35:75–100.
- Piankoff, A. & H. Jacquet-Gordon. 1972. *The Wandering of the Soul*. Princeton: Princeton University Press.
- Piccione, P. 1980. In search of the meaning of senet. *Archaeology* 33:55–8.
- Piccione, P. 1984. Review of *Das Senet-Brettspiel im alten Ägypten*, by E.B. Pusch. *Journal of Egyptian Archaeology* 70:172–80.
- Piccione, P. 1990a. Mehen, mysteries, and resurrection from the coiled serpent. *Journal of the American Research Center in Egypt* 27:34–52.
- Piccione, P. 1990b. *The Historical Development of the Game of Senet and its Significance for Egyptian Religion*. Unpublished Ph.D. Dissertation, University of Chicago.
- Piccione, P. 1994. The Gaming Episode in the Tale of Setne Khamwas as religious metaphor. In D. Silverman (ed.), *For His Ka: Essays Offered in Memory of Klaus Baer. Studies in Ancient Oriental Civilization* 55. Chicago: The Oriental Institute of the University of Chicago, 197–204.
- Piccione, P. 2007. The Egyptian game of senet and the migration of the soul. In I.L. Finkel (ed.), *Board Games in Antiquity: Papers from the 1990 British Museum Colloquium, with Additional Contributions*. London: British Museum Press, 54–63.
- Pieper, M. 1909. *Das Brettspiel der alten Ägypter*. Berlin: Weidmannsche Buchhandlung.
- Pieper, M. 1931. Ein Text über das ägyptische Brettspiel. *Zeitschrift für ägyptische Sprache und Altertumskunde* 66:16–33.
- Pierrat-Bonnefois, G. 1998. Game board in the shape of a hippopotamus and three gaming pieces for the game of 58 holes. In F. Dunn Friedman (ed.), *Gifts of the Nile. Ancient Egyptian Faience*. New York: Thames and Hudson.
- Piperno, M. & S. Salvatori. 1983. Recent results and new perspectives from the research at the graveyard of Shahr-I Sokhta, Sistan, Iran. *Annali* 43:172–91.
- Popova, A. 1976. Les mankala africains. *Cahiers d'Études Africaines* 16:433–58.
- Porat, N. 1992. An Egyptian colony in Southern Palestine during the Late Predynastic-Early Dynastic Period. In E. van den Brink (ed.), *The Nile Delta in Transition: Fourth-Third Millennium BC*. Jerusalem: Israel Exploration Society, 433–40.
- Prisse d'Avennes, É. 1847. *Monuments égyptiens, bas-reliefs, peintures, inscriptions, etc.* Paris: Didot frères.
- Pritchard, J. 1954. *The Ancient Near East in Pictures Relating to the Old Testament*. Princeton: Princeton University Press.
- Pusch, E.B. 1977. Ein unbeachtete Brettspielart. *Studien zur Altägyptischen Kultur* 5:199–212.
- Pusch, E.B. 1979. *Das Senet-Brettspiel im Alten Ägypten*. Munich: Deutsche Kunstverlag.
- Pusch, E.B. 2007. The Egyptian “Game of Twenty Squares”: Is it related to “Marbles” and the Game of the Snake? In I.L. Finkel (ed.), *Ancient Board Games in Perspective: Papers from the 1990 British Museum Colloquium, with Additional Contributions*. London: The British Museum Press, 69–86.

- Quibell, J.E. 1909. *Excavations at Saqqara 1907–1908*. Cairo: Imprimerie de l’Institut Français d’Archéologie Orientale.
- Quibell, J.E. 1913. *Excavations at Saqqara (1911–1912): The Tomb of Hesy*. Cairo: Imprimerie de l’Institut Français d’Archéologie Orientale.
- Ranke, H. 1920. Das altägyptische Schlangenspiel. *Sitzungsberichte der Heidelberger Akademie der Wissenschaften* 71(1).
- Rao, S.R. 1985. *Lothal, a Harappan port town (1955-62), Volume 2*. New Delhi: Archaeological Survey of India.
- Rast, W. & R.T. Schaub. 2003. *Bâb edh-Dhrâ’: Excavations at the Town Site (1975–1981)*. Winona Lake, IN: Eisenbrauns.
- Reeves, N. 1995. *The Complete Tutankhamun: The King, The Tomb, The Royal Treasure*. New York: Thames & Hudson.
- Richard, S. & R. Boraas. 1984. Preliminary report of the 1981–82 seasons of the expedition to Khirbet Iskander and its vicinity. *Bulletin of the American Schools of Oriental Research* 254:63–87.
- Rieche, A. 1984. *Römische Kinder-und Gesellschaftsspiele*. Schriften des Limesmuseums Aalen 34. Gesellschaft für Vor- und Frügeschichte in Württemberg und Hohenzollern e.V.
- Rieche, A. 1986. Römische Spiele in Schrift-und Sachquelle. *Der Altsprachliche Unterricht* 29(3):40–55.
- Rilly, C. & de Voogt, A. 2012. *The Meroitic Language and Writing System*. New York: Cambridge University Press.
- Röder, G. 1961. *Der Ausklang der ägyptischen Religion mit Reformation, Zauberei und Jenseitsglauben*. Zurich: Artemis Verlag.
- Rose, P. 1996. *Qasr Ibrim: The Hinterland Survey*. London: Egypt Exploration Society.
- Rosellini, I. 1834. *I monumenti dell’Egitto e della Nubia. Tomo Secondo: Monumenti Civili*. Pisa: Presso Niccolo Capurro.
- Rothöhler, B. 1996. *Ägyptische Brettspiele außer Senet*. Unpublished M.A. Thesis, Bayerischen Julius-Maximilians-Universität Würzburg.
- Rothöhler, B. 1999. Mehen, god of the boardgames. *Journal of Board Games Studies* 2:10–23.
- Rundle Clark, R.T. 1991. *Myth and Symbol in Ancient Egypt*. London: Thames & Hudson.
- Saad, Z.Y. 1969. *The Excavations at Helwan*. Norman, OK: University of Oklahoma Press.
- Saqqara Expedition. 1938. *The Mastaba of Mereruka*. Chicago: University of Chicago Press.
- Sauvage, M. 1991. Quelques exemples de jeux gravés sur des briques. *Orient-Express*: 4–5.
- Schädler, U. 1994a. Latrunculi: ein verlorenes strategisches Brettspiel der Römer. In G. Bauer (ed.), *Homo ludens: der spielende Mensch IV*, 47–67.
- Schädler, U. 1994b. Murmelspieler auf dem Forum Romanum: ein Volk von Müsiggängern und Faulenzern. *Spielbox* 5:54–7.
- Schädler, U. 1995. XII Scripta, Alea, Tabula: New evidence for the Roman history of “backgammon.” In A.J. de Voogt (ed.), *New Approaches to Board Games Research: Asian Origins and Future Perspectives*.

- Leiden: IIAS, 73–98.
- Schädler, U. 1998. Mancala in Roman Asia Minor. *Journal of Board Games Studies* 1:10–25.
- Schädler, U. 2002. The Talmud, Firdausî and the Greek game “city.” In J. Retschitzki & R. Haddad-Zubel (eds), *Step by step: proceedings of the 4th Colloquium Board Games in Academia*. Fribourg, Switzerland: Editions Universitaires Fribourg Suisse, 91–102.
- Schädler, U. 2007. Sort, hasard, fortune: les nombreuses faces des dés. In U. Schädler (ed.). *Jeux de l'humanité. 5000 ans d'histoire culturelle des jeux de société*. Geneva: Éditions Slatkine, 9–19.
- Schädler, U. 2008. *Pente grammai*: the ancient Greek board game *Five Lines*. In J. Nuno Silva (ed.), *Proceedings Board Game Studies Colloquium XI*, 173–96.
- Schädler, U. 2013a. Games, Greek and Roman. In R.S. Bagnall, K. Brodersen, C.B. Champion, A. Erskine, & S.R. Huebner (eds), *The Encyclopedia of Ancient History*. London: Blackwell Publishing, 2841–4.
- Schädler, U. 2013b. Jouer aux billes à l'époque romaine. *Archéothéma: Histoire et archéologie* 31:54–5.
- Schädler, U. 2013c. Les jeux de pions. *Archéothéma: Histoire et archéologie* 31:64–5.
- Scharff, A. 1926. *Die archäologischen Ergebnisse des Vorgeschichtlichen Gräberfeldes von Abusir el-Meleq*. Leipzig: Deutsche Orient-Gesellschaft.
- Schulman, A. 1989. At the fringe: the historiography and historicity of the relations of Egypt and Canaan in the Early Bronze Age I. In P. de Miroshchedji (ed.), *L'Urbanisation de la Palestine à l'âge du Bronze ancien*. Oxford: British Archaeological Reports, 423–32.
- Schuster, C. & E. Carpenter. 1996. *Patterns That Connect*. [Based on the research and writings of Carl Schuster] New York: Abrams Press.
- Schweinfurth, G.A. 1874. *The Heart of Africa. Three Years Travels and Adventures in the Unexplored Regions of Central Africa from 1868 to 1871*. [Translated by Ellen E. Frewer] Vol. 2. New York: Harper & Brothers.
- Schweitzer, U. 1948. *Löwe und Sphinx im alten Ägypten*. Hamburg: Augustin.
- Sebbane, M. 2001. Board games from Canaan in the Early and Intermediate Bronze Ages and the origin of the Egyptian senet game. *Tel Aviv* 28:213–30.
- Sebbane, M. 2004. Appendix: An incised senet board game. In D. Ussishkin (ed.), *The Renewed Archaeological Excavations at Lachish (1973–1994)*. Tel Aviv: Emery and Claire Yass Publications in Archaeology, 690–4.
- Seyffarth, G. 1833. *Beiträge zur Kenntniss der Literatur, Kunst, Mythologie und Geschichte des Alten Aegypten*, Vol. III. Leipzig: J.A. Barth.
- Shai, I., H.J. Greenfield, J. Regev, E. Boaretto, A. Eliyahu-Behar, & A.M. Maeir. 2014. The Early Bronze Age remains at Tel es-Safi/Gath: an interim report. *Tel Aviv* 41:20–49.
- Sharon, I. 2014. Levantine chronology. In A. Killebrew & M. Steiner (eds.), *The Oxford Handbook of the Archaeology of the Levant: c. 8000–332 BCE*. Oxford: Oxford University Press, 44–68.
- Shaw, I. (ed.). 2000. *Oxford History of Ancient Egypt*. Oxford: Oxford University Press.
- Shore, A.F. 1963. A “Serpent” board from Egypt. *British Museum Quarterly* 26:88–91.

- Simpson, W.K. 1976. *Giza Mastabas 2: The Mastabas of Qar and Idu*. Boston: Museum of Fine Arts.
- Smith, S.T. 1992. Intact tombs of the Seventeenth and Eighteenth Dynasties from Thebes and the New Kingdom burial system. *Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo* 48:193–231.
- Soni, L.N. & T. Bagchi. 2011. The board games of Kachchh of Gujarat: An Overview. In R.K. Bhattacharya, I.L. Finkel, & L.N. Soni (eds), *The Indian Board Game Survey*. London: Anthropological Survey of India, Government of India and the British Museum, 75–89.
- South, A. 1996. Kalavasos Ayios Dhimitrios 1992–1996. *Report of the Department of Antiquities, Cyprus*, 151–75.
- Sowada, K. 2009. *Egypt in the Eastern Mediterranean during the Old Kingdom: An Archaeological Perspective*. Academic Press: Fribourg.
- Spanel, D.B. 2001. Beni Hasan. In D.B. Redford (ed.), *The Oxford Encyclopaedia of Ancient Egypt*. Oxford: Oxford University Press, 175–7.
- Spencer, A.J. 1980. *Catalogue of Egyptian Antiquities in the British Museum V: Early Dynastic Objects*. London: The British Museum Press.
- Stager, L. 2001. Port power in the Early and Middle Bronze Age: the organization of maritime trade and hinterland production. In S. Wolff (ed.), *Studies in the Archaeology of Israel Neighboring Lands in Memory of Douglas L. Esse*. Atlanta: American Schools of Oriental Research, 625–38.
- Sutton-Smith, B. 1997. *The Ambiguity of Play*. Cambridge: Harvard University Press.
- Swiny, S. 1976. Stone “Offering Tables” from Episkopi Phanereomeni. *Report of the Department of Antiquities, Cyprus*, 43–56.
- Swiny, S. 1980. Bronze Age gaming stones from Cyprus. *Report of the Department of Antiquities, Cyprus*, 54–78.
- Swiny, S. 1982. A spiral game (mehen) from Lemba Area II? *Levant* 14:53–4.
- Swiny, S. 1986. *The Kent State University Expedition to Episkopi-Phaneromeni*. Nicosia: Paul Åströms Förlag.
- Swiny, S., E. Herscher, & G. Rapp. 2003. *Sotira-Kaminoudhia: An Early Bronze Age Site in Cyprus*. Boston: American Schools of Oriental Research.
- Tait, W.J. 1982. *Game-Boxes and Accessories from the Tomb of Tutankhamun*. Oxford: Griffiths Institute.
- Tait, W.J. 1998. Dicing with the Gods. In W. Clarysse, A. Schoors, & H. Willems (eds), *Egyptian Religion, the Last Thousand Years: Studies Dedicated to the Memory of Jan Quaegebeur*. Leuven: Peeters, 257–64.
- Tait, W.J. 2007. Were there gamesters in Ancient Egypt? In I.L. Finkel (ed.), *Ancient Board Games in Perspective: Papers from the 1990 British Museum Colloquium, with Additional Contributions*. London: The British Museum Press, 46–53.
- Teissier, B. 1996. Egyptian iconography on Syro-Palestinian cylinder seals of the Middle Bronze Age. *Orbis Biblicus et Orientalis. Series Archaeologica* 11. Fribourg: University Press.

- Tiradritti, F. 1994. L'album di disegni di Luigi Vassalli presso la Civica Biblioteca d'Arte di Milano. In Museo Archeologico, Milan (ed.), *L'egittologo Luigi Vassalli (1812–1887). Disegni e documenti nei Civici Istituti Culturali Milanesi*. Milano: Edizioni ET, 45–128.
- Tiradritti, F. 2010. Luigi Vassalli and the archaeological season at Western Thebes (1862–3). In M. Marée (ed.), *The Second Intermediate Period (Thirteenth-Seventeenth Dynasties). Current Research, Future Prospects*. Orientalia Lovaniensia Analecta 192. Leuven, Paris, and Walpole, MA, 329–42.
- Tosi, M. & C.C. Lamberg-Karlovsky. 2003. Pathways across Eurasia. In J. Aruz (ed.), *Art of the First Cities: The Third Millennium B.C. from the Mediterranean to the Indus*. New York: The Metropolitan Museum of Art, 347–50.
- Tournay, M.-M. & S. Tournay. 1971. Le jeu des pierres chez les Nyangatom (S-O. Éthiopie). *Journal de la société des africanistes* 41:255–7.
- Towry-Whyte, E. 1902. Types of Ancient Egyptian draughts-men. *Proceedings of the Society of Biblical Archaeology* 24(June):261–3.
- Tufnell, O. 1958. *Lachish IV*. London: Oxford University Press.
- Turner, V. 1982. Liminal to liminoid in play, flow, ritual: an essay in comparative symbology. In V. Turner (ed.), *From ritual to theatre: The human seriousness of play*. New York: Performing Arts Journal Publications, 20–60.
- Vandenbeusch, M. & Ch. Salvador. 2014. Amara West 2014: enigmatic ivory “sticks.”
<http://blog.amarawest.britishmuseum.org/2014/02/16/amarawest-2014-enigmatic-ivory-sticks/> [accessed 17 February 2015].
- Vandier, J. 1952. *Manuel d'archéologie égyptienne, 1: Les époques de formation*. Paris: A. et J. Picard et Compagnie.
- Vandier, J. 1964. *Manuel d'archéologie égyptienne, 4: Bas-reliefs et peintures, scènes de la vie quotidienne*. Paris: Editions A. et J. Picard et Compagnie.
- Vandier d'Abbadie, J. 1959. *Catalogue des ostraca figurés de Deir el Médineh (4e fascicule) (Nos 2734 à 3053)*. Cairo: Institut Français d'Archéologie Orientale.
- van Effenterre, H. 1955. Cupules et naumachie. *Bulletin de correspondance hellénique* 69:541–8.
- Väterlein, J. 1976. *Roma ludens: Kinder und Erwachsene beim Spiel im antiken Rom*. Amsterdam: Verlag B.R. Grüner.
- Vermaak, P.S. 2011. A new interpretation of the playing objects in the Gilgamesh epic. *Journal for Semitics* 20(1):109–38.
- Vermeule, E. & F. Wolsky. 1990. *Toumba tou Skourou: A Bronze Age Potter's Quarter on Morphou Bay in Cyprus*. Cambridge: Harvard University Press.
- Voorhies, B. 2013. The deep prehistory of Indian gaming: possible Late Archaic Period game boards at the Tlacuachero shellmound, Chiapas, Mexico. *Latin American Antiquity* 24(1):98–115.
- Walker, R.A. 1990. *Sculptured Mankala Gameboards of Sub-Saharan Africa*, Ph.D. Thesis, Indiana University.

- Webb, J., D. Frankel, Z.A. Stos, & N. Gale. 2006. Early Bronze Age metal trade in the Eastern Mediterranean. New compositional and lead isotope evidence from Cyprus. *Oxford Journal of Archaeology* 25:261–85.
- Wiedemann, A. 1897. Das Brettspiel bei den alten Ägyptern. *Actes du Dixième Congrès Internationale des Orientalistes, 1894*. Leiden: Brill, 35–61.
- Wilkinson, J.G. 1853. *A popular account of the Ancient Egyptians, Volumes 1 and 2*. New York: Harper & brothers.
- Wilkinson, J.G. 1878. *The Manners and Customs of the Ancient Egyptians, Volumes 1, 2 and 3*. London: J. Murray.
- Williams, B.B. 1986. *The University of Chicago Oriental Institute Nubian Expedition III: Excavations between Abu Simbel and the Sudan Frontier*. Chicago: Oriental Institute.
- Winlock, H.E. 1924. The Tombs of the Kings of the Seventeenth Dynasty at Thebes. *The Journal of Egyptian Archaeology* 10(3/4):217–77.
- Winlock, H.E. 1928. The Egyptian Expedition 1925–1927: The Museum's excavations at Thebes. *The Metropolitan Museum of Art Bulletin* 23(2) (Part 2):3–58.
- Woolley, C.L. 1934. *The Royal Cemetery. Ur Excavations II*. London and Philadelphia.
- Yadin, Y. 1960. *Hazor II*. Jerusalem: Magres Press.

Author Index

Multiple author publications and editors are indexed under the name of the first author.

al-Ma'shani, A. *see* Charpentier

al-Maqdissi, M. (ed.) *see* Oates, J.

Albright, W.F. [here](#), [here](#), [here](#)

Allen, J. [here](#), [here](#)

Amandry, P. [here](#)

Amélineau, E. [here](#), [here](#)

Amiran, R. [here](#)

Anderson, J.R. (ed.) *see* de Voogt

Arnold, D. [here](#), [here](#)

Aruz, J. (ed.) [here](#), [here](#), [here](#) *see also* Finkel, Tosi Austin, R.G. [here](#), [here](#), [here](#)

Ayrton, E. [here](#)

Bagchi, T. *see* Soni

Bagnall, R.S. (ed.) *see* Schädler

Banks, E.J. [here](#)

Bardanis, M. [here](#)

Bardiès-Fronty, I. (ed.) xi *see also* Dunn-Vaturi

Bauer, G. (ed.) *see* Schädler

Becker, A. [here](#)

Behling, C.-M. [here](#)

Bell, R.C. [here](#), [here](#)

Ben Zvi, E. (ed.) *see* Guillaume

Bénédite, G. [here](#), [here](#), [here](#)

Ben-Tor, A. [here](#)

Benzel, K. (ed.) *see* Finkel

Berger, J.-F. *see* Charpentier

Bhattacharya, R.K. (ed.) *see* Soni

Bielinski, P. [here](#)
Birch, S. [here](#), [here](#)
Bisht, R.S. [here](#)
Blackman, A. [here](#), [here](#)
Boaretto, E. *see* Shai
Boraas, R. *see* Richard
Borgi, F. *see* Charpentier
Brandl, B. [here](#)
Breyer, C. [here](#), [here](#)
Brink, E. *see* van den Brink
Brodersen, K. (ed.) *see* Schädler
Brown, W.N. [here](#)
Brun, J.-P. [here](#), [here](#), [here](#), [here](#), [here](#)
Brunner-Traut, E. [here](#)
Brunton, G. [here](#), [here](#), [here](#), [here](#)
Bruyère, B. [here](#), [here](#)
Bryan, B.M. (ed.) *see* Allen, DuQuesne
Buchanan, B. *see* Ellis
Buchholz, H.-G. [here](#)
Burke, A.A. [here](#)

Calament, F. (ed.) [here](#)
Capart, J. [here](#), [here](#)
Carnarvon, Earl of [here](#), [here](#), [here](#), [here](#)
Carpenter, E. *see* Schuster
Carter, H., [here](#), [here](#) *see* Carnarvon Caubet, A. [here](#), [here](#)
Champion, C.B. (ed.) *see* Schädler
Charpentier, V. [here](#)
Clarysse, W. (ed.) *see* Tait
Claudius [here](#)
Cline, E.H. (ed.) *see* Caubet, Guillaume
Clogg, P. *see* Philip
Cochavi-Rainey, Z. [here](#)
Cohen, R. [here](#)
Collon, D. [here](#)
Crassard, R. *see* Charpentier
Crist, W. [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

Cuvigny, H. (ed.) *see* Brun, Matelly

Dales, G.F. [here](#)
Dandoy, J.R. [here](#)
Daressy, G. [here](#)
Dasen, V. [here](#)
David, A.R. [here](#)
Davies, N. [here](#), [here](#)
Davies, R. [here](#)
de Garis Davies, N. [here](#)
de Mecquenem *see* Mecquenem
de Miroshchedji, P. (ed.) *see* Ilan, Schulman
de Morgan, J. [here](#) *see also* Mecquenem de Voogt, A.J. [here](#), [here](#)
Depaulis, T. [here](#), [here](#)
Deveria, Th. [here](#)
Dickmeyer, C.G. [here](#)
Donadoni Roveri, A.M. (ed.) [here](#)
Donadoni, S. (ed.) *see* Kendall
Dorn, A. [here](#)
Dreyer, G. [here](#) *see also* Kaiser Drioton, E. [here](#), [here](#), [here](#), [here](#), [here](#)
Dunand, M. [here](#), [here](#)
Dungworth, D. *see* Philip
Dunham, D. [here](#), [here](#), [here](#), [here](#)
Dunn Friedman, F. (ed.) *see* Pierrat-Bonnefois
Dunn-Vaturi, A.-E. [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#) *see also* Crist, de Voogt DuQuesne, T. [here](#), [here](#)
Durand, M. (ed.) *see* Calament

Edelman, D.V. (ed.) *see* Guillaume
Eerkens, J.W. *see* de Voogt
Effenterre, H. *see* van Effenterre
Eliyahu-Behar, A. *see* Shai
Ellis, R. [here](#), [here](#)
Emery, W.B. [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)
Erdős, S. [here](#), [here](#)

Erskine, A. (ed.) *see* Schädler

Eustathius [here](#)

Evans, J. (ed.) *see* Finkel

Eyckerman, M. [here](#)

Falkener, E. [here](#), [here](#), [here](#), [here](#)

Faulkner, R.O. [here](#), [here](#)

Finkel, I.L. [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#) *see also* Becker, Hoerth, Kendall, Piccione,

Pusch, Soni, Tait Finkelstein, I. (ed.) *see* Guillaume

Firth, C.M. [here](#), [here](#)

Fischer, H. [here](#), [here](#)

Fiske, P.N. (ed.) *see* Eyckerman

Förster, F. [here](#)

Fourrier, S. [here](#)

Francigny, V. [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

Franco, I. [here](#)

Frankel, D. [here](#), [here](#), [here](#) *see also* Webb Frankfort, H. [here](#)

Freed, R. (ed.) *see* Kendall

Frewer, E.F. (translator) *see* Schweinfurth

Friedman, R.F. (ed.) *see* Eyckerman

Fugmann, E. [here](#)

Gaballa, G. (ed.) *see* David

Gachet-Bizollon, J. [here](#)

Gale, N. *see* Webb

Gale, R. [here](#)

García Martínez, M.A. [here](#), [here](#)

Gardiner, A. *see* Davies, N.

Garstang, J. [here](#)

Gasson, P. *see* Gale, R.

Gayet, A. [here](#)

Gempeler, A. *see* Kaiser

Gilmour, G.H. [here](#)

Goedicke, H. [here](#)

Greenfield, H.J. *see* Shai

Griffith, F.L. (ed.) *see* Naville

Grossman, P. *see* Kaiser

Grunfeld, F. [here](#)

Guichard, S. [here](#)

Guillaume, P. [here](#), [here](#), [here](#)

Hachmann, R. (ed.) *see* Meyer

Haddad-Zubel, R. (ed.) *see* Schädler

Haeny, P. *see* Kaiser

Hall, H.R. [here](#)

Harcourt-Smith, W. *see* Francigny

Haring, B.J.J. [here](#)

Harris-Cline, D. (ed.) *see* Caubet

Hassan, S. [here](#)

Hawass, Z. [here](#)

Hayes, W.C. [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

Heimann, F.U.M. [here](#)

Hendrickx, S. *see* Eyckerman

Hepper, N. *see* Gale, R.

Herb, M. *see* Decker

Herodotus [here](#)

Herscher, E. [here](#) *see also* Crist, Swiny Hillbom, N. [here](#), [here](#)

Hoerth, A.J. [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

Hood, S. [here](#)

Hornung, E. *see* Allen, DuQuesne

Huebner, S.R. (ed.) *see* Schädler

Huizinga, J. [here](#)

Hyde, Th. [here](#), [here](#) *see also* Depaulis, Keats

Ilan, O. [here](#)

Iskander, J.M. [here](#)

Jacquet-Gordon, H. [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#) *see also* Piankoff Jaritz, H. *see* Kaiser

Jéquier, G. [here](#), [here](#) *see also* Mecquenem Johnston, H.H. [here](#)

Junge, F. *see* Kaiser

Junker, H. [here](#), [here](#)

Kahn, J. *see* Francigny

Kaiser, W. [here](#)

Kamrin, J. [here](#), [here](#)

Kanawati, N. [here](#), [here](#)

Kaplony, P. [here](#)

Karageorghis, V. [here](#), [here](#), [here](#)

Kassianidou, V. (ed.) *see* Merrillees

Keats, V. [here](#)

Kendall, T. [here](#), [here](#)

Keswani, P. [here](#)

Killebrew, A.E. (ed.) *see* Burke, Sharon

Killen, G. *see* Gale, R.

Kirwan, L.P. *see* Emery

Kitchen, K. (ed.) *see* David

Knapp, A.B. [here](#), [here](#)

Kochavi, M. [here](#)

Konyar, E. (ed.) *see* Michel

Krüger, T. [here](#)

Kurke, L. [here](#)

Lamberg-Karlovsky, C.C. *see* Tosi

Lamer, H. [here](#), [here](#), [here](#)

Lane, E.W. [here](#), [here](#)

Lansing, A. [here](#), [here](#)

Lauer, J.-P. [here](#)

Lee, J. [here](#)

Lepsius, C.R. [here](#)

Levy, T. (ed.) *see* Kaplony

Lieblein, J.D.C. [here](#)

Lilyquist, Ch. [here](#), [here](#)

Loat, W.L.S. *see* Ayrton

Loud, G. [here](#)

Macalister, R.A.S. [here](#), [here](#), [here](#)

Mackay, E.J.H. [here](#)

Mackenzie, C. (ed.) *see* Finkel

Maeir, A.M. *see* Shai

Maltby, M. (ed.) *see* Dandoy

Marée, M. (ed.) *see* Tiradritti

Mariette, A. [here](#), [here](#), [here](#)
Maspero, G. [here](#) *see also* Deveria Matelly, M.-A. [here](#), [here](#), [here](#), [here](#)
May, R. (ed.) [here](#), [here](#), [here](#), [here](#), [here](#)
Maystre, C. [here](#)
McDonald, G.E. *see* Dickmeyer
McDonald, H. *see* Oates
Mecquenem, R. de [here](#)
Merkelbach, R. [here](#)
Merriam, A. [here](#)
Merrillees, R. [here](#)
Meyer, J.-W. [here](#), [here](#)
Michaelides, D. (ed.) *see* Merrillees
Michel, C. [here](#) *see also* Collon Miniaci, G. [here](#), [here](#), [here](#)
Montet, P. [here](#), [here](#)
Mulvin, L. [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)
Murray, A. [here](#)
Murray, H.J.R. [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)
Muscarella, O.W. [here](#)
Nash, W.L. [here](#), [here](#)
Naville, E. [here](#)
Needler, W. [here](#), [here](#)
Newberry, P.E. [here](#), [here](#)
Nicholson, P. (ed.) *see* Gale
Niebuhr, C. [here](#), [here](#)
Nilsson, M. [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)
Novacek, G.V. [here](#)

Oates, D. [here](#)
Oates, J. [here](#), [here](#)
Oren, E.D. [here](#)
Ornan, T. [here](#)
Ovid [here](#), [here](#) *see also* Rieche
Pankhurst, R. [here](#)
Parker, H. [here](#)
Parlett, D. [here](#), [here](#), [here](#)
Parrot, A. [here](#)
Pauly, A.F. *see* Lamer

Pedrizet, P. [here](#), [here](#)

Pendlebury, J. *see* Frankfort

Philip, G. here

Piankoff, A. here

Pieper, M. here

Pierrat-Bonnefois, G. here

Piperno, M. here

Plato here

Polak, F. (ed.) *see* Guillaume

Popova, A. here

Porat, N. here

Prisse d'Avennes, É. here

Pritchard, J. here

Pusch, E.B. here,

here

1

Quennet, P. (ed.) see Oates, J.

Quibell, J.E. [here](#), [here](#), [here](#), [here](#), [here](#), [here](#) see also Petrie Quirke, S. xii see also Miniaci

Ranke, H. [here](#), [here](#), [here](#), [here](#)

Rao, S.R. here

Rapp, G. *see* Swiny

Rast, W. here, here

Redford, D.B. (ed.) *see* Spanel

Reeves, N. here, here

Regev, J. see Shai

Retschitzki, J. (ed.) *see* Schädler

Richard, S. here

Rieche, A. [here](#), [here](#)

Rilly, C. here

Röder, G. here

Rose, P. here

Rosellini, I. [here](#)

Rothöhler, B. [here](#), [here](#), [here](#), [here](#), [here](#)

Ruffle, J. (ed.) *see* David

Rundle Clark, R.T. [here](#)

Saad, Z.Y. [here](#)

Salvador, Ch. *see* Vandenbeusch

Salvatori, S. *see* Piperno

Saqqara Expedition [here](#)

Sauvage, M. [here](#)

Schädler, U. [here](#), [here](#) *see also* Dunn-Vaturi

Scharff, A. [here](#), [here](#)

Schaub, R.T. *see* Rast

Schiaparelli, E. *see* Hall

Schoors, A. (ed.) *see* Tait

Schulman, A. [here](#)

Schuster, C. [here](#)

Schweinfurth, G.A. [here](#), [here](#)

Schweitzer, U. [here](#)

Sebbane, M. [here](#), [here](#) *see also* Ilan Seyffarth, G. [here](#)

Shai, I. [here](#)

Sharon, I. [here](#)

Shaw, I. xiii *see also* Gale, R.

Shore, A.F. [here](#), [here](#)

Sidebotham, S.E. *see* Mulvin

Silva, J.N. (ed.) *see* Schädler

Silverman, D. (ed.) *see* Piccione

Simpson, W.K. [here](#), [here](#), [here](#)

Smith, A. *see* Murray, A.

Smith, S.T. [here](#)

Soni, L.N. [here](#)

South, A. [here](#)

Sowada, K. [here](#)

Spanel, D.B. [here](#)

Spencer, A.J. [here](#)

Stager, L. [here](#)

Steiner, M.L. (ed.) *see* Burke, Sharon

Stos, Z.A. *see* Webb
Suetonius [here](#), [here](#), [here](#)
Sutton-Smith, B. [here](#)
Swiny, S. [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#) *see also* Crist
Tait, W.J. [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)
Taracha, P. *see* Bieliński
Tarhan, T. (ed.) *see* Michel
Teissier, B. [here](#)
Tibet, A. (ed.) *see* Michel
Tiradritti, F. [here](#), [here](#)
Tosi, M. [here](#)
Tournay, M.-M. [here](#)
Tournay, S. *see* Tournay, M.-M.
Towry-Whyte, E. [here](#)
Tufnell, O. [here](#)
Turner, V. [here](#)

Ussishkin, D. (ed.) *see* Guillaume, Sebbane

van den Brink, E. (ed.) *see* Brandl, Kaplony, Porat
van Effenterre, H. [here](#)
Vandenbeusch, M. [here](#)
Vandier, J. [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)
Vandier d'Abbadie, J. [here](#)
Vassalli, L. *see* Tiradritti
Väterlein, J. [here](#)
Vaturi, A.-E. *see* Dunn-Vaturi
Vermaak, P.S. [here](#), [here](#)
Vermeule, E. [here](#)
Voogt, A.J. de *see* de Voogt
Voorhies, B. [here](#)

Walker, R.A. [here](#)
Walters, H. *see* Murray, A.
Ward, J. [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)
Webb, J. [here](#), [here](#) *see also* Frankel Welsby, D.A. (ed.) *see* de Voogt
Wenig, S. (ed.) *see* Kendall

Wiedemann, A. [here](#), [here](#)
Wilkinson, J.G. [here](#), [here](#), [here](#)
Willems, H. (ed.) *see* Tait
Williams, B.B. [here](#), [here](#)
Winlock, H.E. [here](#), [here](#)
Wissowa, G. *see* Lamer
Wolff, S. (ed.) *see* Stager
Wolsky, F. *see* Vermeule
Woolley, C.L. [here](#)

Yadin, Y. [here](#)

Subject Index

Names of games and transliterations of Egyptian are in italics. Names of gods, places and individuals are capitalized. Entries starting with “el-” are listed under the second part of the name.

‘nḥ wȝst [here](#)

‘nḥ [here](#)

A-Group [here](#), [here](#)

Aba [here](#), [here](#)

Abu Ballas [here](#)

Abu Rawash [here](#), [here](#), [here](#)

Abu Sha’ar [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

Abydos [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

Acemhöyük [here](#), [here](#)

Aegean [here](#), [here](#), [here](#)

Aegyptus, province of [here](#)

Africa [here](#), [here](#)

Central Africa [here](#)

East Africa [here](#)

Saharan Africa [here](#)

sub-Saharan Africa [here](#)

afterlife [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

Ägyptisches Museum und Papyrussammlung, Berlin [here](#), [here](#), [here](#), [here](#)

Ägyptisches Museum, Bonn [here](#), [here](#), [here](#)

Akhmim [here](#), [here](#)

alabaster [here](#)

Alamgirpur [here](#)

alea [here](#), [here](#)

Alexander the Great [here](#), [here](#), [here](#)

Alexandria [here](#), [here](#), [here](#), [here](#)

alquerque [here](#), [here](#)

Amara West [here](#), [here](#)

Amarna, el-Amarna [here](#)

Amarna letter [here](#)

Amathus [here](#), [here](#)

Amenemhat [here](#), [here](#)

Amenhotep II [here](#)

Amenhotep III [here](#), [here](#)

Amenhotep IV [here](#)

amethyst [here](#)

Amorite [here](#)

amulet, amuletic [here](#), [here](#), [here](#), [here](#)

Anatolia [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

animal *see* playing pieces, zoomorphic

Ankhefensakhmet [here](#), [here](#)

Ankhtifi [here](#), [here](#)

Antef [here](#)

anthropoid *see* board

anthropological archaeology [here](#), [here](#)

Antinoë [here](#)

Anubis [here](#), [here](#)

apotropaic [here](#)

Aphrodisias [here](#), [here](#), [here](#)

appendage *see also* projection, protrusion

round [here](#)

trapezoidal [here](#), [here](#)

turtle-head [here](#), [here](#), [here](#), [here](#)

Aqhor *see* Hornakht

Arab [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

Arabic [here](#), [here](#), [here](#), [here](#)

Aramatelqo [here](#)

Archaeological Museum of Heraklion [here](#)

Asasif, el-Asasif [here](#), [here](#), [here](#), [here](#), [here](#) *see also* Thebes

Ashmolean Museum, Oxford [here](#), [here](#)

Ashur [here](#), [here](#), [here](#)

Assyrian, Assyrians [here](#), [here](#), [here](#)

astragali *see* casting devices

bȝw [here](#), [here](#), [here](#)

ba [here](#), [here](#), [here](#)

Bâb edh-Dhrâ‘ [here](#), [here](#), [here](#), [here](#), [here](#)

baboon [here](#), [here](#)

Babylon [here](#), [here](#)

Babylonian [here](#), [here](#), [here](#), [here](#), [here](#)

Bachias [here](#) *see also* Fayum Oasis

backgammon [here](#), [here](#), [here](#)

Ballas [here](#), [here](#), [here](#)

Baqet III [here](#), [here](#), [here](#)

Bedouin [here](#)

beer [here](#)

Bellapais *Vounous* [here](#)

Beni Hasan [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

Bes [here](#), [here](#)

Beth Shean [here](#), [here](#), [here](#)

bifacial *see* board shape

bird [here](#), [here](#), [here](#), [here](#), [here](#) *see also* duck, goose, sparrow-hawk, waterfowl

black [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

blue [here](#), [here](#)

board shape

anthropoid [here](#)

axe-blade [here](#)

bifacial [here](#), [here](#) *see also* double-sided, reversible

box type *see* box

double-sided [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

ellipsoidal [here](#), [here](#) *see also* violin

hippopotamus [here](#), [here](#) *see also* zoomorphic

liver [here](#)

Palestinian *see* violin

reversible [here](#), [here](#) *see also* bifacial, double-sided

shield [here](#)

turtle [here](#), [here](#)

violin [here](#), [here](#), [here](#), [here](#), [here](#)

zoomorphic [here](#), [here](#)

Bode Museum, Berlin [here](#)

Book of the Dead [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)
box, game box [here](#), [here](#)
British Museum, London [here](#), [here](#)
brown [here](#)
Buhen [here](#), [here](#), [here](#), [here](#), [here](#)
burial [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#) *see also* funerary, mortuary, offerings
Byblos [here](#), [here](#), [here](#), [here](#), [here](#)
Byzantine [here](#), [here](#), [here](#), [here](#), [here](#)

Cairo Papyrus *see* Great Game Text
calendar [here](#)
Canaan, Canaanites [here](#), [here](#), [here](#)
canine [here](#), [here](#), [here](#) *see also* dog
caption [here](#), [here](#), [here](#), [here](#), [here](#), [here](#) *see also* playing scene
captives *see* playing pieces, throwing sticks
casting devices [here](#), [here](#), [here](#), [here](#), [here](#) *see also* randomization
astragalus, astragali [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)
cubic dice [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)
disks, two-sided [here](#), [here](#)
knucklebones [here](#), [here](#), [here](#) *see also* astragalus
oblong dice [here](#), [here](#)
pyramidal *see* teetotum
six-sided *see* cubic dice
sticks, four-sided [here](#)
teetotums [here](#), [here](#), [here](#), [here](#)
tetrahedrons [here](#), [here](#)
throwing sticks [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)
twenty-sided dice, Greek lettering [here](#), [here](#)
cat [here](#)
cedar [here](#), [here](#)
celebration, celebratory [here](#), [here](#), [here](#)
Chalcolithic [here](#)
checkers [here](#) *see also* draughts
checkered [here](#), [here](#), [here](#), [here](#)
chess [here](#), [here](#), [here](#)
child, children [here](#), [here](#), [here](#), [here](#), [here](#)
Christianity, Christian [here](#), [here](#), [here](#)

circle [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#) *see also game of thirty-three circles*

semi-circle [here](#), [here](#), [here](#)

circus [here](#)

climate [here](#), [here](#), [here](#), [here](#), [here](#) *see also preservation*

clockwise [here](#), [here](#), [here](#) *see also counterclockwise*

coffee [here](#)

Coffin Text [here](#), [here](#), [here](#)

color, colored [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

concentric circle *see spiral*

configuration [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

connecting lines *see linkage*

conquest

Arab [here](#), [here](#), [here](#), [here](#)

British, French [here](#)

Egyptian conquest of the Levant [here](#)

Egyptian conquest of Nubia [here](#)

Roman conquest [here](#), [here](#)

copper [here](#), [here](#), [here](#)

Coptic

calendar [here](#)

game [here](#), [here](#)

counterclockwise [here](#), [here](#), [here](#), [here](#)

counters *see playing pieces*

counting devices *see casting devices*

Crete [here](#), [here](#) *see also Archaeological Museum of Heraklion, Knossos*

cross *see “X”*

crystal *see rock crystal*

cubic dice *see casting devices*

cultural transmission [here](#) *see also anthropological archaeology*

Cypro-Geometric [here](#), [here](#)

Cyprus, Cypriot [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

Dakhleh Oasis [here](#), [here](#)

dance, dancers [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

Darius III [here](#)

Dawwi [here](#), [here](#)

Deir el-Bahari [here](#), [here](#), [here](#) *see also Thebes*

Deir el-Bersha [here](#)
Deir el-Gabrawi [here](#), [here](#)
Deir el-Medina [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)
Delta, Nile [here](#)
Demeter [here](#)
Demotic [here](#)
Den [here](#), [here](#)
Dendera [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)
Deneia *Kafkalla* [here](#)
depression [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#) *see also* playing field
drilled/bored [here](#), [here](#), [here](#)
pecked [here](#), [here](#), [here](#)
dexterity [here](#), [here](#)
Dholavira [here](#)
dice *see* casting devices
dice tower *see* pyrgus
Didymoi [here](#), [here](#)
Dinkha Tepe [here](#)
disks *see* casting devices
divination, divinatory [here](#), [here](#), [here](#), [here](#)
Djjet [here](#)
dog, hound [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)
domestic [here](#), [here](#), [here](#), [here](#), [here](#) *see also* public life
double-axe *see* board shape
Dra Abu el-Naga [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)
draughts [here](#) *see also* checkers
draughtsmen *see* playing pieces
drinking [here](#), [here](#), [here](#) *see also* beer, coffee, social lubricant, wine
drinking cup [here](#), [here](#)
duat [here](#), [here](#), [here](#)
duck [here](#)
duodecim scripta, ludus duodecim scriptorum [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

ears [here](#), [here](#), [here](#)
Early Bronze Age [here](#), [here](#)
Early Dynastic Period [here](#), [here](#), [here](#)
East Africa [here](#)

eastern desert of Egypt [here](#), [here](#), [here](#)

Eastern Mediterranean [here](#), [here](#), [here](#), [here](#), [here](#)

Edfu [here](#), [here](#)

Eleventh Dynasty [here](#), [here](#), [here](#) *see also* Middle Kingdom

elite here, here, here, here, here, here, here, here

ellipsoidal *see board shape*

elliptic here

emulation here

Enkomi here, here, here, here, here

Ephesos here, here

Eritrea here

eroded here, here

Ethiopia here

Eustathius here

exchange here, here, here, here, here see also trade

eye here, here, here, here

fajence here here

Famagusta here

famous here here here here see also iconic

Fayum Fayum Oasis here here here

feasting here here

feet here here here here here here here

fonnec.horo

festival here

¹Fifteenth Dynasty here, here *see also* Second Intermediate Period.

Fifth Dynasty here, here, here *see also* Old Kingdom

finger fingertip here here

First Intermediate Period here here here here here here

First Persian Period see Twenty-Seventh Dynasty

Fitzwilliam Museum, Cambridge here, here

five lines here here here here here see also rules of play

gender [here](#) *see also* women
Gerar *see* Tell Jemmeh
Germania [here](#)
Gezer [here](#), [here](#), [here](#), [here](#)
Giza [here](#), [here](#), [here](#), [here](#)
glass [here](#), [here](#), [here](#), [here](#)
goal of the game [here](#), [here](#), [here](#), [here](#), [here](#)
goose [here](#), [here](#)
graffiti games [here](#), [here](#)
Greek calendar *see* calendar
Great Game Text [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)
Greco-Roman [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#) *see also* Hellenistic
Greco-Roman period [here](#), [here](#), [here](#) *see also* Ptolemaic period, Roman period
Greek lettering *see* twenty-side dice
green [here](#)
guessing, counting games [here](#), [here](#)

Hadjiprodromou Collection, Famagusta [here](#)

hairpin [here](#), [here](#) *see also* peg, pin

Hama [here](#), [here](#)

Hapy [here](#), [here](#)

Har Yeroham [here](#)

Har-Behdety [here](#)

Harappa [here](#), [here](#)

Hathor [here](#), [here](#), [here](#), [here](#)

Hatshepsut [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

Hawawish, el-Hawawish [here](#), [here](#)

Hazor [here](#), [here](#), [here](#), [here](#)

Pillared Building [here](#)

head *see also* “head-and-tail”

animal [here](#)

anthropoid [here](#)

canine, dog, hound [here](#), [here](#), [here](#)

jackal [here](#), [here](#)

leopard [here](#)

serpent, snake [here](#), [here](#), [here](#), [here](#)

Iraq *see* Mesopotamia
Iron Age [here](#), [here](#), [here](#), [here](#)
Isesi-merynetjer [here](#), [here](#), [here](#)
Isis [here](#), [here](#)
Islamic [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)
Israel, Israelites [here](#), [here](#)
Israel Museum, Jerusalem [here](#), [here](#)
ivory [here](#), [here](#)
[here](#)
ἰωλῶν [here](#)

jackal [here](#), [here](#), [here](#), [here](#), [here](#), [here](#) *see also hounds and jackals*

jeu de dames *see checkers*

Jiroft [here](#), [here](#)

Jordan [here](#)

Kab, el-Kab [here](#), [here](#), [here](#)

Kababish [here](#)

Kahep [here](#)

Kaiemankh [here](#), [here](#), [here](#), [here](#)

Kairere [here](#)

Kalavasos Ayios Dhimitrios [here](#), [here](#)

Kamid el-Loz [here](#), [here](#), [here](#), [here](#)

Kanesh *see* Kültepe

Karahoyük [here](#), [here](#)

Karnak [here](#), [here](#), [here](#), [here](#), [here](#) *see also temple of Khonsu*

Keramit [here](#)

Kerma [here](#)

Kerman [here](#)

Kharga Oasis [here](#), [here](#), [here](#), [here](#), [here](#)

Kheni [here](#)

Khety [here](#), [here](#), [here](#)

Khirbet Iskander [here](#), [here](#)

Khnumhotep II [here](#)

Khonsu *see* temple of Khonsu

Khonsumose [here](#)

Kition *Kathari* [here](#), [here](#)

Knossos [here](#)

knucklebones *see* astragali

Kom el-Dekka [here](#) *see also* Alexandria

Kom Ombo [here](#), [here](#), [here](#), [here](#)

Kordofan [here](#)

Kotchati [here](#)

Kouklia *Skales* [here](#), [here](#), [here](#), [here](#)

Krokodilo [here](#), [here](#)

Kubban [here](#), [here](#), [here](#), [here](#)

Kültepe, ancient Kanesh [here](#), [here](#), [here](#)

Kürna [here](#), [here](#)

Kurru, el-Kurru [here](#), [here](#), [here](#), [here](#)

Kushite [here](#), [here](#), [here](#) *see also* Twenty-Fifth Dynasty

labyrinth [here](#), [here](#), [here](#)

Lachish [here](#), [here](#), [here](#), [here](#)

Lahun [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

lapis lazuli [here](#)

Late Bronze Age [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

Late Period [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#) *see also* Twenty-Fifth, Twenty-Sixth, Thirtieth Dynasties

Latin [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

latrunculi [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#) *see also* rules of play

Lebanon [here](#), [here](#)

leg, legs [here](#), [here](#), [here](#), [here](#)

Lemba *Lakkous* [here](#), [here](#)

leopard [here](#)

letters [here](#), [here](#), [here](#), [here](#), [here](#) *see also* Greek lettering, hexagram, twenty-side dice

Levant, Levantine [here](#), [here](#)

lime [here](#), [here](#)

liminal [here](#)

lines *see* five lines, linkage

linkage [here](#), [here](#), [here](#), [here](#), [here](#)

lion [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

Lisht [here](#), [here](#), [here](#), [here](#)

[here](#), [here](#), [here](#), [here](#), [here](#)

Middle Bronze Age [here](#), [here](#), [here](#), [here](#), [here](#)

Middle Kingdom [here](#), [here](#) *see also* Eleventh, Twelfth, Thirteenth Dynasties

Middle Minoan period [here](#)

military [here](#), [here](#), [here](#) *see also* soldiers

mill game [here](#), [here](#) *see also* merels, rules of play

Mitanni [here](#)

Moalla [here](#), [here](#), [here](#)

Mohenjo-daro [here](#), [here](#)

moon see lunar

Morphou *Toumba tou Skourou* [here](#), [here](#), [here](#)

mortuary [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#) *see also* burial, funerary

mouth [here](#), [here](#), [here](#) *see also* snout

Muhattah Jaqub [here](#)

Musawwarat el-Sufra [here](#)

Musée du Louvre, Paris [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

Musée Royal de Mariemont [here](#)

Musées Royaux d'Art et d'Histoire, Brussels [here](#), [here](#), [here](#)

Museo Egizio, Turin [here](#), [here](#), [here](#)

Museum of Fine Arts, Boston [here](#), [here](#), [here](#), [here](#)

music, musicians [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

Mut [here](#)

mw [here](#), [here](#), [here](#)

Nahum [here](#)

naked [here](#) *see also* nude

Naqada [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

nard [here](#)

Narodni Muzeum, Prague [here](#)

Naxos [here](#), [here](#)

Nebenma'at [here](#)

Neferhotep [here](#), [here](#), [here](#), [here](#)

Neferiretenef [here](#)

Neferukekashta [here](#)

Nefwa [here](#)

Neith [here](#), [here](#)

Nekau [here](#)

Nephthys [here](#)

New Kingdom [here](#), [here](#)

nfr [here](#), [here](#)

nfrw [here](#), [here](#), [here](#), [here](#)

nine-men's-morris [here](#), [here](#), [here](#), [here](#)

Nineferkaptah [here](#)

Nineteenth Dynasty [here](#), [here](#) see also New Kingdom

Nippur [here](#), [here](#)

nomads [here](#)

ntrw [here](#), [here](#)

ntrwy [here](#), [here](#)

Nubia, Nubians [here](#), [here](#)

Nubia Museum, Aswan [here](#)

nude [here](#), [here](#) see also naked

object frieze [here](#)

offerings [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

burial gifts/goods [here](#), [here](#)

formulae [here](#)

offering table [here](#), [here](#)

Old Kingdom [here](#), [here](#) see also Third, Fourth, Fifth, Sixth Dynasties

Omphale [here](#)

Oriental Institute Museum, Chicago [here](#), [here](#), [here](#), [here](#), [here](#)

Osireion [here](#), [here](#), [here](#)

Osiris [here](#), [here](#), [here](#)

ostracon, ostraca [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

Ottoman [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

Oxyrhyncus Papyrus [here](#)

pachisi [here](#)

paint [here](#), [here](#), [here](#), [here](#), [here](#), [here](#) see also pigment

painting [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#) *see also* relief

Palestine Archaeological Museum, Jerusalem [here](#)

palm tree game [here](#) *see also* hounds and jackals

Palmyra [here](#), [here](#), [here](#), [here](#), [here](#)

papyrus [here](#), [here](#), [here](#), [here](#), [here](#) *see also* Cairo, Oxyrhynchus, Turin Papyrus

pavement [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

pawns *see* playing pieces

pegs [here](#), [here](#), [here](#), [here](#), [here](#) *see also* pins, playing pieces

pegs and holes [here](#) *see* hounds and jackals

πέντε γραμμαί *see* five lines

Pepi I, Pepi II [here](#)

Peribsen [here](#), [here](#)

Persia, Persian [here](#), [here](#), [here](#), [here](#), [here](#)

Petosiris [here](#)

Petra [here](#), [here](#)

Petrie Museum, London [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

φόρωρ Ὄρου ὄικος, Φόρωρ [here](#)

Piankhy [here](#)

Piay [here](#)

pigment [here](#), [here](#), [here](#) *see also* color, paint

pins [here](#), [here](#), [here](#) *see also* pegs, hairpin

platter [here](#)

playing field *see* depression, square

playing pieces [here](#), [here](#) *see also* dog

animal, zoomorphic [here](#), [here](#)

bird [here](#), [here](#)

captive figurine [here](#), [here](#)

conical [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

couchant hare [here](#)

couchant lion [here](#), [here](#)

couchant sphinx [here](#)

domed, low-domed [here](#), [here](#), [here](#), [here](#)

draughtsman [here](#)

halma type [here](#)

hippopotamus [here](#)

pawn [here](#), [here](#), [here](#), [here](#)

pyramidal [here](#)
reel-shaped [here](#)
spherical [here](#), [here](#)
spool-shaped [here](#), [here](#)
playing scene [here](#), [here](#)
pleasure(s) [here](#), [here](#)
poet, poetic lines, poetry [here](#), [here](#), [here](#)
πόλις [here](#)
Post-Meroitic [here](#)
Predynastic [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#) see also Naqada
Prehistoric Bronze Age [here](#)
preservation [here](#), [here](#) see also climate
private collection [here](#), [here](#), [here](#)
projection [here](#), [here](#), [here](#), [here](#) see also appendage, protrusion
Protohistoric Bronze Age [here](#), [here](#)
protrusion [here](#), [here](#), [here](#), [here](#) see also appendage, projection
psychoactive substance [here](#) see also beer, intoxicant, wine
Ptahmay [here](#)
Ptolemaic period [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#) see also Roman period
Ptolemy I Soter [here](#)
public life/space [here](#), [here](#), [here](#), [here](#)
pyramid [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)
Pyramid Texts [here](#), [here](#), [here](#),
pyramidal see casting devices, playing pieces
pyrgus [here](#)

Qantir, el-Qantir [here](#), [here](#), [here](#)
Qar [here](#)
Qasr al Ghweita [here](#)
Qasr Ibrim [here](#), [here](#), [here](#)
Qau [here](#), [here](#), [here](#), [here](#)
quartz [here](#)
Quft [here](#), [here](#)
Qustul [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)
Qusur al-Banat [here](#), [here](#)

Ra [here](#), [here](#), [here](#), [here](#)

race game [here](#), [here](#), [here](#), [here](#), [here](#)

Rahotep [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

ram [here](#)

Rameses II [here](#)

Rameses III [here](#), [here](#), [here](#)

Rameses V [here](#)

Rameses VI [here](#)

Ramesseum [here](#), [here](#)

randomization [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#) see also casting device

Rashepses [here](#), [here](#), [here](#)

Re-Horakhty [here](#)

rebirth [here](#), [here](#)

red [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

Red Sea [here](#)

Rekhmire [here](#), [here](#)

relief [here](#), [here](#) see also painting
religion, religious, religiosity [here](#), [here](#)

[here](#), [here](#), [here](#)

Reniseneb [here](#)

Rhampsinitus [here](#)

ritual [here](#), [here](#)

rock crystal [here](#)

rock face [here](#), [here](#), [here](#), [here](#)

Roman period [here](#), [here](#), [here](#) see also Greco-Roman period, Ptolemaic period

roof [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

rosette [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

royal game of Ur [here](#) see game of twenty

rules of play [here](#), [here](#), [here](#), [here](#)

five lines [here](#)

game of twenty [here](#), [here](#)

hounds and jackals [here](#)

latrunculi [here](#)

mancala [here](#)

mehen [here](#), [here](#), [here](#)

mill [here](#)

seeja [here](#)

tâb [here](#)

sȝ [here](#)

sacred line [here](#)

sacred symbols/text [here](#), [here](#), [here](#) *see* symbols

Sai Island [here](#), [here](#), [here](#), [here](#)

sailors [here](#)

Saite Period *see* Late Period, Twenty-Sixth Dynasty

Saqqara [here](#), [here](#)

Sacred Animal Necropolis [here](#)

scarab [here](#)

scorpion [here](#), [here](#)

Second Intermediate Period [here](#), [here](#), [here](#), [here](#) *see also* Fifteenth, Sixteenth, Seventeenth Dynasty

Sedeinga [here](#), [here](#), [here](#), [here](#), [here](#)

Sedment [here](#)

seeja [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#) *see also* rules of play

senet [here](#), [here](#)

Sennedjem [here](#)

Sennefer [here](#), [here](#), [here](#)

Senusret I [here](#), [here](#)

Senusret II [here](#)

Senusret III [here](#), [here](#)

serpent *see* snake

Serra East [here](#), [here](#)

Seshemnefer [here](#)

Setne [here](#), [here](#)

Seventeenth Dynasty [here](#), [here](#), [here](#), [here](#), [here](#), [here](#) *see also* Second Intermediate Period

Shabaqo [here](#)

Shahr-i Sokhta [here](#)

Shatt el-Rigal [here](#)

shield game [here](#) *see* hounds and jackals

siga *see* *seeja*

Silsila *see* Gebel el-Silsila Survey Project

Silsila West [here](#)

simulacra [here](#)

Sinai [here](#), [here](#)
singers [here](#), [here](#)

Sixteenth Dynasty [here](#), [here](#) *see also* Second Intermediate Period

Sixth Dynasty [here](#), [here](#), [here](#), [here](#), [here](#)

skill *see* games of skill

skittles [here](#)

šn [here](#), [here](#)

snake, serpent [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

snakes and ladders [here](#)

snout [here](#), [here](#) *see also* mouth

social lubricant [here](#)

solar, sun [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

soldiers *see also* military

Egyptian [here](#)

Ottoman [here](#)

Roman [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

Sotira Kaminoudhia [here](#), [here](#)

South Sudan [here](#)

sparrow-hawk [here](#)

special holes, positions, spaces, squares [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

spiral, spiraling [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

sports [here](#), [here](#), [here](#)

square [here](#), [here](#) *see also* special holes

starting configuration, line, point, position [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

State Hermitage Museum, Saint Petersburg [here](#)

status [here](#), [here](#), [here](#)

sticks *see* throwing sticks

stone *see* limestone

strategy game [here](#)

Sudan [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

Sudan National Museum, Khartoum [here](#)

Sumer [here](#)

Sumerian proverb [here](#), [here](#)

sun *see* solar

surface find [here](#), [here](#), [here](#), [here](#)

Susa [here](#), [here](#), [here](#), [here](#)

Swiss Museum of Games, La Tour-de-Peilz [here](#), [here](#), [here](#)
symbolic, symbols, symbolism [here](#), [here](#)
Syria [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

t̄w see game of *tjau*

tâb [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#) see also rules of play

table see gaming/game table

Taharqo [here](#), [here](#)

tail [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

Taya [here](#)

teetotums see casting devices

Tel Arad [here](#), [here](#)

Tell Abu Hatab [here](#)

Tell Ailun [here](#)

Tell el-Ajjul [here](#), [here](#), [here](#), [here](#) see also ancient Gaza

Tell Beit Mirsim [here](#), [here](#), [here](#), [here](#)

Tell Brak [here](#), [here](#), [here](#), [here](#)

Tell Defenneh [here](#), [here](#)

Tell el-Farah south [here](#)

Tell Halaf [here](#)

Tell el-Hisn [here](#), [here](#)

Tell Jemmeh [here](#), [here](#)

Tell es-Safi [here](#)

Tell es-Saidiyeh [here](#)

Tell as-Sib [here](#)

Tell Sukas [here](#)

temple of/at:

Abydos [here](#)

Amun at Karnak [here](#), [here](#)

Dendera [here](#)

Inshushinak at Susa [here](#), [here](#)

Karnak [here](#)

Khonsu at Karnak [here](#), [here](#), [here](#), [here](#), [here](#)

Kom Ombo [here](#), [here](#), [here](#)

Kûrna [here](#), [here](#)

Luxor [here](#), [here](#), [here](#)

Medinet Habu [here](#), [here](#)

Qasr Ibrim [here](#), [here](#)
Soleb [here](#)
Tiye at Sedeinga [here](#)
Userkaf [here](#)
Tepe Gawra [here](#)
Tepe Sialk [here](#), [here](#), [here](#)
Tepe Yahya [here](#), [here](#)
terracotta [here](#), [here](#), [here](#), [here](#)
Teti [here](#)
tetrahedrons *see* casting devices
Thebes [here](#), [here](#) *see also* el-Asasif, Deir el-Bahari, Dra Abu el-Naga
Third Dynasty [here](#), [here](#), [here](#), [here](#), [here](#) *see also* Old Kingdom
Third Intermediate Period [here](#), [here](#) *see also* Twenty-First–Twenty-Fourth Dynasties
Thirteenth Dynasty [here](#), [here](#) *see also* Middle Kingdom
Thirty-ninth Dynasty [here](#), [here](#), [here](#)
Thoth [here](#), [here](#)
three-men's-morris [here](#), [here](#) *see also* merels
throwing cup [here](#) *see also* pyrgus
throwing sticks *see* casting device
Thutmoses III [here](#)
Thutmoses IV [here](#), [here](#)
Tiye *see* temple
tjau *see* game of *tjau*
track [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#) *see also* elliptic, spiraling
trade [here](#), [here](#), [here](#), [here](#), [here](#) *see also* exchange
trapezoidal *see* appendage
Turin Papyrus [here](#), [here](#), [here](#), [here](#), [here](#)
Turkey [here](#) *see also* Anatolia, Ottoman
turquoise [here](#)
turtle *see* appendage, board shape, head
Tushratta [here](#)
Tutankhamun [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)
Twelfth Dynasty [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#) *see also* Middle Kingdom
Twentieth Dynasty [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#) *see also* New Kingdom
Twenty-Fifth Dynasty [here](#), [here](#), [here](#) *see also* Kushite, Late Period
Twenty-First–Twenty-Fourth Dynasties [here](#), [here](#), [here](#), [here](#) *see also* Third Intermediate Period

Twenty-Seventh Dynasty [here](#), [here](#)
twenty-sided dice *see* casting devices
Twenty-Sixth Dynasty [here](#), [here](#), [here](#), [here](#) *see also* Late Period
Two rows of thirteen [here](#)
Tyre [here](#), [here](#)

Ugarit [here](#), [here](#)
underworld/netherworld [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)
unidentified games [here](#), [here](#)
University of Pennsylvania Museum, Philadelphia [here](#)
Ur [here](#), [here](#), [here](#)

Valley of the Kings [here](#), [here](#), [here](#), [here](#)
Vimose, Denmark [here](#) *see also* Germania
violin *see* board shape
votive [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)
Vounous *see* Bellapais *Vounous*

Walters Art Museum, Baltimore [here](#), [here](#), [here](#), [here](#)
wands [here](#), [here](#) *see also* casting devices
warship [here](#)
waterfowl [here](#)
wd³t [here](#)
white [here](#), [here](#), [here](#), [here](#), [here](#)
wine [here](#) *see also* beer, psychoactive substances, social lubricant
women [here](#), [here](#), [here](#) *see also* gender
wooden [here](#)
 board [here](#), [here](#)
 casting device [here](#), [here](#), [here](#)
 playing pieces [here](#)
World Museum, Liverpool [here](#), [here](#), [here](#)

“X” [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#)

Yale Babylonian collection [here](#)

Yale University Art Gallery [here](#)

Zakros [here](#), [here](#)

Zawiyet el-Aryan [here](#), [here](#), [here](#), [here](#), [here](#)

Zer-Ta [here](#)

Zimri-Lim [here](#)

zodiac [here](#) *see also* divination

zoomorphic [here](#), [here](#), [here](#), [here](#) *see also* board shape, feet, playing pieces, table

Bloomsbury Academic

An imprint of Bloomsbury Publishing Plc

50 Bedford Square

1385 Broadway London

New York WC1B

3DP

NY 10018

UK

USA

www.bloomsbury.com

BLOOMSBURY and the Diana logo are trademarks of Bloomsbury Publishing Plc

First published 2016

© Walter Crist, Anne-Elizabeth Dunn-Vaturi and Alex de Voogt, 2016

Walter Crist, Anne-Elizabeth Dunn-Vaturi and Alex de Voogt have asserted their rights under the Copyright, Designs and Patents Act, 1988, to be identified as Authors of this work.

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information storage or retrieval system, without prior permission in writing from the publishers.

No responsibility for loss caused to any individual or organization acting on or refraining from action as a result of the material in this publication can be accepted by Bloomsbury or the authors.

British Library Cataloguing-in-Publication Data A catalogue record for this book is available from the British Library.

ISBN: HB: 978-1-47422-118-4
PB: 978-1-47422-117-7
ePDF: 978-1-47422-120-7
ePub: 978-1-47422-119-1

Library of Congress Cataloging-in-Publication Data Crist, Walter, author.
Ancient Egyptians at play : board games across borders / Walter Crist, Anne-Elizabeth Dunn-Vaturi, Alex de Voogt.

pages cm — (Bloomsbury Egyptology) Includes bibliographical references and index.
ISBN 978-1-4742-2118-4 (hb : alk. paper) — ISBN 978-1-4742-2117-7 (pb : alk. paper) — ISBN 978-1-4742-2119-1 (epub : alk. paper) — ISBN 978-1-4742-2120-7 (epdf : alk. paper) 1. Board games—Egypt—History. 2. Egypt—Antiquities. 3. Egypt—Social life and customs. 4. Divination—Egypt—History. I. Dunn-Vaturi, Anne-Elizabeth, author. II. Voogt, Alexander J. de, author. III. Title. IV. Series: Bloomsbury Egyptology.

DT62.B5C75 2016

794'.0932—dc23

2015034318

Series: Bloomsbury Egyptology

Typeset by RefineCatch Limited, Bungay, Suffolk