

Society for Arabian Studies Monographs No. 7

Series editors D. Kennet & St J. Simpson

# Intercultural Relations between South and Southwest Asia

Studies in commemoration of  
E.C.L. During Caspers (1934-1996)

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BAR International Series 1826

2008

This title published by

Archaeopress  
Publishers of British Archaeological Reports  
Gordon House  
276 Banbury Road  
Oxford OX2 7ED  
England  
bar@archaeopress.com  
www.archaeopress.com

BAR S1826  
Society for Arabian Studies Monographs No. 7

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ISBN 978 1 4073 0312 3

Cover illustration by © J.M. Kenoyer (Kenoyer and Meadow, Fig. 5.3)

Printed in England by Alden HenDi, Oxfordshire

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## The Western Coast of India and the Gulf: Maritime Trade during the 3rd to 7th Century A.D.

Suchandra Ghosh

*This essay is an attempt to treat the intervening period of the much-focused trade between India and the Roman Empire and the trade network which began to grow with the spread of Islam. Though the volume of trade in the period of our choice was no match to the much discussed trading patterns, yet the apparent gap between the slump in the trade with the Roman Empire and the rise of Islamic trade network can perhaps be filled. Sasanian influence in trade kept the issues alive and the period from 3rd to 7th century A.D. can no longer be viewed as a slack period in the history of maritime trade. The archaeological sources for this period cannot be lost sight of.*

Located at the crossroads of major commercial communications, the Persian Gulf emerged as an important sea lane for maritime trade in different periods of history. Apart from the Gulf, another prominent traffic artery in the western Indian Ocean was the Red Sea. From the late 1st century B.C. to about the middle of the 3rd century A.D., as an outcome of its brisk trade with the Roman Empire, South Asia figured in the international maritime network. It coincided with a shift from the Gulf to the Red Sea as the major channel of communication between the western littorals of India and the western Indian Ocean. This shift in the importance of a particular sea lane, however, does not indicate complete desertion of the other. Preference given to a particular maritime connection was generally related to the development of coastal areas (Salles 1998: 48). Thus, when the Konkan coast rises into prominence it is often linked with an active Persian Gulf, whereas in the case of the rise in the activity of the Malabar coast, the Red Sea lane assumes greater pre-eminence. The Gujarat coast, however, was equally important to both sea lanes.

The antiquity of the relations between the western part of the Indian subcontinent and the Gulf can be traced back to the days of the Harappan civilization (2500-1750 B.C.) which is known to have maintained a regular trade contact with Sumer, Akkad and the Oman Peninsula (Ratnagar 1981; Tosi 1993: 365-378).

In the historic period, the initiative of Darius I (522-486 B.C.), the Achaemenid ruler, to gain control over trade across the Indian Ocean brought the Gulf into the limelight. Darius I conquered India, which according to Herodotus' description, lay on the lower Indus and stretched down to the sea. Prior to his actual campaign, the Achaemenian sovereign, desirous of knowing the area, had sent a naval expedition (Scylax of Caryanda) which sailed down the river to the sea. Then "Darius subdued the Indians and frequented this sea" (Mukherjee 1969: 61;

Chakravarti 1986: 42-43; Vogelsang 1990: 93-110). Obviously the conquest of the lower Indus valley gave him an outlet to the sea (Arabian Sea) through a land which was well connected with outside territories by overland routes and a navigable river (Indus). The naval expedition under Scylax and subsequent conquest of the lower Indus valley seem to have opened up channels of contact between the lower Indus valley, the southernmost limit of the empire, and Egypt, the farthest western extent of Darius I's domain (Chakravarti 1986: 43). The nature of this contact seems to have been, at least partly, commercial. Well documented records are there to show that Darius established an efficient network of communication throughout his empire (Ghirshman 1954: 145-146).

The Mauryan empire (ca. 324-187 B.C.) is known to have maintained extensive contacts with Greek kingdoms in West Asia. Such contacts could have been at least partly maritime and facilitated by the Mauryan occupation of the Gujarat, Kathiawad and the Konkan coasts (Thapar 1987: 15-19). The discovery of Asokan-inscriptions from the coastal towns of Junagadh in Kathiawad and Sopara in the Konkan coast (noted as a port) is significant in this regard.

For the Seleucids, a power contemporary to the Mauryas, the Gulf was also very important. This is clearly evident from recent excavations in the Gulf region, in particular at Failaka near Kuwait as the key site. "The military presence of the Seleucids in the area was obviously intended to secure trade connections in the Gulf. India trade was flourishing under the Seleucids and so they were keen on keeping the flow of profit steady" (Salles 1987: 75-184; 1996: 293-310; 1998: 56).

The period following the Mauryas and the Seleucids was marked by extensive trade between India and the Roman Empire (1st century B.C. to 3rd century A.D.), the maritime traffic artery being, in this case, the Red Sea.

Naturally great attention has been paid by scholars to the nature of this trade (Wheeler 1955; Warmington 1974; Begley & Puma 1991; Boussac & Salles 1995; Ray & Salles 1996; de Romanis & Tcherina 1997). One should, however, remember that apart from this trade network, another trade pattern (the Bay of Bengal network) was also active in the eastern coast of India.<sup>1</sup> With the beginning of the 3rd century A.D., a slump could be noticed in the famous trade with the Roman empire. The obvious question which arises is: if Roman trade through the Red Sea declined, then what was happening on the other sea lane, i.e. the Persian Gulf, in the 3rd century A.D. and thereafter?

The present paper in this context seeks to examine the contact of the Persian Gulf region with the Western coast of India from the period ranging from 3rd century A.D. to 7th century A.D.

During the period of our investigation the Sasanians as the premier political power in Iran were trying to gain control over the Persian Gulf as it had a long antiquity of being a major maritime artery. Sasanian rulers greatly favoured urbanism and understood the importance of trade. The Sasanian kings were worthy successors of the Arsacids with a less extortionist fiscal policy. However, from the very beginning of their assuming power in Iran and Iraq, their fundamental policy was to have effective control of the Gulf (Fiorini-Piacentini 1992: 137). In pursuance of their policy, the Sasanians founded several ports and fortified towns in the Gulf region.<sup>2</sup> Mastery over the Gulf was not an easy affair as there were regular threats from the Arabs who were finally taken care of by Shapur II (310-379 A.D.). Shapur not only defeated the Arabs but reasserted Sasanian power in the Gulf by making Bahrain and Hajar an integral part of the Sasanian empire (Hasan 1928: 76). That these campaigns did not affect the prosperity of the Gulf is evident from the description of the Gulf by Ammianus Marcellinus (4th century A.D.). According to him, "there are numerous towns and villages on every coast and frequent sailing of ships".<sup>3</sup> Frequent sailing of ships obviously points to a maritime link between the Gulf and the other regions.

Though Sasanian maritime expansion was both to the west and the east, in this paper we shall concentrate only on its activity in the east. The presence of Sasanian sailing craft in the Indian Ocean is referred to by Palladius (4th century A.D.) (Derrett 1961: 64-135). The Sasanian ruler Yazdigird I (399-421 A.D.) carried on trade with India. The Nestorian annals bear witness to this trade. In fact, "according to the 11<sup>th</sup> century Chronicle of Seert, the Sasanian ruler Yazdigird I sent the Nestorian Catholicus, one Ahai, to Fars to investigate the piracy of ships returning from India and Ceylon sometime before 415" (Whitehouse & Williamson 1973: 43).<sup>4</sup>

Yazdigird's successor to the Sasanian throne was Bahram V (421-438 A.D.). He married an Indian princess and this alliance fetched him the port of Daibul in the Indus delta, together with the adjacent parts of Sind and Makran (Tabari 1879-1893: 868; Hasan 1928: 65). A similar episode is recounted in the writings of Tha'alibi: "Varham V defeated the great enemy of one of his dearest friends, the King of Sind, Shankalat. In order to demonstrate his gratitude to Varham, Shankalat gave his daughter in mar-

riage to the Sasanian king, and, with the princess, Vahram received as part of the dowry the city of Daybul, the Makran and the bordering regions and rich gifts such as a great quantity of gold and silver objects, perfumes, ivory, silk, damasks ..." (Kervran 1994: 336). Daibul is usually identified with the ruins of Banbhore near Karachi.

Control over the Indus delta is commercially very attractive for it offered the prospect of valuable revenues. This is seen in the earlier periods too. From the *Periplus* (Casson 1989: 75) we learn that Barbarike in the Indus delta was an important centre of trade importing coral, storax, frankincense, glassware, silver ware, etc. and exporting costas, bdellium, nard, turquoise, lapis lazuli, etc. The Indus delta had a long history of being prosperous as an important maritime trading zone. With the acquisition of the Indus delta and the Makran coast, the Sasanians could have derived some significant economic gains.

In conformity with the tradition, followed by the Sasanians, of building fortresses at the key strategic points along the maritime routes, Bahram V or one of his successors built the fortress of Rattokot near Daibul for protecting the fort which was usually flooded with merchandise brought by the sea-going vessels (Kervran 1994: 336). Another vital reason behind the construction of the fortress may probably be the well-known presence of pirates in Sind.

The Persian Gulf in the western segment was marked by an intense rivalry between the Byzantine and the Sasanian empires. The lure of economic gain led the Byzantine emperor Justinian (527-565 A.D.) to urge the Ethiopians to buy silk from India and sell it among the Romans. This we learn from Procopius (Dewing 1961: 193) the official historian of Justinian. The Byzantine policy, however, failed as Procopius informs us: "it was impossible for the Aethiopians to buy silk from the Indians, for the Persian merchants always locate themselves at the very harbours where the Indian ships first put in, (since they inhabit the adjoining country); and are accustomed to buy the whole cargoes". This statement betrays the monopoly of the Sasanians over the Gulf and their influence over the markets of western India and confirms the Sasanian hold on Asiatic trade.

Procopius is silent about the harbours of India. His silence is compensated by his contemporary Egyptian writer Cosmas Indicopleustes (XI.366-367). He includes Sindhu (Sind), Orrhata (Gujarat), Calliena (Kalyan), and Sibor (Chaul) among the most notable ports of India. All of these are located in coastal areas of western India. A look at the list of harbours given by Cosmas suggests that the western Indian seaboard was quite active in the 6th century A.D.

The trend in the political history of India in the 6th and 7th centuries A.D. is the gradual rise of regional powers. An in-depth study in the activities of these regional powers would show that they took active interest in trade and often their expeditions were guided by the economic potential of the respective area.

Since early times Gujarat occupied a prominent place in the maritime trade network, Barygaza/Bhrigukachchha (Broach) being its most outstanding port. In subsequent times the coast of Gujarat continued to play a significant

role in the exchanges between India and the Gulf. A case in point is Red Polished Ware. This particular type of Indian ceramic has been identified in Arabia and also on the Iranian coast of the Persian Gulf (Kervran 1996: 37-58).

Excavations at Suhar on the northern coast of Sultanate of Oman have yielded the largest quantity of Red Polished Ware along with other types of Indian Ceramics. It is commonly dated to the early five centuries of the Christian era (Kervran 1996: 38). "Sherds of this type which has smooth red fabric and a highly burnished red or orange slip bear a deceptive likeness to the late Roman red wares of the Mediterranean, although the forms are in no way comparable" (Whitehouse & Williamson 1973: 38). This is a definite indicator of the trade network that existed between the western ports of India and the Gulf. Of course in comparison to the preceding level there is a decrease in the number of potteries in the Sasanian level at Suhar.

The distribution pattern of Indian Red Polished Ware points to its manufacture mainly in Gujarat. Gujarat's fame in the production of superior kind of ceramics was due to the availability of quality clay in the region (Jain 1990: 64).<sup>5</sup> That ceramics formed an item of merchandise in Gujarat is evident from the Charter of Vishnusena dated 592 A.D., referring to a merchant's settlement in Lohatagrama (Sircar 1957: 163-181; Kosambi 1959: 281-293). Lohatagrama has been identified with modern Rohar on the Gulf of Kutch, which is the chief seaport of the Anjar district. There are 72 clauses in this charter and all of them are related to merchants. Clause 53 speaks of frontier customs duty on boats full of pots and vessels (*bhāṇḍa-bhrta-vahitrasya sulk-ātiyatrike*). Normally, *vahitra* stands for a vessel (Monier Williams 1993: 933) but in an 11th century inscription from the Konkan the term definitely denotes a vessel meant for high sea voyages distinct from a coaster.<sup>6</sup> As this charter deals with the settling of a professional body of merchants (*vanigrāma*) at Lohatagrama, there is a distinct likelihood that Lohatagrama was visited by *vahitras* from overseas areas. The preceding clause of the same charter gives us a significant indication regarding the movements of merchants from the Kutch-Kathiawad region to foreign lands and *vice versa*. The clause runs as follows: "*varsha-paryushita vanijah pravesyam sulk-atiyatrikam na dapaniyah; nairgamikam deyam*". Sircar explains the clause as "Merchants staying abroad for a year were not to pay any entrance fee while returning to their native place; but they had to pay the exit tax when they went out again on business. The *āchara* may also refer to foreign merchants coming and staying in the kingdom for a year." In the opinion of Kosambi, this clause suggests that merchants who have come from a foreign region only for shelter through the rainy season are not to be charged import duty (and immigration tax); but export duty (and emigration tax) are to be charged on leaving. Considering both the explanations we can be absolutely sure of the fact that the port of Rohar was frequented by foreign merchants and ceramics formed an item of trade, among other goods. The merchants, in all probability, came through the Persian Gulf as it was the main traffic artery in the 6th century A.D.

Besides Gujarat, the Konkan coast also grew into prominence as an important trading zone. In the 5th century

A.D., the Traikatukas established themselves along the Konkan coast and continued to rule for more than a century with Chaul as a major port. By the end of the 6th century AD, coastal Konkan began to have greater attraction for the rising political power of the Chalukyas of Badami (near Bijapur in the northeastern part of Karnataka). The aggressive designs of Pulakesin II (610-642 A.D.) to the western sea-board can be well understood from his march against the Mauryas of Northern Konkan and a successful attack on their capital Puri (Elephanta Island), lauded as the very goddess of fortune in the western sea (*aparajaladherlakshmi* in his famous *Aihole prasasti*) (Sircar 1983: 446; Chakravarti 1998: 104). This obviously implies its economic potential as a trading zone. The re-establishment of the Chalukyan power in Revatidvipa (Goa) was probably undertaken with an eye to the commercial importance of the area.

An older port in northern Konkan was returning to prominence during this time. This port was Calliane (Kalyan near Bombay). Figuring prominently in the *Periplus* (Casson 1989: 83), but altogether ignored by Ptolemy, Calliane again finds a place in the list of ports given by Cosmas. According to him (BK.III.18, McCrindle 1897), there was a Persian bishop in Calliana. That Calliane is mentioned by Cosmas clearly shows that it became prominent once again. Obviously its re-emergence to prominence is to be appreciated in the light of the rise of Persian Gulf as a major traffic artery.

Harshavardhan, the ruler of Kanauj, and Pulakesin II, the Chalukyan ruler of Vatapi (early 7th century A.D.) were interested in some common territories in western India. These territories were Lata, Gurjara and Malava. Among these territories Lata, *i.e.* southern Gujarat region, was of special importance. This is evident from the establishment of a Chalukya vice-regal house in Gujarat.

Reflecting on Pulakesin's interest in the Gujarat region it can be very well surmised that the Chalukyan ruler was aware of the economic potential of the Lata area. The Chinese pilgrim Hsuan-Tsang (Watters 1988: 241-248), who was a contemporary of Pulakesin and Harsha, also attests to the commercial importance of this zone. In his itinerary, Hsuan-Tsang refers to the sea-fearing character of the people of Broach. Again *A-t'a-li*, a place near Broach but yet unidentified, is described by the pilgrim as follows: "the inhabitants were rich and flourishing; there were more traders than farmers ... the people were mean spirited, prizing wealth and slighting moral worth". The region seems to have commanded considerable significance. According to the pilgrim, *Su-la-ch'a* (= Surat) was inhabited by people who "were rich and flourishing ... As the country was on the highway to the sea, all its inhabitants utilized the sea and were traders by profession". Such commercial facilities are bound to attract the notice of intelligent rulers (Chakravarti 1986: 145). Pulakesin II was no exception.

Pulakesin II is known to have sent an embassy to the Persian ruler Khusrav II (Hasan 1928: 88). Tabari testifies that in the year 625-626 A.D. Khusrav Parviz had received an embassy from the Indian king Pulakesin II in the 36th year of his reign. The nature of this embassy may have been at least partly commercial. The establishment of a

feudatory in Gujarat appears to have facilitated contacts with Persia and other western areas. Perhaps this courtesy of Pulakesin II was returned. According to Hasan (1928: 88-89), a pictorial record in a mutilated form in cave I at Ajanta speaks of a return embassy. This embassy can have come only by sea, for geographically the shortest route from Persia to the Deccan was through the Persian Gulf. Hasan opines that “the fresco painting, therefore, though it contains no reference to the sea is essentially a record of Persian maritime intercourse with Deccan during the reign of Khusro II”.

Attention may be paid in this context to the visual representation of a ship on the Ajanta Paintings. Though Ajanta is situated in the interior and not the west coast, the artist seems to have been familiar with the shipping tradition in the western sea-board of India and in the western Indian Ocean. The figure in cave 2 shows a large sea going vessel with a cabin, lofty sails and steering paddles. Its actual identification has caused scholarly controversy. But Deloche, by comparing it with the figure of another ship from Aurangabad, has recently argued that the “Ajanta ship can be considered as Indian in nature” (1996: 205). Such a position strengthens the possibility of regular seafaring on the west coast of India during the 5th and 6th centuries. Such maritime contacts may be situated in the context of India’s overseas trade with the Persian Gulf.

Piracy at Daibul continued even in the succeeding periods of history. This is narrated through an incident in the Shah-Nameh (Fredunbeg 1900: 59) and al-Baladhuri (Hitty 1916: 215-216) According to the narration, the king of Ceylon sent to Hajjaj, the Governor of Iraq, Hind and Sind during the Caliphate of Walid (695 A.D.), some women who were born in his country as Muslims, their fathers who were merchants having already died. The ship carrying these ladies was captured by pirates of Daibul. Al-Hajjaj wrote to Dahir, the king of Sind, to set the women free but Dahir pleaded inability saying, “I have no control over the pirates who captured them”. This gave Hajjaj an opportunity to launch a campaign against Sind, as he was well aware of the economic viability of an aggressive design upon Sind. And so it was at Daibul in 711, that the Arab conqueror Muhammad ibn Qasim first set foot and after having taken the city sailed further up the river. The successful completion of the campaign was achieved with the defeat and death of Dahir (712 A.D.).<sup>7</sup> Thus, the economic interest behind the Sind campaign was so obvious and so carefully calculated that it resembled rather a commercial venture than a military campaign. From the Sind region the Arabs were gradually progressing southwards to gain control over the other ports of Western India. The commercial attraction of Lata was so tempting that from the Nausari grant (739 A.D.) of Avanijanaśraya Pulakesin of Lata we learn that Gujarat was invaded by the Tajikas (Arabs) in order to gain access to the Deccan (Yazdani 1960: 228). They were, however, thrown back by Avanijanaśraya.

### Acknowledgements

This paper owes much to the generous help and guidance

rendered by Prof. B.N. Mukherjee, Dr. Jean-François Salles and Prof. Ranabir Chakravarti. I am extremely indebted to all of them.

### Notes:

1. The Rouletted Ware found at a large number of coastal sites from Tamil Nadu to west Bengal on the eastern sea board is indicative of a brisk coastal network along the entire length of the eastern littoral from ca. 200 B.C. to 300 A.D. (Begley 1991: 157-196). It has also been found at sites like Mahasthan and Wari Bateswar near Dhaka (Haque, Rahman & Ahsan 2000: 283-315). To this must be added the discovery of the ware from Kantarodai, Mantai and Anuradhapura in Sri Lanka, Kobak Kendal in Java, Sembiran in Bali, Bukit Tengu Lembu in Malaysia, Tra Kieu in Vietnam, and Beikthano in Burma (Ray 1996; Gogte 1997). Its distribution certainly speaks for a network of exchange. The entire eastern seaboard, including the Ganga delta, must have facilitated the spread of the Rouletted Ware to both mainland and maritime south-east Asia.
2. Kervran (1994: 325-351) has extensively dealt with the commercial mechanism of the Sasanians in the Gulf and their interest in building fortresses as a part of their economic policy. The article also contains an interesting discussion on the architecture of the three fortresses of the Sasanian period: Qal’at al-Bahrain, Siraf, and Rattokot.
3. Ammianus Marcellinus (born 330 A.D.) had a military career and then he turned into a historian. He had a keen eye for human character, and, as Gibbon observed, was ‘without the prejudices and passions which usually affect the mind of a contemporary.’
4. The Nestorians formed an important minority in the Sasanian Empire and often filled key positions in the administration. It appears that merchants of the Gulf also included Nestorians (Whitehouse & Williamson 1973: 40-43). From Cosmas, who possibly was a Nestorian himself, we learn that Nestorians were quite active in Sri Lanka.
5. Kervran (1996: 43) refers to the analyses of the clay used in Red Polished Ware by Dr. V. Gogte, which suggests that these ceramics perhaps came from Lothal or adjacent sites. A similar type of analyses was done by Gogte for Rouletted Ware and XRD analyses has convinced him that Rouletted Ware could not have been manufactured at Arikamedu, where it was first discovered. In his opinion the Chandraketugarh-Tamluk region was the manufacturing and distribution zone of Rouletted Ware (Gogte 1997: 78).
6. In the Kharepatan (= Balipattana) plate of Rattaraja (1008 A.D.), the *vahitra* is described as plying overseas (*dvipantara*) destinations and routes. Such *vahitras* are clearly distinguished in the same inscription from *pravahanas*, which sailed on coastal voyages from Thanā in the north to Balipattana in the south. Therefore, the *vahitra* would refer to a ship used in overseas voyages and not coastal journeys (Chakravarti 1998: 114).
7. For a detailed discussion on the possibility of com-

mercial gains of the Arab invasion of Sind and other western Indian ports, see Chakravarti 1986: 146-150. Chakravarti has lucidly explained the economic bases of rivalries between different political powers.

## References:

- Ammianus Marcellinus. 1935-1939. *Res Gestae* (3 volumes). London & Cambridge.
- al-Baladhuri. 1916. *Kitab Futuh al Buldan*. [translated by P.K. Hitti]. New York.
- Begley, V. 1991. Ceramic Evidence of Pre-Periplus Trade on the Indian Coast. Pp. 157-196 in V. Begley & R.D. de Puma (eds) *Rome and India: The Ancient Sea Trade*. (Wisconsin Studies in Classics). Madison.
- Begley, V. & R.D. de Puma (eds). 1991. *Rome and India: The Ancient Sea Trade*. (Wisconsin Studies in Classics). Madison.
- Boussac, M.-F. & J.-F. Salles (eds). 1995. *Athens, Aden, Arikamedu: Essays on the interrelations between India, Arabia and the Eastern Mediterranean*. New Delhi.
- Casson, L. 1989. *The Periplus Maris Erythraei, Text with Introduction, Translation and Commentary*. Princeton.
- Chakravarti, R. 1986. *Warfare For Wealth*. Calcutta.
- . 1998. Coastal Trade and Voyages in Konkan: The early medieval scenario. *Indian Economic And Social History Review* 35: 97-123.
- Cosmas Indicopleustes. 1897. *Christian Topography of Cosma*. [translated by J.W. McCrindle]. London.
- Deloche, J. 1996. Iconographic Evidence on the Development of boat and ship structures in India (2<sup>nd</sup> cent. B.C.-15<sup>th</sup> century A.D.): a new approach. Pp. 201-205 in H.P. Ray & J.-F. Salles (eds) *Tradition and Archaeology: Early Maritime Contacts in the Indian Ocean*. New Delhi.
- Derrett, D.M. 1961. The History of Palladius of the races of India and the Brahmins. *Classica et Mediaevalia* 21: 64-135.
- Fiorini-Piacentini, V. 1992. Merchants and merchandises and military power in the Persian Gulf (Suriyanj/Shahriyay-Siraf). *Atti della Accademia nazionale dei Licei*, Serie IX, III: 137.
- Ghirshman, R. 1954. *Iran from the Earliest Times to the Islamic Conquest*. Harmondsworth.
- Gogte, V.D. 1997. The Chandraketurah-Tamluk Region of Bengal: Source of the Early Historic Rouletted Ware from India and Southeast Asia. *Man and Environment* XXII: 78.
- Hasan, H. 1928. *A History of Persian Navigation*. London.
- Haque, E.M., S.S. Rahman & S.M. Kamrul Ahsan. 2000. A Preliminary Report on Wari Bateswar Trial Excavation by ICSBA. *Journal of Bengal Art* V: 283-315.
- Jain, V.K. 1990. *Trade and Traders in Western India (1000-1300 A.D.)*. New Delhi.
- Kervran, M. 1994. Forteresses, entrepots et commerce: une histoire a suivre depuis les rois sassanids jusqu' aux princes d'Ormuz. Pp. 325-351 in R. Gyselen (ed) *Itinéraires d'Orient. Hommages à Claude Cahen*. (Res Orientales VI). Paris.
- . 1996. Indian Ceramics in Southern Iran and Eastern Arabia: Repertory, Classification and Chronology. Pp. 37-58 in H.P. Ray & J.-F. Salles (eds) *Tradition and Archaeology: Early Maritime Contacts in the Indian Ocean*. New Delhi.
- Kosambi, D.D. 1959. Indian Feudal Trade Charters. *Journal of Economic and Social History of the Orient* II: 281-293 [reprinted in R. Chakravarti (ed). 2001. *Trade in Early India*. New Delhi, pp. 244-256].
- Monier Williams, M. 1993 [1961]. *A Sanskrit-English Dictionary*. Delhi.
- Muhammad 'Ali i Hamid i Aqu Bakar Kufi. 1990. *Chachnamah*. [translated by M.K. Fredunbeg]. Karachi.
- Mukherjee, B.N. 1969. *An Agrippan Source. A Study in Indo-Parthian History*. Calcutta.
- Procopius. 1961. *History of the Wars, BK.I*. [translated by H.B. Dewing]. London.
- Ratnagar, S. 1981. *Encounters: The Westerly Trade of the Harappa Civilization*. Delhi.
- Ray, H.P. 1996. *The Winds of Change*. New Delhi.
- Ray, H.P. & J.-F. Salles (eds). 1996. *Tradition and Archaeology: Early Maritime Contacts in the Indian Ocean*. New Delhi.
- de Romanis, F. & A. Tcherina (eds). 1997. *Crossings: Early Mediterranean Contacts with India*. New Delhi.
- Salles, J.-F. 1987. The Arabian Persian Gulf under the Seleucids. Pp. 75-109 in A. Kuhrt & S.S. White (eds) *Hellenism in the East*. London.
- . 1996. Hellenistic Seafaring in the Indian Ocean, a Perspective from Arabia. Pp. 293-309 in H.P. Ray & J.-F. Salles (eds) *Tradition and Archaeology: Early Maritime Contacts in the Indian Ocean*. New Delhi.
- . 1998. Antique Maritime Channels from the Mediterranean to the Indian Ocean. Pp. 45-68 in C. Guillot, D. Lombard & R. Ptak (eds) *From the Mediterranean to the China Sea: Miscellaneous Notes*. Wiesbaden.
- Sircar, D.C. 1957. Charter of Vishnushena, Samvat 649. *Epigraphia Indica* XXX: 163-181.
- . 1983. *Select Inscriptions Bearing on Indian History and Civilization, vol. II*. Delhi.
- Tabari, Muhammad ibn Jarir. 1879-1893. *Annales*. (ed. M.J. de Goeje et al.). (Series I). Leiden.
- Thapar, R. 1987. Epigraphic Evidence and some Indo-Hellenistic Contacts during the Mauryan Period. Pp. 15-19 in S.K. Maity & U. Thakur (eds) *Indological Studies: Prof. D.C. Sircar commemoration volume*. Delhi.
- Tosi, M. 1993. The Harappan Civilization beyond the Indian Subcontinent. Pp. 365-378 in G.L. Possehl (ed) *Harappan civilization: a recent perspective. Second revised edition*. New Delhi.
- Vogelsang, W. 1990. The Achaemenids and India. Pp. 93-110 in H. Sancisi-Weerdenburg & A. Kuhrt (eds) *Achaemenid History IV: Centre and Periphery*. Leiden.
- Warmington, E.H. 1974 [1928]. *The Commerce between the Roman Empire and India*. London.
- Watters, T. 1988 [1973]. *On Yuan Chwang's travels in India, 629-645 AD*. New Delhi.
- Wheeler, R.E.M. 1955. *Rome Beyond the Imperial Frontiers*. London.
- Whitehouse, D. & A. Williamson. 1973. *Sasanian Maritime Trade. Iran* X: 29-49.
- Yazdani, G. 1960. *The Early History of the Deccan*. London.

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