Art from Wisdom: The Invention of Chess and Backgammon

Ann C. Gunter

As a game that has captured the fascination of so many world cultures, chess can claim few rivals. Introduced to Western Europe from Islamic Spain around the year 1000, chess today is an organized sport played through international competitions. Modern chess is primarily associated with a series of complex stratagems and highly calculated moves. Yet its origins lie in the world of the nobility and the ideals of courtly society in ancient West and South Asia. Ancient texts describing chess, backgammon, and other board games, together with the material evidence of games provided by surviving game pieces and works of art, allow us to explore not only the early history of the games but also the close relation they document between art and the celebration of human reason and ingenuity.

Chess is first mentioned in texts dating from the early centuries of the common era, when the Sasanian dynasty (A.D. 224–651) ruled all of Mesopotamia, Iran, and much of Central Asia. The Sasanians wrote in the language known as Middle Persian, ancestral to the modern Persian spoken today in Iran and adjacent countries. One of the few surviving literary texts in Middle Persian is *The Explanation of Chess and Invention of Backgammon* (Wizārishn ī catrang ud nihishn ī nēw-ardashīr). Although written sometime in the ninth century, it describes events from the sixth century and probably preserves an oral tradition. From this text we learn of a fateful visit to the court of the great Sasanian ruler Khusraw I (reigned 531–579), who is the "king of kings" mentioned in the story.

> They say that, in the reign of Khusraw of the Immortal Soul, a chess game (16 counters of emerald and 16 counters of red ruby) was sent by Dewisharm, great ruler of the Indians, to test the intelligence and wisdom of the Iranians and to see to his own profit. . . . In a letter had been written: "Since you are named as king of kings, as king of kings over us all, it is necessary that your wise men be wiser than ours. [It is so] if you explain the rationale of this chess; otherwise *you* send tribute [and] taxes!"[1]

According to the story, the Persian king asked for four days to respond to Dewisharm's challenge. None of the wise men of his realm came forth to offer a solution, until on the third day Wuzurg-Mihr rose to his feet and announced that he could easily explain the rationale of chess. In addition, he would devise and send Dewisharm something the Indian ruler "will not be able to explain" and so demand a tribute in addition to the one now before the Persian king. As Wuzurg-Mihr deduced:

> Dewisharm has fashioned this chess like a battle in meaning: He has made the kings like two princes, the chariots to left and right like the van, a general like the commander of the warriors, the elephants like the commander of the bodyguards, the horses like the commander of cavalry, the foot-soldiers like the very infantry at the front of the attack.

Wuzurg-Mihr then played three games of chess with the Indian sage who had brought the chess set, and won three victories. The tribute accompanying the game—1,200 camel loads of gold, silver, jewels, pearls, and robes, and 90 elephants—was given to the Persian king.

What did the chess game sent to the Sasanian court look like? From the text we learn that the game, like mod-

Buzurjmihr [Wuzurg-Mihr] inventing backgammon (detail). See figure 6.

King

Queen

Knight

Bishop

Rook

Figure 1. Chess pieces from a set. Nishapur, Iran, 9th century. Ivory, average height 1 in. Metropolitan Museum of Art

The modern vocabulary for chess pieces together with the original Arabic and Persian names.

Modern equivalent	Persian	Arabic	Original meaning
King	Shah	Shah	King
Queen	Farzin	Firzin Firz	Counselor (later Vizir)
Bishop	Pil	Fil	Elephant
Knight	Asp	Faras	Horse
Rook	Rukh	Rukh	Chariot
Pawn	Pujada	Baidaq	Foot soldier

ern chess, was played by two opponents using a board of sixty-four squares. We are told that the gaming pieces were made of emerald and ruby, but their shapes are not described. The Middle Persian word *muhrag*, translated here as "counter," means a gaming piece regarded simply as an object of cut stone. Ninth-century chess pieces—part of a set—recovered from excavations at the site of Nishapur, in Iran, only vaguely suggest the human and animal forms they represent (fig. 1). For the elephant, two small projections at the top of the piece indicate a pair of tusks. The chariot, later known as the rook, is characterized by a deep cleft. The set is made of ivory, with opponents distinguished by color, one side stained dark green.[2] Since the explanation of chess, as recounted in the Middle Persian text, eluded nearly all the wise men of the realm, perhaps the counters of Dewisharm's set were also abstract in form, their shapes providing no clue to the military forces they represented.

Yet some early chess sets may have been fashioned precisely as the figures of war they were meant to imply. A small stone sculpture of an elephant (fig. 2), now in the Metropolitan Museum of Art, was purchased in Baghdad around 1930 by Ernst E. Herzfeld (1879–1948). A great scholar of West Asian studies, Herzfeld dated the elephant sculpture to the end of the Sasanian period. He compared it to the elephants depicted on the rock reliefs Khusraw II (reigned 591–628) had carved at Taq-i Bustan, in western Iran (fig. 3). Herzfeld initially thought the elephant a chess piece, then observing that the earliest known chess pieces were abstract in form, rejected that interpretation. Prudence O. Harper, a specialist in Sasanian art, has since suggested that Herzfeld's original theory may have been correct. The small size of the stone elephant supports an interpretation as a gaming piece. If so, the stone elephant could be the earliest material evidence for the game of chess.[3]

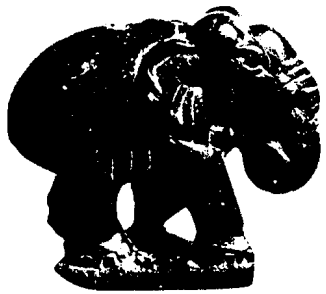

Figure 2. Elephant. Iraq (?), 6th or 7th century. Stone (dolomite); height 2 7/8 in. Metropolitan Museum of Art

The Explanation of Chess clearly establishes the origins of the game in a courtly society that trained for warfare. The Arabic and Persian name for chess, *shatranj*, is borrowed from the Sanskrit *chaturanga*, which means "having four limbs" and originally referred to the four-limbed army composed of elephants, horsemen, navy or chariots, and infantry. Chess has often been thought to derive from the Indian game called *chaturanga*, known to have been played as early as the fifth century. Unlike chess, which has two opponents, *chaturanga* is played by four teams: yellow and green are allied against red and black. Each team includes a king, horse, elephant, boat or chariot, and four foot soldiers. The moves of the game, determined by rolling the die, refer

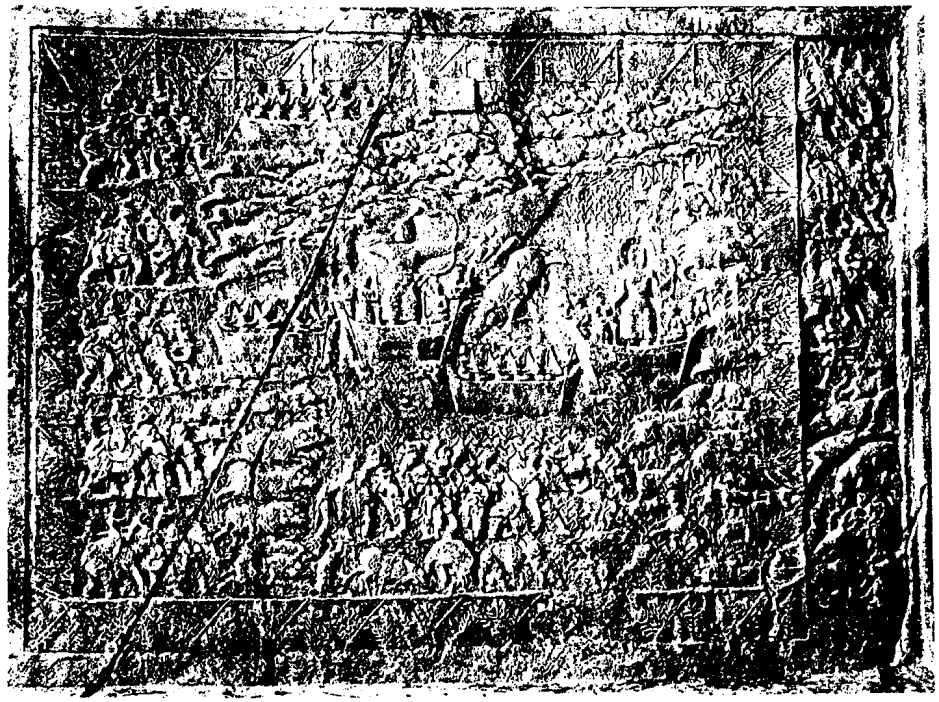

Figure 3. Rock relief depicting royal boar hunt. Iran, Taq-i Bustan, 6th century. Carved panel: height 12 ft 7 in, length 18 ft 10 in

explicitly to its origin as a war game: seizing a throne, regaining a throne, building an empire. The Middle Persian story about Khusraw and Wuzurg-Mihr suggests that India was the source of chess, but chess differs from *chaturanga* in several key respects, including the number of players and the element of chance introduced by the use of the die. Another ancient Indian game, *ashtapada*, literally "eight-foot," was played like chess on a board of sixty-four squares. The *ashtapada* board was later used to play *chaturanga*.

A war game composed of the four divisions of elephant, horsemen, navy, and foot soldiers may be echoed in the scenes of hunting depicted on the rock reliefs at Taq-i Bustan. Scenes of the king hunting deer and boar, carved in low relief, decorate the side walls of a monument whose principal relief depicts the investiture of Khusraw II. Figure 3 illustrates the relief on the left wall, where the king is shown hunting boar. The scene is framed by a hunting net, whose sides are divided into eight and nine segments that may be intended to suggest

Figure 3. Detail

a gameboard. All the elements of a *chaturanga* team are depicted in the hunting scenes: kings, horsemen, elephants, boats, and attendants. In ancient West Asia, both the chess game and the hunt were allegories for war. Hunting, like playing chess, was revered as a royal ritual as well as preparation for warfare.

Another Sasanian monument that may be connected with chess or with *chaturanga* is a painting known only from later Islamic literature. Once decorating the throne hall of Khusraw I at the capital city of Ctesiphon in southern Mesopotamia, the painting depicted the Sasanian defeat of the Roman army at the battle of Antioch in 540, during the reign of Khusraw I. According to written accounts, the Sasanian king was shown dressed in green and seated on a yellow horse. Perhaps the colors were deliberately chosen to represent the allies in the game of *chaturanga*.[4]

According to *The Explanation of Chess*, the wise man Wuzurg-Mihr explained the rationale of the game and then proceeded to devise a challenge of his own to the Indian ruler. He invented the game of backgammon, known in modern Persian as *nard*. Backgammon drew on knowledge not of military tactics but of the sciences of the earth and the heavens. Wuzurg-Mihr explained:

> I will make the board . . . like Spandarmad, the Earth. I will make 30 counters like the 30 nycthhemera [nights and days]; I will make 15 white like day, and I will make 15 black like night. I will make a single die, like the revolution of the constellations and the turning of the zodiac.

The numbers on the die corresponded to cosmological principles of Zoroastrianism, the religion actively promoted by the Sasanian rulers. It was the national faith of Iran from the rise of the Achaemenid Persian dynasty during the sixth century B.C. to the conquest of Islam in the seventh century A.D. Zoroaster, the prophet of the religion, probably lived in eastern Iran around the seventh century B.C. He preached an essentially monotheistic faith, proclaiming Ahuramazda (Ohrmazd) as the single supreme god. He also stressed human freedom of choice between good and evil, truth and falsehood.[5] Wuzurg-Mihr described in detail the explicit relationship between Zoroastrianism and the game he invented.

> I will make a "one" on the die, just as Ohrmazd is one; all well-being was created by him. I will make a "two," just like the material existence and the invisible. I will make a "three," just like good thought, good speech, good works, and thought, words, deeds. I will make a "four," like the four material elements of which a person [consists] and the world's four directions—east, west, south, north. I will make a "five," like the five light-sources—sun, moon, stars, fire, and the lightning which comes from the sky. I will make a "six," like the creating of creatures during the six periods of the year-divisions.

In Wuzurg-Mihr's invention, the moves of the game, too, paralleled the sequence of life:

> The revolving and turning of the counters according to the die is just like people in the world: Their bond has been tied to the invisible beings; they revolve

and move according to the seven planets and twelve zodiacal signs. When they hit one counter against another and collect the latter, it is just as people in the world smite one another. When, by the turn of the die, they collect all the counters, it is an analogy to people, who all pass out of the world. When they set them up again, it is an analogy to people, who will all come alive again at the resurrection.

Wuzurg-Mihr named the game he invented "Noble Is Ardashir" (*nēw-ardashīr*), after the ruler who founded the Sasanian empire, for, "of the rulers during this millennium, Ardashir was most effective and wise." The game *nēw-ardashīr*, which was elided to *nard*, did indeed confound the Indian wise men, none of whom could explain its rationale. So Wuzurg-Mihr again collected tax and tribute from Dewisharm and returned in triumph to the Sasanian court.

What did this game of backgammon look like? A small silver bowl in the collection of the Arthur M. Sackler Gallery preserves what may be the earliest known representation of backgammon (fig. 4). On the exterior of the bowl are scenes of carved figures on a gilded background; the theme of the decoration is the celebration of a marriage contract. In the principal scene a seated couple holds a wreath signifying the marriage agreement. The other scenes, also framed by arches, show activities that accompany the celebration: a servant bringing a banquet, a pair of musicians, and a wrestling match. Two figures playing a board game are of special interest here because the game they play has been identified as backgammon, or *nard*. On the rectangular board are circular counters resembling the modern backgammon board with its thirty counters (fig. 5). The artisan has clearly shown the inner and outer tables of the board as well as the central space, or bar, between the two sides. The board may be made of wood, leather, or cloth; boards made of cloth have long been used in South Asia to play *chaturanga* and pachisi. The moment depicted on the Sackler bowl is the end of the game; the player on the left raises his arm in victory, while the player on the right makes a gesture of respect toward his opponent.[6] The objects at the top and bottom of the scene appear to be a helmet and another piece of armor, set aside during play.

The Sackler bowl also depicts ceremonies in the life of a Sasanian noble, whose upbringing would have included instruction in backgammon, chess, and *ashtapada*. The style of the figures and their dress suggest that the bowl dates to the late Sasanian period or early Islamic era, perhaps mid to late seventh century. Where the bowl was made is difficult to determine, but stylistic affinities of the decoration point to an eastern source, perhaps the area of eastern Iran or Afghanistan. Unique as a small-scale, yet detailed illustration of the game, the bowl is an important document for the history of backgammon and its early representation in works of art.

Backgammon seems to have become popular in Central Asia by the seventh and eighth centuries of the common era. Figures playing backgammon are depicted in wall paintings preserved in private houses at the city of Pjanjikent, in Sogdia, an area located in the present-day Soviet province of Tajikistan.[7] A game called *shuang-lu* or *liu-po*, similar to backgammon, was popular in China from the seventh to the eleventh century and was played in Japan from about the ninth through the twelfth century.[8]

The explanation of chess and invention of backgammon, as related in the Middle Persian text, became an important episode in later Islamic tradition. The story is featured prominently in the great Iranian epic *Shahnama*, or Book of Kings, which, composed in the eleventh century by the poet Firdawsi, includes Persian legends on the creation of the world and the exploits of great heroes like Rustam, a version of the life of Alexander the Great, and a partially historical account of the Sasanian dynasty. Illustrated manuscripts of the *Shahnama* frequently depict the story of the Indian embassy to the court of Khusraw (fig. 6). The account of the explanation of chess and invention of backgammon in Firdawsi's *Shahnama* retains key features of the Middle Persian version. The opposing chess forces are, for example, distinguished by material—ivory and teakwood instead of emerald and ruby.

The courtly associations of chess and backgammon in the Sasanian era may preserve a long tradition in that region of the world, predating the actual invention of the two games. Art flourished in the service of board games created for royalty as early as the third millennium B.C. in West Asia. Games made of costly imported materials were found in the Royal Cemetery at Ur, in southern Mesopotamia, among other fabulous treasures recovered from the graves of rulers of the First Dynasty of Ur (ca. 2500–2400 B.C.). Vessels, weapons, jewelry, and musical instruments, made of gold, silver, and lapis lazuli, were preserved in great quantities in the sixteen graves identified as royal burials. In addition, the royal graves yielded five gaming boards, all of the same type but with variations in decoration. The simplest example consists of small disks of shell with red or blue centers set in bitumen, which covered the wood and formed a background. More elaborate versions are completely covered with shell plaques inlaid with lapis lazuli and red limestone and divided by strips of lapis (fig. 7). In some examples most of the plaques, as well as the white gaming pieces, are decorated with animal figures (fig. 8). The boards are hollow; inside were found seven black and seven white counters and six curious dice, pyramidal in shape, with three of the four points dotted with inlay. Three white and three lapis lazuli dice made a set, perhaps three for each player.

The board games from the Royal Cemetery may have been early examples of race games, with dice and counters, similar to backgammon. In race games, pieces are entered on the board, proceed along a specified path, and then by various means are sent off the board again. Figure 9 shows a drawing of one of the boards and counters from the Royal Cemetery. The rules of the game are not preserved, but the organization of the board squares and the pattern of designs offer a clue to moves and

strategy. All of the boards from the Royal Cemetery have a colored rosette in the middle row of the larger section next to the "bridge" between the two sections of the board.

The decorations on the gaming boards from Ur are made of luxury materials, some—such as lapis lazuli—imported to southern Mesopotamia from considerable distances. These costly materials and the careful crafting of the game boards and pieces attest to the importance of the games in ancient Mesopotamian royal society. Board games made of precious materials have been recovered from other areas of ancient West Asia and also from Egypt, where the dry climate helped preserve many tomb furnishings made from organic materials. Since board games made of cheaper materials, such as clay, have also been recovered from ancient sites in West Asia, it is clear that the materials employed in the manufacture of games were of great importance to artisan as well as consumer. Games made of precious materials were also presented as gifts to royalty in these ancient cultures. Correspondence preserved from Amarna in Egypt, dating to the Eighteenth dynasty, records that among the gifts sent by Tushratta, king of Mitanni in northern Syria, to the pharaoh Amenhotep III (reigned 1417–1379 B.C.), were two games called *patti apsu*, meaning "canal of the deep," that came with "astragals inlaid with gold." Astragals, or knucklebones, were commonly used as dice in the ancient Mediterranean region and in West Asia.[9]

A long-lived association between royal exchanges and challenge games made of precious materials illuminates an important dimension of kingship and courtly society in

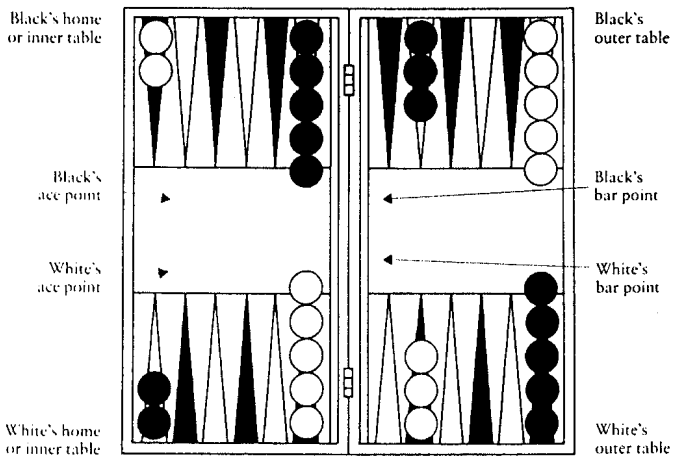

Figure 5. A modern backgammon board with pieces in position at the beginning of play.

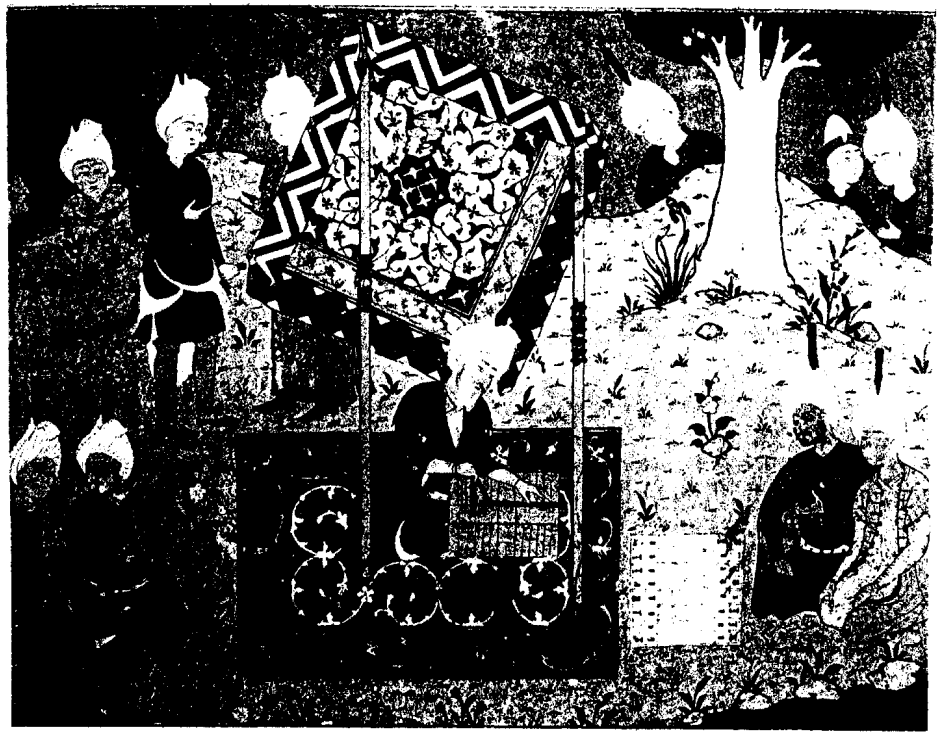

Figure 6. Buzurjmihr [Wuzurg-Mihr] inventing *nard* [backgammon] in answer to the Kaid of Hind's chess. Illustration from a *Shahnama* of Firdawsi, folio 445b. Iran, Tabriz school, Safavid period, 1536. Opaque watercolor, ink and gold on paper. 4¹⁵/₁₆ × 5¹/₄ in. British Library

ancient West Asia. In that world, knowledge was directly related to the cosmic order. Wisdom, therefore, was mystical power and consequently belonged to the most exalted echelons of religious and secular authority. The highest wisdom was to present a challenge, or riddle, that no one could answer. Competitions in esoteric knowledge, often involving a serious penalty for the loser, are common themes among the sacred and epic literatures of ancient West and South Asia. The questioning of a wise man by a king or another wise man, for example, occurs in Iranian tradition, where Zoroaster has to answer the sixty sages of Kavi Vishtaspa, king and patron of the prophet. An ancient Hindu tale tells of king Yanaka, who held a riddle-solving contest among the Brahmans, with a prize of a thousand cows. The wise man who won the prize then challenged the Brahmans to a contest of knowledge.

Another feature of *The Explanation of Chess*, the battle of wits between rulers, echoes a theme famil-

iar to the epic literature of ancient West and South Asia.[10] The explanation of chess and the invention of backgammon addressed key philosophical concerns of human behavior and its relation to the cosmic order, serving as an allegory for the role of action versus fate in the workings of the universe. Chess, an allegory for warfare, relied on strategy and human reason; backgammon, which operated by the roll of the die and hence in part by fate, paralleled the structure and processes of the cosmos.

The challenge Dewisharm sent to Khusraw involved the most sacred and powerful forms of wisdom. In the Middle Persian version of the story, the explanation of chess and invention of backgammon took place during the reign of the Sasanian king Khusraw Anushirvan, Khusraw "of the Immortal Soul." This aspect of the legend is supported by what we know about the personality and administration of this great ruler, who promoted intellectual activity on an international scale. He welcomed at his court Greek physicians and philosophers and founded a medical school instituting Greek theories. One of the most famous Iranian scholars at his court was the physician Burzoe, who may be the Wuzurg-Mihr of the chess story. Burzoe is credited with having translated into Middle Persian the collection of Sanskrit allegorical tales known as the *Panchatantra*, in Islamic times called *Kalila u Dimna*.

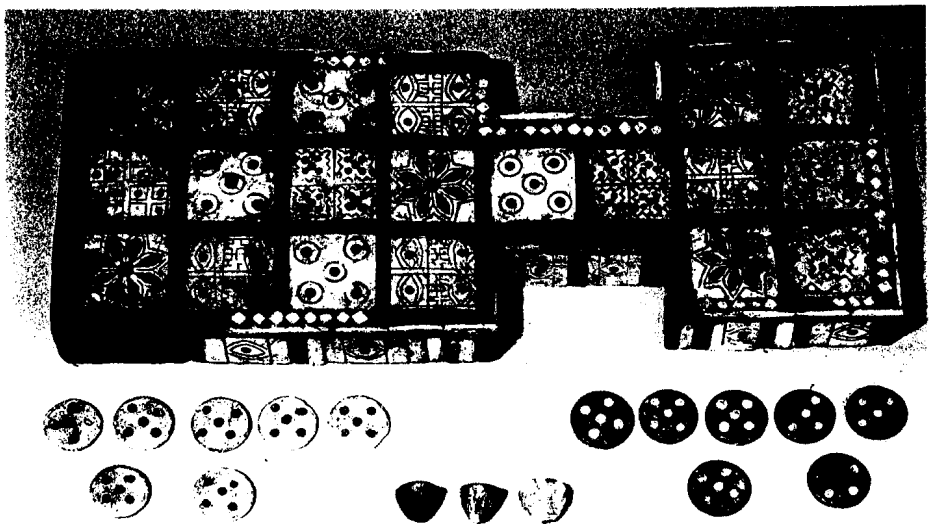

Figure 7. Game board and game pieces. Southern Iraq, Ur, Royal Cemetery, Early Dynastic IIIA, ca. 2500–2400 B.C. Shell inlaid with lapis lazuli and red limestone. Length 11⁴/₁₆ in; width 4⁷/₁₆ in. British Museum

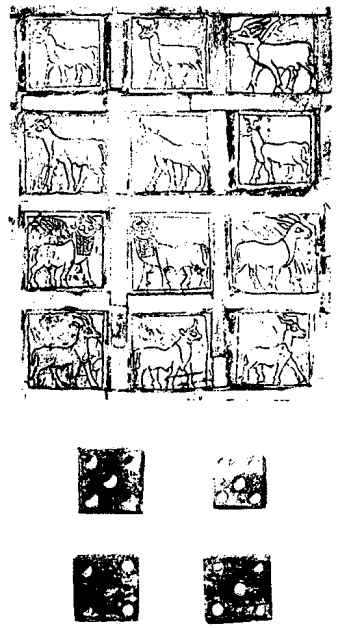

Figure 8. Part of a game board and game pieces. Southern Iraq, Ur, Royal Cemetery; Early Dynastic IIIA, ca. 2500–2400 B.C. Shell and lapis lazuli. Height 5³/₈ in; width 4³/₈ in. The University Museum, University of Pennsylvania

Khusraw actively promoted the Zoroastrian faith, a religion deeply concerned with astrology and the workings of the cosmos. Perhaps because of his strong interest in Zoroastrian beliefs, Khusraw warmly received the more sophisticated Indian developments in the astral sciences. Such a ruler and such an intellectual climate suit the Middle Persian tradition describing the invention of challenge games involving the sages of India and Iran. In later times Khusraw became the model for the wise, just ruler. Surviving from later Arabic and Persian sources are a number of collections of *andarz*, or advice, perhaps better described as "mirrors for princes," wise sayings attributed to this ruler. The name of this king, later rendered in Arabic as Kisra, became the common title for the pre-Islamic Sasanian kings.[11]

The Explanation of Chess and Invention of Backgammon explicitly connects winning and wisdom. The text concludes as follows:

> The explanation of the rationale of chess is this: What is potent derives from this, as the wise men have said: "To carry off the victory through wisdom, to know the principles of that unarmed battle." Playing chess is this: observing, striving to protect one's own pieces, greater striving after how to be able to capture the other person's pieces, not moving badly because of hope of being able to capture the other person's pieces, always keeping one piece on the attack and the others in defense, observing with complete mindfulness, and other points, as they have been written in the *Book of Manners*.

By its own account, Sasanian courtly society also understood that games of contest served civilizing functions. Dewisharm and Khusraw solved their dispute by a battle of wits, not by resorting to armed conflict. In modern times we have come to distinguish sharply between play and seriousness. The Middle Persian story of chess and backgammon allows us to glimpse another cultural definition of games, one that saw a greater continuum between play and seriousness. In Sasanian Iran, the ideals of courtly society were achieved through proper training in the hunt and in board games, among other activities. Games were not recreation or leisure but activities that embodied and

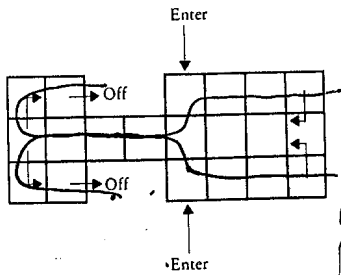

Figure 9. Drawing of board, from game found in the Royal Cemetery at Ur, Early Dynastic IIIA, ca. 2500–2400 B.C., showing probable direction of movement of the pieces on the board.

promoted important social values. As games and as works of art, chess and backgammon reflected the ideals of diplomacy, of ethical behavior, and of wisdom, in the societies that invented them. A wise man knew how to win at chess.

Notes

1. Christopher J. Brunner, "The Middle Persian Explanation of Chess and Invention of Backgammon," *Journal of the Ancient Near Eastern Society of Columbia University* 10 (1978): 49. All passages quoted here are from Brunner's translation, pp. 49–50.

2. Charles K. Wilkinson, "Chessmen and Chess," *Bulletin of the Metropolitan Museum of Art* 1 (1942–43): 274–76.

3. Prudence O. Harper, *The Royal Hunter: Art of the Sasanian Empire* (New York: Asia Society, 1978), pp. 172–73.

4. Harper refers to the text and makes this intriguing suggestion concerning the Taq-i Bustan relief and the painting at Ctesiphon. Ibid., pp. 272–73.

5. See William W. Malandra, *An Introduction to Ancient Iranian Religion* (Minneapolis: University of Minnesota Press, 1983), pp. 3–31, for a general discussion of Zoroaster and Zoroastrianism.

6. See Harper, *Royal Hunter*, pp. 74–76, for an important discussion of the bowl and its decoration.

7. Mario Bussagli, *Painting of Central Asia* (Geneva: Skira, 1963), p. 46; Tamara Talbot Rice, *Ancient Arts of Central Asia* (New York; Frederick A. Praeger, 1965), fig. 88, incorrectly labeled as chess.

8. Yang LiLien Sheng, "A Note on the So-Called TLV Mirrors and the Game Liu-po," in *Excursions in Sinology*, Harvard-Yencheng Institute Studies 24 (Cambridge, Mass.: Harvard University Press, 1969), pp. 185–89.

9. Timothy Kendall, "Games" in *Egypt's Golden Age: The Art of Living in the New Kingdom, 1558–1085 B.C.* (Boston: Museum of Fine Arts, 1982), pp. 263–65.

10. Other examples in Middle Persian literature are cited by Brunner, "The Middle Persian Explanation of Chess and Invention of Backgammon," p. 44. Games of dice play a central role in the Indian epic, the *Mahabharata*.

11. Richard N. Frye, "The Political History o Iran under the Sasanians," in *The Cambridge History of Iran*, vol. 3, pt. 1: *The Seleucid, Parthian, and Sasanian Periods*, ed. Ehsan Yarshater (Cambridge: Cambridge Universit Press, 1983), pp. 153–62.

Further Reading

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A thorough, recent study concentrating on the European history of chess but with important references on the early Asian history of the game.

Harper, Prudence O. *The Royal Hunter: Art of the Sasanian Empire*. New York: Asia Society, 1978.
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Kendall, Timothy. "Games." In *Egypt's Golden Age: The Art of Living in the New Kingdom, 1558–1085 B.C.*, pp. 263–72. Boston: Museum of Fine Arts, 1982.
A clear and lively discussion of the ancient Egyptian game *senet* and "twenty squares," a board game best known from ancient Egypt but apparently of West Asian origin.

Levy, Reuben. *The Epic of the Kings*. Chicago: University of Chicago Press, 1967.
A translation of Firdawsi's *Shahnama*, with its story of chess and backgammon.

Titley, Norah M. *Sports and Pastimes: Scenes from Turkish, Persian and Mughal Paintings*. London: British Library, 1979.
Includes a brief discussion and illustration of chess and backgammon.

Wilkinson, Charles K. "Chess and Chessmen." *Bulletin of the Metropolitan Museum of Art* 1 (1942–43): 271–79.
A discussion of the ivory chess pieces from Nishapur and other examples of medieval chess sets.