

# Ancient India, West Africa & the Sea

by Harry Bourne

## WHY IT COULDN'T BE DONE

Some 40 years ago, my interest in Celts led to their maritime history being looked at and then on to that of elsewhere, especially parts of Africa. This has led to a series of papers by this writer on [Clarence@starry-eye.com](mailto:Clarence@starry-eye.com) plus phoenicia.org.com that have proposed various groups were rather more in maritime contact than it might seem at first sight. On the other hand, the pattern of most of the rest of this series is repeated here and we stay with that pattern by first giving the negatives. The dates given here are given in approximated before present (B.P.) form but those of after c. 500 A.D. are mainly given as Anno Domini (= A.D.)

Aspects of Chinese maritime history have been looked at in the book entitled "1421" by Gavin Maxwell (2003). This particularly means the ships of the so-called "treasure-fleet" led by Zheng-He (= Cheng-Ho). Various online sources give the dimensions of Zheng-Ho's (15<sup>th</sup> c. Chinese) flagship as 400 ft. long and 160 ft. wide; Noah's Ark as c. 450 ft. and c. 75 ft. and the Santa Maria of Christopher Columbus (15<sup>th</sup>/16<sup>th</sup> c.) is guesstimated at c. 85 ft. long and 25/30 ft. wide. The question has to be whether these ships ever existed. It is also noted that Confucianism/Neo-Confucianism had an almost religious disdain for seafaring.

More massive ships are described in the Sanskrit tales of ancient India but are dismissed by Robert Dick-Read (Phantom Voyagers 2005; Indonesia & Af.: questioning the origins of Afs. most famous icons online). There is little archaeological evidence for giant ships in either China or India. Also Sean McGrail (Boats of the World 2004) cites very serious doubts about the claimed "oldest dock in the world" of the Harappan era at Lothal (India). James Hornell (Water Transport 1946) is one of those writing that the codification of Hinduism shown by such as Manu Smrtri (= Laws of Manu) stopped Hindus going to sea.

Nor were the early Arabs greatly enamoured of going to sea, as their primary traditions were those of land-bound dwellers of the desert. Hornell (ib.) plus quoted Mohammed saying "He who goes twice on the sea is truly an infidel". Of the various Khaliffas/Caliphs or Successors to Mohammed, the 4<sup>th</sup> was Umar/Omar ibn Khittab (1400 B.P.). George Hourani (Arab Seafaring 1951 & 1995) cited Umar refusing the Faithful permission to go to sea because it is unnatural. Hornell (ib.) quoted him writing of the sea, "Trust it little, fear it much ... Man at sea is an insect on a splinter, now engulfed, now scared to death".

Not as spiritual but nearly so, was the antipathy towards the sea plus sailors in Egypt according to Strabo (c.2100/2000 B.P. Greek). Connie Lambros-Phillipson (Seafaring on the Mediterranean online) wrote of Egypt to Crete as "The Improbable Voyage". Alessandra Nibbi (Revue d'Anthropologie 1993) went further when saying this kind of thinking shows the ancient Egyptians had no interest in the sea. In support of this would be Plutarch (c. 2100/2000 B.P. Greek) saying "Egyptian priests kept themselves religiously aloof from the sea" Also Porphyry (c. 1600/1500 B.P. Greek) wrote Egyptian priests "held it was unholy to sail from Egypt"

Egypt to Crete may have been the “Improbable Voyage” but Crete to Egypt was not. We also know of Cretan craftsmen in Egypt in the Middle Minoan (= MM) or Proto-Palatial (c. 4000/3700 B.P.) horizon. From early on, Asiatics from more or less Phoenicia (= Lebanon) were acting as craftsmen for Egypt and they too were shipbuilders for Egypt. When a weakened Egypt could no longer compete with other Mediterranean powers, Necho (Pharaoh of Eg. c. 2700/2690 B.P) sent Phoenicians to explore the east coast of Africa that seems to have been an extension of the former Egypt-to-Punt route but turned into a round-Africa voyage.

Ships on the Red Sea had to cope with what the unknown author of *Periplus Maris Erythraei* (= Voyage on the Erythraean Sea = PME) called dangerous coral reefs. The 1911 *Britannica* refers to complex waters making Red Sea navigation difficult and dangerous. East Africa facing the Red Sea is above the Horn of Africa, whereas east Africa facing the Erythraean Sea is south of the Horn. Strabo (c. 2100/2000 B.P. Greek) and Idrissi (14<sup>th</sup> c. Magrebi) wrote respectively of Above-Horn east Africa plus Below-Horn east Africa as evidently not possessing ships. When Egypt is added, this would appear to indicate no part of east Africa had ships.

The leaving of the relatively sheltered Red Sea for the open seas of the western Indian Ocean (= Erythraean Sea) led to what the Greeks had called the Straits of Deire being called Bab el-Mandeb (Gate of Tears) in Arabic. A famous near-wreck of c. 1450 B.P. at the Horn is that of Cosmas Indicopleustes (= C. the Voyager to India). Famous wrecks include the Egyptian “The Shipwrecked Sailor plus the episode from Strabo that has been called “The Half-drowned Sailor). Another came from Stuart Munro-Hay (Aksum: An African Civilisation of Late Antiquity 1991) showing an Ethiopian ship en route being wrecked on the Arabian coast.

A wreck found by Eudoxus (c. 2200 B.P. Greek) is placed at Prason (= Cape Delgado on the Mozambique/Tanzania border) by messrs. Cary & Warmington (*The Ancient Explorers* 1963). This Delgado hippos but whether it was Phoenician from the homeland (= Lebanon); Carthaginian (= Phoens. settled at Carthage = Punic in Latin); Gaditanian (Phoens. settled at Gdr/Gadir = Gades in Latin = later Cadiz, Spain); Lixitan (Phoens. settled at Lixos, Morocco) is uncertain. Few dared come south of Prason/Delgado and those doing so came across Cabo Corrientes (= Cape of Currents, Moz.). Dangerous shoals named Sofala from Arabic sufala (Moz.).

European reports from the time of at least Marco Polo (13<sup>th</sup> c. Italian) have stressed the difficulties of crossing the Mozambique Channel between Mozambique and Madagascar. Further south are the Wild Coast (= the Transkei Coast of South Africa) plus the Wrecks Coast (= from East London to Port Elizabeth, South Africa). Off deep southeast South Africa lies the Agulhas Current. It is notorious for enormous freak waves of the type that destroyed the *Waratah* or the so-called southern *Titanic*. Southward still is Cabo Agulhas (= Cape Agulhas, South Africa) so called from needle-like rocks leading to more shipwrecks.

To the east of Cape Agulhas is the mix of vortexes plus counter-vortexes that Johanna Gyory et al (*The Agulhas Current* online) say led to another Portuguese name meaning Cape Cauldron. Cape Agulhas is the southern tip of the continent of Africa (**not** the Cape of Good Hope). East of it is recognised as the Indian Ocean and west of is the Atlantic Ocean plus the Atlantic-facing coasts of west Africa but most immediately, the western parts of South Africa.

Here too are what Denis Montgomery (*Seashore Man and African Eve* 2005) has called sub-tropical waters. He is of the opinion that few vessels that were non-engined could sail in these seas. On this same coast is what was once called Cabo Tormentosa (= Cape of Storms) but was renamed as Cabo boa Esperanca (= Cape of

Good Hope). The swell of the seas here led to special circumstances being applied to the ferrying of Europeans ashore when the Germans ruled in southwest Africa (= Namibia. The Namibian coast is more or less the 1000-mile stretch of the Namib Desert. Part of it was once called the Skeleton Coast because it was once so littered with the skeletal remnants of wrecked ships plus human skeletons.

An ancient commerce was claimed by Jean Barbot (17<sup>th</sup>/18<sup>th</sup> c. French), Leo Frobenius (*Voice of Africa* 1913) plus others to connect Namibia/Angola with the parts of west Africa facing that part of the Atlantic coast called the Gulf of Guinea. However, Frobenius (ib.) is dismissed as a fantasist by Donald Harden (*Antiquity* 1941). Messrs. Hair, Jones and Law (*Barbot on Guinea* 1992) further dismiss Barbot's account of trade between Namibia/Angola and the Gulf of Guinea. Along with this, there is denial of the Barbot description of the foodstuff called kankey that he says kept Africans fed on these long trade-trips at sea.

Roger Smith (*Journal of African History* 1970) further adverts to the fact that the reverse journeys from Guinea to Gabon and points south went against prevailing currents. If such long sea-voyages ever went took place, they did so in the vessels paramount in west Africa. This was the dugout-canoe. Europeans complained long and loud about the instability of these boats. Such complaints usually involved river-craft and not those claimed as having gone to sea.

There is also the thousand miles of that represent the western fringes of the Sahara Desert. This length of desert-facing coast is analogous to that seen much further south in west Africa in the form of the Namib Desert. If Namibia translates as "Land of Nothing", Sahara simply means desert in Arabic. It would take days to bypass such a length of desert, as described in *Periplus (= Voyage) of Hanno*. The heat of the desert-facing regions is greatly stressed in the Palmer (1931) account of the *Voyage of Hanno* that is called "The Carthaginian Voyage to West Africa".

### **EARLY VESSELS: REED-BOATS**

Having seen dangers on the high seas, more when approaching shore plus the flimsy nature of some of the vessels, there is little surprise that religious edicts become attached to voyages at sea, especially long ones. In the described circumstance, the emergence of gods of the sea can be expected. With changes in religion, they will have been replaced by such as saints but it seems legitimate to pose a question. That question is did anyone have the nerve to sail on the Indian Ocean plus any African coasts.

The answer very clearly is that they did and across the world, were not just sea-going but also ocean-going and were doing so in these frail craft when doing so at early dates. Hornell (ib.) is one of those showing this in the variously named Island Southeast Asia (= ISEA); Insular Southeast Asia; Maritime Southeast Asia; "Indonesia"; Austronesia. Paul Johnstone (*The Sea-craft in Prehistory* 1980) notes reed-boats in China but rather more of riverine and lacustrine contexts than as maritime craft on Pacific coasts.

This last is very definitely not so for the caballitos (= pony/small horse) that Hornell (ib.) says were used on the American side of the Pacific for fishing off the coasts of West-coast Americas from Peru to Ecuador. However, easily the most famous reed-craft of Amerinds (= American Indians = Native Americans) in these western parts of South America are the vessels of Amerinds called the Aymara of Lake Titicaca (Peru). Totora reeds from Lake Titicaca were used to construct Uru which according to James Allen (*History of Reed Ships* online) was sailed from Peru across the Pacific to the Marquesas Islands but was unable to go further.

Probably more famous reed-boats are those called Ra I plus Ra II. Ra I was built for Thor Heyerdahl (The Ra Voyages 1971) of reeds from Lake Tana (Ethiopia) but was Buduma-built on Lake Chad (shared between Niger, Nigeria & Chad). After the failure of Ra I to achieve the crossing of the Atlantic by falling just short of the Bahamas, Heyerdahl (ib.) did not turn to the Buduma again. He got the already-noted Aymara to construct Ra II that successfully crossed the Atlantic from Morocco to the Bahamas in the Caribbean Sea.

The Moroccans were/are also builders of reed-craft. This is the *almady* used at sea for offshore fishing. *Almady* is seen by Hornell (ib.) as the basis of the Portuguese word of *almadia* that also became applied to the west African dugout-canoe. The Lake Chad *kaday* that was the model for Ra I but had evolved out of the conditions of the large but mainly shallow Lake Chad. Heyerdahl has written the reason why Ra I failed was because he failed to appreciate that the line seen to extend the length of some of the ships depicted by Egyptians was actually a truss-rope. This is surprising, as Allen (ib.) shows this feature had been noted as far back as the "Ancient Ships" by Cecil Torr (1895). Donald Muffett (in *Af. Presence Early America* ed. Ivan Van Sertima 1992 & 1997) attributed the failure of Ra I to the methods of the Buduma.

Nor were the Ra vessels the only ones based on based on Egyptian originals. So too were those called *Abora* reed-built for Dominique Gorlitz (online). He makes the interesting statement that the Egyptian pictorial evidence allows interpretations that the severally named daggers/swords/guaras/guares/centre-boards/lee-boards were used on Egyptian ships and this would connect with the replacement of the steering-oar broken early in the Ra I voyage used in *guare*-style. If true, this would make Egypt-to-Crete a much less "Improbable Voyage", as it would mean Egyptian reed-ships could have steered to anywhere in the Mediterranean.

We can expect Egyptian affinities for east African reed-craft particularly those near or relatively near the Red Sea. Fitting here are those of Ethiopia. The reeds seen to be from Lake Tana (Eth.) that could apparently carry up to 7000 tons of coffee-beans according to Hornell. The Old Testament book called the Book of Ezekiel (Chap, VIII, vs.1/2) and "beyond Ethiopia, go ye swift messengers in vessels of bulrushes" when refers to Ethiopian (= Kushite?) reed-boats on the Red Sea.

The Librarian of the Alexandria Library (Egypt) named Eratosthenes (c. 2300/2200 B. P.) wrote of reed-craft reaching India having the form, sails plus rigging of similar vessels on the River Nile. Confirmation of reed-craft as ocean-going seems shown by the Tigris ship built for Thor Heyerdahl (The Tigris Voyage 1981). On this occasion, Heyerdahl (ib.) was adding Egypt-to-India to the theories about Egypt-to-Americas of the Ra Voyages.

Sea-going reed-boats from India-to-Egypt were sought by combining some of what is written by messrs. Bowen (*Mariner's Mirror* = MM 1956) and Hornell (*Water Transport* 1946). In "Boats of the Indus Culture", Bowen (ib.) would reverse the list of traits that included reed-craft usually said to go from Egypt-to-India that would then read India-to-Egypt. Hornell regarded the Puntite vessels on the walls of the tomb-walls of Amenophis II as reed-craft.

### **EARLY VESSELS: SKIN-BOATS**

However, where "Boats of the Indus Culture" by Robert LeBaron Bowen (ib.) disagrees with James Hornell (ib) is about the type represented by the depictions on the walls of Amenophis/Amenhotep II (of the 18<sup>th</sup> Dynasty = ca. 3570 – ca. 3200 B.P.). Bowen is the opinion that what are represented there are western examples of what Paul Johnstone (*Seacraft of Prehistory* 1980) called "the great Pacific sailing-raft

tradition". Johnstone (ib.) referred them to what Herodotus (ca. 2450 B.P. Greek) has described. This was as something strongly akin to the coracle-like skin-boats called quffas of the Iraqi rivers. Yet Hornell (ib.) thought Herodotus had it a little wrong a little wrong about the Iraqi quffas.

Hornell (ib.) quoted Pliny (ca. 2000-1900 B.P.) about Arabian pirates operating from what seems to have been the Red Sea islands off what is now Eretria called the Alalious (= the Dahlaks of today) by Pliny's description was of rafts based on inflated ox-skins. Pliny's description matches how Louise Bradley (Journal of the American Research Centre in Egypt = JARCE 1996) describes the Puntite vessels as probably a raft-like platform on inflated animal-skin floats on the Red Sea linking Somalia (?) to Egypt. Nibbi (ib) showed that Pliny (c.1920 B.P. Roman) mentions folding-boats in "Ethiopia" that she says can only be skin not planked wooden boats, as planked vessels do not fold. Also to be noted is that Ethiopia (in the modern sense = ex-Abyssinia) used skin-boats called hokoumada till well into the 20<sup>th</sup> c.

Nibbi (ib.) cites other Classical writers saying that skin-boats were used in the shallow waters of the Delta of the River Nile in Egypt. She further says that the stitching of some vessels shown in Egyptian illustrations demonstrates that they were probably skin-covered wooden boats. Other Egyptian depictions are said by Nibbi (ib.) to illustrate skin-boats displaying the interesting feature of appearing glass-like when the sun is behind them, as shown by skin-boats in Canada, Norway, Ireland plus Britain. More on this phenomenon is shown by Johnstone (ib.).

Skin-boats in west Europe are those of the Iberian Celts called Lusitani naming Lusitania (= mainly Portugal) reported by Strabo (c. 2100/2000 B.P. Greek). Repeating the form for the purposes of sea-going was a skin-boat of currach-type constructed by staff plus students of Santiago University (Galicia, Spain). It completed sea-trials of c. 450 miles along the Atlantic coasts of west Iberia (= Spain & Portugal) but the money ran out for the project according to Richard Mac Cullach (The Irish Currach Folk 1992).

The seas off Galicia (in northwest Spain) are notoriously fierce, indeed so much so the Dutch, British plus French governments offered to defray the Spanish costs of maintaining a lighthouse at Corunna (Galicia). This act of cooperation of such fierce rivals and who in turn were equally fierce rivals of Spain was unusual to say the least yet what is being recognised is the danger of the Bay of Biscay off Galicia. So when the Santiago currach plus that of the online reports of the Colmcille currach are recorded as going across the Bay of Biscay, we must be impressed.

Reports of sea-going skin-boats of the Celts of Gaul (= Pre-Roman France & Belgium) are cited by Johnstone as possibly having caught the attention of the Classical authors between 3000/2500 Before Present (= B.P.). What Johnstone (ib.) is referring to is the mention of the Oestrymnides (= that part of Gaul/France that was Armorica/ is now Brittany) in the very early Classical Greek text that has come down to us as the Massiliote Periplus but only in sections. Those sections only survived because they were recorded in the Ora Maritima by Rufus Avienus.

Classical writers noting skin-boats of British Celts include the unknown compiler of the Massiliote Periplus (3000-2500 B.P.); Timaeus (c. c.2400/2300 B.P.); Julius Caesar (c. 2100/2000 B.P.); Lucan (2000/1900 B.P.); Pliny (2000/1900 B.P.); Solinus (1800/1700 B.P.), Rufus Avienus 1600/1500 B.P.); Sidonius Apollinaris (c. 1500/1400 B.P.). The accounts by Pliny plus Rufus Avienus primarily concerned a description of the commerce in British tin at the southern end of the Irish Sea. This involved the currachs of the Celts of southern Britain ferrying tin to foreigners.

Hornell (MM 1936; MM 1937; Water Transport 1946), Johnstone (ib.), McGrail (ib.), Richard Mac Cullagh (The Irish Currach Folk 1992), Donal Mac Polin (The Donegal Currachs 2007), etc, discuss the Irish currach. They record Irish currachs as having survived fierce Atlantic storms that destroyed heavy wooden boats. Sanas Cormaic (The Glossary of Cormac [Mac Cuilennain]) is better known as Cormac's Glossary (9<sup>th</sup> c. Irish) and shows currachs of Irish Celts as trading at the northern end of the Irish Sea between Ulster and Scotland.

Just how dangerous that part of Atlantic-facing Europe called the Bay of Biscay has been described. So too has the fact that the Santiago plus Colmcille currach were taken across it fits with what was just said about the currachs of the Celts of Ireland in ferocious Atlantic weather, it will be seen that skin-boats were very seaworthy. The seaworthiness of the Irish currach seems to have been further confirmed by the "The Brendan Voyage" led by Timothy Severin (1978) having sailed successfully across the Atlantic Ocean.

In "Canoes & Navigation of the Maya & their Neighbours", Eric Thompson (Journal of the Royal Anthropological Institute = JRAI 1949) shows the Amerinds of the Miskito Coast had what seems to have been a quffa/coracle type of vessel. It is possible that here too may fit the "snakeskin" boats of the Mayan god named Kukulcan. Here we should recall what has been said just above of the glass-like appearance of skin-boats in Egypt, Ireland, Norway, Canada and to which can probably be added Irish stories of glass boats.

The Siberian skin-boats include the baidara equating with the Inuit umiak plus the baidarka equating with the Inuit/Eskimo kaiak/kayak. They appear to have regularly crossed the Bering Sea/Strait between east Siberian parts of Russia and Alaska/western Canada until stopped by the government of the Soviet Union.

In these northern waters, the umiak replaced the bull-nosed Bedford whaling-boat used by American captains of whaling-ships. The hard-headed attitude of such captains is well known and when their more familiar whaling-boats were replaced by Inuit umiaks for inshore whaling, we can be very sure that they were mightily impressed by these native vessels. Inuit skin-boats regularly plied between eastern Canada and Greenland. They are shown by Paul Whittaker (Antiquity 1954; 1977) plus Jack Forbes (Africans & Native Americans 1993; The American Discovery of Europe 2007) as reaching as far away the British Isles.

### **EARLY WOODEN CRAFT: RAFTS**

Mention of something raft-like returns us to the vessel(s) of the Mayan god called Kukulcan (= the Aztec/Mexica god of Mexico named Quetzalcoatl). As seen just above they are sometimes seen almost as of skinboat/currach class. More often, they are seen as rafts. This is certainly so with such as Douglas Peck (Yucatan: Prehistory to the Great Revolt 2005), Forbes (1993; 2007), etc. Of the possible voyages from East-coast Americas across the Atlantic mentioned by Forbes (ib.), that to Galway may involve kattu-maran types. The most famous of these sea-going Amerind rafts is the South American jangada of mainly Brazil.

On the far side of South America is the very similar balsa raft. They have been attested as regularly plying between Peru/Ecuador and west Mexico over millennia, as is well shown by Dorothy Hosler (The Sounds & Colours of Power: The Sacred Metallurgical Tradition of Ancient West Mexico 1996). These are the log-rafts made famous by Thor Heyerdahl (The Kon-tiki Expedition 1950) when the raft known as Kon-tiki sailed from Peru to the Tuamotu Islands in the Pacific.

Efforts to demonstrate rafts going the other way or east-to-west across the Pacific towards West-coast Americas include "The China Voyage: A Pacific Quest by Bamboo Raft" by Tim Severin (1994). It fell short of its intended objective of c. 6500 miles by about 1000 miles. Other Pacific rafts are those described by messrs. Haddon and Hornell (*The Canoes of Oceania* 1936-8) that they consider brought Austronesians into the Pacific as part of the ancestry of what became the Polynesians in the islands of the west Pacific. The later migrants came in canoes and this may have been repeated on the Indian Ocean.

Roger Blench has also suggested two major Austronesian migrations across the Indian Ocean westwards to Madagascar in several articles. If the pattern of the Pacific is truly echoed on the Indian Ocean, the raft-phase may belong to 2500/2000 B.P. This was still around as still-living tradition at the time that Pliny was (c. 2000/1900 B.P.) labelling them as rati (= rafts).

James Hornell (*The Origins & Significance of Indian Boat Designs* 1920 & part online) plus Blench articles attest rafts in south India. The most famous names for raft-forms here are the kottu-maran/kattu-maran (= tied-logs) plus the shangadam. Ganeswar Nayak (*The wisdom of "tied logs": traditional boats of India's Orissa coast during the colonial era*) shows the kattu-maran being used by the Cholas of south India invaded ISEA. Bowen (ib.) says that shangadam was used of log-rafts plus double canoes. McGrail (ib.) cites the Huntingford and Casson translations of *Periplus Maris Erythraei* (= Voyage of the Erythraean Sea = PME) saying the shangadam was of "vessels of tied logs" and "dugouts yoked together" respectively

In the famous "Catalogue of Ships" section of the account of war between Greeks and the city Troy (= Ilium for the Greeks) called "The Iliad" by Homer (c. 2900 B.P.) is the one describing the "splendid" black ships that very often are described by several authorities as no more than dugouts. We also have the Homeric description of Odysseus/Ulysses building a raft.

East Africa from Egypt to eastern South Africa may not have had such rafts. Egypt generally lacked the timber for such vessels and Hornell (ib.) felt they were absent in Sub-Horn east Africa. Yet Hornell (1946) also pointed out that Egypt constantly imported the necessary long timbers. The Culshaws (*Tanganyika Notes & Records* 1933) plus Henri Junod (*The Life of an African Tribe* 1926) attest traditions of sea-going rafts of the Turu of Tanzania (= mainly Tanganyika), the Thonga of Mozambique/eastern South Africa, etc. Hornell (ib.) recorded rafts at Lobito Bay (Angola) of light timbers. Ivan Van Sertima plus Stuart Malloy (in *Blacks in Science* ed. Van Sertima 1983 & 2001) report tied-log vessels in west Africa.

### **EARLY WOODEN CRAFT: DUGOUT-CANOES**

The dugout-canoe is usually discussed in derogatory terms. Complaints about their instability have been noted. Ways of beating this include building canoes from trees giving wider canoes plus lashing two of them together to form double-canoes. The second vessel in reduced form still resembling the first is described by such as William Dampier (17<sup>th</sup> c. Eng.) and tends to be called an outrigger. This seems to be

the original form of the Indian vessels named kottu-maran/kattu-maran itself the ancestor of the modern catamaran.

There is an overlap of canoes having two outriggers and those having one outrigger on the Indian Ocean according to the map of Hornell (1946). Those with two stabilising outriggers dominated in ISEA and from the map, it may be that the Indian Ocean single outriggers are vestigial to those of double outriggers that evidently attest the west-going Austronesian migrants coming in canoes across the Indian Ocean to Madagascar.

The type of dugout-canoe with outriggers in the Pacific is that with just one of these stabilisers. This is the type that took the Polynesians to all parts of the "Polynesian Triangle" that include Rapa Nui (= Easter Island), Aotearoa (= New Zealand) plus Hawaii as its extreme points. A quick glance at any map will demonstrate that these are the most remote bits of land anywhere in the world and can only be reached by very long voyages. That stable vessels could result from use of very large trees has interest in the light of folklore cited by Ben Finney (*Voyage of Rediscovery* 1994) of giant canoes reaching New Zealand. Out of these sea-craft emerged the famous "flying" proas/praus that Europeans so admired.

There are claims of Polynesia affecting the Amerinds of West-coast Americas and of Amerind influences on Polynesia. For many writers this is very uncertain and this is the opinion of Jose Lopez Urruta (*A Brief Naval History of Chile* online). He describes the Amerind canoes of Chile called the dalca and he makes the perhaps surprising statement that the Chilean dalca is the finest all Amerind canoes. They are usually held to have two-fold sources. One is the need to reach the marine resources of the islands off the Chilean coasts plus European influences. However, there are shell-mounds in these islands that are much older than Pre-contact, so there may have been a rather more local evolution than generally supposed.

Much further north on coasts of West-coast Americas are grouped what have labelled as the Northwest Coastal Cultures (= NCC) best known via the Haida. A Haida canoe was bought in the early 1900s, rigged as schooner and taken round the world. The NCC canoes were regularly taken across from the shores of British Columbia in southeast Canada to islands at some distance from the coast that involved crossing seas that are very frequently particularly ferocious.

More giant Amerind canoes are those of the Caribs naming the Caribbean Sea. They took their canoes to as far north as the Antilles according to such as Peck (*ib.*), Forbes (2007), etc. Those same authors argue for the Mayan god named Kukulcan setting out for his homeland towards the rising sun (= the east) with pious Mayans following him. According to this line, Amerind sailors reached European shores. Forbes (*ib.*) shows this from Iberia (= Spain & Portugal) to Germany at dates much earlier than those for the first known Europeans in the Americas.

The dugout-canoe has near-dominance in west Africa. In "West Africa & the Sea in Antiquity", the long sea-voyages undertaken in their canoes from Namibia/Angola to the Gulf of Guinea plus from Guinea to East-coast Americas were shown. This clearly indicates purposeful long-distance voyages as does that of Hannes Lindemann (*Alone at Sea* 1958). Roger Smith (*Journal of African History* 1970) shows the reverse trips from Guinea went against prevailing currents. The Plaza et al article on (*Joining the Pillars of Hercules: mtDNA Sequences show Multi-directional Gene Flow in the Western Mediterranean* online) may show Senegal-to-Iberia. If the tank-tests on dugout-canoes by Bradley (*ib.*) can be said to represent the theoretical side of this, the practical side of this is surely provided by Lindemann (*ib.*).

### **ROUND WE GO: PHOENICIANS**

Indian texts refer to a group called the Pani resembling the Latin word of Puni that Romans used of Phoenicians (hence Punics). If this indicates the Phoenician homeland was somewhere on the Indian Ocean, this would accord with Herodotus (c.2500/2400 B.P. Greek) describing the Phoenician cradle as somewhere on the Persian Gulf. Unfortunately, for this line of reasoning, genetics reveals the Phoenicians originated in Anatolia (= most of mainland Turkey).

An Egyptian Pharaoh named Necho was seen to have employed Phoenicians to explore the coasts of east Africa. At about this date, the elders of the Phoenician colony of Carthage sent Himilco on a mission to Atlantic-west Europe and Hanno to Atlantic-west Africa. This is shown by the Periplus (= Voyages) of Necho, Himilco Hanno plus This seemingly smacks of Phoenico/Punic coordination with further signs of this shown by Tallboys Wheeler (The Geography of Herodotus 1854) noting interactions with Africans that would suggest prior contacts. So too would the Necho-funded expedition planted crops en route. The knowing when and where to do so, again strongly indicates prior knowledge.

Necho's Phoenicians reported the sun was on their right for part of their journey. This for Herodotus was enough for him to dismiss this as lies but generally convinces modern scholars that it was an authentic record. That journey started in Egypt facing the Red Sea and finished in Egypt facing the Mediterranean Sea. Going the other way, Pliny (2000/1900 B.P.) was one of the few in ancient times to suggest that the Periplus of Hanno (c. 2700/2600 B.P.) came down the African west coast and reached the Arabian Peninsula. This is followed by Felix Chami (The Unity of Ancient African History 2005).

Another colony founded by Phoenicians was Gdr/Gadir (= Gades = Cadiz, Spain), The Phoenico/Punic type of vessel called a hippos was sent out from Gadir northwards to relatively close to the extremely dangerous Bay of Biscay to judge from the example depicted on a jewel found at Aliseda (Portugal). Just how far north they got is uncertain but "Himilco" (now known only as remnants in Latin) may attest partnership with Armorican/Breton locals in west France. Prof. Christopher Hawkes is cited by Johnstone (ib.) saying the Phoenico/Punic golah/trade-ship form is repeated by the Caergwle (nth. Wales) bowl. This would attest a Phoenico/Punic presence as far north as the British Isles.

Hippoi were also sent for four days from Atlantic-southwest Europe to the parts of Atlantic-northwest Africa that are now called Morocco. Here was yet another Phoenico/Punic colony at Lixos (Morocco). These vessels fished of these Atlantic coasts for days at a time and are described by Strabo as very poor ships. Just how far south they got is again uncertain but "Hanno" is interpreted by a few writers as showing this. Problems with this include that the Periplus of Hanno is now only known as an abridgement in Greek and that passing from ocean to ocean is shown by just a few writers ancient and modern.

However, they include messrs Pliny, Martianus Capella, Chami (ib.), Lacroix (Africa in Antiquity 1998). This would be reinforced by the finding of the wreck of what was anciently identified as a hippos from Gades by Eudoxus, as recorded by Poseidonius (c. 2200/2100 B.P.) but who is now only known via extracts in Strabo. The hippos seen to have been found by Eudoxus was also shown to be felt as having reached the Tanzanian coast by messrs Cary and Warmington (ib.).

### **ROUND WE GO: AFRICANS**

Chami (ib.) looks for an ethnic mix affecting all of west Africa from Morocco in the northwest to western South Africa in the southwest. Nor would vessels of the west Africans have been inferior to those of the Phoenico/Punics on the comparisons made by Michael Bradley (ib.). As said, these tests provide a sound basis for evaluating the seaworthiness of the west African dugout-canoe. They are given confirmation by what is said by messrs Plaza et al (ib.), Smith (ib.), Lindemann (ib.), etc. There are also the accounts about trans-Atlantic voyages reported by al-Umari (15<sup>th</sup> c. Egyptian), Columbus (15<sup>th</sup>/16<sup>th</sup> c. Italian working for Spain), etc.

Plaza et al (ib.) appear to be reporting voyages between Guinea and/or Senegal and the Iberian Peninsula that in terms of distance equal many of those across the Atlantic. The several writers cited in "West Africa & the Sea in Antiquity" have traced the trade-trips between Namibia (?)/Angola (?)/Congo and again, the Gulf of Guinea. The reverse journeys are those listed by Jean Barbot (ib.) and seen to have been dismissed by respected authors but accepted by others of equal standing and when commented on by Smith (ib.), they went against prevailing currents (as do those of Peru/Ecuador to west Mexico). The voyages were funded by King Abubakri II of Mali when Mali was very rich and these voyages were reported by al-Umari **who was a non-Malian**. What was described by Columbus is of blacks in canoes leaving the Cape Verde Islands off the west African coast with only the open sea in front of them.

When Columbus recorded more blacks on the far side of the Atlantic, there are many interpretations of what this represents. Yet it is difficult to escape the conclusion that they fit with those just noted as having left the Cape Verdes with only the open Atlantic and the Americas in front of them. The above-noted crossing of the Atlantic by the dugout-canoe of Lindemann (ib.) took 55 days, whereas that of Amerigo de Vespucci (another 14<sup>th</sup>/15<sup>th</sup> c. Italian but working for Portugal) took 64 days over an identical distance in a European ship in full rig. Lindemann's vessel was not just of a dugout-canoe but was of the small 1/2-man variety normal for west African fishing and on his long crossing of the Atlantic ate only the all-fish diet that led to the Greek term of Ichthyophagi (= Fish-eaters) for much earlier west Africans.

Hanno tells us of the west African ethnicae called the Lixitae. They acted as pilots/interpreters for part of his voyage down the west African coast. Elsewhere in this series, it has been shown that the Lixitae were classed as from "Aethiopia" (= what we now call Sub-Saharan Af.) not "Libya" (= Af. nth. of the Sahara). Lacroix (ib.) argued that where the Lixitae stopped being useful to Hanno were the parts of Atlantic-west Africa where Krio/Kru languages were being spoken. This stretches from Ivory Coast through Liberia to Sierra Leone and the Kru were expert fishermen.

Hornell (MM1929; Water Transport 1946) refers to the canoes of the 1/2-man size of the Krio/Kru people. He reports Kru canoes of this size as bringing home two specimens of what he describes as monster fish. Elizabeth Tonkin (in *Afr. & the Sea* ed. J.C. Stone 1985) tells us that some of the Kru are still labelled as the Fishmen and the Kru are oft-called the boldest of African sailors in west Africa. The Wikipedia article on the town of Swakopmund (Namibia) has it that the swell of the coast was so great that when passengers were being ferried from European ships to shore in German-ruled Southwest Africa (now called Namibia), the Germans would only allow Kru boatmen brought from the north to operate the boats.

The Ga of Ghana is another west African ethnica put forward "as the bravest sailors in west Africa" by mainly non-African academics. They too operated extensively as fishermen and they also ferried passengers from European liners to shore. Yet more claimants for this title are the Fang/Mpongwe of what today is called Gabon. They appear to have been the southern fulcrum of the mainly Gabon-to-

Guinea commerce seen to have been dismissed by some British experts but argued for by other British authorities (see *West Af. & the Sea in Ant.*). Thomas Botteler (*Narrative of Voyage to Africa & Arabia 1835*) plus Sir Richard Burton (*Two Months ... ib.*) were both among the great admirers of Mahongwe/Mpongwe/Fang canoes.

This provides a background of expertise that we can expect was tapped by non-Africans in west Africa. That this happened is vouchsafed by what we saw was written by Hanno in *The Periplus of Hanno* (now known only from a Greek abridgement) about the descendants of the Phoenicians called Gaditanians, Lixitae but mainly Carthaginians, when in west Africa.

The long history of Black Africans in parts of southern Africa where the received wisdom says they should not be is directly related to something written by Yusuf ben-Jochannan (*Black Man of the Nile 1989*). He refers to the Africans noted in the logs of Portuguese ships sailing all round the coast of the Monomatapa Empire shown on European maps as stretching from the River Limpopo in the east to Cape Town to the southwest (also see *Abubakri II: Who He?*). In short, all round the coasts of southern Africa. It may even be that the pilot leading the Portuguese across the Indian Ocean was another African but there are several other interpretations. The naming of both sides of the African coast as *Oceanus Ethiopicus* (= the African Ocean[s]) has significance.

#### **ROUND WE GO: AUSTRONESIANS**

Articles important for this section are by messrs. Hornell and Blench. Those by James Hornell include "The Affinities of East African Canoes" (*Man* 1919); "The Design & Ethnological Significance of Indian Boat Designs" (1920); "Indonesian Culture in East Africa" (*Man* 1928); "Indonesian Influence on East Af. Culture" (*Journal of the Royal Anthropological Institute = JRAI* 1934); *The Sea-going Mtepe & Dau of the Lamu Archipelago* (*MM* 1941); "Water Transport" (1946). Among those by Roger Blench include "The Ethnographic Evidence for Long-distance contacts between Oceania & East Af." (in *The Indian Ocean in Antiquity* ed. Julian Reade 1996); "The Movement of Cultivated Plants between Af. & India on Prehistory" online); "The Austronesians on Madagascar & the Coast of East Af." (online); "Ancient Connections between Insular SE Asia & West Africa" (online); "The Austronesian Impact on East Africa" (online).

It is to be noted that this is by no means a complete listing of their works and is not intended to be. The more so given that Blench is constantly adding to his already impressive list. However, they provide a solid case for west-going Austronesians (= ANs) from ISEA. Nor should their references be overlooked. The Hornell (1920) study of Indian boat designs refers to Pre-Tamil "Polynesians" in south India. The same term is used by Robert Dick-Read (*The Phantom Voyagers* 2005; *Indonesians Affinities: Questioning the Origins of Some of Af's. Most Famous Icons* 2006). Hornell (*ib.*) noted Tamil traditions of Pre-Tamil Tyyans (= Islanders) introducing coconuts plus associated de-fleshing scrapers to south India. Further signs of Pre-Tamil islanders include the AN traits of canoes with outriggers, use of model flying-fish to attract large predaceous within easy catching distance, identical means of luring and catching bonito plus octopi, physical types, etc.

A former opinion had it ANs sailed directly from ISEA to Madagascar and surely the most convincing evidence of their migration(s) has to be the AN-based Malagasy language of Madagascar. With a raft-phase on the Pacific evidently matched on the Indian Ocean. Hornell (1946) felt the most convincing obvious testimony of AN material culture in Madagascar and east Africa are canoes with

double outriggers. Also that AN-derived traits of round oculi; duplication of oculi at both stems plus sterns; encircled bands termed severally as (a) fringed strings, (b) bearded talismans of garlands of leaves; rectangular mat sails with upper plus lower lashed or laced to poles on east African mitepe.

The mtepe (singular of mitepe) also figures in a piece of east African folklore from the Bajun Islands (off Somalia). It has been quoted from the days of messrs Lydecker (Man 1919) plus Hornell (1941). It has AN ships wrecked in the Bajuns, their crews rescued by the natives and being taught mtepe-building by way of thanks by the grateful AN crews. This meant the dugout-canoe was replaced by mitepe all along the east African coast. The inter-marriage of ANs plus locals led to the emergence of the people called the Wadiba.

Hornell further linked canoes on the Great Lakes of east Africa and mitepe on grounds of more "fringes" plus the AN sources of the Great Lakes canoes of the Baganda people of Uganda in particular. He lists AN traits the Great Lakes canoes as the fringes again, bifid stems, thwarts thrust through the sides so that they are seen from the outside, seams closed by battens held in place by stitching in opposed holes, etc. Blench notes views that AN sea-craft caught up in the Mozambique Current emanating from the Mozambique Channel separating Mozambique and Madagascar would be swept round to the Atlantic. Hornell (1934) cites Diego de Couto (16<sup>th</sup>/17<sup>th</sup> c. Portuguese) on this when saying AN vessels reached Cape Town (South Africa).

Blench (ib.) noted the widely accepted AN spread of elephantiasis to west Africa, as shown by figurines of the Nok (Nigeria) Culture of c.2800-2500 B.P. Further compared are methods of pegging drumheads unique to ISEA plus west Africa. More AN instruments of ISEA are noise-makers based on plantain-stems again known only to be matched in west Africa. More AN instruments based on Musas (= plantains & bananas) are the xylophones of plantain-stems in ISEA and again west Africa.

Blench (ib.) further says equally widely accepted AN sources of bananas that of AA varieties are known in east Africa and Gabon in west Africa but with no known interlinking land-routes. The BB (esp. ABB/AABB & ABBB) varieties are non-existent in east Africa or are negligible importance there but are dominant in west Africa by c. 2500 B.P. Their coming by sea on AN craft is said by Blench (ib.) to have involved sophisticated fruit-keeping systems.

### **ROUND WE GO: INDIANS (PART I)**

Marking the migrations from Island Southeast Asia to Micronesia in one direction eastwards and Madagascar in another direction westwards are several islands shown by Yava-based plus Dvipa-based names. So Yava (= Java, Indonesia); Havai (mid Polynesia); Hawaii (north Polynesia); Savai (Samoa); Avaiki (Cook Islands); Havaiki (Society Islands); Hiva (Marquesas); Hova (a word meaning people in the Malagasy language of Madagascar).

Dvipa names seemingly include Dvipa Saka (= Island of Teak [Trees?] = Borneo?); Dvipa Suvarna (= Island of Gold = Sumatra); Dvipa Siele (= Island of Lions [= Warriors] = Ceylon/Sri Lanka); Dvipa Lakshad (= 100,000 Islands = Laccadives); Dvipa Mal (= Garland of Islands? = Maldives); Dvipa Mahad (= Dvipa Mahal (?) = Great Island = Madagascar?); Sukhadra (= Island of Bliss = Socotra); Dipa/Diba (= Bajun Islands?).

The question-marks immediately signal some of this is problematical. Another difficulty is that the yava-based names plus suggested meanings originated in an era when messrs. Smith and Forlander were writing in the pioneering days of Pacific

anthropology. From the days of Peter Buck (*The Vikings of the Pacific* 1938), they tend to be cited but generally only so that they can be dismissed.

Against this is what is written by Brian Sykes (*Blood of the Isles* 2007). He compared the Hawaiki linkage with that of the Mongol ancestry of the Hardara of India plus that of the Iberian Q-Celtic forebears of the Irish as recounted in *Lebor Gabala Erenn* (= LG = Book of Invasions). Sykes (ib.) is one of the many comparing the Irish LG as the origin-myths of the Irish with what is written in the *Historia Regnum Britanniae* (*Hist. of the Kings of Britain*) by Geoffrey of Monmouth. Geoffrey (12<sup>th</sup> British) also wrote of skulls in what are now mainly enclosed feeders of the River Thames now confirmed by excavations.

What Sykes (ib.) is showing is the validity of native traditions but as confirmed by genetics **not** archaeology. He tells us that in the case of Hawaiki, it is now proven that **it was** in Indonesia/Austronesia. Also in Austronesia are the yava-names plus dvipa-names now seen as having named islands in the western Pacific plus the Indian Ocean. Here too is an overlap of the two groups of names. The nautical connection is shown by possible alternative names for Borneo and Sumatra. On a map on the "Tribute to Hinduism" site, there is mention of *Apara Samudra* (the Arabian Sea), *Parva Samudra* (= Bay of Bengal) plus *Dvipa Samudra* (= Island of the Sea = Sumatra). One for Borneo is of *Dvipa Varuna* with *Varuna* being the name of the Sanskrit god of the sea that seems equally as convincing for sea-borne contacts.

It emerges from this that these words belong to the earliest phases of Austronesian migrations to the western Pacific plus Indian Oceans. Nor surely is it coincidence that the yava-names taking on secondary meanings included one that has prompted a suggested meaning of homeland east of ISEA/Austronesia in one direction plus people west of Austronesia/Indonesia in the other. The significance of this comes home with the realisation that both yava-names and dvipa-names originate in the ancient language of India called Sanskrit. Indian influences appear to be acting on the Proto-Austronesians in the western Pacific becoming Polynesians.

The Austronesian achievement on the Indian Ocean tends to overshadow that of other groups. What are now the islands of southeast Asia was part of what was once called Sundaland. It has now been added to the worldwide tales of Great Floods well-known via the Atlantis plus Genesis/Noah myths. There is also a tendency to replace the Atlantis and Genesis tales with Sundaland/Southeast Asia as a single-source origin of all civilisations. We saw Hornell (1920) held Austronesia/Southeast Asia was the source of Pre-Tamil south Indians. Instances of this applied to as far west as east Africa range in time from "Voyages of the Pyramid Builders" by Robert Schoch (2002) wanting the builders of such as the Egyptian Pyramids to the much later Great Zimbabwe, etc, being from ISEA.

Hornell (ib.) argued that the coconut plus the scraper for defleshing the nuts was introduced by "islanders" to south India according to Tamil tradition. However, it is also Hornell (ib.) who shows the islanders to have come from Ceylon/Sri Lanka **not** ISEA/Indo-Malaysia. Blench (*Aust. impact on the East Af. Coast* online) says the scrapers are too generalised a form around the Indian Ocean to be specifically associated to Austronesian (= AN)/Indonesian colonists.

Canoes with the stabilisers called outriggers are another item attributed to Austronesian/Indo-Malay and canoes with single outriggers dominate in the Pacific where they reach their peak in those of Micronesia. Graham Campbell-Dunn (*Maori: The African Evidence* 2009) looks to India for the prototype. Directly relevant would be the south Indian language of Tamil and *kattu-maran* (= tied logs & ancestor of the later catamaran). Campbell-Dunn (ib.) notes a reconstructed/ghost-word in Proto-

Malayo-Polynesian (= PMP) shown by an asterisk as \*kati-R (= outrigger-boom). He adds West Futunan (off New Caledonia) kiatu (= outrigger boom), Raratongan (a Polynesian tongue of the Pacific) katea (= double-canoe), kati (= tie/fasten), etc.

If this indicates close links between tied-logs and double-canoes, so too does William Dampier (17<sup>th</sup> c. Eng.) describing the outrigger as almost a small canoe (& see what is said about the jangada above & below). Hornell's (1946) map of canoes across seemingly marks canoes with single outriggers as peripheral to those with double outriggers. This again suggests something Pre-AN, particularly as the double-outriggers especially marks the AN presence. We may have ruled out AN sources for the Pre-Tamils of south India and it seems ANs were not the first to inhabit Madagascar after all, it is still the case that ANs provided the bulk of the basic population of that large island as the Malagasy.

The Austronesic ANs or Indo/Malays reaching Madagascar is not is not to be gainsaid but notions of non-stop voyages from Indo-Malaya/ "Indonesia" are surely fanciful. Hornell (1934) certainly doubted this and Blench (The Austronesian impact on the East Coast of Af. online) lists sources in turn listing several places that seemingly attest sites intermediate between Indo/Malaysia and Madagascar.

It has been shown another unlikely line of argument line is that Austronesians came to an un-peopled Madagascar. If it is still valid to quote folkloric traditions, there is Madagascar in the Ancient Malayo/Polynesian Myths" by Keith Taylor (in Explorers in Early Southwest Asian History edd. Hall & Whitmore = Michigan Papers 1976). Taylor (ib) cites Malagasy mythology saying the Austronesian chief took a local princess as a bride, **thereby acknowledging a Pre-AN occupation of the island**. Blench cites various authors saying east Africans had reached Madagascar between 2500/2300 B.P. and that this was also Pre-AN.

Blench (ib.) also adverts to bones of hippopotami attesting the signs of butchery of about the same date (thereby again confirming the human presence there). So too do changes in the vegetational history of the island that are attributed to the same period and to human activity. It is known that rats were borne unwittingly to all the islands of the Pacific in canoes of the Polynesians plus ships of the Vikings to islands off North America. To this is added that rats plus mice had penetrated to all parts of the island of Madagascar by c. 2500 B.P. and displacing much native fauna when doing so but of particular interest to us here is where it is those rats are thought to have come from.

A major argument by academics wanting to dismiss those putting forward the theory of Africans sailing to the Americas is the absence of rats and/or rat-borne diseases. Now that Old-World rats are proven in Americas by excavation, this is removed as an objection but such matters are more appropriate for "West Africa & the Sea in Antiquity" (online). Part of this is that rats were brought unwittingly to the remotest Pacific islands in Austronesian and/or Polynesian vessels. This was the Pacific rat (*Rattus exulans*) and if rats can truly indicate antecedents, those reaching Madagascar have particular significance.

The sources drawn on by Blench tell us that the affinities of the rats on Madagascar are with India. Nor are they the only example of small mammals from India turning up in Madagascar, this as the same writers informing Blench have it that the Asian shrew also occurs there. As part of the yava-names, we saw that the suggested java/yava-names took us back to India plus the islands of southeast Asia and that of Hova takes us to India and Madagascar. Hova is a name for the basic population of Madagascar but is somewhat less used than Malagasy.

Cyril Hromnik (Indo-Africa 1984) refers to Blood-group B as dominant in India plus the Hova, whereas Blood-group A dominates among Semites plus the Immerina (the rulers of Pre-French Mad.). Canoes of parts of India and those of the Hova have been compared, the more so given that James Sibree is cited by Haddon (Man 1918) as saying that Austronesian norms differ from the Hova canoes. Malagasy tradition has the Austronesic Proto-Hova/Malagasy landing in northeast Madagascar. Here the dominant vessel-form seems to be the Indian plank-built fishing-boats called the masula according to Hornell (1934), Hromnik (ib.), etc. This presumably also tells for the masula being more than merely a coastal form.

Gerald Tibbetts (Arab Seafaring 1981) shows Indian navigators distinguished between *miqdhafaina* (= steering-oar) and *sukkan* (= rudder). According to Hornell (1919), *sukkan* (= rudder) plus *kana* (= tiller) are in a list of terms passing from the Dravido/Tamil tongues into Erythrean usage (inc. Malagasy). Tibbetts (ib.) also saw Indian *kanaka* (= astrologer) combined with Arabic *muallaim* (= pilot) to give Malemo Canaque as the epithet of a Indian from Gujarat (India) who piloted the first Portuguese across the Indian Ocean. Also that the true name of this Gujerati was Ahmed ibn Majid. This is apparently not the famous Arab navigator of that name.

More signs of Indian navigators on the Indian Ocean may be the two birds at either end of a vessel depicted on a baked-clay object from the Harappan Culture site perhaps of Noah-style. More certain is what is cited by Hornell (Antiquity 1946). Thus what is written in such Indian texts The Kevatta/Kevadda of Digba (c.2500 B.P. Buddhist), Sutta Pitaka (c. 2500 B.P. Hindu). Pliny (c. 100 B.P. Roman) wanted this Noah-style activity to reflect bad science in Sri Lanka but this is easily answered by what we now know of the high level of civilisation in ancient Sri Lanka.

Birds as navigational aids are a particular feature of Middle Eastern accounts, such as those of Gilgamesh, Utnapishtim, Noah, etc. The birds described in the Tale of Wen-Amon (c. 3100/3000 B.P. Egyptian) are probably to be seen in this light. Birds reported in the "Role of Birds in Early Navigation" by Hornell (ib.) also appear in east Africa, as shown Cosmas Indicopleustes (= c.1400 B. P. Voyager/Traveller to India) in "Topographica Christiana" (= Christian Topography). Instances in west Africa are discussed in the Hornell (ib.) article plus "West Af. & the Sea in Ant."

Among the rather more obvious navigational aids across the Indian Ocean is such as Mount Karthala in the Comoro Islands to the northeast of Madagascar. As a still-active volcano, its very height plus the smoke belching out make it a very obvious visual navigational aid. Hromnik (ib.) refers to Kumari Dvipa (= Cape Comorin at the southern tip of India &? Sri Lanka). It may be that Kumari/Comorin is the origin of the placename of Comoro (see also East Af. & the Sea in Antiquity).

Bringing this westward still towards east Africa, this was seen to be the subject of arguments that all signs of advanced civilisation in east Africa are introduced from outside, as touched on above. They were seen to range in date from the Pyramids of Egypt to Great Zimbabwe giving the modern state-name. Sea-borne builders of the Pyramids loom large in the David Rohl books of mainly the 1990s but are answered by the sources cited in "Egypt & the Sea in Antiquity" (online). Nor are claimed non-African builders of Great Zimbabwe any more convincing (see East Af. & the Sea in Antiquity online). Had more been known about the giant earthworks of ancient Nigeria in west Africa been known at the same date, we can be sure that they too would have been attributed to non-Africans.

This kind of thinking is not confined to the past or to African structures. Dick-Read (ib.) lauding Austronesian/Indo-Malay nautical achievements, goes on to dismiss those of India. Cyril Hromnik (Indo-Africa1984) praises India but denies

Persia/Iran on the same matter. Hromnik's (ib.) Indians building Great Zimbabwe joins a long list of claimed non-African builders of this African monument. The Hornell works routinely deny Africans as originators of east African vessels best known on the Great Lakes of east-mid Africa (esp. the canoes of Lake Nyanza [= Lake Victoria; the mtepe of the Erythrean Sea (= western Indian Ocean), etc.

It is probably no great surprise that there are also those arguing for Indian sources for the Egyptian Pyramids. One such comparison is of the Indian shikara (the point of Hindu temples) and Egyptian Pyramids by Niranjana Babu Bangalore (Vastu, Temples & Pyramids online). A part of India that Muzafaer Ali (The Geography of the Puranas 1966) called Lhasa (God's Land) may identify with the Punt that Egypt sent ships to and equated in Egyptian myth with Ta-Neter (= God's Land). If this could all be proven, it would indicate navigation between India and Egypt at very remote dates.

Probably rather more certain is yet another Indian to be identified as "The Half-drowned Sailor". The Tale of the Half-drowned Sailor (online) really comes from an episode in the *Periplus Maris Erythraei* seen to translate as the *Periplus of the Erythrean Sea* and the Erythrean Sea is generally seen as the western Indian Ocean. The Casson (1989) translation of PME attempts to reconcile what is written about Eudoxus by Strabo and about Hippalus by PME in terms of a ship captained by Eudoxus and helmed by Hippalus. Sean McGrail (*Boats of the World 2001 & 2004*) is one of those pointing out that in antiquity, there was a wrongly-made conversion of the word of hippalus (= undersea wind) into the personal name of Hippalus. This means the name of Hippalus is not real.

What tends to be forgotten about the Half-drowned Sailor is that he was an Indian. As he was the pilot that took the Greek Eudoxus, it will also be obvious that he knew the direct route across the Indian Ocean. So we can confidently assume that he represented a very long line of people who had that knowledge plus that Eudoxus was not the first to use the monsoon winds to directly cross the Indian Ocean. It was seen already Indians were not the only ones doing so, as Austronesians were also coming west to the various island-groups of the Erythrean Sea and some would argue that they also settled on the east African coast and Hornell's many works are particularly strong on this point.

Austronesians on Madagascar is beyond doubt but this is still very much language-based not on really on archaeology. Evidently trying to locate Austronesian languages in mainland east Africa seems doomed to failure according to several studies. This does not mean that Austronesians did not reach east Africa but their heavy presence there argued in the Hornell papers that consistently mention Great Lakes canoes, sea-going mtepe, etc, is countered by several other authorities.

Messrs. Worthington (MM 1933), Huntingford (Man 1937), Wicker (Eg. & the Mountains of the Moon 1991), etc, all look for native development of the east African canoes. Messrs. Prins (Tanganyika Notes & Records = TNR. 1959; Paideuma 1982), Chittick (Int. Journal of Nautical Archaeology 1980); Allen (Swahili Origins 1993), etc, all deny an Austronesian origin for the sea-going canoes with outriggers.

They are also equally strong in denying there is an Austronesian/Indo-Malay connection for the mtepe. Lydecker (ib) seems to be one of the first to mention the proto-mtepe of Wadiba traders wrecked on the Bajun island of Kiwayu. Once the authority of Hornell was put behind this tradition and linked by him to Austronesians, it became generally accepted but other researchers in the form of Prins (1959), Chittick (ib.), Allen (ib.), etc, have all tried to track down this story among Bajunis but met with complete blankness. Allen also makes the point that the amiability of the

Wadiba of this folklore totally contrasts with what is recorded elsewhere of the Wadiba in east Africa. Nor could Allen (ib.) find much in the way of proof of the proposed intermediate form(s) of the vessels of Wadiba traders in the Maldives.

Sea-borne traders and islands do come together as the Indians on the island of Socotra recorded in PME. This is more or less where the Indian Ocean plus the Gulf of Aden are starting to become the Straits of Bab el-Mandeb leading to the Red Sea. If traders did bring the mtepe to the Bajun Islands, it may be relevant that Hornell (MM 1941) felt the Indian dwipa/dvipa/dipa was echoed in the dipa/diba of Wa-diba of the Bajuns. From the results of excavations of Felix Chami plus colleagues usefully summarised in "The Unity of African Ancient History" (2005), we learn of Indian artifacts on the east African islands of Zanzibar, Mafia Island, etc. Artifacts of the Harappan Culture of India compared with those of these east African island-sites at Machaga Cave (Zanzibar, Tanz.); Kuumbi Cave (Zanzibar, Tanz.), Mafia Cave (Tanzania), etc, presumably attest the oldest of these east African small-finds. Hromnik (ib.) would add the presence of yet more Indians further south on Mocambique Island that in time led to the state-name of Mozambique.

The Indian word(s) of dwipa/dvipa/dipa as the original of diba (as in Wa-diba) held to be relevant for the emergence of the mtepe has added Prins (1959; 1982) comparisons of the Indian pattamar and the east African mtepe on several counts. It should be said that most writers on such matters consider the pattamar as an Indian type that has come under extensive Arab or European influences. On the other hand, Prins (1982) seems to have regarded this type as an Indian form that evolved (without external agencies?). The various theories about mtepe sources do carry with them the implication that they were very much an open-sea type.

This is also very much the case with what Arthur Welford (MM 1941) suggests about the pangaia form of mtepe plying between India & the east African coast. Hromnik (ib.) was seen to refer to Indians on Mocambique Island. This was in connection with what he says about Indian vessels that he describes as mussumbi-baza (= monsoon-boats), so further reinforces what has been said about Indian navigators knowing how to use the monsoon system of the Indian Ocean. Hromnik (ib.) also allows that the mussumbi-baza may lie behind the name of Mozambique.

Here it is worth noting that in the Journals of Vasco da Gama (15<sup>th</sup>/16<sup>th</sup> c. Portuguese), there is mention of Mocambique. This in turn has been the subject of being translated as place of boats and is one of several places on African coasts that this has been applied to. One of those with da Gama was Tome Lopez. The Indian region of Sophara is seen by some writers as the Biblical Ophir but Lopez saw it as what is now the Sofala region of Mozambique. This was based on the handling of nearby gold-sources. Whether this can be said to connect India with Mozambique plus Zimbabwe (as the Biblical Havilah) remains decidedly moot.

### **ROUND WE GO: INDIANS (PART II)**

Sections above have shown several authorities have looked at what they would label "simple" types of vessel capable of passing ocean to ocean and that India was part of this. In "Abubakri II: Who He?", evidence was put forward indicating non-African interest in what is now western South Africa much earlier than usually proposed. Part of this was a possible landing-spot of the Phoenicians sent by Necho round Africa. There is good reason for arguing that circumnavigations of the southern tip of were more frequent than surviving records might indicate.

If the Phoenicians landed then sowed their crops in the Cape of Good Hope/Table Bay area of western South Africa, we can be sure that the other groups

described as also capable of rounding the southern tip of Africa were known in the Cape/Bay region too. Further indicating this are what are shown on the Vesconti/Sanuto (13<sup>th</sup> c.) plus Mauro Maps (15<sup>th</sup> c.) that existed well before Europeans first passed ocean to ocean from the Atlantic to the Indian. For our purposes, key here is what is said on the Sanuto Map about Robben Island.

Robben Island is better known for being the Devil's Island or Alcatraz of South Africa but most famously for being where Nelson Mandela was imprisoned. The Vesconti/Sanuto Map shows Robben Island in near-perfect relationship with the nearby Cape/Table region. If this information does not come from the Africans of the region, there were other sources that could be tapped by messrs. Vesconti and Sanuto/Sanudo. Here we observe that Indians were part of what Sergent (ib.) described and put to ca. 3000/2500 B.P. Here the excavation at Igbo Ukwu (Nigeria) has interest. Thurstan Shaw (Interim Report in *Man* 1965) placed the house-burial of Eze Eri (= King Eri) there to c. 900 A. D. but Catherine Acholonu (*The Gram Code of African Adam* 2005) would seriously dispute this.

The house-burial at Igbo Ukwu is said by Acholonu (ib.) to run counter to Igbo/Ibo tradition. She also points out that for a house to be completely buried by an accumulation of soil would take upwards of a full millennium. Unfortunately, Acholonu (ib.) then follows this with an improbable date equating with the Grimaldi era of the Late Palaeolithic. This may then indicate that the beads with Indian affinities belongs with the other Indian traits that Sergent (ib.) was seen to regard as proof positive that there were maritime links between India and west Africa. This would be in what conventionally would be the last millennium B.C. (= our 3000/2000 Before Present = B.P.). Here may belong Menzies (ib.) bringing the Galle (Sri Lanka) plus Janela (Cape Verde Islands) inscriptions to our attention.

The Galle Stone resembles the more famous one from Rosetta (Egypt) in being trilingual but does so in totally different tongues. The Galle inscriptions praise a local form of Shiva in Tamil, Buddha in Chinese plus Allah in Persio/Arabic. Tamil plus Malayalam emerge from what philologists regard as Dravido/Vedic interactions in India and according to Menzies (ib.), the inscription on the Janela Stone was in the Malayalam language. It may be noted that Acholonu (ib.) also looks for Malayalam links with west Africa but there is a vast difference in the dates sought by them.

Unfortunately for Menzies (ib.), he seems to be the only one who reads the Janela inscription as in the Malayalam language of India. Nor does he deign to give us a photo of the Janela Stone. On the other hand, Menzies does advert to a maritime link between the Indian Ocean and west Africa shown by the map compiled by the priest called Mauro Camaldolese. This goes under the name of the Fra Mauro Map (15<sup>th</sup> c. Italian). The Mauro Map has been subject to diverse interpretations but one is that Mauro looked for Indian crews as far north as the Green Isles (a straightforward translation *Ilhas do Cabo Verde* = islands of Cape Verde). The Cape Verde Islands also figure in further debate but this time about where cereals of American origin first grew in the western Old World.

Messrs. Sorenson (*Across the Ocean: From the "Impossible" to the "Certain"* online) and Jeffreys (*Pre-Columbian maize north of the Old World Equator* online) trace the most famous of the American cereals but do so with somewhat different dates in mind. John Sorenson (ib.) puts it to "late history", whereas Mervyn Jeffreys (ib.) looks to a deposit under a 12<sup>th</sup> c. pavement at Ife (Nigeria) for pottery decorated by maize cobs. It is always possible that these two stances are but separate strands in the same continuum but a question here is if there was adoption of American maize

this side of the Atlantic, why was this so very useful cereal not taken up more widely in Africa in the way it was at a later date?

Paul Lunde (New World Foods, Old World Diets online) joins Sorenson plus Jeffreys in showing maize in west Africa. Lunde (ib.) shows the failure to take up Pre-Columbian maize is matched across southern Europe with a rare example of otherwise around Milan (Italy). Lunde (ib.) cites the American botanist named Carl Sauer saying that Peter Martyr (15<sup>th</sup>/16<sup>th</sup> c. Italian) attributing this to the Pre-Roman inhabitants of around Milan who were Celts or Gauls of the tribe called the Insubres. On the other hand, Lunde (ib.) regards this as no more than learned affectation. Yet it does appear that this would be part of a pattern that was more general meaning that for reasons unknown to us, maize-growing was not taken up much before the time of Columbus.

Board-games have long been the subject of being regarded as showing diffusionism. Fitting here would be the Indian board-game called pachisi, parchisi, etc. It is of the cross-&-circle variety and has constantly been compared with the games known as buulic to the Maya and patolli to the Mexica (including the Aztecs) naming Mexico. These Amerind board-games are best known from wall-art.

As are the controversial “elephants” occurring in Amerind artworks. A major difficulty is that elephants plus relatives have been unknown in the Americas for several millennia. The most famous of the claimed Amerind carvings of elephants are those at Copan (Mexico). Donald McKenzie (Pre-Columbian America 1923 & 1996) has usefully summarised the diverse theories as to the interpretations of what the Copan depictions actually represent. They include tortoises, macaws, tapirs, snakes, scrolls, plant tendrils, etc. What will be immediately self-evident that what underlines this little list is an almost a desperation that under no circumstances, is it to be allowed that that elephants are being depicted. However, it should be said that that the Olmec object from Jalapa (Mex.), the Copan figures, the Yalloch (Mex.) vase, etc, are all held to represent elephants. **Nor are they alone.**

In the light of the noted problems plus the several interpretations, it cannot be insisted that elephants are being depicted but staying with the notion that they are, the ears of that at Jalapa seemingly resembles those of African elephants but those of Copan appear to be the ears of Indian elephants. Elephants also have a different role here in that Aristotle (2400/2300 B.P. Greek) writing that there were elephants in Africa and India meant that they were not far apart. This apparently was in the mind of Christopher Columbus when contemplating trying to reach India plus China by sailing west across the Atlantic.

His thinking that he had reached India is what led to the term of Indian being used of the inhabitants that in turn led to such as “Indians”, American Indians, Amerindians, Amerinds (as here) and Native Americans can be added to this. Columbus went to his grave insisting he had met Indians and this is why the name of the continents that he came across bore the name of the first man known to have acknowledged here were continents new to Europeans. Douglas Peck (Yucatan: Prehistory to the Great Revolt 2005) plus Jack Forbes (Africans & Native Americans 1988; The American Discovery of Europe 2007) show Amerinds on the same ocean.

Peck (ib.) and Forbes (ib.) attest Amerinds as rather better sailors than generally realised. Red skins in Africa have been seen as due to climate, mixing of peoples or incomers. Something of all three is likely with the notion of incomers reinforced by what is described by Forbes (2007) showing inhabitants of East-coast Americas in parts of Atlantic-west Europe, as underlined by a chapter entitled “Iberia to the Baltic”.

Forbes (2007) further alludes to a bronze head that thought was that of an Amerind. Also painted at Pompeii (Italy) was a figure not resembling anyone from the Magreb, the Near East nor southern Europe. He compared it with the description of two more found in a boat in the Atlantic island-group of the Azores that in turn “was neither African or European”. The occupants of the boat were dead but the vessel survived and probably helps us see that Amerind vessels were particularly seaworthy.

That seaworthiness is nicely demonstrated by the vessels called jangadas shown by Forbes (2007) as capable of undertaking sea-voyages of more than 2000 miles at one go. Bowen (ib.) says jangada was used of both log-rafts plus double canoes; Huntingford (as McGrail ib.) wrote of the type as “single logs tied together”; Casson (as McGrail ib.) described them as “double canoes yoked together”

Bowen has also listed a number of traits as papyrus/reed-boats; steering-oars, quarter rudders; sheer plus tripod masts; sails twice as wide as high; their being of rectangular shape; booms at the foot of the sails; cabins centrally placed; the cabins being mat-covered. This is usually seen as reflecting Egyptian influence on Indian Ocean cultures but Bowen reversing this to showing Indian influence as far west as east Africa is underlined by it being seen that Indian navigators were known the length of east Africa from Egypt to Mozambique with the very real possibility that an Indian vessel type may have part-given the modern state-name of Mozambique.

This recognises the skill of Indian navigators, as does the discussion above when outlining where some early Indian vessels fit among those of both the simple types and the simple types deemed by several expert opinions as capable of rounding Africa and going long distances on the Pacific, Indian plus Atlantic Oceans.

Having rounded Africa and now on the Atlantic is added that the Indian type called a kattumaran is matched in Atlantic-facing Africa where it seems never to have a major tradition and this may be felt that this strengthens the thought by Stewart Malloy (ib.) that such rafts were introductions. This further means that the Indian raft-type going under the several names of sangara, shangadam, sangadam, jangar, jangada, etc, and seen on the far side of the Atlantic in South America is less isolated.

Certainly, an introduction from the Pacific or West-coast Americas across the narrow Panama Isthmus to the Caribbean or Atlantic side of what we have called East-coast America can be ruled out on it being by Bowen that the jangada is not a Pacific form. So too can the argument that the jangada originated in Europe. This is based on Pre-Columbian East-coast Amerinds not having sails. The simple sail of the jangada contrasts totally with the elaborate sails of European sailing-ships and the jangada method of fixing sails directly to the mast is completely alien to the elaborate rigging of European ships.

In closing, we remind ourselves that no matter whatever the spelling of shangadam, sangadam, sangara, jangar, jangada, etc, plus the occurrence in South America, the jangada is an Indian vessel-type.

#### **Correspondence address:**

Harry Bourne  
UK  
e-mail: bsooty1@lavabit.com