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### Historic Periods

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# ‘EARLY TERRACOTTA-FIGURES FROM KANAUJ: CHESSMEN?’<sup>1</sup>

## CHAPTER II: HALF AN ANSWER AND MORE QUESTIONS

Manfred A. J. Eder

### *Some Facts and Basic Considerations*

Twenty-six years ago, chess was subject to the body of South Asian Archaeology for the first time: at the 6<sup>th</sup> SAA conference, which took place at Cambridge University in July 1981, Professor Dr J.E. van Lohuizen-de Leeuw presented ‘A unique piece of ivory carving – the oldest known chessman’. She brought this only 1.7 cm high ‘Quadriga’, made of ivory, in 1981 from the Archaeological Museum at Anurādhapura to London to be shown in her exhibition ‘Sri Lanka – Ancient Arts’.<sup>2</sup> Nowadays we may state that its proposed dating to the 2nd-3rd century AD is too early to call this tiny carved piece of ivory a ‘Chessman’, i.e. a gaming-piece, which was used in playing the *Game of Caturaṅga* on the *Aṣṭāpada* (the 8x8-fields’ planogramme: a Chess-Board).

A reasonable time-frame for the evolution *and* invention of *Caturaṅga* as a *Game* - starting around the middle of the 5th century AD, based upon Dr habil. Renate Syed’s theory and her sole merit, that Chess came down to us from what she calls a ‘*didactic model*’, a sort of sand-pit-exercise of *Catur-aṅga*, the Indian army, respectively its *four wings* - is shown as Fig. 1. Dr Irving L. Finkel interprets the essence of Syed’s book (Syed 2001a) as *Caturaṅga* having originally been ‘[...] an elaborate teaching device, using little warrior-like figures on a miniature battlefield, that instructed young warriors-to-be in the art of warfare’ (Finkel 2006).

‘Approaching the Roots of Chess’ was the title of the first ever Chess-Historic Research Symposium in India, carried out at Pondicherry University in November 1996. As one of the results of this Congress and its follow-up in Wiesbaden in August 1997, FSG [Foerderkreis Schach-Geschichtsforschung e.V. – a Charity Trust on Chess-Historic Research<sup>3</sup>] initiated the Project ‘We must find the [Gaming-]Pieces – of *Caturaṅga*<sup>4</sup> - because much

uncertainty existed about the question which kind of gaming-pieces Chess was played with at its beginning.

For her paper ‘Early Terracotta-Figures from Kanauj: Chessmen?’, presented at the 15th SAA conference in 1999 at Leiden (NL) (Syed 2007: 363-74), Syed identified archaeological finds of artefacts, examples see Fig. 3, in Museums’ collections of several cities along the Ganga-Valley (Fig. 2), which could be looked upon as objects, representing a miniature Indian army, so to fit on a play-ground, coincidentally the *Aṣṭāpada*, a long before existing ‘board’ for earlier Indian games. This battle-field suited exactly to take-up two opposing equal parties in an arrangement to play war with: Foot-Soldiers, Elephants, Horses (with Riders) and Chariots, the four wings of the traditional Indian army. Syed suggested to discuss their transformation from reality into terracotta-figures.

Recently, the idea, that terracotta-figures used in the said ‘didactic model’ for exercise could have caused the creation of a game played on a miniature battle-field found support by two new readings of the first Indian reference to Chess in literature: in Bāṇa’s famous ‘*Harṣa-Carita*’, in which the poet gives an account of King Harṣavardhana, residing in Kanauj<sup>5</sup> as the successor of the Maukhari-Dynasty, under which, most likely, *Caturaṅga* was invented as a *Game*.

The *Maukhari* King *Śarvavarman* obviously was the Mahārājadhira, who sent (a set of) Chess from Kanauj to the contemporary Sassanian King Xosrow I Anushirwan in Ctesiphon, between 560/565 (the beginning of *Śarvavarman*’s reign) and AD 579 (Xosrow’s last year).

Earlier translations of Bāṇa’s respective text suggested ‘figures of sculptors’ (Cowell & Thomas 1961) or ‘royal figures of sculptors’ and ‘earthen bodies in the manufactures of dolls’ (Kane 1986), while a new look at the line

*pustakarmanām pārthivavigrahāḥ*

disclosed the meaning ‘*Es gab (kämpfende) Tonkrieger, aber keine kämpfenden Könige*’ (Syed 2005) [There were fighting terracotta-warriors but no fighting kings – transl. MAJE] and ‘When this king [Harṣa] reigns, the fight among kings is confined to terracotta statuettes’ (Rajendran 2008)

<sup>1</sup> This was the original title of Dr habil. Renate Syed’s paper presented at the 15th SAA conference at Leiden (NL) in 1999, the Proceedings of which have been published by Ellen Raven, IISA Leiden University in 2007. Earlier references to Syed’s subject in FSG-Publications are in Syed 1999, 2000, 2001a and 2001b. The present author considers these articles by Syed as ‘CHAPTER I’.

<sup>2</sup> Dr J.E. van Lohuizen-de Leeuw was Professor of Indian and South-Asian Art and Archaeology at the University of Amsterdam. The Archaeological Museum at Anurādhapura registered this object as a find from Mantai (or Montata), the site of the ancient Mahatittha, a town on the North-West coast of Sri Lanka, which was an important harbour. Van Lohuizen-de Leeuw dated this ‘Chariot’ (to use the Indian army-term instead of the possibly misleading Roman word ‘Quadriga’!) 2nd-3rd century AD and determined it as an import from Andhra Pradesh. (van Lohuizen-de Leeuw 1984).

<sup>3</sup> Foerderkreis Schach-Geschichtsforschung e.V. (Charity Trust on Chess-Historic Research) Parkstr. 27, D-65779 Kelkheim/Ts.

<sup>4</sup> ‘We must find the Gaming-Pieces’ (of ‘*Caturaṅga*’) was made an FSG-Project on November 7th, 1997, as an International Initiative of

FSG; details in ‘Bericht Projekt-Ausschuss – Status 31. März 2000’ for the Member-Assembly on April 14th, 2000, in Munich, Project-Description no. 15.

<sup>5</sup> Kanauj = Kannauj = contemporary spelling.

This new perception made it necessary to further investigate three 'T': The Terracotta-figures in question, the Territory they come from and the Time-frame (Gupta – Maukhari – Harṣa) they belong to; in other words: where and when foot-soldiers, war-elephants, horses, ideally with warriors as riders, and chariots were used in the strategic and tactical planning or the analysis of battles in theory and practice.

Not only for chess-players is remarkable that *King* and *Advisor* ('*Queen*') find no mention in this context! The assumption is, that in these military sand-pit exercises, in this teaching concept, the 'King' and his 'War-Minister' were *not* participants in the improvised battle-field but decided on the positions and the manoeuvres of the 'four wings' as the tutors! They only took their place in the middle of their troops when *Caturaṅga* was transferred onto the *Aṣṭāpada*-Board', the 8x8 squares' planogramme, outlining the territory of war in the game.

#### *Local Investigations in India*

An initial exploration was undertaken by FSG-Member Dr Leander A. Feiler, who visited two Museums, in Kannauj and Lucknow, in January 2006, reviving former contacts and establishing new ones. Since the perspectives appeared promising, the decision was taken, to travel again with a small delegation to the territory in question.

The purpose of our mission from February 26th to March 9th, 2007, however, was not only to obtain more information about terracotta-figures of plausible *Caturaṅga*-nature, but as well to draw the attention of the Archaeologists and Historians of the Museums of the Doab to the possible use of such finds as devices in the 'didactic-model' *Caturaṅga* preceding the *Game Caturaṅga* – which may well go back to the later Guptas.

#### *Preliminary Results*

What we found in six Museums in Delhi, Lucknow, Kannauj, Allahabad and Varanasi (Fig. 2) has to be further evaluated with great care *and* with the help of our new Indian friends, mainly archaeologists and historians, and their colleagues – because: We just touched and scratched the surface!

In this paper we discuss a selection of photographs which our delegation was kindly permitted to take from possibly relevant artefacts on exhibition (including some in the go-downs of the State Museum in Lucknow).

**Everybody knowledgeable or interested is invited to give reasoned opinion on these issues!**

To start with, some key-criteria are given, suitable to provide guidance for comparison of what could be determined as *Caturaṅga*-Gamesmen, by two terracottas known from a private collection (Eder 2000: 24-41 and

illustrations on colour-plates p. 19 (nos 3-4) and p. 41, 2003: 12-13 and 55-56; Syed 2001a: 81-82 and illustration p. 91), which clearly show particular elements typical for *Chess*, and these are:

1. a *War-Elephant* - representing a 'Bishop', and
2. a *Horse with an armed Rider* - representing a 'Knight'.

They both carry prototype-features very similar to later objects doubtlessly belonging to the world of *Chessmen*:

The *Elephant* = 'Bishop' - Fig. 4 - is on its knees, put on rest before it enters the battle; and it is protected by a chain-mail. In particular 'Bishops' in old Burmese chess-sets deliver a breath-taking similarity and therefore may be considered a link between origin and maintained tradition.

The *Horse with Rider* = 'Knight' - Fig. 5: in all elements of its representation it is, for generations (!), identical with later chess-'knights' of Indian sets.

Unfortunately, there are no archaeological records available on them!

For comparison with what we found on our mission, the parameters are given by those examples, which Syed selected for her paper 'Early Terracotta-Figures from Kanauj: Chessmen?' as presented at the 15th SAA conference at Leiden, printed in several publications (Syed 1999, 2000, 2001a, 2001b and 2007) with detailed information about their sources and interpretations: Fig. 3 features three Warriors (a-c), possibly Foot-Soldiers, two Horse-Riders (d-e), two Elephants (f-g) and a Chariot (h).

Among the seven authors and sources Syed refers to (Nigam 1981; Agrawala 1947/48; Prakash 1985; Altekar 1959; Sinha & Narain 1970 and Lal 1954 and 1955), the most important commentaries of three of them are the following:

Prakash, in addition to his description of a 'Horse rider, warrior, originated from Bhitari, latest period, 300 AD-600 AD' (p. 10 and 127, pl. X), reports:

- that in Bhitari, near Ghazipur, about 70 km north-east of Varanasi, among the terracottas found, 74 represent 'men' and 65 represent 'animals', all made from models, '... dateable not earlier than the 4th century AD.' (Prakash 1985: 38; Syed 2001a: 78, fn. 196);
- that in Ahicchattra, a city about 80 km north-west of Kannauj and right in the heart of the Maukhari territory (with no Museum nowadays), 17 elephant-figures were found: 'A large majority of elephant figures showed representations of riders. These are mostly represented on a pedestal.' (Prakash 1985: 122; Syed 2001a: 81, fn. 202);

And he reports:

- 'An interesting development was the occurrence of 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: 126f; Syed 2001a: 81);
- A general observation is, that most of these artefacts were 'double-moulded' and lack of sophistication and decoration, certainly an indication that they were produced in masses and that there was no need to design them artistically to give them value!

Altekar, who comments the Elephant, Fig. 3f, in Syed's selection (Patna 1959: 119, pl. LII, 1), reports about the excavations in Kumrahar, a village South of Patna/Pataliputra, and mentions:

- 'Ninety seven [97!] terracotta animals, entire or fragmentary, were found [...] The majority of these animals are solid.' (Altekar 1959)

Kala states about the 'Terracotta Figurines from Kausambi':

- 'Kausambi<sup>6</sup> has yielded a number of sling-balls and miniature objects, used in *chess* and other indoor games' (Kala 1950: 49).

These three authors interpret the objects they describe very generally as 'toys', without being more specific, e.g. whether for children or adults, whether for playing a certain motif (like the arrangement of a farm) or just a thing to play with (without any relation to a game based on rules).

Two statements by Syed are very important (2001a: 79):

1. She emphasizes that there is no proof for her hypothesis that these terracotta figures, which obtrude themselves upon such a function, in fact were used in a 'didactic model' or in the game *Caturaṅga*.
2. But the assumption, she says, that these objects have only been used as 'toys' for children, is not less speculative than the supposition, that some of these many terracottas be figures for *Caturaṅga* - in the sense of 'toys' for men!

Taking into account the variety of terracottas found one may conclude that they could be just objects of *virtu* if not offerings for deities. In the collections are bulls, rams,

<sup>6</sup> Kausambi is located West of Allahabad and the objects found there date - in our understanding - from a suitable period.

boars, dogs, donkeys, monkeys, lions, tigers, camels, besides elephants, horses and chariots, as well as the armed warriors made of terracotta. We also saw birds, and, made of ivory, we know of cows, peacocks and beasts in addition. The more motifs we list, the more uncertainty grows about the purposes and functions of such items.

Again van Lohuizen-de Leeuw tried to give an answer with her article 'What was the Purpose of the Terracotta Animal Figurines discovered at Kondapur?' (van Lohuizen-de Leeuw 1987: Chapter 62, 369-73): Apart from discussing the general understanding of toys, she creates the conclusion that the three figurines in question, a horse, a lion and a zebu-bull, represent the symbols of the [four!] cardinal points in ancient Indian art (but: where is the elephant?) as also present in the famous Aśoka pillar-motif with one animal for each of the four main-directions of the world (north, east, south and west).

This interpretation, however, is not satisfactory for the many different types of small terracotta figurines which might be of mystic, religious, ritual, ethnological significance or the like. As an example: The ram is considered as an animal of protection for new-born babies and as a patron saint for children (Kreisel 1989: 23).

So, what is the meaning and purpose of these numerous other terracotta-motifs besides the elephant (and later the Camel!), the horse (with and without a rider, perhaps to differentiate the two parties which make war against each other!) and the chariot, for which horses (or zebu-bulls) were needed to pull them to the battle and into the fight?<sup>7</sup>

Have they been used to mark a place as holy like home-altars? To arrange something like a nativity scene, not unlike a representation of the birth of Christ as seen in the Christian world in churches at Christmas? Or to indicate, which animals belong to the family on a farm? Or like battle-formations we now-a-days still find in collections of tin-figures?

As promised: more questions than answers!

In any case: Toys are something to play with, and playing with toys must not be far from (inventing [!] and) playing a game (based on rules). There is clearly a close relationship between Toy – Play – Game!

For this study in the framework of the project 'We must

<sup>7</sup> Specializing in this field is Naman P. Ahuja, Associate Professor Ancient Indian Art and Architecture, Jawaharlal Nehru University New Delhi, who presented 'Further Visual and Textual References to Talismanic Iconography in Ancient India' in Ravenna. In a *Privatissimum* and correspondence following it he drew our attention to [www.indianiconography.info](http://www.indianiconography.info) and promised to re-examine his corpus of images 'to see if there are any [terracotta chariots] that I identify as gaming pieces.' (e-Mail July 14<sup>th</sup>, 2007). Furthermore we may expect a contribution from him on 'Toys from the early period with suggestions of what they may [have] be[en] used for'.

find the Gaming-Pieces – of *Caturaṅga*’ we decided to concentrate on objects which have significance in the Indian army: Elephants, Horses, Chariots and Foot-Soldiers (although the Bull may have played a role as well, not as one of the *four wings*, not as a weapon or a certain power of force, but in the logistic part: to pull vehicles, to settle positions in a battle or war).

However and of course: Not every ‘warrior’ is necessarily a ‘Pawn’, not every ‘elephant’ is a ‘Bishop’, not every ‘horse’ a ‘Knight’ and not every ‘cart’ is a ‘Chariot’, ... among the thousands of terracotta-figures, matching with the relevant time-period (roughly from Gupta to Harṣa), the territory (*i.e.* the Maukhari- and Puṣyabhūti/Vardhana-Dynasties’ Dominions), even if suitable in size and shape and concept!

On the other hand we learned from archaeologists and historians met in the museums visited, that hardly anybody considered or realized the possibility that the available excavated pieces could have some connection to *Caturaṅga*. Indeed, one explanation for this might be that the importance of terracotta *warriors* in the context given is a relatively recent discovery.

For three of the four elementary parts of the Indian army we also have to consider their mythological significance:

For the *Elephant*:

According to brahmin sources the elephant symbolises the dimension and the duration of the world and royal power.<sup>8</sup> This is reflected in antique figurative Indian Chess-Sets in two ways:

The ‘King’ and his ‘Minister’ is often presented riding an elephant, and the war-elephant, as the strongest weapon (later called ‘Bishop’!), is placed on the sides of ‘King’ and ‘Minister’ as we know from the position on the ‘Board’, which is the same as in all the descriptions of war, and battle-strategies and tactics.

For the *Horse*:

‘A horse with rider used to be a favourite motif in the art of many ancient peoples.’ Mirzamurat Mambetullayev (2000: 4-6), quoting E.E. Kuz'mina (1977) refers particularly ‘...to the cult of the horse which was practiced throughout antiquity by the ancient Indo-Iranian tribes and Khorazmians.’ And Mambetullayev translates: ‘In all cases, a horse was sacrificed to the sun-god.’ And: ‘... a horse with rider represented the cult of the sun and the astral cult.’

For the *Chariot*:

The chariot finds its expression for example in the *Rāmāyaṇa* as a vehicle of gods or heaven; and from the *Rāmāyaṇa* we also learn that not only horses were put to harness, but also a zebu-bull, as the carrier of god Śiva (Lobo 1986: 16).

It is therefore not surprising to find endless interpretations of meanings of early Indian terracotta art. The opinion of Gerd Kreisel (1989) that most of these riders, chariots and animals are related to religion and rural rituals is not objectionable. Even using them as symbolic sacrifices could be a possible purpose.

*Some hard facts*

Coming to examine the material collected on this FSG-mission in six out of seven museums visited in the Doab, the objects of particular interest are to be characterized as follows:

**Small terracotta figures, in a handy size, roughly dated between 300-700 AD, excavated at places belonging to the territories dominated by the Guptas, Maukharis and King Harṣa.**

Their identification:

*Elephants* - without a base, **on** a base, without a rider, **with** a rider - Figs 6-8.

*Horses* - without a base, **on** a base, without a rider, **with** a rider - Figs 9-13.

*Chariots* - Fig. 14 - For them, the following observation is for consideration:

If a chariot was made to be a toy (for children), we must take into account that the horses (or the bulls) to pull are the most important element of the two parts of a span – strictly following the real object to be reproduced en-miniature! (Examples of exactly this type made out of bronze can be seen in the Harappan-Section of the National Museum in Delhi). However such long vehicles made of terracotta have not been detected in the museums visited! Instead, the four- or two-headed span (of horses or bulls) is integrated as a relief onto the front-plate of the cart, as illustrated (Fig 14 a-c)!

What is the reason for this reduction at the cost of loss of the attractiveness as a toy? Possibly, this was to design the chariot as a *square* unit to make it easier to handle when practising the ‘didactic model’, and - to fit better on the squares of the *Aṣṭāpada*, the battle-field of the game *Caturaṅga*.

Some of such carts (or fragments thereof) seen in India have a hole on the front, obviously to manoeuvre the piece by using a stick. The collection of well identical terracotta carts of the Linden-Museum in Stuttgart, Germany,<sup>9</sup> consists of 10 chariot-fronts or –fragments, most of them probably from Mathura (on the Yamuna, south of Delhi), but dated 1st century BC to 1st century AD; and - as can be seen from the remains - they also were constructed so that an axis for two wheels could be inserted.

<sup>8</sup> ‘Nach den brahmanischen Quellen bringt er [= der Elefant] symbolisch die Größe und die Dauer der Welt zum Ausdruck und ist Attribut der königlichen Macht’; und sinngemäß: In Indien war die Elefantenhaltung königliches Vorrecht (Matz 1952: 750).

<sup>9</sup> Information and illustrations by courtesy of Gerd Kreisel, Linden-Museum Stuttgart.

To look for such type of chariots in our project is certainly a must to learn more about them as possible objects used in both, the 'didactic model' and the game *Caturaṅga*.

While the fact, that terracotta artefacts representing 'King' and 'Minister' were not found, is less disturbing (see page 70), the scarcity of *figurative* terracottas representing 'Foot-Soldiers' is indeed surprising!

The three 'Warriors from Kanauj' referred to in Syed's publications as nos 1-3 (Fig 3 a-c) could not be detected, although they were registered as to belonging to the collections of the Government Archaeological Museums in Kannauj. Nevertheless they (and two more 'warriors') appear on a Photo-Index as nos 55+56+57 from 1975, [by Dr. G.K. Agnihotri, at that time Secretary of the Archaeological Museum Kannauj]<sup>10</sup> ... comprising a total of 129 lots of mostly terracotta-finds.

Some small heads (with helmets?) kept in the go-downs in Lucknow and one in Allahabad (where the Government Archaeological Museum is hosting numerous objects from Kannauj) could belong to 'warriors'. But the question remains: Where have they all gone, the 'Pawns', of which each complete set for a game of *Caturaṅga* consists of  $2 \times 8 = 16$  'men'? We may and must assume that it is as good as impossible that in the 'didactic model', the master-pattern of the game, foot-soldiers were ignored and the strategic and tactical exercises had simply been carried out with only the major forces (elephants, horses and chariots)!

Therefore a convincing explanation for so small a number of figurative 'pawns' could be, that the 'foot-soldiers' were of *non-figurative* shape, just like traditional Indian gaming pieces, of which we found two in Kannauj - Fig. 15a - and to which Rakesh Tewari, Directorate of the U.P. State Archaeology in Lucknow, has drawn attention by contributing photos during the Ravenna Congress - Fig. 15 b-c: Seven terracotta gamesmen from different periods between AD 0-600, excavated in Hulaskhera, District Lucknow. Interesting: They look astonishingly similar to 14 gamesmen from Narhan, District Gorakhpur, dated 800-600 BC, published by Singh (1994: 198-99).

The most impressive example of possibly a figurative 'Pawn', however, is featured by Syed as no. 3 (Fig. 3c), which seems to provide a master-pattern and guiding reference for the maintenance of the tradition in designing 'Pawns' in later figurative chess-sets: We can trace this concept over roughly 12-15 centuries! Compare Figs 16-17.

The following examples have been selected from over 40 objects photographed during the reported study-tour:

<sup>10</sup> Agnihotri, G.K., Secretary Archaeological Museum Kannauj, in 'A short History of Puratattva Sangrahalaya Kannauj', Kannauj, 1975, published in a larg(er) volume of unknown title and bibliographical data, p. 141-160 (138-161?).

They are grouped into

*Elephants*: 9 shown out of 16 (17?) as candidates to represent 'Bishops', without or with a base, without or with a rider (Figs 6-8)

*Horses*: 12 shown out of 18 as candidates to represent 'Knights', without or with a base, without or with a rider (Figs 9-13)

*Chariots*: 2 shown out of 4 as candidates to represent 'Rooks' (Fig. 14 a-c)

*Warriors* ('Foot Soldiers'): 7 in parts or questionable fragments as candidates to represent 'Pawns', with two of them *non-figurative* found in Kannauj (Fig. 15a), identical with classical traditional Indian gamesmen (Fig. 15 b-c)

Finally there are (nine) animals (bulls, cows, rams, birds) as well as numerous unidentified gamesmen in our collection of photographs - with certainly no connection to *Caturaṅga*.

One could imagine that *elephants* and *horses* with *no base*, i.e. standing on four legs, could well have served as *Caturaṅga*-figures used on *outdoor* grounds or in a sand-pit; while the pieces *with* a base could have been intentionally tailored to stand on a hard surface - like on a 'board' for a game!

For those interested in more details: There is also a breakdown by museum visited and more information to be obtained from the author.

### Conclusions

'Half the Answer' is, that there is sufficient evidence of terracotta-figures from Kannauj as well as from other ancient settlements of the late Gupta-Maukhari-Harṣa-periods (4th-7th century AD) in the museums of Kannauj and other ones within the Doab-Plain, which could have played their role in *Caturaṅga* as a '*didactic model*' as well as the *game* - and so do confirm what Bāṇa described in his *Harṣa-carita*!

To the 'missing half' belong those artefacts of which we could clearly say *they leave no doubt*, that they were used in the *Game Caturaṅga* - for example with the feature of forming a group to be part of a set.

They may be among the uncountable reserves of the museums visited as well as in others not visited - and they may still not be unearthed! Even for Kannauj, a place most promising due to its importance as the residential city of several dynasties within the respective time-frame for the invention of *Caturaṅga* as a game, is true: It is only the surface which so far was scratched! What is needed is a new beginning! Not only for the good of the history of the origin of chess!

For the time being we hope for more archaeological data of the items seen and preliminary classified as candidates

from the records in Lucknow, Kannauj, Allahabad, Varanasi and Delhi.

#### Two important remarks

1) Of course, *Caturaṅga* -Pieces may have been not made figurative and from terracotta only - but already very early from other materials like ivory, bone, wood etc. as well; even of precious stone.

2) Already prior to Bāṇa/Harṣa (around AD 630) the Maukhari King Śarvavarman sent a set of *non-figurative* chessmen ('made of ruby and emerald') to his Sassanian contemporary Xosrow I Anushirwan within the period of AD 560/565 (*terminus ante quem*) to 579 (*terminus post quem*) (Syed 2001a; Abka'i Khavari 1998, 1999, 2001).

This justifies to assume that *Chess* very soon after its invention (around AD 450) was also played – in parallel to *figurative* pieces – with traditional Indian gaming-pieces, 'tailor-made' to differ sufficiently for the identification of their functions and positions on the 'board' and in the game!

#### Epilogue

It has been suggest to make the lost metropolis Kannauj a new archaeological site! Apart from the expectation that more *Caturaṅga*-material will be found there, earlier efforts (undertaken in 1955 and 1972-75) have already proven, what a historic treasure this place bears:

The re-vitalization of this project will definitely deliver many missing links, especially about the Maukhari Dynasty which suffered from being overlooked so far due to the dominance and present knowledge about the mighty Guptas and later the powerful King Harṣa. In spite of Syed's remarkable study about the Maukharis (who began to rule about close to 5th century till around AD 600<sup>11</sup>) much too little in terms of hard facts is known about the rulers of Kannauj as a great place of Indian history.

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The Master-Map of Fig. 2 and the comparative photo of an identical Chariot on Fig. 14b are by courtesy of Gerd Kreisel, Linden-Museum Stuttgart; the photographs on Fig. 15 b-c were kindly contributed by Rakesh Tewari,

Lucknow; for all other photographs the copyright remains with Manfred A.J. Eder and Leander A. Feiler, members of Foerderkreis Schach-Geschichtsforschung e.V., Kelkheim/Ts., Germany.

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#### Bibliographic References

- Abka'i Khavari, M. (1998) 'Schach im Iran – Einige Überlegungen zu den iranischen Schachepisoden' in *Arbeitspapiere zum Privatissimum 'Seidenstraße'*, 28-41. Kelkheim/Ts.
- Abka'i Khavari, M. (1999) 'Die Schachpräsentation der Inder beim Sassaniden-Herrscher Khosrow I Anushirwan fand wahrscheinlich mit unfigürlichen Spielsteinen statt' in *Arbeitspapiere zum Privatissimum 'Indien'*, 66-69. Kelkheim/Ts.
- Abka'i Khavari, M. (2001) 'Schach im Iran', *Iranica Antiqua* XXXVI: 329-59.
- Agnihotri, G.K. (1975), 'A short History of Puratatva Sangrahalaya Kannauj'. Kannauj (see fn. 10).
- Agrawala, V.S. (1947-48) 'Terracotta Figurines of Ahichchhatra, District Bareilly, U.P.', *Ancient India, Bulletin of the Archaeological Survey of India*, 4, Double Number: July 1947 – January 1948: 104-179.
- Altekar, A.S. (1959) *Report on Kumrahar Excavations 1951-1955*. Patna.
- Cowell, E.B. & Thomas, F.W., transl. (1961) *The Harsacarita of Bana*. Delhi (first ed. 1897).
- Eder, M.A.J. (2000) 'Zum gegenwärtigen Forschungsstand über die ältesten Schachfiguren /The Present State of Research regarding the Oldest Chessmen' in *Arbeitspapiere/Working Papers 'Chess Originated in India'*, illustrations on colour-plates p. 19 (nos 3+4) and p. 41, Kelkheim/Ts.
- Eder, M.A.J. (2003) 'Bagdad – Bergkristall – Benediktiner. Zum Ex-oriente des Schachspiels' in *Begleitschrift mit Katalog Schach zur 'Ex-oriente'-Ausstellung in Aachen 2003*, 12-13 and 55-56. Kelkheim/Ts.-Aachen.
- Finkel I.L. (2006) 'Preface' in R. Vasantha Maharaja's *Games and Puzzles*, 6-7. Kelkheim/Ts.
- Kala, S.C. (1950) *Terracotta Figurines from Kausambi*, 49. Allahabad.
- Kane, P.V. (1986) *Harṣacarita*. Delhi (first ed. 1918).

<sup>11</sup> see fn. 10: Agnihotri 1975: 142.



- Kreisel, G. (1989) 'Sundari die Schöne – Terrakottakunst aus Indien' in G. Kreisel (ed.) *Exhibition-Catalogue, Bildheft der Südasien-Abteilung Linden-Museum Stuttgart, Staatliches Museum für Völkerkunde*, 13 & 37. Stuttgart.
- Kuz'mina, E.E. (1977) *Kon' v religii i iskusstve sakov i skifov / Skify i sarmaty*. Kiev.
- Lal, B.B. (1954-55) 'Excavation at Hastinapura and other explorations in the Upper Ganga and Sutlej Basins 1950-52' in *Ancient India, Bulletin of the Archaeological Survey of India*, 10-11: 5-151.
- Lobo, W. (1986) 'Erzählende Reliefs vom Angkor Vat', *Staatliche Museen Preußischer Kulturbesitz*, 16. Berlin.
- Mambetullayev, M. (2000) 'Terracotta from Khorazm', quoting E.E. Kuz'mina, *San'at Journal of the Academy of Arts of Uzbekistan* 4/2000: 4-6.
- Matz, F. (1952) 'Der Gott auf dem Elefantenwagen', *Abhandlungen der Akademie der Wissenschaften und Literatur Mainz, Geistes- und sozialwissenschaftliche Klasse* 10, 750. Mainz.
- Nigam, J.S. (1981) 'Some Post-Gupta Terracottas from Kanauj', *Journal of the Asiatic Society of Bombay, Dr. P. Kane Birth Centenary Volume*, 52-53/1977-78 (New Series): 214-18.
- Prakash, P. (1985) *Terracotta Animal Figurines in the Ganga-Yamuna Valley (600 BC-600 AD)*. Delhi.
- Rajendran, C. (2008) *A new look into the Caturaṅga Passages in Harṣacarita* (forthcoming by FSG Kelkheim/Ts.).
- Sinha, B.P. & Narain, L.A. (1970) *Pāṭaliputra Excavation 1955-56*. Patna.
- Syed, R. (1999) 'Terrakotta-Figuren aus Kanauj und Ahicchatra: Schachfiguren? – Early Terracotta-Figures from Kanauj: Chessmen?' in *Arbeitspapiere zum Privatissimum 'Indien'*, 70-76. Kelkheim/Ts.
- Syed, R. (2000) 'Early Terracotta-Figures from Kanauj: Chessmen?' in *Arbeitspapiere/Working-Papers 'Chess Originated in India'*, 13-17. Kelkheim/Ts.
- Syed, R. (2001a) *Kanauj, die Maukharis und das Caturaṅga: Der Ursprung des Schachspiels und sein Weg von Indien nach Persien*. Kelkheim/Ts.
- Syed, R. (2001b) 'Early Terracotta-Figures from Kanauj: Chessmen?', *Asiatische Studien/Études Asiatiques, Zeitschrift der Schweizerischen Asiengesellschaft*, LV.2.2001: 381-414.
- Syed, R. (2005) 'Astapadanam Caturaṅgakalpana – Banas Erwähnung des Schachspiels im Harsacarita', *Asiatische Studien / Études Asiatiques, Zeitschrift der Schweizerischen Asiengesellschaft*, LIX.2.2005: 581-91.
- Syed, R. (2007) 'Early Terracotta-Figures from Kanauj: Chessmen?' in *SAA 1999*, 363-74. Leiden.
- van Lohuizen-de Leeuw, J.E. (1984) 'A unique piece of ivory-carving – the oldest known chessman' in *SAA 1981*, 245-49. Cambridge.
- van Lohuizen-de Leeuw, J.E. (1987) 'What was the Purpose of the Terracotta Animal Figurines Discovered at Kondapur?' in M.S. Nagaraja Rao (ed.) *Kusumāñjali: New Interpretations of Indian Art and Culture (Sh. C. Sivaramamurti Commemoration Volume)*, II, 369-73. Delhi.

**The Origin of Chess (Caturanga) in India**  
according to  
Dr. (Mrs.) Renate Syed, Munich, 1999/2000

**The Principal Pattern in a Time-Frame**

<i>Suggested Period</i>	<i>Category</i>	<i>Characteristics</i>	<i>Description (Definition)</i>
B.C	Caturanga 0	Institutional	The traditional Indian Army
A.D.	Caturanga 1	Field-Exercises Army	The Didactic Model of and in Indian Army Schools
Pre-Gupta & Gupta	Caturanga 2	Sand-pit Exercises Terracotta-Warriors	Strategic Movements within a determined Territory without formulated Rules
Late Gupta Maukhari	Caturanga 3	Gaming-Planogramme Terracotta-Warriors and Conventional Gaming-Pieces	Transfer onto and unation with the (existing!) Ashtapada Board (8x8) and definition (invention) of Rules to make it a Game, including the key-element not to kill the king!

March 31, 2001  
(c) FSG-Chart/M. Eder

Fig. 1 - The Origin of Caturanga in India (after R. Syed 2000).

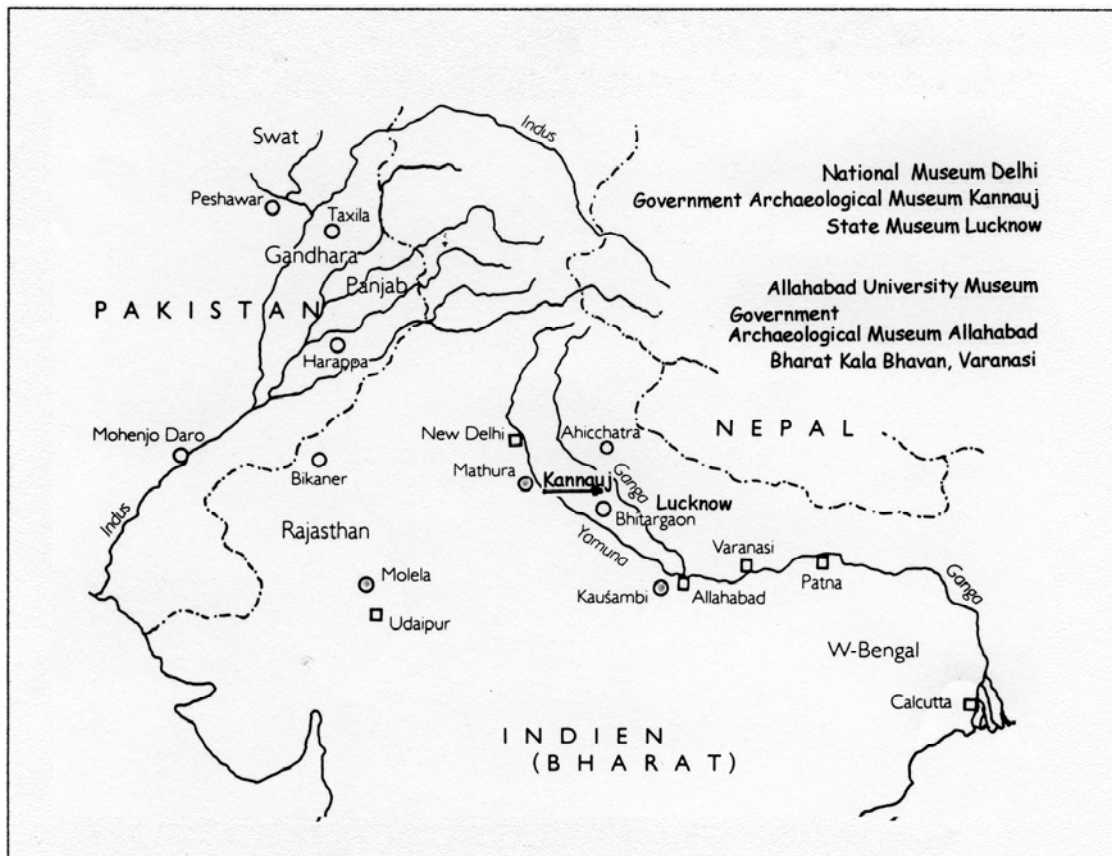


Fig. 2 - The Route of the FSG-Mission 'We must find the Gaming-Pieces' in Febr./March 2007 from Delhi to Varanasi (Master-Map courtesy of G. Kreisel, LM Stuttgart, 1989).



Fig. 3 - Terracottas from Kanauj and other cities of Northern India (after Syed 2000: 17).



Fig. 5 - Horse with Rider, representing a 'Knight'; top compares Chess- 'Knight' single find from Afrasiab, with Terracotta below (Photos M.A.J. Eder).

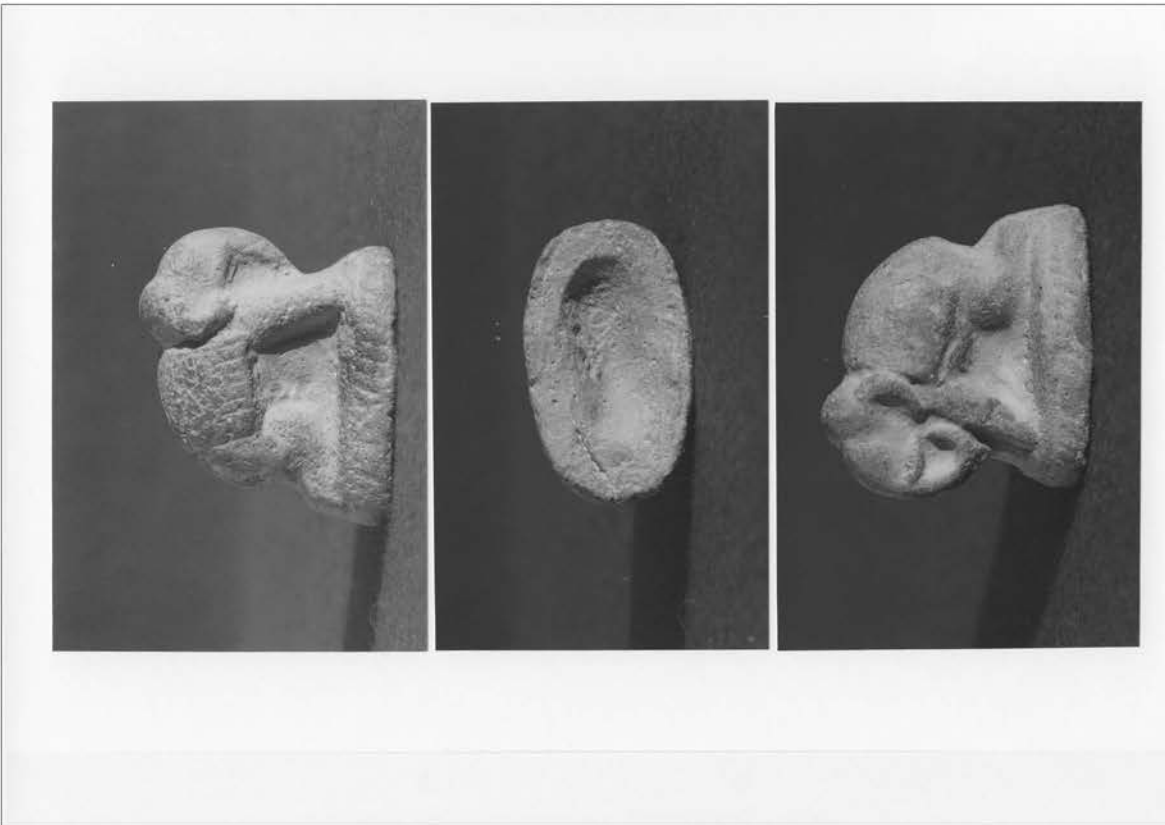


Fig. 4 - The Elephant, representing a 'Bishop' (Photos M.A.J. Eder).

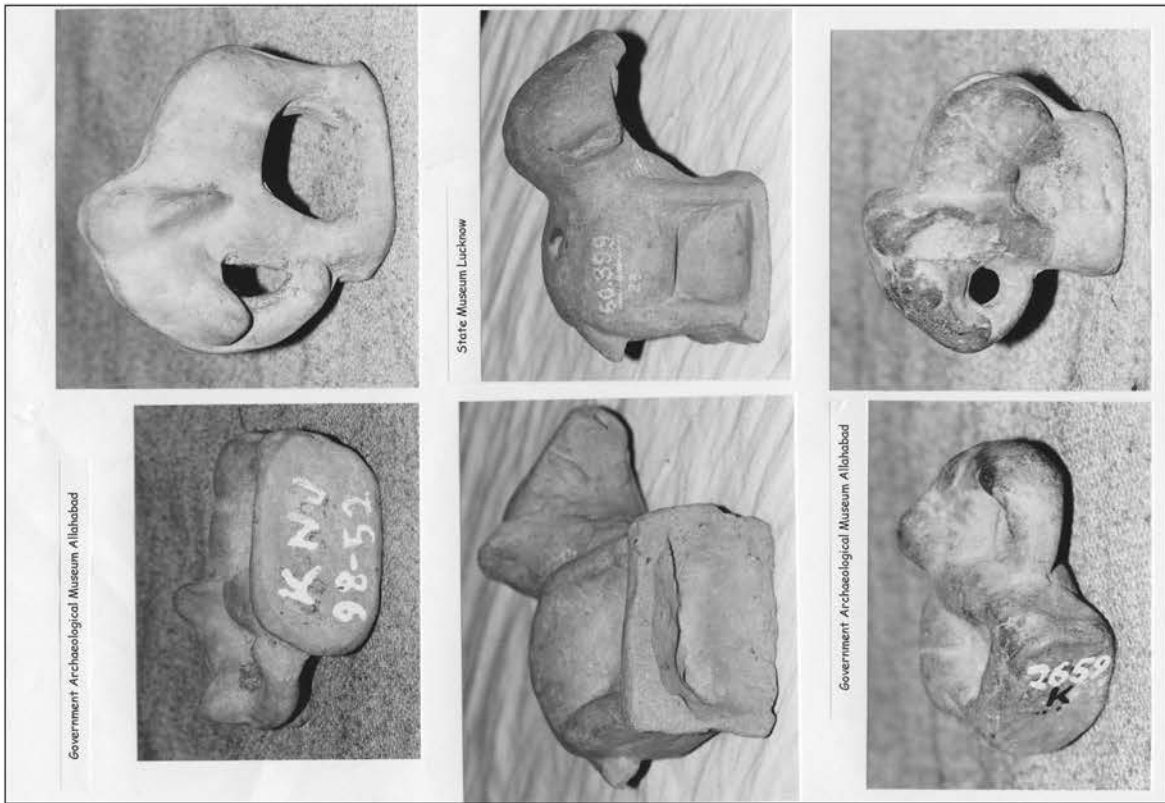


Fig. 7 - Elephants, examples on a base (Photos M.A.J. Eder & L.A. Feiler).



Fig. 6 - Elephants, examples without a base, below with (broken) rider (Photos M.A.J. Eder & L.A. Feiler).

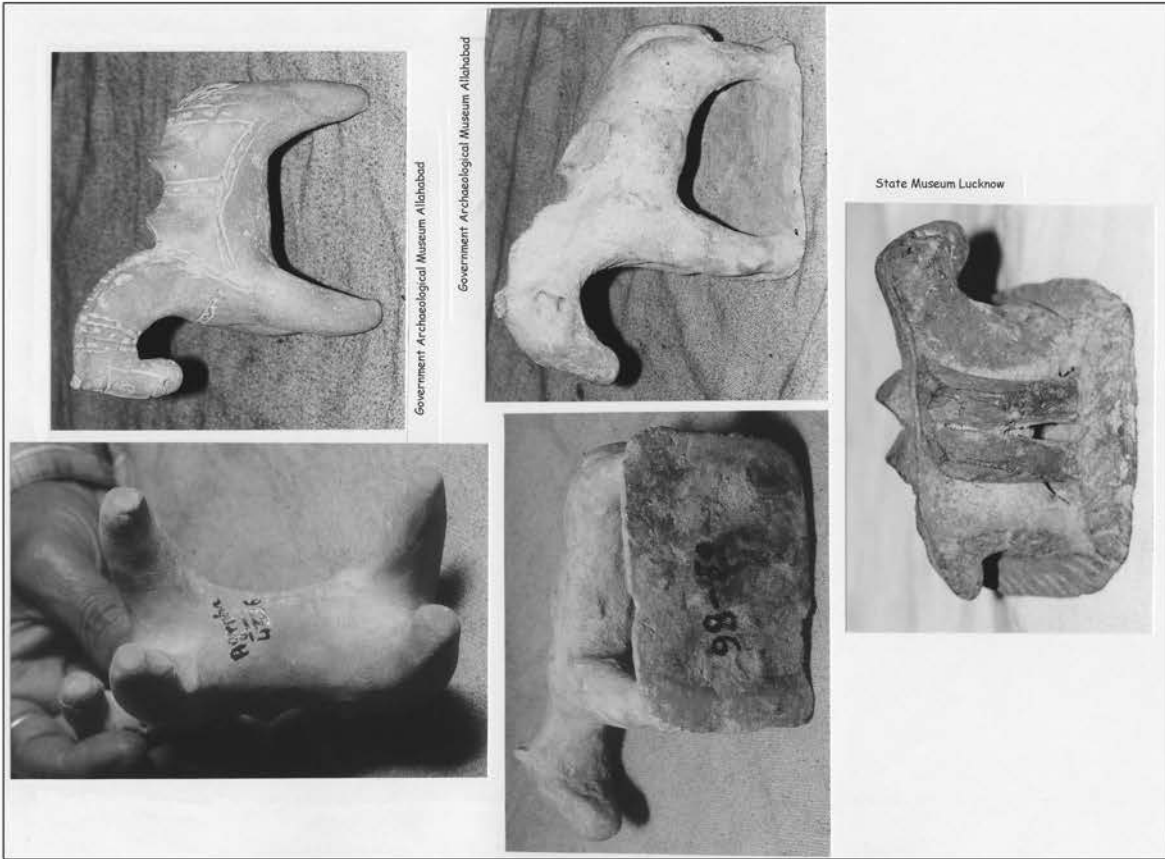


Fig. 9 - Horses, free standing (top) and two on a base (Photos M.A.J. Eder & L.A. Feiler).

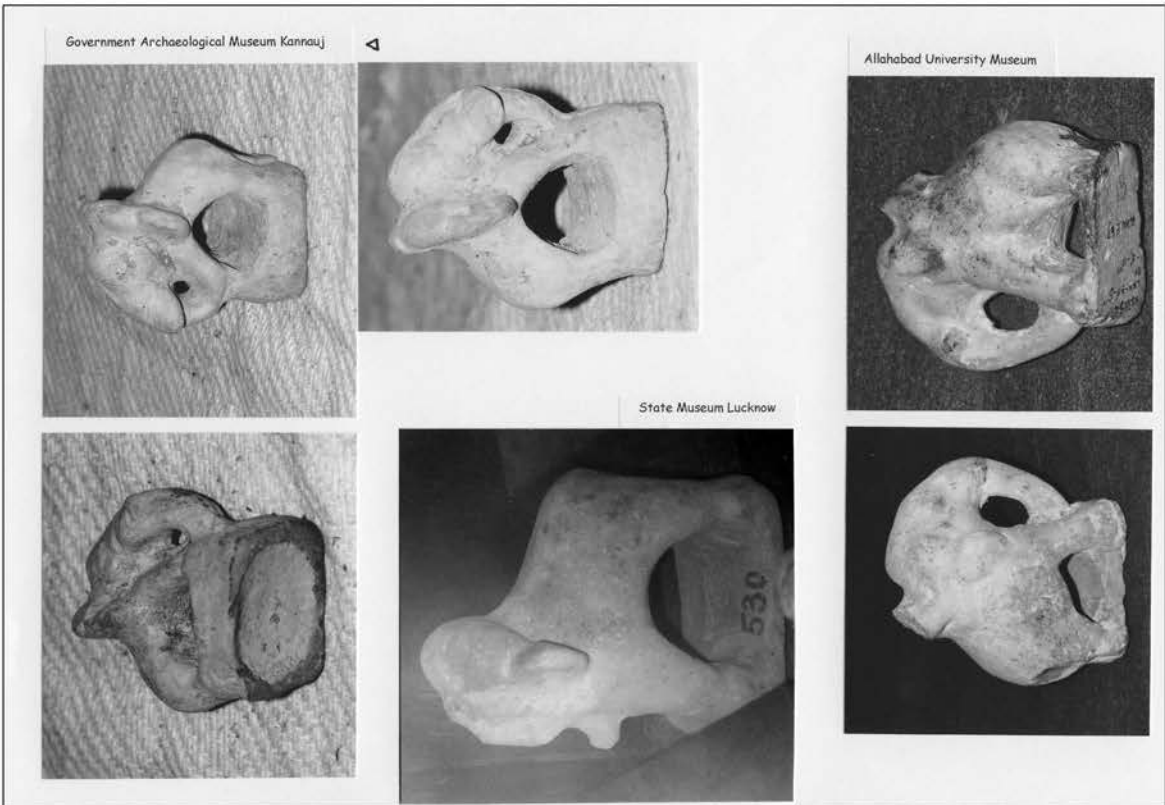


Fig. 8 - Elephants, examples on a base, below with (broken) rider (Photos M.A.J. Eder & L.A. Feiler).

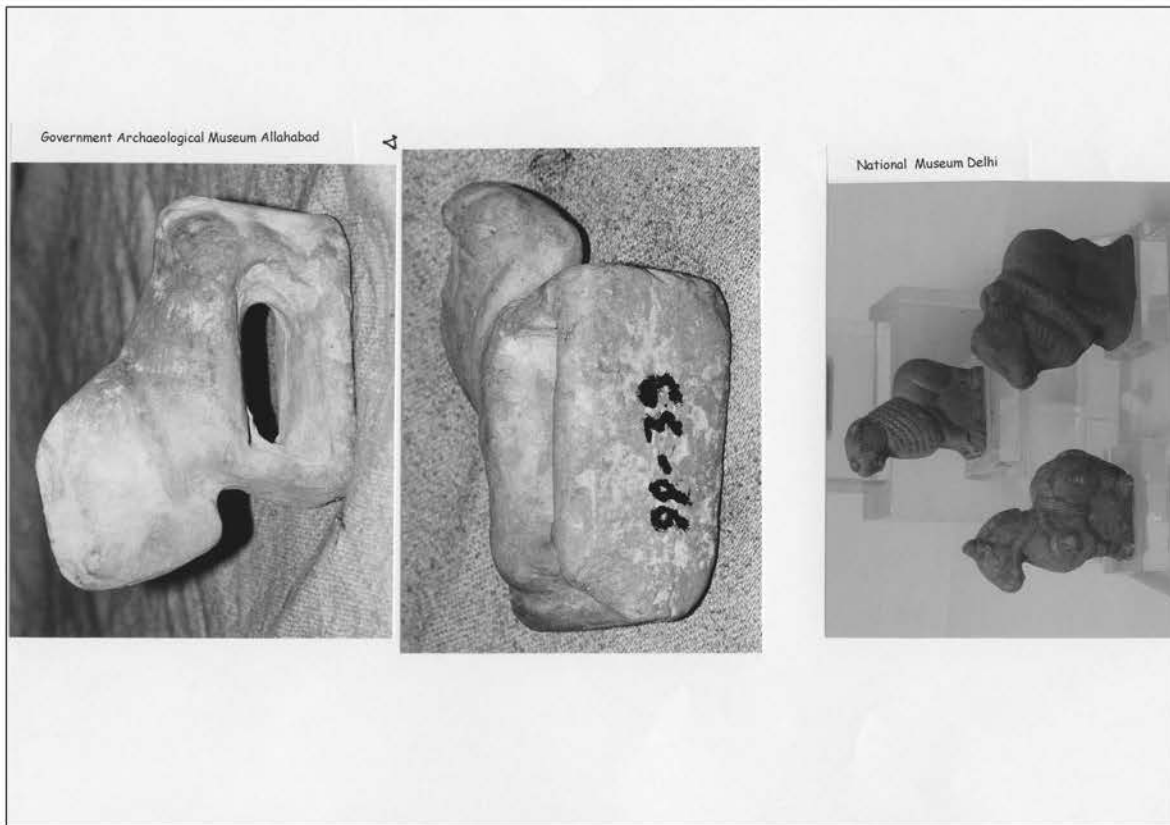


Fig. 11 - Horses, two with a base (Photos M.A.J. Eder & L.A. Feiler).

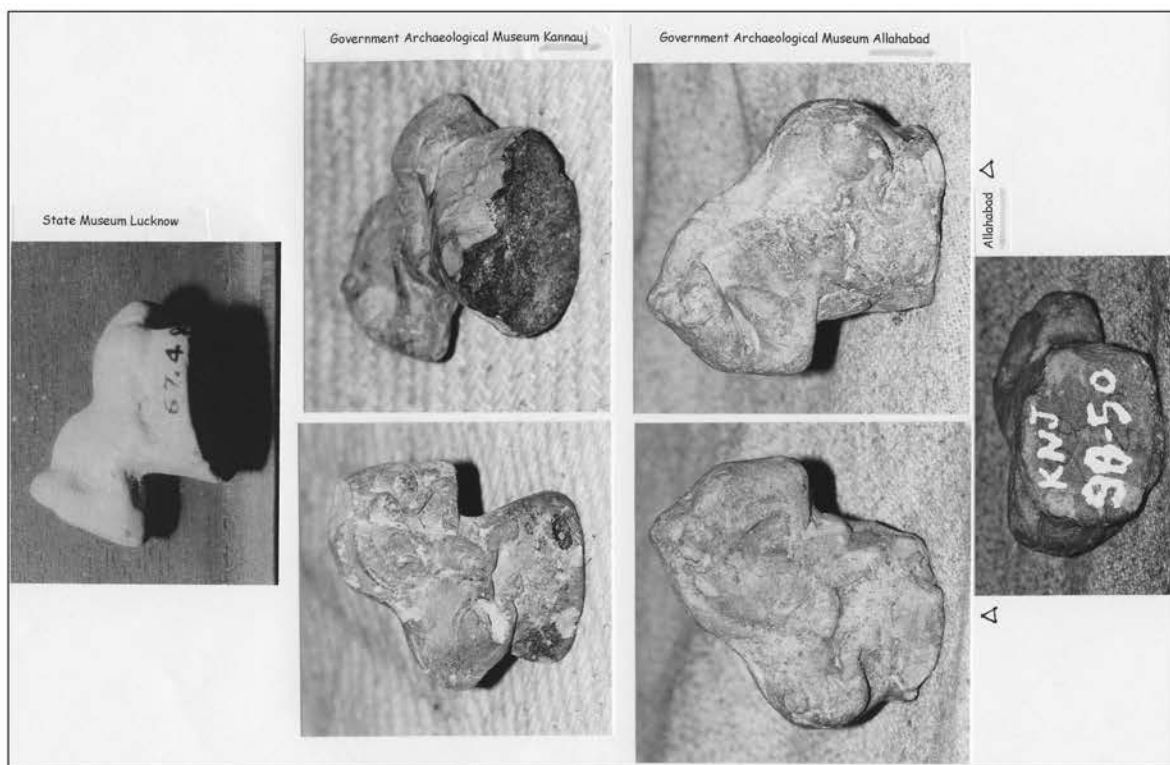


Fig. 10 - Horses, examples with a base (Photos M.A.J. Eder & L.A. Feiler).

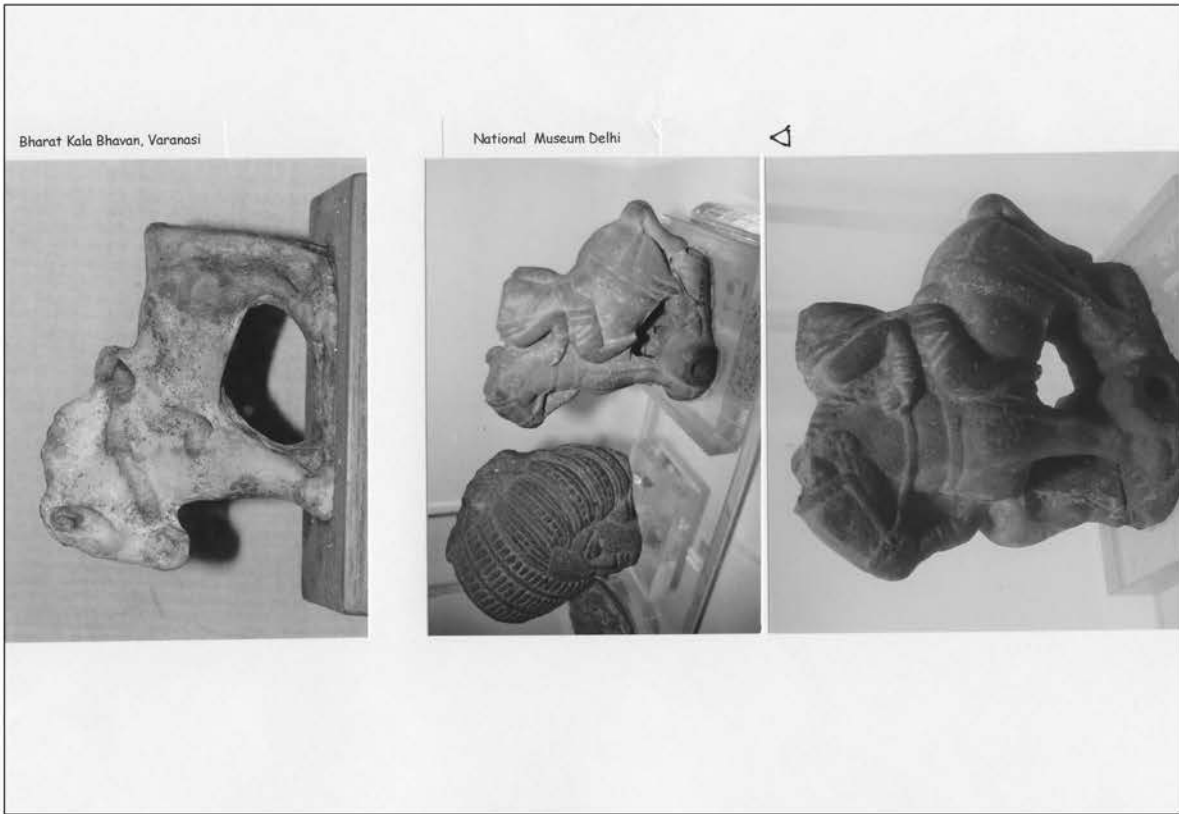


Fig. 13 - Horses with rider and on a base (Photos M.A.J. Eder & L.A. Feiler).

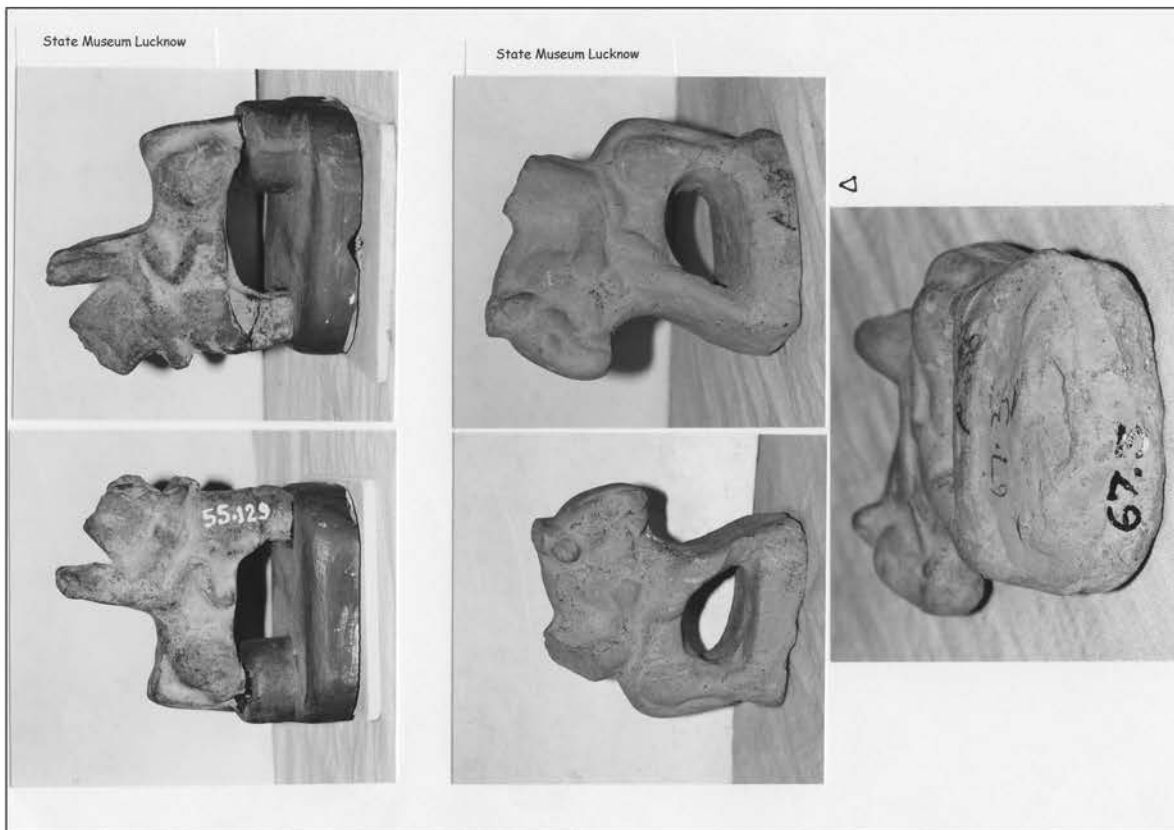


Fig. 12 - Horses with rider and on a base (Photos M.A.J. Eder & L.A. Feiler).



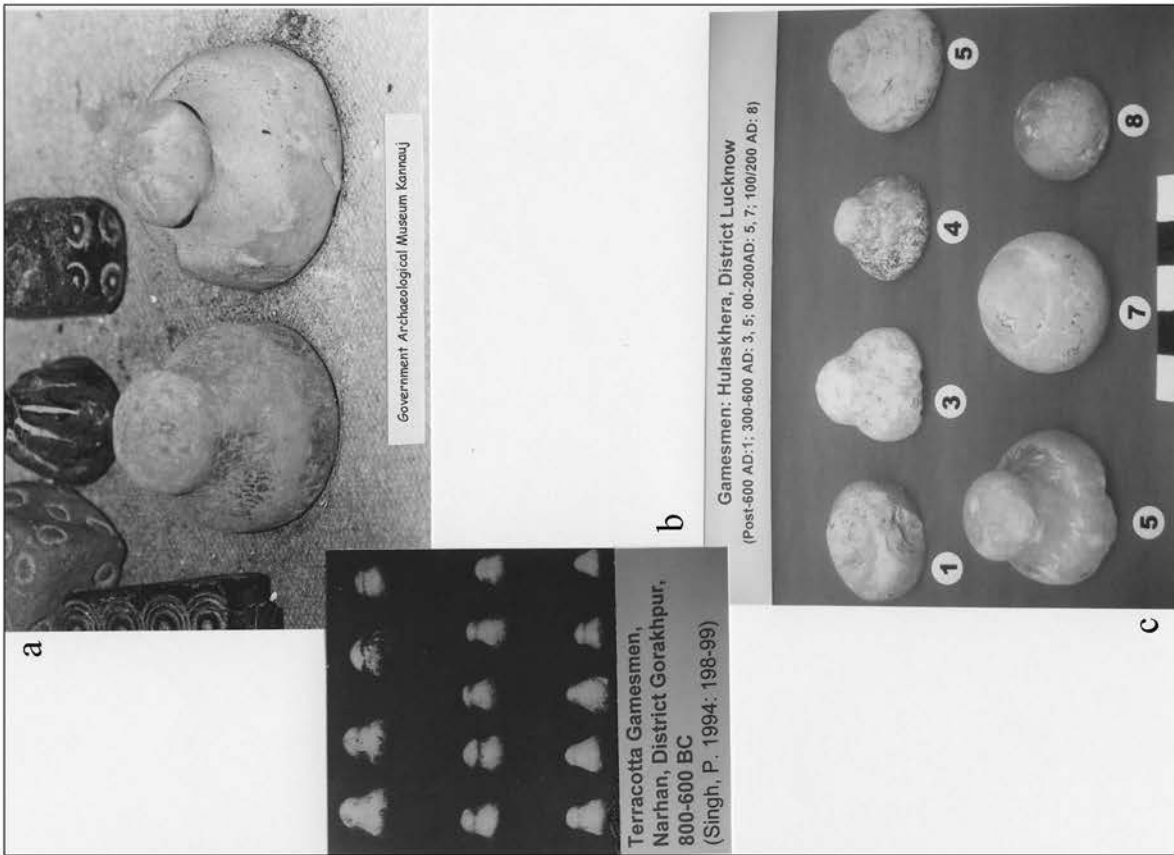


Fig. 15 - Gamesmen representing 'Pawns' (Photos a: M.A.J. Eder; b-c: courtesy of R. Tewari).

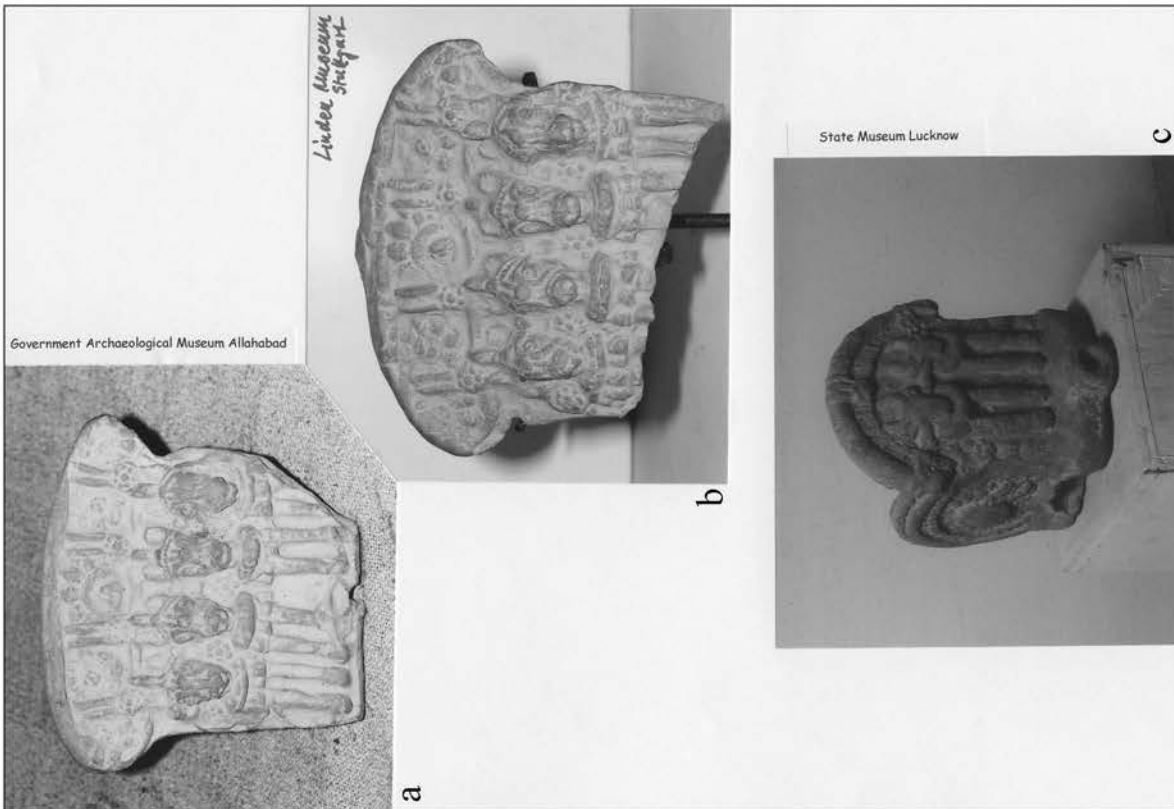


Fig. 14 - Chariots (Photos a & c: M.A.J. Eder & L.A. Feiler; b: courtesy of G. Kreisel).

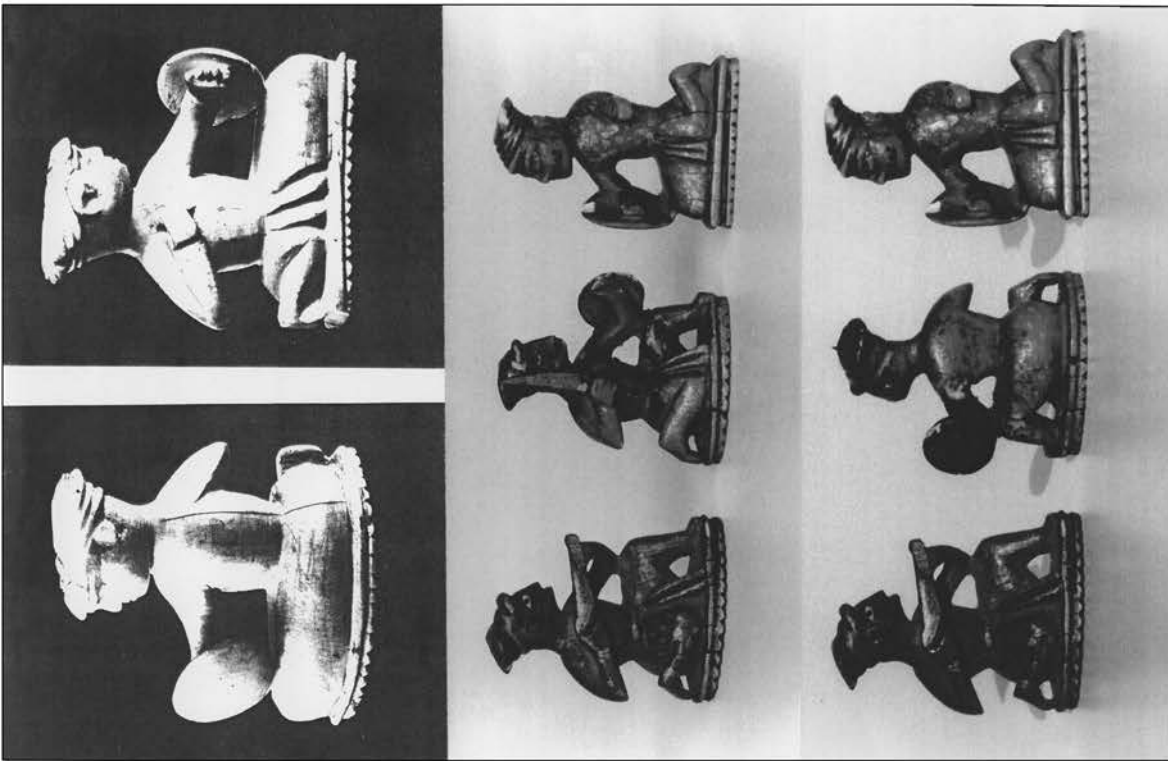


Fig. 17 - The Warrior of Museum für Indische Kunst (Fig. 16 c-d) compared to Pawns from a Rajasthan Chess-Set, 18th century AD, 4.0cm high (private collection).

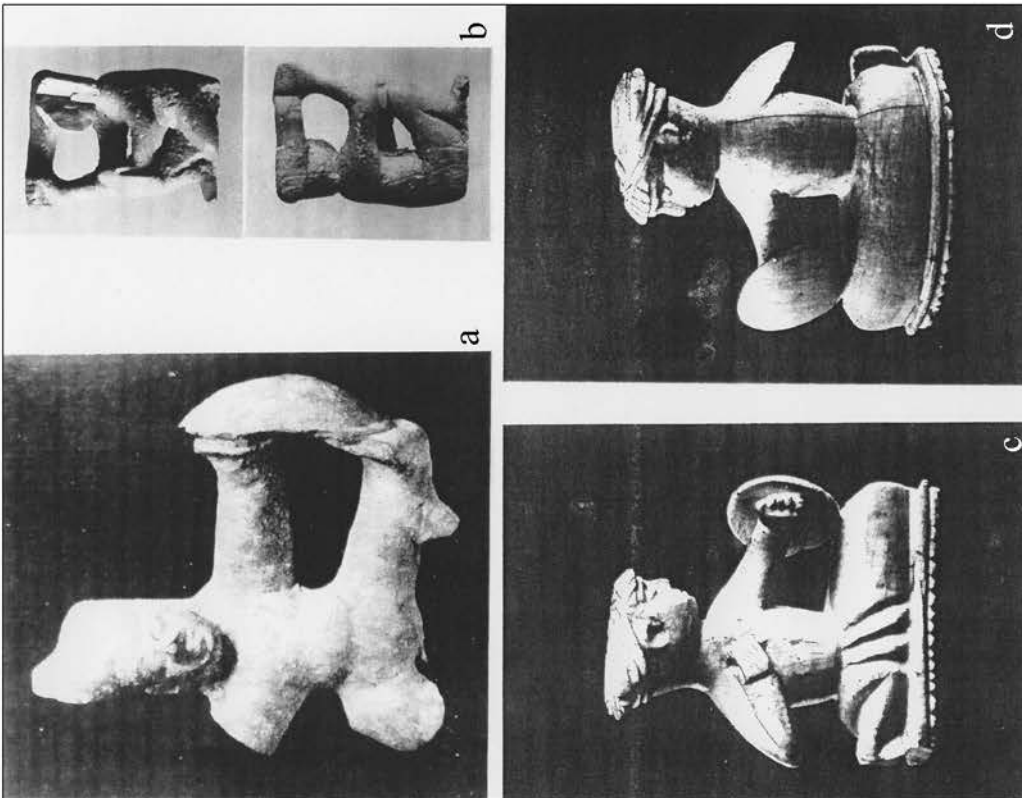


Fig. 16 - a: Warrior from Kanauj (after Nigam 1981: 216 and pl. VIII), Post-Gupta Terracotta, ca 12cm.

b: Warrior with sword and shield, ivory, excavated in Ktesiphon, Iraq, 6-7th century AD, 3 cm high (courtesy Museum für Islamische Kunst, Berlin).

c-d: Warrior with sword and shield, 12-14th century AD, 4.5cm high (courtesy Museum für Indische Kunst, Berlin).