# **EAST AFRICANS & ANCIENT NAVIGATION**

#### Why It Could Not Be

In a series of papers, this writer has proposed that our ancestors were very much more in touch by sea than is usually accepted by most maritime historians. Doubts about this lead us into something seen in many other of those other papers, namely opening with the negatives and this is echoed in this article with "Why it Could Not Be" are expressed. To also be borne in mind is that dates are to be expressed here as Before Common Era (= BCE/BC) and later ones as Common Era (= CE/AD), as are the international comparisons.

Things Chinese begin these international comparisons and are taken from the book called "1421" by Gavin Maxwell (2003). He especially means the expeditions in the "treasure-ships" led by Zheng-He ( $15^{th}$  c. Chinese) westwards across the Indian Ocean. Online sources give the flag-ship of Zheng-He (= Cheng-Ho) as measuring ca. 400 ft. in length and 160 ft. in width; Noah's Ark as circa (= ca.) 450 ft. long and ca. 75 ft. wide and the Santa Maria of Christopher Columbus ( $15^{th}$  c.) as ca. 85 ft. long and ca. 25/30 ft. wide. Did such ships exist? Also bear in mind Confucianist/Neo-Confucianist disdain for the sea and sailors.

More massive ships are described in the Sanskrit myths of ancient India but are dismissed by Robert Dick-Read (The Phantom Voyagers 2005; Africa & Indonesia: questioning the origins of Africa's most famous icons online, etc.) However, there is little real evidence for the giant wooden ships of either India or China. Also Sean McGrail (Boats of the World 2004) cites very serious doubts about "the oldest dock in the world" at Lothal (India). James Hornell (Water Transport 1946) is one of those writing that the codification of Hinduism shown by such as Manu Smriti (= Laws of Manu) stopped Brahmins 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 in the Arabian Peninsula. Hornell (ib.) plus others quote Mohammed saying "he who goes twice on the sea is truly an infidel". Of the various successors to Mohammed, the third was Omar ibn Khattabh. George Hourani (Arab Seafaring 1951 & 1995) quoted Omar/Umar refusing the Faithful permission to go sea because "it is unnatural". Hornell (ib.) has 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 religio/spiritual but nearly so, was the antipathy towards the sea and sailors in Egypt according to Strabo (1<sup>st</sup> c. BCE Greek). Connie Lambrou-Phillipson (Seafaring on the Mediterranean online) described Egypt to Crete as "The Improbable Journey". Alessandra Nibbi (Revue d'Anthropologie 1993) went further on this kind of thinking shows this kind of thinking shows the ancient Egyptians had no interest in the sea. In support of this would be Plutarch (ca. 1<sup>st</sup> c. CE Greek) saying "Egyptian priests held aloof from the sea". Also Porphyry (ca. c. CE Greek) wrote "Egyptian priests held it was unholy to sail on the sea".

Egypt direct to Crete may have been "The Improbable Journey" but Crete to Egypt was not. We also know of Cretan craftsmen of the Middle Minoan or Proto-Palatial (ca. 4000/3700 BCE) were also acting as craftsmen in Egypt. From early on, Asiatics were also acting as craftsmen in Egypt. They were shipbuilders too for Egypt. When a weakened Egypt could no longer compete with the other Mediterranean powers, Pharoah Necho (700/600 BCE) sent Phoenicians to explore

the east coast of east Africa. This seems to have started as an extension of the former Egypt to Punt voyages but turned into a round-Africa one.

Egyptian plus other ships on the Red Sea had to cope with what the unknown author of the Periplus of the Erythraean Sea (= PME= Voyage on the Erythraean Sea) called dangerous coral reefs. The 1911 Britannica refers to complex waters making Red Sea navigation difficult and dangerous. Despite frequent voyages, east Africans could ask Egyptians where they had come from. Nor did this frequency prevent Egyptian ships going down, as made plain by the story "The Shipwrecked Sailor" written by Amenaa and given Middle Kingdom date.

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 (1<sup>st</sup> c. BCE Greek) and Idrissi (14<sup>th</sup> c. Magrebi) wrote respectively of Above-Horn and Below-Horn east Africa as evidently not possessing ships. When what such as Nibbi (ib.) wrote about Egypt is recalled, it seems east Africa had no ships at all.

There is a route via the Red Sea, the straits called Deire in Greek and Mandeb in Arabic, the Gulf of Aden and on to the open Erythraean Sea (= western Indian Ocean Region[= western IOR]). It is unlikely such geographical niceties were recognised in antiquity. If so it is likely that the terms of Deire plus Bab el-Mandeb refer to the connection of the Red and Erythraean Sea.

Deire would appear to be the Greek word of narrow referring to the narrow straits but Bab el-Mandeb translates as Gate of Tears. One suggestion is that this refers to east Africans en route to the Trans-Islamic trading in Zanj slaves to perhaps parallel the Sankofa of west Africa (esp. Ghana). The Sankofa is the bird that always looks back in regret on the part of west Africans never to see their homelands again because they were now part of the trans-Atlantic slave-trade.

Less romantic would be that the Gate of Tears refers to going from the relatively sheltered Red Sea to the open Indian Ocean. A reason for the tears is nicely illustrated by Cosmas Indicopleustes (= C. the Voyager on the Indian Ocean). The ship carrying Cosmas nearly came to grief close to the Horn of Africa.

There are also plenty of actual wrecks to occasion tears. Some are famous. Thus the "The Tale of the Shipwrecked Sailor" (ca. 2500/2000 BCE; the episode from Strabo titled "The Half-wrecked Sailor" having an Indian wrecked on the Red Sea coast of Egypt; an Ethiopian ship wrecked on the Red Sea coast of Arabia noted by Stuart Munro-Hay Aksum: An African Civilisation of Late Antiquity 1991).

Another wreck has been held to explain the emergence of the ship-type called an mtepe in east Africa. This story has it that a vessel of possible Indian origin but more usually seen of the Austronesians (= ANs)/Indo-Malays was wrecked in the Bajun Islands (Somalia), were rescued by the islanders and the grateful crew taught mtepe-building to the Bajunis. Again south of the Horn is the better known wreck found by Eudoxus (ca. 200 BCE Greek). Phoenicians were settled at Carthage (Tunisia = Poeni/Puni in Latin), Gdr/Gadir (Gader/Gadiera in Greek & Gades in Lat. [= later Cadiz, Spain). A vessel of these Phoenico/Punics was the hippos. The figurehead of one was found by Eudoxus according to messrs. Cary & Warmington [The Ancient Explorers 1963]) at Cape Prason.

Relatively few vessels appear to have come south of Cape Prason/Delgado (Tanz./Moz.) and those that did then came across Cabo das Corrientes (= Cape of Currents (Moz.). Also on the Mozambique coast is Sofala. Dick-Read (ib.) probably rightly identifies as a region. The more so given that the name seems to arise from the Arabic sufail (= shoals) marking dangerous shores.

European reports from at least the time of Marco Polo (13<sup>th</sup> c. Italian) have stressed the problems of traversing the Mozambique Channel between Madagascar and Mozambique. Further south are the Wild Coast (Transkei portion of South Africa.) plus the Wrecks Coast (from East London to Port Elizabeth, Sth. Af.). Off deepest eastern South Africa is the Agulhas Current. It is notorious for freak waves of the type that destroyed the Waratah or the so-called southern Titanic.

Cabo das Caldeira (= Cape Cauldron) is east of Cape Agulhas. It is named from what Johanna Gyorgy et al (The Agulhas Current online) plus others state is a mix of vortexes plus counter-vortexes. Cabo das Agulhas (= Cape of Needles) is named from a Portuguese term for needle-like/jagged rocks that also caused wrecks. It is at the southern tip of the continent of Africa, with the Indian Ocean to its east and the Atlantic to the west but most immediately is western South Africa.

Here too is what Dennis Montgomery (Seashore Man & African Eve 2005) has called sub-tropical waters. He is of the opinion that few non-engined vessels could cope with these seas. On this same coast is what was once called Cabo Tormentosa (= Cape of Storms) from the terrifying conditions here but was later renamed as Cabo boa Esperanca (= Cape of Good Hope).

The swell here is so dangerous that it led to a special circumstance of ferrying passengers from ship-to-shore during German rule of part of the southwestern shores of Africa. This German rule was over what is now Namibia having a coast that is more or less the 1000-mile stretch of the Namib Desert. The northern extent of this shore is what is called the Skeleton Desert because the sea-swell here was so dangerous to European ships and crews that left bleached human bones and skeletal remnants of ships.

Efforts are made by Ijo Genesis (Ijo-Gen online) plus Leo Frobenius (Voice of Africa 1913) are to connect western South Africa with the part of Guinean part of west Africa that is Nigeria and Angola-to-Morocco respectively. Elysee Reclus (The Earth & its Inhabitants 1889) does allow that Angolans reached a Guinean island but only as survivors of a wreck. Frobenius attempting to link west Africa from Angola to Morocco are dismissed as fantasy by Donald Harden (Antiquity 1941).

Pieter de Marees (17<sup>th</sup> c. Dutch) wrote of Africans trading some distance down the west African coast and that they this was fuelled by a special foodstuff called kankey. This is dismissed out of hand as errors by messrs. Hair, Law & Jones (Barbot on Guinea 1992). Roger Smith (The Canoe in West African History 1970) further says African canoes coming south would have to have gone against prevailing currents. Smith (History of Africa ib.) also cites British opinion saying west Africans were too scared to go to sea. Roy Bridges (in Africa & the Sea ed. Jeffrey Stone 1985) cited French authorities saying much the same thing.

Other European comments were complaints about flimsy and unstable African canoes. Also these canoes could cope not with the narrow channels linking mainland Guinea-Bissau and the Bissagos Islands plus those between the islands. Reclus (ib.) cites opinion that west African canoes from that part of Atlantic-facing Africa now called Senegal could not reach the Cape Verde Islands because of the currents.

Still on the Bulge of Atlantic-west Africa but north and west of Senegal are a number of other dangers. Setting aside these objections, there is an interesting anecdote recorded by al-Umari (14<sup>th</sup> c. Syrian). He says the Malian Empire sent two fleets on to the Atlantic and of which only a single made it back home. This hardly suggests the detailed knowledge expected from the frequent crossing of the ocean called for over millennia on the thinking of the Africa-centred/Afrocentric school.

Moreover, the African-like traits matched in Mesoamerica on the far side of the Atlantic are suggested to result from drift voyages on the so-called conveyor currents that carried non-engined craft helplessly across the Atlantic. Such mishaps could involve engined sea-craft to judge from a story by Gary Tremlett. in the British newspaper called the Guardian (29/5/06). Tremlett wrote of a modern French vessel having left Senegal and getting caught up in the combined Canarian/North Equatorial Currents was swept off to the Americas.

Nor do we really need to look so far away for problems. Ras/Cape Bojador (in the Moroccan-ruled Western Sahara) seems to have a block on Muslims and Europeans going any further south for millennia. This is expressed in a Latin term for the Atlantic of Mare Tenebrosum (= Dark Ocean) apparently being glossed in Arabic as Bahr al-Zulumat (= Sea of Darkness). Further would be Ras Bojador as Abu Khatar (= Father of Terror) in Arabic plus the cost to the Portuguese recounted in Mensagem (= Message) by Ferdinand Pessoa (1934). Just what could happen seems shown by the U.S. ship called Commerce foundering at Cape Bojador according to Wikipedia.

Richmond Palmer (The Carthaginian Voyage to West Africa 1931) is one of those pointing up how dangerous the heat would be on this stretch coast that is the western fringes of the Sahara that is an extent of desert as long as that of the Namib seen to have been so dangerous to European ships. This would have been to crews from the Phoenico/Punics down to the Portuguese, especially given that in the ancient text called the Periplus (= Voyage) of Hanno (ca. 600 BCE) says it took days to pass.

No less than Chancellor Williams (Destruction of Black Civilisation 1971) tells us that the Africans of the Magreb had no interest in the ports of north Africa/Magreb. Probably the most famous Arab navigator is Ahmad ibn Majid (15rh c. Arabian). Majid is cited by Gerald Tibbetts (Arab Navigation 197) as being less than impressed by the evidently Egypto/Phoenician basis of Mediterranean navigation when compared to that of the Indian Ocean.

### **Early Vessels: Reed Boats**

More doubts come with views about the validity of re-created of ancient voyages and vessels for several reasons. This would remove Thor Heyerdahl's Ra I and II because the first failed; Eric de Bisschop (1940) in The Kaimiloa Voyage (based on a Pacific dugout-canoe with Chinese sails); John Voss in Tilikum (an Amerind dugout rigged in schooner style); Hannes Lindemann (Alone at Sea 1958) in Liberia II (an African dugout with small keel added); Tim Severin (The Brendan Voyage 1978) in a skin-boat of the Celto/Irish currach type because like most of the rest of this list had modern equipment aboard.

The dangers of the high seas, more when approaching shore plus the flimsy nature of some vessels, there should be little surprise religious edicts emerged and that they became attached to voyages, 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 still legitimate to pose a simple question.

Based on what was said in the previous section and just above, that question is did anyone have the nerve to sail on the IOR/Red Sea coasts of east Africa or the Atlantic coast of west Africa? The brief answer is yes and that they did so in frail craft that were just sea-going but ocean-going too. This occurred at very early dates. Hornell (ib.) is one of those showing this in the variously named Island Southeast Asia (= ISEA), Island Southeast Asia; Maritime Southeast Asia, Austronesia, Nusantara (= the Islands), Indo/Malaysia, etc.

Paul Johnstone (The Sea-craft of Prehistory 1980) notes reed-boats in China but are of lakes and rivers not as sea-craft. This is very definitely so for the caballitos (=ponies/small horses) of the opposite side of the Pacific that Hornell (ib.) says were used 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 those of the Amerinds called the Aymara of Lake Titicaca (Peru). Tortora reeds from Lake Titicaca were used to construct Uru which according to James Allen (History of Reed Ships online) was sailed from Peru to the Marquesas in the Pacific but could not go any further.

African reed-craft included the kaday by the Buduma of Lake Chad (shared by Chad, Niger & Nigeria). Thor Heyerdahl (The Ra Voyages 197!) took the designs of Egyptian papyrus-craft and got the Buduma to construct Ra I that by just falling just short of the Bahamas failed to complete an Atlantic crossing. For Ra II, Heyerdahl (ib.) turned to the above-seen Aymara of Lake Titicaca which did so by reaching the Bahamas in the Caribbean Sea on the far side of the Atlantic Ocean.

Heyerdahl wrote that he felt the reason for the failure of Ra I was that a line seen in the Egyptian tomb-art was misunderstood. This is curious because Allen (ib.) says this was interpreted as a hogging-truss as long ago as Cecil Torr (Ancient Ships 1895). Donald Muffet (in African Presence in Early America ed. Ivan Van Sertima 1992 & 1997) was more used to building kadays for the for the shallows of Lake Chad rather than sea-going reed-craft. Heyerdahl's use of mature reeds rather than green reeds was also an important factor here.

Yet another interpretation of a feature in ancient Egyptian art is made by Dominique Gorlitz (various online articles re. vessels named Abora). He says that this feature shows use of the severally named daggers/swords/guaras/guares/lee-boards in Egypt. If this proves to be correct, Egypt to Crete would not be such an "Improbable Journey" as it would mean that Egyptian reed-craft could have navigated anywhere in the Mediterranean.

Confirmation of Egyptian reed-ships as ocean-going was provided by those described in the IOR by Eratosthenes (3<sup>rd</sup> c. BCE Egypto/Greek) when comparing the rigging and sails of Nile river-boats and ships plying the IOR.. Further confirmation of reed-boats as ocean-craft was provided again by Heyerdahl in "Tigris Voyage" (1978) but this time of Iraqi berdi-reeds.

Egypt-to-India also emerges from combining what is written by messrs. Bowen (ib.) plus Bowen (Mariner's Mirror = MM 1956). Most of the traits of these vessels are given Egyptian sources but Robert LeBaron Bowen's "Boats of the Indus Civilisation" reverses this making them going from Egypt to India. Hornell (ib.) held Puntite water-craft depicted on the walls were reed-boats. Perhaps they were the seagoing equivalent of the Lake Tana reed-boats Hornell says they could carry 7000 tons of coffee-beans. Red Sea types of reed-boat are the speedy ones described in the Book of Isaiah. Lake Tana provided the reeds for Ra I.

#### **Early vessels: Skin-boats**

In "Canoes & Navigation of the Maya & their Neighbours", Eric Thompson (Journal of the Royal Anthropological = JRAI 1951) shows Amerinds of the Miskito Coast of Honduras/Nicaragua had what seems to have been a quffa/coracle-type of river-vessel. It is possible that here belong the snakeskin (?) boats of the Olmec/Maya named Kukulkan (of mainly Mexico). Alongside this is what can be said about the

glass-like appearance of skin-boats in Egypt, Ireland, Norway, Canada, etc. Related are probably Irish tales of glass boats.

Among other skin-boats of the Americas is the Inuit (= Eskimo) umiak that Hornell (ib.) equated with the Siberian baidara in the way that the Inuit kayak/kayak is the equivalent of the Siberian baidarka. The Inuits regularly plied between Greenland and east Canada and the far side between west Canada/Alaska and Siberia until Soviet Governments stopped them.

In these northern waters, the umiak replaced the bull-nosed Bedford boats used by captains of U.S. whaling-ships. The hard-nosed attitude of such captains is well known, so when the boats familiar to them were replaced by Inuit umiaks, we may be sure that it was because they were mightily impressed by the sea-craft.

On the far side of the Asia/Euro land-mass were the skinboats of currach type of the Irish Celts discussed by Hornell (MM 1936, MM 1937, Water Transport 1946), Johnstone (ib.), McGrail (ib.), McCullach (ib.), Donal Mac Polin (The Donegal Currach 2007), etc. They attest currachs surviving rescues from ships wrecked in stormy weather sinking heavier planked wooden boats. Sanas Chormaic is better known as Cormac's Glossary (9<sup>th</sup> c. Irish) cites the age-old trading between Ulster (= nth. Ire.) and Scotland (= nth. Scot.) at the northern end of the Irish Sea.

Classical (= Greek & Roman) historians describe the skin-boats of Celts in Britain. Among these Greco/Roman writers about these British skin-boats are the unknown author of the Massiliote Periplus (ca. 600 BCE Greek); Timaeus (ca. 300 BCE Greek); Julius Caesar (50 BCE Roman); Pliny (1<sup>st</sup> c. CE Roman); Solinus (2<sup>nd</sup> c. CE); Rufus Avienus (ca. 350 CE Gaul?); Sidonius Apollinaris (4<sup>th</sup> c. Gaul). Pliny and Avienus primarily concerned a description of the commerce via British currachs ferrying British tin to foreign ships at the southern end of the Irish Sea.

Sea-going skin-boats of the Celts of Gaul (= most of Pre-Roman France & Belgium) caught the attention of above-seen Greco/Roman writers according to Johnstone (ib.) of 1000/500 BCE and later. Johnstone refers to the Oestrymnides (= islets off that part of Gaul/France that was Armorica/Brittany?) mentioned in the very early Greek text called the Massiliote Periplus. Only sections of its Greek text survive in a version garbled for the Latin poetry of the Ora Maritima (= The Sea Coasts) by Rufus Avienus.

Other skin-boats in west Europe are those of the Iberian Celts called the Lusitani naming Lusitania (approx. Portugal) attested by Strabo. Repeating the form for the purpose of sea-going was a skinboat of currach type built by staff and students of the University of Santiago (Galicia, Spain). It completed sea-trials of ca. 450 miles along the coasts of Atlantic-west Iberia (= Spain & Portugal) but the money for the project ran out according to Richard Mac Cullach (The Irish Currach 2007).

The seas off Galicia are mainly those of the Bay of Biscay long known for being the fiercest seas of Europe. So much so, the 18<sup>th</sup> c. governments of Holland, France plus Britain offered to defray Spanish costs of maintaining a lighthouse at Corunna (Iberia/Spain). The point to bear in mind is that these were bitter rivals of each other and of Spain, so this amount of cooperation is unusual to say the least. So when we read of the Santiago and the Irish type called Colmcille survived being near the Bay of Biscay or crossing it, again we should again be impressed.

Hornell (ib.) and Bowen (ib.) differ about vessels attested on the walls of the tomb of Amenhotep II. Bowen felt they depict what he and Johnstone describe as a continuation of "The great Pacific sailing-raft tradition". Something of the confusion of types is shown by the Broighter (Ire.) gold model oft-seen as a skinboat but seen as

ancestral strain of the birlinn (= Highland) galley in the Wikipedia entry on the Highland galley.

Moreover, Louise Bradbury (Journal of the American Research Centre in Egypt = JARCE 1996) thought they were as likely to be raft-like platforms set on inflated animal-skin floats. Pliny (as Johnstone ib.) described what seems to have been something similar used by pirates on the Red Sea.

Nibbi (ib.) cites other Classical writers saying that skin-boats were used in shallow waters in the Delta of the River Nile in Egypt. She further says the stitching of some vessels shown in Egyptian art-works demonstrates that they were probably skin-covered displaying the interesting feature of appearing glass-like when the sun is behind them, as noted by Johnstone (ib.) for Ireland, Britain, Norway plus Canada. Nibbi (ib.) cites Pliny saying Aethiopia (= Africa) had "folding" (= skin?) and adds the hokoumada of modern Ethiopia.

#### **Early Vessels: Rafts**

Vessels of the Olmec/Maya god called Kukulkan (= the Mexica/Aztec god of Mex. named Quetzalcoatl) are also seen possible skin-boat/currach class. More often, they are seen as rafts. This is certainly the case so with such as Douglas Peck (Yucatan: Prehistory to the Great Revolt 2005), Forbes (1993, 2007), etc. Of possible voyages from East-coast Americas across the Atlantic mentioned by Forbes (ib.) that to Galway may involve log-raft types. The most famous of these sea-going Amerind rafts of East-coast Americas is the South American jangada of mainly Brazil.

On the far side of South America is the very similar balsa raft. They are attested as having regularly plied between Peru/Ecuador and west Mexico over millennia, as is well shown by Dorothy Hosler (The Sounds & Colours of Power: The Sacred Metallurgical Technology of West Mexico 1996)), Richard Callaghan (Antiquity 2000) plus others. These are the log-rafts made famous by Thor Heyerdahl (The Kon-Tiki Expedition 1951) when the log-raft named Kon-Tiki sailed from Peru to the Tuamoto Islands in the Pacific.

Efforts demonstrating the reverse east/west passage across the vast Pacific include "The China Voyage: A Pacific Quest by Bamboo Raft" by Tim Severin (1995). Having covered ca. 6000 of the intended 6500 miles, it fell apart short of the intended objective. Other rafts are described by messrs. Haddon & Hornell (The Canoes of Oceania 1936-8) as those bringing the ISEA ancestors of the Polynesians on to the Pacific. Another raft-first/ canoe-next sequence seemingly took more ISEA groups across the IOR to Madagascar for Blench (Azania 2007 & several other articles elsewhere).

James (The Origin & Significance of Indian Boat Designs 1920 & part online), Blench material, etc, attest rafts in In India (esp. the south). Ganeswar Nayak (The wisdom of "tied-logs": traditional boats of India's Orissa Coast... online) shows kattu-maran (= tied-logs) invading Nusantara (esp. Indonesia) by sea using such boats. Bowen (ib.) says the Indian shangadam also means tied-log rafts. McGrail (Boats of the World 2004) cites the Huntingford plus Casson translations of PME saying the shangadam was a "vessel of tied logs" and "dugouts tied together" respectively.

This presumably accords with such rafts certainly still around in the IOR for Pliny (as Blench ib.) to have reported them as rati (= rafts) in that ocean. It can be further assumed this parallels the raft built by Sinbad according to the various editions of the Arabian Nights. Raft-building was also known to Odysseus (= Ulysses in Latin) in the Mediterranean according to Homer (dated to the  $9^{th}$  c. BCE acc. to Bernal's Black Athena 1991). In line with this would be that many of the much-vaunted black ships of the Greeks listed in the Catalogue of Ships in Home's Iliad were no more than of the level of dugout canoes.

Whether known by the Sanskrit kottu-maran/kattu-maran, the Tamil shangadam or the Latin rati used by Pliny, log-rafts in parts of Africa, both east and west may be introductions. Whatever else is to be said on this count, this overlooks what is written by the Culshaws (Tanganyika Notes & Records 1933) plus Henri Junod (The Daily Life of A South African Tribe 1926). The Culshaws (ib.) and Junod (ib.) attest legends of sea-going among the Turu of Tanganyika (= most of Tanzania) and Thonga of south Mozambique/northeast South Africa respectively. Stuart Malloy plus Ivan Van Sertima (in Blacks in Science ed. Van Sertima 1983) describe double-canoes in west Africa.

East Africa is oft-said to lack the long timbers needed and this is said of Egypt by Hornell (ib.) plus others where the long timbers generally had to be imported (from west Canaan/Lebanon). It is possible that this arises from it constantly being written that ancient Egypt had no interest in the sea; Strabo evidently saying Above-Horn east Africa had no ships; Idrissi is frequently cited as seen saying the same of Below-Horn east Africa. As part of the negatives we saw it is frequently written there was no west African sea-going tradition.

### **Navigation: Some of the Evidence**

The question has been posed as to whether anyone had the nerve to approach any part of Africa by sea. This has been very briefly answered. Egypt is treated here as part of that continent. This is because it is geographically of Africa and not as merely the extension of the Near East past authors have tended to view it. This is not dismiss the close overland links that are equally proven but tend be denied or are overlooked by those wanting to over-egg the Afrocentric pudding. However, it is obvious that to the overland links are added to those of overseas.

Here is some of the earliest testimony of Egyptian interest in the non-Egyptian world and is provided by finds of Pre-Dynastic date in southwest Syro/Palestine (approx. modern Palestine & Israel). This is attested by artifacts from a reign of what previously was solely called the Pre-Dynastic but which for the Later Pre-Dynastic Egyptologists are tending to label as Dynasties 00 and 0. This is the Pharoah of Dynasty 0 named Narmer.

The long timbers that Egypt needed to import for better woodworking that included shipbuilding came from further north in Syro/Palestine. According to Anita Stratos (Barques, Barges & Boats online) and many others these cedar logs came via Byblos in what was Phoenicia is now mainly Lebanon to Pre-Dynastic Egypt. Pharoah Khasekhemy (Dynasty 2) is the first known to have his king-name recorded at Byblos The reign of Snefru (Dynasty 5) has records of the actual shipping of these long coniferous timbers already said to have been exported from west Canaan/Phoenicia (approx. Lebanon) by sea.

Even further north in Canaan is what was Ugarit/is now Ras Shamra. Canaan is very approximately what archaeologists have labelled as Syro/Palestine. Much of what was west Canaan is best known as Phoenicia (= later Phoenicia). It came to consist of cities that at times of great Egyptian power were client-states. Byblos plus Ugarit appear to fall into this category. Ugarit is mentioned in the collection of clay tablets found at El Amarna (Egypt) and known as the EA Letters. Early Egyptian

voyages went on an anti-clockwise path en route to the Aegean using Ugarit plus Cyprus as useful stop-off points.

Egypt had other reasons for having a concern for Cyprus. Most but not all authorities identify the island of Alashiya as an ancient name for Cyprus. Among the EA Letters are some from a king of Alashiya studied in "The Location of Alashiya: New Evidence from Petrographic Investigation of Alashiyan Tablets from El-Amarna and Ugarit" by Yuval Goren et al (American Journal of Archaeology 2003). They are inscribed on tablets of clay from Cyprus that greatly helps to strengthen the identification of Alashiya as Cyprus.

Egyptian finds on Cyprus are dated to the Early Bronze Age (ca. 2500/2000 BCE) there and include alabaster, faience, glassware, jewellery, etc. Among Egyptian king-names on objects here are those of Senusret I at Enkomi; Amenhotep III at Hala Tekla Sultan; Horemheb at Palaepaphos/Skales; Seti I at Phylakopi. Another of the ancient names for Cyprus seems to be at least as old as the archaic Greek of the Linear-A script. There it is Kuprijo/Kupros (= Land of Copper?). Egyptian interest in the island revolved around copper but it will be seen this was far from being all that came from Cyprus to Egypt.

It can be expected that such showy displays will have greatly impressed the neighbours of Egypt in the east Mediterranean. This may be what really lies behind the arguments of Martin Bernal (vol. II of Black Athena 1991). Bernal combined what is said in the Mit Rahina (Eg.) inscription, what is said by the Greek writer named Herodotus about Sesostris, the results of the excavations by Evans at Knossos (Crete) those of Marinatos at Akrotiri (Thera/Santorini in the Cyclades Islands), etc, to suggest conquests in Anatolia plus the Balkans. Marinatos further says the earliest Greek legends match the results of the Akrotiri excavations. The Cycladic wall-art at Akrotiri was compared by James Brunson (in Africans in Early Europe ed. Ivan Van Sertima 1985) with a scene described in north Africa by another Greek writer called Diodorus Siculus (1<sup>st</sup> c. B.C.).

The Creto/Theran wall-art that has been touched on includes the "River" scenes compared with a scene by Diodorus Siculus about a lake named by Triton equated by many with Nereus. Lake Triton is usually seen as in "Libya". However, the oldest known of Greek writers are Hesiod plus Homer (of the 10<sup>th</sup> c. BCE for Bernal ib.). Hesiod says Triton "was of the sea"; Homer that he was from Aegea (formed on Aegean); if Athena as Triton's daughter was born in the homeland of Triton, Virginia Hicks (Minoan Origin of Athena [Antistoritan 2002]) put it on Crete; if Nereus and Triton were one the same, Nonnus refers Nereus as both Arabian and Libyan but the "Arabia" of Nonnus apparently refers to the Sopdu (Eg.) that equates with Arabia for Flinders Petrie (cited in the Maquillen article of "On the Shores of Canopus [Atlantis in Egypt] online).

If the homeland of Nereus/Triton was originally seen as Egyptian, this fits with the original term for "River" scenes of Creto/Theran art that originally were called "Nile/River Nile". Also with Lucien Basch (cited by Wachsmann ib.) showing paddled water-craft of Egypt are mirrored at Akrotiri. Frank Yurco (in Black Athena edd. messrs. Lefkowitz & Rogers 1996) saying Eg.-type shipbuilding, side-mounted steering-oars, sails, rigging, etc, occur at Akrotiri. So too do Egyptian-type cabins and Shelley Wachsmann (Seamanship & Sea-going Ships in the Levant 200) adds the more specific sources of the boom-footed sails of Akrotiri vessels.

Such Egyptian texts as the "Instructions of Merikari", "The Lament of Ipuwer", appear to again attest Egyptians in the Aegean plus Crete, etc. It should be said there are contrary to this but confirmation seems shown in such as "Amenemhet

II & the Sea: maritime aspects of the Mit Rahina inscription" and the Kom el-Hetan inscription in "Amenhotep III & the Aegean: A Reassessment of Egypto/Aegean Relations in the Aegean" by Ezra Marcus (Egypt & the Levant 2007) plus Eric Cline (Orientalia 1987).

Further confirmation seems further provided by the marrying by Spyridon Marinatos (In Bronze Age Migrations in the Aegean edd. by messrs. Crosland & Birchall 1974) of the results of his excavations at Akrotiri and early Greek tradition. Having seen that "Nile" scenes can actually be placed anywhere in north Africa from Egypt to Tunisia/Libya, we also find Marinatos arguing for the depiction of Africans at Akrotiri on Santorini in the Cycladic Islands. Elsewhere in the islands of the Aegean Sea is Rhodes.

The span from Byblos to Crete is also shown by types of Egyptian ships. Thus those named KBN/KPN (from Kubna/Kubla = Gubla/Gebla/Gebla = Byblos) for those on the Egypt-to-Byblos run. Then there are ships called KFTW because they plied between Egypt and Crete (= Keftiu in Eg. but with non-Egyptian vowels added for Western readers & also note our spelling of Pharoah; again originally vowel-less).

The Egyptian tales about the unfortunate Enenkhet (killed by "Asiatics") and the later Henu being sent to Red Sea locations to construct KBN-ships make obvious they were not confined to the Mediterranean. Those on the Red Sea were for the Punttrade that seems most probably to be regarded as to somewhere south of Egypt facing the Red Sea, the Mandeb Straits and part of the Gulf of Aden.

If correct, this makes obvious that Egyptians knew how to navigate the ca. 2000-mile round trip from Egypt to Punt yet even this familiarity did not stop such disasters as that described in such as the above-noted "The Tale of the Shipwrecked Sailor". They also did so frequently and it is reasonable to pose the question why?

A parallel seems to be the maritime contacts along West-coast Americas seemingly dated 1500 BCE and ca. 1500 CE by Patricia Anawalt (Latin American Antiquity 1992). Anawalt (ib.) says shaft-tombs; grave-goods; ceramics; their techniques; metallurgy; design motifs; clothing; language; spread types of jay and show "Ancient Cultural Contacts between Ecuador, West Mexico & the American Southwest". Dorothy Hosler Sounds & Colours of Power: The Sacred Metallurgical Tradition of West Mexico 1992) shows to the seeking of the Spondylus shell should be added peyote despite peyote-types giving similar effects grown back home. Underlying this are the famous balsa rafts, Peruvian mummies. This commerce seems to have been dated to between 1500 BCE and ca. 1500 CE. It died out and was revived several times over this period.

The ca. 80 Peruvian mummies yielded THC to analyses paralleled by Egypto/Nubian mummies giving cocaine plus tobacco. Again American silk-woods became those of Africa and Blench says analogous is the African oil-palm becoming the American palm-oil. For the crossing of seas this clearly shows see below and relate (?) to the story of a west sojourn of an Egyptian Pharoah linking this to Egypt. Further is the later dealing with drugs, jewels, etc, from the Equinoctial regions plus Ethiopia by Jaime Ferrer (15<sup>th</sup>/16<sup>th</sup> c.) seemingly confirmed by his being chief Spaniard at Tordesillas. His expertise cannot just have been acquired between Columbus on the Atlantic (1492) and Tordesillas (1494). By Ethiopia is meant Africa but Ferrer is known to have traded beyond Africa, Egypt to the Near East "& Hindoos".

Along similar lines may be opium discussed in various ways by messrs. Kapoor (Opium Poppy: Botany, Chemistry & Chromatography online); Aggrawal (The Story of Opium online); Aleff (Sheshat & Her Tools online); Bisset et al (The Presence of Opium in a 3500 Year old Cypriote Base-ring Juglet [Aegypten und Levant 1996]). Kapoor and Aggrawal state that Homer (9<sup>th</sup> c. BCE Greek) plus Galen (1<sup>st</sup> c. CE Roman) respectively attributed spread of opium under the name of nepenthes to Egypt. Upturned Cypriote bilbils (= the Base-ring juglets of archaeologists) have long been recognised as echoing the shape of seed-head of the opium poppy and seen to have been proven to have carried opium. They are also the most common Cypriot export to Ramessid-ruled Egypt despite it being shown opium was grown in Egypt.

Something else grown in ancient Egypt was the east African khat/kat. Among other plants known to have reached Egypt at this are cinnamon, cassia, etc. They were given African sources in antiquity. However, this is generally acknowledged to have disguised what was held to be the true origin of these plants in Island Southeast Asia (=ISEA). However, messrs Serpico and White (in Ancient Materials & Technology edd. messrs. Nicolson & Shaw 2000) give the African sources more credence when saying it was not ISEA cassia plus cinnamon but east African camphor having the same effects that was exported to Egypt. Of the myrrh and frankincense also taken from somewhere called Punt were grown in east Africa and Margaret Serpico (ib.) says given that only the best was good enough for Egyptian temples, the best frankincense grew/grows in Somalia.

This tells us that Egypt was looking south to Red Sea coasts, as further shown by the fact that what were seen above as KPN-ships not sailed on the Med. Sea but were used on the Red Sea for the Punt-trade. A common belief is Punt was somewhere in east Africa. Despite various writers stating very firmly saying they know where Punt was, we simply do not know where Punt was. Those wanting to regard Kush (= Nubia = much of Sudan) as Punt need to explain why Egyptian texts refer to constant warfare between Kush/Nubia and Egypt but only rarely between Punt and Egypt.

Some of this is based on the age-old concept that Africans did not go to sea or if they, never did so on their own behest. This means Puntites could not have combined with Kush to have attacked Egypt if Kushites were somewhere that needed them to have come by sea. Also Kushites may have been known across the Mediterranean according to the views cited in "East Africa & the Sea in Antiquity" but there is little agreement on Kushites known along Red Sea coasts.

However, "Tarikh al-Mustabir" (= Guide to Arabia) by ibn al-Mujawir (13<sup>th</sup> c. Arab) is cited by Marina Tolmacheva's "Navigation in Africa" (in Ency. of the History of Science, Technology & Medicine ed. by Helene Selin 1997) as saying Kushites drove enemies away from the Horn of Africa. This was said to be ancient and another presumed ancient tradition is noted by Hideyomi Takahashi (Hugoye = Journal of Syraic Studies 2003).

Hideyomi (ib.) was writing about the Causa Causorum (The Book of the Cause of Causes) possibly by Jacob of Edessa (7<sup>th</sup> c. CE Syrian). The Causa refers to the "ma-lono d'kush" (= Sea of Kush) which roughly corresponds with Pliny's term vaguely stretching from of the Sea of Azania southern Sudan to Tanzania/Mozambique. Having seen a possible military action at one end of the Red Sea by Kushites, confirming the military alliance of Kush with Punt is what has been labelled as the el-Kab (Eg.) inscription. This involved Kushites plus Puntites in a devastating attack on Egypt that was never followed up. A passage from the Book of Isaiah confirms Kushite reed-built ships on the Red Sea.

A favourite for being Punt is east Ethiopia/Eritrea and this is especially so given what is written in the inscription from Deffeneh (Egypt). The Defenneh

inscription with its description of rain in mountains usually identified with those in Ethiopia as clear-cut as frequently thought. The mountains referred to may be highest in the form of the Simien Mountains (Eth.) but such mountains have foothills stretching away through Eritrea plus Djibouti to as far south as what today is Somalia (see below).

It is known plants of east African origin were shipped to Egypt to grow there, as most notably illustrated by murals at Deir el-Bahari (Egypt). From what is pictured in the mortuary temple of Queen Hatshepsut there, the plants shown as transplanted to Egypt included myrrh plus frankincense. Margaret Serpico (in Nicolson/White ib.) was seen to write the temples of Egypt wanted only the best as they were the abode of the gods. In this respect, what is universally acknowledged as the finest of frankincense is Boswellia frereana. It grows in Somalia.

From the two previous paragraphs, it seems Punt probably stretched between east Ethiopia/Eritrea and north Somalia. Something else depicted at Deir el-Bahari is a rowing-boat described as possibly Puntite in by Jacke Phillips (Journal of African History 1997). Thus in what Egyptologists have labelled as Theban Tomb (= TT) 143 are depicted two more that Phillips (ib.) felt were Puntite and probably raft-like. We may wonder how like those described by Pliny plus the unknown writer of the Maris Periplus Erythraei (= PME = Voyage on the Erythraean Sea) they may have been, especially given that they too were raft-like according to Hornell (ib; citing Pliny) with the added feature of animal-skin floats.

However, whether Punt-to-Egypt or Egypt-to-Punt, it is obvious that Kushite and Puntite vessels were as capable of sailing the length of the Red Sea as those of Egypt. Norman de Garis Davies (Supplement to the Bulletin of the Metropolitan Museum 1935) wrote of laughter ensuing when trying to verbally describe the illustrated Puntite vessels. However, if they do relate to those reported by the PMEauthor and Pliny, clearly their utilitarian value is proven by just repeating voyages the length of the Red Sea but were still around for Pliny to record in the 1<sup>st</sup> c. CE.

The Phillips (ib.) article bears the title of "Punt & Aksum: Egypt & the Horn of Africa". Previously unknown Pre-Axumite levels were proven by the excavations at Axum/Aksum (Ethiopia) of Stuart Munro-Hay (Aksum: An African Civilisation of Late Antiquity 1991). It has long been held that Axum is to be identified with the Debra Makeda itself bearing the name of Makeda (= Sheba? = Bilkis? = Nikaulis? = Queen of the South?) perhaps best known in English via the Wallis Budge (1922) translation of the Kebra Negast (= Book of Kings).

The Kebra has mention of Tamrin controlling Makeda's overland trade and Menelik controlling the overseas trade. A military component is suggested by legends of a General Ganges reaching India and making conquests there. Underlying this would be the several ancient writers saying there were very close connections between Ethiopia stretching to as far east as India. A military presence is suggested by legends of an Ethiopian general named Ganges making conquests there and leaving his name in the Indian river of the same name.

We are probably on firmer ground with an assumed background to the extensive overseas commerce of Axumite-ruled Ethiopia given some airing in "East Africa & the Sea in Antiquity". This is proven by the sources cited there to have reached to at least as far east as what is now called Sri Lanka.

One of those sources is "On the problems of ancient Africans on the Indian Ocean" by Yuri Kubinaschev (JAH 1965). It is not immediately obvious what the "problems" are but this is at one with much of what said is the opening section about the caveats plus dangers of approaching African shores. There we saw Classical

comments about Egyptian priests being very wary about going to sea and it is then theorised by some that Egyptians not do so.

Strabo is one such Classical author and his comment that Ethiopians only put to sea every 260 years is worked up to indicate what in British English is called a Blue Moon category. As a blue moon occurs very rarely, this almost takes us into the realms of it never really happens. This is then to put alongside Idrissi writing that east Africans from below the Horn seemingly possessed no ships. This is in line with rather more recent notions that the east African seacraft called an mtepe (= mitepe in plural) could only have arisen because of outside help. Hornell's considerable expertise and reputation behind much of this could also lead to notions such as African canoes, the building of Great Zimbabwe, etc only exist because of those external agencies. Also fitting here is that the maritime expertise of the Swahili/Shirazi/Zanj is based on that of Arabs taking their name from Shiraz.

This means Africans could only ever have developed water-craft under foreign stimulus. Such nonsense has been answered to some degree just above and elsewhere. In any case, this ignores deciding whether the claimed ancestors of the Swahili were the much-favoured Arabs from Shiraz or Persians from Shiraz (esp. as Shiraz is in Persia/Iran).

Moreover, Felix Chami has fully settled this question when deriving Shirazi from Bantu chi/shi (= land), ra/la (= shore) plus za/zi (= people) giving the compound word of Shirazi. Nor should we overlook James Allen (Swahili Origins 1993) citing the PME-author plus al- Masudi saying the Zanj did have ships or the Van Sertima remarks when noting Swahili/Zanj achievements when regarding Africans as "boatless" people.

## Navigation: Some ancient methods.

Oars/paddles plus sails are the basic means of propulsion for ships before the advent of engines. Oars were not just a means of moving water-craft about but could also act as a means of steering when placed at one end of a vessel in the role of a steering-oar. Of interest is that when the steering-oar of an Egyptian ship re-created in the 1970s by Thor Heyerdahl (The Ra Voyages 1970) broke, it was replaced by an ordinary oar thrust through the reeds of which Ra I was built. This put it into the position of being a steering-oar akin to the better known steering aid severally known as daggers, swords, guares/guaras, centre-boards, leeboards, etc, made most famous in the many works by Thor Heyerdahl (esp. those of the Amerinds of South America).

Oars would not have moved merchantmen around according to Lambrou-Phillipson (ib.) but would probably have been rather more useful for warship propulsion, especially as galleys. A good example seems shown when we repeat the Marinatos comparison of elements in the Akrotiri wall-art and early Greek legends drawn on by such as Aeschylus ( $5^{th}/4^{th}$  c. BCE Greek), Apollonius Rhodius ( $2^{rd}$  c. BCE Greek), etc. Apollodorus gives a solid Africo/Egyptian background for the immediate forebears of Danaus plus Aegyptus and attributes the first ever ship to Danaus. Aeschylus tells us the Danaids (= the 50 daughters of Danaus) were black "because they were smitten by the sun" and drew attention to the black skins of the Aegyptiads (= the 50 sons of Aegyptus [twin brother of Danaus]).

If at first glance, the rowing of a galley ca. 700 miles directly (?) from Egypt to Rhodes by first Danaus then the pursuing Agyptus seems unlikely, the voyages across the Atlantic in rowing-boats should be borne in mind. Probably relevant is Douglas Peck (Yucatan: Prehistory to the Great Rebellion 2005) citing Diego Chanca

(15<sup>th</sup> c. Span.) saying the Caribs naming the Caribbean could go up to ca. 450 miles via the paddling method that is regarded as remarkably inefficient. Perhaps someone in the past should have informed the Caribs.

Between Egypt and Crete is a lesser distance than Egypt to Rhodes in the Aegean. Egypt direct to Crete was seen to be "The improbable journey" according to Connie Lambrou-Phillipson (ib.). It can be expected that use of sails would make life easier for sailors and the same author plus many others state that Egyptians would have gone via Ugarit, Cyprus en route to Crete.

On the other hand, an opinion contrary to that of the last paragraph is that of Dominique Gorlitz (ib.). Gorlitz was seen to regard Egyptians as displaying use of the guaras better known from those of the Amerinds of the Pacific coast of South America and made especially famous by the various works of Thor Heyerdahl. If Gorlitz can be definitively proven to be correct, this indicates early Egyptian seacraft could have navigated anywhere in the east Mediterranean. Otherwise, direct voyages from Egypt to Crete were evidently impossible before the advent of brailed sails.

Egypt as the place where the first ships appeared is supposed by the traditions drawn on such Greek writers as Aeschylus. This is improbable but added to this is that the Nile is a prime candidate for the first ever sails. However, this too is unlikely to be the only place of the invention of sails; the more so given that the Indo/Malay jong became Chinese junk with very different sails plus rigging to indicate a very separate Far Eastern development. The Nile flows north but most winds blow south. It was noted breezes behind such as tribal banners aboard early Nile-craft and hence sails emerged. Bjorn Landstrom (The Ship 1961; Ships of the Pharoahs 1970) saw the banners as those of Africans and where cattle are portrayed, they parallel such African peoples as the Dinka, Shilluk, Bari, etc.

Conditions on the Nile are the reason why sails emerged there according to Paul Johnstone plus others. Dan Gibson (Ancient Sailing & Navigation online [re. Nabataean Arabs]) suggests something very similar very similar about a later development of sails. Eve Taylor (The Haven-finding Art 1956), Gibson (ib.), etc, have described conditions at the northern end of the Red Sea between the Gulfs of Aqaba (for Arabs)/Eilat (for Israel) and Suez that were/are very tricky for nonengined vessels. Out of this it seems comes the triangular en route to becoming the lateen form. If Conrad Taylor (Arabia before Muhammed online) is correct, south Arabians did not transport goods along the Red Sea but overland by camel through the Arabian Peninsula. If this could be proven, the African location of "Punt" becomes relevant. The more so given that the much-cited vessels of Puntite type in Egypt not only appear to have been capable of dealing with the conditions of the northern Red Sea by reaching Egypt but also attest the triangular sails held to be ancestral to the later lateen type.

The region of east Africa bring us to the various terms of Punt, Afro-Asiatic/Afrasian, Azania, Punt, etc, tongues. It has long been accepted the homeland of the Afrasian languages is roughly identified with that of the Ta-neter recognised as the homeland of their gods and as Punt by the Egyptians. This is likely to have been modern Eritrea/Djibouti/north Somalia (esp. as it seems Punt/Ta-Neter was reached by ship from Eg. not overland). This same region also seems to have been that called Azania confirmed as the land of the Zanj returning us to sails plus winds.

In "Muslims or Shamans: Black of the Persian Gulf", Iraj Bashiri (online) touches on the Zanj as slaves. Whether peoples variously called Shirazi, Zanj, Swahili, etc, were ever slaves is very seriously doubted by some writers. The basis of this argument soon enough leads us to conclude such as the Trans-Islamic slave-trade;

the Trans-Atlantic slave-trade; the World War II Holocaust, etc, will soon vanish from the pages of history once and for all. From this it emerges, there was no Trans-Islamic trading in Zanj slaves, therefore, no Zanj slave revolts and certainly no Great Zanj Revolt. Nor would there have been any Zanj slaves for Bashiri to have attributed control of the wind to. This is despite the overwhelming evidence of **Islamic** writers there were Zanj slaves; Persian Gulf records such an attribution of the winds to African Ahl-i-Hava (= People of the Wind) in the Persian Gulf and that right the way down the later 20<sup>th</sup> c., rites of the east African Thonga aboard their ships are identical to those of the Ahl-i-Hava.

Richard Poe (1999) has made the point if Egyptian ships could navigate the ca. 900 miles between the place variously called Ta-neter or Punt and Egypt, what is the difficulty with the ca. 550 miles between Egypt and Crete? Poe (Black Spark, White Fire ib.) also cited the comment made by Strabo (1<sup>st</sup> c. BCE Greek) that long before his day, the ancients undertook longer voyages than those of his day.

It is also to be borne in mind that Egypt operated the same kind of ships on both the eastern Mediterranean and the Red Sea. Some of the conditions met with on the Red Sea were very briefly mentioned in the opening section of this article as part of the dangers when coming towards almost every part of the coast of Africa. Amongst others noting the dangers on the northern Red Sea is Eve Taylor (The Haven-finding Art 1956). She reports violent squalls and storms and tides that rise and fall in the Gulfs of Akaba (for Arabs)/Eilat (for Israel) and of Suez that result in dangerous cross-currents. Taylor (ib.) also alludes to the Biblical episode of Jehosophat building a "Tarshish" fleet destroyed at the mouth of the Gulf of Akaba.

The "Ethiopian" boats of reed-build that were referenced above as having reached Israel according to the Biblical account contained in the Book of Isaiah would have been capable of coping with these adverse conditions at the head of the Red Sea. It was also said above there were Puntite raft-like vessels that had also reached Egyptian waters, so they too were able to cope with the just-noted dangerous squalls plus tides leading to dangerous cross-currents at the northern end of the Red Sea.

Further occurring on Red Sea coasts are the wrecks described in "The Tale of the Shipwrecked Sailor", that outlined on by Munro-Hay (ib.) and coming the other way was the vessel prompting the title of "The Tale of the Half-wrecked Sailor" (online). The latter becomes relevant in the light of the supposed European discovery of the monsoon system by a Greek named Hippalus. Sean McGrail (ib.) is one of those saying that Hippalus is nothing more than the Greek hippalum (= wind from the sea?) worked up into a name.

The "Half-drowned Sailor" showed the Greek Eudoxus the direct route between India and east Africa using the monsoon-system of the Indian Ocean region (= IOR). Not only was this Sailor an Indian but he had to way-find for Eudoxus across the IOR and Eudoxus was a lot earlier than any mention of the supposed Hippalus. Cyril Hromnik (Indo-Africa 1980) points to another Indian type using the monsoons on long-distances. They are of the class that Hromnik calls musum-baza (= monsoonboats).

Arthur Welford (TNR 1933) showed it seems the ancient east African shiptype called an mtepe were also sometimes seen as far east as India. Even longer distances would be indicated by such as what has been written about the Oceanic Negro plus Fijian traditions. The Oceanic Negro is a concept in a one-time belief based on external physical forms stretching from east Africa to India, southeast Asia and south China. Genetics have put a severe dent in that thinking but what they really attest is the mixing of groups who have undergone genetic changes on their Out-of-Africa (= OOA) migrations that involve some early instances of sea-crossings.

Such OOA voyages can only ever have been short ones but somewhat longer are those recorded by traditions in the ISEA islands of the Fijian Archipelago. The Balson Holdings site (online) informs us that east Africans from Tanzania are regarded by legends as having migrated to Island Southeast Asia (= ISEA) that especially means the Fiji Islands in large dugout-canoes. Arthur Welford (Tanganyika Notes & Records ib.) showing the possibility of east African mitepe (plural of mtepe) on the open IOR further attests east African maritime expertise over long distances.

Reed-ships may have been able to cover similar distances, as similar types stretch from those of Egypt to ones depicted on rocks plus the performance of the Racraft re-created for Thor Heyerdahl (The Ra Voyages 1971). This means the length of the Mediterranean then that of the Atlantic. However, it does appear that probably the most significant event from Egypt felt Med.-wide seemingly follows what is depicted at Medina Habu (Egypt) showing what has been dubbed the Battle of the Nile Delta.

It seems the Egyptians trapped ships of the motley groups called "Sea-Peoples" in the Nile Delta and rained arrows on the would-be invaders. Nor does this appear to have the only such occasion of the Egyptians using their local knowledge to see off enemies. Henri Hubert (The Greatness & Decline of the Celts 1934) says Pausanias (2<sup>nd</sup> c. CE Greek) wrote Celtic mercenaries in Egypt plotted to take over in Egypt but it all fell apart and that Egyptians trapped the Celts on an island in the Nile and left them there to starve.

The Red Sea connected by way of canals to the River Nile is touched on by messrs. Taylor (ib.), Morris Silver (Ancient Economies II online), David Jones (The Origins of Civilisation: The Case of Egypt & Babylon from Several Disciplines 2007), etc. Taylor wrote that the problems coming home to Egyptian ports facing the north Red Sea would prompt the canals. Silver cites such as Herodotus (5<sup>th</sup> c. BCE Greek), Diodorus Siculus plus the much later Flinders Petrie (Social Life in Ancient Eg. 1923) about the "Two-Seas" canal. Jones points up maps cited by Charles Hapgood (Maps of the Ancient Sea Kings 1996) and Joan Covey (in Africans in Early America 1992) that appear to attest this canal.

It has been said already the Nile is an African river not just an Egyptian one. The main feeders are the Blue and White Niles. The source of the Blue Nile is Lake Tana (Ethiopia) famous for the primitive water-craft called a tankwa capable of bearing 7000 lbs. of coffe-beans and that of the White Nile seems to have been in the Ethiopian mountains. Further showing just how far into Africa the Nile reaches appear to be shown when the now-defunct Great Soviet Encyclopaedia (1979) says the Nile is navigable to as far south as Uganda. North of the present Sudan/Egypt border, the Nile is navigable between stretches needing portages. To ease access from the Red Sea, it seems that as early as the 12<sup>th</sup>-Dyn. "Sesostris" a Proto-Suez Canal was dug. Resources were put into the digging of this canal and according to David Jones (ib.), this canal was a considerable achievement, even if seems it was slave-dug.

Canals in Iraq were more definitely built by slaves from east Africa called Zanj. The Spartacus-led Slaves War (79-7 BCE) stayed all-conquering Rome for just 18 months but the Great Zanj Revolt (869/883 CE) led by a man called Sahib az-Zanj (= Leader of the Z.; Man of the Z.; Friend of Z.) or Ali bin Muhammed stopped all-conquering Arabs for 15 years. knowledge of local waters saw Egypt to victory at the Battle of the Nile Delta, this was equally true of Africans called Zanj victory at the Shaytan Canal (Iraq).

The Nile Delta that would have been something visually marking Mediterranean shores of Egypt in antiquity. More of the same would evidently be the freshwater surge of ca. 20 miles into the Mediterranean from the Nile. Otherwise, the most visual markers of the River Nile are so-called Nilometers that were used to measure the Nile floods that were so essential for the existence of ancient Egypt but things have changed since the building of the Aswan Dam.

Part of Egypt and other shores of east Africa face the Red Sea that according to the Eritrea.be site (online) was named Mare Rostrum (= Red Sea) from much of the coasts being ringed by mineral-rich mountains. Robert Dick-Read (The Phantom Voyagers 2005) has called attention to yet another mountain. This time it is Mount Karthala in the Comoro Islands. The Ngadzija site online gave interesting etymologies for Komoro/Comoro and Moroni (capital of the Comoros).

Moroni seems to derive from the Bantu terms of moro plus ni. Moro (= fire/heat) further combines with the Bantu locative of ko to give Komoro/Comoro. The significance of this as a placename is that Mt. Karthala is the most prominent natural feature in the Comoro Islands and belches out all that marks an active volcano to clearly connect with Comoro meaning Place of fire/heat. This also makes it a prominent landmark for sailors plying between east Africa and Madagascar. Karthala also as the home of a giant called Red-band echoes prominent landmarks seen from the sea marked by legends of giants on virtually the entire west African coast.

Equally as visual are the stars of the sky. Sky-watching/astronomy was a prerequisite of way-finding on land and sea in pre-instrument days. Among those discussing way-finding/navigation at sea are Lambrou-Phillipson (ib.) plus Wim Van Binsbergen (Alternative models of interaction towards the oldest Cretan script online). They come down on opposite sides of how early star-based navigation began. Lambrou-Phillipson wants this to be late as part of denying direct early voyages from Egypt to Crete. Binsbergen (ib.) cites Michael Ovenden (The Philosophical Journal 1966) on this. Ovenden's (ib.) "The origins of the constellations" takes this back ca. 2500 BCE. He traces this through Egyptian periods of study by Greek scholars to Aratus. Ovenden was of the opinion that Aratus was writing a manual for sailors.

From as far back as the days of "The Ruins of Empires" by (1<sup>st</sup> ed. 1787 but here the 1890 one), Constantin Volney felt able to cite Classical writers saying astronomy had Aithiopian/Ethiopian sources. He quotes Diodorus Siculus (1<sup>st</sup> c. BCE Greek), Lucan (1<sup>st</sup> c. CE Roman), etc, on this and went on to argue for an attribution of the zodiac and the calendrical signs depicted further at Dendera (Eg.). Another sign of an ancient calendrical system in a part of east Africa is that called Borana of now Somalia and Kenya itself relating to the Namoratunga (Kenya) stone circles. It is also well known that stone rings can be related closely to maritime navigation and sailors in this region near the Indian Ocean region (= IOR) are well known as Swahili.

Whether called Swahili, Zanj or Shirazi, east Africans sailed on the IOR not just as slaves but also as seafarers in their own right. Felix Chami has summed up many of the results of his excavations in Tanzania in "The Unity of African Ancient History 2005". They show something of how widespread contacts were. He also compares accounts of islands reached dated between "The Shipwrecked Sailor" by Amenaa (ca. 2000 BCE Egyptian?), those written by Euhemerus (3<sup>rd</sup> c. BCE Greek) plus Iambulus (3<sup>rd</sup> c. Greek?). Chami felt more signs of astronomy extending between mainland east Africa and the islands are shown by the latter two Greek authors.

Nearly 1000 years lie between the "Story of the Shipwrecked Sailor" (of Middle Kingdom/MK date of ca. 2000-1700 BCE) and another Egyptian tale, the Story of Wen-Amon (of New Kingdom/NK centring on 1100 BCE). The latter has

Wen-Amon looking at a flock of birds that he compares with the sails of a ship. This imagery may indicate that that the principle of birds as aids for seafarers was known in Egypt. Of approximately the same date as "The Story of Wen-Amon" would appear to be "A Man Talks to his Ba". The last-named apparently represents the ba as a human-headed bird in a psychopompos role guiding souls of the dead into the Afterworld. The more so given that this story, we read that the ba led the soul "into the harbour" so fits alongside what was said in Wen-Amon.

That birds as navigational aids were known in east Africa seems shown by a report by Cosmas Indicopleustes (= C. the Sailor to India). There are two main methods of using birds at sea. One is noting birds coming some distance out to sea to feed in the mornings and then seeing where they came to roost (as Polynesians went on to discover remote Pacific islands on which they settled). The other primary method is to send out land-seeking birds that cannot land on the sea and if they do not return, they have found land but if not they have to come back to the vessel from which they were sent. In "Topographia Christiana" (= Christian Topography" Cosmas (7<sup>th</sup> c. Egypto-Greek) tells us that on a voyage on the Indian Ocean, his ship was caught up in a ferocious storm on the Indian Ocean. It was on seeing birds coming home to roost, that his ship was guided to a harbour and safety.

The east African seafaring component of the seafaring Bantu seen to have been severally called the Shirazi, Zanj, Swahili, etc, also had a form of these Indian diskara/Hebrew Noah-type tales. James Hornell (Antiquity 1946) described "The Role of Birds in Early Navigation" and in particular reports on one such myth known in Zanzibar. This has it that the raven dispatched by Noah stopped to feed on the eyes of the dead of the Deluge that had been sent by God/Allah to punish the sins of humans.

A Kenyan version has Tumbainot in the Noah role and a vulture in that of the raven, so points up birds as navigational aids being known in east Africa from the southeast to Egypt in the far north. The same distribution seems to be that of the sewn-plank vessels in east Africa. The views of messrs. Worthington (Man 1933) and Chittick (IJNA 1980) cited in "East Africa & the Sea in Antiquity" plus "Egypt & the Sea in Antiquity", note canoe-forms of the Great Lakes of east Africa, mitepe (plural of mtepe), etc. They also observe the proposed AN/IOR ancestry of the Great Lakes canoes plus the sea-going mitepe just do not exist.

Worthington (ib.) and Chittick (ib.) gave African sources to some canoes of the Great Lakes plus the mitepe. The AN/IOR claim is based especially on the sewn-plank construction of such as the mtepe. A similar supposition concerns the Austronesian (= AN)/Indian Ocean Region (= IOR) origin of coconut scrapers but like the sewn-plank construction, this is a form too generalised to be capable of attribution. What helps the east African connection is that with sewn-plank construction in Below-Horn east Africa linked to Afrasian and/or Nilotic words and/or forms of east-mid to northeast Africa by messrs. Huntingford (Man 1937) and Wicker (Egypt & the Mountains of the Moon 1991).

Nor does it seem this was the only African sea-going vessel with claimed external affinities. This does appear to connect with Trans-Islamic trading in enslaved east Africans (mainly called Zanj) that on the method of argument will soon mean the Trans-Islamic slave-trade, Trans-Atlantic slave-trade, World War II Holocaust, etc, will be wished away from the pages of history.

In "A History of Sub-Saharan Africa", messrs. Collins & Burns (2007) tell us that dead African slaves of Islam were thrown into pits with dogs. This obvious indication of low status provides a background for some claims of exalted parentage for African Muslims gaining prominence. This is said of Ibn Khaldun variously held to be a north African Berber or as an Arab. Then there is al-Jahiz who is even more severally seen as an African, Persian or as an Arab. Likewise, if the leader of the Great Zanj Revolt was an east African claiming to be a Persian now becomes explicable.

Collins/Burns (ib.) also refer to Zanj slaves as boatmen, sailors plus fishermen for their Islamic masters. Word for word, this could have been written in such works as "The African American Tradition in the Decorative Arts" by Jon Vlach (1990), "They Can Run the Boats But Not Ride" by Edward Salo (African Diaspora Archaeology Network 2009), etc. The latter relates to the Trans-Atlantic slave-trade. The expertise gained by these East Africans in east Africa provides a context for the Zanj successes in the marshes of south Iraq, no less than that gained by Egyptians but on home soil shown by the Egyptian victory in the Battle of the Nile Delta.

The African sea-craft already suggested to have possible external links are described by Peter and Ginger Neimann (The Marcy Voyage: Magadascan Canoes online). They compared the construction of some Madagascan canoes with those of the Chesapeake (U.S.) type. Chesapeake-type canoes were seen as brought to north Africa by west African slaves by Vlach (ib.).

If this identifies another now-lost African canoe-building tradition, it is really ironic that it may only be recognised because it survived outside the continent of Africa because of the Trans-Islamic and Trans-Atlantic slave-trades. Not to be overlooked and not connected to slave-trading are the legends of giant east African canoes having reached past Island Southeast Asia (= ISEA) to at least as far east as Oceania (especially the islands of Fiji).

With the clearest testimony of navigation being evidence of an actual presence at either end of proposed voyages, from this it will be obvious that Africans were regarded as capable of undertaking and navigating over long distances.

Harry Bourne (mainly written 2011)

2#