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Autor: Syed, Renate
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EARLY TERRACOTTAS FROM KANAUJ: CHESSMEN?

Renate Syed

Introductory remarks

An Old Indic and a Persian source connect the Indian city of Kanauj / Kānyakubja with the game of chess, *caturaṅga*. These sources, Bāṇa's Harṣacarita from the early seventh century and Firdausī's Shāhnāme from the late tenth century, refer to the Kanauj of the early seventh and sixth century AD, as will be shown. In Kanauj as well as in the surrounding cities, numerous terracotta figures of armed warriors, horses, elephants and chariots were found, which archaeologists date to the time from the fifth century AD onwards. Regarding their representation and their size, which is between five and fifteen cm, they could be chess figures.¹ In this paper, I would like to demonstrate the connection of the city of Kanauj with the game of chess and for another, I will present the said terracottas, the meaning and function of which are unclear, and discuss their possible use as chessmen.

1. Kanauj and the *caturaṅga*

1.1. The city of Kanauj

The city of Kanauj or Kānyakubja² experienced its rise after the first quarter of the sixth century as the residential city of the Maukhari

- 1 As is well-known, besides the king and minister (our “queen”) of each of the two colours, an army in Ancient Indian chess consisted of two elephants, two horses and two chariots as well as eight foot soldiers (Syed 1995).
- 2 In the Mahābhārata the city is called Kanyakubja, Kānyakubja and Kanyākubja (3.115.9 and 17). In the Buddhist literature the city appears as Kaṇṇakujja (Law

dynasty. Majumdar summarizes the events of the sixth century briefly in the following way: "The Hūnas [the Huns, R.S.] disappeared as they came. The Gupta Empire, grown very weak, was dissolved, the virile Maukharis emerged victorious. But with their rise began a new phase in Indian history. Kanauj emerged as the symbol of a new order." (1954:xvi) In his work *History of Kanauj*, Tripathi writes that the city was founded long before the beginning of the Christian era, but did not reach its real zenith until the middle of the sixth century AD, when the Maukharis made it their capital (1959:preface). It was most probably the Maukhari king Īśānavarman who conquered Kanauj (Chattopadhyaya 1958:223). According to the Indian historian Devahuti, however, it was Īśānavarman's son Śarvavarman who made Kanauj the capital of the Maukharis (1970:27).

During the first half of the seventh century, king Harṣavardhana from the Puṣyabhūti dynasty reigned in Kanauj; after that the city belonged to the empire of the Gurjara-Pratihāras, and in the year 1018 it was destroyed by Maḥmūd of Ghaznī. Situated in the northern Indian plain on the Ganges, Kanauj was an important trading centre and place for merchandising goods from the whole of India. The position of the city concerning trade and traffic as well as military expansion and administration was excellent: "The importance of Kanauj in ancient times was probably due to its strategic advantages. The city stood on a cliff on the right bank of the Ganges, which was then a highway of commerce and communication, and it must have, therefore, been a convenient centre for traffic in the upper Doab [the land of two streams, the Gangā and the Yamunā, R.S.]." (Tripathi 1959:1, fn. 1, emphasis mine.) And as the indologist and historian Moti Chandra states, the highway on which Kanauj was situated was used for constant warfare, commerce and cultural exchange (1977:25).

The Chinese pilgrim Hsuan Tsang, who travelled India in the first half of the seventh century, describes the splendour of the city in detail and remarks: "Valuable merchandise is collected here in great quantities. The people are well off and contented, the houses are rich and well found." (Beal 1884,1:206) An Arabic work from the ninth

1954:93), in Prakrit its name is Kaṇṇaujja, thus in Rājaśekhara's Karpūramañjarī 3.5.

century reports that precious fabrics, muslin, turbans and herbs came from Kanauj (Chandra 1977:203).

1.2. The Maukharis, Harṣa and the caturaṅga

The Maukharis, formerly vassals of the Guptas,³ became stronger at the beginning of the sixth century, when the Gupta empire disintegrated; their rise took place “when confusion ran high in the field of North Indian politics due to the inroads of the Epthalites or the White Huns.” (Chattopadhyaya 1958:217) About the middle of the sixth century the dynasty of the Imperial Guptas totally collapsed and left the Maukharis in possession of great parts of modern Bihar and Uttar Pradesh. Their rivals were initially the Late Guptas, against whom the Maukharis, however, were able to succeed.⁴ The Maukharis played a decisive part in driving the Huns out of India (Pires 1934:91 and Tripathi 1959:46).

The exact dating of the Maukhari kings is uncertain, as it is based on controversial readings of the numbers on the Maukhari coins: the inscriptions merely tell us the order of the rulers.⁵ According to this, the

- 3 “The Maukharis were a very ancient tribe whose branches were spread over different parts of the country.” (Devahuti 1970:24) The dynasty can be traced back to the third century AD in inscriptions, Altekar 1940:42. See also Majumdar 1954:67: “Maukhari is the name of a very ancient family or clan. The name was probably known to Pāṇini.” Pāṇini was the famous grammarian living in the 5th century BC.
- 4 From the undated Apsad inscription we learn that Ādityasena from the family of the Guptas of Magadha had waged war against the Maukhari king Īśānavarman, and Ādityasena’s son Dāmodaragupta had also fought the Maukharis; Fleet 1888:200-208, Apsad Stone Inscription of Ādityasena, esp. lines 5-9.
- 5 The Harāhā inscription of King Īśānavarman, dated to the year 554 AD, is particularly important for the genealogy of the Maukharis, see Sastri 1917/1918:110-120. The names of the Maukhari kings and their wives appear in the Asirgadh Copper Seal Inscription of Śārvavarman, see Fleet 1888:219-221. The Deo-Baraṇār inscription demonstrates that Avantivarman was the successor to Śārvavarman, see Fleet 1888:213-218.

first historically identifiable Maukhari ruler was Mahārāja Harivarman; his rise may be assigned to the end of the fifth or the beginning of the sixth century (Devahuti 1970:15). He was followed by his son Mahārāja Ādityavarman, then followed Mahārāja Īśvaravarman, then his son Īśānavarman, who was the first of the dynasty to bear the title of Mahārājādhirāja.⁶ After Īśānavarman came his son Śārvavarman, who also bore the title of Mahārājādhirāja and during whose reign the empire acquired its greatest extension; Śārvavarman was followed by his son Avantivarman, an insignificant ruler. After Avantivarman, his son Grahavarman ascended the throne of Kanauj, and with his death in 605 or 606 the dynasty of the Maukharis of Kanauj came to an end (Devahuti 1970:24-32). Only those Maukhari-kings who ruled in Kanauj bore the title of *mahārājādhirāja*, i.e. Īśānavarman, Śārvavarman and Avantivarman, and issued coins.

Inscriptions, coins and deeds of gift prove that Śārvavarman was the most important ruler of the Maukhari dynasty. Pires writes about him: "[...] Śārvavarman was a paramount sovereign, to whom homage was due from all kings of Northern India. [...] [His] suzerainty was acknowledged throughout practically the whole of Northern India. [...] We may further assume that Śārvavarman's dominions extended westwards as far as the easternmost tributaries of the Indus, including perhaps even that country of Sthāṇvīśvara (Thānesar)." (1934:90 and 92) The historian Bajpai is certain that the Maukharis extended their dominion, most probably during the reign of Śārvavarman, in the South to Andhra and in the Northwest to the Punjab, and this in order to consolidate their rule over what is now Uttar Pradesh and large areas of the surrounding states (1988:513). Devahuti notes: "Śārvavarman, who definitely extended the Maukhari dominion, perhaps in three directions, must have enjoyed a long reign. His several coins, his Asirgarh seal, and references to him in the records of other kings all point to an eventful and long career. Twenty to twenty-five years therefore appear to be the reasonable duration of his reign." (1970:30)

6 Sastri 1917/198:111-112, Smith 1924:155 and Devahuti 1970:25. On the title Fleet writes: "[...] lit. 'supreme king of Mahārājas' [...] is one of the titles indicative of a supreme paramount sovereignty, and is the only expression that properly and fully answers to our idea of a 'king'." (1888:10, fn. 3)

With this, Devahuti rejects the old datings by Burn and Majumdar, who accorded to Śarvavarman only a short duration of rule, while assigning a longer one to Īśānavarman.⁷ The dating by Burn had already been doubted by Sastri in the years 1917/18 in his treatment of the Harāhā inscription; according to his calculation, Śarvavarman ruled from 560 until 580, Avantivarman from 580 until 600 (1917/1918:113). According to Devahuti's dating, Īśānavarman reigned until 560 or 565, Śarvavarman from 560 or 565 until 585, his son Avantivarman from 585 until 600 and the latter's son Grahavarman from 600 until 605/606 (1970:30). Anyhow, in the second half of the sixth century the Maukharis dominated large parts of Northern India and with the establishment of Maukhari hegemony Kānyakubja replaced the city Pāṭaliputra as the imperial capital, and the ancient Kuru-Pañcāla region again became the primary political core of Northern India; the Maukharis emerged as the paramount power on the Gangetic plain. (Schwartzberg 1978:181)

The last Maukhari ruler in Kanauj was Grahavarman, Śarvavarman's grandson. In the year 603 or 604 he married Harṣavardhanas young sister, Rājyaśrī. In his biography of King Harṣavardhana (the "Harṣacarita", "Life of Harṣa"), written around 630 and 640, the poet Bāṇa, living at the court in Kanauj, describes this event in great detail and praises the Maukhari dynasty with the following words: "At the head of the royal families (of India) there is

7 According to Burn, who founds his opinion on his reading of the coins of Īśānavarman, Śarvavarman and Avantivarman, Īśānavarman reigned in the year 553, Śarvavarman in the years 553, 554 or 555 and 557, and Avantivarman in the years 556, 569 and 570; Burn 1906:849. According to Pires' reading, 579 was the last year of Śarvavarman's reign, 1934:163-164. Majumdar (1954:70) and Pires (1934:164) assume that Īśānavarman reigned from 550 until 576, Śarvavarman only from 576 until 579/80. But Majumdar himself is unsure: "Unfortunately, the numerical figures are very uncertain, and widely divergent readings have been proposed by different scholars. So it is impossible to form any definite conclusion from them [...]" (ibid.) The date-marks on the coins of Śarvavarman have totally disappeared and as such it is impossible to say at what particular dates these coins were issued. On Majumdar and criticism of his proposed dating see Devahuti 1970:29.

the family of the Maukharis, which is revered by all the world like the footprint of Maheśvara (the god Śiva). The firstborn son of (king) Avantivarman, the ornament of this race, named Grahavarman, who resembles the lord of the planet (the moon) descended down to earth and who is in no way inferior to his father with respect to virtues, demands her (our daughter Rājyaśrī for his wife).” (Harṣacarita 2, p. 35.) The marriage was meant to consolidate the alliance between the imperial and vassal families, the Maukharis and the Puṣyabhūti, a minor dynasty ruling a part of Punjab with Sthāṇvīśvara as their capital.

Grahavarman was killed in 605 or 606 by Devagupta, the King of Mālava; due to the short period of his reign, no inscriptions or coins of this last ruler of the Maukharis exist. Kanauj was in the hands of Devagupta for a short while, then Harṣa conquered Kanauj, the capital city of his murdered brother-in-law and freed his widowed sister Rājyaśrī, who at that time was only 12 or 13 years old and wanted to ascend the funeral pyre of her deceased husband. In Kanauj, which he made his new capital instead of Sthāṇvīśvara – Grahavarman had left no heir – Harṣa reigned until his death in the year 647.⁸ There are two valuable contemporary sources on the rule of Harṣa in Kanauj, on the one hand, Bāṇa’s mentioned biography of King Harṣa, on the other, the report by the Chinese pilgrim Hsuan Tsang, who lived in India between 629 and 644 (Beal 1884). The poet Bāṇa became acquainted with King Harṣa at the beginning of his (Harṣa’s) fifth decade, that is shortly after 630.⁹ By this time, Harṣa had already waged most of his numerous wars of conquest, and his empire was experiencing a period of peace, in which, as Bāṇa states, the drawing-up (*kalpanā*) of the armies (*caturaṅga*) (now only) took place on the gameboards with 64 squares (*aṣṭāpada*): *aṣṭāpadānāṃ caturaṅgakalpanā* (Harṣacarita 2, p.35). As is well-known, this is the oldest preserved mention of the game *caturaṅga* on the *aṣṭāpada*, and it proves that around 630/640, chess was played at the court in Kanauj.

8 See on this Harṣacarita 7, p. 67 as well as Pires 1934:116-125, 129-130 and Devahuti 1970:72.

9 Harṣacarita 2, p. 30: *pañcamīpraveśa*. Harṣa, born in 590, ascended the throne of Kanauj around 610, after the death of his brother Rājyavardhana and after some wars, when he was not even twenty.

1.3. The “Rāy of Qanūj”, “Devaśarm”, Khusrau Anushirvān and the catrang

According to the epic *Shāhnāme*, composed by the Persian poet Firdausī at the end of the tenth century, it was the “Rāy of Qanūj”¹⁰ in India who sent king Khusrau Anushirvān (he reigned from 531 until 579 in Ktesiphon) a game of chess: “The king of the world learned from his watchful observers that the envoy of the King of India had arrived, accompanied by elephants, shades and knights from Sindh (Indus). [...]”¹¹ The numerous and precious gifts, including jewels, shades, gold and silver, musk, ambra and fresh incense, rubies and silk fabrics, were, according to the *Shāhnāme*, “all products from Qonnuj and the empire of the Ray” (Abka’i-Khavari 1998:38). The Indian envoy presented the Sassanian king with the game of chess, saying: “Give orders that those who strive hardest regarding the sciences be confronted with this chessboard, they shall confer with one another and explain the intricate game, they shall guess the name of each figure and after that its house, they shall recognize the infantry, the elephants, the army, the rok [the chariot, R.S.], the horse and the gait (mode of movement) of the farzin [the minister, R.S.] and the king.” (ibid.) The *caturaṅga* thus reached Persia as a game, it had a gameboard and a set number of figures, which moved and struck according to certain rules.¹²

There can be no doubt that “Rāy of Qanūj” means the *rāja*, king, of Kanauj.¹³ However, this king is not further identifiable from the

10 According to Wolff, *rāy* means “Raja, king” (1935:427), Qanūj is a “geographical name, city in India” (1935:622). Wolff remarks that the city also appears as Qānūj in the *Shāhnāme*.

11 *Shāhnāme* VIII, 2628ff., Moscow edition. The German translation is by Abka’i-Khavari 1998:38, translated into English by R.S.

12 The figures, their arrangement, their progress and their modes of fighting and striking are modelled on the Ancient Indian army, which was also called *caturaṅga*, and on the theory of war. I have treated this matter in detail in a study of Ancient Indian war-theoretical literature, Syed 1995.

13 In his paper of 1898, MacDonell had already identified “Qanūj” (transcribed by him as “Kanūj”) as Kanauj (1898:129); however, he did not pursue this line of

Shāhnāme. Regardless of the answer to the question of the identity of this king and the historicity of the statements of the Shāhnāme, which, of course, can be doubted, the following points can be regarded as certain:

1. The Indian game *caturaṅga* came from India to Persia, where it was called *catrang*. It is linguistically proven that the Sanskrit word *caturaṅga*, “composed of four parts,” “army,” is the basis of Middle Persian word *catrang*: “The name of the game of chess indicates that it came to Iran from India in pre-Islamic times. It cannot have taken the opposite way from Iran to India.” (Sundermann 1999:59)¹⁴ All Old Persian sources assume the Indian origin of the *caturaṅga* (Syed 1995:67; Abka’i-Khavari 1998:31).

thought any more than Murray, who wrote: “Under the Persian name Kanūj, the town is associated by Firdawsī in the *Shāhnāma* with the introduction of chess into Persia under Khusraw I Nuschirvan, 531-79 A.D.” (1913:52, fn. 3).

- 14 This was already seen by Sir William Jones almost 200 years ago: “[Chess] seems to have been immemorially known in *Hindustan* by the name of *Chaturanga*, that is, the four *angas*, or *members* of an army [...]. By a natural corruption of the pure *Sanskrit* word it was changed by the old *Persians* into *Chatrang*; but the *Arabs* who soon took possession of their country, had neither the initial nor the final letter of that word in their alphabet, and consequently altered it further into *Shatranj* [...].” (1807:159; original emphasis.)

The Iranist Sundermann states that the Arabic word for chess, *šatranj*, which undoubtedly forms the basis for Spanish *ajedrez* and Portuguese *xadrez*, is a loanword from Persian, as it cannot be derived from three radicals (consonantal stem sounds), as would be the case with an Arabic word proper. Sundermann continues: “But Middle Persian *catrang*, i.e. the word used in Iran until the 7th/8th centuries AD, is a loanword in Middle Persian as well. It cannot be a native word, as Middle Persian does not have the consonant cluster *tr* [...]. If *catrang* is a loanword, the most obvious solution seems to be to derive it from Old Indic *caturaṅga* documented in Sanskrit [...]. The initial *aṅga*- “member” is an Indic word without any equivalent in the Iranian languages.” (1999:59)

2. The terminus ante quem: The *caturaṅga* must have reached Persia before the conquest of the Sassanian Empire by the Arabs, i.e. before 650, for the names show that the Arabs took over the game from the Persians.¹⁵ The mention of *catrang* in the *Wizārīšn ī Čatrang* in the early seventh century further proves the existence of chess in Persia before the advent of the Arabs. All Arabic sources assume the Indian origin of chess (Wieber 1972:92-99).
3. The terminus post quem: The *caturaṅga* cannot have reached Persia before the early sixth century, as its invention in India can hardly be dated before 450;¹⁶ also, the earliest Persian mentions all date from the time after 600.¹⁷

The possible period during which chess came to Persia extends from the middle of the sixth century (at the earliest) and 630 (at the latest). If one doubts the truthfulness of the statements made in the *Wizārīšn ī Čatrang* and in the *Shāhnāme*, then the sending of the game of chess by an Indian king to a Persian ruler can also be questioned; thus, Panaino calls the *Dēwišarm* mentioned in the *Wizārīšn ī Čatrang* “fictitious” (1999:245). Of course, the *caturaṅga* could have reached Persia with traders, soldiers or scholars. Regardless of whether the statements in the *Shāhnāme* are to be treated as historical facts or not, *caturaṅga* came to Persia at the time when Kanauj was the capital of the Maukharis and

- 15 MacDonell writes: “Had the chess come into Persia from India after that date [652 AD, R.S.], it is likely the Arabs would have obtained a first-hand knowledge of the game.” (1898:10) In the battles of 636 and 642 the Arabs caused the worst defeats to the Sassanians; around 651/652 the Sassanian Yazdegird was murdered (Schippmann 1990:146).
- 16 The complete silence of the voluminous Indian literature on a game named *caturaṅga* prior to Bāṇa’s *Harṣacarita* suggests that such a game did not exist before the fifth or even the sixth century. Of course, the silence is not a *proof* for the non-existence of *caturaṅga* in this time!
- 17 The Pahlavi work *Karnamak-e Ardaschir*, according to which the Parthian king Ardaschir (224-240) learned to play chess was written around 600 at the earliest, Nöldeke, Göttingen 1879: 39. Also, the *Wizārīšn ī Čatrang* is from late Sassanian times, Abka’i-Khavari 1998: 29 and Panaino 1999: 245.

the political, economic and cultural centre of Northern India. If one believes the *Wizārīšn ī Čatrang* and *Firdausī*, chess came to Persia under Khusrau Anushirvān, and this coincides largely, as elaborated above under point 3, with the probable period in which *caturaṅga* must have reached Persia in any case.

During the politically significant period of Khusrau's rule (531-579), the most important Northern Indian kings of that century on the throne in Kanauj were the Maukhari Īśānavarman from app. 554 until 560 or 565 and his son Śārvavarman from 560 or 565 to 585. Īśānavarman's and Khusrau's reigns thus overlapped for six or eleven years, Śārvavarman and Khusrau shared at least 15 years of rule (565 until 579). It must be taken into consideration that Khusrau came to the throne at a very young age and had to fight against rebellions and revolts for many years; it took several years for the kingdom to be at peace and Khusrau to be established. He did not gain full power until the middle of the century. By 570, both kings, Khusrau Anushirvān in Ktesiphon and Śārvavarman in Kanauj, had reached the zenith of power, and had beaten their respective internal and external rivals.

In the *Wizārīšn ī Čatrang* the Indian king is called "the great lord, king of India" (Panaino 1999: 249), in the *Shāhnāme* he is the "King of India" (VIII, 2632, Abka'i-Khavari 1998:39). This points to the Maukharis Īśānavarman and Śārvavarman, who called themselves *mahārājādhirāja*. A further designation of the "Rāy of Qanūj" in the *Shāhnāme* could also point to the Maukharis. The Indian delegate, obviously an intellectual Brahmin, is addressed with the words: "You priest of the Rāy, whose origin is from the sun...[...]", (VIII; 2686, Abka'i-Khavari 1998:39). (According to Abka'i-Khavari, the title *khvarshid cehr*, "descended from the sun", is, however, also borne by the Sassanian kings in the *Shāhnāme*.¹⁸) But it is important to bear in mind that the Maukharis also trace their origin from the sun god in their

18 According to Bartholomae, Old Iranian *cithra*, which is the basis of Modern Persian *cahr*, means, among other things, "face" and "origin, descent". (1904:586-587; German original: "Gesicht, Antlitz" and "Ursprung, Herkunft, Abstammung".)

inscriptions, “the Maukharis thus were *sūrya-vamśīs*” (Devahuti 1970:241).¹⁹

A Middle Persian text from the early seventh century entitled *Wizārīšn ī Čatrang* (“Explanation of chess”) or *Matikān-e Šatranj* (“Treatise on chess”) calls the Indian king who sent the game of chess to the Sassanian Khusrau Anushirvān “Devasarm”, “Devaśaram” or “Dēwiśarm” (depending on the mode of transcription); however, it is not mentioned in this text that the king reigned in Kanauj. In his English summary Panaino translates: “Thus they say that, in the reign of Xusraw of the Immortal Soul, Dēwiśarm, the great lord, king of India, sent one set of catrang (and) sixteen pieces made of emerald and sixteen made of red ruby, to test the intelligence and wisdom of the lords [...] of Erānšahr [...]” (1999:249)

In the *Wizārīšn ī Čatrang* the Indian king is called “Dēwiśarm” (Panaino 1999:93 and 249),²⁰ which is clearly based on Sanskrit “Devaśarman”. But an Indian king as a member of the warrior caste cannot have borne a name ending in *-śarman*, as this is exclusively a designation for Brahmins, in ancient as well as in contemporary India. The onomastic element *-varman* of the Maukharis shows these to be members of the warrior caste. On his coins and in the inscriptions Śarvavarman is called *Śarvvavarmma deva* as well as *deva Śarvvavarmma*,²¹ as Indian kings always bore the title *deva*, “god, lord”. Could “Dēwiśarm” etc. be a modification (contraction) of the designation *deva Śarvavarman*?

19 See the Harāhā inscription of Īśānavarman, where the Maukharis or Maukharas are called the descendants of the hundred sons whom Aśvapati obtained from Vaivasvata, or the seventh Manu, who is supposed to be born of the Sun (Sastri 1917/1918:111). In his *Harṣacarita* Bāṇa also says that the Maukharis are a solar race; according to 4, p. 16 the marriage of Rājyaśrī, who was descended from the lunar race of the Puṣpabhūti (=Puṣyabhūti), with Grahavarman, a descendant of the Mukharas [sic, R.S.], constituted the union of the moon with sun.

20 According to Panaino: “[...] in grafia pahlavi [...] d y p ? l .” (1999:93)

21 Barah Copper-plate of Bhojadeva, Sastri 1927-28:15-19 as on his coins, see Burn 1906:844.

Interestingly enough, Arabic historians, e.g. Jaq'ūbī (880 AD) and Ibn Challikān (1211-1282), named the Indian king who sent the game of chess to Khusrau Anushirvān, "Shah(a)ram" and "Shah(a)ran" (Nöldeke 1892:23 and Roshanzamir 2001:182).²² Nöldeke wrote: „For the name of the king, Shaharān or Shaharām, looks so similar to the Pahlewi form of the name of the king in our book [the *Wizārīšn ī Čatrang*, R.S.] i.e. Devasaram, that I am inclined to regard them as identical." (ibid.) Nöldeke believed, that the Arabic names could have arisen from a false reading of a maybe slightly deformed Pahlewi group; it is also possible that the Arabs used a Middle Persian source lost to us in which the Indian name was written slightly differently than Devasaram etc.

If the Indian king is once called Dēvaśarm etc. by the Persians, then Shah(a)ram and Shah(a)ran by the Arabs, Śārvavarman (pronounce: Sharvavarman) seems to be the Indian king referred to.

An exchange of delegations between the Maukharis and the Sassanians around 570 seems highly probable, as the dominions of the Maukharis extended to the Indus under Śārvavarman.²³ In the *Shāhnāme* it is mentioned that the delegation from the Rāy of Qanūj was accompanied by riders from the region of the Indus ("accompanied by [...] riders from Sindh", VIII 2632, Abka'i-Khavari 1998:38), and this indicates that the Rāy of Qanūj ruled over the area mentioned. The Indian historian Aravamuthan assumes that Śārvavarman had been able to extend his dominions up to the Indus and beyond in the course of his

22 According to Ibn Challikān, an Indian sage called Sissa, son of Daher, invented the game of chess for the king of India, Shahram (Roshanzamir 2001:182).

23 The inscription on the Nirmand copper plate of the Mahāsāmanta and Mahārāja Samudrasena mentions that Śārvavarman made a donation of land at the river Sutlej, Fleet 1888:286-291. Devahuti writes: "[...] the extension, even if briefly, of Maukhari influence in the Punjab and the identification of the Śārvavarman of the Nirmand inscription with the Maukhari king of that name appear feasible. In fact no other power but the Maukharis, and among them Śārvavarman, appears to fit in with the circumstances." (1970:28). The opinion that the dominion of the Maukharis extended to the Indus under Śārvavarman is also shared by Pires 1934:90 and 92 as well as Majumdar 1954:69-70.

wars with the Hūnas (1925:93), an opinion also held by Majumdar (1954:69). The empire of the Maukharis nearly bordered on the easternmost parts of the Sassanian provinces after the Huns had been driven out of India as well as out of the Sassanian empire;²⁴ their expulsion had relaxed the political situation in Northern India considerably and opened the roads between India and Persia.²⁵ Not only Firdausī, but also the historian Ṭabarī (839-923), who came from Persia and wrote in Arabic, reports that Khusrau Anushirvān and Khusrau II (590 until 628) received Indian delegations (Nöldeke, 1879:371 and Devahuti 1970:146).

In his *Shāhnāme* Firdausī says that the Indian collection of folk tales *Kalīla wa Dimna* came to Persia under Khusrau Anushirvān;²⁶ the Arabic historian Mas‘ūdī confirmed this.²⁷ The historicity of this event is not doubted by scholars; thus the Iranist Wiesehöfer writes: “Xusro’s look to the East is indicated by the translation, authorised by him, of a

- 24 About 557 Khusrau Anushirvān allied with the Turks and together they destroyed the Huns and divided their territory. It would seem that Khusrau obtained their lands south of the Oxus river. But how far the Sassanian empire extended after the Persian campaigns against the Huns during the reign of Khusrau Anushirvān is uncertain; according to Frye it would appear that Kabul and areas to the east were not under Sassanian rule, although “periods of control cannot be excluded.” (1983:156)
- 25 See Schwartzberg 1978:25, Plates a and b. According to this, the Sassanian territory around 500 stretched right into what is today Pakistan, the Gupta empire extended up to the Indus, and the area of Northern Pakistan and Northern Afghanistan was under the rule of the Huns.
- 26 Nöldeke 1892:22 and MacDonell 1898:126 and 130, *Shānāme*-edition of Mohl, VI, 356-365.
- 27 According to the Arabic Historian Mas‘ūdī (2,203), who wrote in the first half of the tenth century, King Khusrau Anushirvān received the game of chess, the collection of fairy tales *Kalīla wa Dimna* (called *Pañcatantra* in India) and some black hair dye from the Indians. See on this Nöldeke 1892:22. “Though Mas‘ūdī’s account of the early history of India is quite mythical, his assertion that *shatranj*, or chess, was an Indian invention, and was sent to King Kisrā (= Chosrau) at the same time as the book *Kalīla wa Dimna*, undoubtedly rests on a historical foundation.” (MacDonell 1898:126)

version of the Indian work of fables *Pancatantra*, [...] brought back from India by the doctor Burzoy.” (1993:291)²⁸ According to the Indologist Winternitz, it was the Northwest Indian version of the collection of tales, which was translated into Pahlavi together with other Indian texts by order of Khusrau (1920:299). Iranian interest in Indian thought and sciences in Sassanian times is evident from the numerous translations into Middle Persian of Indian works on mathematics, astronomy, and medicine, as well as works of imaginative and didactic literature such as the *Pañcatantra*.²⁹ Thus, the same route from Northern India to Persia that the tale collection took, was most probably also taken by the *caturaṅga* at the same time.

What is noteworthy about the *caturaṅga* and its connection with Kanauj is the fact that Śarvavarman was the grandfather of Grahavarman, Harṣa’s brother-in-law. At Harṣa’s court in Kanauj chess was played, and Harṣa had come to the throne of Kanauj as the heir of the Maukharis. Had he also taken over the war game *caturaṅga* from the Maukharis? The political and dynastic relations between the Maukharis and the Puṣyabhūtiś existed, as it seems, for generations; according to the Indian literary historian Dhruva, Avantivarman Maukhari and Harṣa’s father Prabhākaravardhana had been cousins and, having a common enemy in the Hūṇas, led several joint campaigns against them (1930:xi pp.).³⁰ Therefore, the exchange of artefacts and

28 Wiesehöfer points out Khusrau’s occupation with philosophy, theology and statesmanship as well as with “foreign contributions to law and medicine”; in his “Book of deeds” Khusrau acknowledged his interest in Byzantine and Indian law, same source (1993:291).

29 “His [Khusrau Anushirvān’s, R.S.] time saw [...] the translation of many Indian works into Pahlavi. After the Muslim conquest of Iran, some of these, including [...] tales from the *Pancatantra*, were translated into Arabic. [...] Much of the *Thousand and One Nights* is Indian legend in Iranian garb.” (Russell 1988: 388)

30 Devahuti supposes, that Śarvavarman fought side by side with Harṣa’s grandfather Ādityavardhana (ruling c. 555 until 580) against the Huns: “The Vardhanas were not very strong at this stage, and Āditya-varḍhana could not have chastised the Hūṇas with his limited resources. [...] Āditya-varḍhana, a

cultural goods also must have taken place between the Maukharis and the Puṣyabhūtiś during the 6th century. If *caturaṅga* was played around 630/640 in Kanauj, it was doubtless also known some decades before in Kanauj, when Īśānavarman and Śarvavarman ruled here. There are only about 50 years between Śarvavarman's year of death, 585, and Bāṇa's mention of *caturaṅga*, and only around 25 years between 585 and Harṣa's ascension to the throne in Kanauj approx. 610.

We can assume that the game *caturaṅga* was invented around 450 AD (or even earlier) in Northern India³¹ and quickly spread also to Kanauj, when this had become the most important city in the North in the middle of the sixth century. The invention and the spread of a war game imitating battle, the progress of which does not depend on luck in throwing the dice, but purely on the achievement of the mind, on strategic and tactical considerations, is not surprising at this particular time and in this geographical area, for: "The late fifth and the sixth centuries were an age of mutually repellent and warring states engaged in petty internecine jealousies, and hence statesmanship and military skill of a high order were called forth to hold the empires together." (Tripathi 1959:130)

lesser king, may have willingly allowed Śarva-varman to pass through his territory to repel the Hūṇas [...]. He may even have assisted Śarva-varman in the task." (Devahuti 1970:28) And: Ādityavardhana's sister was most probably married to Susthitavarman, a Maukhari prince (same source and Dhruva).

- 31 My hypothesis is that the game *caturaṅga*, invented in the first centuries of the first millennium AD in Northern India, developed from a didactic model of the same name which was a kind of "sandpit game" of the war theoreticians; I assume that this older *caturaṅga* was "played" without a game-board and with a variable number of figures, which represented the different elements of the army, in order to imitate the setting-up of armies and the course of battle. I believe that this *caturaṅga*, not documented in any texts, was used for training purposes in strategy and tactics (Syed 1995 and 1998).

2. Terracottas from Kanauj and other cities of Northern India

2.1. The finds

In central Northern India, in Kanauj, Ahicchatra, Pāṭaliputra, and numerous other cities a great number of terracottas have been excavated, among them figures of standing armed warriors as well as elephants, horses and chariots.³² However, there is no group of figures belonging together which could be interpreted as a chess set.³³ Also, I do not know of any specimens that could unequivocally be identified as “king” or “minister”.³⁴ I will present some of these terracottas, the representations and descriptions of which I have taken from the publications on these finds, in order to discuss the possibility of interpreting them as figures of warriors, elephants, horses and chariots used in the *caturāṅga*. Nigam’s dating of some of the pieces as “Post-Gupta” points to the sixth century and thus to the epoch of the Maukharis, but it must be taken into consideration that the dating of the terracottas is extremely difficult and in no case certain.

32 Among the terracottas, there are many different animals: bulls, dogs, monkeys, lions, tigers, camels, see Altekar 1959:119 and Prakash 1985:38.

33 As none of the excavators and art historians thought of chess figures in connection with the terracottas, it may be that a possibly existent, but perhaps incomplete set was not recognized as such.

34 Conclusive statements cannot be made before all terracottas in the museums of the places mentioned have been sorted; most pieces are, however, in hardly accessible “go-downs”.



Fig. 1: Warrior, Kanauj (Nigam 1981:216 and pl. VI). "Post-Gupta Terracotta" (Nigam). Here as in the other cases, the precise site within the city of Kanauj is not mentioned. "A terracotta figure in dull grey, prepared from a single shallow mould [...], presents a male warrior standing. The lower portion of the feet can be known from several similar incomplete figurines in the collection. [...] He holds a sword in the right hand while the left is akimbo." The scale provided by Nigam below the illustration shows that the figure, if legs and feet are added, must have been about 12 to 15 cm high.



Fig. 2: Warrior, Kanauj (Nigam 1981:216 and pl. VII). "Post-Gupta Terracotta" (Nigam). "A fragmentary terracotta figure, dull red, pressed against a single shallow mould. [...] It is the bust of a warrior. [...] The masculinity of the warrior who holds a Khetaka [*khetaka*, "shield", R.S.] in his right hand has been expressed by the broad chest." Judging from the upper scale the complete figure must have been between 12 and 15 cm high.



Fig. 3: Warrior, Kanauj (Nigam 1981:216 and pl. VIII). "Post-Gupta Terracotta" (Nigam). "A dull red, fragmentary terracotta figure of a warrior [...]. The figure is in round. The moulded head has been luted to the hand modelled body." Its height must have been according to the upper scale approx. 15 cm.

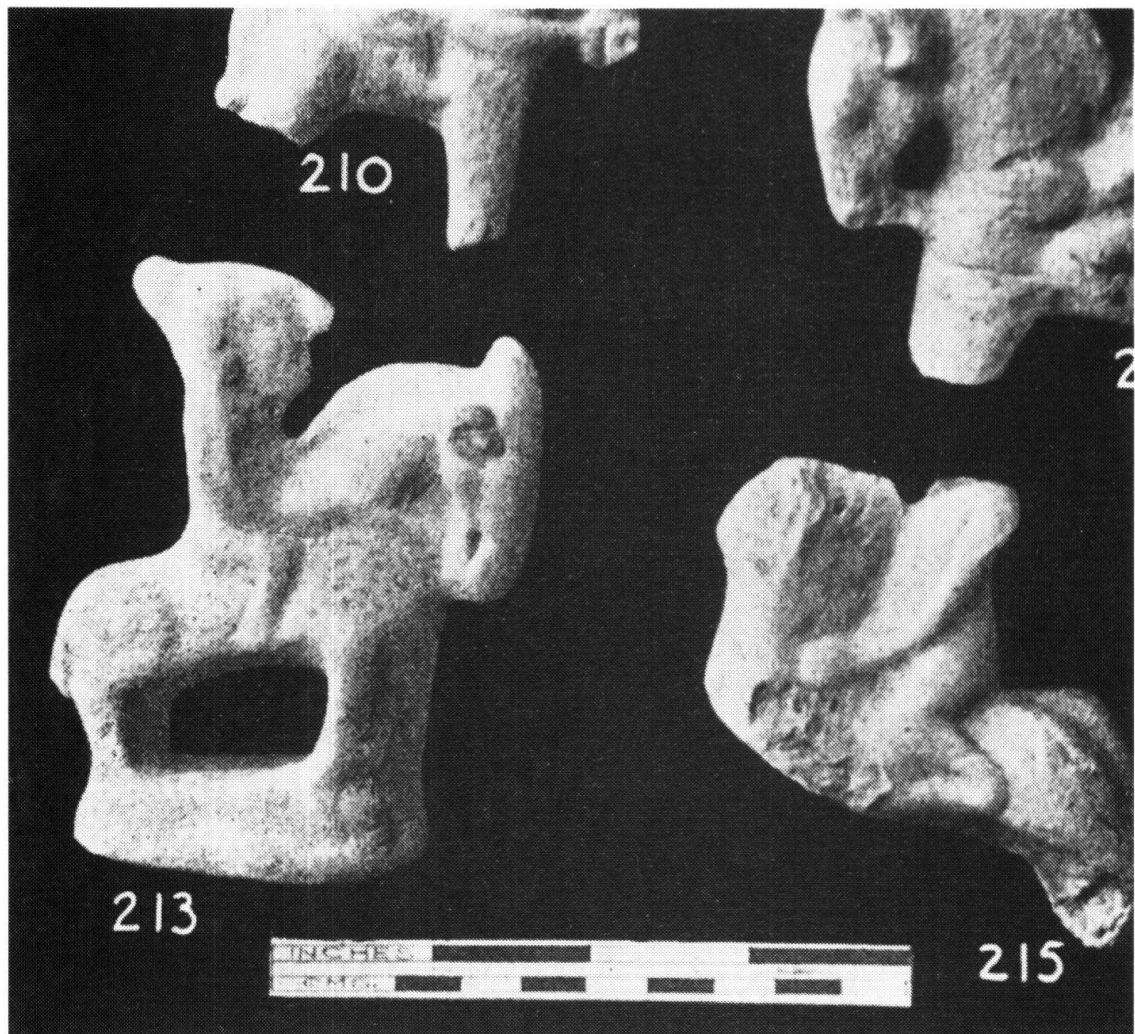


Fig. 4: Rider on horseback, Ahicchatra (Agrawala 1947/48:154, Figure 213). "Male rider on horseback, complete with the feet of the horse resting on the base-plate." Belonging to stratum IIIb: "A.D. 550-660." (1947/48:153) 23 riders of this type have been excavated, each figure is produced from a double mould [...]." (1947/48:152) The added scale shows that the figure is approx. 9,5 to 10 cm high. Interestingly, Agrawala writes: "This type [of horse, R.S.] may be identified with the Kāmboja horse [...] referred to by Bāṇa (*Harshacarita* p.62)." (1947/48:153)

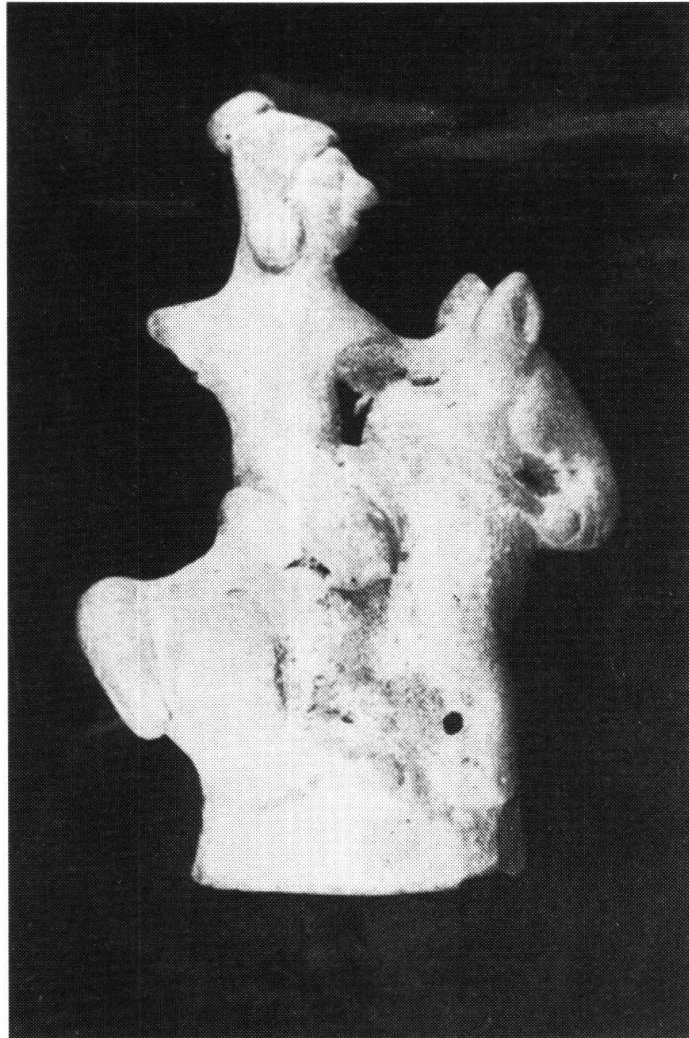


Fig. 5: Rider on horseback, Bhitari near Ghazipur (Prakash 1985:10 and 127, pl. X). "Horse rider, warrior, [...] latest period [300-600 AD, R.S.]. [...] It is double moulded and half seated figure fixed on a pedestal. [Sic, R.S.]."³⁵ Prakash does not mention the size. According to Prakash, ten comparable rider figures from this period were found in Ahicchatra; they have not been published yet (1985:127). This type was widespread since the Gupta period (Prakash 1985:126). Ghazipur is situated approx. 70 km northwest of Varanasi (Benares).

35 According to Prakash, 74 terracottas representing humans and 65 figures of animals were found in this place, "datable not earlier than the fourth century AD", all figures were made in a mould." (1985:38)

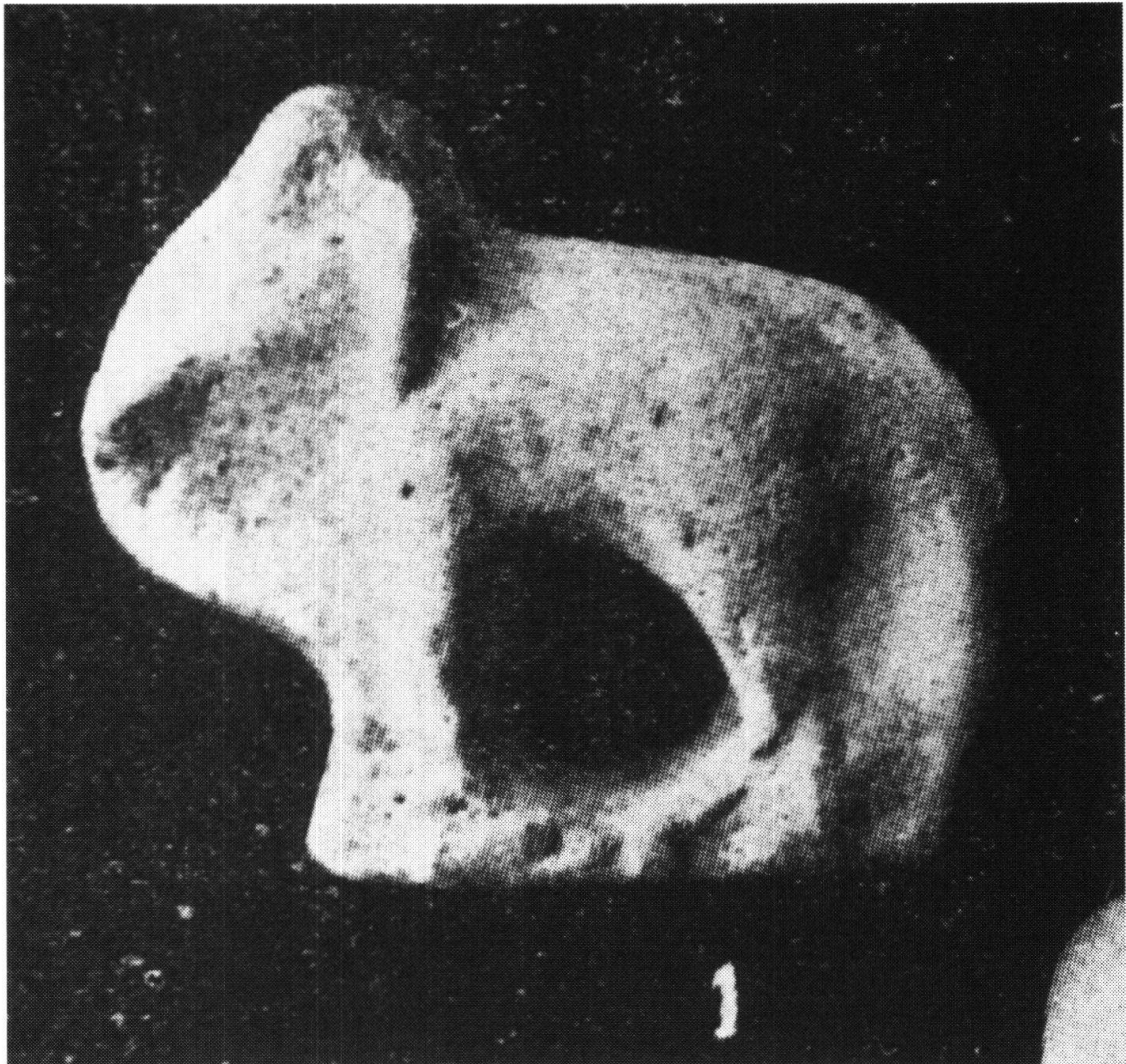


Fig. 6: Elephant, Kumrahar (Altekar 1959:119). "Ninety-seven terracotta animals, entire or fragmentary, were found. [...] On the whole these terracotta animals do not appear to be well baked as the figurines; but as many are obviously toys and are hand-made, this was to be expected. The majority of these animals are solid." According to Altekar the elephant belongs to the period IV and thus to the time between 300 and 450 AD. The elephant is ca. 7 cm long and nearly 6 cm high. Kumrahar is a village south of Patna/Pāṭaliputra. (In Kumrahar a number of terracotta horses with armed riders have been excavated, which have been dated to period IV, 300-450 AD.)

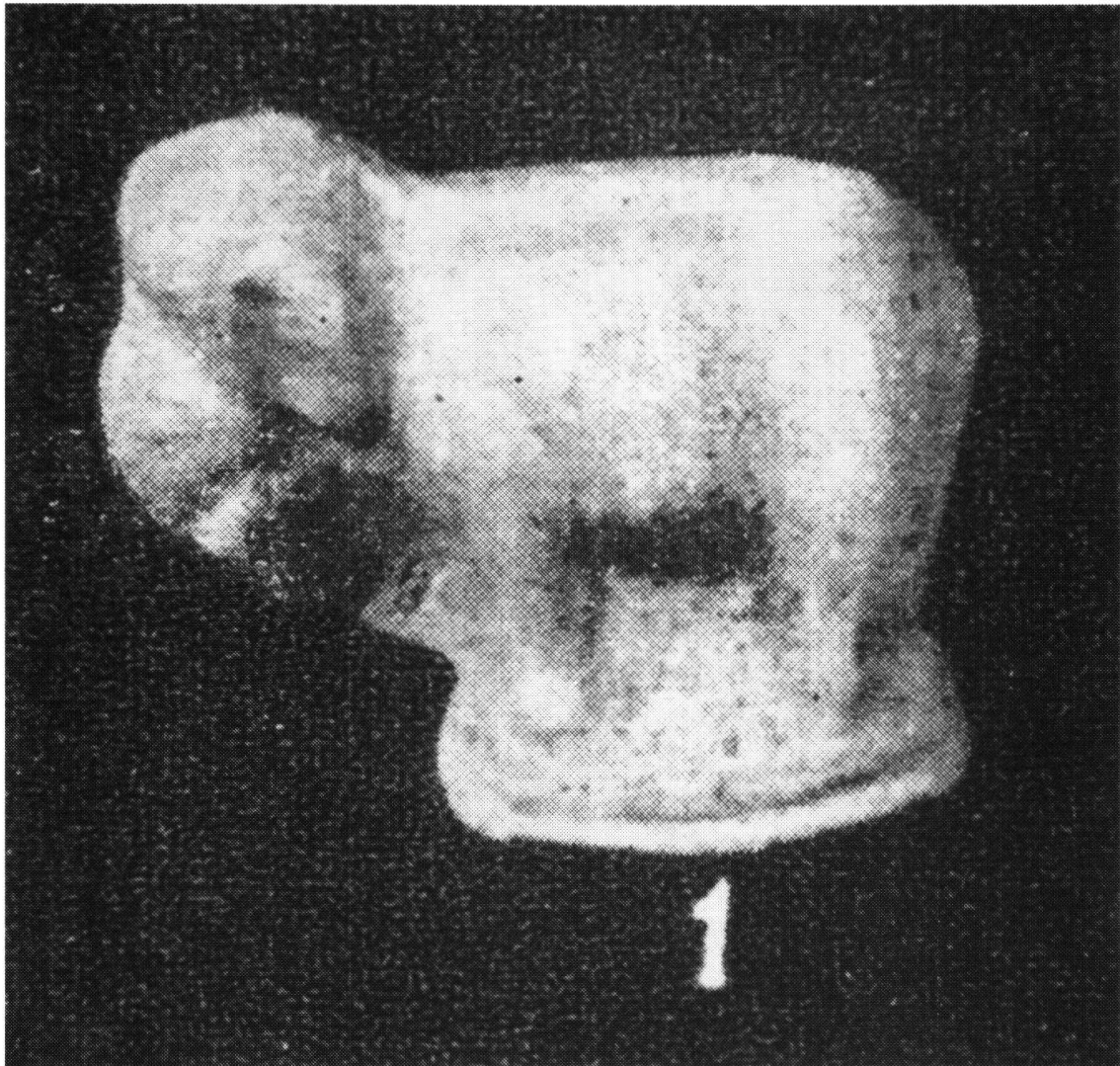


Fig. 7: Elephant, Pāṭaliputra (Sinha/Narain 1970:12). “Moulded figure of an elephant, [...] red terracotta, no wash or slip. [...] From period III [till 500 AD, R.S.]” The elephant is about 4,5 cm high and 5,5 cm long. (About 30 similar elephants, provided with pedestals were found in Rājghat, p. 45.)

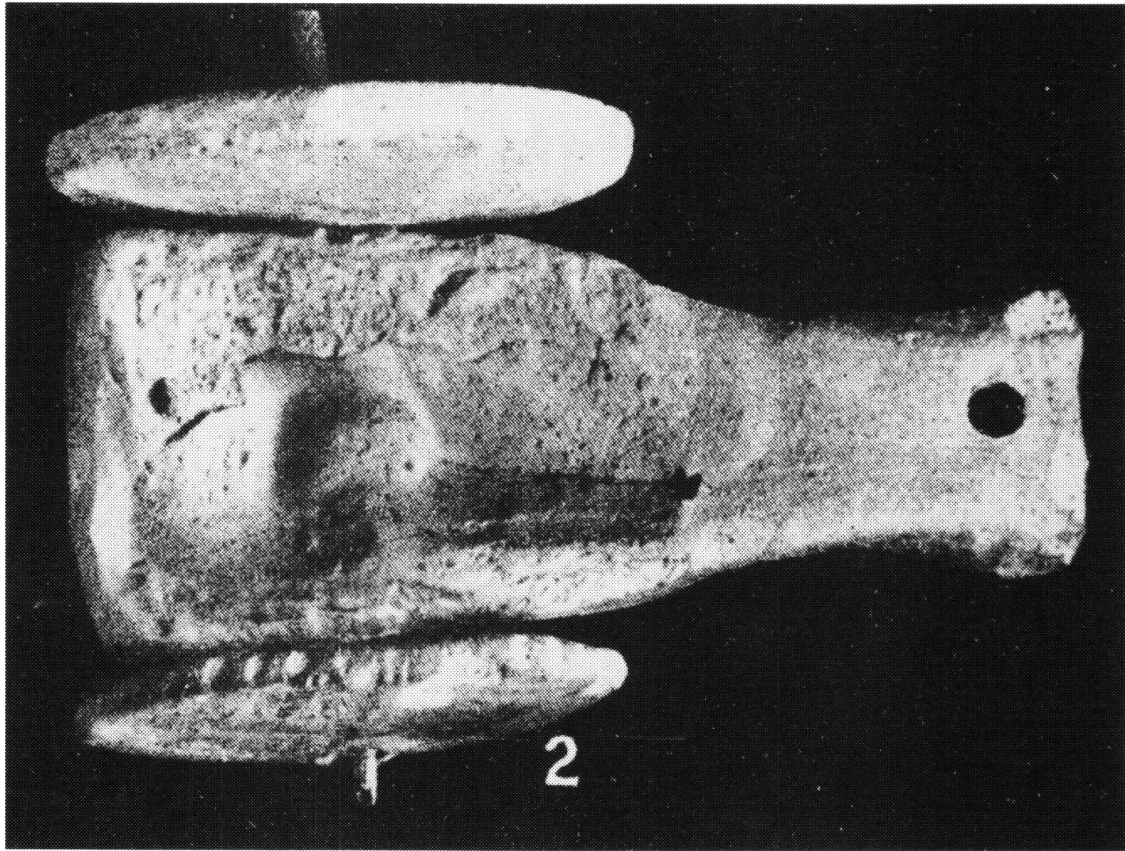


Fig. 8: Chariot, Hastinapura (Lal 1954&1955:88 and pl. XLVIII).
“Wheeled toy-cart. [...] Excavated from an early level of period IV,
early second century B.C. [to] late third century AD.”



Fig. 9: Coins of Śarvavarman Maukhari, silver. British Museum, London. Finding place most probably Fyzabad, Uttar Pradesh. Averse: Head of the king. Reverse: Dancing peacock. Legend: *vijitāvanir avanipatiḥ śrī śarvavarmā devo jayati*, "The king of the earth, the glorious lord Śarvavarman, who conquered the earth, is victorious."

2.2. Interpretations

No conclusive evidence can be given for the use of the terracottas as chessmen; however, a discussion about such a use should be allowed. Few of the authors mentioned linked the terracottas with chess; according to Prakash and Altekar the figures are toys (1985:122 and 1959:199, respectively); only Kala writes: "Kauśāmbī has yielded a number of sling balls and miniature objects used in chess and other indoor games." (1950:49)³⁶ The assumption that the figures are toys for children is just as speculative and without proof as the supposition that the terracottas have been chessmen and thus toys for men. Terracottas in human and animal shapes, which were used in a religious context, had existed all over India from the earliest times on. When chess was invented, one could thus make use of already existing forms.

Of course, many of the terracottas were used for religious and ritual purposes, but one must not overlook the fact that there were surely also terracottas that were put to profane use, e.g. as game figures. The mention of *caturaṅga* in the Harṣacarita proves that there must have existed chess figures of some kind. Terracotta is a material excellently suited for chess figures: easily accessible, easy and quick to handle, easy to decorate, light in weight, easy to transport and easily replaceable, if something broke or got lost.

The factors pointing towards a possible use as chessmen are the following:

1. Use: The meaning and use of the terracottas are as yet unknown.
2. Manufacture: The fact that the figures were mostly produced in forms or moulds indicates that they were manufactured serially, and that the artistic design was of minor importance.
3. Number: There are several copies of the warrior of Kanauj (1): Nigam speaks of "several similar incomplete figurines". Similar

36 Dwivedi writes about the tiny ivory figure of an elephant, excavated in Patna: "It's size suggests that it could have been used as a Chessman." (1976:61, Plate 33)

elephants and horses were manufactured in great quantities (Prakash 1985:122).

4. Height: The height is between 5 and 15 cm.
5. Colour: Some of the terracottas are grey (1), others red (2 and 3). It is unclear whether they were painted.
6. Pedestals: The horses and elephants have flat bases (4,5, and 6). In the period between 300 and 600 AD the animal figures, according to Prakash, are supplied with flat bases: "Yet another interesting development was the provision of a flat or pedestal base on which the animal figures stood. [...] This was meant to facilitate the use of the figures as toys." (1985:122) Due to their fragmentary state, it is not possible to tell whether the warriors (1-3) had flat bases.
7. Finding places: The figures were found in central Northern India (the Gangetic plain) and thus in that area in which in all probability chess originated and which was ruled by the Maukharis during the sixth century. The geopolitical synopsis of Schwartzberg's atlas depicts the dominion of the Maukharis, which included Kānyakubja, Prayāga, Ayodhyā and Pāṭaliputra (1978:145, pl. XIV.1, 1). Most of the Maukhari coins were found in this area, i.e. in Ahicchatra and Ayodhyā (Tripathi 1932:298), as well as in Lucknow (Burn 1906:847).
8. Dating: The number of the serially manufactured elephant and horse terracottas with solid bases increased in Ahicchatra in the period between 300 and 600 (Prakash 1985:122). This city is situated approx. 80 km northwest of Kanauj and belonged to the core area of the Maukharis. Here, 17 elephants were found: "The elephant figures lack the sophistication of the preceding period. The figures are generally devoid of any decoration. Double moulded elephant figures are mostly found from these sites. A large majority of elephant figures showed the representation of riders. They are mostly represented on a pedestal." (same source). The following also applies to the period mentioned: "An interesting development was the occurrence of a large number of horse figurines with rider. In many cases the person depicted as a rider is shown as a warrior [...]. This type is very popular and almost every site of the valley has yielded this type. The figures are generally mould-made. The rider is often represented like a

warrior.” (Prakash 1985:126-127) These horses were also mould-made: “Moulded horse figures are found mostly from all the sites of the valley.” (Prakash 1985:126)

Epilogue

The present study is, of course, speculative and there is no conclusive evidence for the historicity of Firdausī’s statement and my corresponding thesis that Śarvavarman was the *rāja* of Kanauj who conveyed the game of chess to Khusrau Anushirvān. But it was my intention to illustrate the different kind of clues that point to the Gangetic plain as the area in which chess was most probably invented and from where it made its way first to Persia and then out into the world.

Apart from Middle Persian and Arabic variations of the Indian king’s name that could refer to him, evidence from two directions point to Śarvavarman’s time and to Śarvavarman as the king who sent chess to Persia: He was the most important king in Kanauj during the reign of Khusrau Anushirvān, and he was the grandfather of Grahavarman, who had close familial bonds with Harṣa, at whose court it is proven *caturaṅga* was played.

And: The existence of *caturaṅga* played on the *aṣṭāpada* around 630/640 as documented in the Harṣacarita proves that chessmen were used in this time: Is it thus not possible that the terracottas presented here could be chessmen used in the sixth century?

BIBLIOGRAPHY

ABKA'I-KHAVARI, Manijeh (1998), "Schach im Iran. Einige Überlegungen zu den iranischen Schachepisoden". In: Eder, Manfred (ed.), *Arbeitspapiere zum Privatissimum "Seidenstraße"*, Berlin 20. und 21. Februar 1998, pp. 28-41. Kelkheim/Ts.: Förderkreis Schach-Geschichtsforschung e.V.

AGRAWALA, V.S. (1947/48), "Terracotta Figurines of Ahicchatrā, District Bareilly, U.P.," *Ancient India, Bulletin of the Archaeological Survey of India* 4: 104-179.

ALTEKAR, A.S. (1940), "Three Maukhari inscriptions on yupas: Krita Year 295," *Epigraphia Indica* XXIII, 1935-36: 42-52.

– (1959), *Report on Kumrahar Excavations 1951-1955*. Patna: K.P. Jayaswal Research Institute.

ARAVAMUTHAN, T.G. (1925), *The Kaveri, the Maukharis and the Sangam Age*. Madras: B.G. Paul & Co.

BAJPAI, Shiva (1988), "Maukhari Dynasty," In: Ainslie T. Embree (ed. in chief), *Encyclopedia of Asian History*, 4 Vols. New York: Macmillan Publishing Company. 2:513.

BARTHOLOMAE, Christian (1904), *Altiranisches Wörterbuch*. Strassburg: Karl J. Trübner.

BEAL, Samuel (1884), *Si-Yu-Ki. Buddhist Records of the Western World*. Translated from the Chinese of Hiuen Tsiang (A.D. 629), 2 Vols. London and Strassburg: Trübner's Oriental Series.

BURN, R. (1906), "Some coins of the Maukharis, and of the Thanesar line," *The Journal of the Royal Asiatic Society of Great Britain & Ireland*: 843-850.

CHANDRA, Moti (1977), *Trade and trade routes in Ancient India*. New Delhi: Abhinav Publications.

CHATTOPADHYAYA, Sudhakar (1958), *Early history of Northern India from the fall of the Mauryas to the death of Harsa, c. 200 B.C. – A.D. 650*. Calcutta: Progressive Publishers.

DEVAHUTI, D. (1970), *Harsha. A Political Study*. Oxford: Clarendon Press.

DHRUVA, Diwan Bahadur K.H. (1930), *Mudrārākṣasa or The Signet Ring. A Sanskrit drama in seven acts by Viśākhadatta*. Critically edited with copious notes, translation, introduction and appendixes. Indexes etc. Third edition. Poona: Oriental Book Agency.

DWIVEDI, V.P. (1976), *Indian Ivories. (A Survey of Indian ivory and bone carvings from the earliest to the modern times.)* New Delhi: Prakash Publishers.

FLEET, John Faithful (ed.) (1888), *Inscriptions of the early Gupta kings and their successors*. Calcutta: Superintendent of Government Printing. (Corpus Inscriptionum Indicarum. Vol.III.)

FRYE, R.N. (1983), "The political history of Iran under the Sasanians." In: Ehsan Yarshater (ed.): *The Cambridge History of Iran* Vol. 3(1): The Seleucid, Parthian and Sasanian periods. Cambridge: Cambridge University Press. Pp. 116-180.

HARSACARITA (1918), *The Harṣacarita of Bāṇabhaṭṭa with exhaustive notes (ucchvāsas I-VIII)*. Edited with an introduction and notes by Mahāmahopādhyāya P.V. Kane. Delhi (etc.): Motilal Banarsidass.

JONES, Sir William (1807), "On the Indian game of chess," *Asiatic Researches, or Transactions of the Society instituted in Bengal* Vol.II: 159-165.

KALA, Satish Chandra (1950), *Terracotta figurines from Kauśāmbī, mainly in the collection of the Municipal Museum, Allahabad*. Allahabad: The Municipal Museum Allahabad.

LAL, B.B. (1954 & 1955), "Excavation at Hastinapura and other explorations in the Upper Ganga and Sutlej Basins 1950-52," *Ancient India, Bulletin of the Archaeological Survey of India* 10 & 11: 5-151.

LAW, B.C. (1954), *Historical Geography of Ancient India*. Paris: Société Asiatique de Paris.

MACDONELL, A.A. (1898), "The origin and early history of chess," *Journal of the Royal Asiatic Society of Great Britain and Ireland*: 117-141.

MAJUMDAR, R.C. (1954), "Northern India after the break-up of the Gupta empire (sixth century A.D.)." In: R.C. Majumdar (general editor): *The classical age*. Bharatiya Vidya Bhavan's History and Culture of the Indian People, Vol.III: 60-92. Bombay: Bharatiya Vidya Bhavan.

MURRAY, H.J.R. (1913), *A History of Chess*. Oxford: Clarendon Press.

NIGAM, J.S. (1981), "Some Post-Gupta Terracottas from Kanauj," *Journal of the Asiatic Society of Bombay* 1977-78 (New Series), 52-53: 214-218.

NÖLDEKE, Theodor (1879), *Geschichte der Perser und Araber zur Zeit der Sasaniden*. Aus der arabischen Chronik des Tabari. Übersetzt und mit ausführlichen Erläuterungen und Ergänzungen versehen. Leyden: Brill.

– (1879), *Karnamak-e Ardaschir: Artachsir i Papakan aus dem Pehlewi übersetzt, mit Erläuterungen und einer Einleitung versehen*. Göttingen: Peppmüller.

– (1892), *Persische Studien II*. Sitzungsberichte der Wiener Akademie der Wissenschaften, Philosophisch-Historische Classe CXXVI. Wien: F. Tempsky.

PANAINO, Antonio (1999), *Testo pahlavi, traduzione e commento al Wizārīšn ī Čatrang ud nīhišn ī nēw-ardaxšār*, "La spiegazione degli scacchi e la disposizione della tavola reale". Milano: Mimesis Sāmory.

PIRES, Edward A. (1934), *The Maukharis*. Madras: B.G. Paul & Co.

PRAKASH, Pratiba (1985), *Terracotta Animal Figurines in the Ganga-Yamuna Valley (600 B.C. to 600 A.D.)*. Delhi: Agam Kala Prakashan.

ROSHANZAMIR, Mehdi (2001), "Das persische Schachspiel", *Kaweh* 93: 176-189. (Kaweh, Deutsch-Iranische Kulturzeitschrift, München.)

RUSSELL, James R. (1988), "Sasanid Dynasty." In: Ainslie T. Embree (ed. in chief), *Encyclopedia of Asian History*, 4 Vols. New York: Macmillan Publishing Company. 3: 386-390.

SASTRI, Hiranand (1927-1928), "Barah copper-plate of Bhojadeva," *Epigraphia Indica* XIX: 15-19.

– (1917/1918), "Haraha inscription of the reign of Īśānavarman: [Vikrama Samvat] 611," *Epigraphia Indica* XIV: 110-120.

SCHIPPMANN, Klaus (1999), *Grundzüge der Geschichte des Sasanidischen Reiches*. Darmstadt: Wissenschaftliche Buchgesellschaft.

SCHWARTZBERG, Joseph E. (ed.) (1978), *A Historical Atlas of South Asia*. Chicago and London: The University of Chicago Press.

SINHA, B.P. and Narain Lala Aditya (1970), *Pāṭaliputra Excavation 1955-56*. Patna: The Directorate of Archaeology and Museum, Bihar.

SMITH, Vincent A. (1924), *The early history of India from 600 B.C. to the Muhammadan conquest including the invasion of Alexander the Great*. Fourth Edition, revised by S.M. Edwardes. Oxford: Clarendon Press.

SUNDERMANN, Werner (1999), "Eine Bemerkung zum Namen des Schachspiels, seiner Herkunft und Geschichte". In: Eder, Manfred (ed.), *Arbeitspapiere zum Privatissimum "Indien"*, München 13. und 14. März 1999. Kelkheim/Ts. Förderkreis Schach-Geschichtsforschung e.V.: 58-59.

SYED, Renate (1993), "Das caturaṅga im Mānasollāsa und einige Bemerkungen zum Schach in Indien", *Beiträge des Südasien-Instituts der Humboldt-Universität zu Berlin* 6: 93-132.

– (1995), "caturaṅga. Anmerkungen zu Alter, Ursprung und Urform des Schachs", *Beiträge des Südasien-Instituts der Humboldt-Universität zu Berlin* 8: 63-108.

– (1998), "Der König und sein Berater im altindischen Staat und im Schach", In: Eder, Manfred (ed.), *Arbeitspapiere zum Privatissimum 'Seidenstraße'*, Berlin

20. und 21. Februar 1998, pp.71-95. Kelkheim/Ts.: Förderkreis Schach-Geschichtsforschung e.V.

– (2001), *Kanaui, the Maukharis and the caturaṅga. The way of chess from India to Persia*. Forthcoming.

TRIPATHI, R.S. (1959), *History of Kanaui to the Muslim conquest*. Delhi [etc.]: Motilal Banarsidass.

WIEBER, Reinhard (1972), *Das Schachspiel in der arabischen Literatur von den Anfängen bis zur zweiten Hälfte des 16. Jahrhunderts*. Beiträge zur Sprach- und Kulturgeschichte des Orients, 22. Walldorf-Hessen: Verlag für Orientkunde Vorndran.

WIESEHÖFER, Josef (1993), *Das antike Persien. Von 550 v. Chr. bis 650 n. Chr.* Düsseldorf/Zürich: Artemis & Winkler.

WINTERNITZ, Moritz (1920), *Geschichte der indischen Litteratur*. Dritter Band. Leipzig: C.F. Amelang.

WOLFF, Fritz (1935), *Glossar zu Firdosis Schahname*. Festgabe des Deutschen Reiches zur Jahrtausendfeier für den Persischen Dichturfürsten, herausgegeben von der Notgemeinschaft der deutschen Wissenschaft in Verbindung mit der Deutschen Morgenländischen Gesellschaft. Berlin: Reichsdruckerei.

