

STUDIA ORIENTALIA  
EDITED BY THE FINNISH ORIENTAL SOCIETY  
65

---

INDIA IN EARLY GREEK  
LITERATURE

by  
KLAUS KARTTUNEN



HELSINKI 1989

**Klaus Karttunen**

India in Early Greek Literature.

Studia Orientalia, Vol. 65.

Copyright © 1989 by the Finnish Oriental Society,  
Societas Orientalis Fennica,  
Snellmaninkatu 9-11, SF-00170 Helsinki, Finland

Publication Secretary: Harry Halén

Maps: Copyright © Virpi Hämeen-Anttila & Klaus Karttunen

Cover design drawn by Mrs. Virpi Hämeen-Anttila, B.A.,  
from Henrik Comell & Sigurd Wallin, Uppsvenska målarskolor  
på 1400-talet. Stockholm 1933, pl. 23 Vaksala church.

ISSN 0039-3282  
ISBN 951-9380-10-8  
PunaMusta  
Helsinki 1989

*To my family*

## ABSTRACT

### INDIA IN EARLY GREEK LITERATURE

KLAUS JUHANI KARTTUNEN  
UNIVERSITY OF HELSINKI (SF)

In the early phase of Greek awareness of India (from the 6th to 4th centuries B.C.) the amount of reliable knowledge was scanty and mostly obtained through intermediaries. For Ionian ethnographers and other early authors India was a country of fabulous peoples and marvels of nature situated on the very edge of the inhabited world. When compared with the India known from more or less contemporary Indian sources it is not easily recognized as the same country. The fact is that it is not.

It should be obvious that the bulk of the Greek descriptions is probably connected with the Northwest, the country now comprising Pakistan and parts of Afghanistan and northwestern India. But with the exception of the histories of Alexander's campaign this viewpoint is rarely emphasized. Still it proves to be useful. A comparison of the accounts written by Herodotus, Ctesias, the historians of Alexander and Megasthenes with such material which is found in ancient Indian sources to be connected with the Northwest turns out to be profitable and shows many common points.

It is important to keep in mind that the country here called simply the Northwest was situated on the frontier of Iranian and Indo-Aryan, but it also formed a separate sphere of culture comprising several different ethnic elements and different traditions. In other periods, like the third millennium B.C. and the early first millennium A.D., this has been eagerly studied, but it is also true in the middle of the first millennium B.C.

There are no direct literary sources belonging to the Northwest of this period. Therefore our knowledge must necessarily be collected from diverse sources. Archaeological finds and inscriptions offer primary material from the country itself. Something may be culled from contemporary Iranian, Greek and Indian sources. Further material is found from later literary sources, among them also Chinese and Central Asian, and even from modern ethnographic literature.

The present study concentrates on contemporary literary sources, but without neglecting the other sources. Some emphasis is also laid on questions of chronology and on relations between the different sources. The Greek sources are discussed both as representatives of a Western literary genre, early ethnography, and as possible sources for Northwest India. A comparison with Indian sources and other evidence is then attempted in order to show the extent to which they can be used as such sources.

## PREFACE

This study has grown during a long period in several different phases. When I first became interested in Graeco-Indian relations, I began to study the remains of the *Indica* of Ctesias. For a while I thought I would write a thesis on Ctesias, and thus for a long time collected material in order to explain the *Indica* through Indian material. Yet it turned out to be unsatisfactory to simply compare the Greek accounts and the Indian material. This has often been done since the early 19th century, and generally with unsatisfactory results. It proved necessary to deal with more than one author only. Attention must be paid to the Greek material of the period in its entirety, and many general questions must be considered and discussed. The use of Indian material also needed a stricter method than was commonly used.

Then I prepared a short paper about fabulous peoples in classical sources on India for the VI World Sanskrit Conference held in Philadelphia in October 16–21 1984. Afterwards, when I was preparing this paper for publication, it somehow took its own shape and became a draft in sixty pages for the present thesis. It was already wholly different from the paper, which was never published as such. Now it is finished as far as a work like this can ever be finished.

There are many people to whom I would like to express my deep feeling of gratitude. Firstly my teachers, Prof. em. Penti Aalto and Prof. Asko Parpola in Indology, and Prof. em. Henrik Zilliacus, Prof. em. Holger Thesleff and Prof. Maarit Kaimio in Greek philology. They have all contributed in one way or another to the evolution of this thesis. Its very beginning was a short paper on Ctesias submitted in a seminar held by Professor Zilliacus in 1974 just before his retirement. My M.A. thesis on Ctesias and the *Kuvo-κέφαλοι* (Karttunen 1977) was submitted to Professors Aalto and Kaimio, and afterwards I had an occasion to expound my ideas about Ctesias' *Indica* in a seminar under Professors Aalto and Parpola. The original draft for this book was read by Professors Thesleff, Kaimio and Parpola, and the two last-mentioned have been kind enough to read a more final version as well. Each time I have benefited from their valuable advice, which has naturally not been enough to prevent me from making some errors of my own.

Special thanks are due to my two friends Martti Leivo (Lic. Phil.) and Bertil Tikkanen (Ph.D.) for their encouragement and for many inspiring conversations we have had about my thesis and related problems; to Dr. Tikkanen also for initiating me into the secrets of the computer. The preliminary version was read and commented on, in addition to those mentioned above, by Mr. Leivo and Professors Saara Lilja (Helsinki), Franz Ferdinand Schwarz (Graz) and Romila Thapar (Delhi). The comments Dr. Harry Falk (Freiburg) has made on my published papers have often been valuable for the present thesis. Several colleagues in related fields have always been willing to give advice from the point of their own subject area. To my deep regret the enormous scholarship and wise judgment of Prof. Jussi Aro (1928–1983) was lost to us all so early. I would also like to mention Dr.

René Gothóni (Comparative Religion), Prof. Tapani Harviainen (Semitics), Mr. Jaakko Hämeen-Anttila (Semitics), Ms. Raija Mattila (Assyriology), Mr. Pertti Seppälä (Sinology) and my brother Krister Karttunen (Botanics).

Further I must thank Prof. U.P. Arora (Bareilly), Prof. A. Dihle (Heidelberg), Prof. P.H.L. Eggermont (Louvain), Dr. Hans Bakker (Utrecht), Dr. I. Puskás (Budapest), Prof. D. Schlingloff (München), Prof. F.F. Schwarz (Graz), Professors F. Tola and C. Dragonetti (Buenos Aires), Dr. Ja.V. Vasil'kov (Leningrad), Mrs. Rosalía Vochuk (Buenos Aires), Prof. F. Wilhelm (München), Dr. A. Zambrini (Firenze) and Prof. K. Zysk (Eastern Michigan University) for sending offprints of their studies. Without their generosity my list of sources would be short of several important items.

Mrs. Virpi Hämeen-Anttila, B.A., has with great care and skill drawn the maps according to my specifications.

Mr. Mark Shackleton, M.A., lecturer in English at the University of Helsinki, has kindly checked and patiently corrected my English.

During the work the Finnish Cultural Foundation has granted two yearly scholarships (1986-87). They were essential for the writing of this book, and I am very grateful for this assistance. I must also thank another foundation, Heikki ja Hilma Honkasen Säätiö, for a shorter scholarship (1989), which enabled me to finish the work. My sincere thanks are also due to the Finnish Oriental Society for accepting my work in its series *Studia Orientalia*.

Finally I would like to thank my wife Tuula for her patience and interest in my work, and my two sons Einar and Reino, who have been as forbearing as their tender age allows!

Klaus Karttunen

# CONTENTS

PREFACE	1
CONTENTS	3
I. INTRODUCTION	5
II. HISTORICAL PERSPECTIVES	11
1. <i>The Ships of Meluhha</i>	11
2. <i>King Solomon and the Gold of Ophir</i>	15
3. <i>Incense and Aromatics</i>	19
4. <i>Mesopotamia and the Re-establishment of the Northern Route</i>	22
5. <i>The Great Kings</i>	32
6. <i>The Opening up of the East: Bactrians and Carians</i>	39
7. <i>The Achaemenian Empire: Peoples and Wares</i>	48
8. <i>The coming of the Greeks</i>	55
9. <i>The Impact of Achaemenian Rule in India</i>	60
III. GREEK SOURCES	65
1. <i>Scylax of Caryanda</i>	65
2. <i>Hecataeus of Miletus</i>	69
3. <i>Herodotus of Halicarnassus</i>	73
4. <i>Ctesias of Cnidus</i>	80
5. <i>Incidental Notes</i>	85
6. <i>Companions of Alexander</i>	89
7. <i>Scientists on India</i>	94
8. <i>Megasthenes and Later Sources</i>	96
IV. SPURIOUS GREEK SOURCES	103
1. <i>Homer and India</i>	103
2. <i>Greek Philosophy and India</i>	108
V. THEORY AND INFORMATION IN GREEK ETHNOGRAPHY	121
1. <i>On τόποι</i>	122
2. <i>Fabulous Peoples in Greek Sources</i>	127
3. <i>India and Ethiopia – the Old Confusion</i>	134
4. <i>The Northern Paradise</i>	138
VI. INDIAN SOURCES	141
1. <i>Pāṇini and Patañjali</i>	142
2. <i>The Arthaśāstra</i>	146
3. <i>Epics</i>	147
4. <i>The Dharmasāstra</i>	150
5. <i>Buddhist Literature</i>	151
6. <i>Veda</i>	153

VII. NORTHWESTERN INDIA IN GREEK AND INDIAN SOURCES (1)	157
1. <i>The Idea of India</i>	157
2. <i>Falconry</i>	160
3. <i>Indian Dogs</i>	163
4. <i>Fat-tailed Sheep</i>	167
5. <i>Rhinoceros</i>	168
6. <i>Gold-Digging Ants</i>	171
7. <i>Gold-Guarding Griffins</i>	177
8. <i>Cynocephali</i>	180
9. <i>Silas/Sailodā</i>	186
10. <i>Σκώληξ</i>	190
VIII. NORTHWESTERN INDIA IN GREEK AND INDIAN SOURCES (2)	193
1. <i>Fabulous Peoples in Indian Sources</i>	193
2. <i>Cannibals</i>	197
3. <i>Pāṇḍava</i>	202
4. <i>Wine</i>	207
5. <i>Heracles and Dionysus</i>	210
6. <i>The Sun Cult</i>	219
7. <i>The Customs of Taxila</i>	223
8. <i>The Bad Habits of the Northerners</i>	225
IX. CONCLUSIONS	231
REFERENCES	237
INDEX LOCORUM CITATORUM	265
GENERAL INDEX	269
MAPS	

Addenda et corrigenda  
(Karttunen, STUDIA ORIENTALIA 65)

p. IV	Comell => Cornell
p. 2 line 7	Vochuk => Vofchuk
p. 6 note 8	Karttunen 1086a => Karttunen 1986a
p. 8 line 2 from below	evidence => evidence
p. 13 line 5 from below	Μακαρηνη => Μακαρηνή
p. 24 line 11 from below	horned => horned animal
p. 35 note 213	delete 'many'
p. 37 note 226 line 1	Αιθιόπες => Αιθιόπων
p. 46 note 309	άκτας => ἀκτὰς ἐπ' ἀεξιφύλλους
p. 55 line 10 from below	a hereditary operators => the hereditary operators
p. 60 line 5	Αśoka => Aśokan
p. 92 note 208	188 => 188ff.
p. 100 lines 6 & 10 from below	Deimachus => Daimachus
p. 103 line 5	out => our
p. 111 note 74	Tola & Dragonetti => Tola & Dragonetti 1986, 3-7 => 2-7
p. 128 note 43	Byzantine => Byzantine
p. 129 line 14	Deimachus => Daimachus
p. 132 note 70, last line	τούτος => τούτοις
p. 136 note 98 line 2	delete comma after 'that'
p. 139 line 2	search of => search for
p. 149 lines 2 and 11 from below	one => 10 000
p. 188 line 3 from below	in the north of => north of
p. 189 line 4 from below	southwest => southeast
p. 195 line 9	राक्षसास्या => rākṣasāsya
p. 196 note 15, line 6	सुवाह => मुनिः
p. 199 note 37, line 2	so => as
p. 204 line 6 from below	Fragments => He quotes fragments
p. 206 note 91 line 1	नारताम => 'nāratām
p. 210 note 117	were => that
p. 213 line 5	πολθχρύσους => πολυχρύσους
p. 213 note 139 line 2	River => river
p. 217 line 2	μέλανος => μέλανος.
p. 222 note 204 line 2	delete ϕ
p. 222 note 205 line 5	perignem => per ignem
p. 222 note 208	σθνοικεῖν => συνοικεῖν
p. 223 note 211 line 6	other => other
p. 233 line 16	1988 316f. => 1988, 316f.
p. 234 note 15	BAKKER <i>forthcoming</i> . "Some methodological considerations with respect to the critical edition of Puranic literature", has now appeared in <i>ZDMG</i> Supplement 7, 1989, 329-341.
p. 245	
p. 265 column 1 line 15 from below	95 => 81
p. 265 column 1 line 4 from below	52 => 53

In the *Index locorum* in some references page numbers must be added by one.

## VII. NORTHWESTERN INDIA IN GREEK AND INDIAN SOURCES (1)

### 1. *The Idea of India*

In this chapter I shall attempt to combine the Greek and the Indian evidence. It was pointed out in chapter I. that there is a general difficulty in such comparisons. The earliest Greek descriptions of India contain very little such information which is familiar to us from Sanskrit sources, and this is simply because they were not describing the same country and culture. As we saw in chapter II.5. the very name *India* is derived from the Indus river (*OI Sindhu*) and its original meaning was the Indian satrapy conquered by Darius, perhaps containing only the middle and lower Indus country. But very soon, perhaps beginning with Hecataeus or Herodotus,<sup>1</sup> it came to include the other southeastern satrapies, too, and even the lands beyond as far as they were known. India was the eastern end of the *οἰκουμένη*, which soon vanished into the unknown. Herodotus' India ended at the Thar desert; nothing shows that he had any idea of the India (as we now know it) on the other side of the desert, and probably Ctesias was not much wiser. Only in the southeast might they have had some knowledge of further regions, but even here we cannot easily extend the Herodotean account very far, and it is not at all so clear that the *Mount Sardo* of Ctesias really is the same as the *Sardonyx Mountains* of Ptolemy.<sup>2</sup> When Alexander conquered the Indus country, all historians reported that he had conquered *India*. Alexander's intelligence gained some information of the country further in the east,<sup>3</sup> but apparently it was considered to be a mere appendage of "proper" India. Only with Megasthenes and the Hellenistic sea trade did the conception of *India* acquire more or less the same meaning as it had at least until 1947.

On the other hand, it is possible that the early Greek idea of India had a much longer extension in the north, as many tales coming through the northern trade route to the Indus were connected with India.<sup>4</sup> But the countries north of India, their extension and their

<sup>1</sup> The use of the terms *India* ('*Ἰνδία*', not '*Ἰνδία*') and *Indians* ('*Ἰνδοί*') in Herodotus is analysed by Reese (1914, 64) and Vofchuk (1982b, 86f.); see also the more general account in Wecker 1916, 1268.

<sup>2</sup> See chapter III.3.

<sup>3</sup> Tarn (1923, again 1950, 275ff.) tried to deny that Alexander had heard of the Ganges and Doab, but was competently opposed by Meyer (1927). See also Eggermont 1971, 90f.

<sup>4</sup> E.g. the gold-digging ants and the river *Silas*. Both are discussed later in this chapter. Of course, I am not directly including Central Asia in India as was done by some early scholars (see e.g. Weyrauch 1814, 386, and Malte-Brun 1819, *passim*). See also Lindegger 1982.

distance were clearly unknown to our early Greek authors.

Even the western boundary of India contains problems. It seems to have changed several times according to the political changes, and for the early period there is no conclusive evidence. In later literature the Indus river is sometimes mentioned as India's western frontier,<sup>5</sup> but probably this was not the opinion of Herodotus and his predecessors. A much longer extension of India in the west is given by Pliny,<sup>6</sup> but his Northwestern India might be the territory ceded by Seleucus to Candragupta Maurya and then reconquered by Antiochus III.<sup>7</sup> The westernmost parts of it perhaps came to be considered as a part of India only after it had been under Mauryan government, and therefore had been under some Indian influence. The historians of Alexander give the impression that India begins where the dominion of the last Achaemenids ended, but even this cannot be true for the fifth century, when there certainly was an Indian satrapy. And we do not know where the western frontier of this satrapy was. As far as the ethnic and cultural unities are concerned, there never was a definite frontier between India and Iran. Indians lived west of the Indus, and Iranians always penetrated eastwards.<sup>8</sup> The whole northwestern country seems to have been a place of continuous movement, interaction and mutual influence.

Too often we more or less instinctively think of the later conception of India even in the early context. But the early India was not "India" at all in the sense it was later understood. In India the Aryan sphere of culture was known as *Āryāvarta*, the country of the Aryans corresponding more or less to what was later Hindustan.<sup>9</sup> But it only came later that it to some extent coincided<sup>10</sup> with the Western idea of India, and most of the India of the Greeks was definitely outside it. The first knowledge of the existence of this Aryan India came with the expedition of Alexander, and though the importance and extent of countries beyond Alexander's conquests was much underestimated, Onesicritus and Megasthenes had even heard of Ceylon.<sup>11</sup> Beginning with Eratosthenes, who made use of the new knowledge obtained by the historians of Alexander and early ambassadors, scientific geography included in its concept of India the entire subcontinent. Later even Southeast Asia was included and this greater India was divided into two parts, Ptolemy's 'Ινδική ἐντὸς Γάγγου and 'Ινδική ἐκτὸς Γάγγου.

This conception has continued ever since, in "Further India" and "Indo-nesia". But for a long time India proper remained the country conquered by Alexander. Until the late antiquity it was the accepted literary conception of India,<sup>12</sup> and its description was still sought from the historians of Alexander and from Megasthenes.<sup>13</sup> With Megasthenes it

<sup>5</sup> For India's boundaries in classical sources see Wecker 1916, 126ff.

<sup>6</sup> N. H. 6, 23ff. In some Buddhist sources Lamghan is the western boundary of India (Lévi 1915, 90).

<sup>7</sup> According to Eggermont (1966b, 62ff.) Pliny may have derived his account from a history of the expedition of Antiochus.

<sup>8</sup> The eastern policy of the early Achaemenids was a phase in this penetration, as were later the conquests of Sakas, Parthians and Kushans.

<sup>9</sup> A general discussion of the confines of *Āryāvarta* is found in Brucker 1980, 127ff.

<sup>10</sup> In the south it never coincided, as the southern boundary of *Āryāvarta* was the Vindhya.

<sup>11</sup> Schwarz 1976, *passim*.

<sup>12</sup> To some extent even in the Middle Ages, see Karttunen 1987.

included also the early Mauryan empire. If we accept the suggestion that the Mauryas were considered to be the successors of the Achaemenids or of Alexander in the east, the limited earlier and the later wider conception of India come in a way nearer to each other.

In early times India was only the Indus region with its confines. In the east its boundary more or less coincided with the Thar desert. And this desert where the lost river of Sarasvatī once flowed was exactly the western boundary of Āryāvarta as it is stated in the Dharmasūtras.<sup>14</sup> For Aryan Indians – at least those who cared about the orthodox rules – it was forbidden to travel in western countries. Many śrauta and dharma texts prescribe expiations for such a sin.<sup>15</sup> The Indus region and its peoples are often mentioned in this connection.<sup>16</sup>

In a way the position of the Indus country in respect to the Indian (Indo-Aryan) culture is problematic. Although it was not considered as a part of Āryāvarta,<sup>17</sup> it does not seem to have been wholly separated from its culture or devoid of Vedic religion. There were Brahmins in the Northwest too. A rebirth as a northwestern or northern – which often means the same in Indian sources – Brahman was chosen several times by

<sup>13</sup> Allan 1951, 860 and especially Dihle 1963, *passim*.

<sup>14</sup> *BaudhDh* 1, 1, 2, 9 *prāg ādarsāt pratyak kanakhalād* (v. 1. *kālakād vanād*) *dakṣinēna himavantam udak pāriyātram etad āryāvartam/ tasmin ya ācārah sa pramāṇam* – east of Ādarsā, i. e. of the region where the Sarasvatī disappears. The same boundaries are given e.g. in *VāsDh* 1, 8 and also in *Pat* on P 2, 4, 10 *kāh punar āryāvartah/ prāg ādarsāt pratyak kālakāvanād dakṣinēna himavantam uttareṇa pāriyātram/*. An even narrower conception was mentioned in *BaudhDh* 1, 1, 2, 10 *gaṅgāyamunayor antaram ity eke*, and still another, *yāvat kṛṣṇā* (scil. *mrgā*) *vidhāvanti* (ib. 1, 1, 2, 12; cf. *Manu* 2, 22f.). These and other accounts of sūtras are also given in Brucker 1980, 93ff. For a discussion of the boundaries of Āryāvarta see ib. 127ff., and Chaudhuri 1949, on Indian attitude towards foreigners (*mleccha*) in general, Thapar 1971, 411ff.

<sup>15</sup> *BaudhDh* 1, 1, 2, 14 *āraṭān kāraskarān punḍrān sauvirān vaṅgān kalingān prānūn iti ca gatvā punastomēna yajeta sarvapṛṣṭhayā vā* (both western and eastern regions are included). By offering a punastoma one gets back the right to participate in the Soma libations (*GautDh* 19, 7). Other sources (see Brucker 1980, 93f.) mention other expiations.

<sup>16</sup> A possible reference to this kind of travel prohibition could perhaps be seen in Ctesias' *Persica* (F 1b, 10, from Diodorus). In the account of the Indian expedition of Semiramis it is told how the Indian king Staphrobates was prevented by Indian soothsayers from crossing the Indus. A long time ago Wilford (1801, 531) proposed an Indian origin for the king deriving his name from OI *sthāvarapati*, but this is unlikely. What Ctesias was telling was in fact a Near Eastern or Persian tale, and the conquests of Semiramis (especially his Indian expedition) have little historical background (cf. Borszák 1976). The passage on the Indian expedition represents the general idea of India in the West, but contains no details. Wilford's etymology is unlikely, probably the name can be explained from Iranian. And the prohibition to cross the Indus may equally well be ascribed to military reasons without any general principle involved. When the oracle prohibiting the crossing is ascribed to Zeus, this is therefore no reason to try and identify Zeus with an Indian god (like Vofchuk 1982a, 62ff. with Indra). Zeus is Zeus and exhibits only the wholly non-Indian character of the account.

<sup>17</sup> This may have been one of the reasons for the often wondered silence of Indian sources about Alexander's campaign, as was noticed already by Lassen (1827, 58). In addition, there is the brevity of this episode in Indian history and the fact that we have very few authentic Indian sources from this period (see chapter VI.). Moreover, the few we still have are generally not interested in invasions. Also, it has often been suggested that the rise of the Mauryas soon after Alexander contributed to the oblivion of this episode, which was confined to the peripheral Northwest. See e.g. Narain 1965.

the Bodhisattva, according to Jātakas,<sup>18</sup> and the companions of Alexander met Brahmins in the Indus country. There are several reasons to suspect these Brahmins of unorthodoxy, at least in the eyes of their more orthodox colleagues of Āryāvarta.<sup>19</sup> But we know that at least one Northwesterner was accepted and even accepted as a great authority in as orthodox a field as Sanskrit grammar. Pāṇini was from the Northwest, born in Śalātura in Gandhāra, and we can hardly ascribe unorthodox customs to him. But even then the orthodox Brahmins must have been only a thin layer in a non-Vedic country. Even later<sup>20</sup> when the Indus country had for a long time been under the same rule as India proper (under the Mauryas, the Kushans and the Guptas) it was still looked upon with suspicion by orthodox Brahmins.<sup>21</sup> The main religion there never seems to have been Brahmanism, but for a long time it was Buddhism, and Islam came later.

## 2. Falconry

In a relatively well preserved chapter<sup>22</sup> Ctesias described a method of falconry used in India. Instead of falcons, he says that kites, eagles and ravens were used. There is little evidence of training kites or ravens, but eagles have been used up to present times (and perhaps still are) in near Central Asia,<sup>23</sup> and the method of training is described correctly. With the exception of some Mesopotamian tablets Ctesias' account of falconry is the first mention of the art in literature.

The art of hunting with falcons and hawks has old traditions in Mesopotamia and Iran. Mesopotamian tablets several times mention the use of the local form of peregrine (*Falco peregrinoides* Temminck, ssp. *babylonicus* Slater) for hawking.<sup>24</sup> The silence of Herodotus and Xenophon (in the *Cynegeticus*!) suggests that the art was no longer exercised in the Achaemenian period, when there is no evidence at all for it. Later it

<sup>18</sup> Northwestern in J. 73 and 87, northern in J. 80, 99, 117 and 149. In two cases (80 and 99) he was educated in Taxila.

<sup>19</sup> This will be discussed in chapter VIII.8.

<sup>20</sup> Pāṇini himself may only belong to the Mauryan period, see chapter VI.1.

<sup>21</sup> On the contempt for Northwesterners see also the account of Punjab religion in *Mbh* 8, 30 discussed in chapter VIII.5. In *KA* 3, 18, 8 insults to the Northwestern peoples are specifically mentioned (prājjūṇakagāndhārādīnām ca janapadopavādā vyākhyātāḥ). *Prājjūṇa* is variously explained as *cāṇḍālarāṣṭra*, Eastern Huns (*prāggāhūṇaka*) or Ferghana (see Kangle's note ad 1. and Scharfe 1968, 321f.).

<sup>22</sup> Ctesias F 45, 24 and 45g (from Aelianus), most recently discussed in Lindner 1973, 117f., Karttunen 1981 and Wilhelm 1987, 347f.

<sup>23</sup> Cf. Karttunen 1981, 106 and Le Coq 1914, *passim*.

<sup>24</sup> It is called in Akkadian *kasūsu* or *hasmar*, in Sumerian SŪR.DŪMUŠEN. See Salonen 1973, 184, 207 and 259 and Brentjes 1962, 639.

became very popular in Iran, but our evidence is centuries later than Ctesias.<sup>25</sup> In Europe it seems to be known only from the fifth century A.D., when it suddenly becomes very popular in Gallia.<sup>26</sup>

The origins of the art of falconry in Central Asia and further east lie in darkness. Nowadays, the art is known even in Japan, and in China it seems to have had a long history.<sup>27</sup> In Central Asia the sources are necessarily late, but show the art already existed and was popular in the region. A hawk in the banner of Attila, onomastic evidence from Kök Turkic inscriptions, Byzantian and Slavic hawking terms borrowed from Turkic, falconry scenes in Turkestan murals (beginning in the 8th century A.D.) and Siberian art, literary sources of the late first and early second millennium A.D.<sup>28</sup> – all show the popularity of the art there, and many scholars have suggested that Central Asia is its original home.<sup>29</sup>

In India there is very little evidence on falconry before the Islamic period, when it became quite common even in Hindu circles.<sup>30</sup> Yet there is some evidence showing that even earlier the art was not entirely unheard of. There are brief references where it is not always clear if falconry is meant or perhaps the hunting of wild falcons. Thus the supposed first mention in the *Rigveda* is uncertain,<sup>31</sup> and in spite of Durga's commentary *Nirukta* 4, 24 can perfectly well refer to the wild falcon.<sup>32</sup> But in the Pāṇinean tradition we find *śyainatīpāta* – which in itself could well refer to a hunting wild falcon<sup>33</sup> – confirmed at least in the 6th century *Kāśikāvṛtti* to refer to falconry.<sup>34</sup> A similar instance

<sup>25</sup> Seneca, *Phaedra* 816ff. on Parthian falconry, then in Sassanian art.

<sup>26</sup> Keller 1913, 25. There are many books on hunting in classical literature (like those by Xenophon and Grattius), but they do not mention falconry at all. On the early history of Western falconry see Lindner 1973, 111ff.

<sup>27</sup> According to Laufer (1909, 233f.), the oldest representation of falconry in China is found in a bas-relief of the Han period.

<sup>28</sup> See Le Coq 1914, 2f., for Siberian art Laufer 1909, 232, for literary sources also Esin 1976, 197ff.

<sup>29</sup> E.g. Laufer 1909, 231 and Vögele 1931, 15.

<sup>30</sup> There is a chapter on falconry in Somadeva's *Mānasollāsa* (1129 A.D.; see Wilhelm 1987, 358f.) and in the 15th century King Rudradeva of Kumaun wrote a Sanskrit handbook on the art entitled *Śyainikāśastra* (see also Wilhelm 1987, 349ff.). Terms of Persian and Turkish origin used by Rudradeva show that his art was probably originally learned from Muslims. For Muslim falconers of modern (19th century) Northwest India see Burton 1852.

<sup>31</sup> RV 4, 26 and 27. Schneider 1971, 36f. takes it as certain with weak arguments. Without any evidence he claims that falconry was known in Central Asia from what he calls "graue Vorzeit", and supposes the Vedic Aryans learned the art from there. But in fact there is no Central Asian evidence old enough to justify such an idea. The eagle motif of Bronze Age Bactria (Parpola 1988, 239 and fig. 25) can easily be explained otherwise and the falcon carrying soma is not so near a parallel for the hunting falcon to suggest that the legend could not be invented without the knowledge of falconry. See also Schmidt 1980, 16. Dave (1985, 204f.) tried again to find Vedic evidence for falconry, but could not find enough. The question remains open.

<sup>32</sup> This case is mentioned as uncertain by Schneider (1971, 37).

<sup>33</sup> The term as such is not found in the *Asṭādhyāyī*, but sūtra 6, 3, 71 (*śyenatīsya pāte* शेनतीस्य पाते) indicates *śyainatīpāta*, which is mentioned in *Kāś* too.

<sup>34</sup> *Kāś* on P 6, 3, 71 *śyenapāto* 'syām kriḍāyām *śyainampātā*, on P 4, 2, 58 also gives *śyainampātā*. The related term *śyenapāta* was used for other arts, it was for instance one of the 11 ways to hold a lasso and one of the 32 ways of fencing in the Purāṇic Dhanurvedaśāstra (*Agni-Purāṇa*

is Manu's *pakṣinām posaka*, translated as a 'bird-fancier' by Bühler, but explained to be a "trainer of falcons etc. for hunting" in Medhātithi's commentary.<sup>35</sup> A little later in the same list there is also a *śyenajīvin*, "one who lives by falcons", and this time the reference seems certain. Bühler translates it as a falconer, Kullūka and Medhātithi (who connects it with the earlier passage) as one who buys and sells falcons.<sup>36</sup> Both terms are included in a list of persons not to be entertained at a śrāddha by an orthodox householder.<sup>37</sup>

There are some further, but still pre-Islamic passages showing a knowledge, if not the practice of the art in India. In *Amarakośa* *śyainarīpātā mrgaya* is mentioned as a method of hunting and is connected with *Pāṇini* 4, 2, 58.<sup>38</sup> In the *Rājatarāṅginī* a falconer is made town prefect by king *Kalaśa* (1063–89 A.D.).<sup>39</sup> *Hemādri* (late 13th century A.D.) mentions in the *Caturvargacintāmaṇi* the sale (and theft) of eagles and falcons.<sup>40</sup> *Kṣemendra* (middle of the 11th century A.D.) quotes from the poet *Dīpaka* a verse about a prince whose arm is torn by the grasp of falcon's claws.<sup>41</sup>

Thus it seems that although falconry was not popular in pre-Islamic days, its existence was at least known in India. The silence of the *Arthaśāstra* (despite a curious parallel use for hawks and other birds in 13, 4, 14) shows that it was not a royal sport.<sup>42</sup> The prohibition to entertain a falconer indicates that it was not impossible to meet a falconer in India. As the nearest country where we know falconry was practised was Iran, a good explanation would be that the art was known and in operation in Northwest India. *Pāṇini* makes it likely that it was already known in the early period, and *Pāṇini* was a Northwesterner himself.

It remains to discuss the birds mentioned by Ctesias. A great variety of different species of birds have been used in different countries where falconry is known. As for India, Rudradeva and Burton list several species of falcons, hawks, goshawks and hobbies, but no eagles or ravens.<sup>43</sup> But at least later the eagle (*Aquila fulva*) has been

and others, see Losch 1955, 212).

<sup>35</sup> Manu 3, 162 (152 in Jha's edition); Medhātithi ad l. *śyenādīnām ākhetārtham*.

<sup>36</sup> Manu 3, 164 (Jha 154); Kullūka ad l. *śyenair jīvati krayavikrayādīnā*; Medhātithi ad l. *śyenair jīvati krayavikrayādīnā prāguktah pakṣinām posakah pañjarādi samsthitānām dhārayitā*.

<sup>37</sup> Manu 3, 151–166.

<sup>38</sup> AK 2907 (3, 7), reference to P in 2906.

<sup>39</sup> *Rājat.* 7, 580 *sevāśiktaḥ syenapālām sa nāgarādhipam/ cakre vijayasimhākhyam hatāśeṣam alimlucam//*.

<sup>40</sup> Dave 1985, 205, note 1.

<sup>41</sup> *Aucityavicāracarca* p. 141: *syenānghrigrahadāritottarakaro ... nṛpasutah*.

<sup>42</sup> Wilhelm 1987, 349.

<sup>43</sup> *Śyainikāśāstra* 4, 20f. and Burton 1852, 13ff., see also Wilhelm 1987, 353ff. In an editor's note to the *Suśruta* edition, sūtrasth. 46, 74 (p. 190) *śaśāda/śaśaghāti/śaśaghātī* is identified as the golden eagle (*Aquila chrysaëtos*), but it seems much more likely that it is a kind of goshawk (so in Shastri's note to Rudradeva), more exactly a hawk eagle (Dave 1985, 210). The crested hawk eagle (*Spizaetus cirrhatus* Gmelin) eats i.a. hares (Ali 1977, 25) and is used for falconry in the Northwest, where it is later called *shahbaz* and often used to hunt hares (Burton 1852, 13 and 79). On the other hand, Dave (1985, 204f.) tries to show that the golden eagle was used in falconry in ancient India (identifying *śyena* as the golden eagle), but fails to give sufficient proof.

much used and appreciated in Central Asia,<sup>44</sup> where it is used to catch hares and foxes, exactly as in our Ctesias passage. According to Le Coq, its training follows closely the method described by Ctesias.<sup>45</sup> Kites are not commonly used in falconry, but as a great variety of different kinds of eagles, hawks, falcons and even owls and shrikes<sup>46</sup> has been used, it does not seem too surprising. It is also possible that Ctesias has somewhat misunderstood the information given to him.<sup>47</sup> As to ravens, Pliny refers to a case of ravens trained for a kind of falconry in Asia Minor,<sup>48</sup> and later it is found used in some parts of Asia.<sup>49</sup>

To conclude, we have from Ctesias a remarkably early description of falconry. As the India known to Ctesias was the Northwest and as it is quite possible that the art was already known in Central Asia, it seems likely that falconry belonged to Northwest India. This explains why the art is so rarely mentioned in Indian literature – yet its existence was known. The first more or less certain mention in India comes from Pāṇini, who was himself a Northwesterner and a contemporary or not too much later than Ctesias. Reese's hypothesis that Ctesias' account belonged to the description of the Pygmies places too much confidence on Photius' careless epitome and can be dismissed.<sup>50</sup>

### 3. Indian Dogs

The fierce dogs of India, this *genus intractabilis irae*,<sup>51</sup> were already known in the early period beginning with Herodotus. The Achaemenian governor of Babylon had a large kennel of these dogs and Xerxes took many of them along with his army.<sup>52</sup> Xenophon refers to them as used in hunting deer and wild boar<sup>53</sup> and Ctesias praised their

<sup>44</sup> Le Coq 1914, 3ff. and Esin 1976, 197ff. According to Esin (197), the manual of falconry compiled by order of caliph al-Mahdī in the late 8th century mentions eagles used for falconry in Maghreb, too.

<sup>45</sup> Le Coq 1914, 5f.

<sup>46</sup> According to Vögele 1931, 36f. owls in Iran and *ibid.* 38 shrikes in Caucasus.

<sup>47</sup> Lindner 1973, 118. Wilhelm (1987, 348) says briefly that kites are used, while Lindner (*ibid.*) asserts that "Milane bestenfalls passiv, niemals aber aktiv an der Beizenjagd mitwirkten".

<sup>48</sup> N. H. 10, 60, 124 *nec non et recens fama Crateri Monocerotis cognomine in Erizena regione Asiae corvorum opera venantis eo quod devehebat in silvas eos insidentes cornoculo umerisque; illi vestigabant agebantque, eo perducta consuetudine ut exeuitem sic comitarentur et feri.*

<sup>49</sup> Vögele 1931, 31. Unfortunately, Vögele gives no details; it seems that he did not want to waste time on such an "unworthy" bird.

<sup>50</sup> See Reese 1914, 74 and 79f.

<sup>51</sup> As characterized later by Grattius (*Cynegeticus* 159), who calls them Chinese dogs. These Indian dogs have been discussed in McCrindle 1896, 363f., Keller 1909, 108ff., Orth 1913, 2545, Saletore 1975, 213f. and Lilja 1976, 11 and 79.

<sup>52</sup> Hdt 1, 192 (Babylon) and 7, 187 (Xerxes). A third instance is perhaps Hdt 3, 32 mentioned below.

valour.<sup>54</sup> Unfortunately, we have only the short sentence of Photius for Ctesias and cannot therefore be sure if he was a source for Aristoteles, who mentioned Indian dogs several times and explained their valour as the crossbreeding of the tiger and the dog.<sup>55</sup> Thus Indian dogs were already a well-known breed in the West well before Alexander, and the famous Molossian dogs were perhaps their descendants.<sup>56</sup>

The historians of Alexander and Megasthenes<sup>57</sup> leave no doubt that these dogs were much appreciated in the Indus country. Sopeithes had a kennel and arranged a fighting display before Alexander – dogs against bulls and lions. Alexander was very happy to be given some of these dogs as a present. Earlier Herodotus told of a similar fight between a lion cub and two pups without clearly saying that the pups were Indian.<sup>58</sup> The fame of Indian dogs was sealed, and they were a much appreciated breed in the West, too.<sup>59</sup>

When we turn to the Indian evidence, we cannot immediately find these brave Indian dogs. The common dog of Aryan India was evidently not of the same breed, according to the *Atharvaveda* he was very much afraid of lions.<sup>60</sup> Unlike their Iranian neighbours,<sup>61</sup> the Aryan Indians generally despised the dog and held it to be an impure animal.<sup>62</sup> Yet it is not clear how old this attitude is and how well our sources reflect the attitudes of other classes than the Brahmans. Among the common depreciation there is also some evidence of a more positive attitude. It also seems that there were several breeds.

In the *Rigveda* the dog is not particularly despised<sup>63</sup> and in one hymn the watchdog

53 Xenophon, *Cyneg.* 9, 1 and 10, 1. Cf. *RV* 10, 86, 4.

54 Ctesias F 45, 10 περὶ τῶν κυνῶν τῶν Ἰνδικῶν ὅτι μέγιστοί εἰσιν, ὡς καὶ λέοντι μάχεσθαι.

55 Aristoteles, *H. An.* 7, 28, p. 607a; *Gen. An.* 2, 7, p. 346 and *Part. An.* 1, 3, p. 643b, also Pseudo-Aristoteles, *Probl.* 10, 45, p. 895b (all collected in Bolchert 1908, 17f. and Reese 1914, 33). The passage on cross-breeding is from *H. An.* (φασὶ δέ καὶ ἐκ τοῦ τίγριος καὶ κυνός γίγνεσθαι τούς Ἰνδικούς, οὐκ εὐθύνεται δέ ἀλλ' ἐπὶ τῆς τρίτης μίξεως· τὸ γὰρ πρώτον γεννηθὲν θηριώδης γίγνεσθαι φασιν, ἄγοντες δὲ δεομεύουσιν εἰς τὸς ἐρημίας τὰς κύνας, καὶ πολλαὶ κατεοθίονται, ἐὰν μὴ τύχῃ ὄργων πρὸς τὴν ὄχειαν τὸ θηρίον). Later the same is told of Hyrcanian dogs by Grattius (*Cyneg.* 161ff.). The classical world had greater confidence in the possibilities of crossbreeding than we do. It was also believed that Laconian dogs descended from the crossing of dogs and foxes. See Grmek 1988, 50f.

56 See Lilja 1976, 11, 50 and 79.

57 Aristobulus F 40 and probably Onesicritus (see Pearson 1960, 225), Megasthenes F 21a), then often in later literature, e.g. Diodorus 17, 92, Curtius 9, 1, 6, Pliny 8, 61, 148 and Aelianus 4, 19 and 8, 1.

58 Hdt 3, 32. Orth (1913, 2545) identifies them as Indians.

59 Egyptian sand has preserved funeral verses dedicated to the Indian dog of Zeno, a Ptolemaic fiscal official of the third century B.C. (Stein 1929, 35).

60 AV 4, 36, 6cd *svānāḥ simhām iva dṛṣṭvā té nā vindante nyāñcanam* “like dogs on seeing a lion, they do not find a hiding-place” (tr. by Whitney).

61 In Iran the dog was much appreciated as a creation of Ahura Mazda, see the many passages of the Avesta (especially *Videvdat* 13) quoted by Miller (1880, 40ff.) and Willman-Grabowska (1932, 30ff.).

62 In the modern Northwestern tradition the dog is not important. Dogs are occasionally mentioned accompanying gods and demons (Jettmar 1975, 252 and 354) and their faithfulness to men is appreciated (*ibid.* 421). A more negative attitude is seen in Kalash mythology, where the devil is said to have a dog's appearance when seen by men (*ibid.* 338, see also 438) and the sacrifice of dogs is several times mentioned as an offence against the gods (*ibid.* 344, 346 and 353).

is addressed very favourably.<sup>64</sup> Indra, Rudra and Yama had dogs.<sup>65</sup> But already in the later Veda the dog's impurity is well attested,<sup>66</sup> and in later literature it is a common theme. In the aforementioned list of sinful vocations causing exclusion from a śrāddha we find a "breeder of sporting dogs".<sup>67</sup> But here it is also interesting to notice that dogs were bred for sporting purposes. It is also noteworthy that the dog is not always despised in popular religion.<sup>68</sup>

There are passages that allow us to suspect that especially among Kṣatriyas the attitude towards dogs was different before the Brahmanic influence became too overwhelming. In any case there have always been people who have kept dogs for guarding and hunting purposes. The fierce breed known in the West was not unknown. The watchdog of the *Rigveda* was used in hunting as were the Indian dogs in Xenophon. While Sopeithes' dogs fought with lions, the Mācala dogs of Vidarbha are said to have killed tigers.<sup>69</sup> In the great epic a pack of hunting dogs rouses a sleeping lion.<sup>70</sup> One Jātaka tells how the king goes to hunt "with a well-trained pack of clever pedigree hounds"<sup>71</sup> and another makes a clear difference between the dogs living in a cemetery and the pack of hounds bred in the royal kennel.<sup>72</sup> In the text it becomes clear that royal kennels were a usual feature of the time.<sup>73</sup>

<sup>63</sup> See Hopkins 1894, 154f. and Willman-Grabowska 1932, *passim*.

<sup>64</sup> *RV* 7, 55, 2 – 4 yád arjuna sārameya datáh piśamga yáccchase/ vīva bhrājanta ṣṭáya ṫpa śrākeṣu bápsato ni ṣu svapā/ stenám rāya sārameya táskaram vā punahsara/ stotṛṇi indrasya rāyasi kím asmān ducchunāyase ni ṣu svapā/ tvám sūkarásya dardhī tāvā dardartu sūkarāḥ/ stotṛṇi Indrasya rāyasi kím asmān ducchunāyase ni ṣu svapā/.

<sup>65</sup> Indra and Yama discussed in Willman-Grabowska 1932. A mighty dog of Indra is also found in the *Mahākaphajātaka* (J. 469). For Rudra see *AV* 11, 2, 30 (rudrásyailabakārēbhyo 'sāṁsūktagilēbhyaḥ/ idām mahāsyebhyāḥ svābhyo akaram nāmaḥ) and *VS* 16, 28 (nāmaḥ svābhyaḥ svapatibhyas ca vo nāmo nāmo bhāvāya ca rudrāya ca nāmaḥ), Arbman 1922, 37 and 257ff. and Falk 1986, 18f.

<sup>66</sup> Macdonell & Keith s.v. *svan*, Gonda 1980, see index s.v. *dog*. An early example of the Brahman contempt for dogs is found in *SB* 12, 4, 1, 4, where a dog as well as a vicious boar and a ram defile an Agnihotra offering if one of them runs between the fires (trayo ha tvāvā paśavo 'medhyāḥ/ īr-varāḥa aīdakāḥ svā teṣām padyadhiśrite 'gnihotre 'ntareṇa kaścit sāmcaret kīm tatra karma kā prāyaścittir iti).

<sup>67</sup> *Manu* 3, 164 (Jha 154) śvakrīḍin, Kullūka ad 1. kṛīḍartham sunah posayati, Medhātithi ad 1. svabhiḥ kṛīḍati śvakrīḍi kṛīḍartham suno bibharti.

<sup>68</sup> Mitra 1928 mentions several examples from different regions.

<sup>69</sup> *JB* 2, 442 te haite vidarbheṣu mācalās sārameyā api ha sārdūlam mārayanti "these are the Mācala dogs of the Vidarbha country, descendants of Saramā. They can even kill a tiger" (tr. by W. Rau).

<sup>70</sup> *Mbh* 2, 37, 8 vṛṣṇisimhasya suptasya tatheme pramukhe sthitāḥ/ bhaṣante tāta sāmkruddhāḥ svānah simhasya sāmnidhau//.

<sup>71</sup> *Bhallaṭiyajātaka* (J. 504) susikkitakoleyyakasunakhagaṇapariyuto.

<sup>72</sup> *Kukkurajātaka* (J. 22), see e.g. the verse said by the dog (Bodhisattva) living in a cemetery:

ye kukkurā rājakulāsmi vaddhā  
koleyyakā vāṇḍabaliupapannā  
te 'me na vajjhā, mayam asma vajjhā,  
nāyam saghaccā dubbalaghātikāyan ti.

<sup>73</sup> See also Chattopadhyay 1967, 232. Most of the following references are found from her article.

In Indian epics we often find these royal hounds, although the Brahmanic contempt comes through now and then. A hunting party of the Kaurava and Pāṇḍava princes is accompanied by a dog and its keeper.<sup>74</sup> Our Northwestern link is found in the *Rāmāyaṇa*, where Bharata is given a present of hounds who were bred in the palace, huge dogs with fangs like spears and the strength and courage of tigers.<sup>75</sup> They come from the Kaikeyas, the Kekaya country of the Pañjab.<sup>76</sup>

Hunting with a pack of hounds (*śvaganikā*) was a favourite pastime of the Kṣatriyas. It was apparently mentioned by Pāṇini<sup>77</sup> and Chattopadhyay gives several references to Kālidāsa and later poetry.<sup>78</sup> Some of these hounds have golden leashes or collars. A Bharhut scene depicts the hunter attacking his game with hounds.<sup>79</sup> The *Arthaśāstra* prescribes a fine of 54 paṇas for the theft or killing of dogs and other pets<sup>80</sup> and refers to dog kennels.<sup>81</sup> The Superintendent of Pasture Lands has among his helpers hunters with packs of hounds.<sup>82</sup> Varāhamihira devotes one chapter (*BS* 62) to the prognostics of dogs and tells the characteristics of a good dog bringing welfare to his keeper. There is a late account of hunting with a pack of hounds in Rudradeva's *Syainikaśāstra* (3, 64–69).

The most famous dog in ancient India is without doubt the faithful dog of Yudhiṣṭhīra in the *Mahāprasthānikaparvan* of the *Mahābhārata*. The dog accompanies his master on the hard journey to heaven, but is not admitted inside, and loyally Yudhiṣṭhīra declines to enter without his companion. Perhaps we might connect this with the non-(Vedic-)Aryan features of the Pāṇḍavas such as their polyandry, still met with in the Western Himalayas but a horror to the Aryans.<sup>83</sup> With this Himalayan connection it is interesting to notice that in a much earlier age (the early second millennium B.C.) the dog seems to have enjoyed a honoured position in the Neolithic culture of Kashmir, where it was sometimes the custom to bury the dog with its owner.<sup>84</sup>

Royal pedigree hounds (Sanskrit *kauleya*) were a part of Kṣatriya life and seem to have been found throughout India. Yet there is at least some evidence suggesting that keeping dogs was common in the Northwest and that Northwestern dogs were

<sup>74</sup> *Mbh* 1, 123, 15f. *atha dronābhyanujñātāḥ kadācit kurupāṇḍavāḥ/ rathair viniryayuḥ sarve mṛgayāṁ arimardanāḥ// tatropakaraṇam gṛhya naraḥ kāscid yadṛcchayā/ rājān anujagāmaikāḥ svānam ādāya pāṇḍavān//*

<sup>75</sup> *R* 2, 64, 21 *antahpure 'tisamvṛddhān vyāghravīryabalañvitān/ dāmstrāyudhān mahākāyān sunas copāyanam dadau//* As to the strength and courage of tigers, cf. what the classical sources say about their hybrid origin.

<sup>76</sup> Saletore 1975, 213. According to Dey (s.v.), Kekaya is situated between the Satlej and the Beas.

<sup>77</sup> *P* 4, 4, 11 *śvaganāt thañca*, according to *Kāś* ad 1., one who *śvaganena carati* is *śvagani-kāḥ*.

<sup>78</sup> Chattopadhyay 1967.

<sup>79</sup> Agrawala 1963, 162.

<sup>80</sup> *KA* 4, 10, 2.

<sup>81</sup> *KA* 14, 3, 23 *sunakaphelakāḥ*.

<sup>82</sup> *KA* 2, 34, 9 *lubdhakasvaganināḥ parivrajeyur aranyāni*.

<sup>83</sup> See below, in VII.13.

<sup>84</sup> Allchin & Allchin 1982, 113. Brentjes (in Tucci 1977, 93) mentions dogs in the petroglyphs of Swat (Godgara I) and compares them with Central Asian scenes of worship which include dogs.

appreciated for their strength and valour. From classical sources we know that the Northwestern dogs were indeed worthy of this fame. Their breeding was begun quite early, as we meet Indian dogs in the Near East as early as the fifth century B.C. It even seems likely that there were watchdogs in the Indus civilization.<sup>85</sup>

#### 4. *Fat-tailed Sheep*

I shall mention only in passing the Ctesianic account of the fat-tailed sheep (and goats) of India.<sup>86</sup> If there is any truth at all in his account (in which case we must at least ignore the goats) then it clearly must belong to the Northwest country. In modern times fat-tailed sheep are common in some areas of Pakistan, Afghanistan and Central Asia, but not found further in the east.<sup>87</sup> Unfortunately, however, we do not know if they were there nearly two and a half millennia ago. Indian literature is silent about them, and the first information even about the fat-tailed sheep in Iran is only by Marco Polo.<sup>88</sup> Of course, sheep in general were kept from very early times (in the Indus civilization and earlier) in the Northwest,<sup>89</sup> and there is probably no reason even to expect that the Indian texts would inform us about the tails of Northwestern sheep.

On the other hand, we know that these sheep have a very long history in Arabia, which may have been their country of origin. Arabian fat-tailed sheep are mentioned by Herodotus, who said that they have small wagons under their tails.<sup>90</sup> Earlier they were depicted in Sumerian art of the late fourth millennium,<sup>91</sup> and the rock engravings of Central Arabia (third or second millennium B.C.) show them too.<sup>92</sup> There are several different breeds – Herodotus mentions two – and the Sumerian and Arabian types are said to be different.<sup>93</sup> The Central Asian breed with an exceptionally heavy tail could be third.

Ctesias is not reliable enough an author to be taken as the sole authority for the

<sup>85</sup> Conrad 1968, 234ff. See also Meadow 1987, 890 (on dogs in Tepe Yahya and Daimabad).

<sup>86</sup> Ctesias F 45, 27 and F 45i).

<sup>87</sup> Wilson 1836, 46 and Lambrick 1975, 102. Watt s.v. *sheep* does not discuss the fat-tailed sheep. As far as goats are concerned I have never heard (with the exception of Ctesias) that they could have such a tail (see e.g. Brentjes 1962, 549ff.).

<sup>88</sup> Benedict 1941, 169.

<sup>89</sup> Conrad 1968, 219ff., Meadow 1987, 904ff. and B. Compagnoni in Stacul 1987, 142ff. Among the bone finds it is often difficult to distinguish between sheep and goats (Conrad 1968, 219), and in seals and sculpture the tail is rarely clearly discernible (*ibid.* 220), which might indicate the absence of fat-tailed sheep.

<sup>90</sup> Hdt 3, 113. See also Keller 1909, 312.

<sup>91</sup> Anati 1968, 1.

<sup>92</sup> Anati 1968, 7ff.

<sup>93</sup> Anati 1968, 4, see also Keller 1909, 312.

existence of fat-tailed sheep in the Northwest as early as the fifth century B.C. But at least he makes it a possibility worth considering.

### 5. *Rhinoceros*

The one-horned Indian ass described by Ctesias,<sup>94</sup> later destined to be one of the prototypes of the unicorn legend, seems to owe its origin to the Indian rhinoceros. Several details in Ctesias' description seem to refer to the rhino,<sup>95</sup> and especially the anti-poisonous effects ascribed to its horn prove the eastern origin of the account. But what is curious is that this medical use of rhinoceros horn is not attested in ancient India<sup>96</sup> but in China, where it seems to have an old tradition.<sup>97</sup> It is unlikely that Ctesias could have known anything of China or heard of such Chinese customs as the use of the rhinoceros horn. It is also unlikely that Ctesias could in this respect have influenced China, where the horn was in fact used to prevent poisoning,<sup>98</sup> while Ctesias' account is simply a literary

<sup>94</sup> Ctesias F 45, 45 and F 45q. Megasthenian (F 27b) ἕππους ... μονοκέρωτας ἐλαφοκρά-  
vouç are perhaps the same (on these see also Sachse 1981, 31f.), but probably his account is not derived from Ctesias. Megasthenes (not Cleitarchus as suggested by Eggerton, 1984a, 227f.) was probably the source for Pliny, *N. H.* 8, 31, 76 (*in India ... asperrimam autem feram monocerotem, reliquo corpore*  
*equo similem, capite cervo...*). With Ctesias and Pliny we can hardly accept Sachse's hypothesis that Megasthenes actually meant a mythological figure (Rṣyaśṛṅga). In the one-horned καρτάζωνος of Aelian (16, 20) with its Indian name we have a better account of the Indian rhinoceros. For other references in later classical literature see Steier 1935.

<sup>95</sup> See Steier 1935, 1780ff. Ctesias' description might also owe some features to the real wild ass (or even an antelope, see Steier 1781f.) of Northwest India. As some seem to think that the great difference between the rhino and the ass makes it impossible that Ctesias could point to a rhino (an animal, however, he had not even seen), we can notice with Steier that the rhino does not differ more from the ass than, say, the hippopotamus from the horse or the elephant (*bos Lucanus*) from the bull. See also Laufer 1914, 96f., note.

<sup>96</sup> The oldest reference to its use in India according to Watt (s.v. *rhinoceros*) comes from the Dutch traveller, Linschoten (1590). Laufer (1914, 155, note) adds a slightly earlier account by Garcia da Orta (the middle of the 16th century), who had himself noticed its use in India. Bautze (1985, 426f.) refers to the rarity of carved rhinoceros horns in India, and suggests that European travellers were merely "seeing" their own Western traditions in India. But while stressing the Western nature of the tradition, Bautze disregards its origin in Ctesias and its existence in China (briefly mentioned by him on page 426). It will be seen that my interpretation is somewhat different. In Sanskrit sources the common method of discovering whether food or drink is poisoned is to watch the reactions of different animals (especially birds) brought near it or given a sample of it (see Kapadia 1953 and Suśruta, Kalpasth. 1, 28ff.). Among medical glossaries *Dhanv* does not mention the rhino, and *Rājan* 19, 2 (p. 402) gives only a list of synonyms (*khadgah khadgamgah krodhī mukhaśṛṅgo mukhevalī/ mandako vajracarmā ca khadgī ca priṇasas ca sah*).

<sup>97</sup> See Laufer 1914, 75 and 153ff. (note). Later it was also used in Europe (Laufer l. c., Briggs 1931, 277).

<sup>98</sup> It would be interesting to know if rhinoceros horn actually has any virtues. But I have not seen any

curiosity. In China rhinoceros horn is also reputed to be an aphrodisiac, and unfortunately for this seriously endangered species it is still used for this purpose in East Asia.

Nevertheless, Ctesias' account and Chinese use must have some link. There is still a possibility that the horn has been used in India, despite the silence of Indian sources. This silence is perhaps not conclusive. In spite of some unorthodox features,<sup>99</sup> Indian classical medicine mostly complied with orthodoxy, and this is perhaps reflected in the fact that drugs of animal origin are very rare in Indian *materia medica*. The most important exception seems to be the use of the meat of some animals as a medicine, mentioned for instance by Caraka.<sup>100</sup> The meat of peacocks, mongooses, godhā lizards and spotted deer is even used as a preventive against poison,<sup>101</sup> but the rhinoceros is never mentioned in this connection. It may well be that rhinoceros horn was not a part of established medicine and was not therefore mentioned in its literature. Even then it could be used by charlatans or tribal medicine men. The Chinese use of the horn and the existence of the animal only in India and further east<sup>102</sup> seem to prove that Ctesias had genuine eastern information, yet he could not have acquired it from China.

We may notice that even in Aryan India the rhinoceros was not without religious and magical significance. Most of the evidence has been collected by Briggs and Bautze.<sup>103</sup> In medicine its meat is prescribed as "a destroyer of cough, astringent, remover of winds, good for liver, pure, life-prolonger, restrainer of urine and keeper of (health?)".<sup>104</sup> Some older Dharmasūtras allow the consumption of its meat, too.<sup>105</sup> There is a connection between the rhino and ancestors. One group (gāṇa) of ancestors is called the Ekaśīṅgas,<sup>106</sup> and rhinoceros' meat is offered to the ancestors in a śrāddha.<sup>107</sup> In this

account of its chemical composition.

99 Like dissection in Suśruta, Śārīrasth. 5, 47ff., cf. Zysk 1986.

100 Caraka, Cikitsitasth. 8, 149ff., see also Chattopadhyay 1968, 59ff.

101 Suśruta, Kalpasth. 1, 81 *mayūrān nakulān godhāḥ pṛṣṭān harinān api/ satatam bhakṣayec cāpi rasāṁ teṣāṁ pibed api*. Kalpasth. 1 is a general account of the prevention of poisoning (Annapānarakṣākalpa).

102 It is impossible that Ctesias' account could point to the African species.

103 Briggs 1931, 280ff. and Bautze 1985, 405ff., some further references are given in Chakravarti 1906, 370f. In addition to literary sources, Bautze also pays attention to archaeology and art.

104 Chakravarti 1906, 371 from Suśruta (Sūtrasth. 46, 103 *kaphaghnaṁ khadgapisitam kaśāyam anilāpaham/ pitriyām pavitram āyusyām baddhamūtrām virūkṣanām*). The metre demands of course the reading *pitriyām*, and instead of being 'good for the liver' (Chakravarti) both seem to mean 'relating to ancestors' (so explained also in the Hindi *īśka*). According to Monier Williams, *virūkṣanā* is 'drying, astringent'. Caraka contains some further uses of rhinoceros flesh and dung, see Chakravarti I. c.

105 *GautDh* 17, 27 (list of forbidden food with exceptions) *pañcanakhāś cāsalyakaśasasvāvid-godhākhadgakacchapāḥ*. The same list (with modifications) is found in *ĀpDh* 1, 5, 17, 37, *ViDh* 51, 6 and *Manu* 5, 18. But *YDh* 1, 177 mentioned by Chakravarti (1906, 371), does not mention rhino meat (at least in Stenzler's edition). Some later texts forbid it, see Chakravarti I. c. On rhinoceros meat being eaten see also Bautze 1985, 406f., 409 and 411f.

106 *Mbh* 2, 11, 47 *Bomb.* (133\*, 1, 6 crit. ed.) quoted in Defourny 1976, 22, note 16.

107 *GautDh* 15, 15 ... *pitarāḥ pṛiṣṭānti ... vārdhriṇasena māṁsenā kālaśākacchāgaloha-khadgamāṁsaīr madhumīśrais cānāntyam*, again in *Manu* 3, 272 and some other texts (see

connection we may perhaps note that according to a late Purāṇa rhinoceros meat is said to please the goddess for 500 years.<sup>108</sup> Briggs also mentions some present uses of the rhino in connection with ancestors.<sup>109</sup>

Briggs quotes both from literature and present usage examples of yogis using rings or earrings made of rhinoceros horn, and some further cases where its hide, blood or meat is used for magical purposes.<sup>110</sup> As to vessels made of rhinoceros horn or hide, we may add one reference to sacrificial vessels made of either.<sup>111</sup>

Defourmy has attempted to explain the religious importance of the one-hornedness – met also in the one tusk of the Varāha Avatāra, in the horned dolphin saving Manu from the deluge and in the one-horned ascetic Rṣyaśrīga<sup>112</sup> (and in the one tusk of Gaṇapati). When horns are normally in pairs, the one horn pointing directly to heaven is naturally considered important. Its verticality is compared with the offering post (yūpa) and the *axis mundi*. Therefore, it was also regarded as a horn of salvation.<sup>113</sup> This might explain the magical power ascribed to rhinoceros and especially its horn. We may also note that the horn and especially the single horn is sometimes regarded as a symbol of the plough-share and fertility.<sup>114</sup>

When we come back to the account of Ctesias, there is still a further explanation. In spite of the possibility mentioned above, considering the silence of Indian sources an origin outside India proper is much more likely. As South-East Asia as the origin of Ctesias' account is as impossible as China, we are left with our Northwestern country, the country described by Ctesias as India. Nowadays, it is sometimes pointed out that the rhinoceros lives only in the very Northeast of India, but this is a rather recent development. We have seen that it was not unknown to Aryan India, and there is also evidence, both earlier and later than Ctesias, showing that it was found even in the Indus country.

Among the seals of the Indus civilization there are several beautiful pieces showing realistic rhinoceroses.<sup>115</sup> A Jātaka mentions rhinos (*khagga*) living near the Western Ocean.<sup>116</sup> In the early sixteenth century A.D., we have an account by emperor Bābar

Chakravarti 1906, 371 and Bautze 1985, 411).

<sup>108</sup> *Kalikapurāṇa*, *Rudhirādhyāya* referred to by Briggs (1931, 281).

<sup>109</sup> Briggs 1931, 280ff.

<sup>110</sup> Briggs 1931, 280ff.

<sup>111</sup> *ViDh* 54, 19 *sleṣmājatumadhučchiṣṭāsāṅkhasuktitrapusīsakṛṣṇalohaudumbara-khadgapātravikrayī cāndrāyanām kuryāt. Khadgapātra* is translated by Jolly as a vessel made of rhinoceros *horn*, but according to Bautze (1985, 410f.) the skin is actually meant. That the skin was also used for armoury is told in *JB* (2, 103 *khadgakavaca*) and *KA* (2, 18, 16 ...śīmśūmārakakhadgi-dhenukahastigocarmakhuraśringasāmghātām varmāṇi, according to Kangle this should mean entire skins with hooves and horns used as armoury). Jaipur museum contains some 18th century shields made of rhinoceros hide (Bautze 1985, 410).

<sup>112</sup> There is plenty of literature on Rṣyaśrīga, see e.g. Lüders 1897, Schlingloff 1973 and Vasil'kov 1979.

<sup>113</sup> Defourmy 1976, 20ff.

<sup>114</sup> Atre 1985, 5f.

<sup>115</sup> Pointed out in this context by Briggs (1931, 280) and Bautze (1985, 406ff.). For illustrations see Joshi & Parpola 1987, seals M 274–277, H 88 and K 39. See also Conrad 1968, 253. On the so-called unicorn seals see Atre 1985.

about a rhinoceros hunt near Peshawar, and even then the animal was no rarity there.<sup>117</sup> Rudradeva of Kumaon reported that rhinos were hunted by a team of five or six horsemen.<sup>118</sup> We do not know what kind of rhinoceros lore was current in the Northwest in the days of Ctesias, but it might have been something of the kind told by Ctesias. Among the countries where rhinoceroses have been found, Northwest India is the best possible link for China, India and ancient Greece.

### 6. Gold-Digging Ants

In the well-known passage of his Indian logos Herodotus tells the curious story about the gold-digging ants. These giant ants and the gold sand of their country are given as an explanation for the great amount of gold brought from India to the Great King.<sup>119</sup> Some additional information was later given by Nearchus, who said he saw some skins of these insects, and by Megasthenes, who located the story in the land of Derdae, probably corresponding to the modern Dards, known to have been gold merchants in ancient as well as in modern times.<sup>120</sup> There were also some horns of the giant ant, which were brought to the west.<sup>121</sup> The ants are quite often mentioned in later literature,<sup>122</sup> but all real information seems to go back to the three authors mentioned above.<sup>123</sup>

The story has fascinated scholars ever since, and the interest increased when Wilson

<sup>116</sup> *Daddabhajataka* (J. 322).

<sup>117</sup> Quoted in Briggs 1931, 279.

<sup>118</sup> *Syainikaśastra* 3, 37f. *khaḍgābhīsarane* *śastā* *pañcaśā* *eva* *sādinah* // *vaśyāś* *turaṅgāḥ* *śasyante* *sikṣitā* *ye* *gatāgatē* / *tvarayā* *prsthato* *vedhyah* *kṣudraśaktyā* *tu* *sādinā* // and 3, 24 on the merits of hunting *tathārthropārjanam* *mattahastigāñḍānubandhanāt* / *viśāṇājina-kastūrimanipakṣādyupārjanāt*. *Viśāṇa* may refer either to the elephant's tusks or to rhinoceros horn.

<sup>119</sup> Hdt 3, 102–105. For a different interpretation of the actual form of this tribute see Walser 1966, 95.

<sup>120</sup> Nearchus F 8; Megasthenes F 23; on the gold trade of the Dards see Tucci 1977, 18ff. and P'jankov 1987, 266f., on Megasthenes Stein 1932, 237.

<sup>121</sup> Pliny 11, 36, 111. This may also be due to a purely Western fictitious interpretation of some curiosity.

<sup>122</sup> References in Schwanbeck 1846, 72 and Schiern 1873, 5ff. (Schiern goes beyond classical antiquity).

<sup>123</sup> To these we should perhaps add a Sophocles fragment from Photius' *Lexicon* (Nauck F 26 = Radt F 29) apparently locating the gold-digging ants in Ethiopia (Σοφοκλῆς Αἰθίοψι τούς ἐσφιγμένους μύρμηκας τῇ οιρκώσει τετράπτεροι γὰρ νῶτον ἐν δεσμώσασιν οφηκοὶ κελαῖνόρινες). In this case the similar tradition attested in Philostratus and some other late authors would also originate in the early period. But though the Sophocles fragment belongs to a play called *Aethiopes*, its contents are not restricted to Ethiopia, and for the fragment in question no location is indicated. Nauck suggested that it may belong to a description of Mesopotamia, Memnon's native land. In any case, the confusion between India and Ethiopia is so old and well attested long before Sophocles that we hardly need to bother with *Aethiopes*.

found an Indian parallel.<sup>124</sup> A passage in the *Mahābhārata* describes the presents brought to Yudhiṣṭhīra from various countries and directions, and among them the ant gold is also mentioned.<sup>125</sup> The direction of its origin is clearly in the north or northwest, as peoples like the Khaśas are mentioned just before. Lately it has been shown that this is not the only reference to ant gold in Indian sources. According to Buddhaghosa, the *hātaka* gold mentioned in the *Arthaśāstra*, the *Mahābhārata* and Buddhist canonical scriptures, is also brought by ants.<sup>126</sup> There are also some stories and references to ant gold in Tibetan and Mongolian sources,<sup>127</sup> but unfortunately they belong to a much later period, and an Indian (or even Western) origin is not excluded as their source, though Laufer tried to show the opposite.

Many theories have been proposed in order to explain the gold-digging ants and it is not my intention to enter into a detailed discussion of them or make a choice among them. In any case I think that there have already been enough more or less unfounded guesses about which explanation sounds the best. But perhaps a short survey of the various theories and their origin is still worthwhile and may shed some light on the general nature of the question.

According to Schiern, the last scholar who gave his support to a literal explanation – that there really were giant ants who dug gold somewhere in the then unknown wastes of Central Asia – was Larcher in 1786. A little later (1788) Rennell suggested that the ants were just ordinary termites who had been greatly exaggerated by storytellers.<sup>128</sup>

Count Veltheim suggested that the gold came from Gobi, where it supposedly was washed by children using fox skins. The heaps of washed sand near the river resembled ant hills and thus the story of the gold-digging ants was fabricated in order to keep strangers out. The skin seen by Nearhus was, of course, a fox skin.<sup>129</sup>

The idea that the story was invented in order to keep strangers out of the gold mines or gold washing places was sound, but the fox rested apparently only on the fact that foxes are mentioned as a comparison in classical sources. When it is said that the ants are bigger than foxes, this is of course no reason to say that the ants are foxes. Therefore Veltheim's fox was soon replaced by another theory using the same explanation for the origin of the gold (washed in Central Asia) but choosing another animal. This animal was the so-called marmot Moorcroft had observed in Ladakh.<sup>130</sup> As an explanation for the gold-digging

<sup>124</sup> Wilson 1841, 135f.

<sup>125</sup> *Mbh* 2, 48, 4:

te vai pipilikam nāma varadattam pipilikaiḥ/  
jātarūpam droṇameyam ahārṣuḥ puñjaśo nṛpāḥ//

<sup>126</sup> Hinüber 1985, 1123f. referring to *Manorathapūraṇī* 2, 239, 21 (quoted by Hinüber *hātakan ti kipilikaiḥ nīhātāsuvaṇṇam*).

<sup>127</sup> See Laufer (1908) and Herrmann (1938, 13ff.), who summarized the Central and (rather irrelevant) East Asian evidence.

<sup>128</sup> Schiern 1873, 9, note 3 (Larcher, from his Herodotus translation, Vol. III, Paris 1786, p. 339) and 10, note 1 (Rennell). Several other early theories are discussed by Malte-Brun (1819, 376ff.) and Schiern (1873, 8ff.). Few were sober enough to follow the wise conclusion of Albertus Magnus (13th century A.D.): *Sed hoc non satis est probatum per experimentum* (quoted in Schiern 1873, 8).

<sup>129</sup> Veltheim 1800, 273ff.

ants it was first proposed by Malte-Brun,<sup>131</sup> in another form by Ritter.<sup>132</sup> The last-mentioned has been one of the favourite theories supported by many scholars.<sup>133</sup>

Wilford received much less support with his suggestion of a leopard, but notwithstanding his bad reputation as a scholar and his questionable method of comparing modern Hindi words for big ant (Wilford's *cheuntá*, apparently *cīmṭā*) and leopard (*chittá*, i. e. *cīṭā*), he was favoured by Alexander von Humboldt.<sup>134</sup>

Among lesser theories of the 19th century, hamsters (Heeren in 1818),<sup>135</sup> hyenas (Wahl in 1807) and jackals (Kruse in 1856) were suggested. Bastian (in 1868) even suggested banners illustrated with ants (and griffins) waving above some forerunner of the Great Wall.<sup>136</sup> Showing a rare common sense among these early scholars Mannert was content with the notice that the Indians "waren wohl klug genug, die wahren quellen ihrer Schätze nicht anzugeben."<sup>137</sup>

A popular new theory was proposed by Schiern in 1873. According to him, the ants are Tibetan miners, who are small of stature, industrious like ants and dig many shafts which resemble ants' holes.<sup>138</sup> This theory has found many adherents among scholars,<sup>139</sup> in spite of the huge chronological gap between any known Tibetan miners<sup>140</sup>

<sup>130</sup> Moorcroft 1818, 442 (this is a reset reprint of the 1812 original, where the page number is 439 according to Ritter 1833, 593) wrote that in the country between the Satlej and the Indus he saw "animals of fawn colour, about twice the size of a rat, without a tail, and having much longer ears than rats; *Q. Marmot?* They burrow in the ground..." The animal in question has often been identified with the Himalayan marmot also found in Central Asia, but from Prater 1971, 202 we learn that both the Himalayan marmot (*Marmota bobak* Müller) and the long-tailed marmot (*Marmota caudata* Jacquemont) have tails (13 and 30 cm resp.) and very small ears. The ground squirrel or suslik (*Citellus*) has also tail and small ears. Therefore I cannot identify the animal seen by Moorcroft, but as far as the gold digging ants are concerned, I doubt if it is really important to know which kind of animal Moorcroft actually saw.

<sup>131</sup> Malte-Brun 1819, 380f. suggested a combined theory in which Rennell's termites, Veltheim's fox skins and Moorcroft's marmots were all included.

<sup>132</sup> Ritter 1833, 659f.

<sup>133</sup> E.g. Schauflerberger 1845, 40, Schwanbeck 1846, 73, Lassen 1847, 850, Bunbury 1879, 257, Issberner 1888, 17, Tomaschek 1901, 2153, Wecker 1916, 1301, Charpentier 1918, 480 (hesitating), Chantraine 1927, 43f. (note 2), Hennig 1930, 331 and even Karsai 1978, 66. Those who care about the animal mostly identify it as the Himalayan marmot. Sachse (1981, 71) accepts a slightly modified version of the marmot theory: as marmots are gentle animals without any correspondence to fierce ants, some local (Dardistan) beasts of prey may have had their characteristics applied to the marmots when the ant story was created. The advocates of the marmot theory are probably interested in hearing that there is some kind of a marmot cult in Hunza and Tibet (mentioned by Jettmar 1975, 282).

<sup>134</sup> Wilford 1822, 468 and Humboldt 1847, 422, note 65.

<sup>135</sup> Heeren 1818, 253 "eine Thierart, die dem Hamster gleich sich in die Erde gräbt" but adding wisely "es kann auch sein, dass es blosse Dichtung ist ... eine Karavanenlegende."

<sup>136</sup> All quoted by Schiern 1873, 11f. (Wahl and Kruse) and 17 (Bastian).

<sup>137</sup> Mannert 1829, 12.

<sup>138</sup> Schiern 1873, *passim*. In a more general way a human explanation was suggested by Malte-Brun, who wrote: "Ne ce pourroit-il pas aussi qu'une tribu indienne eut réellement porté le nom de *fourmis*...?" (Malte-Brun 1819, 382, quoted also by Schiern 1873, 16).

<sup>139</sup> McCrindle 1874, 94 and 1896, 341f. and 1901, 44f., McCartney 1954, 234 and still Sedlar 1980, 12, without even mentioning other theories.

<sup>140</sup> Even when known, they are mostly restricted to Ladakh.

and our sources.

This miner theory was approved by Ball, who completed it by suggesting that the gold-guarding griffins of Ctesias<sup>141</sup> were the big mastiffs of the same (or at least the modern Ladakhi) miners.<sup>142</sup> These mastiffs were mentioned by Schiern, but only as an explanation of some characteristics of the ants, such as their extreme swiftness and their meat-eating.<sup>143</sup> Some later scholars have simply identified the ants with the mastiffs.<sup>144</sup> On one occasion McCrindle even brought the Moorcroftian marmots into the picture by explaining that the skins are those of marmots, whilst the living ants are miners.<sup>145</sup>

Further animals have been brought in by way of explanation. There is a theory about badgers, but the evidence lies as far as away in Nevada, U. S. A.<sup>146</sup> Without mentioning Wilford, Herrmann suggested leopards or other beasts who killed miners.<sup>147</sup> Recent support has also been given to an old idea of George Rawlinson, who suggested that the ants were pangolins.<sup>148</sup> Reese combined the pangolin and the marmot theories by referring to the sandhills of auriferous earth heaped up by pangolins and interpreted by the people as done by marmots because they had never actually seen nocturnal pangolins. Only in India was the animal referred to as an ant.<sup>149</sup> Another version of the theory was proposed by Jennison, who located it in the Yarkand basin. According to him, the burrowing animal was the pangolin, but the danger came not from it but from the warlike nomads of the region. He was sure enough of his explanation to write: "The story is so simple that the naturalist can have no difficulty in naming the gold-finding ant, nor in explaining the historian's lapses from accuracy."<sup>150</sup> I venture to disagree.

It is true that the curious appearance of a pangolin fits much better with imaginary ants than that of marmots or dogs (or miners!), but there are also serious difficulties. The pangolin seems to be one of those animals which avoids exposing its burrows and does not heap up sandhills.<sup>151</sup> Further, it is apparently met neither in Tibet, Ladakh and

<sup>141</sup> See next chapter.

<sup>142</sup> Ball 1888, 341f. This idea is often ascribed to McCrindle (1901, 44f.), but he was in fact citing Ball without even omitting a reference.

<sup>143</sup> Schiern 1873, 44ff.

<sup>144</sup> Suggested already by Ball (*l. cit.*) and then proposed by Rawlinson (1926, 32f.) and Bevan (1922, 396).

<sup>145</sup> McCrindle 1901, 3. Among arguments used for the miner theory we can notice the supposed heaps of alluvial gold resembling ant hills (ascribed to Wilson and mentioned approvingly by McCrindle and others on several occasions). But Wilson's (1841, 136) actual words were: "the Hindus apparently imagined that the ants cleared away the sand or soil, and left the ore exposed". The horns of the gold-digging ants mentioned by Pliny are explained in the miner theory as the horns of wild sheep used by the miners as pickaxes.

<sup>146</sup> Regenos 1939, 425f.

<sup>147</sup> Herrmann 1938, 15f. supported by Hoffmann 1975, 35. The starting-point is again the auriferous earth piled up by real ants.

<sup>148</sup> Rawlinson 1862, 409 supported (though hesitatingly) by Puskás (1978, 79f.).

<sup>149</sup> Reese 1914, 69f.

<sup>150</sup> Jennison 1937, 190ff.

<sup>151</sup> Prater 1971, 302f. Puskás (1978, 79) quotes herself W. Elliot's words in Brehms: "The pangolin works very carefully, only some surface disorder show where they are."

Central Asia nor even in Kashmir and Dardistan.<sup>152</sup> In India its classification has been a problem indeed, yet it is never thought to be an insect, but a fish, the *khavalla-* or *silecchiya-maccha* of Jaina animal lists (e. g. in the *Uttarajjhayaṇa*), the "jungle fish" of modern India.<sup>153</sup> The Indian names for pangolin Puskás quotes from Brehms are in fact not so hard to identify as she thinks,<sup>154</sup> but they do not contribute in any way to the problem of the gold-digging ants.

Laufer suggested that the gold came from the Central Asian–Siberian area and took the Tibetan and Mongolian accounts as representative of an ancient local tradition, and thus identified the ants with a Mongol tribe having a name resembling the Mongolian word for ant.<sup>155</sup> This theory has not found much support, a new and perhaps in this respect more critical generation of scholars has been more keen to notice the vast chronological gap between the classical and Indian accounts and Laufer's Central Asian sources (as well as the Ladakhi miners). Yet as important a scholar as Otto Stein supported him.<sup>156</sup>

Tarn followed Laufer regarding the origin of the ant gold, but explained away the ants as a mere tale, a version of the well-known folk tale of ants collecting grains for the hero, now applied by middlemen to explain the origin of the gold they brought from Siberia in order to keep any would-be rivals out of the trade.<sup>157</sup>

Then there is the idea that instead of the gold sand mentioned by Herodotus the gold actually consisted of grains, according to Puskás alluvial gold of granulous shape, somehow resembling ants and therefore called ant gold. The source of this gold she locates in Dardistan.<sup>158</sup> The same idea – ants as gold grains – is suggested apparently independently by Lindegger, but he locates the gold country in Tibet. The story of the ferocious gold-digging ants was then fabricated in order to protect the gold trade.<sup>159</sup>

In her recent study König analyses several older theories, but finds them inconclusive.<sup>160</sup> Referring to the folk tale already mentioned she connects our ants with the well-known Indian motif of gold hidden in termite hills.<sup>161</sup> But this gold is more connected with cobras, which often live in deserted termite hills,<sup>162</sup> and it seems to be too restricted to India proper to be used as an explanation of the ant gold coming from Dardistan,<sup>163</sup>

<sup>152</sup> "The plains and lower slopes of hills of India south of the Himalayas" according to Prater 1971, 302.

<sup>153</sup> Kohl 1954, 365f.

<sup>154</sup> Puskás 1978, 86f., note 51. As to the names, Prater (1971, 301) gives *khawali mah*, *khawala manjar* and *kassoli manjar* as the pangolin's Marathi names. The last one is mentioned by Brehms as such and the rest are related both to Brehms' *kaballa*, *kaballaya* (this is also mentioned by Kohl [1954, 365] as its Sinhalese name) and Prākrit *khavalla*. The first name mentioned by Puskás from Brehms (*bayar kit*) is clearly Hindi *bajrkit*, Sanskrit *vajrakīta* (Yule & Burnell 1903, s.v. Pangolin).

<sup>155</sup> Laufer 1908, 449ff.

<sup>156</sup> Stein 1932, 238.

<sup>157</sup> Tarn 1951, 107.

<sup>158</sup> Puskás 1978, 80 and 83.

<sup>159</sup> Lindegger 1982, 34.

<sup>160</sup> König 1984, 62ff.

<sup>161</sup> König 1984, 69ff.

<sup>162</sup> Vogel 1926, 20f. and *passim* (see Index s.v. *ant hill* and *treasures*) and König 1984, 69ff.

<sup>163</sup> Tucci 1977, 10ff. gives good evidence of the Dards being gold merchants. But although they probably

Western Tibet or even Siberia.

There is not much more to be said about all these theories. I find it as difficult to believe in the foxes or marmots or mastiffs or pangolins as in the Tibetan gold miners or the Mongolian tribes or the grains that resemble ants. The words George Rawlinson wrote some 125 years ago are to a great extent still valid: "Modern research has not discovered anything very satisfactory either with respect to the animal intended, or the habits ascribed to it."<sup>164</sup> The fact is that we do not know. We need evidence, not ingenious guesses.

Leaving aside the various explanations offered about the ants we can note as perhaps the most important fact that there was a tradition about the gold-digging ants known both in Iran and India. Herodotus acquired his version from the Persians<sup>165</sup> (either through Hecataeus or directly), and according to Karsai there might be Persian elements in the story itself (the role of the camels).<sup>166</sup> He is, of course, right when he points out that the gold-digging ants cannot belong to a *Pañcatantra* type of instructive moral tales,<sup>167</sup> though I am not so sure that this was exclusively the only type of tale told in India or that we really can ascribe the structure used by Herodotus solely to the Persians.<sup>168</sup> But in any case the tale was told by the Persians and was located in Northwestern India. This location is confirmed both by Indian evidence and by Nearchus and Megasthenes, who apparently had access to local (not Persian) tradition. The setting could be Dardistan.

The country of the Dards, however, was only where the ant gold appeared, its real origin is unknown. The desert mentioned by Herodotus and others does not explain anything, because it could well represent only the *τόπος* of the world that ends in deserts.<sup>169</sup> Therefore Herodotus did not necessarily mean the Thar desert<sup>170</sup> nor any particular region to the north or northeast of India.<sup>171</sup> The gold may have come from Ladakh, from Central Asia or even from Siberia through the ancient route across the Pamir.<sup>172</sup> The story of the ants guarding gold was either fabricated by gold merchants or brought with the gold from its original country.

There was also another, related tale about fabulous animals guarding auriferous earth, and before a final conclusion we must also consider it.

---

dealt with ant gold – as was said by Megasthenes – it is not certain that the gold itself and the legend protecting its source originally belonged to Dardistan.

<sup>164</sup> Rawlinson 1862, 409.

<sup>165</sup> Hdt 3, 105 ως Πέρσαι φασί.

<sup>166</sup> Karsai 1978, 67ff.

<sup>167</sup> Karsai 1978, 62ff.

<sup>168</sup> Karsai 1978, 69: "Wir können nur soviel als erwiesen ansehen, dass die Annahme der indischen Herkunft des Märchens irrtümlich ist, und dass Herodot bei der Bearbeitung des Materials sich jenes Konstruktionsschemas bediente, das in den persischen Geschichten angewendet wurde."

<sup>169</sup> Mentioned in this context by Lindegger (1982, 34).

<sup>170</sup> As supposed by Altheim & Stiehl (1970, 439f.).

<sup>171</sup> Cf. Herrmann's attempt at location (1938, 11ff.).

<sup>172</sup> See e.g. Jettmar 1983 and 1984, 73f. for this route.

7. *Gold-Guarding Griffins*

It does not seem possible to keep wholly separate the stories about gold-digging ants and gold-guarding griffins.<sup>173</sup> These two stories are so similar that they must be somehow related, though they became known in the West by different routes. But as the griffins do not belong to India, we can be rather brief with them and the many questions involved.

Originally the griffin is an iconographical motif with wide distribution in the Near East.<sup>174</sup> Its history begins as early as in Pre-Dynastic Egypt and – perhaps independently – in the Mesopotamia and Elam of the fourth millennium B.C. At an early date it was introduced into Syro-Palestina – where it found relatives in *cherubim* – Anatolia, Urartu, Cyprus and Minoan Crete. From Crete it was carried to mainland Greece, where it was popular in the Mycenaean period and the period of orientalizing art. The wide distribution of the early griffin suggests a connection with various myths, though they are not often known. Accordingly there are also several different types of griffin such as the Egyptian royal bird, the falcon-headed griffin; the Mesopotamian divine lion, the lion-headed griffin; the eagle-headed griffin, and so on.<sup>175</sup> These different types originating in different countries were probably connected with different myths and perhaps not related to each other at all. When the motif was then borrowed by a different culture, it may have taken place either in connection with the borrowing of a related myth, or with a reinterpretation of the motif connecting it with some local myth, or it may have been borrowed as a purely decorative motif with no myths involved. The details do not concern us here.

The griffin did not stop in the Near East and Greece. It was carried east from Elam,<sup>176</sup> was used in Luristan art and became famous as a royal animal in Achaemenian art. Here it belongs mostly to the Mesopotamian lion-griffin type, but the eagle-headed type was also common in Iranian art.<sup>177</sup> In India the griffin is a late import from the Achaemenian or Hellenistic West, it is found mainly in early Buddhist sites like Bharhut, Sanchi and Sarnath.<sup>178</sup>

But the motif also migrated to the north and northeast, where it is common in Eurasian animal style.<sup>179</sup> In the fifth or fourth century B.C. it had even reached China.<sup>180</sup> Both

<sup>173</sup> Hennig 1930 is an attempt to do so.

<sup>174</sup> Bisi 1964 and 1965 form together the best survey of its history in early art.

<sup>175</sup> Summarized from Bisi 1965.

<sup>176</sup> In the Indus civilization it seems to have been unknown.

<sup>177</sup> See Bisi 1964.

<sup>178</sup> Combaz 1937a, 133 and 1937b, pl. 58. Indian examples are listed in 1937b, 19.

<sup>179</sup> Rudenko 1958, 106ff. and Bisi 1964, 35ff. In the western parts of the area (South Russia) the Greek eagle-headed type was imported with Greek art, but in Asia the Iranian influence was much more important. See e.g. Phillips 1955, 172 and Azarpay 1959, 324ff.

lion-headed and eagle-headed types are found in the animal style even in Siberia (for instance in Pazyryk).<sup>181</sup> What is perhaps important is the fact that this Eurasian griffin seems to be not so much the royal animal as a furious beast.<sup>182</sup> This could well mean that it was adapted into local folklore; perhaps the imported motif was accepted as an illustration of some local fabulous beast. I shall come back to this soon.

While the griffin is well known in oriental art, our earliest literary sources only come from classical Greece. There are three different accounts of it, by Herodotus, Aeschylus and Ctesias.<sup>183</sup> Herodotus, referring to Aristeas of Proconnesus,<sup>184</sup> locates the gold-guarding griffins in the far north or northeast, where the one-eyed Arimaspeans stole gold from them and apparently sold it to the Issedones. No details of the griffins were given. The account is variously located by scholars in the Urals, Siberia, Central Asia and even Tibet.<sup>185</sup>

Aeschylus speaks of griffins as the hounds of Zeus.<sup>186</sup> He mentions them together with the Arimaspeans and the motif of guarding is included. Gold is not directly mentioned, but a river running with gold is said to be in the country of the Arimaspeans. They form a part of the journey of Io, which was directed towards the sunrise, viz. the east. Only in a later stage of the journey would the old confusion of Ethiopians in the east and the south bring her to the Nile. The connection with the Arimaspeans, the motif of guarding, and to some extent even the direction, mean that this account cannot be kept separate from the Aristean – Herodotean tradition.<sup>187</sup>

According to Ctesias, griffins seem to belong to India,<sup>188</sup> which is difficult to explain without making Ctesias appear untrustworthy. The long fragment 45 h) preserved by Aelianus gives us many details, for instance the different colours of the parts of the animal, which belong clearly to the eagle-headed type of Greek art. It may be that Ctesias

<sup>180</sup> Esin 1976, 189.

<sup>181</sup> Bisi 1964, 48.

<sup>182</sup> Hančar 1952, 183ff. and Rudenko 1958, 106ff. But here the griffin is always attacking wild animals, not miners.

<sup>183</sup> It was mentioned by Hesiodus (F 152 πρῶτος Ἡσίοδος ἐτερατεύσατο τοὺς γρῦπας), but the text is not preserved.

<sup>184</sup> Hdt 3, 116; 4, 13 and 27, for Aristeas see Bolton 1962 (and criticism in Herington 1964, 79f.).

<sup>185</sup> An exact location is not so important to us. For various theories see e.g. Hennig 1935, Phillips 1955, 166ff. and Bolton 1962, 104ff. Perhaps the most interesting among them is the Dzungarian Gate suggested by Bolton (1962, 93ff.) and Pekkanen (1986, 178ff.).

<sup>186</sup> *Prom.* 802–806

ἄλλην δ' ἄκουσον δυσχερῆ θεωρίαν.  
όξυστόμους γάρ Ζηνὸς ἀκραγεῖς κύνας  
γρῦπας φύλαξαι τόν τε μουνῶπα στρατὸν  
'Αριμασπὸν ἵπποβάμον', οὐ χρυσόρρυτον  
οἰκοῦσιν ἀμφὶ νάμα Πλούτονος πόρου.

<sup>187</sup> Pjankov (1976, 21f.) stressing the contrast between Zeus (Aeschylus) and Apollo (Aristeas) and interpreting Io's direction erroneously as southern tried to make the two accounts wholly different. But see Bolton (1962, 45ff.), who derives Aeschylus directly from Aristeas. One could speculate here about the possible role of Hecataeus as an intermediary.

<sup>188</sup> F 45, 26 and 45h), Philostratus, *Vita Ap.* 3, 48 probably related.

had acquired some of these details from Achaemenian sculpture,<sup>189</sup> and in fact the text itself contains a reference to the works of art.<sup>190</sup> But this reference is so closely combined with the eagle head – and the royal Achaemenian griffin was always lion-headed – that it seems more likely that Ctesias was referring to Greek art. As the griffin of Greek art was already connected with a similar legend when Ctesias told a new version of the same legend, a reference to Greek works of art does not make him a liar. It is even possible that he still thought the Achaemenian lion griffin was the same animal. Even the eagle headed-griffin is not unknown in Iranian art, though it is not found in Achaemenian art.

According to Ctesias, the story of the gold-guarding griffins is told by Indians and Bactrians. He himself learned it mostly from the latter. It is the only full version of the griffin story we know from early literature. According to this version, the gold is not actually stolen from the griffins but dug up stealthily during the night when the fierce animals cannot see the miners. The country is desert – again the desert at the end of the inhabited world and associated with gold-digging ants as well – and here the griffins nest in high mountains. The expedition arranged in order to fetch the gold<sup>191</sup> lasts three or four years.

According to Bolton and P'jankov,<sup>192</sup> Ctesias has just cooked up his story combining three Herodotean passages, those on griffins of Scythia, on gold-digging ants of India (Central Asia) and on the cinnamon birds of Arabia.<sup>193</sup> This may be so, but it is also possible that Ctesias acquired another (Bactrian) version of the story known in different (Scythian and Indian) versions from Herodotus. It is not necessary to suppose that his Bactrian informants described the animal as an eagle-headed griffin, for it is missing from the Bactrian art of the period.<sup>194</sup> Perhaps Ctesias interpreted the story in the light of Greek tradition (Aristeas) and Greek art.

It is not so important at present to ascertain the reliability of Ctesias. But his account does fit quite well with other evidence. The gold-guarding griffins of the Northeast (in Herodotus and Aeschylus) and the gold-digging ants of India (or rather Central Asia north of India) seem to be related, and Ctesias' version is somewhere between. In later sources these different versions are sometimes intertwined. Aelianus, for instance, claimed that the gold-digging ants live in the same country (*συνοικοῦντες*) as the Issedones, and their neighbours are, of course, here again the Arimaspeans, who fetch the griffin gold.<sup>195</sup> Arrianus mentions ants and griffins together in India, although he is wise

<sup>189</sup> Suggested by several 19th century scholars and Jacoby (1922, 2038).

<sup>190</sup> F 45h ...οτόμα δὲ ἔχειν ἀετῶδες καὶ τὴν κεφαλὴν ὅποιαν οἱ χειρουργοῦντες γράψουσι τε καὶ πλάτουσι.

<sup>191</sup> An expedition fetching fabulous riches from the end of world is a *τόπος*. I have discussed it in Karttunen 1988.

<sup>192</sup> Bolton 1962, 65ff. and P'jankov 1976, 21f.

<sup>193</sup> Hdt 3, 116, 102ff. and 111.

<sup>194</sup> P'jankov (1976, 23) concludes from this that Ctesias could not get his story from Bactria. But at least in an earlier period griffins were known in Bactria, too (see Parpolia 1988, 233 and 257 and Sarianidi 1988, 1284f.). Among these Bactrian examples the lion-griffin is the common type, but an occasional eagle-griffin is also seen (e.g. Sarianidi 1988, 1285 and pl. II, 6).

<sup>195</sup> Aelianus, *N. An.* 3, 4.

enough not to believe them,<sup>196</sup> and in Megasthenes we find a one-eyed people (Μονομάτοι) in India.<sup>197</sup>

Traditions of fabulous gold-guarding beasts are encountered in eastern sources, too. In the Iranian tradition found also in Central Asia, the giant bird *Sēnmury/Simurg* lives in a mountain and guards a treasure, which parallels the griffin story.<sup>198</sup> Griffins themselves are found in Eurasian art, though the gold-guarding motif is not present. But at least royal Achaemenian griffins are guards. Some authors have also shown that there are elements in later Central Asian – Siberian folklore which can perhaps explain the griffin story.<sup>199</sup>

A Central Asian legend had many directions in which to travel. It may be found in the West, in South (India), but also in the East. Fortunately, we do have a Chinese version of the same tradition. In two early Chinese accounts of the horrors of the far west and north “red ants huge as elephants, and wasps as big as gourds” are mentioned.<sup>200</sup> The later of these two texts also mentions a one-eyed people and winged tigers (*qiongqil/ch'iung-ch'i*). The one-eyed people (Arimaspes?) are mentioned in several other Chinese sources, too. Unfortunately, the gold is missing from the Chinese accounts, but they still seem to represent the same tradition. The ants correspond to the gold-digging ants and a parallel for the griffins may be seen both in the giant wasps and in the winged tiger. Neither Western nor Chinese sources represent the original legend as such, but give interpretations of it where their own tradition has an important role. Nevertheless, they all reflect Central Asian–Siberian folklore and when a connection with India is mentioned, it means the Northwest, which always had close links to the north.

#### 8. *Cynocephali*

In a long passage Ctesias dealt with the dog-headed people of India<sup>201</sup> and afterwards they became a very common subject in Western *mirabilia* literature.<sup>202</sup> Though the word

<sup>196</sup> *Anab.* 5, 4, 3

<sup>197</sup> Megasthenes F 27b).

<sup>198</sup> P'jankov 1976, 24. See also Schmidt 1980.

<sup>199</sup> Alföldi 1933, 567f. and Bolton 1962, 80ff. with references. As the griffin story does not belong to India, I shall not go into details here. The question of the solar character of the griffins is also left out.

<sup>200</sup> Quoted by Bolton (1962, 81f.) who (or Professor Hawkes, whom he thanks for Sinological information) dates *Chao Hun* (or *Ch'u Tz'u?*, in Pinjin *Zhao hun* and *Chu ci*) to the mid-third century B.C. and *Shan Hai Ching* (*Shanhai jing*) to the first century B.C. (but containing much older material). Later golden gadfly and gold-digging ants are mentioned in the Mongolian version of the Geser epic quoted by Laufer (1908, 431), who knows some Chinese parallels too.

<sup>201</sup> F 45, 37ff.

<sup>202</sup> See Kretzenbacher 1968, some additions in Karttunen 1984. Cf. also Marquart 1913, CCff. (Africa)

Κυνοκέφαλος is found earlier in Herodotus, who mentions them in Libya,<sup>203</sup> Ctesias' work contains the oldest description of them. At the same time it is by far the longest and one of the best preserved passages of his *Indica* in the epitome of Photius.

These dog-headed people have been discussed quite often since Lassen, and mostly it has been accepted that they really represent some Indian (but not Indo-Aryan) people.<sup>204</sup> On the strength of Herodotus some have maintained that they must originally belong to Africa.<sup>205</sup> In my earlier studies I have tried to show that in classical literature there are three different traditions about a dog-headed people, located in Libya, Ethiopia and India. Of these the Ethiopian Dog-heads represent only a misunderstanding of the Κυναμολγοί of Agatharchides, sometimes erroneously ascribed to Ctesias, too, and the Libyan Dog-heads may be wholly independent of the Indian people.<sup>206</sup> This is supported by the Eastern evidence I shall discuss next.

The Indian evidence is unfortunately rather late as it comes from the Purāṇas, nevertheless it does consistently point to the Northwest. There is a geographical list included in several Purāṇas,<sup>207</sup> which we may call the "River list", as the peoples and places are listed according to the major rivers. Two verses are given under the Sindhu and the last name but one in all versions is *śunāmukha*.<sup>208</sup> The name corresponds to Ctesias' Κυνοκέφαλοι, who are also said to live near the Indus.<sup>209</sup> Another perhaps related name is found in the astrological Kūrmavibhāga list<sup>210</sup> among the northern peoples, but the

and 1930, 36ff. (Iran), Molé 1951 (Iran), Fenikowski 1938 (Mediaeval and Eastern Europe), Klinger 1937, 122f. (Slavic peoples) and Toivonen 1937, 97f. (the Baltic countries and Finland).

<sup>203</sup> Hdt 4, 191.

<sup>204</sup> See e.g. Lassen 1852, 654ff., Marquart 1913, CCff., Reese 1914, 71ff., Wecker 1925 and Lindegger 1982, 51ff. I have myself discussed them extensively in Karttunen 1977 (some parts summarized in Karttunen 1984).

<sup>205</sup> Bunbury 1883, 340f. and still Dihle 1984, 203f.

<sup>206</sup> Karttunen 1984. Marquart (1913, CCIII) suggests that the Herodotean Dog-heads might be monkeys. This is not impossible. Later the word was commonly used for a baboon (*Comopithecus hamadryas*) and the first examples are nearly contemporary, from Aristophanes (*Eques* 415f.), Plato (*Theaetetus* 161C and 166C) and Aristotle (*H. An.* 2, 8, 502A). I collected the occurrences of κυνοκέφαλος as the name for the baboon in Karttunen 1977, 32ff. and discussed them *ibid.* 108f. Klinger's (1937, 120f.) attempt to show that Κυνοκέφαλος in Aristophanes does not mean baboon but a dog-headed giant, a chthonic demon, which should supposedly be the original meaning, is hardly convincing.

<sup>207</sup> According to Sircar 1971, 65 they are *Brahmāṇḍa* 51, 40ff., *Matsya* 121, 39ff. and *Vāyu* 47, 38ff. The text with variants is given in Sircar 1971, 65ff. There is another version quoted a long time ago from the (late) *Prabhāsakhaṇḍa* of *Skandapurāṇa* by Wilford (1808, 336ff.). It has often been quoted as the only source (e.g. Wecker 1925, 26 and still Lindegger 1982, 108), but can now be discarded in favour of the better evidence given by Sircar (see also my note in Karttunen 1984, 33).

<sup>208</sup> Text according to Sircar 1971, 68f.:

daradāṁś ca sakāśmīrān gāndhārān aurasān kuhūn/  
śivapaurān indramarūn vasātīmś ca visarjayān//  
saindhavān randhrakarakān bhramarābhīraramakān/  
śunāmukhāṁś cordhvamarūn sindhur etān niṣevate//

<sup>209</sup> Ctesias F 45, 37 οἰκοῦσι δὲ ἐν τοῖς ὄρεσι μέχρι τοῦ Ἰνδοῦ ποταμοῦ.

<sup>210</sup> BS 14 and Parāśara quoted in Bhāṭṭopala's commentary on BS, further MārkP 55 and al-Bīrūnī.

reading is ambiguous as in *turagānanāśvamukhāḥ* (as it is in most manuscripts) the name after the Turagānanas might be read either as *śvamukha* or as *aśvamukha*.<sup>211</sup> A horse-headed people is not unknown in Indian sources, but here the shorter reading is mostly accepted.<sup>212</sup>

In addition to the ethnic names directly pointing to a dog-headed people the names for low castes (*caṇḍala*) like *śvapāka* and *śvapaca* (both meaning 'one who cooks dogs') are often mentioned in connection with the Ctesianic Dog-heads.<sup>213</sup> These dog-eaters as well as the Dog-heads proper might well have been given this mocking name by other peoples. We may also note in passing that there is epigraphic as well as literary evidence for a people called *Kukura* somewhere in southern Rajasthan.<sup>214</sup>

This Indian evidence is mostly very late for our purposes. The same must be said of the Iranian Dog-heads.<sup>215</sup> Markwart finds in Middle Iranian literature and in the *Śāh-nāme* several accounts of them (called *saksar* or *sagsār*).<sup>216</sup> They are often mentioned in connection with other fabulous peoples known from classical sources and contain similar characteristics as in Ctesias.<sup>217</sup> But as these sources are so late, a borrowing from the West (e.g. from the *Alexander Romance* or even Ctesias himself) is wholly acceptable, and therefore a direct borrowing from India as suggested by Markwart<sup>218</sup> is not very likely.

As there is very little evidence for the spread of Ctesianic fabulous peoples in the East, even late sources are not worthless as evidence as we find several of them in different countries. In addition to Indian and Iranian sources there are also Chinese accounts, where a country of the dogs is located somewhere in Central Asia or Tibet.<sup>219</sup> The first brief mention is from the early Han period,<sup>220</sup> and a later source (in the 10th century

211 *BS* 14, 25:

kaikayavasātiyāmūnabhogaprasthārjunāgnidhrāḥ/  
ādārsāntardvīpitrigartaturagānāḥ śvamukhāḥ//

212 E.g. by Kern (*BS* translation *ad 1.*), Kirfel (1920, 88), Sircar (1967, 97 and 234) and Bhat (*BS* edition *ad 1.*). *Āśvamukha* has been accepted by Pargiter (note to translation of *MārkP* 55 [58], 43), as the *Purāṇa* (55, 43 *tathāvāśvamukhāḥ prāptāś cividāḥ keśadhrināḥ*) gives no other possibility, but even he compared them with the Dog-heads. The *BS* passage has been connected with Ctesias e.g. by Lévi (1904, 83). Dog-head (*śvamukha*) is also confirmed by al-Bīrūnī. In Karttunen 1977, 129ff. I have collected Indian names of peoples connected with dogs or horses.

213 See e.g. Benfey, 1840, 42 and Wecker 1925, 26.

214 Sircar 1971, 271ff. and Dey s.v. The epigraphic evidence comes from the inscriptions of Rudradāman and Sri Puṇmāvi, both in the early centuries A.D.

215 But see also Parpola 1988, 218 (especially note 185).

216 Markwart 1930, 36ff., see also Molé 1951. The oldest of these passages seems to be *Ayātkār i Žāmāspīk* 9, where several fabulous peoples are mentioned: *varaśmān u vargōśān u duvālpādān u vitastikān u sagsarān* "Breast-eyed, Breast-eared, Spindle-shanked, Pygmies and Dog-heads" (quoted in Humbach 1960, 45).

217 Markwart 1930, 49ff.

218 Markwart 1930, 52f. Molé 1951, 136f. suggests a Western origin for the Iranian Dog-heads and related legends. Iranian fabulous peoples (especially *asāra* 'άσαρα' found already in Avesta) are also discussed by Humbach (1960, 44ff.).

219 Discussed in Lindegger 1982, 57ff.

220 *Yanzi chunqiu* (*Yen tzu ch'un chi'u*) according to Lindegger 1982, 59.

A.D.) confirms that its inhabitants have a dog's head and a human body. We may also notice that according to the same source the women are wholly human. Other Chinese sources make the country of the dogs a neighbour to the country of women (Strīrājya of Sanskrit sources). Medieval Western tradition similarly makes the Dog-heads the husbands of the Amazons. Some of the Chinese sources we refer to here are the same, where we find also the "soft river" Ruoshui (Jo-shui) related to Greek (including Ctesias) and Indian sources.<sup>221</sup>

We may also note that Ctesias' description of his Dog-heads contains several features which might very well be Indian. Their economy based primarily on shepherding suits very well the conditions in, say, the western Himalaya, where sheep have apparently always been very important. At the same time hunting and shepherding as main occupations<sup>222</sup> is somewhat un-Aryan, and the extensive use of sheep's milk is definitely so.<sup>223</sup> The oil made of (sheep's) milk has been compared with ghee.<sup>224</sup> The small insect living in their country and yielding good red dye could well be the lac insect, as a red dye is an important side product in addition to lac.<sup>225</sup>

Un-Aryan habits, a different appearance (referred to as dog's head), a different language ("barking") and black skin<sup>226</sup> make it likely that we have here an actual people

<sup>221</sup> See Lindegger 1982, 57ff. and chapter VII.9. As to the Western tradition connecting Dog-heads and Amazons, e.g. Adam of Bremen told of a *Terra feminarum* situated east of the Baltic Sea where male children are Dog-heads (*fiunt cynocephali*).

<sup>222</sup> Ctesias F 45, 40 ὅτι οἱ Κυνοκέφαλοι οίκουντες ἐν τοῖς ὄρεσιν οὐκ ἐργάζονται, ἀπὸ θῆρας δὲ ζῶσιν· ὅταν δὲ ἀποκτείνωσιν αὐτά, ὀπτῶσι πρὸς τὸν ἥλιον, τρέφουσι δὲ καὶ πρόβατα πολλὰ καὶ αἴγας καὶ ὄνους, πίνουσι δὲ γάλα καὶ δέγυαλα τῶν προβάτων.

<sup>223</sup> *GautDh* 17, 24 *nityam āvikam* (scil. *kṣīram*) *apeyam auṣṭram aikāśapham ca*.

<sup>224</sup> Suśruta, Cikitsāsth. 24 speaks very approvingly of anointing the body with oil. Ghee is mentioned in 24, 34 *tan na prakṛtisātmyartudeśadoṣavikārīvat/ tailam ghṛtam vā matimān yuñjyād abhyāṅgasekayoh//*.

<sup>225</sup> This was fully discussed in Karttunen 1977, 63ff. As to the tree where this coccid lives, no less than 43 different species are mentioned (listed in Watt s.v. *Coccus lacca*, discussed in Karttunen 1977, 69ff.) including those few mentioned by some scholars in connection with Ctesias (Kiessling 1916, 331, Tola & Dragonetti 1987, 174, note 43). For a different approach to the tree see Johnston 1942, 29ff. A possible connection of the name given by Ctesias to this tree (F 45, 36 σιπταχόρα) with the Iranian word (Avestan *xšvid/xšīd-*, OP \**xšifta*-) for 'milk' (Johnston 1942, 249f. and Szemerényi 1958, 189) makes one think of some milky tree like those of the genus *Ficus*.

<sup>226</sup> Ctesias F 45, 37 ἐν τοῖσδε τοῖς ὄρεσι φησιν ἀνθρώπους βιοτεύειν κυνὸς ἔχοντας κεφαλήν... φωνὴν δὲ διαλέγονται οὐδεμίαν ἀλλ' ὠρύονται ὕσπερ κύνες, καὶ οὕτω συνιᾶσιν αὐτῶν τὴν φωνὴν... μέλανες δὲ εἰσι καὶ δίκαιοι πάνυ, ὕσπερ καὶ οἱ ἄλλοι Ἰνδοί, οἵς καὶ ἐπιμίγνυνται, καὶ συνιᾶσι μὲν τὰ παρ' ἔκεινων λεγόμενα, ούτοι δὲ οὐ δύνανται διαλέγεσθαι, ἀλλὰ τῇ ὠρυγῇ καὶ τοῖς χεροῖς καὶ τοῖς δακτύλοις σημαίνουσιν ὕσπερ οἱ κωφοὶ (καὶ ἄλλοι). Here their righteousness is the only feature which is probably due to Greek embellishment, but then a people living as far away as the Dog-heads did had necessarily to be righteous (see chapter V.1.). As to the language, with a dog's head it was only natural to call it barking, and anyway foreign languages were rarely given the right of full human speech (cf. Greek βάρβαρος). Even a different dialect of the same language may be easily described as "unintelligible" like Eastern OIA *he 'Iavo* instead of Vedic *he 'rayo* in *SB* 3, 2, 1, 23f. It is called unintelligible, barbarous and Asura talk leading to destruction (*te*

living in Northwest India, perhaps in the western Himalaya.<sup>227</sup> But I do not think it is wise to attempt any exact geographical or ethnographical identification. This has been often attempted, they have been made for instance Muṇḍas<sup>228</sup> or Tibetans,<sup>229</sup> always with some but wholly insufficient evidence. It has not always been wholly understood how heterogenous Northwestern ethnography must have been with Indo-Aryans, Iranians, Nuristani and Dardic peoples, Tibeto-Burmans, Burušaškis, perhaps Muṇḍas – and we must never forget the possibility of “x” or several “x’s”, ethnic elements later fully assimilated by the existing ones.<sup>230</sup>

It remains to note the “Indian” name given by Ctesias to the Dog-heads. Καλύστριοι should have the same meaning as Greek Κυνοκέφαλοι.<sup>231</sup> As the attempt to find any Iranian (what Ctesias’ “Indian” words often seem to be) or Indo-Aryan form corresponding to this explanation has not met with any success, several other, more or less correct explanations have been offered. They include *kālavastra* ‘of black habit’,<sup>232</sup> *kaluṣṭra/kharoṣṭra* a mock name of uncertain meaning,<sup>233</sup> *kaluṣa* ‘dirty’,<sup>234</sup> a contamination of *kukura* and *kurukṣetra*<sup>235</sup> and *kālīstrīya* ‘of black women’ or *kauleyaśrita* ‘surā āttavacaso he ‘lavo he ‘lava iti vadantaḥ parābabhūvuh// tatraitām api vācam ūduḥ/ upajīnāsyāṁ sa mlecchas tasmān na brāhmaṇo mlecched asuryā haiṣā vāg). See also Parpola 1988, 219 on *a-nāsah/an-āsah/āsah* (ποτομος).

<sup>227</sup> But not necessarily. The river of their country, called variously “Υπαρχος/Σπάθαρος/ Hypobarus/”Υσπορος can be explained through \*Υσπάθαρος from either Iranian (OP) *Vispabara* or OIA (perhaps through MIA!) *Viśvabara*, and this has been compared with the Swat (OIA *Suvāstu*) by Lévi (1904, 83). The same comparison can also be made with Wecker’s (1925, 25) *subhara*. A location between the Swat and the Indus would be quite acceptable. I have already pointed out in chapter III.4. how uncertain the old identification of the “Υπαρχος etc. with the Ganges actually is. Lévi’s Swat is accepted by André & Filliozat (1986, 370). It might also be significant that according to Ctesias amber is found in the river, and Chinese sources mention the amber of India (Laufer 1907, 225ff.). According to Laufer, the first mention of amber in China refers to the amber of Ki-pin, which in early sources refers more probably to Kapiša than to Kashmir (Stein 1900, 354 and Lévi 1915, 102). On amber see also chapter III.5.

<sup>228</sup> Thus e.g. Marquart (1913, CCVf.) made them a Munda people which, according to Marquart, formed a substratum in the Western Himalaya languages (Kanawari a. o.).

<sup>229</sup> Lévi 1904, 83: “The Tibetan populations have exactly the traits of the *Kalystrīoi* mentioned by Ktesias: mountaineers, hunters, eaters of meat, herdsmen, rich in sheep, above all dirty, with a dirtiness which is rendered still more striking by contrast with the regular and frequent ablutions of the Hindus. Their physiognomy, and their harsh language, bristling with monosyllables, also correspond...” Tibetans are also opted for by Lindegger (1982, 54f.). Herrmann (1938, 20), who wants to see in dog-headed and dog-like peoples of Ctesias and Asian folklore some reminiscence of *Sinanthropus Pekinensis*, is entirely fantastic! But his remarks (*ibid.* 21f.) on Tibetan traditions of mountain demons and ape-men may be noted in connection with the Dog-heads, although they are from a much later period.

<sup>230</sup> Cf. Tikkannen 1988, 316f.

<sup>231</sup> Ctesias F 45, 37 καλοῦνται δὲ ὑπὸ τῶν Ἰνδῶν Καλύστριοι (Καλύπτριοι), ὅπερ ἐστὶν Ἑλληνιστὶ Κυνοκέφαλοι.

<sup>232</sup> Suggested by Vans Kennedy and, referring to him, by Benfey (1840, 41f.), criticized already by Lassen (1852, 656), but often mentioned later.

<sup>233</sup> Lévi 1904, 83 (on meaning see 82f.).

<sup>234</sup> Reese 1914, 86 (with the misprint *kaluṣa*), again (without misprints) Tola & Dragonetti (1987, 184).

<sup>235</sup> Schafer 1964, 499f.

'of doglike appearance'.<sup>236</sup> But these are all pure guesses. We can dismiss them on the ground that they have nothing to do with the meaning given by Ctesias (in other cases his "Indian" words are often easily explained from Iranian). There is also an Iranian etymology suggested by Marquart,<sup>237</sup> who corrected the Greek into Σαδύστροι and derived it from OP \*sa-dauxštr- 'milkers of dogs'. This is better in meaning, but in addition to an unwarranted correction it involves Κυναμολγοί, who hardly belong to India or Ctesias at all, but to Ethiopia and Agatharchides.<sup>238</sup> Therefore we cannot but conclude that we do not know. Even a connection with the Καλλατίαι of Hecataeus and Herodotus,<sup>239</sup> though possible, is rather haphazard.

Although we cannot exactly identify the Dog-heads, and if they are a primitive non-Aryan people this is not very surprising, they clearly belong to Northwest India. There is also the possibility suggested orally by Professor Asko Parpola that the Dog-heads are in fact the same as the Vṛātyas, the unorthodox Aryan people often mentioned in Vedic literature. There are many references connecting the Vṛātyas or their god Rudra with dogs.<sup>240</sup> They are also clad in skins and their gṛhapatī wears dark (*kṛṣṇaśa*) clothing,<sup>241</sup> which brings Benfey's *kālavastra* to mind. A difficulty is that generally the Vṛātyas belong to the east, but in the *Mahābhārata* Madras, a Northwestern people with unorthodox habits, are called the Vṛātyas<sup>242</sup> and in the *Aitareya-Brāhmaṇa* Rudra is mentioned as "a man in black garments coming from the north".<sup>243</sup>

<sup>236</sup> Lindegger, somewhat incongruously, gives both in different places (1982, 53ff. and 108). Both are hardly acceptable as such.

<sup>237</sup> Marquart 1913, CCVIIIf.

<sup>238</sup> See Lindegger 1982, 67f. and Karttunen 1984. The Ethiopian location was suggested by Marquart himself (1893, 539f.), too, but later he changed his opinion in favour of Ctesias and India (1913, CCVIIIf.). He was too hard on Agatharchides, who was actually a much better author than Ctesias.

<sup>239</sup> Suggested already by Benfey (1841, 41), then often repeated (e.g. Lindegger 1982, 53f.).

<sup>240</sup> *AV* 11, 2, 30 on Rudra's howling dogs, *VS* 16, 28 on dogs and masters of dogs in Rudra's retinue, *SSS* 4, 20, 1 on Rudra's sons as wolves, *HGS* 2, 2, 7, 2 addressing Ekavrātya as a dog (*śunaka*) and some later works. See Arbman 1922, 29 and 37 and Falk 1986, 18f. As sattrins seem to be related to the Vṛātyas (Falk 1986, 30ff.) we may also note with Falk (1986, 40) that in two Upaniṣadic passages (*ChāgU* 2 and *ChU* 1, 12) dogs are mentioned as sattrins. On Vṛātyas in general see e.g. Hauer 1927, Parpola 1973, 34ff. and 1988, 251ff. and Falk 1986, 17ff., on dogs in India see chapter VII.3.

<sup>241</sup> Parpola 1973, 38 and Falk 1986, 20.

<sup>242</sup> *Mbh* 8, 30, 36 (cf. VIII.5.).

<sup>243</sup> *AB* 5, 2, 14 *puruṣah kṛṣṇaśavāsy uttarata upodatiṣṭhan.*

9. *Silas/Sailodā*

The wonderful fountain variously called Σίλας/Σίλλης/*Sides*<sup>244</sup> is mentioned by several classical authors beginning with Hellanicus, Ctesias, Democritus and Megasthenes.<sup>245</sup> It is a very good case of a parallelism between Western sources on India, Indian sources on the Northwest and even Chinese sources on what is the Southwest seen from China. Here I can be rather brief as I have already discussed it in my article.

There are several more or less independent Eastern traditions related to our miraculous fountain. In them it is always a river, not a spring, but then a river beginning from a spring is also mentioned by Megasthenes. In Indian sources the most important version is the River *Śilā* or *Sailodā* forming the boundary of the mythical northern paradise of *Uttarakuru*.<sup>246</sup> This river is said to be very difficult to cross because everything, with the exception of the *kīcaka* reed growing on its banks, changes into stone when touched by the water. Therefore the river is called *Śilā* 'stone' or *Sailodā* 'stone-water'.

Another version of the story is found in Buddhist literature, both Pāli<sup>247</sup> and Chinese.<sup>248</sup> Here the river is called *Sīdā*, Chinese *Ruoshui* (*Jo-shui*), and its water is said to be so light that nothing can float on it, not even a feather. In Indian epic and purānic

<sup>244</sup> This reading of Pliny has been mostly thought to be corrupt but see Karttunen 1985, 64f.

<sup>245</sup> Collected and discussed in Lindegger 1982, 75ff. and again in Karttunen 1985, 55f. See also André & Filliozat 1986, 419f.

<sup>246</sup> The main versions are the *Mahābhārata* 2, 48, 2–4 and the *Rāmāyaṇa* 4, 42, 37f. with an important addition in insertion 930\* of the critical edition of the latter work. These and some further sources are quoted and discussed in Karttunen 1985, 61ff. (to references there, Lévi 1918, 133 and Agrawala 1956, 9f. must be added) where it was also noted, how most of these sources have not been noticed in most studies of Western accounts of the spring. To make reference easier I shall give them again. *Mbh* 2, 48, 2–4 *merumandarayor madhye sailodām abhito nadīm/ ye te kīcakaveṇūnām chāyām ramyām upāsate// khaśā ekāśanā jyohāḥ pradarā dīrghaveṇavah/ paśupāś ca kūṇindāś ca taṅgaṇāḥ parataṅgaṇāḥ// te vai pipilikām nāma varadattām pipilikaiḥ/ jātarūpām droṇameyam ahārṣuḥ puñjaśo nṛpāḥ//* R 4, 42, 37f. *tām tu deśam atikramya sailodā nāma nimnagā ubhayos tirayor yasyāḥ kīcakā nāma veṇavah// te nayanti param tirām siddhān pratyānayanti ca/ uttarāḥ kuravas tatra kītapunyapratīśrayāḥ//* (an account of the *Uttarakuru* follows), and insertion 930\* (before 38cd, in some mss. before 38) found in all northern recensions *sā na sākyā nadī tartum puṇyā paramadurgamā/ tasyāḥ sprśtvā tu sailam sarvah sailo 'bhijāyate// te tu tiragatās tasyā mahākīcakaveṇavah/ samā-gacchānty asāmgena sāmgamām te parasparam//*.

<sup>247</sup> *Nimijātaka* (J. 541) verses 424f. with their commentary:

uttarena nadī sīdā gambhirā duratikkamā/  
naṭaggivāṇṇā jotanti sādā kañcanapabbatā//  
parūḥakacchā tagarā rūḥakacchā vanā nagā/  
tatrāśūm dasasahassā porāṇaisayo pure//

*sīdā nāma nadī gambhirā nāvāhi pi duratikkamā ahosi, kiṁkāraṇā: sā hi atisukhūmodakā, sukhumattā udakassa antamaso morapiñjam pi tattha patitam na sañthāti sīditvā hetthātalam eva gacchati ten' ev' assā Sīdā ti nāmām ahosi (sīdā derived from sīdati 'sink').*

<sup>248</sup> Examined by Lindegger (1982, 75ff.).

literature a river *Sītā* or *Sītā* is mentioned as situated next to the *Sailodā*, and in Jaina cosmographies there is a river *Sītoda* 'of cool water'.<sup>249</sup> This *Sītā*/*Sītā* is commonly identified with the Yarkand river of Central Asia, and Central Asia or Tibet is also always the geographical context of the stone river or light river of our sources.<sup>250</sup> It is, however, better to see it as a mythical river than to try to put it on a map.

A further examination of these sources shows that there are several other features mentioned in connection with this river which we meet again in classical accounts on India. In *Mahābhārata* the ant gold was brought by "the kings who live by the river *Sailodā* between Mount Meru and Mount Mandara and enjoy the pleasing shade of bamboo and cane".<sup>251</sup> In Herodotus, Nearchus and Megasthenes there is no mention of a river (or even a spring) in connection with the gold-digging ants, but there is an interesting passage in Aelianus, which may perhaps be connected with this.<sup>252</sup> The passage is somewhat complicated by the presence of the Issedones, who belong to another tradition (the griffins) than the gold-digging ants. Yet a river which the ants do not cross may well be compared with the river which nobody can cross without a boat made of a special kind of reed. It might also be that the river is here mentioned as the means to shake off the ferocious ants' pursuit.<sup>253</sup> The origin of Aelianus' account is not given and there is no use in guessing.<sup>254</sup>

Chinese sources locate Dog-heads in the same region as our river and the country of women. The latter are found in Sanskrit sources, too, as *Strījya*, which is located in the far north. In the *Mahābhārata* the river is situated in a mythical country (between Meru and Mandara), and in the *Rāmāyaṇa* it is said to be the southern boundary of the happy paradise of *Uttarakuru*.<sup>255</sup> *Uttarakuru* was the country where milk and honey flowed, which makes one think of the river of honey flowing out of a stone in Ctesias.<sup>256</sup> Jewels and gold were found in place of stones and sand, which may be connected with the gold sand dug out by the ants in Herodotus and other classical sources. The people there had a life span of several millennia, and longevity is also met with in classical sources.<sup>257</sup>

<sup>249</sup> Karttunen 1985, 63.

<sup>250</sup> Karttunen 1985, 62f.

<sup>251</sup> Van Buitenen's translation. He seems to take *kīcakaveṇu* as a dvandva, but a comparison with the *Rāmāyaṇa* (*kīcakā nāma veṇavāḥ* in the critical edition, *mahākīcakaveṇavāḥ* in insertion 930\*) seems to suggest that a karmadhāraya is meant.

<sup>252</sup> *N. An.* 3, 4 οἱ μύρμηκες οἱ Ἰνδίκοι <οἱ> τὸν χρυσὸν φυλάττοντες οὐκ ἀν διέλθοιεν τὸν Καμπύλινον ποταμόν. 'Ιστηδόνες δὲ τούτοις συνοικοῦντες τοῖς μύρμηξι. Unfortunately, the rest is not preserved in the manuscripts; there follow only the last words of a mutilated chapter (καλοῦνται τε καὶ εἰσιν).

<sup>253</sup> Crossing a river (running water) in order to get rid of one's pursuers is a common motif in folklore.

<sup>254</sup> The preceding chapter (3, 3, where there are fat-tailed sheep but no pigs in India) comes from Ctesias, but he can hardly be the source of 3, 4. It is very unlikely that Ctesias would have written either on gold-digging ants or on Issedones. Both were first mentioned by Herodotus, and it seems that Ctesias was deliberately leaving out anything mentioned in the Indian logos of Herodotus.

<sup>255</sup> Karttunen 1985, 64. For *Strījya* and *Uttarakuru* see also *Rājat* 4, 172ff. and 185.

<sup>256</sup> F 45, 29 καὶ ποταμόν φησιν ἐκ πέτρας ρέοντα μέλι.

<sup>257</sup> Here most important are perhaps the long-living people ascribed by Pliny to Ctesias (F 52

According to epic sources, Uttarakuru was also a country where the ancient law of promiscuity was still in force, a feature which has been connected with the polyandry still met with in the western Himalayas.<sup>258</sup> This may well be compared with several classical accounts of Eastern promiscuity,<sup>259</sup> though they can also easily be explained by the early ethnographical theory (see chapter V.1.).

We should not forget the reed used in order to cross the river. The word *kīcaka* is not restricted to the banks of our river, and it has mostly been identified as a kind of hollow bamboo.<sup>260</sup> In later Classical Sanskrit it was often mentioned as producing a beautiful sound in the wind.<sup>261</sup> But even here the Northwestern connection is not missing. A check of the occurrences in Kālidāsa showed that it is always mentioned together with Kashmir, Kailāśa, the mythical Kinnaras or some other Northwestern feature.<sup>262</sup> In any case, a reed which provides a means to cross a river where everything else turns into stone must somehow be special, even if it is not given a very special name. In a late geographical account we meet a people called the Kīcakas, but although the geographical context is the same, the lection is unclear.<sup>263</sup> In the *Mahābhārata* the Kīcakas live in Madhyadeśa.

These reeds are never found in classical accounts of the wondrous spring. But it may well be asked whether the gigantic reeds described by Ctesias are the same as these *mahākīcakaveṇavah*. They grow in the same mountains where the Indus is said to flow and we remember that the Dog-heads, too, lived in mountains bordering on the Indus. This Indian reed is so big that two men can hardly put their arms around it and as high as the mast of a merchantman having a capacity of one talent. That bamboo has probably contributed is seen in its being dioecious. A fragment adds that two boats are made of a single section between nodes.<sup>264</sup> The same was mentioned also in Ctesias' *Persica*,

...*Macrobios*. *Ctesias gentem ex his, quae appelletur Pandarae, in convallis sitam annos ducentos vivere*). See also F 45, 50 and Marquart 1913, CCIXff. (discussing both). Thomas (1906, 202) pointed out that both Arabic and Chinese authors were speaking of the longevity of the inhabitants of Ferghana, and nowadays it is often ascribed to those of Hunza.

<sup>258</sup> Winternitz 1897, 730. In India this old law – which also seems to contain an element of sexual freedom allowed to women – was kept in honour by great ḥis, and Winternitz (*ibid.* 729) asked if this is not sarcasm.

<sup>259</sup> See e.g. Hdt 3, 101 and Megasthenes F 27b9.

<sup>260</sup> *Arundo karka* Roxb. according to Mayrhofer s.v. *kīcaka* (also Suppl.), where various theories about its derivation – perhaps Dravidian – are discussed. Of Indian medical lexicons Dhanvantari (4, 137) mentions *kīcaka* as a synonym of *varṣa*, but the *Rājanīghaṇṭu* makes it a different plant, a hollow bamboo (215 *anyas tu randhravamśah syāt tvaksāraḥ kīcakāhvayāḥ*). There seems to be some confusion with the scientific name of this plant. In older floras it is called *Arundo karka* Retz. or *Arundo Roxburghi*, nowadays *Phragmites karka* (Retz.) Steud. It is not a bamboo, but a reed. (I owe this information to my brother Krister Karttunen.)

<sup>261</sup> *AK* 971 *veṇavah kīcakās te syur ye svananty aniloddhatāḥ*; *Megh* 58 *sabdāyante madhuram anilaiḥ kīcakāḥ...*

<sup>262</sup> Thus *Megh* 58, *KumS* 1, 8 and *Ragh* 2, 12 and 4, 73.

<sup>263</sup> *MārkP* 55, 48f. (58, 48f. in Pargiter) ...*yena kinnararājyam ca paśupālām sakīcakam// kāśmīrakam tathā rāgrām abhisārajanas tathā* Pargiter too reads *kīcaka* but Sircar (1967, 97) prefers *kucika*. In the better tradition (*BS*) we find *kīra* in its place. Although the people known as the Kīcaka here might be compared with the Dīrghavenus of the *Mbh* passage quoted above, I dare not connect this with our river and its reeds, as was done by Pargiter in his note *ad l.*

where it is added that the treelike reed never rots.<sup>265</sup> While the gigantic measures of this Indian reed were fully consistent with the Western ethnographic idea about the nature of India and other remote countries, they might at the same time also reflect an Eastern tradition connected with the fabulous country of Uttarakuru and the river separating it from other countries. Combined with other common elements this seems a more likely explanation than the mere exaggeration of bamboos growing on the Indus (yet Herodotus told of similar reeds growing near the mouth of the Indus)<sup>266</sup> or a distorted account of the coconut or palmyra palm.<sup>267</sup>

In conclusion, it must be emphasized that our river does not have any exact geographical location,<sup>268</sup> although it can be vaguely located in the north of Northwest India (like Meru and some other mythical places, too). It is a mythical boundary, the uncrossable line between the human world and a mythical paradise. As such it is related to other mythical boundaries, especially to the various rivers of the underworld.<sup>269</sup>

<sup>264</sup> Ctesias F 45, 14 ὅτι ὁ Ἰνδός ποταμὸς ῥέων διὰ πεδίων καὶ ὥρεων ὁεῖ, ἐν οἷς καὶ ὁ λεγόμενος Ἰνδικὸς κάλανος φύεται, πάχος μὲν ὅσον δύω ἄνδρε περιώργυιωμένοις *κμόλις* περιλάβοιεν, τὸ δὲ ὕψος ὅσον μυριοφόρου νεώς ιστός εἰσι καὶ ἔτι μείζους καὶ ἐλάττους, οἷους εἰκὸς ἐν ὅρει μεγάλῳ. εἶναι δὲ τῶν καλάμων καὶ ἄρρενας καὶ θηλείας· ὁ μὲν οὖν ἄρρην ἐντερώνην οὐκ ἔχει, καὶ ἔστι κάρτα ισχυρός, ἡ δὲ θήλεια ἔχει and 45c εἰ θαῦμα δὲ νομίζοι τις Ἀρράβων τοὺς καλάμους, / ὁ Τζέτζης λέγει, τοὺς Ἰνδῶν καλάμους τῷ Κτησίᾳ/ ὡς διοργύιους γράφοντι τὸ πλάτος τίς πιστεύσοι; / καὶ τοῖς ἐν γονάτιον δύο ποιεῖν ὄλκάδας. From Ctesias perhaps comes also Pliny N. H. 7, 2, 21 *harundines vero tantae proceritatis ut singula internodia alveo navigabili ternos interdum homines ferant*. Real bamboos were seen by the companions of Alexander and described by Theophrastus (H. Pl. 4, 11, 13) and Megasthenes (F 8 and 27b, again with gross exaggeration). It was confused with the Ctesianic giant bamboo in Pliny N. H. 16, 65, 162, where real bamboo is described with the addition that *navigiorumque etiam vicem praestant, si creditimus, singula internodia*.

<sup>265</sup> F 1b, 17, 5 (Diodorus in the Semiramis episode) καὶ πρῶτον μὲν ἐκ τοῦ καλάμου κατεσκεύασε πλοῖα ποτάμια τετρακισχίλια· ἡ γὰρ Ἰνδικὴ παρά τε τοὺς ποταμοὺς καὶ τοὺς ἐλώδεις τόπους φέρει καλάμου πλῆθος, οὐδὲ τὸ πάχος οὐκ ἄν ῥᾶδίως ἄνθρωπος περιλάβοι λέγεται δὲ καὶ τὰς ἐκ τούτων κατασκευαζομένας ναῦς διαφόρους κατὰ τὴν χρείαν ὑπάρχειν, οὕσης ἀσήπτου ταύτης τῆς ὕλης.

<sup>266</sup> Hdt 3, 98 ...οἱ δὲ ἐν τοῖσι ἔλεσι οἰκέουσι τοῦ ποταμοῦ καὶ ἰχθύας οἰτέονται ὡμούς, τοὺς αἱρέουσι ἐκ πλοίων καλαμίνων ὄρμῷμενοι καλάμου δὲ ἐν γόνῳ πλοῖον ἔκαστον ποιέεται. Bamboos or other reeds of the Indus have been suggested as an explanation e. g. by Lassen (1852, 633f.) and Lambrick (1975, 101f.). Gross exaggeration of the dimensions of Indian bamboos is also seen later, see Yule & Burnell s.v. *Bamboo*.

<sup>267</sup> The idea of Ball (1888, 336f.). But the nodes show that a graminaceous plant is meant.

<sup>268</sup> Different locations have often been suggested by modern scholars (e.g. Yarkand, Helmand and Jaxartes, cf. Thomas 1906, 202 and 463) and perhaps by some ancient.

<sup>269</sup> This relation is suggested by Sachse (1982).

## 10. Σκώληξ

Soon after the description of the Dog-heads<sup>270</sup> Ctesias gives a curious account of a gigantic worm living in the Indus.<sup>271</sup> The worm resembles the maggots which live in figs or in timber, but it is seven cubits long and very plump. During the night it comes out of the water and hunts horses, oxen and camels. It has just two teeth. It is only captured with much difficulty, and is then hung up in the sun for thirty days. In this way it begins to drip a thick oil which is inflammable and can burn anything. The Indian king is said to use it as a terrible weapon, much like the Byzantians later used Greek fire.

This worm has often been connected with the crocodile,<sup>272</sup> but its curious characteristics are not easily connected with the reptile. Rumours of the actual crocodile and its voracity may have contributed, but there is also another explanation.<sup>273</sup> It was suggested by Lassen<sup>274</sup> that the worm may have a mythological origin, that it is a fire weapon given by the serpent god and mistaken by Ctesias as a real animal. Lassen in his time had very little evidence for this idea, but now there is considerably more to say about it than the mere importance given to snakes and Nāgas in the Northwest.

Nāgas were in possession of magical fire and "the fiery blast of their nostrils" carried destruction. Even the breath of an ordinary snake was considered to be poisonous, sometimes also its sight.<sup>275</sup> There is a close connection between Nāgas/snakes and water.<sup>276</sup> The two long teeth of our worm can be much better compared with the fangs of a snake – though they are situated in both jaws – than the rows of teeth of a crocodile.

First among the Nāgas is Śeṣa or Ananta, the cosmic serpent, bearer of the earth and of Viṣṇu.<sup>277</sup> An incarnation of Śeṣa is Balarāma, the brother of Kṛṣṇa. Both Śeṣa and Balarāma are often represented with identical attributes such as the hood, the plough and the mace.<sup>278</sup> Both are in several ways connected with the northwestern direction<sup>279</sup> and especially with the mouth of the Indus. Without going into all the details, I would like to refer to an article by Asko Parpola, where he attempts to show a connection between the mythical Pātāla (abode of Śeṣa and the Nāgas) and the geographical one situated in the

<sup>270</sup> Reese 1914, 80 proposed that it belongs to the country of the Dog-heads themselves, but in the fragments it is clearly indicated that the worm lives in the Indus.

<sup>271</sup> Ctesias F 45, 46 and 45r, briefly mentioned also in 45, 3.

<sup>272</sup> For the first time, I think, by Baehr (1824, 335), later e.g. Wilson 1836, 60f., Ball 1888, 326ff. and Lambrick 1975, 102.

<sup>273</sup> I am now mostly summarizing what I wrote in Karttunen 1977, 95ff.

<sup>274</sup> Lassen 1852, 641f.

<sup>275</sup> Vogel 1926, 15ff.

<sup>276</sup> Vogel 1926, *passim* (see Index s.v. *water*).

<sup>277</sup> Vogel 1926, 192ff.

<sup>278</sup> Vogel 1926, 196 and Joshi 1979, 32ff.

<sup>279</sup> In passing we may notice that Balarāma's mother, Rohiṇī, an incarnation of the Mother of snakes (*sarpamātā*), was a princess from Bāhīraka (Bactria). See Joshi 1979, 2.

Indus delta,<sup>280</sup> as well as between Pātāla and the *tāla* 'the wine palm' (*Borassus flabellifer* L., Palmyra palm).<sup>281</sup> This palm is very common in the Indus Delta and an emblem of Balarāma, who is called *tālaketu/tāladhvaja/tālabhṛt/tālānka*.<sup>282</sup> A further point of comparison is that between Balarāma, the famous drunkard,<sup>283</sup> and the Vaḍavāmukha, the unquenching fire (thirst) at the bottom of the sea just outside the Delta.<sup>284</sup>

When we now turn back to our worm, we find some common points. The maggots in timber are white and in Philostratus we find it actually said that the Indian worm is white, too.<sup>285</sup> Balarāma, when considered as born from Viṣṇu, derived his origin from the white hair of the god (when Kṛṣṇa came out of the black hair) and has accordingly a fair complexion.<sup>286</sup> In ancient Tamil literature he is called the *Vellai-nākar* or 'white serpent', and *Vāliyōn* 'the white one'.<sup>287</sup> In many legends Balarāma is specially connected with rivers.<sup>288</sup>

When we turn back to Śeṣa, we even find a legend which could perhaps explain the method for obtaining the burning oil as described by Ctesias.<sup>289</sup> In the *Harivāraṇa-Purāṇa* Śeṣa is represented as hanging from a tree in ascetic fervour for a thousand years, distilling *kālakūṭa* poison from his mouth, and thus burning the world.<sup>290</sup> We may also notice some other Nāgarājas with connected features. Thus, Takṣaka has his home in Takṣaśīla (or Kurukṣetra) and is called the White One (*śveta*).<sup>291</sup> When the gods and the Asuras churned the Ocean they made the snake Vāsuki their churning rope. After a thousand years the poison-spitting heads of the serpent bit the rocks with their fangs. A terrible fire-like poison called *hālāhala* came forth, and would have burnt up the whole world if Śiva had not swallowed it.<sup>292</sup>

Thus, it seems possible that the worm represents Balarāma/Śeṣa who is, either by Ctesias or in some Northwestern tradition unknown to us, interpreted as a ferocious aquatic animal. The crocodile may have contributed.<sup>293</sup> It is another case of a Northwestern tradition which is no longer preserved in its original form but in the more or less

<sup>280</sup> Parpola 1975a, 131f.

<sup>281</sup> Parpola 1975a, 138 and 140. It was mentioned as Τάλα by Megasthenes (F 12), cf. Stein 1922, 71 and Hinüber 1985, 1105.

<sup>282</sup> Parpola 1975a, 140 and Joshi 1979, 5.

<sup>283</sup> See Joshi 1979, 48f. He is often depicted as carrying a wine flask and his eyes are misty from intoxication (*madavibhramalocana*). Of course he drinks Palmyra toddy, too.

<sup>284</sup> Parpola 1975a, 131f.

<sup>285</sup> *Vita Ap.* 3, 1 (related to Ctesias, cf. Reese 1914, 90f.).

<sup>286</sup> Joshi 1979, 16 (quoting *Mbh*).

<sup>287</sup> Parpola 1975a, 132f., where he also connects Balarāma with the white *śuklapakṣa* half of the moon and with the (equally white) planet Venus.

<sup>288</sup> See Joshi 1979, 1ff.

<sup>289</sup> It has been noticed in this connection by Goossens (1929, 39f.).

<sup>290</sup> *Harivāraṇa* 12076ff. as summarized by Hopkins (1915, 24).

<sup>291</sup> Vogel 1926, 204f. On a connection between the Nāgas and Taxila see also Dani 1986, 2f.

<sup>292</sup> Vogel 1926, 199f. (referring to R 1).

<sup>293</sup> I cannot, however, agree with Goossens (1929, 37ff.) when he connects the worm, the crocodile, Śeṣa, real serpents, Gangetic river dolphins and the ὄδοντοτύραννος of Pseudo-Palladius.

VII. Northwestern India in Greek and Indian Sources (1)

scanty accounts of Greek and Sanskrit literature.

## REFERENCES

### I. Classical texts

N.B. The Abbreviations of Liddell & Scott & Jones for Greek and of *Thesaurus Linguae Latinae* for Roman authors are used when they are clear enough. In addition to those mentioned below, some Finnish translations (e.g. E. Rein's Herodotus and M. Kaimio's Aeschylus) have occasionally been used for quick reference.

Aelianus: *N. An.*: *Aelian On the Characteristics of Animals*, [text] with an English translation by A.F. Scholfield, 1 – 3. Loeb Classical Library, London 1958–59 (for 1. and 3. repr. 1971–72 used).

----- V. H.: *Varia Historia*, edidit Mervin R. Dilts. Bibliotheca Teubneriana, Leipzig 1974.

Aeschylus: *Aeschyli septem quae supersunt tragoeidas* edidit Denys Page. Oxford Classical Texts, Oxonii 1972.

Alcman: Fragments in Th. Bergk, *Poetae Lyrici Graeci*, Vol. 3. Lipsiae 1882.

Aristeas of Proconnesus: fragments edited in Bolton 1962.

Aristobulus: fragments edited in *FGrH* 139, translated in Robinson 1953.

Aristoteles: *Gen. An.*: *Aristotelis de generatione animalium*, rec. H.J. Drossart Lulofs. Oxford Classical Texts, Oxonii 1965.

----- Aristotle, *Generation of Animals*, with an English Transl. by A.L. Peck. Loeb Classical Library, London 1942 (rev. repr. 1963).

Aristoteles: *H. An.*: *Aristotle, Historia Animalium*, with an English Transl. by A.L. Peck, 1 – 2. Loeb Classical Library, London 1965–70.

Aristoteles: *Part. An.*: *Aristotle, Parts of Animals*, with an English Transl. by A.L. Peck; *Movement of Animals. Progression of Animals*, with an English Transl. by E.S. Forster. Loeb Classical Library, London 1937 (rev. repr. 1961).

Aristoteles, passages referring to India are collected in Bolchert 1908, 13ff. and Reese 1914, 32ff.

Arrian: *Anabasis*: ed. and transl. G. Wirth and v. Hinüber, see Hinüber 1985.

Arrian: *Indica*: ed. and transl. G. Wirth and O. v. Hinüber, see Hinüber 1985, and Chantraine 1927, transl. also McCrindle 1877.

Athenaeus: *The Deipnosophists*, with an English translation by Charles Burton Gulick, 1 – 7. Loeb Classical Library. London 1927–41 (repr. 1961).

Chares: fragments edited in *FGrH* 125, translated in Robinson 1953.

Cleitarchus: fragments edited in *FGrH* 137, translated in Robinson 1953.

Ctesias: *Indica*: ed. in Reese 1914, 7ff. and *FGrH* 688, transl. in McCrindle 1882 and Bowman 1938a.

Ctesias: *Persica*: ed. in *FGrH* 688 & König 1972, transl. in Bowman 1938a and König 1972.

Curtius Rufus *Historiae Alexandri Magni*, ed. Theodorus Vogel. Bibliotheca Teubneriana, Lipsiae 1904.

Daimachus: *Indica*: fragments ed. in *FGrH* 716.

Democritus: fragments ed. in Diels & Kranz 2.

Diels & Kranz: Hermann Diels: *Die Fragmente der Vorsokratiker. Griechisch und deutsch*. <sup>10</sup>Aufl. hrsg. von Walther Kranz, 1 – 3. Berlin 1960–61.

Diodorus: *Diodorus of Sicily*, with an English translation by C.H. Oldfather, 1 – 12. Loeb Classical Library. Vol. 1, London 1933 (repr. 1946), Vol. 2, L. 1935 (repr. 1967), Vols. 3 – 12 not used.

Eratosthenes: *Die geographischen Fragmente des Eratosthenes*, neu gesammelt, ordnet und besprochen von Hugo Berger. 1880 (repr. Amsterdam 1964).

Euripides: *Fabulae*, rec. Gilbertus Murray, 1 – 3. Oxford Classical Texts, Oxonii 1902 (1) & <sup>2</sup>1908–13 (2–3) (repr. 1974 [1–2] and 1949 [3]).

Gellius: *N. A.*: *A. Gellii Noctes Atticae*, rec. P.K. Marshall, 1 – 2. Oxford Classical Texts, Oxonii 1968

Grattius: *Cynegeticum*: *Gratti Cynegeticum quae supersunt*, cum prolegomenis, notis criticis, commentario exegetico edidit P.J. Enk, 1 – 2. Zutphaniæ 1918 (repr. Hildesheim – New York 1976).

Hdt = Herodotus, q.v.

Hecataeus: *Periegesis*: ed. Jacoby, *FGrH* 1.

----- *Hecataei Milesii Fragmenta* ... a cura di G. Nenci. Firenze 1954.

----- Fragments on India also in Reese 1914, 3.

Heracleitus: fragments ed. in Diels & Kranz 1.

Herodotus: *Herodoti Historiae*, rec. C. Hude, 1 – 2. Oxford Classical Texts, Oxonii 1908 (for vol. I the 1973 reprint of the third ed. 1927 was used).

----- *Herodotus, Historiae*, ed. H.B. Rosen, vol 1. Bibliotheca Teubneriana, Leipzig 1987.

----- Indian account also in Reese 1914, 3ff.

Hesiod: *Hesiodi Theogonia, Opera et Dies, Scutum*, ed. Friedrich Solmsen, *Fragmenta selecta* ed. R. Merkelsbach et M.L. West. Oxford Classical Texts, Oxonii 1970.

Hippocrates: *Concordantia in corpus Hippocraticum*, ed. G. Maloney & W. Frohn, avec la collaboration du P. Potter, 1 – 5. Alpha–Omega, Reihe A LXXV, Hildesheim – Zürich – New York 1986.

Hippocrates: *Airs, Waters, Places: Hippocrates, Über die Umwelt*, hrsg. und üb. von Hans Diller. Corpus medicorum Graecorum I, 1, 2. Berlin 1970.

Hippocrates: *Morb. mul.: Œuvres complètes d'Hippocrate*, traduction nouvelle avec le texte grec en regard ... par É. Littré, t. 8. Paris 1853.

Homer: *Iliad: Homeri Opera*, rec. David B. Munro et Thomas W. Allen, 1 – 2. Oxford Classical Texts, Oxonii 3<sup>1920</sup> (repr. 1969–71).

Homer: *Odyssey: Homeri Opera*, rec. David B. Munro et Thomas W. Allen, 3 – 4. Oxford Classical Texts, Oxonii 2<sup>1917–19</sup> (repr. 1967–66).

Horatius: *Opera omnia*, edidit B. Wys. Editiones Helveticae, Series Latina 2. Frauenfeldae 4<sup>1969</sup>.

Josephus: *Ant.: Antiquitates Judaicae in Works* with an English translation by H. St. J. Thackeray, R. Marcus, A. Wikgren and L. H. Feldman, 1 – 9. Loeb Classical Library, London 1926–65.

Justinus: *M. Iuniani Iustini Epitoma historiarum Philippicarum Pompei Trogi*, post Franciscum Ruehl edidit Otto Seel. Bibl. Teubneriana, Lipsiae 1935.

Lobel & Page: *Poetarum Lesbiorum Fragmenta*, ed. Edgar Lobel et Denys Page. Oxford 1955.

Megasthenes: fragments ed. in Schwanbeck 1846, in *FGrH* 715 and transl. in McCrindle 1877.

Mela: *Pomponius Mela De chorographia*, ed. Carolus Frick. Bibliotheca Teubneriana, Lipsiae 1880.

Mimnermus: Fragments in Bruno Gentili & Carolus Prato, *Poetae elegiaci. Testimonia et fragmenta* I. Bibliotheca Teubneriana, Lipsiae 1979.

Nauck: *Tragicorum Graecorum Fragmenta*, rec. Augustus Nauck, repr. with a Supplement by Bruno Snell. Hildesheim 1964 (orig. 1888).

Nearchus: fragments edited in *FGrH* 133, translated in Robinson 1953.

Onesicritus: fragments edited in *FGrH* 134, translated in Robinson 1953.

Patrocles: fragments edited in *FGrH* 712.

Periplus = *Periplus maris Erythraei: Le Périple de la Mer Érythrée suivi d'une étude sur la tradition et la langue* par Frisk. Göteborgs högskolas årsskrift 33, 1927:1, Göteborg 1927.

----- transl. in McCrindle 1879, Schoff 1912 and Huntingford 1980.

Philostratus: *V. Ap.: Philostratus, The Life of Apollonius of Tyana*, with an English Transl. by F.C. Conybeare, 1 – 2. Loeb Classical Library, London 1912 (repr. 1960).

Pindarus: *Pindar, Siegesgesänge und Fragmente*, Griechisch und Deutsch hrsg. und üb. von Oskar Werner. Tusculum-Bücher, München [c. 1967].

Pliny N. H.: *Natural History* in ten volumes with an English translation by H. Rackham, 1 – 9. Loeb Classical Library, London 1938–1952 (repr. 1967–68).

----- *Pline l'ancien, Histoire naturelle. Livre XXXVII*. Texte établi, traduit et commenté par E. de Saint-Denis. Collection ... Guillaume Budé. Paris 1972.

----- book VI also in André & Filliozat 1980.

Plutarchus: *Plutarch's Lives*, with an English Transl. by Bernadotte Perrin, 7. *Demosthenes and Cicero. Alexander and Caesar*. Loeb Classical Library, London 1919 (repr. 1958).

Ptolemy, son of Lagus: fragments edited in *FGrH* 138, translated in Robinson 1953.

Ptolemy, Claudius: *Claudii Ptolemii Geographia*. Ed. C. Fr. A. Nobbe, 1 – 3. Lipsiae 1843–45.

----- ed. and transl.: *La Géographie de Ptolémée. L'Inde (VII, 1–4)*. Texte établi par Louis Renou. Paris

1925.  
 ---- transl. also McCrindle 1885.  
 Sappho: fragments ed. in Lobel & Page.  
*Scholia Graeca in Homeri Odysseam*. Ed. G. Dindorfius, 1 – 2. Oxonii 1855.  
 Scylax: fragments ed. in Reese 1914, 2f. and *FGrH* 709.  
 Sophocles: *Tragödien und Fragmente*. Griechisch und deutsch hrsg. und üb. von W. Williget, überarbeitet von Karl Bayer, Tusculum-Bücherei, München 1966.  
 ---- fragments completely in Nauck.  
 ---- fragments completely in Stefan Radt: *Tragicorum Graecorum Fragmenta*. Vol. 4. *Sophocles*. Göttingen 1977.  
 Stephanus: *Stephani Byzantii Ethnicon quae supersunt*, ex recensione Augusti Meinekii. Berolini 1849.  
 Strabo: *Strabonis Geographica*, recognovit Augustus Meineke, 1 – 3. Teubner, Lipsiae 1866.  
 ---- *The Geography of Strabo*, with an English Transl. by Horace Leonard Jones, 1 – 8. Loeb Classical Library, London 1917–32 (repr. used).  
 Theophrastus: *H. pl.: Theophrastus, Enquiry into Plants*, [Text] with an English translation by Sir Arthur Hort, 1 – 2. Loeb Classical Library, London 1916–26 (repr. 1968–77).  
 ---- *Theophrastus on Stones*, Introduction, Greek text, English translation and commentary by E.R. Caley and J.F.C. Richards. Columbus, Ohio 1956.  
 Thucydides: *Thucydidis Historiae*, rec. H.S. Jones, 1. Oxford Classical Texts, Oxonii 1942 (repr. with emended and augmented apparatus criticus from original 1900 edition; repr. 1970).  
 Xenophon: *Cynegeticus: Xénophon, L'art de la chasse*, texte établi et traduit par Edouard Delebecque. Collection Guillaume Budé, Paris 1970.  
 Xenophon: *Cyropaedia: Xenophontis opera omnia*, rec. E.C. Markham, Tomus IV. *Institutio Cyri* (Cyropaedia). Oxford Classical Texts, Oxonii 1910 (repr. 1956).  
 Xenophon, passages referring to India are collected in Reese 1914, 30ff.

## 2. Indian texts

N.B. The abbreviations given in Mylius 1970 are used when feasible.

*AB* = *Aitareyabrahmaṇam*. Śrīmatsāyaṇācāryaviracitabhbhāṣyasametam. Etat pustakam Ve. Śā. Rā. Rā. Kaśmīraśāstrī Āgāśe ityetaiḥ saṁśodhitam, 1 – 2. Ānandāśramasāriskṛtagranthāvalī 32. Vol. 1, new ed. 1979, vol. 2 31977.  
 ---- *Rigveda Brahmanas: The Aitareya and Kauṣītaki Brāhmaṇas of the Rigveda*, transl. from the original Sanskrit by Arthur Berriedale Keith, HOS 25, Cambridge, Mass. 1920 (repr. Delhi 1971).  
*AK* = *The Amarakoṣa with a short commentary and footnotes*. Bombay (NSP) 101969.  
*ĀpDh* = *Āpastamba-Dharmasūtra: Aphorisms on the Sacred Law of the Hindus by Āpastamba*, ed. ... by G. Bühler, Bombay 1868.  
 ---- transl. G. Bühler: *The Sacred Laws of the Āryas*, Part I. SBE 2, Oxford 1879.  
*Ārṣeya-Upaniṣad: Un-Published Upanishads*, ed. by the Pandits of Adyar Library under the supervision of Dr. C. Kunhan Raja. Adyar 1933.  
*AS* = *Atharvaveda-Saṁhitā: Atharva Veda Saṁhita*, hrsg. von R. Roth und W.D. Whitney, 3ed. (repr. of 21924) Bonn.  
 ---- *Atharva-Veda-Saṁhitā*, translated into English with a Critical and Exegetical Commentary by W.D. Whitney [and edited by C.R. Lanman]. HOS 7 – 8, Cambridge, Mass. 1905 (2Indian repr. Delhi 1971).  
*BaudhDh* = *Das Baudhāyana-Dharmasūtra*. Hrsg von. Hultzsch, Zweite, verbesserte Auflage. Abhandlungen für die Kunde des Morgenlandes XVI:2. Leipzig 1922.  
 ---- transl. G. Bühler: *The Sacred Laws of the Āryas*, Part II. SBE 14, Oxford 1882.  
*BhāgP* = *Śrīmadbhāgavatapurāṇam (mūlamātram)*. Gītāpṛes-edition, Gorakhpur 11ed. samvat 2037.  
*BS* = *Varahamihira's Brhat Saṁhitā*, with English Translation, Exhaustive Notes and Literary Comments by M. Ramakrishna Bhat, 1 – 2. Delhi 1981–82.

----- transl. Kern 1872.

*Caraka-Saṁhitā* maharṣinā Bhagavatāgniveśena praṇīta mahāmuninā Carakeṇa pratisaṁskṛtā, Āyurvedācārya-śrījayadevavidyālaṅkāreṇa praṇītayā Tantrāthidīpikākhyayā hindīvyākhyayā tippaṇyā ca samanvitā, 1 – 2. Dili 91975 (Repr. 1979).

*ChāgU* = *Chāgaleya-Upaniṣad*, quoted from secondary sources.

*ChU* = *Chāndogya-Upaniṣad*, quoted from secondary sources.

*Dhany* = *Rājanighaṇṭusahito Dhanvantarīyanighaṇṭuḥ*. Etat pustakam Ve. Sa. Ra. Rā. "Purahdare" ityupanāmakai Viṭṭhalātmajajair Vaidyanārāyaṇaśarmabhiḥ saṁśodhitam. Ānandāśramasāṁskṛtagranthāvalī 33. Tīrṭyeyam arīkanāvṛttiḥ 1986 (repr. of 21925).

*GautDh* = *Gautama-Dharmasūtra: The Institutes of Gautama*, ed. with an index of words by A.F. Stenzler. Sanskrit Text Society, London 1876.

----- transl. G. Bühler: *The Sacred Laws of the Āryas*, Part I. SBE 2, Oxford 1879.

*Hariv* = *The Harivamśa, the khila or supplement to the Mahābhārata*. Text as constituted in its Critical Edition. Poona 1976.

*HGS* = *Hiranyakeśi-Gṛhyasūtra*, quoted from secondary sources and H. Oldenberg's translation (SBE 2, Oxford 1892).

*J* = *The Jātaka together with its commentary being Tales of the anterior births of Gotama Buddha*, for the first time edited in the original Pāli by V. Fausbøll, 1 – 6. London 1877–96. [Vol. 7] *Index to the Jātaka and its Commentary* by Dines Andersen. London 1897.

----- *The Jātaka or stories of the Buddha's Former Births*, transl. from the Pāli by various hands under the editorship of E.B. Cowell, 1 – 6. Cambridge 1895–1907 and Index-Vol. 1913 (all repr. London 1969).

*Jaimini-Aśvamedha: atha jaiminiktaśvamedhab prārabhyate*. Bombay 1863.

*JB* = *Jaiminīya-Brāhmaṇa of the Sāmaṇeva*. Complete text critically ed. for the first time by Raghu Vira and Lokesha Chandra. Sarasvati-Vihara Series 31. Nagpur 1954.

----- *Das Jaiminīya-Brāhmaṇa in Auswahl. Text, Übersetzung, Indices*. Von W. Caland. VKNAW, Nieuwe reeks, deel XIX:4. Amsterdam 1919.

*KA* = *Kauṭilya-Arthaśāstra*; ed. & transl. R.P. Kangle, *The Kautilya Arthaśāstra*, 1 – 2. Bombay 21969–72 (repr. Delhi 1986).

*Kāś* = *Kāśikā. A Commentary on Pāṇini's Grammar by Vāmana and Jayāditya*. Ed. by Aryendra Sharma and Khanderao Deshpande and D.G. Padhye. 1 – 2. Sanskrit Academy Series 17 & 20 (A 14 & 17). Hyderabad 1969–70.

*KS* = *Kāphakasāṁhitā*, sampādaka Śrīpāda Dāmodara Sātavalekara. Pāraḍī 41983.

*Kṣemendra, Aucityavīcāracarcā: Mahākavīkṣemendrakṛtā Aucityavīcāracarcā Manoramākhyasāṁskṛta-hindi-vyākhyābhāyām upetā*. Vyākhyākārau Śrīnārāyaṇamīśraḥ, Gokuldāsa Saṁskṛta Granthamālā 44. Vārāṇasī 1982.

Kullūka, see Manu.

*KumS* = *Kumārasaṁbhava* of Kalidāsa, cantos I–VIII, ed. with the Commentary of Mallinātha, a Literal English Translation, Notes and Introduction by M.R. Kāle. Delhi 71981 (1923).

----- transl. H. Heifetz: *The Origin of the Young God*. Berkeley – Los Angeles 1985.

*Mbh* = *The Mahābhārata* for the first time critically edited by Vishnu S. Sukthankar, S.K. Belvalkar ... and other scholars. 1–19. Poona 1933–1959.

----- *The Mahābhārata*. Translated by J.A.B. Van Buitenen. 1–3 [Books 1–5]. Chicago 1973–78.

*Manu* = *Mānava-Dharmaśāstra*; ed. J.L. Shastri: *Manusmṛti, With the Sanskrit Commentary Manvartha-Muktāvalī of Kullūka Bhaṭṭa*. Delhi 1983.

----- ed. G. Jha: *Medhātithi according to Manu-Smṛti*. Bibliotheca Indica 256, Calcutta 1932.

----- transl. G. Bühler: *The Laws of Manu*. SBE 25, Oxford 1886 (Repr. Delhi 1975).

*MārkP* = *Mārkandeya-Purāṇa*: Shri Venkateshwar Press edition, Bombay 1910.

----- F.E. Pargiter: *The Mārkandeya-Purāṇa*, Translated with Notes. Bibliotheca Indica, Calcutta 1904.

*Megh* = Kalidāsa's *Meghadūta*. With some notes of Saradaranjan Ray, ed. by Kumudranjan Ray. 6ed. rev. and enlarged, Calcutta 1968 (1928).

Medhātithi, see Manu.

*MS* = *Maitrīyāpiśāṁhitā*, sampādaka Śrīpāda Dāmodara Sātavalekara. Pāraḍī n.d. (4ed.).

## References

*Mūlasarvāstivādavinaya*, translation in Przyluski 1914.

**NIP** = *Nīlamatapurāpa*; *Nīlamata* or *Teachings of Nīla*. Sanskrit text with critical notes ed. by K. de Vreeze. Leiden 1936.

**Nirukta** = *Jaska's Nirukta sammti den Nīghaṇṭavas* hrsg. und erläutert von Rudolph Roth. Göttingen 1852.

**P** = *Pāṇini: The Aṣṭādhyāyī of Pāṇini*, ed. & transl. into English by Late Śrīśa Chandra Vasu, 1 – 2, Delhi 1977 (repr., original edition Allahabad 1891)

**Pat** = *Patañjali: The Vyākaraṇa-Mahābhāṣya of Patañjali*. Ed. by F. Kielhorn. 3rd ed. revised ... by K.V. Abhyankar. 1–3, Poona 1962–72.

**R** = *Rāmāyaṇa* crit. ed. 1 – 7. Baroda 1960–1975.

----- *The Rāmāyaṇa of Vālmīki. An Epic of Ancient India*. Vol. 1. Intr. and Transl. by Robert Goldman, Vol. 2. Intr. and Transl. by Sheldon I. Pollock. Princeton, N. J. 1984–86.

**Ragh** = *Raghuvarīṣa: The Raghuvarīṣa* of Kalidasa with The Commentary (the Sañjīvī) of Mallinātha, ed. by Kāśīnāth Pāṇḍurang Parab and Wāsudev Laxman Śāstrī Pāṇḍīkar, Bombay (NSP) 10/1932.

----- *Kālidāsa: The Dynasty of Raghu*, transl. from the Sanskrit by R. Antoine, Calcutta n.d. [c. 1972].

**Rajan** = *Rājanīghaṇṭu*, see *Dhanv*.

**Rajat** = *Rājatarāṅgiṇī: Kalhaṇa's Rājatarāṅgiṇī or Chronicle of the Kings of Kashmir*, ed. by M.A. Stein. Bombay 1892.

----- *Kalhaṇa: Rājatarāṅgiṇī*, transl. with an introduction, commentary and appendices by M.A. Stein, 1 – 2. Westminster 1900 (repr., Delhi 1961).

**Rudradeva**: *Syainika Śāstram. The Art of Hunting in Ancient India of Rājā Rudradeva of Kumaon*. Translated into English by Haraprasad Shastri, edited with a critical introduction by Mohan Chand. Delhi 1982.

**RV** = *Rgveda-Saṁhitā: The Hymns of the Rig-Veda in the Samhita and Pada texts*, reprinted from the edition princeps by F. Max Müller, 1 – 2, Kashi Sanskrit Series 167, Varanasi 3/1965.

----- *Der Rig-Veda*, aus dem Sanskrit ins Deutsche übersetzt und mit einem laufenden Kommentar versehen von Karl Friedrich Geldner. HOS 33 – 36. Cambridge, Mass. 1951–1957.

**SB** = *Śatapatha-Brāhmaṇa: The Śatapatha-Brāhmaṇa in the Mādhyandina-śākhā*, ed. by Albrecht Weber. The White Yajurveda ed. by A. Weber, Part 2. Berlin – London 1855.

----- transl. J. Eggeling. 1 – 5. SBE 12, 36, 41, 43 & 44. Oxford 1882–1900.

**SSS** = *Saṅkhayana-Śrautasūtra*, quoted from secondary sources.

*Suśruta-Saṁhitā*, bhūmikā lekhak Śrībhāskar Govind Ghāṇekar, viśeṣ mantavya Lalācandra Vaidya, Dillī 5/1975 (text with Hindi commentary).

**Surapāla**: *Das Wissen von der Lebensspanne der Bäume. Surapāla's Vṛkṣayurveda* kritisch ediert, übersetzt und kommentiert von Rahul Peter Das. Alt- und Neuindische Studien 34. Stuttgart 1988.

**VasDh** = *Vasiṣṭha-Dharmasūtra* ed. in *Śmṛtiṇāmī Samuccayah*. Ānandaśramaśākṛtagranthāvalī 48. 2/1929, 187–231.

----- transl. G. Bühler: *The Sacred Laws of the Āryas*, Part II. SBE 14. Oxford 1882.

**ViDh** = *Viṣṇu-Śmṛti* (*Vaiṣṇava-Dharmaśāstra*) ed. by J. Jolly. Bibliotheca Indica, Work No. 91. (Calcutta 1881) repr. in Chowkhamba Sanskrit Series 95. Varanasi 1962.

----- *The Institutes of Vishnu*, Transl. by Julius Jolly. SBE 7. Oxford 1880.

**VS** = *The Vājasaneyi-Saṁhitā in the Mādhyandina- and the Kāṇva-śākhā with the Commentary of Mahīdhara*, ed. by Albrecht Weber. Berlin & London 1852.

**YDh** = *Yājñavalkya's Gesetzbuch*. Sanskrit und Deutsch herausgegeben von A.F. Stenzler. Repr. of 1849 edition, Osnabrück 1970.

### 3. Abbreviations of Periodicals (including series and some reference works)

N.B. The abbreviations of *L'Année Philologique* and those common in Indological literature are used.

**AAHu** = *Acta Antiqua Hungarica*  
**AAWM** = *Abhandlungen der Akademie der Wissenschaften in Mainz, Geistes- und Sozialwissenschaftliche*

<i>Klasse</i>	
<i>ABORI</i>	= <i>Annals of the Bhandarkar Oriental Research Institute</i>
<i>ACUSD</i>	= <i>Acta Classica Universitatis Scientiarum Debreceniensis</i>
<i>AHAM</i>	= <i>Anales de Historia antigua y medieval</i>
<i>AI</i>	= <i>Acta Iranica</i>
<i>AION</i>	= <i>Annali, Instituto Orientale di Napoli</i>
<i>AJPh</i>	= <i>American Journal of Philology</i>
<i>AJSL</i>	= <i>American Journal of Semitic Languages</i>
<i>ANRW</i>	= <i>Aufstieg und Niedergang der römischen Welt</i>
<i>AO</i>	= <i>Acta Orientalia</i>
<i>AoF</i>	= <i>Altorientalische Forschungen</i>
<i>ArtAs</i>	= <i>Artibus Asiae</i>
<i>AsRes</i>	= <i>Asiatic Researches</i>
<i>ASNP</i>	= <i>Annali della Scuola Normale Superiore di Pisa, Classe di Lettere e Filosofia</i>
<i>AUSB</i>	= <i>Annales Universitatis Budapestinensis, Sectio Classica</i>
<i>AW</i>	= <i>Ancient World</i>
<i>BAEO</i>	= <i>Boletin de la Asociacion Espanola de Orientalistas</i>
<i>BDCRI</i>	= <i>Bulletin of the Deccan College Research Institute</i>
<i>BEFEO</i>	= <i>Bulletin de l'École Française de l'Extrême-Orient</i>
<i>BSL</i>	= <i>Bulletin de la Société de Linguistique de Paris</i>
<i>BSOAS</i>	= <i>Bulletin of the School of Oriental and African Studies</i>
<i>CJ</i>	= <i>Classical Journal</i>
<i>CPh</i>	= <i>Classical Philology</i>
<i>CQ</i>	= <i>Classical Quarterly</i>
<i>CR</i>	= <i>Classical Review</i>
<i>CRAI</i>	= <i>Comptes rendus de l'Académie des Inscriptions et Belles-Lettres</i>
<i>E&amp;W</i>	= <i>East and West</i>
<i>EOL</i>	= <i>Ex Oriente Lux</i>
<i>FGrH</i>	= <i>Fragmente Griechischer Historiker</i> , hrsg. von F. Jacoby. I-II D, Berlin 1923-30; III A - III C, Leiden 1954-58.
<i>FUF</i>	= <i>Finnisch-ugrische Forschungen</i>
<i>GGA</i>	= <i>Göttingische Gelehrte Anzeigen</i>
<i>Grundriss</i>	= <i>Grundriss der Indo-Arischen Philologie und Altertumskunde</i>
<i>HOS</i>	= <i>Harvard Oriental Series</i>
<i>IA</i>	= <i>Indian Antiquary</i>
<i>IC</i>	= <i>Indian Culture</i>
<i>IrA</i>	= <i>Iranica Antiqua</i>
<i>IHQ</i>	= <i>Indian Historical Quarterly</i>
<i>IIJ</i>	= <i>Indo-Iranian Journal</i>
<i>IT</i>	= <i>Indologica Taurinensis</i>
<i>JA</i>	= <i>Journal Asiatique</i>
<i>JAOS</i>	= <i>Journal of the American Oriental Society</i>
<i>JASB</i>	= <i>Journal of the Asiatic Society of Bengal</i>
<i>JCA</i>	= <i>Journal of Central Asia</i>
<i>JESHO</i>	= <i>Journal of the Economic and Social History of the Orient</i>
<i>JHS</i>	= <i>Journal of Hellenic Studies</i>
<i>JIH</i>	= <i>Journal of Indian History</i>
<i>JNES</i>	= <i>Journal of Near Eastern Studies</i>
<i>JNSI</i>	= <i>Journal of the Numismatic Society of India</i>
<i>JOIB</i>	= <i>Journal of the Oriental Institute, Baroda</i>
<i>JRAS</i>	= <i>Journal of the Royal Asiatic Society</i>
<i>KP</i>	= <i>Der kleine Pauly 1 - 5</i> , München 1964-75 (DTV pocket ed. 1979 used).
<i>KSINA</i>	= <i>Kratkie soobščenija Instituta Narodov Azii</i>

### References

<i>KZ</i>	= <i>Zeitschrift für vergleichende Sprachforschung ("Kuhns Zeitschrift")</i>
<i>MDAFA</i>	= <i>Mémoires de la Délégation archéologique française en Afghanistan</i>
<i>MIO</i>	= <i>Mitteilungen des Instituts für Orienforschung</i>
<i>MO</i>	= <i>Le Monde Orientale</i>
<i>NCI</i>	= <i>La Nouvelle Clio</i>
<i>OLP</i>	= <i>Orientalia Lovanensia Periodica</i>
<i>OLZ</i>	= <i>Orientalistische Literaturzeitung</i>
<i>RE</i>	= A. Pauly & G. Wissowa et al. [ed.], <i>Realencyclopädie der Klassischen Altertumswissenschaften</i>
<i>RM</i>	= <i>Rheinisches Museum</i>
<i>RO</i>	= <i>Rocznik Orientalistyczny</i>
<i>RSO</i>	= <i>Rivista degli Studi Orientali</i>
<i>SAA</i>	= <i>South Asian Archaeology</i>
<i>SBE</i>	= <i>Sacred Books of the East Series</i>
<i>SBeAW</i>	= <i>Sitzungsberichte der Preussischen Akademie der Wissenschaften (Berlin), Philologisch-historische Klasse</i>
<i>SO</i>	= <i>Studia Orientalia</i>
<i>StII</i>	= <i>Studien zur Indologie und Iranistik</i>
<i>SWA</i>	= <i>Sitzungsberichte der Österreichischen Akademie der Wissenschaften in Wien, Philosophisch-historische Klasse</i>
<i>VDI</i>	= <i>Vestnik drevnej istorii</i>
<i>VKNAW</i>	= <i>Verhandelingen der Koninklijke [Nederlandse] Akademie van Wetenschappen te Amsterdam, Afdeeling Letterkunde.</i>
<i>WZBerlin</i>	= <i>Wissenschaftliche Zeitschrift der Humboldt-Universität zu Berlin, Gesellschaft-Sprachwissenschaftliche Reihe</i>
<i>WZHalle</i>	= <i>Wissenschaftliche Zeitschrift der Martin-Luther-Universität zu Halle-Wittenberg, Gesellschaft-Sprachwissenschaftliche Reihe</i>
<i>WZKM</i>	= <i>Wiener Zeitschrift für die Kunde des Morgenlandes</i>
<i>WZKS</i>	= <i>Wiener Zeitschrift für die Kunde Südasiens</i>
<i>ZDMG</i>	= <i>Zeitschrift der Deutschen Morgenländischen Gesellschaft</i>
<i>ZII</i>	= <i>Zeitschrift für Indologie und Iranistik</i>
<i>ZKM</i>	= <i>Zeitschrift für die Kunde des Morgenlandes</i>

### 4. Dictionaries

N.B. The works listed here are referred to by author's name or abbreviation, and the word in question instead of year and page number.

CHANTRAINE, Pierre. *Dictionnaire étymologique de la langue Grecque*. Paris 1968–.

DEY, Nundo Lal. *The Geographical Dictionary of Ancient and Mediaeval India*. (the so-called 4<sup>th</sup> ed. Delhi 1984 used, but it is a repr. of 1927, 1<sup>st</sup> ed. was publ. in 1899).

EDS = Ghatare, A.M. (general editor). *An Encyclopaedic Dictionary of Sanskrit on Historical Principles*. 1–. Poona 1976–.

FRISK, Hjalmar. *Griechische etymologische Wörterbuch* 1–3. Heidelberg 1960–72 (Vol. 3 is Supplement).

LIDDELL, Henry George & SCOTT, Robert & JONES, Henry Stuart. *A Greek-English Lexicon*. Revised and augmented... Reprinted from the ninth edition (1940) with a Supplement (1968), Oxford 1976.

MACDONELL, Arthur Anthony & KEITH, Arthur Berriedale. *Vedic Index of names and subjects*. 1–2. London 1912 (repr. 1982).

MALALASEKERA, G.P. *Dictionary of Pāli proper names*. 1–2. 1937 (Repr. New Delhi 1983).

MAYRHOFER, Manfred. *Kurzgefasstes etymologisches Wörterbuch des Altindischen*. 1–4. Heidelberg 1956–80 (referred to as Mayrhofer).

MAYRHOFER, Manfred. *Etymologisches Wörterbuch des Altindoarischen*. 1:1–. Heidelberg 1986– (referred to as "Mayrhofer (New)", last part used I:6, *kṣīvala-GAL*, 1989).

## References

MONIER WILLIAMS, Monier. *A Sanskrit-English Dictionary, etymologically and philologically arranged*. New edition, greatly enlarged and improved, London 1899 (repr. Delhi 1984).

OCD = *The Oxford Classical Dictionary*. Edited by N.G.L. HAMMOND and H.H. SCULLARD. Second Edition, Oxford 1970 (repr. 1973).

PW = BÖHTLINGK, O.N. & ROTH, Rudolf. *Sanskrit Wörterbuch nebst allen Nachträgen 1 – 6*. St.Petersburg 1853–1875.

pw = BÖHTLINGK, O.N. *Sanskrit-Wörterbuch in kürzerer Fassung 1 – 7*. St.Petersburg 1879–1889.

RHYS DAVIDS, Thomas William & STEDE, William. *The Pali Text Society's Pali-English Dictionary*. London 1921–25 (repr. 1972).

SØRENSEN, Søren. *An index to the names in the Mahābhārata with short explanations and a concordance to the Bombay and Calcutta editions and P.C. Roy's translation*. 1904 (repr. Delhi 1963).

WATT, George. *A Dictionary of the Economic Products of India*. I–VI:4, 1889–1893, and *Index* vol. by Edgar Thurston, 1896 (all repr. Delhi 1972).

YULE, Henry & BURNELL, Arthur C. *Hobson-Jobson. A Glossary of Colloquial Anglo-Indian Words and Phrases, and of Kindred Terms, Etymological, Geographical and Discursive*. New edition ed. by William Crooke, London 1903 (repr. New Delhi n.d.).

## 5. Monographs and articles

N.B. The dates of classical authors and history I have often checked from the relevant *KP* or *OCD* articles without a special reference. Whitehouse 1975 and Schwarzberg 1978 are not mentioned in the footnotes but used constantly for checking locations.

AALTO, Pentti 1955. "Alkoholin asema Intian klassisessa sivistyksessä", *Alkoholipoliitikka* 1955:3, 1–15.

----- 1963. "Madyam apeyam", *Jñānamuktiāvalī, Commemoration Volume in Honour of J. Nobel*, Sarasvati Vihara Series 38, New Delhi, 17–37.

----- & PEKKANEN, Tuomo 1975 & 1979. *Latin Sources on North-Eastern Eurasia*. 1 – 2, *Asiatische Forschungen* 44 & 57, Wiesbaden.

AGRAWALA, Vasudev Sharan 1956. "The Mahābhārata – A cultural commentary", *ABORI* 54, 107–128.

----- 1963. *India as known to Pāṇini*, 2<sup>nd</sup> revised and enlarged ed.

ALFÖLDI, A. 1933. Review of Rostowzew's *Skythien und der Bosporus* I, Berlin 1931, *Gnomon* 9, 561–572.

ALI, Sálim 1977. *The Book of Indian Birds*. 10<sup>th</sup> revised and enlarged ed. (originally publ. 1941), Bombay.

AL KHALIFA, Shakha Haya Ali & RICE, Michael (ed.) 1986. *Bahrain through the ages. The Archaeology*. London.

ALLAN, John 1951. "Notes on the Punch-Marked, Local Taxilan and Greek Coins", chapter 41 in Marshall 1951, vol. II, 853–863.

ALLCHIN, Bridget & ALLCHIN, Raymond 1982. *The Rise of Civilization in India and Pakistan*. Cambridge.

ALSDORF, L. 1977. "Das Bhūridatta-Jātaka. Ein anti-brahmanische Nāga-Roman", *WZKS* 21, 25–55.

ALTHEIM, Franz & STIEHL, Ruth 1970. *Geschichte Mittelasiens im Altertum*. Berlin.

ANATI, E. 1968. *Rock-Art in Central Arabia*. Vol. 2. Part 1. *Fat-tailed sheep in Arabia*. Expédition Philby-Ryckmans-Lippens en Arabie. 1<sup>re</sup> partie. Géographie et archéologie. Tome 3. Bibliothèque du Muséon 50, Louvain.

ANDRÉ, J. & FILLIOZAT, Jean 1980. *Pline l'Ancien. Histoire Naturelle. Livre VI, 2<sup>e</sup> partie*. Texte établi, traduit et commenté. Collection ... Guillaume Budé, Paris.

----- 1986. *L'Inde vue de Rome. Textes latins de l'Antiquité relatifs à l'Inde*. Paris.

ANDRONOV, M.S. 1971. *Jazyk braui. Jazyki narodov Azii i Afriki*. Moskva.

ARBMAN, Ernst 1922. *Rudra. Untersuchungen zum altindischen Glauben und Kultus*. Uppsala.

ARORA, Uday Prakash 1982a. "India vis-a-vis Egypt-Ethiopia in Classical Accounts", *Graeco-Arabica* 1, 131–140.

----- 1982b. "Greek Image of the Indian Society", *Makedonika* 12, 470–482.

## References

ASTHANA, Shashi 1976. *History and Archaeology of India's contacts with other countries, from earliest times to 300 B.C.* Delhi.

ATRE, Shubhangana 1985. "The Harappan riddle of 'unicorn'", *BDCRI* 44, 1–7.

AUBOYER, Jeannine 1974. "Les Achéménides et l'art de l'Inde ancienne", *Commémoration Cyrus. Hommage universel II*, AI 2, Téhéran – Liège – Leiden, 263–267.

AZARPAY, Guity 1959. "Some Classical and Near Eastern Motifs in the Art of Pazyryk", *ArtAs* 22, 313–339.

BACKHAUS, Wilhelm 1976. "Der Hellenen-Barbaren-Gegensatz und die Hippokratische Schrift Περὶ δέρων θάτων τόπων", *Historia* 25, 170–185.

BAEHR, Joh. Chr. Felix 1824. *Ctesiae Cnidi operum reliquiae*. Francofurti ad Moenum.

BAILEY, Harold Walter 1952. "Kusanica", *BSOAS* 14, 420–434.

----- 1982. "Maka", *JRAS* 1982, 10–13.

BAJOI, A. Hameed 1986. "Grape cultivation in Baluchistan", *Newsletter of Baluchistan Studies* 3, 4–6.

BAKKER, Hans 1986. *Ayodhyā*. Groningen Oriental Studies 1. Groningen.

----- forthcoming. "Some methodological considerations with respect to the critical edition of Puranic literature", pre-print offered by the author of an article to be published in *ZDMG*.

BALSDON, J.P.V.D. 1979. *Romans and Aliens*. London.

BALL, Val. 1888. "On the Identification of the Animals and Plants of India which were known to Early Greek Authors", *Proceedings of the Royal Irish Academy, Polite Literature and Antiquities*, 2nd series, vol. II, Dublin 1879–88, 302–346.

BARNETT, Lionel David 1915. "An Aramaic Inscription from Taxila", *JRAS* 1915, 340–342.

BARNETT, R. D. 1948. "Early Greek and Oriental Ivories", *JHS* 68, 1–25.

BASHAM, Arthur Llewellyn 1954. *The Wonder that was India*. (repr. New York 1959).

BAUDOT, M.P. 1987. "'Stearite' Vessels in the Third Millennium in the Ancient Orient", *Pollet* 1987, 1–32 and pl. i–v.

BAUTZE, Joachim 1985. "The Problem of the Khaqga (*Rhinoceros unicornis*) in the Light of Archaeological Finds and Art", J. Schotsmans & M. Taddei (ed.) *SAA 1983*, Istituto Universitario Orientale, Dipartimento di Studi Asiatici, Series Minor 33, Naples, 405–433.

BEAL, Samuel 1880. "Branchidae", *IA* 9, 68–71.

----- 1884. *Si-yu-ki. Buddhist Records of the Western World translated from the Chinese of Hiuen Tsiang (A.D. 629)*. London (repr. Delhi 1981).

BECHERT, Heinz 1982. "The date of the Buddha reconsidered", *IT* 10, 29–36.

----- 1983. "A remark on the problem of the date of Mahāvira", *IT* 287–290.

----- 1986. *Die Lebenszeit des Buddha - das älteste feststehende Datum der indischen Geschichte?* Nachrichten der Akademie der Wissenschaften in Göttingen 1. Philologisch-historische Klasse, 1986:4, 129–184 (provided also with separate paging, which I refer to in my footnotes).

BENARY, Agathon 1831. Review of Schlegel 1829, *Jahrbücher für wissenschaftliche Kritik* 1831:1, c. 748–772.

BENEDICT, Coleman H. 1941. "Herodotus confirmed once again", *CJ* 36, 1940–41, 168f.

BENFEY, Theodor 1939. *Griechische Grammatik I. Griechisches Wurzellexicon* 1. Berlin.

----- 1940. "Indien", *Allgemeine Encyclopädie der Wissenschaften und Künste ... hrsg. von J.C. Ersch und J.G. Gruber*, Zweite Section, 17. Theil, Leipzig, 1–346.

BENGSTON, H. 1955. "Skylax von Karyanda und Herakleides von Mylasa", *Historia* 3, 1954–55, 301–307.

BENVENISTE, Émile 1964. "Edits d'Asoka en traduction grecque", *JA* 252, 137–157.

BERVE, Helmut 1926. *Das Alexanderreich auf prosopographischer Grundlage*. 1–2. München.

----- 1935. "Nearkhos", *RE* XVI, c. 2132–2154.

BERZINA, S.Ja. 1982. "Drevnjaja Indija i Afrika", Bongard-Levin 1982, 17–41.

BEVAN, E.R. 1922. Two chapters, "XV. Alexander the Great" and "XVI. India in Early Greek Literature" in Rapson 1922, 345–386 and 391–426.

BHANDARKAR, Ramkrishna Gopal 1872a. "Pāṇini and the Geography of Afghanistan and the Panjab", *IA* 1, 21–23.

----- 1872b. "On the Date of Patañjali and the King in whose Reign he lived", *IA* 1, 299–302.

BIBBY, Geoffrey 1970. *Looking for Dilmun*. (a Pelican ed. 1972, repr. 1984 used).

BICKERMAN, Elias J. 1952. *Origines Gentium*", *CPh* 47, 65–81.

BIGWOOD, Joan M. 1965. "Ctesias of Cnidus", *Harvard Studies in Classical Philology* 70, 263–265 (a

## References

summary of her thesis).

BISI, Anna-Maria 1964. "Il grifone nell' arte dell' Antico Irâne e dei popoli delle steppe", *RSO* 39, 15–60.

---- 1965. *Il grifone. Storia di un motivo iconografico nell' antico oriente mediterraneo*. Studi Semitici (Università di Roma, Centro di studi semitici) 13, Roma.

BOBRINSKOY, G.V. 1936. "A Line of Brâhmi (?) Script in a Babylonian Contract Tablet", *JAOS* 56, 86–88.

BOHLEN, Peter von 1830. *Das alte Indien*. 1–2. Königsberg.

BOLCHERT, Paul 1908. *Aristoteles Erdkunde von Asien und Libyen*. Quellen und Forschungen zur alten Geschichte und Geographie 15, Berlin.

BOLTON, J.D.P. 1962. *Aristeas of Proconnesus*. Oxford.

BONGARD-LEVIN, Grigorij Maksimovič 1956. "Taksil'skaja nadpis' Ašoki", *Soveckoe Vostokovedenie* 1956:1, 121–128.

---- 1973. "Antičnaja tradicija i religiozno-filozofičeskie tečenija v rannemaurijskuju épohu", *WZHalle* 23:3, 7–14.

---- (ed.) 1982. *Drevnjaja Indija. Istoriko-kul'turnye svjazi*. Moskva.

BOPP, Franz 1840. *Glossarium Sanscritum*. Berolini.

BORZSÁK, I. 1976. "Semiramis in Zentralasien", *AAHu* 24, 51–62.

BOSWORTH, A.B. 1988. *Conquest and Empire. The reign of Alexander the Great*. Cambridge.

BOWERSOCK, G.W. 1986. "Tylus and Tyre: Bahrain in the Graeco-Roman World", Al Khalifa & Rice 1986, 399–406.

BOWMAN, Johnston Alexander 1938a. *Studies in Ctesias*. Unpubl. diss., Northwestern University.

---- 1938b. "Studies in Ctesias" (summary of Bowman 1938a), *Summaries of Doctoral Dissertations submitted to the Graduate School of Northwestern University ...* Vol. VI, Chicago – Evanston, 5–8.

BRELOER, Bernhard 1929. "Zum Kauṭṭalya-Problem", *ZII* 7, 205–232.

---- 1934. "Megasthenes (etwa 300 v.Chr.) über die indische Gesellschaft", *ZDMG* 88, 130–164.

---- 1935. "Megasthenes über die indische Stadtverwaltung", *ZDMG* 89, 40–67.

---- 1940. "Die Śākyā", *ZDMG* 94, 268–294.

---- 1941a. *Alexanders Bund mit Poros. Indien von Dareios zu Sandrokottos*. Sammlung Orientalistischen Arbeiten 9, Leipzig.

---- 1941b. "Taxiles der Amātya", *ZDMG* 95, 333–337.

---- & BÖMER, Franz 1939. *Fontes historiae religionum Indicarum*. Fontes historiae religionum ex auctoribus Graecis et latinos collectos 7, Bonnæ.

BRENTJES, Burchard 1961. "Der Elefant im Alten Orient", *Klio* 39, 8–30.

---- 1962. A series of papers on domestication in *WZHalle* 11:6 ("Gazellen und Antilopen als Vorläufer der Haustiere im Alten Orient", 537–548; "Die Caprinae", 549–594; "Mensch und Katze im Alten Orient", 595–634; "Nutz- und Hausvögel im Alten Orient", 635–702; "Gelegentlich gehaltene Wildtiere des Alten Orients", 703–732).

---- 1981a. "Archäologie Afghanistans", *Das Altertum* 27, 133–146.

---- 1981b. "The Mitanians and the Peacock", *Ethnic Problems of the History of Central Asia in the Early Period (Second Millennium B.C.)*. Proceedings of the International Symposium on Ethnic Problems of Ancient History of Central Asia (Second Millennium B.C.), Dushanbe October 17–22, 1977, Moscow, 145–148.

---- 1988. "Die 'baktrischen Bronzen' und Vorderasien – Probleme der Kunstgeschichte des 2. Jahrtausends v. u. Z.", *Iranica Antiqua* 23, 163–167.

BRETZL, Hugo 1903. *Botanische Forschungen des Alexanderzuges*. Leipzig.

BRIGGS, George W. 1931. "The Indian Rhinoceros as a Sacred Animal", *JAOS* 51, 276–282.

BROWN, Truesdell S. 1949. *Onesicritus. A Study in Hellenistic Historiography*. University of California Publications in History 39, Berkeley – Los Angeles.

---- 1950. "Clitarchus", *AJPh* 71, 134–155.

---- 1955. "The Reliability of Megasthenes", *AJPh* 76, 18–33.

---- 1957. "The Merits and Weaknesses of Megasthenes", *Phoenix* 11, 11–24.

---- 1960. "A Megasthenes Fragment on Alexander and Mandanis", *JAOS* 80, 133–135.

---- 1962. Review of Pearson 1960, *AJPh* 83, 198–201.

---- 1965. "Herodotus speculates about Egypt", *AJPh* 86, 60–76.

## References

----- 1973. *The Greek Historians*. Lexington, Mass. – Toronto – London.

----- 1978a. "Suggestions for a vita of Ctesias of Cnidus", *Historia* 27, 1–19.

----- 1978b. "Aristodorus of Cyrene and the Branchidae", *AJPh* 99, 64–78.

BRUCKER, Egon 1980. *Die spätvedische Kulturepoche nach den Quellen der Śrauta-, Grhya- und Dharmasūtras. Die Siedlungsraum*. Alt- und Neu-Indische Studien 22, Wiesbaden.

BRUNSWIG, Robert H. & PARPOLA, Asko & POTTS, Daniel T. 1983. "New Indus type and related seals from the Near East", D. Potts (ed.), *Dilmun. New Studies in the Archaeology and Early History of Bahrain*. Berliner Beiträge zum Vorderen Orient 2, Berlin, 101–115.

BUCHANAN, Briggs 1967. "A dated seal impression connecting Babylonia with ancient India", *Archaeology* 20, 104–107.

BUDDRUSS, Georg 1965. Review of Dahlquist 1962, *Gnomon* 37, 718–723.

BÜHLER, Georg 1895. *Indian Studies III. On the Origin of the Indian Brāhma Alphabet*. SWA 123:5, Wien.

BUNBURY, E.H. 1879. *History of Ancient Geography*. Vol. I. London (vol. II not used).

BURROW, T. 1937. "Further Kharosthi Documents from Niya", *BSOS* 9:1, 111–123.

----- 1973. *The Sanskrit Language*. New and revised 3rd ed. London.

BURTON, Richard F. 1852. *Falconry in the Valley of the Indus*. London.

CAMERON, George G. 1973. "The Persian Satrapies and related matters", *JNES* 32, 47–56.

CARDONA, George 1976. *Pāṇini. A Survey of Research*. The Hague – Paris.

CARLIER, J. "Voyage en Amazonie grecque", *AAHu* 27, 1979, 381–405.

CAROE, Olaf 1958. *The Pathans, 550 B.C. – A.D. 1957*. London (repr. 1965).

CARTER, Martha L. 1968. "Dionysiac aspects of Kushān Art", *Ars Orientalis* 7, 121–146.

CARY, M. 1919. "Herodotus III. 104.", *CR* 33, 148f.

CASSON, Lionel 1974. *Travel in the Ancient World*. London.

CHAKRAVARTI, Monmohan 1906. "Animals in the Inscriptions of Piyadasi", *Memoirs of the Asiatic Society of Bengal* I:17, 361–374.

CHANDRA, Pratap 1971. "Was early Buddhism influenced by Upaniṣads?", *Philosophy East and West* 21, 317–324.

CHANTRAIN, Pierre 1927. *Arrien, L'Inde*, Texte établi et traduit. Collection ... Guillaume Budé, Paris.

CHAPEKAR, Nalinee M. 1977. *Ancient India and Greece. A Study of their cultural contacts*. Delhi.

CHARPENTIER, Jarl 1909. "Über Rudra-Śiva", *WZKM* 23, 151–179.

----- 1913. "Zu den indischen Glossen bei Hesychius", *KZ* 45, 90–94.

----- 1918. "Politiska och kulturella förbindelser mellan Grekland och Indien före Alexander den Store", *Nordisk Tidskrift* 1918, 466–493 (continuation publ. in following year not used).

----- 1923. "Der Name Kambyses (Kaṇbūjīya)", *ZII* 2, 140–152.

----- 1933. *The Livro da Seita dos Indios Orientais (Brit. Mus. Ms. Sloane 1820) of Father Jacobo Fenicio*, S.J., ed. with an introduction and notes. Uppsala etc.

----- 1934. *The Indian Travels of Apollonius of Tyana*. Skrifter utgivna av K. Humanistiska Vetenskaps-Samfundet i Uppsala 29:3. Uppsala.

CHATTOPADHYAY, Aparna 1967. "A Note on Ancient Indian Hunting Dogs", *Indo-Asian Culture* 16, 231–234.

----- 1968a. "Ancient Indian Dietary in the light of Caraka-Samhita", *Indo-Asian Culture* 17:1, 57–78.

----- 1968b. "A note on beef-eating in Mauryan times", *Indo-Asian Culture* 17:2, 49–51.

CHATTOPADHYAYA, Sudhakar 1974. *The Achaemenids and India*. Rev. 2nd ed., Delhi (1950).

CHAUDHARI, K. 1983. "Dionysos of Indo-Greek coins – A Study", *JNSI* 45, 119–133.

CHAUDHURI, S.B. 1949. "Āryāvarta", *IHQ* 25, 110–122.

CHAVANNES, E. 1903. "Voyage de Song Yun dans l'Udyāna et le Gandhāra (518–522 P.C.)", *BEFEO* 3, 379–441.

CHILDE, V. Gordon 1939. "India and the West before Darius", *Antiquity* 13, 5–15.

CHRISTINGER, R. 1961. "Les Arimaspes", *Asiatische Studien/Études Asiatiques* 14, 9–14.

CLARK, Walter Eugene 1920. "The Sandalwood and Peacocks of Ophir", *AJSL* 36, 1919–20, 103–119.

COEDÈS, George 1910. *Textes d'auteurs grecs et latins relatifs à l'Extrême-Orient*. Paris (repr. Hildesheim – New York 1977).

COLLON, D. 1988. "Mesopotamia and the Indus: the evidence of the seals", summary of a paper read at the Colloquium *The Indian Ocean in Antiquity*, held at the British Museum, 4–8 July 1988.

## References

COMBAZ, Gisbert 1937a & b. *L'Inde et l'Orient classique*. I. Texte. II. Table des titres abrégés, références iconographiques, planches. Publications du Musée Guimet, Documents d'art et d'archéologie I. Paris.

CONGER, George P. 1952. "Did India Influence Early Greek Philosophies?", *Philosophy East & West* 2, 102–128.

CONRAD, Roswitha 1968. "Die Haustiere in den frühen Kulturen Indiens", *Säugetierkundliche Mitteilungen* 16, 189–258.

CRIBB, Joe 1985. "Dating India's Earliest Coins", J. Schotmans & M. Taddei (ed.) *SAA 1983*, Istituto Universitario Orientale, Dipartimento di Studi Asiatici, Series Minor 33, Naples, 535–554.

CUNNINGHAM, Alexander 1871. *The Ancient Geography of India*. (repr. Varanasi – Delhi 1979).

---- 1891. *Coins of Ancient India from The Earliest Times to The Seventh Century A.D.* London (repr. Varanasi – Delhi 1979).

DAFFINÀ, Paolo 1967. *Immigrazione dei Saka nella Drangiana*. IsMEO, Centro studi e scavi archeologici in Asia, Reports and Memoirs 9, Roma.

---- 1977. "India e mondo classico: nuovi risultati e prospettive", *Annali della Facoltà di lettere e filosofia (Università di Macerata)* 10, 10–33.

---- 1980. "On Kaspapyros and the so-called 'Shore of the Scythians'", *AAHu* 28, 1–8.

DAHLQUIST, Allan 1962. *Megasthenes and Indian Religion*. Upsala (repr. Delhi 1977).

DANDAMAEV, M.A. 1982. "Indijscy v Irane i Vavilonij v ahemenidskij period", *Bongard-Levin* 1982, 113–125.

DANDEKAR, R.N. 1953. "Rudra in the Veda", *Journal of the University of Poona, Humanities Section* 1, 94–148.

---- 1969. "Some Aspects of the Indo-Mediterranean Contacts", *ABORI* 50, 57–74.

DANI, Ahmad Hassan 1967. "Report on the Excavation of Balambhat Settlement Site", *Ancient Pakistan* 3, 235–288.

---- 1986. *The Historic City of Taxila*. Paris – Tokyo.

DAR, Saifur Rahman 1984. *Taxila and the Western World*. Lahore.

DATTA, Bhakti 1979. *The evolution of the concept of transgression of sex-ethics in the Ādiparva of the Mahābhārata in the light of Dharmasāstra rulings*. London (diss. Tübingen).

DAVARY, G. Djelani 1977. "A List of the Inscriptions of the Pre-Islamic Period from Afghanistan", *StII* 3, 11–22.

DAVE, K.N. 1985. *Birds in Sanskrit Literature*. Delhi.

DEB, Harit Krishna 1948. "Vedic India and the Middle East", *JASB* 14:1, 121–143.

DEFOURNY, Michel 1976. "Note sur le symbolisme de la corne dans le Mahābhārata et la mythologie brahmanique classique", *IJ* 18, 17–23.

DELBRÜCK, Richard 1956. "Südasiatische Seefahrt im Altertum", *Bonner Jahrbücher* 155/156, 1955–56, 8–58 and 229–308.

DERRETT, J. Duncan M. 1968. "Two Notes on Megasthenes' INDIKA", *JAOS* 88, 776–781.

---- 1969. "Megasthenes", *KP* 3, c. 1150–1154.

---- 1973. *Dharmaśāstra and Juridical Literature*. A History of Indian Literature, part of Vol. IV. Wiesbaden.

DESHIPANDE, Madhav M. 1985. "Sanskrit Grammarians: differing perspectives in cultural Geography", *Aligarh Journal of Oriental Studies* 2, 57–68.

DIELS, Hermann 1887. "Herodotos und Hekataios", *Hermes* 22, 411–444.

DIHLE, Albrecht 1961. "Zur hellenistischen Ethnographic", *Greco et Barbares, six exposés et discussions*. Entretiens sur l'Antiquité classique 8, Genève, 205–232 and discussion 233–239 (repr. in Dihle 1984, 21–46, Nachträge 216f.).

---- 1962. "Der fruchtbare Osten", *RM N.F.* 105, 97–110 (repr. in Dihle 1984, 47–60, Nachträge 217f.).

---- 1964. "The Conception of India in Hellenistic and Roman Literature", *Proceedings of the Cambridge Philological Society* 190, 15–23 (repr. in Dihle 1984, 89–97, Nachträge 219).

---- 1965. *Umstrittene Daten*. Wissenschaftliche Abhandlungen der Arbeitsgemeinschaft für Forschung des Landes Nordrhein-Westfalen 32, Köln – Opladen.

---- 1984. *Antike und Orient, Gesammelte Aufsätze*. hrsg. von V. Pöschl und H. Petermann, Supplemente zu den *Sitzungsberichte der Heidelberger Akademie der Wissenschaften, Philosophisch-historische Klasse* 2, Heidelberg (with one new contribution, "Serer und Chinesen", 201–215).

## References

----- 1987. "Dionysos in Indien", *Pollet* 1987, 47–57.

DIXON, D.M. 1988. "Egyptian Activity in and beyond the Red Sea to 332 B.C.", summary of a paper read at the Colloquium *The Indian Ocean in Antiquity*, held at the British Museum, 4–8 July 1988.

DODDS, E.R. 1966. *The Greeks and the Irrational*. Berkeley – Los Angeles.

DREWS, Robert 1972. *The Greek Accounts of Eastern History*. Washington D.C.

DUNBabin, T.J. 1957. *The Greeks and their Eastern Neighbours*. Suppl. Paper No. 8 of the Society for the Promotion of Hellenic Studies, London.

DURING CASPERS, Elisabeth C.L. 1971. "Some motifs as evidence for maritime contact between Sumer and the Indus Valley", *Persica* 5, 1970–71, 107–118.

----- 1972a. "Harappan trade in the Arabian Gulf in the third millennium B.C.", *Mesopotamia* 7, 167–191.

----- 1972b. "The Gate-post in Mesopotamian Art. A short outline of its origin and development", *EOL* 22, 1971–72, 211–227.

----- 1979. "Sumer, Coastal Arabia and the Indus Valley in protoliterate and early dynastic eras", *JESHO* 22, 121–135.

----- 1984. "Dilmun: International Burial Ground", *JESHO* 27, 1–32.

EDELBerg, Lennart 1965. "Nuristanske sølvpokaler", *KUML, Årbog for Jysk arkeologisk selskab* 1965, 153–201 (with English summary, "Silver Cups of Nuristan", 193–197).

EDELMANN, Hannelore 1970. "Ἐρημή und ἔρημος bei Herodot", *Klio* 52, 79–86.

EDGERTON, Franklin 1938. "Rome and (?) Antiochia in the Mahābhārata", *JAOS* 58, 262–265.

EGGERMONT, P.H.L. 1942. "Indië en de hellenistische Rijken", *EOL* 8, 735–746.

----- 1966a. "The Murundas and the ancient trade-route from Taxila to Ujjain", *JESHO* 9, 257–296.

----- 1966b. "New Notes on Aśoka and his Successors I", *Persica* 2, 1965–66, 27–70.

----- 1969. "New Notes on Aśoka and his Successors II", *Persica* 4, 77–120.

----- 1970. "Alexander's Campaign in Gandhāra and Ptolemy's list of Indo-Scythian towns", *OLP* 1, 63–122.

----- 1971. "New Notes on Aśoka and his Successors III", *Persica* 5, 1970–71, 69–102.

----- 1975. *Alexander's Campaigns in Sind and Baluchistan and the Siege of the Brahmin Town of Harmatelia*. Orientalia Lovanensia Analecta 3, Leuven.

----- 1979. "New Notes on Aśoka and his Successors IV", *Persica* 8, 55–93.

----- 1982. "The Kushan Dynasty and Alexandria Bucephalus", *Studia Paulo Naster oblata* II. Orientalia antiqua. Orientalia Lovanensis Analecta 13, Leuven.

----- 1984a. "Ptolemy, the geographer, and the people of the Dards", *OLP* 15, 191–233 (also published in *JCA* 7, 1984, 73–123).

----- 1984b. "Indien und die hellenistischen Königreiche. Zusammenschau einer west-östlichen Gesellschaft zwischen 550 und 150 v. Chr.", Ozols & Thewalt 1984, 74–83.

----- 1986. "Heracles-Dorsanes and Priyadarśin-Aśoka", *OLP* 17, 159–168.

----- 1988. "Hippalus and the discovery of the Monsoons", A. Théodoridès, P. Naster & J. Ries (edd.), *Humour, travail et science en orient*, Leuven, 343–364.

ERDOSY, George 1985. "The Origin of Cities in the Ganges Valley", *JESHO* 28, 81–109.

ESIN, E. 1976. "Tugril and Kara-kuş", *AION* 36, 189–211.

EVANS, J.A.S. 1982. *Herodotus*. Twayne's World Authors Series 645, Boston.

FABRI, C.L. 1937. "A Sumero-Babylonian inscription discovered at Mohenjo-Daro", *IC* 3, 1936–37, 663–673.

FALK, Harry 1982. "Die sieben "Kasten" des Megasthenes", *AQ* 43, 61–68.

----- 1986. *Bruderschaft und Würfelspiel. Untersuchungen zur Entwicklungsgeschichte des vedischen Opfers*. Freiburg.

FALKENSTEIN, A. 1964. "Sumerische religiöse Texte", *Zeitschrift für Assyriologie* 56, 44–129.

FENIKOWSKI, Marian 1938. "De Cynocephalis", *Eos* 39, 351–363.

FILLIOZAT, Jean 1945. "Pandaia, fille d'Héraclès indien" (a summary), *JA* 234, 1943–45, 420.

----- 1964. *The Classical Doctrine of Indian Medicine*. Transl. by D.R. Chamana [from the French original publ. 1949, with some additions by the author], Delhi (repr. n.d.).

----- 1981. "La valeur des connaissances gréco-romaines sur l'Inde", *Journal de Savants* 1981, 97–135.

FLEMING, David 1982. "Achaemenid Sattagydia and the geography of Vivarna's campaign (DB III, 54–75)", *JRAS* 1982, 102–112.

FLINTOFF, Everard 1980. "Pyrrho and India", *Phronesis* 25, 88–108.

## References

FOUCHER, Alfred 1938. "Les satrapies orientales de l'empire Achéménide", *CRAI* 1938, 336–352.  
 ----- 1942. *La vieille Route de l'Inde de Bactres à Taxila*. I. MDAFA 1:1, Paris.  
 ----- 1947. *La vieille Route de l'Inde de Bactres à Taxila*. II. MDAFA 1:2, Paris.

FRANCFORT, Henri-Paul 1985, "Note sur la mort de Cyrus et les dardes", *Orientalia Iosephi Tucci memoriae dicata*, Serie Orientalis Roma 56, 1, Roma, 395–400.

FRANCKEN, Gotthilf August (ed.) 1735. *Der Königlichen Dänischen Missionar aus Ost-Indien eingesandter Ausführlichen Berichten Dritter Theil* ..., Halle ("Dänische Missionsberichte").

FRANKE, Rudolf Otto 1893. "Beziehungen der Inde zum Westen", *ZDMG* 47, 595–609.

FRANKFORT, H. 1934. "The Indus Civilization and the Near East", *Annual Bibliography of Indian Archaeology for the year 1932*, Leiden, 1–12.

FRAUWALLNER, Erich 1960. "Sprachtheorie und Philosophie im Mahābhāṣyam des Patañjali", *WZK 4*, 92–118.

FREMKIAN, Aram 1958. German summary of his book *Scepticismul grec și filozofia indiană*, București 1957, *Biblioteca Clasica Orientalis* 3, c. 212–249.

FRIESEL, Karen 1975. "On Prehistoric Settlement and Chronology of the Oman Peninsula", *E&W* 25, 359–424.

FRIIS JOHANSEN, H. & WHITTLE, Edward W. 1975. *Aeschylus, The Suppliants*. 1–3. N.pl.

FRYE, Richard N. 1984. *The History of Ancient Iran*. Handbuch der Altertumswissenschaft 3:7. München.

GADD, C.J. 1932. "Seals of Ancient Indian Style found at Ur", *Proceedings of the British Academy* 18, 191–210.

GAIL, Adalbert J. 1978. "Der Sonnenkult im alten Indien — Eigengewächs oder Import", *ZDMG* 128, 333–348.

GERSHEVITCH, Ilya 1957. "Sissoo at Susa (OPers. yakā = Dalbergia Sissoo Roxb.)", *BSOAS* 19, 317–320.  
 ----- (ed.) 1985. *The Cambridge History of Iran*. Vol. 2. The Median and Achaemenian Periods. Cambridge.

GESENIUS, Wilhelm 1833. "Ophir", *Allgemeine Encyclopädie der Wissenschaften und Künste...* hrsg. von J.C. Ersch und J.G. Gruber, Dritte Section, 4. Theil, Leipzig, 201–203.

GHIRSHMAN, R. 1948. *Les chionites-heptalites*. MDAFA 13 = Mémoires de l'Institut français d'Archéologie orientale 80, Le Caire.

GISINGER, Friedrich 1929. "Skylax", *RE* IIIA, c. 619–646.  
 ----- 1949. "Patrokles", *RE* XVIII:2, c. 2263–2273.

GOLDMAN, Robert P. 1977. *Gods, Priests and Warriors. The Bhṛgus of the Mahābhārata*. Studies in Oriental Culture (Columbia University) 12, New York.

GONDA, Jan 1980. *Vedic Ritual. The non-solemn rites*. Handbuch der Orientalistik II:IV:1, Leiden – Köln.

GOOSSENS, Roger 1929. "L'όδοντοτύραννος, animal de l'Inde", *Byzantion* 4, 1927–28 (publ. 1929), 29–52.  
 ----- 1953. "Le 'démon' indien Σοροάδειος", *NCI* 5, 38–47.

GOUKOWSKY, Paul 1978. *Essai sur les origines du mythe d'Alexandre (336–270 av. J.-C.)*. I. Les origines politiques. Annales de l'est publiées par l'Université de Nancy II - Mémoire 60. Nancy.  
 ----- 1981. *Essai sur les origines du mythe d'Alexandre (336–270 av. J.-C.)*. II. Alexandre et Dionysos. Nancy.

GOYAL, S.R. 1985. *Kauṭilya and Megasthenes*. Meerut.

GRAEF, Botho 1886. *De Bacchi expeditione Indica monumentis expressa*. Diss., Berolini.

GRANTOVSKIJ, È.A. 1963. "Iz istorii vostočnoiranskikh plemen na granicah Indii", *KSINA* 61, 8–30.

GREPPIN, John A.C. 1976. "Skt. garuḍa, Gk. γέρανος: the battle of the cranes", *Journal of Indo-European Studies* 4, 233–243.

GRIERSON, George Abraham 1905. "Piśāca = 'Ωμοφαγος'", *JRAS* 1905, 285–288.  
 ----- 1912. "Piśācas in the Mahābhārata", *Festschrift V. Thomsen*. Leipzig, 138–141.  
 ----- 1916. *Linguistic Survey of India*. IX:4. Pahāṛī. Calcutta.

GRMEK, Mirko D. 1988. "Antiikki ja perinnöllisyys", *Hippokrates. Suomen Lääketieteen Historian Seuran vuosikirja*, 5, 42–57 (with English summary "Ideas on heredity in Greek and Roman antiquity").

GUDEMAN, Alfred 1913. "Hellenikos", *RE* VIII, c. 104–155.

GUNDERSON, Lloyd L. 1980. *Alexander's Letter to Aristotle about India*. Beiträge zur klassischen Philologie 110. Meisenheim am Glan.

GUTHRIE, W.K.C. 1962. *A History of Greek Philosophy*. I. The Earlier Presocratics and the Pythagoreans.

Cambridge.

1965. *A History of Greek Philosophy*. II. The Presocratic Tradition from Parmenides to Democritus. Cambridge.

1969. *A History of Greek Philosophy*. III. The fifth Century Enlightenment. Cambridge.

1975. *A History of Greek Philosophy*. IV. Plato. The man and his Dialogues: Earlier Period. Cambridge.

1978. *A History of Greek Philosophy*. V. The Later Plato and the Academy. Cambridge.

1981. *A History of Greek Philosophy*. VI. Aristotle. An Encounter. Cambridge.

HÄGG, Tomas 1975. *Photios als Vermittler antiker Literatur. Untersuchungen zur Technik des Referierens und Exzerpierens in der Bibliothek*. Acta Universitatis Upsaliensis. Studia Graeca Upsaliensia 8. Uppsala.

HAHN, Nic. 1707. *Disputatio philologica De Ὅφιρ [Öphir] Salomonis*. Aboae s.a.

HALBFASS, Wilhelm 1988. *India and Europe. An Essay in Understanding*. Albany, N.Y.

HAMILTON, J.R. 1961. "Cleitarchus and Aristobulus", *Historia* 10, 448–458.

HANČAR, Franz 1952. "The Eurasian animal style and the Altai complex", *ArtAs* 15, 171–194.

HARLE, James C. 1985. "Herakles Subduing the Horse(s) of Diomedes and Kṛṣṇa Slaying the Demon-horse Keśin: a Common Iconographic Formula", J. Schotsmans & M. Taddei (ed.) *SAA 1983*, Istituto Universitario Orientale, Dipartimento di Studi Asiatici, Series Minor 33, Naples, 641–652.

HARMATTA, J. 1966. "Zu den griechischen Inschriften des Asoka", *AAHu* 14, 77–85.

HARTMAN, Sven S. 1965. "Dionysos and Heracles in India according to Megasthenes: a counter-argument", *Temenos* 1, 55–64.

HAUER, J.W. 1927. *Der Vṛātya. Untersuchungen über die nichtbrahmanische Religion Altindiens*. I. Die Vṛātya als nichibrahmanische Kultgenossenschaften arischer Herkunft. Stuttgart.

HEEREN, A.H.L. 1818. *Ideen über den Politik, den Verkehr und den Handel der vornehmsten Völker der alten Welt*. Erster Theil, 1. Abtheilung. Upsala (there are several different editions of this work).

1843. "Versuche die frühesten Spuren einiger Handelszweige des Altertums zu erklären", *Abhandlung en der Göttingischen Gesellschaft der Wissenschaften, Historisch-philologische Classe* 1, Göttingen, 21 pp. (paper read already 1834, a Latin summary, "Conamina ad explicanda nonnulla historiae mercaturae antiqua capita", was published in *GGA* 1834, 2049–2076).

HEGYI, D. 1978. "Der Begriff Bāpīṣapōς bei Herodotus", *AUSB* 5–6, 1977–78, 53–59.

HENNIG, Richard 1925. *Von rätselhaften Ländern*. München.

1930. "Herodots 'goldhüttende Greifen' und 'goldgrabende Ameisen'", *RM N.F.* 79, 326–332.

1932. "Der kulturhistorische Hintergrund der Geschichte von Kampf zwischen Pygmäen und Kranichen", *RM N.F.* 81, 20–24.

1935. "Herodots Handelsweg zu den sibirischen Issedonen", *Klio* 28 (N.F. 10), 242–254.

1944. *Terrae incognitae [L.] Altertum bis Ptolemäus*. Leiden.

HENNING, Walter Bruno 1947. "Two Manichaean Magical Texts", *BSOAS* 12:1, 39–66.

HERINGTON, C. J. 1964. Review of Bolton 1962, *Phoenix* 18, 78–82.

HERMINGHAUSEN, Detlef 1964. *Herodots Angaben über Äthiopien*. Diss., Hamburg.

HERRMANN, Albert 1919. "Kaspapyros", *RE* IIIA, c. 2270.

1920. "Σαρδώνυξ ὄρος", *RE* IA, c. 2496.

1929. "Skiapodes", *RE* IIIA, c. 517f.

1930. "Makrokephaloi" and "Makrones", *RE* XIV, c. 815.

1938. *Das Land der Seide und Tibet im Lichte der Antike*. Leipzig.

1939. "Ottorokorrai", *RE* XVIII:1, c. 1888f.

HERZFELD, Ernst 1968. *The Persian Empire. Studies in Geography and Ethnography of the Ancient Near East*. Ed. from the posthumous papers by G. Walser, Wiesbaden.

HIERSCHE, Rolf 1977. "Die Sage von der Weiterwanderung der Arier. Zu Śatapatha-Brāhmaṇa I 4, 1, 14–16", *KZ* 90, 47–49.

HINÜBER, Oskar von 1981. "Die Paisaci und die Entstehung der sakischen Orthographie", *Gedenkschrift Ludwig Alsdorf*, 121–127.

1985. *Arrian. Der Alexanderzug. Indische Geschichte*. Griechisch und deutsch hrsg. und übersetzt von Gerhard Wirth und Oskar von Hinüber. Sammlung Tusculum. München – Zürich [latter part, *Indica* by von Hinüber, referred to as Hinüber 1985].

## References

HLOPIN, Igor' N. 1975. "K lokalizacii paktiev Gerodota", *AoF* 3, 47–54.

----- 1983. *Istoričeskaja geografija južnyh oblastej Srednej Azii*, Ašhabad.

HOFFMANN, Helmut 1975. *Tibet. A Handbook*. Bloomington.

HOLT, Frank L. 1984. "Discovering the Lost History of Ancient Afghanistan. Hellenistic Bactria in Light of Recent Archaeological and Historical Research", *AW* 9, 2–12.

----- 1987. "Hellenistic Bactria: Beyond the Mirage (Select Bibliography)", *AW* 15, 3–15.

HOPKINS, Edward Washburn 1894. "The Dog in the Rig-Veda", *AJPh* 15, 154–163.

----- 1915. *Epic Mythology*. Grundriss III:1 B, Strassburg (repr. Delhi 1974).

HUMBACH, H. 1960. "Die awestische Länderliste", *WZKS* 4, 36–46.

----- 1978. "The Aramaic Aśoka Inscription from Taxila", *JCA* 1:2, 87–98.

HUMBOLDT, Alexander von 1847. *Kosmos. Entwurf einer physischen Weltbeschreibung*. II. Stuttgart – Tübingen.

HUNTINGFORD, G.W.B.† 1980. *The Periplus of the Erythraean Sea*, by an unknown author. With some Extracts from Agatharkhiēs 'On the Erythraean Sea'. Translated and edited. Works Issued by Hakluyt Society, Second Series 151. London.

IL'IN, Grigorij Fedorovič 1958. *Drevnej indijskij gorod Taksila*. Moskva.

IRWIN, John 1987. "'Aśokan' Pillars: the Mystery of Foundation and Collapse", *Pollet* 1987, 87–93.

ISSBERNER, Reinoldus 1888. *Inter Scylacem Caryandensem et Herodotum quae sit ratio*. Diss. Berolini.

JACKSON, A.V. Williams 1922. "The Persian Dominions of Northern India down to the Time of Alexander's Invasion", chapter XIV in Rapson 1922, 319–342.

JACOBY, Felix 1912. "Hekataios von Milet", *RE* VII, c. 2667–2750, and "Hekataios von Abdera", *ibid.* c. 2750–2769.

----- 1913. "Herodotos", *RE* Suppl. II, c. 205–520.

----- 1922. "Ktesias", *RE* XI, c. 2032–2073.

JENNISON, George 1937. *Animals for show and pleasure in Ancient Rome*. Manchester.

JETTMAR, Karl 1967. "The Middle Asiatic Heritage of Dardistan (Islamic Collective Tombs in Punyal and Their Background)", *E&W* 17, 59–82.

----- 1973. "Weinbereitung und Weinrituale im Hindukusch", *Festschrift für Helmut Petri*, Kölner ethnologische Mitteilungen 5, Köln, 191–205.

----- 1975. *Die Religionen des Hindukusch*. Die Religionen der Menschheit 4, 1. Stuttgart.

----- 1983. "Westerners beyond the Great Himalayan Range, Rock Carvings and Rock Inscriptions in the Indus Valley near Chilas", *India and the West*. Proceedings of a Seminar Dedicated to the Memory of Hermann Goetz, ed. by J. Deppert, New Delhi, 159–164.

----- 1984. "Tierstiel am Indus", *Kulturhistorische Probleme Südasiens und Zentralasiens*. Beiträge zu einer Konferenz am 9. August 1983 im Wissenschaftsbereich Orientalische Archäologie der Martin-Luther-Universität Halle-Wittenberg, hrsg. von B. Brentjes und H.-J. Peuke, Halle (Saale), 73–93.

----- 1985. "Non-Buddhist Traditions in the Petroglyphs of the Indus Valley", J. Schotsmans & M. Taddei (ed.) *SAA 1983*, Istituto Universitario Orientale, Dipartimento di Studi Asiatici, Series Minor 33, Naples, 750–777.

JETTMAR, Karl & THEWALT, Volker 1987. *Between Gandhāra and the silk roads: rock-carvings along the Karakorum highway; discoveries by German-Pakistani Expeditions 1979–1984*. Mainz am Rhein.

JOHNSON, Helen M. 1941. "Grains of Mediaeval India", *JAOS* 61, 167–171.

JOHNSTON, Edward Hamilton 1941. "Two Notes on Ptolemy's Geography of India", *JRAS* 1941, 208–222.

----- 1942. "Ctesias on Indian Manna", *JRAS* 1942, 29–35 & 249f.

JOLLY, Julius 1896. *Recht und Sitte*. Grundriss II:8, Strasburg.

JONES, Schuyler 1974. "Dolke, pokaler og magiske sører i Nuristan", *KUML, Årbog for Jysk arkeologisk selskab* 1973/74, 231–261 (with English summary, "Silver, gold and Iron. Concerning Katara, Urei, and the Magic Lakes of Nuristan", 251–261).

JONES, W.R. 1971. "The Image of the Barbarian in Medieval Europe", *Comparative Studies in Society and History* 13, 376–407.

JONES, William 1798. "On the Gods of Greece, Italy and India", *AsRes* 1, 8°-reprint of Indian original publ. in London, 221–275.

JONG, Jan Willem de 1973. "The Discovery of India by the Greeks", *Asiatische Studien/Études Asiatiques* 27,

115–142.

JOSHI, Jagat Pati & PARPOLA, Asko 1987. *Corpus of Indus Seals and Inscriptions*. 1. *Collections in India*. Annales Academiae Scientiarum Fennicae Ser. B, tom. 239 / Memoirs of the Archaeological Survey of India 86. Helsinki.

JOSHI, N.P. 1979. *Iconography of Balarama*. New Delhi.

JOSHI, S.D. 1980. "The contribution of R.G. Bhandarkar to the study of Sanskrit Grammar", *Sanskrit and Indian Studies, Essays in Honour of Daniel H.H. Ingalls*, Studies in Classical India 2, Dordrecht, 33–60.

JUNGE, Julius 1939. *Saka-Studien*. Klio, Beiheft 41 (N.F. 28), Leipzig.

KANAKASABHAI [PILLAI], V. 1904, *The Tamils Eighteen Hundred Years Ago*. (repr. Madras 1966).

KANE, Pandurang Vaman 1941. *History of Dharmasāstra*, Vol. II, Part 1. Poona.

---- 1968. *History of Dharmasāstra*, Vol. I, Parts 1–2. Government Oriental Series Class B, No. 6. Poona.

---- 1973. *History of Dharmasāstra*, Vol. IV, 2<sup>ed</sup>. Poona.

KAPADIA, Hiralal R. 1953. "Detection of Poison in Food", *Journal of the University of Bombay* New Series 22:2, Arts Number 28, 91–96.

KARSAI, Gy. 1978. "Die Geschichte von den goldgrabenden Ameisen", *AUSB* 5–6, 1977–78, 61–72.

KARTTUNEN, Klaus 1977. *Koirankuonolaisten alkuperä ja asema antiikin kirjallisuudessa*. Unpubl. M.A. diss., University of Helsinki.

---- 1981. "The reliability of the *Indica* of Ctesias", *Proceedings of the Nordic South Asia Conference*, held in Helsinki June 10–12 1980, *SO* 50, 105–107.

---- 1984. "Κυνοκέφαλοι and Κυναμολογοί in classical ethnography", *Arctos* 18, 31–36.

---- 1985. "A miraculous fountain in India", *Arctos* 19, 55–65.

---- 1986a. "Graeco-Indica – A Survey of Recent Work", *Arctos* 20, 73–86.

---- 1986b. "On the contacts of South India with the Western world in ancient times, and the mission of the Apostle Thomas", A. Parpola & B. Smidt Hansen (ed.), *South Asian Religion and Society. Studies on Asian Topics* (Scandinavian Institute of Asian Studies), Copenhagen – London, 189–204.

---- 1987. "The country of fabulous beasts and naked philosophers – India in classical and medieval literature", *Arctos* 21, 43–52.

---- 1988. "Expedition to the end of the world – An ethnographic *tόπος* in Herodotus", *SO* 64, 177–181.

---- forthcoming a. "The *Indica* of Ctesias and its criticism", *Demetrios Galanos Commemoration Volume*.

---- forthcoming b. "A Thousand Years of Contamination – India in the Geographic Dictionary of Stephanus of Byzantium", *Berliner indologische Studien* 4–5, 57–71.

KELLER, Otto 1909–1913. *Die antike Tierwelt*. 1–2. Leipzig.

KENNEDY, James 1898. "The Early Commerce of Babylon with India – 700–300 B.C.", *JRAS* 1898, 241–288.

---- 1916. Review of the 1<sup>ed</sup>. of Rawlinson 1926, *JRAS* 1916, 847–853.

KENT, Roland G. 1953. *Old Persian. Grammar, Texts, Lexicon*. 2<sup>revised ed.</sup> American Oriental Series 33, New Haven.

KERBAKER, Michele 1905. "Il Bacco indiano nelle sue attinenze col mito e col culto dionisiaco", *Atti della Reale Accademia di Archeologia, Lettere e Belle Arti* (Napoli) 23:1, 139–196.

KERN, Hendrik 1872. "The Br̥hat-Samhīta; or Complete System of Natural Astrology of Varāhamihira. Translated from Sanskrit into English" [Part II, ch. 8–15], *JRAS* 1872, 45–90.

---- 1875. *Over de jaartelling der zuidelijke Buddhisten en de gedenkstukken van Açoka den Buddhist*. VKNAW 8. Amsterdam.

---- 1908. "Grieksche woorden in het Sanskrit", *Sertum Nabericum collectum a philologis Batavis ...* Lugd. Bat., 205–209.

KIESSLING, Max 1900. *Zur Geschichte der ersten Regierungsjahre des Darius Hystaspes*. Diss., Leipzig.

---- 1916. "Hypobaros", *RE* 9, c. 329–332.

---- 1920. "Πών", *RE* 1A, c. 1106f.

KIRFEL, Willibald 1920. *Die Kosmographie der Inder*. Bonn – Leipzig.

KIRK, G.S. & RAVEN, J.E. & SCHOFIELD, M. 1983. *The Presocratic Philosophers. A critical history with a selection of texts*. Second edition [1957]. Cambridge.

KJÆRUM, Poul 1986. "The Dilmun seals as evidence of long distance relations in the early second millennium

## References

B.C.", Al Khalifa & Rice 1986, 269–277.

KLENGEL, Horst 1976. "Vorderasien und die Induskultur. Zum Stand der Forschung", *WZBerlin* 25, 325–329.

KLINGER, W. 1937. "Psioglowcy w tradycji starożytnej i nowożytnej (Hundsköpfige Gestalten in der antiken und neuzeitlichen Überlieferung)", *Bulletin international de l'Académie polonaise des sciences et lettres*, Année 1936, 119–123 (a German summary).

KÖNIG, Dieter 1984. *Das Tor zur Unterwelt. Mythologie und Kult des Termitenhügels in der schriftliche und mündliche Tradition Indiens*. Beiträge zur Südasiens-Forschung 97, Wiesbaden.

KÖNIG, Friedrich Wilhelm 1972. *Die Persika des Ktesias von Knidos*. Archiv für Orientforschung, Beiheft 18, Graz.

KOHL, Josef 1954. "Einige Bemerkungen zu den Tierlisten des jinistischen Kanons", *Asiatica. Festschrift Fr. Weller*, Wiesbaden, 365–376.

KONOW, Sten 1937. "Professor Poussin on Šakayavanam", *IC* 3, 1936–37, 1–7.

KRAMER, S.N. 1963. "Die Suche nach dem Paradies. Dilmun und die Indus-Zivilisation", *WZHalle* 12, 311–317.

KRETZENBACHER, L. 1968. *Kynokephale Dämonen südosteuropäischer Volksdichtung*. Beiträge zur Kenntnis Südosteupas und des Nahen Orients 5, München.

KRUMBHOLZ, Paul 1886. "Diodors assyrische Geschichte", *RM N.F.* 41, 321–341.

----- 1889. "Wiederholungen bei Diodor", *RM N.F.* 44, 286–298.

----- 1895. "Zu den Assyriaka des Ktesias", *RM N.F.* 50, 205–240 (continued in 52, 1897, not used here).

KÜHNE, H. 1976. "Industalkultur", *Reallexikon der Assyriologie* V:1/2, c. 96–104.

KUHN, Ernst 1904. "Das Volk der Kamboja bei Yāska", *Avesta, Pahlavi and Ancient Persian Studies in honour of the late Shams-ul-ulama Dastur Peshotanji Bohramji Sanjana*. I, Strassburg & Leipzig, 213f.

KUIPER, F.B.J. 1969. Review of Dahlquist 1962, *IJ* 11:2, 142–146.

KUMAR, Viney 1974. "Social life in Ancient India as described in the Indika of Ktesias", *ABORI* 55, 239–242.

KUMARI, Ved 1968. *The Nīlamata Purāṇa*. Vol. I. (A Cultural and Literary Study of a Kaśmīrī Purāṇa). Srinagar – Jammu.

KUZMINA, E.E. 1976. "The 'Bactrian Mirage' and the Archaeological Reality. On the Problem of the Formation of North Bactrian Culture", *E&W* 26, 111–131 (rev. transl. from *VDI* 1972:1, 131–146).

LACROIX, Léon 1974. "Héraclès, héros voyageur et civilisateur", *Académie royale de Belgique, bulletin de la Classe des lettres et des sciences morales et politiques* 5<sup>e</sup> série, tome LX, 34–60.

LAHIRI, A.K. 1974. "The Marduk – Tiāmat conflict of the Babylonian Enuma Elis and the Indra – Vītra struggle of the R̥gveda: a comparative study", *Visvabharati Quarterly* 39, 236–259.

LAL, B.B. 1981. "The two Indian epics vis-à-vis archaeology", *Antiquity* 55, 27–34.

LAMBERG-KARLOVSKY, C.C. 1972. "Trade mechanisms in Indus – Mesopotamian interrelations", *JAOS* 92, 222–229.

LAMBRICK, Hugh Trevor 1975. *Sind: A general introduction*. 2<sup>nd</sup> ed., Hyderabad (Sind) – Karachi.

LAMOTTE, Etienne 1953. "Les premières relations entre l'Inde et l'Occident", *NCI* 5, 80–118.

----- 1958. *Histoire du bouddhisme indien. Des origines à l'ère Šaka*. Bibliothèque du Muséon 43, Louvain.

LASSEN, Christian 1827. *Commentatio Geographica atque historica de Pentapotamia Indica*. Bonnae ad Rhenum.

----- 1839. "Beiträge zur Kunde des indischen Alterthums aus dem Mahābhārata II. Die altindischen Völker", *ZKM* 2, 21–70.

----- 1840. "Beiträge zur Kunde des indischen Alterthums aus dem Mahābhārata II. Die altindischen Völker" (continued), *ZKM* 3, 183–217.

----- 1844. "Bemerkungen über dieselbe Stelle des Megasthenes", *ZKM* 5, 232–259 (postscript to an article by Benfey).

----- 1847. *Indische Alterthumskunde*, Theil I. Leipzig.

----- 1852. *Indische Alterthumskunde*, Theil II. Leipzig.

LASSERRE, François 1975. "Pygmäen", *KP* 5, c. 1643f.

LAUFER, Berthold 1907. "Historical jottings on amber in Asia", *Memoirs of the American Anthropological Association* I:3, 211–244.

----- 1908. "Die Sage von den goldgrabenden Ameisen", *T'oung Pao* série 2, t. 9, 429–452 (repr. in Laufer 1976, 1271–1294).

----- 1909. *Chinese Pottery of the Han Dynasty*. Leiden (repr. Rutland, Vermont 1962).

1913. "Der Pfau in Babylonien", *OLZ* 16, c. 539f.

1914. *Chinese Clay Figures*. Part I. *Prolegomena on the history of defensive armour*. Field Museum of Natural History Publ. 177 (Anthropological Series XIII:2, pp. 73–315). Chicago (esp. chapter 1 "History of the Rhinoceros", 73–173).

1919. *Sino-Iranica*. Field Museum of Natural History Publ. 201 (Anthropological Series XV:3, pp. 185–630), Chicago (repr. Taipei 1978).

1931. "Columbus and Cathay", *JAOS* 51, 87–103.

LA VALLÉE POUSSIN, Louis de 1930. *L'Inde aux temps des Mauryas et des barbares grecs, scythes, parthes et Yue-tchi*. Histoire du Monde VI. Paris.

LAW, Bimala Churn 1916. "Taxilā as a Seat of Learning in the Pāli Literature", *JASB* N.S. 12, 17–21.

1973. *Tribes in Ancient India*. 2<sup>nd</sup> ed. Poona (apparently a mere repr. of 1<sup>st</sup> ed., publ. in 1940s).

LE COQ, Albert von 1914. "Bemerkungen über Türkischen Falknerei", *Baessler-Archiv* 4, 1–13 (with Nachtrag ib. 6, 1917, 114–117).

LESKY, Albin 1959. "Aithiopika", *Hermes* 87, 27–38.

LÉVI, Sylvain 1890a. *Quid de Graecis veterum Indorum monumenta tradiderint*. Paris.

1890b. "Notes sur l'Inde à l'époque d'Alexandre", *IA* 8. série, t. 15, 234–240.

1904. "The Kharoshthi Writing and its cradle", *IA* 33, , 79–84.

1914. "Autour du Bāveru-Jātaka", *Annuaire de l'École des Hautes-Études, Sciences philologiques* 1913–14, 5–19 (repr. in Lévi 1937, 284–292, used).

1915. "Le catalogue géographique des yakṣa dans la Mahāmāyūrī", *IA* 11. série, t. 5, 19–138.

1918. "Pour l'histoire du Rāmāyaṇa", *IA* 11. série, t. 11, 5–161.

1937. *Mémorial Sylvain Lévi*. Paris.

LILJA, Saara 1976. *Dogs in Ancient Greek Poetry*. *Commentationes Humanarum Litterarum* 56. Helsinki.

LINDEGGER, Peter 1979. *Griechische und römische Quellen zum peripheren Tibet*. Teil I. Frühe Zeugnisse bis Herodot (Der fernere skythische Nordosten). *Opuscula Tibetana*, Arbeiten aus dem Tibet-Institut Rikon-Zürich 10, Rikon-Zürich.

1982. *Griechische und römische Quellen zum peripheren Tibet*. Teil II. Überlieferungen von Herodot bis zu den Alexanderhistorikern (Die nordöstlichsten Grenzregionen Indiens). *Opuscula Tibetana*, Arbeiten aus dem Tibet-Institut Rikon-Zürich 14, Rikon-Zürich.

LINDNER, Kurt 1973. *Beiträge zu Vogelfang und Falknerei im Altertum*. Quellen und Studien zur Geschichte der Jagd 12. Berlin – New York.

LION, Albertus 1823. *Ctesiae Cnidi quae supersunt*, recensuit A. Lion. Göttingen.

LITVINSKIJ, B. A. 1964. "Tadžikistan i Indija (primery drevnih svjazej i kontaktov)", *Ancient India/Indija v drevnosti. Sbornik statej*. Moscow, 143–165.

LOMPERIS, Timothy J. 1984. *Hindu influence on Greek philosophy. The Odyssey of the soul from the Upani-shads to Plato*. Calcutta.

LONG, J. Bruce 1971. "Siva and Dionysus – visions of terror and bliss", *Numen* 18, 180–209.

LOSCH, Hans 1955. "Ein Abriss der Waffenkunde", *Studia Indologica. Festschrift W. Kirlfel*. Bonn, 197–218.

LÜDERS, Heinrich 1897. "Die Sage von Rṣyaśrṅga", *Nachrichten von der Königl. Gesellschaft der Wissenschaften zu Göttingen* 1897, 87–135.

LYSENKO, V. G. 1982. "Atomizm vajšešikov i atomizm Demokrita (Opyt sravnitel'nogo analiza)", *Bongard-Levin* 1982, 187–201.

MAAS, Paul 1924. "Ein Excerpt aus Ktesias 'Ινδικά", *KZ* 52, 303–306.

MCCARTNEY, Eugene S. 1941. "Modern analogues to ancient tales of monstrous races", *CPh* 36, 390–394.

1954. "The Gold-Digging Ants", *CJ* 49, 234.

MACKAY, Ernest 1925. "Sumerian connexions with Ancient India", *JRAS* 1925, 697–701.

MCCRINdle, John Watson 1877. *Ancient India as described by Megasthenes and Arrian*. Calcutta – London (from *IA* 1876–77, repr. with notes by R. Jain, Delhi 1972).

1879. *The Commerce and Navigation of the Erythraean Sea; being a translation of the Periplus maris Erythraei, by an anonymous writer, and of Arrian's account of the voyage of Nearchus*. Calcutta – London (from *IA* 1877, repr. together with McCrindle 1882, Amsterdam 1973).

1882. *Ancient India as described by Ktesias the Knidian*. Calcutta – London (from *IA* 1881, repr. together with McCrindle 1879, Amsterdam 1973).

## References

1885. *Ancient India as described by Ptolemy*. London (from IA 1884, repr. with notes by R. Jain, Amsterdam – Faridabad n. d. [in 1970s]).

1896. *The Invasion of India by Alexander the Great*, 2<sup>ed.</sup> (repr. New Delhi n. d. [in 1970s]).

1901. *Ancient India as described in Classical Literature*. Westminster.

MAJUMDAR, R.C. 1949. "Achaemenian Rule in India", *IHQ* 25, 153–165.

1958. "The Indika of Megasthenes", *JAOS* 78, 273–276.

1960a. *The Classical Accounts of India*. Calcutta (repr. 1981).

1960b. "The Surrejoinder to K.D. Sethna", *JAOS* 80, 248–250.

MALLOWAN, Max 1970. "An early Mesopotamian Link with India", *JRAS* 1970, 192–194.

MALTE-BRUN 1819. "Mémoire sur l'Inde Septentrionale d'Hérodote et de Clésias comparée au Petit-Tibet des modernes", *Nouvelles Annales des Voyages* 2, 307–383.

MANNERT, Konrad 1829. *Geographie der Griechen und Römer*, IV. Geographie von Indien und der Persischen Monarchie bis zum Euphrat. Verbesserte und vermehrte 2<sup>Ausgabe</sup>, Leipzig.

MARIOTTINI SPAGNOLI, Maria 1967. "The Symbolic Meaning of the Club in the Iconography of the Kuṣāṇa Kings", *E&W* 17, 248–267.

1970. "Some Further Observations in the Symbolic Meaning of the Club in the Statue of Kaniṣka", *E&W* 20, 460–463.

MARKWART, Josef 1930. "Woher stammt der Name Kaukasus?", *Caucasica* 6:1, 25–69.

MARQUART, Jos. 1893. "Die Assyriaka des Ktesias", *Philologus*, Supplementband 6, 501–658.

1907. "Untersuchungen zur Geschichte von Eran II", *Philologus*, Supplementband 10, 1–258.

1913. *Die Benin-Sammlung des Reichsmuseums für Völkerkunde in Leiden*, beschrieben und mit ausführlichen *Prolegomena zur Geschichte der Handelswege und Völkerbewegungen in Nordafrika* versehen. Veröffentlichungen des Reichsmuseums für Völkerkunde in Leiden Serie 2, Nr. 7, Leiden.

MARSHALL, John 1951. *Taxila. An illustrated Account of Archaeological Excavations carried at Taxila, I – III*. Cambridge (repr. New Delhi 1975).

MAYRHOFER, Manfred 1966. *Indo-Arier im Alten Vorderasien*. Wiesbaden.

MEADOW, Richard H. 1987. "Faunal Exploitation Patterns in Eastern Iran and Baluchistan: a review of recent investigations", *Orientalia Iosephi Tucci memoriae dicata*, Serie Orientale Roma 56, 2, Roma, 881–916.

MEISSNER, Bruno 1913. "Haben die Assyrer den Pfau gekannt?", *OLZ* 16, c. 292f.

MEULI, Karl 1935. "Scythica", *Hermes* 70, 121–176.

MEYER, Ernst 1927. "Alexander und der Ganges", *Klio* 21, 183–191.

MEYER, Johann Jakob 1971. *Sexual life in ancient India*. Delhi (reprint of revised English translation [1952] of German original published in 1915).

MILLER, J. Innes 1969. *The Spice Trade of the Roman Empire*. Oxford.

MILLER, Wsevolod 1880. "Sur le rôle du chien dans quelques croyances mythologiques", *Atti di IV Congresso Internazionale di Orientalisti, Firenze 1878*, t. II, 39–60.

MINAEV, Ivan Pavlovič 1870. "Novye fakty otnositel'no svjazi drevnej Indii s zapadom", *Žurnal Ministerstva narodnogo prosveščenija* 1870:8, 225–239.

MITCHELL, T.C. 1986. "Indus and Gulf type seals from Ur", *Al Khalifa & Rice* 1986, 278–285.

MITCHINER, John E. 1986. *The Yuga Purāṇa*. Critically edited, with an English Translation and a detailed Introduction. *Bibliotheca Indica*. Calcutta.

MITCHINER, Michael 1973. *The origins of Indian coinage*. London.

MITRA, Sarat Chandra 1928. "The Dog-bride in Santali and Lepcha Folklore", *Journal of the Bihar and Orissa Research Society* 14, 322–325.

MOLÉ, Marian 1951. "Garshāsp et les Sagsār", *NCI* 3, 128–138.

MOMIGLIANO, Arnaldo 1975. *Alien Wisdom. The limits of Hellenization*. Cambridge.

MOORCROFT, William 1818. "A Journey to Lake Mānasarōvara in U'n-dés, a Province of little Tibet", *AsRes* 18, (1813), 8<sup>o</sup>-reprint with new paging of Indian original publ. in London, 380–536.

MORAUX, Paul 1984. *Der Aristotelismus bei dem Griechen von Andronikos bis Alexander von Aphrodisias. II. Der Aristotelismus im I. und II. Jh. n. Chr. Peripatoi* 6. Berlin – New York.

MORGENSTIERNE, Georg 1940. "'Pashto', 'Pathan' and the treatment of *r* + sibilant in Pashto", *AO* 18, 138–144.

<sup>1</sup> Same as Marquart.

## References

MÜLLER, C. 1844. *Ctesiae Cnidi Fragmenta*. Publ. as an appendix to the Herodotus edition by Dindorff, Paris.

MÜLLER, Klaus E. 1972. *Geschichte der antiken Ethnographie und ethnographischen Theoriebildung*, Teil I. Studien zur Kultukunde 29, Wiesbaden.

MURRAY, Oswyn 1970. "Hecataeus of Abdera and Pharaonic Kingship", *Journal of Egyptian Archaeology* 56, 141–171.

----- 1972. "Herodotus and Hellenistic Culture", *CQ* 22, 200–203.

MYLIUS, Klaus 1970. "Ausgewähltes Verzeichnis der Abkürzungen von Titeln aus der Sanskrit-Literatur", *MIO* 16, 602–611.

NARAIN, Awadh Kishore 1957. *The Indo-Greeks*. Oxford (repr. Delhi 1980).

----- 1965. "Alexander and India", *Greece & Rome* 12, 155–164.

----- 1973. "The two Hindu divinities on the coins of Agathocles from Ai-Khanum", *JNSI* 35, 73–77.

NEIMAN, David 1980. "Ethiopia and Kush: Biblical and Ancient Geography", *AW* 3, 35–42.

NENCI, G. 1954. *Hecataei Milesii Fragmenta* ... a cura di G. Nenci, Firenze.

NILAKANTA SASTRI, K.A. 1939. "Southern India, Arabia and Africa", *New Indian Antiquary* 1, 1938–39, 24–36.

----- 1959. "Ancient Indian Contacts with Western Lands", *Diogenes* 28, 40–62.

----- (ed.) 1967. *Age of the Nandas and Mauryas*. 2ed. (1951) Delhi (only chapters written by N. S. himself are referred to as Nilakanta Sastri 1967).

NOIVILLE, Jean 1929. "Les Indes de Bacchus et d'Héraclès", *Revue de philologie, de littérature et d'histoire anciennes* 55, 245–270.

NYLANDER, Carl 1988, "Masters from Persepolis? A Note on the Problem of the Origins of Maurya Art", *Orientalia Iosephi Tucci memoriae dicata*, Serie Orientale Roma 56, 3, Roma, 1029–1038.

OLCK, Franz 1899. "Casia", *RE* III, c. 1637–1651.

OIKONOMIDES, A.I.N. 1985. "The Deification of Alexander in Bactria and India", *AW* 12, 69–71.

OJHA, K.C. 1969. *The History of Foreign Rule in Ancient India*. Allahabad.

OLMSTEAD, A.T. 1948. *History of the Persian Empire*. Chicago III.

OPPERT, Jules 1875. "Ἐλέιφας", *BSL* 2, 1872–75, lxx–lxxi.

ORTH, Ferdinand 1913. "Hund", *RE* VIII, c. 2540–2582.

OZOLS, Jacob & THEWALT, Volker (ed.) 1984. *Aus dem Osten des Alexanderreiches: Völker und Kulturen zwischen Orient und Okzident; Iran, Afghanistan, Pakistan, Indien*. Festschrift zum 65. Geburtstag von Klaus Fischer. Köln.

PANOFSKY, Hugo 1885. *Quaestionum de Historiae Herodoteae fontibus pars prima*. Diss., Berolini.

PARKE, H.W. 1985. "The Massacre of the Branchidae", *JHS* 105, 59–68.

PARPOLA, Asko 1973. *Arguments for an Aryan Origin of the South Indian Megaliths*. Madras.

----- 1975a. "Isolation and tentative interpretation of a toponym in the Harappan inscriptions", *Le déchiffrement des écritures et des langues*, Colloque du XXXIX<sup>e</sup> congrès des orientalistes, Paris, Juillet 1973, Paris, 121–143.

----- 1975b. "India's Name in Early Foreign Sources", *Sri Venkateswara University Oriental Journal* 18, 9–19.

----- 1980. *Från Indusreligion till Veda*. Popularvetenskapliga skrifter utgivna av Finska Orient-Sällskapet, Svensk serie 6. Copenhagen.

----- 1983. "The Pre-Vedic Indian Background of the Śrauta Rituals", *Agni, The Vedic Ritual of the Fire Altar*, ed. by F. Staal, vol. II. Berkeley, 41–75.

----- 1984a. "On the Jaiminīya and Vādhūla Traditions of South India and the Pāṇḍu/ Pāṇḍava Problem", *SO* 55, 427–468.

----- 1984b. "New correspondences between Harappan and Near Eastern glyptic art", B. Allchin (ed.), *SAA 1981*, Cambridge, 176–195.

----- 1985a. "The Harappan 'Priest-King's' Robe and the Vedic Tarpya Garment: Their Interrelation and Symbolism (Astral and Procreative)", J. Schotmans & M. Taddei (ed.) *SAA 1983*, Istituto Universitario Orientale, Dipartimento di Studi Asiatici, Series Minor 33, Naples, 385–403.

----- 1985b. *The Sky-Garment. A study of the Harappan religion and its relation to the Mesopotamian and later Indian religions*. SO 57. Helsinki.

----- 1988. "The coming of the Aryans to Iran and India and the cultural and ethnic identity of the Dāsas", *SO*

64, 195–302.

— & PARPOLA, Simo 1975. "On the relationship of the Sumerian toponym Meluhha and Sanskrit mleccha", *SO* 46, 205–238.

PARPOLA, Simo & PARPOLA, Asko & BRUNSWIG, Robert H., Jr. 1977. "The Meluhha Village. Evidence of acculturation of Harappan traders in late third millennium Mesopotamia?", *JESHO* 20, 129–165.

PEARSON, Lionel 1939. *Early Ionian Historians*. Oxford.

— 1960. *The Lost Histories of Alexander the Great*. Philological Monographs 20, London.

PEKKANEN, Tuomo 1968. *The Ethnic Origin of the Δουλοσπόροι*. Arctos. Acta philologica Fennica. Supplementum I. Helsinki.

— 1986. "The first references to the silk road in classical literature", *Traces of the Central Asian culture in the North*, Mémoires de la Société finno-ougrienne 194, Helsinki, 173–193.

PETTINATO, Giovanni 1972. "Il commercio con l'estero della Mesopotamia meridionale nel 3. millennio av. Cr. alla luce delle fonti letterarie e lessicali sumeriche", *Mesopotamia* 7, 43–166.

PHILLIPS, E.D. 1955. "The Legend of Aristeas: fact and fancy in Early Greek notions of East Russia, Siberia and Inner Asia", *ArtAs* 18, 161–177.

PIANTELLI, Mario 1978. "Possibili elementi indiani nella formazione del pensiero di Pirrone d'Elide", *Filosofia* N.S. 29, 135–164.

PINGREE, David 1973. "The Mesopotamian Origin of early Indian mathematical Astronomy", *Journal for the History of Astronomy* 4, 1–12.

PISANI, Vittore 1940. "Indoiranica 4. – Aethiopes d'Asia e Paricani", *RSO* 18, 97f.

— 1955. "Von fabelhaften Glücksländern. Weiteres zu den Beziehungen zwischen Indien und Mittelmeergebiete", *Studia Indologica. Festschrift W. Kirlfel*. Bonner Orientalische Studien 3, Bonn, 243–253.

PISCHEL, Richard 1981. *A Grammar of the Prakrit Languages*. Translated from German by Subhadra Jhā. 2<sup>nd</sup> revised edition. Delhi.

PJANKOV, I.V. 1965. ""Istorija Persii" Ktesija i sredneaziatskie satrapii Ahemenidov v konce V v. do n. è.", *VDI* 1965:2, 35–50.

— 1973. "Gorod Srednej Azii ahemenidskogo vremeni po dannym antičnyh avtorov", *Drevnij Vostok. Goroda i torgovlia (III – I tys. do n. è.)*, Akademija nauk Armjanskoy SSR, Erevan, 126–135 (with English summary, "The Central Asian Cities of the Achaemenid Period according to Graeco-Roman authors, 231–233).

— 1976. "Baktrijskij grif v antičnoj literature", *Istorija i kul'tura Srednej Azii*, Moskva, 19–25.

— 1987. "Drevnejše antičnoe izvestie o puti v vostočnyj Turkestan", B.A. Ranov (red.), *Prošloje srednej Azii (arheologija, numizmatika i epigrafika, etnografija)*, Dušanbe, 261–267.

POLLET, Gilbert (ed.) 1987. *India and the Ancient World. History, Trade and Culture before A.D. 650*. Prof. P.H.L. Eggemont Jubilee Volume... Orientalia Lovaniensia Analecta 25, Leuven.

POTT, A.F. 1842. "Kurdische Studien III. Naturgeschichtliches aus der Kurdischen und anderen Sprachen Westasiens", *ZKM* 4, 1–42 and 259–280.

PRAKASH, Buddha 1969. "Cyrus the Great and the Indus Valley Region", *Satkari Mookerji Felicitation Volume*, Chowkhamba Sanskrit Studies 69, Varanasi, 133–140.

PRATER, S.H. 1971. *The book of Indian animals*. Rev. 3<sup>rd</sup> ed., Bombay.

PRZYLUSKI, Jean 1914. "Le nord-ouest de l'Inde dans le Vinaya des Mūla-Sarvāstivādin et les textes apparentés", *JA* 11. série, t. 4, 493–568.

— 1926. "Un ancien peuple du Penjab: les Udumbara", *JA* 208, 1–59.

— 1927. "La ville de Cakravartin. Influences babylonniennes sur la civilisation de l'Inde", *RO* 5, 165–185.

PUGAČENKOVA, Galina A. 1967. "Dionisijskaja tema v antičnom iskusstva Srednej Azii", *AHHu* 15, 423–428.

— 1977. "Gerakl v Baktrii", *VDI* 1977:2, 77–92.

PUGLIESE CARRATELLI, G. et al 1964. *A bilingual Graeco-Aramaic edict by Aśoka. The first Greek Inscription discovered in Afghanistan*. Text, transl. and notes by G. Pugliese Carratelli and G. Garbini, foreword by G. Tucci. Introduction by U. Scerrato. Serie Orientale Roma 29, Roma.

PULLÉ, Francesco L. 1901. *La cartografia antica dell'India*, Parte I. *Dai principi fino ai Bizantini e agli Arabi*. Studi Italiani di filologia indo-iranica 4, Firenze.

PUSKÁS, Ildikó 1978. "On an ethnographical topos in the classical literature (the gold-digging ants)", *AUSB* 5–6, 1977–78, 73–87.

1983. "Herodotus and India", *Oikumene* 4, 201–207.

1986. "Mahabharata Motifs in Classical Greek and Latin Sources", *Sanskrit and World Culture, Proceedings of the Fourth World Sanskrit Conference of the International Association of Sanskrit Studies Weimar May 23–30 1979*. Schriften zur Geschichte und Kultur des alten Orients 18, Berlin, 257–262.

& KÁDÁR, Zoltán 1980. "Satyrs in India", *ACUSD* 16, 9–17.

RANKIN, H.D. 1969. "'Eating people is right': Petronius 141 and a *τόπος*", *Hermes* 97, 381–384.

RAPIN, Claude 1983. "Les inscriptions économiques de la trésorerie hellénistique d'Afghanistan (Afghanistan)", *Bulletin de Correspondance Hellénique* 107, 315–372.

RAPP, Eugen Ludwig 1972. "The Semitic Stone Inscription I.110 of the Lahore Museum and Its Probable Equivalent I.152 in Unknown Script and Language", *E&W* 22, 25–31.

RAPSON, E.J. (ed.) 1922. *The Cambridge History of India*. Vol. I. Cambridge.

RASCHKE, Manfred G. 1978. "New Studies in Roman Commerce with the East", *ANRW* II, 9, 2, 604–1361.

RATNAGAR, Shereen 1981. *Encounters. The Westerly Trade of the Harappa Civilization*. Delhi.

RAU, Wilhelm 1974. *Metalle und Metallgeräte im vedischen Indien*. AAWM 1973:8, Wiesbaden.

RAWLINSON, George 1862. *History of Herodotus: A New English Version* [transl. and ed. with copious notes ... Vol. II. London.

RAWLINSON, Hugh George 1913. "Foreign Influences in the Civilization of Ancient India 900 B.C. – 400 A.D.", *Journal of the Bombay Branch of the Royal Asiatic Society* 23, 1908–1913, 217–238.

1926. *Intercourse between India and the Western World*. 2ed., Cambridge (1ed. 1916; repr. New York 1971).

RAY, H.C. 1922. "Madra", *JASB* N.S. 18, 257–268.

REESE, Wilhelm 1914. *Die griechischen Nachrichten über Indien bis zum Feldzuge Alexanders des Grossen*. Leipzig.

REGENOS, G.W. 1939. "A Note on Herodotus III, 102", *CJ* 34, 1938–39, 425f.

RELAND, Adriaan (Hadrianus Relandus) 1706. "Dissertatio de veteris lingua Indica", *Dissertationes selectae [Hadri. Relandi]*, t. I. Trajecti ad Rhenum, 209–232.

RICHTER, Will 1967. "Huhn (Hahn)", *KP* 2, c. 1239–1241.

RITTER, Carl 1833. *Die Erdkunde von Asien. II. Der Nordosten und der Süden von Hoch-Asien*. Die Erdkunde in Verhältniss zur Natur und zur Geschichte des Menschen, oder allgemeine vergleichende Geographie... 3. Berlin.

ROBINSON, Charles Alexander, Jr. 1953. *The History of Alexander the Great*, Vol. I. Providence R.I.

ROBINSON, T.R. 1961. *Knowledge of India among educated Greeks down to the time of Arrian*. Unpublished Ph.D. thesis, The Queen's University, Belfast.

ROCHER, Ludo 1957. "Megasthenes on Indian Lawbooks", *JOIB* 16, 125–128.

RÖNNOW, Kasten 1936. "Kirāta. A Study of some Ancient Indian Tribes", *MO* 30, 90–170.

ROHDE, Erwin 1900. *Der griechische Roman und seine Vorfäher*. Vermehrte 2Auflage, Leipzig.

ROOS, A.G. 1939. "De grieken en Indië", *Tijdschrift voor geschiedenis* 52, 225–250.

ROSSELLINI, Michèle & SAID, Suzanne 1978. "Usages de femmes et autres nomoi chez les 'sauvages' d'Hérode: essai de lecture structurale", *ANSP* Serie III, vol. 8, 949–1005.

ROUX, Georges 1964. *Ancient Iraq*. London (Pelican-edition 1966, repr. 1976 used).

RUDENKO, S.J. 1958. "The mythological eagle, the gryphon, the winged lion, and the wolf in the art of northern nomads", *ArtAs* 21, 101–119.

SACHSE, Joanna 1981. *Megasthenes o Indiach*. *Classica Wratislaviensia* VIII, Acta Universitatis Wratislaviensis 587, Wrocław.

1982. "Le mythe des Sila, fleuve indien (Mégasthène, FGrHist. 715, F. 10)", *Eos* 70, 237–241.

SALETORE, R.N. 1975. *Early Indian Economic History*. London (printed in India).

SALONEN, Armas 1973. *Vögel und Vogelfang im alten Mesopotamien*. *Annales Academiae Scientiarum Fennicae* B 180, Helsinki.

SARAO, K.T.S. 1987. "Who and what originated Buddhism?", Preprint of a paper read at the Seventh World Sanskrit Conference Leiden 23–29 Aug 1987.

SARIANIDI, Viktor I. 1988. "Cult symbolism of Bactrian and Margiana amulets", *Orientalia Iosephi Tucci memoriae dicata*, Serie Orientale Roma 56, 3, Roma, 1281–1294.

SCHACHERMEYR, Fritz 1967. *Ägäis und Orient. Die überseeischen Kulturbeziehungen von Kreta und Mykenai*

## References

*mit Ägypten, der Levante und Kleinasien unter besonderer Berücksichtigung des 2. Jahrtausends v. Chr.* Österreichische Akademie der Wissenschaften, Philosophisch-historische Klasse, Denkschriften 93, Wien.

1973. *Alexander der Grosse. Das Problem seiner Persönlichkeit und seines Wirkens*. SWA 285, Wien.

SCHAFER, R. 1964. "Unmasking Ktesias' dog-headed people", *Historia* 13, 499–503.

SCHARFE, Hartmut 1968. *Untersuchungen zur Staatsrechtslehre des Kautilya*, Wiesbaden.

1971. "The Maurya dynasty and the Seleucids", *KZ* 85, 211–225.

1977. *Grammatical Literature. A History of Indian Literature V:2*, Wiesbaden.

1987. "A visit to the cradle of grammatical science", *Pollet* 1987, 157f.

SCHAUFFELBERGER, D.Fr. 1845. *Corpus scriptorum veterum qui de India scripserint*, fasc. I. continens: Scylacem, Hecataeum, Herodotum, Ctesiam. Bonnae ad Rhenum.

SCHIERN, Frederik 1873. *Über den Ursprung der Sage von den goldgrabenden Ameisen*, Kopenhagen – Leipzig.

SCHWARTZBERG, Joseph E. (ed.) 1978. *A historical atlas of South Asia*. Chicago & London.

SCHIWEK, Heinrich 1962. "Das Persische Golf als Schiffahrts- und Seehandelsroute in Achämenidischen Zeit und in der Zeit Alexanders des Grossen", *Bonner Jahrbücher* 162, 4–97.

SCHLEGELE, August Wilhelm von 1820. "Zur Geschichte der Elefanten", *Indische Bibliothek* I:2, 129–231.

1829. "Einleitung über die Zunahme und den gegenwärtigen Stand unserer Kenntnisse von Indien", a supplement to the *Berliner Kalender auf das Gemein Jahr 1829*.

SCHLINGLOFF, Dieter 1973. "The Unicorn. Origin and Migrations of an Indian Legend", *German Scholars on India* 1, 294–307.

SCHLUMBERGER, Daniel 1953. "L'argent grec dans l'empire achéménide", R. Curiel and D. Schlumberger, *Trésors monétaires d'Afghanistan*, MDAFA 14, Paris, 1–64.

1964. "Une nouvelle inscription grecque d'Açoka", *CRAI* 1964, 126–140.

SCHMIDT, H.-P. 1980. "The Sennmurw. Of Birds and Dogs and Bats", *Persica* 9, 1–85.

SCHMITT, Rüdiger 1979. "Die Wiedergabe iranischer Namen bei Ktesias von Knidos im Vergleich zur sonstigen griechischen Überlieferung", J. Harmatta (ed.), *Prolegomena to the Sources on the History of the Pre-Islamic Central Asia*, Budapest, 119–133.

SCHNEIDER, Ulrich 1971. *Der Sômaraub des Manu; Mythus und Ritual*. Freiburger Beiträge zur Indologie 4, Wiesbaden.

SCHOFF, Wilfred H. 1912. *The Periplus of the Erythraean Sea*. New York (repr. New Delhi 1974).

1920. "Cinnamon, Cassia and Somaliland", *JAOS* 40, 260–270.

SCHROEDER, Leopold von 1884. *Pythagoras und die Inder*. Leipzig.

1901. "Das Bohnenverbot bei Pythagoras und im Veda", *WZKM* 15, 187–212.

SCHWANBECK, E.A. 1846. *Megasthenis Indica*. Bonnae.

SCHWARTZ, E. 1896. *Fünf Vorträge über den griechischen Roman*. Berlin.

SCHWARZ, Franz Ferdinand 1966. "Griechenland und Indien im Spiegel der antiken Literatur", *Jahresbericht des Bundesgymnasium Fürstenfeld* 36, 62–86.

1968. "Mauryas und Seleukiden. Probleme ihrer gegenseitigen Beziehungen", *Studien zur Sprachwissenschaft und Kultatkunde. Gedenkschrift für W. Brandenstein*, Innsbrucker Beiträge zur Kulturwissenschaft 14:1, 223–230.

1969. "Daimachos von Plataiai. Zum geistesgeschichtlichen Hintergrund seiner Schriften", *Beiträge zur alten Geschichte und deren Nachleben. Festschrift für Franz Altheim ... Teil I*, Berlin, 293–304.

1970. "Die Griechen und die Maurya-Dynastie", chapter 14. in Altheim & Stiehl 1970, 267–316.

1972. "Neue Perspektiven in den griechisch-indischen Beziehungen", *OLZ* 67, c. 5–26.

1975. "Arrian's *Indika* on India: Intention and Reality", *E&W* 25, 181–200.

1976. "Onesikritos und Megasthenes über den Tambapannidipa", *Grazer Beiträge* 5, 233–263.

1980. "Invasion und Résistance. Darstellungsmöglichkeiten in der Alexanderliteratur", *Grazer Beiträge* 9, 79–110.

SCERRATO, Umberto 1966. "L'edificio sacro di Dahan-i Ghulaman (Sistan)", *Atti del convegno sul tema: La Persia e il mondo greco-romano*. Accademia nazionale dei lincei, anno 363, quaderno 76, 457–470 (with notes by G. Gnoli, 471–476).

SCIALPI, F. 1984. "The Ethics of Asoka and the Religious Inspiration of the Achaemenids", *E&W* 34, 55–74.

## References

SCULLARD, H.H. 1974. *The Elephant in the Greek and Roman World*. Ithaca, N.Y.

SEDLAR, Jean W. 1980. *India and the Greek World*. Totowa, N.J.

SETHNA, K.D. 1960. "Rejoinder to R.C. Majumdar", *JAOS* 80, 243–248.

SIDEBOOTHAM, Steven E. 1986. *Roman Economic Policy in the Erythra Thalassa 30 B.C.–A.D. 217*. Mnemosyne, Supplementum 91. Leiden.

SIRCAR, Dinesh Chandra 1965. "Alasanda and Varvara", *JIH* 43, 343–348.

----- 1967. *Cosmography and Geography in Early Indian Literature*. Calcutta.

----- 1971. *Studies in the Geography of Ancient and Medieval India*. 2<sup>nd</sup> ed. Delhi.

----- 1977. "Media of exchange in ancient and medieval India", *Journal of Ancient Indian History* 10, 1976–77, 1–51.

SKURZAK, Ludwik 1964. "Le traité syro-indien de paix en 305, selon Strabon et Appien d'Alexandrie", *Eos* 54, 225–229.

----- 1979. "En lisant Mégasthène (Nouvelles observations sur la civilisation indienne)", *Eos* 67, 69–74.

ŚLUSZKIEWICZ, Eugeniusz 1980. "Pāli Bāveru 'Babylon'", *RO* 41:2, 107–117.

SMITH, R. Morton 1957. "Power in Ancient India: 1. Chronology and Economics", *ABORI* 38, 190–216.

SPELLMAN, John W. 1964. *Political Theory of Ancient India. A Study of Kingship from the earliest Times to circa A.D. 300*. Oxford.

SPRENGLING, M. 1940. "Shahpur I, the Great on the Kaabah of Zoroaster (KZ)", *AJS* 57, 341–420.

SRIVASTAVA, V.C. 1964. *Sun-Worship in Ancient India*. Allahabad.

STACUL, Giorgio 1987. *Prehistoric and Protohistoric Swāt, Pakistan (c. 3000 - 1400 B.C.)*. Istituto Italiano per il Medio ed Estremo Oriente, Centro studi e scavi archeologici, Reports and memoirs 20, Rome.

STADLER, Hermann 1920. "Reis", *RE* IA, c. 517–519.

STAWISKIJ, Boris 1982. *Die Völker Mittelasiens im Lichte ihrer Kunstdenkmäler*. Übersetzung aus dem Russischen [1979] von D. Strunk und R. Weimar. Bonn.

STEIER, August 1935. "Nashorn", *RE* XVI, c. 1780–1784.

----- 1938. "Pfau", *RE* XIX, c. 1414–1421.

STEIN, M.A. 1900. See *Rājat* translation in part 2 (appendices in volume 2. are referred to as Stein 1900)

STEIN, Otto 1922. *Megasthenes und Kautilya*. SWA 191, Wien.

----- 1927. "Die Wundervölker Indiens bei Skylax", *Epitymbion, Heinrich Swoboda dargebracht*, Prag, 311–319 (repr. in Stein 1985, 90–98).

----- 1929. "Indien in den griechischen Papyri", *Indologica Pragensia* 1, 34–57 (repr. in Stein 1985, 163–186).

----- 1932. "Megasthenes", *RE* XV, c. 230–326.

----- 1936a. "Nūra 12) Stadt, Gegend, Berg in Indien", *RE* XVII, c. 1640–1654.

----- 1936b. "Τιλάδαι", *RE* VIA, c. 1028–1034.

----- 1939. "Ωπίατ", *RE* XVIII:1 (35), c. 667f.

----- 1985. *Kleine Schriften*. Hrsg. von F. Wilhelm, Glasenapp-Stiftung 25, Stuttgart.

STIETENCRON, Heinrich von 1966. *Indische Sonnenpriester. Sāmba und die Śakadvīpīya-Brāhmaṇa. Eine textkritische und religionsgeschichtliche Studie zum indischen Sonnenkult*. Schriftenreihe des Südasiatischen Instituts der Universität Heidelberg 3, Wiesbaden.

STOLPER, Matthew W. 1985. *Entrepreneurs and Empire. The Murašū Archive, the Murašū Firm, and Persian Rule in Babylonia*. Uitgaven van het Nederlands Historisch-Archaeologisch Instituut te Istanbul 54, Leiden.

SZEMERÉNYI, Oswald 1958. "Greek γάλα and the Indo-European term for 'milk'", *KZ* 75, 170–190.

TARN, W.W. 1923. "Alexander and the Ganges", *JHS* 43, 93–101.

----- 1948. *Alexander the Great I. Narrative*. Cambridge.

----- 1950. *Alexander the Great II. Sources and Studies*. Cambridge.

----- 1951. *The Greeks in Bactria and India*. 2<sup>nd</sup> ed. (1938) Cambridge (repr. New Delhi 1980).

THAPAR, Romila 1971. "The Image of the Barbarian in Early India", *Comparative Studies in Society and History* 13, 408–436.

THOMAS, F.W. 1906. "Sakastana", *JRAS* 1906, 181–216 and 460–464.

THOMSON, J. Oliver 1948. *History of Ancient Geography*. Cambridge.

TIKKANEN, Bertil 1988. "Ancient and modern patterns of convergence involving Burushaski and other languages

## References

in Northwestern South Asia", *SO* 64, 303–325.

TIMMER, B.C.J. 1930. *Megasthenes en de indische maatschappij*. Amsterdam.

TKAČ, Jaroslav 1909. "Eremboi", *RE* VI, c. 413–417.

TOD, James 1835. "Comparison of the Hindu and Theban Hercules, illustrated by an ancient Hindu Intaglio", *Transactions of the Royal Asiatic Society of Great Britain and Ireland* III, London, 139–159.

TÖTTÖSSY, Cs. 1955. "The name of the Greeks in Ancient India", *AAHu* 3, 301–319.

----- 1977. "Graeco – Indo-Iranica", *AAHu* 25 (J. Harmatta Vol.), 129–135.

TOIVONEN, Y.H. 1937. "Pygmäen und Zugvögel", *Commentationes Instituti Fennno-Ugrici "Suomen Suku"* VI = *FUF* 24, 87–126.

TOLA, Fernando & DRAGONETTI, Carmen 1982. "Augusto y la India", *AHAM* 1982: 148–241 (instead of this printed version I have used a copy of the final manuscript sent to me by the authors. Its pages begin from 1).

----- 1986. "India and Greece before Alexander", *ABORI* 67, 159–194.

TOMASCHEK, Wilhelm 1899. "Casiri", *RE* III, c. 1652.

----- 1901. "Dardai", *RE* IV, c. 2153f.

TORREY, Ch.C. 1936. "Note on the Line of Brähmi (?) Script on a Babylonian Tablet", *JAOS* 56, 490f.

TOSI, Maurizio 1986. "Early maritime cultures of the Arabian Gulf and the Indian Ocean", Al Khalifa & Rice 1986, 94–107.

TRAUTMAN, Thomas R. 1971. *Kautilya and the Arthaśāstra. Statistical investigation of the authorship and evolution of the text*. Leiden.

TREIDLER, Hans 1965. "Πακτυλή", *RE* Suppl. X, c. 475f.

TRÜDINGER, Karl 1918. *Studien zur Geschichte der griechisch-römischen Ethnographie*. Basel (I have used a defective copy containing only pages 1–48).

TUCCI, Giuseppe 1963. "Oriental Notes II. An image of Devi discovered in Swat and some connected problems", *E&W* 14, 146–182.

----- 1977. "On Swat. The Dards and Connected Problems", *E&W* 27, 9–103.

TYCHSEN, Thomas Christian 1796. "[Versuch einer Erläuterung der von Ctesias angeführten Indischen Wörter aus dem Persischen]", *GGA* 1796:160, 1597–1600 (the first version was published without a title as a part of Heeren's article "Die vormalhige Gestalt des Persischen Meerbusens", revised version with the above-mentioned title in Heeren 1818, 437–452).

UKERT, Fr. Aug. 1814. *Bemerkungen über Homers Geographie*. Weimar.

UNGER, Eckhard 1931. *Babylon. Die heilige Stadt nach der Beschreibung der Babylonier*. Berlin – Leipzig.

VAN NOOTEN, Barend A. 1971. *The Mahābhārata*. Twayne's World Authors Series 131, New York.

VASIL'KOV, Ja.V. 1979. "Zemledel'českij mif v drevneindijskom ēpode (Skazanie o Riš'jašringe)", *Literatura i kul'tura drevnej i srednevekovoj Indii*, Moscow, 99–133.

----- 1982. "Mahabharata kak istoričeskij istočnik (k karakteristike ēpičeskogo istorizma)", *Narody Azii i Afriki* 1982:5, 50–60.

VEKERDI, J. 1974. "Pseudo-historicity of the Mahābhārata", *Anantapāram kila Śabdaśāstram... Księga pamiątkowa ku czci Eugeniusza Śluszkiewicza*. Warszawa, 259–262.

VELTHEIM, A.F., Graf von 1800. *Sammlung einiger Aufsätze historischen, antiquarischen, mineralogischen und ähnlichen Inhalts*. Zweiter Theil, Helmstedt.

VERNIERE, Yvonne 1987. "Utopie et classification sociale chez quelques écrivains grecs", *Études indo-européennes* 6, Georges Dumézil in memoriam I, 129–138.

VÖGELE, Hans-Heinrich 1931. *Die Falknerei. Eine ethnographische Darstellung*. Veröffentlichungen des Geographischen Instituts des Albertus-Universität zu Königsberg Pr., N.F. Reihe Ethnographie 1, Neudamm.

VOPCHUK, Rosalba C. 1982a. "Costumbres y creencias de los indios según Ctesias de Cnido", *Papeles de la India* 10–11, 1981–82, 59–76.

----- 1982b. "Las costumbres y creencias filosófico-religiosas de la India según Herodoto de Halicarnaso", *Argos* 6, 85–97.

----- 1982c. "Las costumbres y creencias filosófico-religiosas de la India según las informaciones de Nearco de Creta", *BAEO* 1982, 277–293.

----- 1984. "La India: sus creencias filosófico-religiosas, a través de la obra de Onesícriso", *Cultura*

## References

Sánscrita, *Memoria del Primer Simposio Internacional de Lengua Sánscrita*, México, 401–420 (a revised version of this appeared as Vofchuk 1986).

1985. *Megasthénés y la religion de la India*. Oriente-Occidente (Centro de Investigaciones filosóficas C.I.F., Seminario de Indología) 1, Buenos Aires.

1986. "Los informes de Onesicrito, cronista de Alejandro Magno sobre la India", *BAEO* 22, 187–202 (revised version of Vofchuk 1984).

1988. "The Woman of India as Pictured by Greek and Latin Authors", *ABORI* 59, 141–154.

VOGEL, Jean-Philippe 1926. *Indian Serpent-Lore*. (repr. Varanasi – Delhi 1972).

1952. "Ptolemy's Topography of India: his Sources", *Archæologia Orientalis in Memoriam E. Herzfeld*, 226–234.

VOGELSANG, W. 1985. "Early historical Arachosia in South-East Afghanistan", *IrA* 20, 55–99.

VOSS(US), Gerhard 1700. *Ger. Vossii Opera*, t. V de *idololatria gentilium*. Amstelodami.

WAGLER, Paul 1899. "Baumwolle", *RE* III, c. 167–173.

WALSER, Gerold 1966. *Die Völkerschaften auf den Reliefs von Persepolis. Historische Untersuchungen über den sogenannten Tributzug an der Apadana-Treppe*. Teheraner Forschungen 2, Berlin.

WANOCHIUS, Andr. 1688. *De Ophir Salomonis sive ejus negotiatio Indica dissertatio*. Aboae.

WARMINGTON, E.H. 1928. *The Commerce between the Roman Empire and India*. Cambridge.

WEBER, Albrecht 1853. "Die griechischen Nachrichten von dem indischen Horner, nebst Aphorismen über den griechischen und christlichen Einfluss auf Indien", *Indische Studien* 2, 161–169 and 408–411.

1857. "Die Verbindungen Indiens mit den Ländern im Westen", *Indische Skizzen*, Berlin, 69–124 (originally publ. in 1853).

1871. "Indische Beiträge zur Geschichte der Aussprache des Griechischen", *Monatsberichte der königlichen Preussischen Akademie der Wissenschaften zu Berlin* 1871, 613–631.

1890. "Die Griechen in Indien", *SBeAW* 1890, 901–933.

1892. "Über Bāhilī, Bāhlīka", *SBeAW* 1892:2, 985–995.

WECKER, Otto 1916. "India", *RE* IX, c. 1264–1325, and "Indos", ib. 1369–1373.

1925. "Κυνοκέφαλοι", *RE* XII, c. 25f.

WEISGERBER, Gerd 1986. "Dilmun – A trading entrepôt: evidence from historical and archaeological sources", *Al Khalifa & Rice* 1986, 135–142.

WEST, M.L. 1966. *Hesiod, Theogony. Edited with Prolegomena and Commentary*. Oxford.

1971. *Early Greek Philosophy and the Orient*. Oxford.

1983. *The Orphic Poems*. Oxford.

WEYRAUCH, A.H. von 1814. "Herodot und Ktesias über Indien", *Dörptische Beyträge für Freunde der Philosophie, Litteratur und Kunst* 1814:2, 365–415 (actually signed only "A.H. von .....ch").

WHEELER, Sir Mortimer 1968. *Flames over Persepolis. Turning-point in history*. London.

1974. "The transformation of Persepolis architectural motifs into Sculpture under the Indian Mauryan dynasty", *Commémoration Cyrus. Hommage universel* II, AI 2, Téhéran – Liège – Leiden, 249–261.

WHITEHOUSE, D. & R. 1975. *Archaeological Atlas to the World*. London.

WILFORD, Francis 1799. "On Egypt and other Countries adjacent to the Ca'li' River or Nile of Ethiopia, from the ancient Books of the Hindus", *AsRes* 3, 8<sup>o</sup>-reprint of Indian original publ. in London 1799, 46–259.

1801. "On Mount Caucasus", *AsRes* 4, 8<sup>o</sup>-reprint, 455–539.

1808. "An Essay on the sacred Isles in the West", *AsRes* 8, 8<sup>o</sup>-reprint, 245–376.

1822. "On the ancient Geography of India", *AsRes* 14, 373–470.

WILHELM, Friedrich 1987. "Die Falkenjagd als Sanskritwissenschaft", *SII* 13/14, 347–361.

WILLMAN-GRABOWSKA, Helena 1932. "Le chien dans l'Avesta et dans les Védas", *RO* 8, 1931–32, 30–67.

1934. "Un vieux thème de fiançailles dans la littérature indienne et grecque", *Bulletin international de l'Academie polonaise des sciences et lettres, classe de philologie, classe d'histoire et de philosophie*, Année 1934, 216–229.

WILSON, Horace Hayman 1832. "Remarks on the portion of the *Dionysiaca of Nonnus* relating to the Indian", *AsRes* 17, 607–620.

1836. "Notes on the Indica of Ctesias", *Transactions of the Ashmolean Society* 1, Oxford, 5–80.

1841. *Ariana Antiqua. A Descriptive Account of the Antiquities and Coins of Afghanistan*. London

#### References

(repr. Delhi 1971).

----- 1843. "Notes on the Sabhā Parva of the Mahābhārata, illustrative of some Ancient Usages and Articles of Traffic of the Hindus", *JRAS* 7, 137–144.

WINTERNITZ, Moriz 1897. "Notes on Mahābhārata", *JRAS* 1897, 713–759.

----- 1908. *Geschichte der indischen Literatur*, 1. Stuttgart (repr. 1968).

----- 1920. *Geschichte der indischen Literatur*, 3. Stuttgart (repr. 1968).

WISSMANN, Hermann von 1975. *Über die frühe Geschichte Arabiens und das Entstehen des Sabäerreiches. Die Geschichte von Saba' I*. Sammlung Eduard Glaser 13, SWA 301:5, Wien.

WITTKOWER, Rudolf 1942. "Marvels of the East", *Journal of the Warburg and Courtauld Institutes* 5, 159–197.

WITZEL, Michael 1980. "Early Eastern Iran and the Atharvaveda", *Persica* 9, 86–128.

----- 1987a. "On the Localisation of Vedic Texts and Schools (Materials on Vedic Śakhas, 7)", *Pollet* 1987, 173–213.

----- 1987b. "On the Origin of the Literary Device of the 'Frame Story' in Old Indian Literature", *Hinduismus und Buddhismus. Festschrift für Ulrich Schneider*. Freiburg, 380–414.

WÜST, Ernst 1959. "Pygmaioi", *RE* XXIII:2, c. 2064–2074.

YOYOTTE, Jean 1974. "Les inscriptions hiéroglyphiques. Darius et l'Egypte", *JA* 260, 253–266.

ZAMBRINI, Andrea 1982. "Gli Indikā di Megastene", *ASNP Serie 3*, vol. 12:1, 71–149.

----- 1983. "Idealizzazione di una terra: etnografia e propaganda negli Indikā di Megastene", *Forme di contatto e processi di trasformazione nelle società antiche. Atti del convegno di Cortona (24–30 maggio 1981)* ..., Collection de l'École française de Rome 67, Pisa – Roma, 1105–1118.

----- 1985. "Gli Indikā di Megastene II.", *ASNP Serie 3*, vol. 15:3, 781–853.

----- 1987. "A proposito degli Indika di Arriano", *ASNP Serie 3*, vol. 17:1, 139–154.

ZYSK, Kenneth G. 1986. "The Evolution of Anatomical Knowledge in Ancient India, with Special Reference to Cross-Cultural Influences", *JAOS* 106, 687–705.