Western scholars have underestimated India's achievement with regard to commerce, ship-building and navigation, and sea travel. The colonist bias against Indian culture is fully matched by the Indian 'Marxist historian' bias against culture.

India, situated at the central point of the ocean that washes on its coast on three sides, seemed destined very early for a maritime future. In the Rig Veda, a passage (I. 25.7) represents Varuna having a full knowledge of the sea routes, and another (L. 56.2) speaks of merchants going everywhere and frequenting every part of the sea for gain. The Ramayana refers to the Yavan Dvipa and Suvarna Dvipa (Java and Sumatra) and to the Lohta Sayara or the Red Sea. The drama Sakuntala, Ratnavali of King Harsha, Sisupalvadha of Magha, relates stories of sea voyages of merchants and others, and the fabulous literature of India is replete with stories of sea voyages by Hindus. Historian R. C. Majumdar states: "The representation of ship on a seal indicates maritime activity, and there is enough evidence to show that the peoples of the Sindhu valley carried on trade not only with other parts of India but also with Sumer and the centers of culture in Western Asia, and with Egypt and Crete."

There was a time in the past, when Indians were the masters of the sea borne trade of Europe, Asia and Africa. They built ships, navigated the sea, and held in their hands all the threads of international commerce, whether carried on overland or sea. In Sanskrit books we constantly read of merchants, traders and men engrossed in commercial pursuits. Manu Smriti, the oldest law book in the world, lays down laws to govern commercial disputes having references to sea borne traffic as well as inland and overland commerce. India, according to Chamber's Encyclopedia, "has been celebrated during many ages for its valuable natural productions, its beautiful manufactures and costly merchandise," was, says the Encyclopedia Britannica, "once the seat of commerce." Sir William Jones was of opinion that the Hindus must have been navigators in the age of Manu. Lord Elphinstone has written that "The Hindus navigated the ocean as early as the age of Manu's Code because we read in it of men well acquainted with sea voyages." Ms. Manning, author of Ancient and Mediaeval India writes: "The indirect evidence afforded by the presence of Indian products in other countries coincides with the direct testimony of Sanskrit literature to establish the fact that the ancient Hindus were a commercial people."

Indian traders would set sail from the port of Mahabalipuram, carrying with them cinnamon, pepper and their civilization to the shores of Java, Cambodia and Bali. Like the Western world, the Indian world stretches far beyond its border, though India has never used any violence to spread her influence. Noted historian, R. C. Majumdar observed: "The Indian colonies in the Far East must ever remain as the high watermark of maritime and colonial enterprise of the ancient Indians." It has been proved beyond doubt that the Indians of the past were not, stay-at-home people, but went out of their country for exploration, trade and conquest. Sir Aurel Stein (1862-1943) a Hungarian, whose valuable researches have added greatly to our knowledge of Greater India, remarks: "The vast extent of Indian cultural influences, from Central Asia in the North to tropical Indonesia in the South, and from the Borderlands of Persia to China and Japan, has shown that ancient India was a radiating center of a civilization, which by its religious thought, its art and literature, was destined to leave its deep mark on the races wholly diverse and scattered over the greater part of Asia."
Introduction

"Do Thou, Whose countenance is turned to all sides, send off our adversaries as if in a ship, to the opposite shore: do Thou convey us in a ship across the sea for our welfare."

- Rig Veda. 1., 97, 7 and 8

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Professor A. L. Basham, who reduced India along with her culture to a Wonder land wrote in his book Wonder That Was India has observed that: "certain over-enthusiastic Indian scholars have perhaps made too much of the achievements of ancient Indian seafarers, which cannot compare with those of the Vikings or of some others early maritime peoples." A careful examination indicates that Prof. Basham's assessment is a characteristic example of colonialist bias in Indian historiography.

What was the Viking achievement? It is clear that the Vikings, during the period A.D. 800 to A.D. 1200, migrated to all the corners of Europe, they did not influence the people they came in contact with. On the contrary, they lost their identity under the influence of the superior cultures of the lands they visited.

In comparison to this, both from the qualitative and quantitative viewpoints, what was the Indian achievement? With regard to their contact with Southeast Asia Professor D. P. Singhal remarks: "Indians came into contact with the countries of Southeast Asia principally for commercial reasons. But whatever they settled they introduced their culture and civilization. In turn, they were influenced by the indigenous culture, laying thus the foundation of a new culture in the region. Indian cultural contact with Southeast Asia covers a period of more than thirteen hundred years, and segments of Indian culture even reached eastwards of this region."

(source: India and World Civilization - By D. P. Singhal p.25).

Goddess Tara: Rescued sailors who were at risk of Shipwreck. She could change color according to her moods. When she was calm, she was green or white in color, when angry, she could be blue, red or yellow.
Sir Aurel Stein (1862-1943) a Hungarian and author of several books including *Ra`jatarangini: a chronicle of the kings of Kashmir* and *Innermost Asia : detailed report of explorations in Central Asia, Kan-su, and Eastern Iran* carried out and described under the orders of H.M. Indian Government, whose valuable researches have added greatly to our knowledge of Greater India, remarks:

"The vast extent of Indian cultural influences, from Central Asia in the North to tropical Indonesia in the South, and from the Borderlands of Persia to China and Japan, has shown that ancient India was a radiating center of a civilization, which by its religious thought, its art and literature, was destined to leave its deep mark on the races wholly diverse and scattered over the greater part of Asia."

(source: *The Vision of India* - By Sisir Kumar Mitra p. 178 and *Main Currents of Indian Culture* - By S. Natarajan p. 50).

Indians of old were keenly alive to the expansion of dominions, acquisition of wealth, and the development of trade, industry and commerce. The material prosperity they gained in these various ways was reflected in the luxury and elegance that characterized the society. Some find allusion in the Old Testament to Indian trade with Syrian coast as far back as 1400 B.C. Archaeological evidence shows that as early as the eighth century B.C., there was a regular trade relation, both by land and sea, between India on the one hand and Mesopotamia, Arabia, Phoenica, and Egypt on the other. (For more information refer to chapter on *India and Egypt*). The Chinese literary texts refer to maritime and trade activity between India and China as far back as the seventh century B. C. Recent excavations in Philippines, Malay Peninsula, and Indonesia confirm of early and extensive trade which continued down to the historical period. It was this naval supremacy that enabled Indians to colonize the islands in the Indian Archipelago. Shortly, after, there grew up a regular traffic between India and China, both by land and sea. India also came in close contact with the Hellenic world. We learn from ancient authority that in the processions of Ptolemy Philadelphus (285-246 B.C.) were to be found Indian women, Indian hunting dogs, Indian cows, also Indian spices carried on camels, and that the yachts of the ruler of Egypt had a saloon lined with Indian stones. Everything indicates that there was a large volume of sea-trade between India and the western countries as far as African coast. From the coast the goods were carried by land to the Nile, and then down the river to Alexandria which was a great emporium in those days.

There was a mercantile colony of Indians in an island off the African coast in the first century A.D. The adventurous spirit of the Indians carried them even as far as the North Sea, while their caravans traveled from one end of Asia to the other.


On journeys by sea there were jalanirymakas – guides who could predict the behavior of waters. In the sea coast town of Shurparak, there was an arrangement to train persons with the help of Niryamak Sutras. According to these, those person who traveled together in a ship were called sanyatrika. In the Mahajanaka Jatak, there is a dialogue between a person swimming in the ocean and Goddess Mani Mekhala who was the presiding deity of sea-journeys.

"Who is this person, who in an ocean which knows no bound is trying to swim with his hands? On whose reliance are you doing this exercise?"

"O Goddess, I believe that one should do the exercise as long as it is possible. So I am doing this exercise though I do not see the shore."

In this way the dialogue continues with the swimmer continuing to gather courage hoping against hope. Mani Mekhala was the Goddess whose influence obtained from Kanya Kumari to the island of Katah. There was a huge temple dedicated to her in Puhara where the Kaveri joined the sea.

Comparing the achievements of the Indians and the Chinese in Southeast Asia, T. V. Mahalingam observes: "Though China also exercised a considerable influence over countries of Southeast Asia, Indian influence was more effective and durable for the Chinese always remained colonies of foreigners with little inclination to mix with the local population and in contrast to what the Hindus achieved, there is nowhere any trace of the taking-over of Chinese culture by the children of the soil."

His views have been upheld by John F. Cady who concluded that: "Indian cultural patterns in particular became widely disseminated during the early centuries A.D., while Chinese influence, although culturally less contagious, virtually dominated from Sung times (960 and later) the trade and politics of the eastern seas."

Amaury de Riencourt wrote: "The brightest sun shining over Southeast Asia in the first centuries A.D. was Indian Civilization. Waves of Indian colonists, traders, soldiers, Brahmins and Buddhist beat upon one Southeast shore after another. Great military power based on superior technical knowledge, flourishing trade fostered by the remarkable increase in maritime exchanges between India and these areas, the vast cultural superiority of the Indians, everything conspired to heighten the impact of the Indian Civilization on the Southeast Asian. Passenger ships plied regularly between the Ganges, Ceylon and Malaya in the middle of the first millennium A.D. Indian settlers from Gujarat and Kalinga colonized Java, for instance, while others set out for Burma or Cambodia. Old Indian books – the Kathasagara, the Jatakas and others – refer to these wondrous regions that set the imagination of civilized Indians on fire, to Suvarnabhumī, the fabulous "Land of Gold." On the whole, the Indianization of Southeast Asia proceeded peacefully. Local chiefs and petty chieftains were admitted into the caste structure as Kṣatriyas through a ritual known as vratyastoma, performed by an Indian Brahmin. All over Southeast Asia tremendous ruins are strewn, testifying to the immense influence of Indian Civilization."

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Allusions to Maritime Activity in Sanskrit Literature

All the universe rests within your nature, in the ocean, in the heart, in all life. - Rig Veda IV. 58. 11

There are a number of terms in the Rig Veda that mean ocean or sea. "Samudra" the main term in classical Sanskrit for the ocean, is very common in the Rig Veda and this meaning for it makes sense in all passages. The symbolism of ships is as pervasive in the Vedas as that of the sea, which it tends to reinforce. The saving action of Agni, the sacred fire, is frequently compared to a ship that carries us across the river or sea.

As a ship across the river (or sea), Agni takes us across to safety (I. 97.8). Vedic culture was a maritime culture, the Vedic people lived by the sea for some time before the hymns of the Rig Veda were composed.

(source: Gods, Sages, and Kings - By David Frawley p. 43-64).

The Indians built ships, navigated the sea and monopolized the international trade both by sea route and land route. Indian literature furnishes evidence with innumerable references to sea voyages and sea-borne trade and the constant use of the ocean as the great highway of international intercourse and commerce.

Rig Veda

The oldest evidence on record is supplied by the Rig Veda, which contains several references to sea voyages undertaken for commercial purposes. One passage (I. 25.7) represents Varuna having a full knowledge of the sea routes, and another (I. 56.2) speaks of merchants, under the influence of greed, going sending ships to foreign countries. A third passage (I. 56.2) mentions merchants whose field of activity known no bounds, who go everywhere in pursuit of gain, and frequent every part of the sea. The fourth passage (VII. 88.3 and 4) alludes to a voyage undertaken by Vasishtha and Varuna in a ship skillfully fitted out, and their "undulating happily in the prosperous swing." The fifth, which is the most interesting passage (I. 116. 3), mentions a naval expedition on which Tugra the Rishi king sent his son Bhujyu against some of his enemies in the distant islands; Bhujyu, however, is ship wrecked by a storm, with all his followers, on the ocean, "where there is no support, no rest for the foot or the hand," from which he is rescued by the twin brethren, the Asvins, in their hundred-oared galley. The Panis in the Vedas and later classical literature were the merchant class who were the pioneers and who dared to set their course from unknown lands and succeeded in throwing bridges between many and diverse nations. The Phoenicians were no other than the Panis of the Rig Veda. They were called Phoeni in Latin which is very similar to the Sanskrit Pani.
Ships of 3rd century B.C. E.
(source: Foreign trade and Commerce in Ancient India - By Prakash Charan Prasad)

Among other passages may be mentioned that which invokes Agni thus: "do thou whose countenance is turned to all sides send off our adversaries as if in a ship to the opposite shores; do thou convey us in a ship across the sea for our welfare"; or that in which Agni is prayed to bestow a boat with oars."

The Ramayana also contains passages which indicate the intercourse between India and distant lands by the way of the sea. In the Kishkindha Kandam, Sugriva, the Lord of the Monkeys, in giving directions to monkey leaders for the quest of Sita, mentions, all possible places where Ravana could have concealed her. In one passage he asks them to go to the cities and mountains in the islands of the sea, in another the land of the Koshakarsa, is mentioned as the likely place of Sita's concealment, which is generally interpreted to be no other country than China (or the land where grows the worm which yields the threads of silken clothes); a third passage refers to the Yava and Dvipa and Suvarna Dvipa, which are usually identified with the islands of Java and Sumatra of the Malaya Archipelago; while the fourth passage alludes to the Lohita Sagara or the red sea. In Ayodhya Kandam there is even a passage which hints at preparation for a naval fight, thus indirectly indicating thorough knowledge and universal use of waterway. The Ramayana also mentions merchants who trafficked beyond the sea and were in the habit of bringing presents to the king.

In The Mahabharata the accounts of the Rajasuya sacrifice and the Digvijaya of Arjuna and Nakula mention various countries outside India with which she had intercourse. There is a passage in its Sabha Parva which states how Sahadeva, the youngest brother of the five Pandavas, went to the several islands in the sea and conquered the Mlechchha inhabitants thereof. the well known story of the churning of the ocean, in the Mahabharata, in the boldness of its conception is not without significance. In the Drona Parva there is a passage alluding to shipwrecked sailors who "are safe if they get to an island." In the same Parva there is another passage in which there is a reference to a "tempest-tossed and damaged vessel in a wide ocean."
In the Karna Parva we find the soldiers of the Kauravas bewildered like the merchants "whose ships have come to grief in the midst of the unfathomable deep." There is another shloka in the same Parva which describes how the sons of Draupadi rescued their maternal uncles by supplying them with chariots, "as the shipwrecked merchants are rescued by means of boats." In the Santi Parva the salvation attained by means of Karna and true knowledge is compared to the gain which a merchant derives from sea-borne trade. But the most interesting passage in the Mahabharata is that which refers to the escape of the Pandava brothers from the destruction planned for them in a ship that was secretly and especially constructed for the purpose under the orders of the kind-hearted Vidura. The ship was a large size, provided with machinery and all kinds of weapons of war, and able to defy storms and waves.

But besides the epics, the vast mass of Sutra literature also is not without evidence pointing to the commercial connection of India with foreign countries by way of the sea. That these evidences are sufficiently convincing will probably be apparent from the following remarks of the well-known German authority, the late Professor Buhler: "References to sea voyages are also found in two of the most ancient Dharam Sutras.

**Manu Smriti**

In Sanskrit books we constantly read of merchants, traders and men engrossed in commercial pursuits. Manu Smriti, the oldest law book in the world, lays down laws to govern commercial disputes having references to sea borne traffic as well as inland and overland commerce. Manu (iii. 158) declares a Brahmin who has gone to sea to be unworthy of entertainment at a Shraddha. In chapter viii again of Manu's Code there is an interesting sloka laying down the law that the rate of interest on the money lent on bottomry (The lender of money for marine insurance) is to be fixed by men well acquainted with sea voyages or journeys by land. In the same chapter there is another passage which lays down the rule of fixing boat-hire in the case of a river journey and a sea voyage. But perhaps the most interesting passages in that important chapter are those which are found to lay down the rules regarding what may be called marine insurance. One them holds the sailors collectively responsible for the damage caused by their faults to the goods of passengers, and other absolves them from all responsibility if the damage is caused by an accident beyond human control.

Sir William Jones is of opinion that the Hindus "must have been navigators in the age of Manu, because bottomry (The lender of money for marine insurance) is mentioned in it. In the Ramayana, the practice of bottomry is distinctly noticed."


Lord Mountstuart Elphinstone has written: "The Hindus navigated the ocean as early as the sage of Manu's Code, because we read in it of men well acquainted with sea voyages."

(source: History of India - By Mountstuart Elphinstone London: John Murray Date of Publication: 1849 p. 166).

In Yajnavalkya Samhita there is a passage which indicates that the Hindus were in the habit of making adventurous sea voyages in pursuit of gain. The astronomical works also are full of passages that hint at the flourishing condition of Indian shipping and shipbuilding and the development of sea-borne trade. Thus the Brihat Samhita has several passages of this kind having an indirect bearing on shipping and maritime commerce. One of these indicate the existence of shippers and sailors as a class whose health is said to be influenced by the moon. Another mentions the stellar influences affecting the fortunes of traders, physicians, shippers, and the like. The third, also, mentions a particular conjunction of stars similarly affecting merchants and sailors. The last one is that which recommends as the place for an auspicious sea-bath the seaport where there is a great flow of gold.
due to multitudes of merchantmen arriving in safety, after disposing of exports abroad, laden with treasure.

**Puranas**

The Puranas also furnish references to merchants engaged in sea-borne trade. The *Varaha Purana* mentions a childless merchant named Gokarna who embarked on a voyage for trading purposes but was overtaken by a storm on the sea and nearly shipwrecked. The same Purana contains a passage which relates how a merchant embarked on a voyage in a sea-going vessel in quest of pearls with people who knew all about them.

But besides the religious works like the Vedas, the Epics, and the Sutras and Puranas, the secular works of Sanskrit poets and writers are also full of references to the use of the sea as the highway of commerce, to voyages, and naval fights. Thus in *Kalidasa* *Raghuvaṃsa* (canto 4, sloka 36) we find the defeat by Raghu of a strong naval force with which the kings of Bengal attacked him, and his planting the pillars of victory on the isles formed in the midst of the river Ganges. The *Shākuntala* also relates the story of a merchant named Dhanavriddhi whose immense wealth devolved to the king of the former's perishing at sea and leaving no heirs behind him. In *Sakuntala*, we learn of the importance attached to commerce, where it is stated: "that a merchant named Dhanavriddhi, who had extensive commerce had been lost at sea and had left a fortune of many millions." In Nala and Damyanti, too, we meet with similar incidents.

The *Sīsupalavaḍha* of the poet Magha contains an interesting passage which mentions how Sri Krishna, while going from Dvāraka to Hastinapura, beholds merchants coming from foreign countries in ships laden with merchandise and again exporting abroad Indian goods.

The expansion of Indian culture and influence both towards Central Asia and the south-east towards the countries and islands of the Pacific is one of the momentous factors of the period immediately preceding the Christian era. From the first century A.D. a systematic policy of expansion led to the establishment of Hindu kingdoms in Annam, Cochin-China, and the islands of the Pacific. The *Ramayana* knew of Java and Sumatra. Communication by sea between the ports of south India and the islands of the Pacific was well established many centuries before the Christian era. The discovery and colonization of Sumatra, Java and Borneo were the results of oceanic navigation. The allusions in the *Ramayana* to Java and *Ptolemy's* mention of Yava-dwipa in the first century A.D. clearly establish the fact that Java had come under Indian influence at least by the beginning of the Christian era.

The reaction of this overseas activity on India was very considerable. An explanation of the immense wealth of the merchants who made such munificent endowments as witnessed by the inscriptions in the temples of the Satavahana period lies in the great overseas trade. *Tamil literature* of the first centuries, especially *Silappadhikaram* and *Manimekhalai* also testify to this great overseas trade while in *Kalidasa* we have the allusion to ships laden with spices from distant lands lying in Kalinga ports.


**Some passages in Rig Veda**

"May Usha dawn today, the excitress of chariots which are harnessed at her coming, as those who are desirous of wealth send ships to sea."

"Do thou, Agni, whose countenance is turned to all sides, send off our adversaries, as if in a ship to the opposite shore. Do thou convey us in a ship across the sea for our welfare." (A remarkable prayer for safe conduct at sea).

The Hitopadesha describes a ship as a necessary requisite for a man to traverse the ocean, and a story is given of a certain merchant, "who, after having been twelve years on his voyage, at last returned home with a cargo of precious stones."
The Institutes of Manu include rules for the guidance of maritime commerce. Thus, the passage quoted above indicate a well developed and not a primitive trade.

Significant also is the fact that Lieutenant Speake, when planning his discovery of the source of the Nile, secured his best information from a map reconstructed out of Puranas. (Journal, pp. 27, 77, 216; Wilford, in Asiatic Researches, III). It traced the course of the river, the "Great Krishna," through Cusha-dvipa, from a great lake in Chandristhan, "Country of the Moon," which it gave the correct position in relation to the Zanzibar islands. The name was from the native Unya-muezi, having the same meaning; and the map correctly mentioned another native name, Amara, applied to the district bordering Lake Victoria Nyanza.

"All our previous information," says Speake, "concerning the hydrography of these regions, originated with the ancient Hindus, who told it to the priests of the Nile; and all these busy Egyptian geographers, who disseminated their knowledge with a view to be famous for their long-sightedness, in solving the mystery which enshrouded the source of their holy river, were so many hypothetical humbugs. The Hindu traders had a firm basis to stand upon through their intercourse with the Abyssinians."

(source: Periplus of the Erythrean Sea - W.H. Schoff p. 229-230. For more information refer to chapter on India and Egypt)

The Jatakas

Some very definite and convincing allusions to sea voyages and sea-borne trade are also contained in the vast body of Buddhist literature known as the Jatakas, which are generally taken to relate themselves to a period of one thousand years beginning from 500 B.C. E. The Baveru Jataka without doubt points to the existence of commercial intercourse between India and Babylon in pre-Ashokan days. The full significance of this important is thus expressed by the late Professor Buhler: "The now well-known Baveru-Jataka, to which Professor Minayef first drew attention, narrates that Hindu merchants exported peacocks to Baveru. The identification of Baveru with Babiru or Babylon is not doubtful," and considering the "age of the materials of the Jatakas, the story indicates that the Vaniyas of Western India undertook trading voyages to the shores of the Persian Gulf and its rivers in the 5th, perhaps even in the 6th century B.C. just as in our days. This trade very probably existed already in much earlier times, for the Jatakas contain several other stories, describing voyages to distant lands and perilous adventures by sea, in which the names of the very ancient Western ports of Surparaka-Supara and Bharukachcha-Broach are occasionally mentioned."


Ms. Manning, author of Ancient and Mediaeval India Volume II, p. 353, writes: "The indirect evidence afforded by the presence of Indian products in other countries coincides with the direct testimony of Sanskrit literature to establish the fact that the ancient Hindus were a commercial people."

(source: Ancient and Medieval India - By Mrs. Manning Volume II p. 353).

Sudas is stated in the Aitertiya Brahmana to have completely conquered the whole world. This conquest was not political; it means exploration of the whole earth. Puruvara navigated the ocean and
explored 13 islands.

Colonel James Tod says that one of

the ancestors of Rama was Sagara also called the Sea-King whose sixty thousand sons were so many

mariners.

Sir William Jones wrote: " of this cursory observation on the Hindus which it would require volumes to expand and illustrate this is the result that they had an immemorial affinity with old Persians, Ethiopians, and Egyptians, Phoenicians, Greeks and Tuscan, the Scythians or Goth and Cilts, the Chinese, Japanese and Peruvians."

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There are references in Buddhist Jataka tales to ships sailing from Bhrigukachcha to Baveru (Babylon); in the Pali book Questions of Milinda, a merchant is described as having sailed to Alexandria, Burma, Malaya and China. Another story of the 6th and 7th century tells of a merchant having sailed to the “Island of Black Yavanas” maybe Zanzibar.

Professor Max Duncker, author of History of Antiquity, says, that ship-building was known in ancient India about 2000 B.C. It is thus clear that the Hindus navigated the ocean from the earliest times, and that they carried on trade on an extensive scale with all the important nations of the whole world.

A. M. T. Jackson writes: "The Buddhist Jatakas and some of the Sanskrit law books tell us that ships from Bhroach and Supara traded with Babylon (Baveru) from the 8th to the 6th century B.C."

Rev. J. Foulkes says: "The fact is now scarcely to be doubted that the rich Oriental merchandise of the days of King Hiram and King Soloman had its starting place in the seaports of the Deccan, and that with a very high degree of probability some of the most esteemed of the spices which was carried into Egypt by the Midianitish merchants of Genesis."

Arnold Hermann Ludwig Heeren (1760-1842) writes: "The Hindus in their most ancient works of poetry are represented as a commercial people."

Dr. Caldwell says: "It appears certain from notices contained in the Vedas that Aryans of the age of Solomon practiced foreign trade in ocean-going vessels."

In G. Buhler's opinion, "prove the early existence of a complete navigation of the Indian Ocean, and of the trading voyages of Indians."

Thus, Sanskrit literature in all its form - such as the Vedas, the Epics, the Sutras, the Puranas, poetry epic and dramatic romance etc. is replete with references to the maritime trade of India, which prove that the ocean was freely used by the Indians in ancient times as the great highway of international commerce. Further, the evidence from Sanskrit literature receive their confirmation again from the evidence furnished by the Buddhistic literature - the canonical books, and the Jatakas.
Sea Trade


In Eastern Asia the influence of India has been notable in extent, strength and duration. "Scant justice is done to India's position in the world by those European histories which recount the exploits of her invaders and leave the impression that her own people were a feeble dreamy folk, surrendered from the rest of mankind by their seas and mountain frontiers. Such a picture takes no account of the intellectual conquests of the Hindus. Even their political conquests were not contemptible and were remarkable for the distance if not for the extent of the territory occupied. For there were Hindu kingdoms in Java and Camboja and settlements in Sumatra and even in Borneo, an island about as far from India as is Persia from Rome."

The West

Gordon Childe says: "The most startling feature of pre-historic Indian trade is that manufactured goods made in India were exported to Mesopotamia. At Eshunna, near Baghdad, typically Indian shell inlays and even pottery probably of the Indus manufacture have been found along with seals. After c. 1700 B.C. C. E. the traders of India lost commercial contact with the traders of Mesopotamia."

S. R. Rao says that the Indian traders first settled in Bahrein and used the circular seal. Later on the different sections of the Indian merchants colonized the different cities of Mesopotamia after the name of their race. The Chola colonized the land where the two rivers, the Tigris and Euphrates, approach most nearly and the banks touch the so called Median wall. They called their colony Cholades which later came to be known as Chaldea (i.e. the land of the Cholas) as a result of corrupt pronunciation. Similarly the Asuras of Vedic India colonized the city Asura after their name and later they established the Assyrian empire.

Archaeological evidence of the use of indigo in the cloths of the Egyptians mummies, Indian cedar in the palace of Nebuchadnzzzar and Indian teak in the temple of the moon god at Ur shows the continuity of Indian commercial relations with the West. Rassam found a beam of Indian cedar in the palace of Nebuchadnzzzar (604-562 B.C) at Birs Nimrud. In the second storey of the Temple of the Moon-God at ur rebuilt by Nebuchadnzzzar and Nabonidus (555- 538 B.C.) Taylor found "two rough logs of wood apparently teak".

The ancient Egyptian traders sailed there boats not only on the Nile but also ventured into the Mediterranean and the Red Sea and even into the Indian Ocean, for they are said to have reached "God's land" or the land of Punt (India). Similarly the Indian traders sailed their ships not only on the Indian Ocean and the Persian Gulf, they also ventured into the Red Sea and even into the Mediterranean and Aegean Sea. From the very beginning Indian traders had a very fair knowledge of all the ancient oceans and seas of the populated world. the Egyptians called India as "God's land" because India was in those days culturally very much developed. The priest of ancient Egypt required vast quantities of aromatic plants for burning as incense; frankincense, myrrh and lavender were also used for embalmment purpose. Herodotus has left us a sickening description of the great number of spices and scented ointments of which India was the center. Beauty products from India
also attracted the women of Egypt. The cosmetic trade was entirely dependent on imports chiefly from India. The Pharaohs of the fifth and sixth dynasties made great efforts to develop trade relations with the land of Punt. Knemphotep made voyages to Punt eleven times under the captainship of Koui. This expedition was organized and financed by the celebrated Queen Halshepsut.

[source: **Foreign Trade and Commerce in Ancient India** - By Prakash Charan Prasad p. 36-43. For more information refer to chapter on **India and Egypt**)

Before trade with the Roman Empire, India carried on her trade chiefly with Egypt; whose king, Ptolemy Philadelphus (285-247 B.C.) with whom Ashoka the Great had intercourse, founded the city of Alexandria, that afterwards became the principal emporium of trade between the East and West.

**M. A. Murray**, the Egyptologist says in his book, "The splendor that was Egypt" that the type of men of Punt as depicted by Halshepsut's artists suggests an Asiatic rather than an African race and the sweet smelling woods point to India as the land of their origin.


This expedition really appears to have been a great commercial success. The queen proudly recorded on the walls of the temple of Deir-el-Bahri: "Our ships were filled with all marvelous things from Punt (India); the scented wood of God's land, piles of resin, myrrh, green balsam trees, ebony, ivory, gold, cinnamon, incense, eye-coloring, monkeys, grey dogs and panther-skins." These objects indicate Indian goods exported to Egypt.

**Alexander's** passage of the Indus was effected by means of boats supplied by Indian craftsmen. A flotilla of boast was used in bridging the difficult river of Hydaspses. For purpose of the voyage of Nearchus down the rivers and to the Persian Gulf, all available country boats were impressed for the service, and a stupendous fleet was formed, numbering around 800 vessels, according to Arrian, and to the more reliable estimate of Ptolemy nearly 2,000 vessels which accommodated 8,000 troops, several thousand horses, and vast quantities of supplies. It was indeed an extraordinary huge fleet, built entirely of Indian wood and by the hands of Indian craftsmen. All this indicates that in the age of the Mauryas shipbuilding in India was a regular and flourishing industry of which the output was quite large.

A book, called the **Periplus of the Erythraean Sea**, written by a Graceo-Egyptian sailor in the first century A.D., gives a very detailed and interesting account of Indian trade from the author's personal knowledge. He came to India and found the Indian coast studded with ports and harbors, carrying on brisk trade with foreign countries. The chief articles of export from India were spices, perfumes, medicinal herbs, pigments, pearls, precious stones like diamond, sapphire, turquoise and lapis lazuli, animal skins, cotton cloth, silk yarn, muslin, indigo, ivory, porcelain and tortoise shell; the chief imports were cloth, linen, perfume, medicinal herbs, glass vessels, silver, gold, copper, tin, lead, pigment, precious stones and coral.
The value of Indian trade may be estimated from the well-known passage of Pliny, in which he recorded that India drained the Roman empire of fifty million sesterces every year. The wealth of early India is confirmed by the lament of Pliny the Elder in Historica Naturalis (Natural History), completed in 77 AD that all of Rome's coffers were being emptied into India to satisfy Roman demand for translucent Indian muslins. Pliny's statement is corroborated by the discovery, in India, of innumerable gold coins of the Roman emperors, which must have come here in course of trade. Most of the coins have been found. Most of these coins have been found in South India, and their evidence is corroborated by many passages in classic Tamil literature. We read of 'Yavanas of harsh speech' with many wares; of foreign merchants thronging sea-port towns like Mamallapuram, Puhar, and Korkai; or busy customs officials, and those engaged in loading and unloading vessels in the harbor. The wealth of the Roman Empire reached India through the ports of Kalyan, Chaul, Broach, and Cambay in Western India. Tamralipti was an important port in Bengal. It carried on trade with China, Lanka, Java and Sumatra. In the Andhra region, the ports were Kadura and Gantasala, Kaveripattanam (Puhar) and Tondail were the ports of the Pandya region. The ports of Kottayam and Muziris were on the Malabar coast. There was a great maritime trade between India and Southeast Asia and China. The rulers of India facilitated trade by building and maintaining lighthouses at the necessary points and by keeping sea routes free and safe from pirates.

According to Surjit Mansingh: "India's trade with Europe, both by land and sea, was a constant fact of history from ancient times"


The close connection between the early civilization of Ninevah and Babylon and the West Coast of India is borne out by indisputable evidence and this was possible only through the navigation of the Arabian sea. There is ample evidence of a flourishing trade between the Levant and the West Coast of India, as may be inferred from allusion in the Old Testament.
As stated by Prof. K. A. Nilakanta Sastri in Indian Antiquary, 1938 p. 27: "the evidence of South Indian connections with the West drawn from references in his (Solomna's) reign to Ophir and Thar Shih to ivory, apes and peacocks is seen to be only a link in a more or less continuous chain of data suggesting such connections for long ages before and after. The earliest Indian literature, the Vedas speak of sea voyage. One well-known mantra (Rig Veda 1, 97, 8) prays: "Do thou convey us in a ship across the sea for our welfare." Besides this, there are numerous allusions in the Rig Veda to sea voyages and to ships with a hundred oars.


Indian seafarers did not absent themselves from the Middle East or the European mainland. From the Sanskrit name of Socotra (Island abode of bliss) and from certain Hindu-like divisions and customs among the people of East Arabia. C. Lassen suggested that the first sailors and colonizers on the Indian Ocean came from India. According to Jeannie Auboyer "merchant shipping was very active in India and had, even since Roman times, linked the Mediterranean world to China with great vessels (nava) of which the Indian king owned a fleet, though most of them belonged to wealthy individuals."


The achievements of Indian seafarers in the Far East and Southeast Asia have been acknowledged by a host of scholars. The late Professor Buhler says: "References to voyages are also found in two of the most ancient Dharma Sutras."

There was also an active trade between India and Greece. The mention of ivory by Homer and of several other Indian articles assign the trade a very ancient date. In addition to ivory, India also supplied indigo to Greece, whence the inhabitants derived their knowledge of its use. Homer knew tin by its Sanskrit name. Professor Max Duncker says that the Greeks used to wear silken garments which were imported from India, and which were called "Sindones, or "Tyrian robes." "Trade existed between the Indians and Sabaens on the coast of South Arabia before the 10th century B.C. the time when, according to the Europeans, Manu lived.

Of the producer of loom, silk was more largely imported from India into ancient Rome than either in Egypt or in Greece. "It so allured the Roman ladies," says a writer, that it sold its weight in gold."


Testimony to the flourishing condition of the ship-building industry in India is available in the description of the return journey of Alexander from India via the sea route. According to estimates of Ptolemy nearly 2000 vessels which between them accommodated 8000 troops, several thousand horses, and vast quantities of supplies. This vivid description speaks not only of the ready resources and expertise of the Indian craftsmen but also of the tonnage of the seaworthy ships estimated at about 75 tons (or 3000 amphoreia) by Pliny.

The most valuable of the exports of India was silk, which was under the Persian Empire is said to have exchanged by weight of gold.
It is evident that "there was a very large consumption of Indian manufactures in Rome. This is confirmed by the elder Pliny, who complained that there was "no year in which India did not drain the Roman Empire of a hundred million sesterces (1,000,000 pounds)....so dearly do we pay for our luxury and our women." The annual drainage of gold from Rome and its provinces to India was estimated by him at 500 steria, equal to about Rs. 4,000,000. We are assured on undisputed authority that the Romans remitted annually to India a sum equivalent to 4,000,000 pounds to pay for their investments, and that in the reign of Tolomeies, 125 sails of Indian shipping were at one time lying in the ports whence Egypt, Syria, and Rome itself were supplied with the products of India."

(Roman coins in large quantities are found in places in Southern India, whence beryl, pepper, pearls and minerals were exported to Rome. Some of these are described by Mr. Sewell. "These hoards," he says, "are the product of 55 separate discoveries, mostly in the Coimbatore and Madura districts."

There is extant, a Prakrit text on ship-building named Angavijja written in the Kushana period and edited in the Gupta period. This text enlists about a dozen names of different types of ships, such as Nava, Pota, Kotimba, Salika, Sarghad, Plava, Tappaka, Pindika, Kanda, Katha, Velu, Tumba, Kumba and Dati. Some of these varieties of ships such as Tappaka (Trappaga), Kotimba and Sarghad have also been mentioned in the *Periplus of the Erythrean Sea*. They are considered to be very large ships capable of sailing along the coast as well as in deep sea.

Mr. Momensen in his *Provinces of the Roman Empire* (Volume II p. 301), says: "Somewhat further to the south at Kananor numerous Roman gold coins of the Julio Claudian epochs have been found, formerly exchanged against the spices destined for the Roman kitchens."

Arabia being the nearest of the countries situated to the west of India, was the first to which the Indian commercial enterprises by sea were directed. The long-continued trade with Arabia dates from a very remote antiquity. "The labors of *Von Bohlen (Das Alte Indian*, Volume I, p. 42), confirming those of Heeran and in their turn confirmed by those of Lassen (Ind Alt. Vol II. p. 580), have established the existence of a maritime commerce between India and Arabia from the very earliest period of humanity. Lassen also says that the Egyptians wrapped their mummies in Indian Muslin.

*Agatharchides* of Cnidus, Ptolemaic Dynasty, President of the Alexandrain Library, who is mentioned with respect by Strabo, Pliny and Diodorus, and who lived upwards of 300 years before the time of Periplus, noticed the active commercial intercourse kept up between Yemen and Pattala - a seaport in Western India. Pattala in Sanskrit means a "commercial town" which circumstance if it is true, says Prof. Heeran, "would prove the extreme antiquity of the navigation carried on by the Indus. Agatharchides saw large ships coming from the Indus and Pattala.

The importance of trade was highly appreciated by the people of *Kalinga* - a kingdom on the Eastern seaboard of India. Inscriptions "speak of navigation and ship commerce as forming part of the education of the princes of Kalinga."

*J. Takakusu* writes: "That there was a communication or trade between India and China from 400 A.D. down to 800 A.D. is a proven fact. Not to speak of any doubtful records we read in the Chinese and
Japanese books, Buddhist or otherwise, of Indian merchant ships appearing in the China Sea; we know definitely that Fahien (399-415 A.D) returned to China via Java by an Indian boat...at further in the Tang dynasty an eyewitness tells us that there were in 750 A.D. many Brahmin ships in the Canton River."


Historian Vincent Smith in his book Early History of India, writes" "Ancient Tamil literature and the Greek and Roman authors prove that in the first two centuries of the Christian era the ports on the Coromandel or Chalamandal coast enjoyed the benefits of active commerce with both East and West. The Chola fleets.....uncrossed the Indian ocean to the islands of the Malaya Archipelago."

(source: **Early History of India** - By Vincent Smith p. 415).

"The Hindus themselves were in the habit of constructing the vessels in which they navigated the coast of Coromandel, and also made voyages to the Ganges and the peninsula beyond it. These vessels bore different names according to the size." writes Prof. Heeran. There were commercial towns and ports on the Coromandel coast. Masulipatam, with its cloth manufactures, as well as the mercantile towns situated on the mouth of the Ganges, have already been noticed as existing in the time of *Periplus*. Even as late as the 17th century, French traveler Tavernier in 1666 A.D. said: "Masulipatam is the only place in the Bay of Bengal from which vessels sailed eastwards for Bengal, Arrakan, Pegu Siam, Sumatra, Cochin China and the Manilla and West to Hormuz, Makha and Madagascar."


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**The East**

Southeast Asia has always been an integral part of the Indian consciousness is borne out by the fact that the countries of Southeast Asia so comprehensively embraced Hinduism and Buddhism in all its aspects. This spiritual and cultural affinity became an inseparable part of their ethos and way of life. Successive Indian kings and kingdoms from the first century AD and even before to the beginning of the 15th century, had regarded Southeast Asia and the lands lying beyond as vital for their own strength, security and sustained development. This intricate and abiding web of relationships in turn contributed significantly to India’s sense of security in an extended neighborhood in which India is neither seen as an alien power nor as a country with a colonial past.
The advent of the British in India and the struggle for influence between European powers that ensued all over Southeast Asia, suspended the continuous interaction that had existed between India and the region. Southeast Asia itself was carved up into areas of influence by the major colonial powers, viz., the British, French, Dutch and Portuguese. India’s cultural and commercial interaction with this region was therefore subordinated to the political and strategic considerations of the great powers. The relationship spanning nearly 2500 years was founded and nurtured on mutual interest and security in which both partners constantly enriched and reinforced each other.

In the opinion of Professor Kakasu Okakura author of *The Ideals of the East, with Special Reference to the Art of Japan*:

"Down to the days of the Mohammedan conquest went, by the ancient highways of the sea, the intrepid mariners of the Bengal coast, founding their colonies in Ceylon, Java and Sumatra, and binding Cathay (China) and India fast in mutual intercourse."

George Coedes, French historian and author of *Indianized State of South East Asia* considered that Indian colonization, intensive in the 2nd and 3rd centuries A.D. came to full fruition in 4th and 5th centuries. "I am convinced that such research will reveal numerous facts which will indicate a much deeper Indianization of the mass of the population than the sociologists will at present admit."

Indianization of Southeast Asia continued even during the early mediaeval times which is explained by French scholar, Orientalist who wrote on Eastern religion, literature, and history Sylvain Levi (1863-1935) who proposed that:

"India has produced its true masterpieces in foreign lands under foreign inspiration and that in architecture it is in distant Cambodia and Java that one must seek the two marvelous products of Indian genius, Angkor Wat and Borobudar."

T. W. Rhys Davids author of *Pali-English Dictionary* has observed that "Sea going merchants, availing themselves of the monsoons, were in the habit at beginning of the 7th century B.C. of trading from ports of the Southwest Coast of India to Babylon, then a great mercantile emporium."

(source: *Buddhist India - By T. W. Rhys- Davids* p. 116).

Reginald S. Le May (1885 - ) author of *The culture of South-East Asia; the heritage of India* has observed:

"India, indeed, began to exercise a profound cultural influence on her neighbors to the eastward - Burma, Siam, Malaya, Cambodia, Java and Sri Lanka all falling beneath her sway. And this, as far as one can may judge, almost entirely as a result of trading and peaceful penetration by missionaries, merchants and others, and not by force of arms." "The beginnings of Indian colonization overseas eastward go back a very long way in time and it is almost certain that the results seen today were, in the main, not achieved by military expedition, but by peaceful trading and religious teaching - and thereby all the more permanent."

Contrasting the Indian method with the Chinese he remarked:

"Indian religious art and culture seem naturally to have exercised an extraordinary fascination over the indigenous peoples of all these territories, no doubt, owing to the attractions offered by Hinduism and Buddhism, while Chinese art, not bearing any particular religious message, apparently made little impression, in spite of the fact that the Chinese, too, sailed to southern seas..."


George Coedes (1886 -1969) author of *Ancient Hinduized states of the Far East*, has pointed out the
enduring value of Hindu culture in Outer or Greater India:

"One is struck by the fundamental difference in the results achieved in the countries of the Far East, by the civilizing action of China and that of India. The reason of it lies in the radical difference in the methods of colonization, employed by the Chinese and by the Hindus. The Chinese proceeded with conquest and by annexation: the armies occupied the lands and the officials spread the Chinese civilization. *The Hindu penetration and infiltration seem to have almost always been peaceful and unaccompanied by those destructions, which disgrace the Mongol cavalcade or the Spanish conquest of America.* Far from being destroyed by the conquerors, the indigenous people have found in the Hindu society, transplanted and made supple, a frame, in which their own societies have been able to integrate and develop themselves." "The exchange of ambassadors between the two shores of the Bay of Bengal was done on a *footing of equality*, whereas China always required of the "barbarians of the south" the recognition of her suzerainty, which was expressed by the regular payment of tribute."

"The lands, militarily conquered by China, had to adopt or imitate her institutions, customs, religions, language and script. On the contrary, those, whom *India peacefully conquered, by the prestige of her culture*, have preserved the essence of their individual characters and have developed them, each according to its own genius."

(source: *Les états Hindouisés d'Indochine et d'Indonésie* - By George Coedes p. 64-66).

The control of the Indian seas belong predominantly to India till the thirteenth century A.D. In respect of the Arabian Sea this control meant only the freedom of navigation. There was no colonizing activity in that area, though Socotra, or Sukhadhara dwipa (the island of the blest) was discovered long before the Christian era and was probably under the Indian occupation at that time. Indian communities existed in Alexandria and other Egyptian towns and there were also settlements on the coasts of the Persian Gulf. But generally speaking, the navigation of the Arabian Sea was only for the purpose of trade. In case of Bay of Bengal, it was different. The supremacy in that sea was naval and political, based on an extensive colonization of the islands and this supremacy ceased only with the breakdown of Chola power in the thirteenth century. The naval activity of the Hindus was controlled by organized corporations of which the most important were the *Manigramam Chetties* and the *Nanadesis*. Of the Manigramam Chetties who traded all over the world we have authentic records in grants and inscriptions. The Bhaskara Ravi Varman plate of the Kerala King grants certain special privileges to the Manigramam guild. This body was given charter...including "the sword of sovereign merchantship" and monopoly rights of trading. Other "merchant adventurers" known from records are the Nanadesis, the Valangai and the Elangai who are described in the inscription at Baligami in Mysore as bodies of "*brave men born to wander over many countries since beginning of the Krta Age* (the first of the Indian Cycle of Yugas) penetrating regions of the six continents by land and water routes, and dealing in various articles, such as horses and elephants, precious stones, perfumes and drugs either wholesale or in retail."
The ships built by Hindu navigators at that time are described thus by J. Hornell stated to be an authority on Indian boat designs. They were "square rigged, two masted vessels, with raked stem and stern, both sharp, without bowsprit and rudder and steered by two quarter paddles." (Quoted in Towards Angkor - By Q. Wales p. 26). First the Mauryas and then the Andhras were the lords of the Eastern Seas. The Ambassador of the Prince of Wu reported that while he was in Khamboja (Cambodia) in about A.D. 250 he saw ships with seven sails which could stay at sea for four weeks at a time. Other reports mention ships which carried over 600 men and more than 1,000 tons of merchandise. From the Andhras the sovereignty of the eastern Seas passed to the Pallavas as may be inferred from the great influence which this dynasty exercised on the colonial kingdoms of Further India.

The Hindus had already in use a magnetic compass known as Matsya Yantra for determining direction. The work "Merchants Treasure" written at Cairo by Baylak al Kiljaki mentions the magnetic needle as being in use in the Indian Ocean. The route that Fa-hien, the celebrated Chinese monk, took to return home after his stay in India (412-413) is fully described by him. Leaving Tramralipti, the Orissa port, he took fourteen days to reach Sri Lanka. From there he embarked for Java and called at Nicobars (Nakka-varam), the island of the naked. From Nicobar the ship passed through the Straits of Malacca into the Pacific. Oceanic travel was therefore well advanced in the fifth century and Indian mariners not merely crossed the Bay of Bengal at its widest point, but sailed far out into the Pacific.

Further, the Hindus had developed great skill in building ocean-going ships of great strength and durability. The participation of Hindus in the navigational activities of the Red Sea is also borne out by the Oxyrhynchus Papyri, a second century farce in the Greek language in which the conversation between certain characters is in a language which some scholars have identified as being South Indian. Besides, there are extensive allusions to maritime affairs and to long voyages in early Tamil literature. Tamil scholars have counted no less than 1,800 nautical words in that language.

The numerous ports of India from Broach to Quilon became great markets of trade. A first century Tamil classic describes the port of Muziris. (Cragnore in Cochin) as being filled with ships. The ruins of a Roman temple have also been discovered in that area.

Sir Stamford Raffles (1781-1826) the British Governor of Java, in his book, History of Java, II, p. 87, wrote:
“In the year 525 Saka era – 603 A.D., it being foretold to a king of Gujarat that his country would decay and go to ruin, he resolved to send his son to Java. He embarked with about 5000 followers in 6 large and about 100 small vessels, and after a voyage of four months reached an island they supposed to be Java; but finding themselves mistaken, re-embarked, and finally settled at Matarem, in the center of the island they were seeking….The prince then found that men alone were wanting to make a great and flourishing state. He accordingly applied to Gujarat for assistance, when his father, delighted at his success, sent him reinforcement of 2000 people…From this period Java was known and celebrated as a kingdom; an extensive commerce was carried on with Gujarat and other countries, and the bay of Matarem was filled with adventurers from all parts.”


Yuktikalpataru gives a detailed classification of ships: They were two kinds: ordinary (Samanya) ships comprising those used in inland waters and special (vīsesa) meant for sea journeys. The largest of these called Manthara measured 120 cubits in length, 60 in breadth and 60 cubits in height. During the days of the composition of Yuktikalpataru, it appears that ship-building was highly advanced. Bhoja has advised the builders of the sea-faring ships not to join the plants with iron, as, in the case, the magnetic iron in sea water could expose the ship to danger. To avoid this risk, he suggests that planks of the bottoms should be held together with the help of substances other than iron.

According to Marco Polo an Indian ship could carry crews between 100 to 300. Out of regard for passenger convenience and comfort, the ships were well furnished and decorated. Gold, silver, copper and compound of all these substances were generally used for ornamentation and decoration.


The comparatively large size of the shipping on the Coromandel coast is indicated also by the Andhra coinage, on which a frequent symbol is a ship with two masts, apparently of considerable tonnage.

E. J. Rapson in his book, Coins of the Andhra Dynasty “Their maritime traffic, to which the ship type bears witness, is also attested by the large number of Roman coins which are found on the Cholamandalum coast.”

The shipping of the Andhra and Pallava coins doubtless survives in the modern “masula boats” at Madras:

J H Furneaux wrote in his book, Glimpses of India, p. 254:

“These masula boats are flat-bottomed barges constructed of planks sewn together with rope of cocoanut fiber, caulked with oakum, are able to withstand better than far more solidly built craft the shock of being landed on the sandy beach from the crest of a something breaker.”

Similar in a general way to the Andhra coin-symbol is the Gujarati ship carved in a bas-relief on the frieze on the Borobodor temple in Java. While dating from about 600 A.D. this vessel was probably not different from those of the 1st century, while the short broad sail with double yards is identical with those of the Egyptian Punt Expedition of the 15th century B.C.

Kalidasa, in the Raghuvamsa, tells of a tour of conquest of India, made by Raghy, the great-great-grandfather of Rama; starting from Ayodhya he went eastward to the ocean, having conquered the Bangalis, who trusted in their ships.”

The textile industry of both Trichinopoly and Tanjore has been famous from early times. There can be little doubt that some of the finest fabrics that reached the Roman world came from this kingdom of Chola. From this part of India, in the middle ages, came those gold-threaded embroideries which were to such demand in the Saracen markets.

Marco Polo called Chola “the kingdom of Maalabar called Soli, which is the best and noblest province in
India, and where the best pearls are found.”


"The Mauryan emperor Chandragupta, who ruled from 321 to 297 B.C had even at that time, an actual Board of Admiralty, with a Superintendent of Ships at its head." References to it can be found in Kautilya’s Arthasastra. From their voyages of conquest and trade, we can infer that although much later, the Pallavas, Pandyas and Cholas of South India must also have had an efficient naval organization. The merchants of Surat, who relied upon ships built by the Wadis of Bombay (who had not taken long to copy prevailing European designs) were particularly rich - one of them Virji Vora (who died in the beginning of the 18th century) left a fortune of 22 million gold francs. "According to certain travelers, Surat was then the most beautiful city of India. One small detail will give an idea of the unparalleled luxury that prevailed there: certain streets were paved with porcelain. Francois Martin in his Memoires calls it 'a real Babylon'.


The waves of Indian migration before breaking on the shore of America submerged the islands of the Indian Archipelago or Suvarnabhumi.

Colonel James Tod wrote: "The isles of the Archipelago were colonized by the Suryas (Surya-Vamsa Kshatriyas), whole mythological and heroic history is sculptured in their edifices and maintained in their writings."


Sir Mountstuart Elphinstone says: "The histories of Java give a distinct account of a numerous body of Hindus from Kalinga who landed on their island, civilized the inhabitants and established an era still subsisting, the first year of which fell in the seventh year before Christ."

"These pilgrims sailed from the Ganges to Ceylon, from Ceylon to Java and from Java to China in ships manned by crews professing the Brahmmanical religion."


Most of the sculptures show in splendid relief ships in full sail and scenes recalling the history of the colonization in Java by Indians in the earlier centuries of the Christian era. Of one of them E. B. Havell thus speaks in appreciation:

"The ship, magnificent in design and movement, is a masterpiece in itself. It tells more plainly than words the perils which the Prince of Gujarat and his companions encountered on the long and his companions encountered on the long and difficult voyages from the west coast of India. But these are over now. The sailors are hastening to furl the sails
and bring the ship to anchor."

Big ships were built. They could carry anywhere upwards from 500 men on the high seas. The Yuktialpataru classifies ships according to their sizes and shapes. The Rajavalliya says that the ship in which King Sinhaba of Bengal sent Prince Vijaya, accommodated full 700 passengers, and the ship in which Vijaya's Pandyan bride was brought over to Lanka carried 800 passengers on board. The ship in which Buddha in the Supparaka Bodhisat incarnation made his voyages from Bharukachha (Broach) to the "sea of the seven gems," carried 700 merchants besides himself. The Samuddha Vanija Jataka mentions a ship which accommodated one thousand carpenters.


Oldest Hindu Temple in Siam

One of the most remarkable site in the center of Siam, is Srideb (Crip-tep), where statues of Hindu deities bearing Sanskrit inscriptions of the 5th to 6th century have been discovered. The art of Srideb is of excellent quality and provides a link between Indian art and the art of Indo-China. Quaritch Wales considered Srideb the oldest temple in Indo-China.

The author R. K. Mookerji of Indian Shipping says:

"For full thirty centuries India stood out as the very heart of the old world and maintained her position as one of the foremost maritime countries. She had colonies in Pegu, in Cambodia, in Java in Sumatra, in Borneo and even in the countries of the Farther East as far as Japan. She had trading settlements in Southern China, in the Malayan Peninsula, in Arabia and in all the chief cities of Persia and all over the East Coast of Africa. She cultivated trade relations not only with the countries of Asia, but with the whole of the then known world, including the countries under the dominion of the Roman Empire, and both the East and West became the theatre of Indian commercial activity and gave scope of her naval energy and throbbing international life." According to R. Sewell, "There was trade both by sea and overland with Western Asia, Greece, Rome and Egypt as well as China and the East."


Anthony Christie remarks that: "although attempts have been made from time to time to minimize the extent of Indian influence upon Southeast Asia, the evidence for their importance is there for all to see and cannot be controverted."

Alastair Lamb observes that "by the opening of the Christian era the civilization of India had begun to spread across the bay of Bengal into both island and mainland Southeast Asia; and by the fifth century A.D. Indianized states, is to say, states organized along the traditional lines of Indian political theory and following the Hindu religion, had established themselves in many regions of Burma, Thailand, Indo-China, Malaysia, and Indonesia...The Indianization of Southeast Asia was a slow and gradual process. With a few exceptions, it was carried out by peaceful means and in consequence, as it developed, it did not build up a resistance to its further progress. Indian influence had no difficulty merging with indigenous cultures to create a series of distinct amalgams in which it is now virtually impossible to disentangle all the Indian from the non-Indian....it has now without a doubt guaranteed the Indian heritage a place in Southeast Asian civilization from which it cannot possibly be dislodged without the total destruction of the civilization."


In the middle of the 18th century, John Grose noted that at Surat the Indian ship-building industry was very well established, indeed, "They built incomparably the best ships in the world for duration", and of all sizes with a capacity of over a thousand tons. Their design appeared to him to be a "a bit clumsy" but their durability soundly impressed him. They lasted "for a century".

Lord Grenville mentions, in this connection, a ship built in Surat which continued to navigate up the Red
Sea from 1702 when it was first mentioned in Dutch letters as “the old ships” up to the year 1700.” Grenville also noted that ships of war and merchandise “not exceeding 500 tons” were being built with facility, convenience and cheapness at the ports of Coringa and Narsapare.

Dr. H. Scott sent samples of dammer to London, as this vegetable substance was used by the Indians to line the bottom of their ships; he thought it would be a good substitute “in this country for the materials which are brought from the northern nations for our navy…There can be no doubt that you would find dammer in this way an excellent substitute for pitch and tar and for many purposes much superior to them.”

source: Decolonizing History: Technology and Culture in India, China and the West 1492 to the Present Day - By Claude Alvares  p. 68-69).

The largest ships carried 10,000 talents or 250 tons. Ajanta painting of a later date depict horses and elephants aboard the ship which carried Prince Vijaya to Sri Lanka.

Megasthenes informs us that there was a class of ship-builders among the artisans who were salaried public servants and not permitted to work for any private persons. The ships built by them in royal shipyards were, however, let out on hire both to those who undertook voyages and to professional merchants. The fact that shipping and sea-trade received adequate attention under the Mauryas is made clear by the reference to the Superintendent of Ships in the Arthasastras. The Periplus of the Erythraean Sea, a marine guidebook of 1st century A.D. by an anonymous Graeco-Egyptian takes note of several ports on the Indian coast. Beginning from the mouth of the Sindh, notice is taken of Barbaricum. Then follows Barygaza, ie. modern Broach. In Dachinabades two sea ports are mentioned namely, Supara and Calliena, both situated near Bombay (Mumbai). Muziris was the most important port of Kerala. It gained prominence after the discovery of the monsoons and was always crowded with a large number of Greek and Arab ships. Nelceynda was another port of Kerala located 500 stadia or 50 miles south of Muzaris. Near Kanya Kumari also there were two ports named Paralia and Balita. All these ports were well looked after either by the local or the imperial rulers of India. The ports served as the chief source of state revenue. (For more information refer to chapter on India and Egypt)
Chinese travelers like Fa-hsien, Hsuang-tsang and I-tsing invariably speak of Tamralipti, the main outlet for north Indians who wanted to travel to Southeast Asia via Lanka or by a more direct route. From the volume of exports and imports and the variety of goods exchanged it appears that considerable facilities were available at all the ports. Light houses were provided, remains of some are extant. Late Sinhalese sources speak of an artificial harbor made during the time of Karikal Chola (1st century A.D).

According to the Divyavadana the desire to amass wealth without making a sea voyage is like an effort to fill a pitcher with a few drops.

The work also records that the captain of a ship reminded the passengers that there were more perils than pleasure in seafaring. Many went out but few came back and that it was rare to sail six times successfully across the ocean. This narration points out the hazards of deep sea sailing but there is no scope for suggesting that the Indians hated the sea. The Jatakas, the Manimekhalai, Raghuvamsa, Tilakamanjari, Kathasaritsagara, etc. abound in tales of the sea as exciting as they are terrifying and point to the Indians familiarity with, and lure of the sea. The Yuktikalapataru of Bhoja (11th century A.D.) affirms that the king who has boats, wins war, and the king who through ignorance does not keep boats, loses his prestige, vigor and treasury. This text also supplies details regarding the construction of ships. (For more please refer to chapter on War in Ancient India). The Jaina texts like the Gyatadharma Avasyaka-chou-ko-ta'an (1122 A.D.) mentions large ships from Kalinga that carried several hundred men and smaller ones which carried hundred or more men.

Marco Polo found Socotra a prey to multitudes of Hindu pirates who encamped there and sold off their booty. He speaks of Aden as a "port to which many ships of India come with their cargo." He also gives details regarding the size, form fittings and mode of repairing of Indian ships. He remarks about the strength of Indian ships and says that they were built to last a hundred years. Marco Polo saw ships so large as to require a crew of 300 men, and other ships that were manned by crews of 200 and 150 men. Friar Odoric (A.D. 1321) traveled in a ship owned by a Gujarati Rajput that carried a load of 700 people.

Historian Vincent Smith remarks: "This is a confirmation of the account we have of those large ships from the time of Agatharcides down to the 16th century, the ships of Gujarat which traversed the Indian ocean in all ages."

There is an even earlier mention of Rajput ships sailing between Sumena (Somnath) and China in Yule's Cathay. Abd-er-Razzak (A.D. 1442) informs us that "from Calicut vessels continually sailing for Mecca, which are for the most part laden with pepper. The inhabitants of Calicut are adventurous sailors, and pirates do not dare to attack the vessels of Calicut." Niccolo Conti (15th century) acknowledged that the "natives of India build some ships larger than ours." In 1510 Albuquerque met Hindu sailors and traders in Java and Malacca.

Indian land-lubbery was not synchronous with the coming of Islam, nor with the Middle Ages. The Bay of Bengal was a Chola lake in the 11th century. A ship built at an Indian dockyard is said to have been used in the Napoleonic wars. In fact Indian navigational expertise and enthusiasm seems to have suffered in direct proportion to the British economic policies reducing India to the position of a mere supplier of raw materials. People whose ships had trades with the Mediterranean world in the west, and with the lands of gold in the east now considered themselves heroic if they made it to England to land at Lincoln's Inn!

Historian Radha Kumud Mookerji

"We now know that many ports on both Eastern and Western Coast had navigational and trade links with almost all Continents of the world. There are many natural and technological reasons for this. Apart from Mathematics and Astronomy, India had excellent manufacturing skills in textile, metal works and paints. India had abundant supply of Timber. Indian-built ships were superior as they were built of Teak which resists the effect of salt water and weather for a very long time. Lieut. Col. A Walker's paper "Considerations of the affairs of India" written in 1811 had excellent remarks on Bombay-built ships. He notes, "situated as she is between the forests of Malabar and Gujarat, she receives supplies of timber with every wind that blows." Further he says, "it is calculated that every ship in the Navy of Great Britain is renewed every twelve years. It is well known that teakwood built ships last fifty years and upwards. Many ships Bombay-built after running fourteen or fifteen years have been brought into the Navy and were considered as stronger as ever. The Sir Edward Hughes performed, I believe, eight voyages as an Indiaman before she was purchased for the Navy. No Europe-built Indiaman is capable of going more than six voyages with safety." He has also further noted that Bombay-built ships are at least one-fourth cheaper than those built in the docks of England.


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Products Traded

Indian Exports

Food: Rice, Wheat, Sugar,
Spices: Turmeric, Pepper, Cinnamon, Nard, Spikenard, Costus, Bdellium, Aloes, Indigo, Lycioum, Sesame oil, Cotton, Silk
Animals: Lion, Tiger, Parrot, Hides and furs, skins, Horns and tails, wool, Ivory, Tortoise shells, Pearls, Lac, Log of Ebony, Teakwood, Blackwood, Sandalwood, Bhurja Leaves, Bamboo
Mineral: Diamond, Agate and Carnelian, Sapphire, Quartz, Crystal, Beryls, Lapislazuli, Garnet, Asbestos, Turquoise, Copper.

Indian Imports

Sesame, Flax and Linen, Parchment wine, gold, Horse, Peach and apricot, sweet clover, silver, tin, copper, lead, ruby, topaz, glass, corals, amber,

Teakwood

It is the best building timber as it can resist the action of water. Theophrastos mentions that ship builders built ships of this wood of India in the Persian Gulf. Town of Siraf on the Persian Gulf was entirely built of this wood and in 1811 teak was found in the walls of a Persian palace near Baghdad (7th century B.C.E.) The Susa inscription of Darius clearly mentions the import of teakwood in Persia. The Periplus states that large vessels were regularly sent from Barygaza loaded with timbers of teakwood to Oman. Realizing the export importance of teakwood Kautilya made provision for the Superintendent for forest produce.


State patronage with the strength of the organized guilds greatly increased the prosperity of the country. Megasthenes records how prices were regulated by state-trading. The idea was that staple commodities were bought when they were cheap and released when the prices were high, just to bring the prices down. This was really a measure far ahead of its time. As historian A. L. Basham points out:

"It is striking that ancient Indian political theorists anticipated by over 2000 years the plans put forward by the Food and Agriculture Organization of the United Nations for maintaining a stable level of prices of staple commodities on a world-wide scale.

Land Trade

The land trade of India extended to China, Turkistan, Persia, Babylon and sometimes also to Egypt, Greece and Rome. Historian Vincent Smith writes:

"The country in the north with which India traded was China." "The name China is of Hindu origin and comes to us from India."


The author of Periplus, after describing the geographical position of China, says: "Silk was imported from that country, but the persons engaged in this trade were the Indians themselves." It may, however, be added, in the words of an English critic: "It is not improbable that silk was also indigenous in India even at a remote epoch."

(source: Asiatic Researches Volume II. p. 286. Also refer to Schlegel, Berlin Calendar p. 9 1829).

E. B. Havell (1861-1934) principal to the Madras College of Art in the 1890s, says: "From the sea ports of western and eastern coasts India at this time also sent streams of colonists, priests and craftsman all over Southern Asia, Ceylon, Siam and far distant Cambodia. Through China and Korea Indian art entered Japan about the middle of the sixth century. About 603 A.D. Indian colonists from Gujarat brought Indian art in Java and at Borobudur in the 8th and 9th centuries. Indian sculpture achieved its greatest triumphs."

As regards the trade with central and northern Asia, we are told that "the Indians make expeditions for commercial purposes into the golden desert Ideste, desert of Cobi (Gobi) in armed companies of a thousand or two thousand men. But according to report, they do not return home for three or four years. The Takhti, Suleman, or the stone tower mentioned by Ptolemy and Ctesias was the starting point for Hindu merchants who went to China.

India traded with Europe by sea as well as by land. Foreign trade of a nation presupposes development of its internal trade. Specially is this true of a large country like India, with varied products, vast population and high civilization.

Professor Lassen of Paris considers it "remarkable that the Hindus themselves discovered the rich, luxurious character of India's products; many of them are produced in other countries, but remained unnoticed until sought for by foreigners, whereas the most ancient Hindus had a keen enjoyment in articles of state and luxury. Rajas and other rich people delighted in sagacious elephants, swift horses, splendid peacocks, golden decorations, exquisite perfumes, Pungent peppers, ivory, pearls, games etc. and consequently caravans were in continued requisition to carry down these innumerable other matters between the north and the south and the west and east of their vast and varied country. These caravans, it is conjectured, were met at border stations and about ports by western caravans or ships bound to or from Tyre and Egypt, or to or from the Persian Gulf and Red Sea."
Professor Heeran remarks, "The internal trade of India could not have been inconsiderable, as it was in a certain degree prescribed by nature herself." Royal roads were constructed all over the country from east to west and from north to south, in addition to the numerable rivers, along the banks of which considerable commerce was carried on.

The Encyclopedia Britannica says:

"It (India) exported its most valuable produce, its diamonds, its silks, and its costly manufactures. The country which abounded in those expensive luxuries, was naturally reputed to be the seat of immense riches, and every romantic tale of its felicity and glory was readily believed. In the Middle Ages, an extensive commerce with India was still maintained through the ports of Egypt and the Red Sea; and its precious produce imported into Europe by the merchants of Venice, confirmed the popular opinion of its high refinement and its vast wealth."

Foreign commerce on such a gigantic scale was one of the principle causes of the immense riches of ancient India.

The Hindu Period in The Indian Ocean: A Naval Power

The spread of Hindu thought was an intellectual conquest, not an exchange of ideas. The Far East counted for nothing in her internal history, doubtless because China was too distant and the other countries had no special culture of their own. Still it is remarkable that whereas many Hindu missionaries preached Buddhism in China, the idea of making Confucianism known to India seems never to have entered the head of any Chinese. There was never any question of colonizing or civilizing rude races.

Manu, the great lawgiver, provides in his Code, for shipping and port dues, while Kautalya's Arthasastra, an authoritative work on administration which was written in the fourth century B.C. lays down the functions of the Port Commissioner and Harbor Master. The Board of Shipping was one of the six departments of the Mauryan Emperors. At the head of it was a Minister who dealt with all matters relating to shipping, including the navigation of the oceans. There under him a staff of commissioners, harbor masters, etc. whose duty it was to look after ships in distress. As the Mauryan ports were mainly on the coast of the Bay of Bengal, this is conclusive evidence of the growth of trade and shipping in that sea as early as the fourth century B.C.

We have also evidence of regular maritime traffic by the Hindus in the South China seas before the Christian era. At the beginning of that period both Chinese records and the Greek geographer Ptolemy record the existence of Indian colonies in the present territory of South east Asia.

Sir Charles Elliot (1862-1931), British diplomat and colonial administrator, a famous scholar and linguist of Oxford, observed on his book Hinduism and Buddhism observes:

"This outgrowing of Indian influence, so long continued and so wide in extent, was naturally not the result of any one impulse. At no time can we see in India any passion of discovery, any fever of conquest such as possessed Europe when the New world and the route to the East round the Cape were discovered. India's expansion was slow, generally peaceful and attracted little attention at home. The Hindus produced no Tamerlanes or Babers, but a series of expeditions, spread over long ages, but still not few in number, carried them to such distant goals as Java and Camboja.

We have also historical evidence of some of the continental powers using their naval power for purposes of conquest. Pulikesin II the Chalukya king who reigned in the first half of the seventh century led a naval expedition of considerable size. The Zamorin of Calicut gloated in the title of the Lord of the Mountain and the Ocean, and one of the first writs he issued after coronation was to permit the usual navigation of the
sea. The Pandyas, Cholas and others also maintained powerful navies, while the Rulers of Malabar exercised naval sway over the seas of the Western coast.

The Hindu Period in The Indian Ocean
(source: India and the Indian Ocean - By K. M. Panikkar)

From the fifth century to the tenth the command of the Malacca Straits was in the hands of a great Indian naval power, based on Sumatra known to history as the Sri Vijaya Empire. This State included much of Peninsular Malaya, Sumatra and the Western half of Java besides numerous island principalities. I'Tsing who resided for some years in that Kingdom says that the King possessed numerous ships which sailed regularly between India and Sri Vijaya as also between Sumatra and China.

The Sri Vijaya Kings maintained a powerful navy which swept the sea of pirates and corsairs. Their naval power, well attested by their continuous raids on the coasts of Champa and Annam, is recorded both in local inscriptions and in Chinese annals, (e.g Po Nagar Stelae inscription of King Satya Varman 784 A.D. and in Yang Tiku inscription of Indra Varman I, dated 787). With the Straits of Malacca firmly under their control and with their authority extending over the far flung group of islands, the Sri Vijaya Kings were in a position to enforce their rule over the Indian waves. Further, they were also closely connected with the Indian Kingdoms of the Eastern side of the Bay of Bengal especially with the Kalinga monarchs of Orissa.

Till the end of the tenth century, that is, for a period of nearly 500 years, the Sri Vijaya Kings were the Lords of the Ocean. But in 1007 the Chola Emperor Rajendra fitted out a powerful navy and challenged the might of Sri Vijaya. he not only defeated the opposing navy, but captured Kedah and established the Chola power on the Malaya Peninsula. This hundred year war was of great importance for it weakened the Sri Vijaya power. Chau Ju Kua, the Imperial Chinese Inspector of Foreign Trade, in his work entitled Chu Fau Chi written in 1225 states that Sri Vijaya was not merely a great emporium of trade, but controlled the Straits of Malacca and thus was able to dominate the sea trade to China with the west. All ships passing through the Straits had to call at the capital and the maritime administration kept a close watch on traffic through the lane.

As regards to Sumatra, the Bombay Gazateer says: "The Hindu settlements of Sumatra was almost entirely from the east coast of India, and that Bengal, Orissa and Masulipatam had a large share in
Colonizing both Java and Cambodia cannot be doubted."

Charles Coleman wrote: "Mr. Anderson, in his account of his mission to the coast of that island (Sumatra) has, however, stated that he discovered at Jambi the remains of an ancient Hindu temple of considerable dimensions, and near the spot various mutilated figures, which would appear to clearly indicate the former existence of the worship of the Vedantic philosophy."


Francois Balazar Solvyns (1760-1824) a French maritime painter, wrote a book titled "Les Hindous" (tome troisieme) in 1811. He lived in Calcutta from 1791-1803 and he remarked:

"In ancient times, the Indians excelled in the art of constructing vessels, and the present Hindus can in this respect still offer models to Europe-so much so that the English, attentive to everything which relates to naval architecture, have borrowed from the Hindus many improvement which they have adopted with success to their own shipping.... The Indian vessels unite elegance and utility and are models of patience and fine workmanship."

He has described some of the typical Indian vessels. A Pinnace or Yacht was a strongly masted ship, divided into two or three apartments, one for company, another for the beds, and a third as a cabinet, besides a place called varandah forwards for the servants. Balesore, the principal entrance of the Hugli, is described as being frequented by different sort of vessels, and particularly by large ships from Bombay, Surat, and other parts of the western coast. The vessels from the Ganges were called Schooners, which were very well fitted out and "able to make a voyage to Europe." their pilots being very skilful. The Grab was a ship with three masts, a pointed prow, and a bowsprit, its crew consisting of a Nakhoda or captain and a few khelasses or sailors. The grabs were built at Bombay, their pointed prow signifying Hindu construction. The Bangles were the largest Indian boats, some of them carrying four thousand or five thousand maunds of rice. Brigs were ships that came from the coast of Coromandel and Malabar, bringing to Calcutta the produce of those countries. To the coast of Coromandel (Cholamandel) also belonged the Dhoni, with one mast, resembling a sloop. Its deck consisted of a few planks fastened on each side. It was badly rigged. Pattooas, lastly, were those ships that differed from other vessels by their being clincher-built; "the boards are one upon the other, fastened by little pieces of iron in the form
Surprisingly, many earlier western traders and travelers have expressed the same views. Madapollum was a flourishing shipping center. Thomas Bowrey, an English traveler who visited India during 1669-79, observes, "many English merchants and others have their ships and vessels yearly built (at Madapollum). Here is the best and well grown timber in sufficient plenty, the best iron upon the coast, any sort of ironwork is ingeniously performed by the natives, as spikes, bolts, anchors, and the like. Very expert master-builders there are several here, they build very well, and launch with as much discretion as I have seen in any part of the world. They have an excellent way of making shrouds, stays, or any other rigging for ships".

Alain Danielou (1907-1994) son of French aristocracy, author of numerous books on philosophy, religion, history and arts of India has written:

"India's naval dockyards, which belonged to the state, were famous throughout history. The sailors were paid by the state, and the admiral of the fleet hired the ships and crew to tradesmen for transporting goods and passengers. When the British annexed the country much later on, they utilized the Indian
dockyards - which were much better organized then those in the West - to build most of the ships for the British navy, for as long as ships were made of wood."

(source: A Brief History of India - By Alain Danielou p. 106).

During the same period a great impetus was given to Indian shipping and maritime enterprise by the great Shivaji, the great Maratha leader. Shivaji, who liberally patronized the shipbuilding industry but the beginnings of the Maratha navy were laid a little earlier. In 1640 Shahji Bhonsle was able to achieve a naval victory over the Portuguese off Reradanda. Shahji was helped in his expedition by Tukoji, whose son, the famous Kanhoji Angray, occupied such an important position in the Maratha navy of the times. Under Shivaji the growth of the Maratha was accompanied by the formation of a formidable fleet. Sivaji believed in the doctrine Jalaim jasya, valaim tasya and so proceeded to organize the Maratha navy on sound lines. In 1698 Kanhoji Angray succeeded to the command of the Maratha navy with the title of Dariya Saranga. Angray soon became a menace to the European traders along the west coast and in 1707 his ship attacked the frigate Bombay, which was blown up after a brief engagement. The career of Angray was one long series of naval exploits and achievements rare in the annals of Indian maritime activity but unfortunately "dismissed in a few words by our Indian historians."


The following account of Orme, describing the features of the Maratha ships and Angrey:

" The piracy which Angray exercised upon ships of all nations indifferently who did not purchase his passes, rendered him every day more and more powerful. His fleet consists of grabs and gallivats, vessels peculiar to the Malabar coast..."

(source: Bombay Gazetteer, Volume I part ii p. 89).

In the days of the sailing ships and oaken vessels, the naval engineering of the Hindus was efficient and advanced enough to be drawn upon with confidence for European shipping. At Madapollum, for example, on the Madras coast, many English merchants used to have their vessels yearly built. The Hindu ship architects could ingeniously perform all sorts of iron works, e.g., spikes, bolts, anchors, etc. "Very expert master-builders there are several here," says the English traveler, Thomas Bowrey in his Geographical Account of Countries Round the Bay of Bengal (1669-1675); "they build very well, and launch with as much discretion as I have seen in any part of the world. They have an excellent way of making shrouds, stays, or any other riggings for ship."

Writing even as late as 1789, on the eve of the Industrial Revolution in Europe, Solvyns, the French traveler, could still recommend, in his Les Hindous (Vol. III, 1811), the Hindu method of uniting the planks are "not unworthy of the imitation of Europeans." He says, "In ancient times the Hindus excelled in the art of constructing vessels, and the present Hindus can in this respect still offer models to Europe."

In the building of the boat the Hindus began by choosing a large piece of timber which they bent as they pleased. To the two ends of this they attached another piece thicker than it, and covered this simple frame with planks; "but they have a particular manner of joining these plants to each other, by flat cramps with two points which enter the boards to be joined, and use common nails only to join the plants to the knee. For the sides of the boat they have pieces of wood which out pass the planks. This method is as solid as it is simple."

The Portuguese "imitated" the pointed prow in their Indian ships. This was a characteristic feature of the grab, a Hindu ship with three masts. The industrial and material culture of Old India was thus sufficiently vital to influence contemporary Europe at the threshold of the 19th century civilization. The tradition is reported also by old American sea-captains that fishing boats like the sloop, yawl, cutter, etc. so common in the United States waters were modeled in the "colonial period" on Hindu patterns.

(source: Creative India - By Benoy Kumar Sarkar p. 105).

Francois Balazar Solvyns (1760-1824) a French maritime painter, has made the following observation in his book, "Les Hindous"
Introducing the 40 or so sketches of boats and river vessels in use in Northern India in the 1790s, he observes, "the English, attentive to everything which relates to naval architecture, have borrowed from the Hindoos many improvements which they have adapted with success to their own shipping."

Commenting on Indian rowing an early eighteenth century observer remarked: "Their water-men row after a different manner from ours. They move the oar with their feet, and their hands serve instead of the hypomochlion, or roller on which it turns."

Mahartha Grab and Gallivat ships attacking an English ship  
(source: History of Indian Shipping - By Radha Kumud Mukerjee).

Har Bilas Sarda author of Hindu Superiority (1906) wrote:

"They built ships, navigated the sea, and held in their hands all the threads of international commerce, whether carried on over land or by sea."

Colonel James Tod author of Annals and Antiquities of Rajasthan: or the Central and Western Rajput States of India ISBN 8120612892 says:

"The Hindus of remote ages possessed great naval power."


From the teak forests, which were numerous along the western coasts, the Indians built their ships. Bishop Reginald Heber wrote in 1824, ships built by native artisans are notoriously as good as any which sail from London or Liverpool.


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"...an Indian naval pilot, named Kanha, was hired by Vasco da Gama to take him to India. Contrary to European portrayals that Indians knew only coastal navigation, deep-sea shipping had existed in India. Indian ships had been sailing to islands such as the Andamans, Lakshdweep and Maldives, around 2,000 years ago. Kautiliya's shastras describe the times that are good and bad for seafaring. In the medieval period, Arab sailors purchased their boats in India. The Portuguese also continued to get their boats from India, and not from Europe. Shipbuilding and exporting was a major Indian industry, until the British banned it. There is extensive archival material on the Indian Ocean trade in Greek, Roman, and Southeast Asian sources."

(source: History of Indian Science & Technology).

India became the first power to defeat a European power in a naval battle - The Battle of Colachel in 1742 CE.

A dramatic and virtually unknown past, in an area of bucolic calm surrounded by spectacular hills: that is Colachel, a name that should be better known to us. For this is where, in 1741, an extraordinary event took place -- the Battle of Colachel. For the first, and perhaps the only time in Indian history, an Indian kingdom defeated a European naval force. The ruler of Travancore, Marthanda Varma, routed an invading Dutch fleet; the Dutch commander, Delannoy, joined the Travancore army and served for decades; the Dutch never recovered from this debacle and were never again a colonial threat to India.
The ruler of Travancore, Marthanda Varma, routed an invading Dutch fleet; the Dutch commander, Delannoy, joined the Travancore army and served for decades; the Dutch never recovered from this debacle and were never again a colonial threat to India.

The Battle of Colachel in 1742 CE, where Marthanda Varma of Travancore crushed a Dutch expeditionary fleet near Kanyakumari. The defeat was so total that the Dutch captain, Delannoy, joined the Travancore forces and served loyally for 35 years--and his tomb is still in a coastal fort there. So it wasn't the Japanese in the Yellow Sea in 1905 under Admiral Tojo who were the first Asian power to defeat a European power in a naval battle--it was little Travancore. The Portuguese and the Dutch were trying to gain political power in India at that time, Marthanda Varma defeated the Dutch in 1741. He was an able ruler. He established peace in his country - Travancore. It was a remarkable achievement for a small princely state.


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Retrospect

Dynasty after dynasty succeeded to the position of paramount power in the land, but the course of commerce ran smooth through all these changes. This is shown on the one hand, unmistakably by the books of Roman writers with their remarkably accurate details regarding Indian exports and imports, and harbors, and on the other hand, by the unimpeachable testimony of many finds of Roman coins both in Northern and Southern India.

A consideration of the kind of things which India sent abroad in exchange for the things she imported and a glance at the list of Indian exports and imports such as that given in that most interesting work on oriental commerce, the Periplus of the Erythraean Sea, will reveal certain peculiar features regarding the economic system of ancient India, to which has been traced the proverbial "wealth of Ind" by many scholars. As remarked by Major J. B. Keith, in an article in the Asiatic Quarterly Review (July, 1910), "the old prosperity of India was based on the sound principle which is, that after clothing and feeding your own people, then of your surplus abundance give to to the stranger." The result was the development of an external trade to which we owe, on the one hand, the great cities like Baalbek and Palmyra in the desert, and, on the other hand, "those great monuments of art, which India was enabled to erect after clothing and feeding her own people." And of the many satrapies of Darius, India was the only one, which could afford to pay her to tribute in gold to him. Finally, we should not miss the point of Pliny's famous complaint about allowing India to find a market for her superfluous manufactured luxuries in Rome, and thereby suck out her wealth and drain her of gold.
It may be noted that it was India's wonderful achievement in applied chemistry more than her skill in handicraft that enabled India to command for more than a thousand years (from Pliny to Tavernier) the markets of the East as well as the West, and secured to her an easy and universally recognized pre-eminence among the nations of the world in exports and manufactures. Some of the Indian discoveries in chemical arts and manufactures are indicated as early as the 6th century A.D. by Varahamihira in the Brihat-Samhita.

Besides the trade with the West generally, there was also developed along with it a trade with the East. The West alone could not absorb the entire maritime activity of India, which found another vent in a regular traffic in the Eastern waters between Bengal and Ceylon, Kalinga, and China and Suvarnabhumi, and a complete navigation, in fact, of the Bay of Bengal and the Indian Ocean and laid the foundation of a Greater India.

"Almost from the dawn of her history, it has been the privilege of India to carry the torch of her unique ideals to distant lands and inspire them to noble adventures, both in the inner and outer fields of human activity. The culture of India has been like a sky-high tower of light shedding its lustre on the surrounding countries, even on those at the far ends of the earth, illuminating the mind of man, exalting his heart, ennobling his life and above all beckoning him on the realization of the highest spiritual destiny."

(source: The Vision of India - By Sisir Kumar Mitra ASIN 8124200068 p. 161).

Conclusion

Indian shipping has thus had a long and brilliant history covering a period of about five millennia from the very dawn of India's civilization in the Indus Valley. Both Hindu and Buddhistic texts are thus replete with references to the sea-borne trade of India that directly and indirectly demonstrate the existence of a national shipping and shipbuilding. It was one of the great national key industry of India. Indeed, all the evidence available clearly shows that for full thirty centuries India stood at the very heart of the commercial world, cultivating trade relations successively with the Phoenicians, Jews, Assyrians, Greeks, Egyptians, and Romans in ancient times, and Turks, Venetians, Portuguese, Dutch and English in modern times.

Professor Basham is not the only scholar to have underplayed India's achievements with regard to ship-building, navigation, and sea travel. The colonialist bias against Indian culture is fully matched by the Indian 'Marxist' bias against culture.

For example, Marxist historian, B.S. Sharma's oversimplification of facts for children plays havoc with the subject matter of history. He writes: "In early times the ancient Indians obtained some knowledge of navigation, and they contributed to the craft of ship-building. But since political powers had their seats of power far away from the coast and since there was no danger from the sea-side, the ancient Indian princes did not pay any particular attention to navigation." The italics clearly manifest Sharma's negative treatment of India's accomplishments whereas the obliteration of Pallavas and Cholas from his memory - important political power which were not far away from the coast - divulges his northern, perhaps Aryan and Brahmin bias.

There is enough evidence to prove that Indians maintained their maritime activity throughout the ancient and mediaeval periods, naturally with variations in its extent and excellence, over such a long period of time. Both Basham and Marxist historians of India have presented untruth, and half truth as truth.

Non-Indian scholars, especially modern writers of secondary works, tend to play down India's importance in the evolution of Southeast Asian civilization. The eastward expansion of Hindu civilization has not yet been fully traced.
George Coedes, French historian and author of *Indianized State of South East Asia*, has said: "I am convinced that such research will reveal numerous facts which will indicate a much deeper Indianization of the mass of the population than the sociologists will at present admit."

Sylvain Levi, French art historian, has shown how references in the Ramayana, Mahabharata, Mahaniddesa, and Brihat-Katha that the products of Burma and Malaya Peninsula were known to Indian merchants and sailors and also some of its ports such as Suvanakudya, Suvanabhumi, Takkolam, Tamin and Javam from at least first century A.D.

(source: *Ancient India - By V. D. Mahajan* p. 752-753).

That Indian traders and settlers repeatedly undertook journeys to Southeast Asia, despite the hazards and perils involved, speaks well for their physical prowess, courage, and determination, even if allowance for the pull of profit is made.

Historian K. M. Panikkar, who in his brilliant exposition, *India and the Indian Ocean*, speaks about the ‘influence of the Indian Ocean on the shaping of Indian history.’ For Panikkar, the geographical ‘imperative’ of the Indian Ocean – and indeed the Himalaya in the North – has conditioned and shaped the history and civilization of this subcontinent. ‘The importance of geographical path on the development of history is only now receiving wide and general recognition,’ he says.

Nand Kishore Kumar wonders:

"It will be hard to find a secondary source from any part of the world which will endorse Professor Basham's view. Indeed it is difficult to understand, how in view of incontrovertible primary evidence proving Indian maritime activity, extensive respect of space and time-span, intensive in terms of variety, tonnage and value, and altogether of far reaching consequences in material as well as ideational spheres, Professor Basham could have belittled that is when he found it worth a mention at all - this aspect of Indian civilization. Is it because it is hurtful to the pride of a native of the British Isles which conquered the world through military strength but cannot compare with its erstwhile colony which for over a millennium dominated the world through civilized means?"


Dr. Vincent Smith has remarked, "India suffers today, in the estimation of the world, more through the world's ignorance of the achievements of the heroes of Indian history than through the absence or insignificance of such achievement."


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U.S. adopts Indian Catamaran technology

Washington May 28 2003: The United States adopted ancient Indian catamaran-making technology to construct fast ships which were used with dramatic effect in the Iraq war, says a media report.

Among the equipment the Americans used to win the Iraq war were 100-feet catamaran ships to ferry tanks and ammunition from Qatar to Kuwait.

The ships, built with technology adapted from ancient Tamil methods to make catamarans, can
travel over 2,500 kms in less than 48 hours, twice the speed of the regular cargo ships, and carry
enough equipment to support about 5,000 soldiers, the Wall Street Journal reported yesterday.

Having a shallow draft, the boats can unload in rudimentary ports, allowing troops to land closer to the
fight. — PTI

(source: [U.S. adopts Indian Catamaran technology](https://www.hindu.com) - hindu.com and
[tribune.com](https://tribune.com)).

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Sailing down the seas of history

Charting the coastline from Mumbai to the very end of Gujarat, where India ends and Pakistan begins, the
1,000 nautical mile voyage that will end on February 11 is in preparation for another, more ambitious voyage.
The sailors, calling themselves the Maritime Exploration and Research Group, is getting ready to follow the
path of ancient Indian mariners from south India all the way to Indonesia.

Inspired by the Chola kings of the 11th century, who discovered the present-day Indonesian islands of
Sumatra and Bali, the group is preparing to replicate the feat using traditional instruments and a boat
resembling the vessels of yore.

Called the Simulation of Chola Navigation Techniques, the forthcoming expedition will attempt to cover the
distance between Nagapatnam in southern India and the Indonesian islands. “The expedition will aim to show
that our ancient seafarers were in no way inferior to their Western counterparts,” said B. Arunachalam, a
researcher who is the moving spirit behind the expedition. The expedition has cost the team members nearly
Rs.100,000 but they have received substantial assistance from the Indian Navy.

(source: [Sailing down the seas of history](https://newindpress.com) - newindpress.com).

Books used for this chapter:

1. Bias in Indian Historiography - Edited By Devahuti
   the Earliest Times - By R. K. Mookerjee
3. Foreign Trade and Commerce in Ancient India - By Prakash Charan Prasad

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Did You Know?

Close resemblance of Easter Island and Indus Valley Script

The Hindu and Buddhist cultures in Indonesia gradually extended to Polynesia through tradesmen and
preachers of Indonesia some of whom might have settled down in Polynesia and were called the Arii or
the Aryans. Dr. E. S. Cragihill Handy describes the story of Polynesian culture as "a mere index to Indian
history."

Author of the 'Ancient Voyagers in Polynesia' is of opinion that Polynesian ancestors came from the west
through the waters between Buru and Yap to eastern New Guinea and the Melanesian island and thence
to Polynesia by a slow succession of West-East voyage.

The hypothesis of Indian contact with the Polynesians is strengthened by the discovery of the
Easter Island scripts which closely resemble the scripts of the Indus Valley civilization.
William Ellis, the well-known missionary and author of Polynesian Researches, has commented on the coincidences in language, mythology, etc. of the Polynesians with those of the Hindus, the natives of Madagascar, and the Americans. Bishop Heber, an authority on the Hindus stated "that many things which he saw among the inhabitants of India reminded him of the plates in Cook's Voyages". Recently, an Indian scholar, B. C. Chhabra, in his Vestiges of Indian Culture in Hawaii, has noticed certain resemblances between the symbols found in the petroglyphs from the Hawaiian Islands and those on the Harappan seals. Some of the symbols in the petroglyphs are described as akin to early Brahmi script.

The Meitei word 'Atea' of Manipur which means 'All Powerful Sky God' is found in New Zealand and some other Polynesian island with out any change in sound or meaning. In Hawaii island, 'Atea' has become 'Wakea.'

Edward Tregear, former President of the Polynesian Society, is cited by William Churchill, "Polynesian Wandering" (Carnegie Institution, 1911), p. 20 as stating the generally accepted view of Polynesian scholars to be that the Polynesians came from India, or from central Asia through India.

Characters similar to those on the Indus seals have also been found on tablets excavated from Easter Island.

This discovery has presented a difficult problem for the pre-historian. It is not known if the two belong to a common source, if one provided the model for the other, or if the similarity is purely accidental due to in accuracies of drawing. If the Indus models traveled about 13,000 miles eastward, it seems strange that the characters should have remained unaltered, because figures generally do not remain identical during prolonged transmission. And, if the seals were actually made in the Indus Valley and taken to the Easter Island, what is the explanation for the difference in arrangement between the two groups of seals?
(source: *Indian and World Civilization - By D. P. Singhal* p. 4).

(For more on this topic, please refer to the chapter *India on Pacific Waves*?)