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Selected phases of the historical geography of major eastern African ports

by

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Abstract

Before the nineteenth century the East African coast formed an integral part of the Indian Ocean commercial system, and because of changing internal and external space relations, successive historical epochs saw the emergence of widely different port hierarchies. The concept of an 'open system' - with its progression from movements to trade-routes, nodes, hierarchies to a model - provides a fruitful approach for the evolution of port activity and allows the 'cut' to be made just as much with routes as with ports. Owing to the limited extent of overland connections prior to the seventeenth century, epochs of change in the pattern of port development were marked by the establishment of new overseas connections. At the commencement of the Christian era trade contacts were with the Red Sea, but as eastern Africa then had only two unrelated ports, discussion stops short of a hierarchy. During the Middle Ages commercial intercourse began with the Persian Gulf, to be followed a few centuries later by direct links with north-west India, and the succession of ports over this period of six centuries enables the construction of a model of the spatial patterns of port locations. With the breakthrough of the Portuguese into the Indian Ocean at the end of the fifteenth century

a new element in space relations was introduced, whose impact is analysed against the last phase of the model. East Africa became a backwater in the subsequent centuries, but under the combined influence of Omani commercial stimulus and French slaving interest there was a revival of prosperity from the second half of the eighteenth century, which calls for trade-routes to be followed through afresh to the build-up of a new port hierarchy. This more or less endured until the late nineteenth century which, because of the advent of steamships and railways, marked the end of an era in port development that had been characterised by changing port hierarchies associated with varying alignments of trade-routes.

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Note: all maps are orientated with north at the top.

Glossary

Almadia	a Portuguese adaptation of the Arabic al-ma'dīya used to denote a canoe or a dug-out.
Arrátel, arrates	a measure of weight of about 1 lb.
Arroba	a weight of about 32 lbs.
Bar, bares	a weight varying between about 518 and 560 lbs; composed of 16 arrobas or 20 faraçolas.
Carreira da India	the round trip from Lisbon to Goa and back.
Cruzado	a silver coin equal to 400 reaes.
Faraçola	a weight varying between 18 and 30 lbs.
Mandado	an order issued by one official of the factory to another to deliver whatever was asked of him.
Mihrab	a niche in the mosque reserved for a man who leads the prayers; it indicates the direction of Mecca, and so in East Africa is always found in the north wall of the mosque.
Mitical	an old Arabic weight of gold (mithqāl) equivalent to about 0.155 oz; valued in Sofala first at 500 reaes, and then from 1515 at 467 reaes.
Nao	a square-rigged ship such as was used on the run between Portugal and India (Indiaman).
Parádao	a gold coin equal to 360 reaes.
Piastre	the French name for the Austrian Maria Theresa and Spanish dollars, equal in the late eighteenth century to 4 cruzados or $\frac{1}{4}$ of pound sterling.
Quintal, quintas	a weight of about 128 lbs; composed of 4 arrobas.

Real, reaes	the former basic unit of the Portuguese monetary system.
Regimento	a royal or vice-regal set of instructions.
Roteiro	a Portuguese sailing directory - the precursor of the modern Pilot series of the Hydrographic Department of the British Admiralty.
Sgraffiato	literally means scraped since this medieval Islamic ware had patterns incised under the glaze.
Zambuco	a Portuguese adaptation of the Arabic sanbūk used to denote a small coastal craft.

Abbreviations

ANF	Archives Nationales, Paris, France.
BIHEA	British Institute of History and Archaeology in East Africa
D	Documentos sobre os portugueses em Moçambique e na Africa central (Documents on the Portuguese in Mozambique and Central Africa), Centro de Estudos Históricos Ultramarinos, Vols. I-V, Lisboa, 1962-1966.
EPM	Alexandre Lobato, A expansão portuguesa em Moçambique de 1498 a 1530, 3 Vols., Lisboa, 1954-60.
FKI	G.S.P. Freeman-Grenville, The French at Kilwa Island: an Episode in Eighteenth-century East African History, Oxford, 1965.
I.O.	India Office Library, London
JAH	Journal of African History
PRO	Public Record Office, London
SD	G.S.P. Freeman-Granville, The East African Coast: Select Documents from the first to the earlier nineteenth century, Oxford, 1962.
TNR	Tanganyika/Tanzania Notes and Records

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B.D.

CHAPTER I

Introduction: The Geographical Background and the Conceptual Framework for an Historical Geography of Eastern African Ports

I. The Geographical Background to Maritime Orientation of eastern Africa

The eastern side of Africa has, for purposes of trade, been aptly described as the western shore of the Indian Ocean:[1] it implies that the coast was oriented outwards rather than inwards, seawards rather than landwards, so that it had few connections with what is now considered to be its natural hinterland. However, the statement is true only of the coast of East Africa[2] until the early part of the seventeenth century. South of Cape Delgado, gold from the Rhodesian mines reached the coast at least from the tenth century onwards, while north of that Cape African traders from the interior are believed to have first visited the coast in the early seventeenth century. Such an orientation has a parallel in the Sudan zone of West Africa which may likewise be described as the southern 'shore' of the Sahara until about the sixteenth century. For just as sailing ships linked East Africa with the seaboard communities of the Arabian Sea, so too trans-Saharan caravans sustained connections between West and North Africa.[3]

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1 C. Lucas, The Partition and Colonization of Africa, Oxford, 1922, p. 9.

2 "East Africa" is used to refer to the coasts of Kenya and Tanzania, while "eastern Africa" also includes the Somali and Mozambique coasts.

3 See E.W. Bovill, The Golden Trade of the Moors, 1958.

Yet in detail there are similarities as well as differences between the two regions, and these will be sketched respectively at the beginning and the end of the first part of the introduction.

Both the dhow trade to East Africa and the caravan trade across the Sahara had their origins in the period prior to the commencement of the Christian era. Each terminated in ports for, as Vidal de la Blache intimated, desert terminals had comparable functions to ocean terminals.[1] Over a period of time, the major terminals became foci , in the one case of city-states, in the other of large states. The nearest that East Africa came to the West African pattern was in the Middle Ages when, for instance, there was a meridional enlargement of the hinterland of such ports as Kilwa and Mombasaa. What is of particular interest, however, is that in the western Sudan between the Atlantic and the Middle Niger, there was an eastward shift in the centres of power from before the eigth to the sixteenth centuries (with the succession of the states of ancient Ghana, Mali and Songhai), a shift which has been tentatively correlated with the stability or otherwise of powers along the North African coast.[2] So too in East Africa before the eighteenth century, the rise and decline of major ports depended largely upon external contacts, whether from the Persian Gulf or north-west India or with the Portuguese via the Cape of Good Hope and the French of the Mascarene Islands. It is at this point that the relevant geographical phenomena to which the East African

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1 E. de Martonne (ed.) Principles of Human Geography, 1926, pp. 473-4. (English translation M.T. Bingham).

2 J.D. Fage, An Atlas of African History, 1963, pp. 18-19; R. Oliver & J.D. Fage, A Short History of Africa, 1962, pp. 59-65, 85-91.

littoral owed its orientation should be considered.

Factors involved in maritime orientation

(a) The Ocean. Foremost among the factors which generated the east coast's outward orientation is the phenomenon of the seasonal reversal of monsoonal winds in the Indian Ocean. The air involved in the north-east monsoon circulation originates in the dynamic anticyclone located over South Asia. As the land mass cools with the approach of winter, the Tropical Continental air subsides from aloft and replaces the Tropical Maritime air of the Indian Ocean. The Inter-Tropical Front between these two air masses then begins to retreat southwards as the continental air flows out across the ocean as the north-east monsoon. It achieves its greatest areal expression in January but south of the equator, there is an important contrast between the western and central sections of the ocean. While the north-east winds continue into the Mozambique Channel without marked deflection, east of the longitude of Madagascar they change direction to north-west and are referred to as the 'cross monsoon'.[1] The spatial extent of the north-east monsoon delimits the operative environment for commercial activity by the seaboard communities of the Indian Ocean.

With the apparent march of the sun northwards, winter conditions gradually break down as a thermal low develops at lower levels in South Asia, while anticyclonic circulation continues aloft. This draws the south-east trades of the southern Indian Ocean which, on

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1 W. Kirk, 'The north-east monsoon and some aspects of African History', J. of African History, III, 1962, pp. 263-5; Meteorological Office, Monthly Meteorological Charts of the Indian Ocean, H.M.S.O., 1949.

deflection north of the equator, become the south-west monsoon, so that the Inter-Tropical Front between the two air masses at its most northerly position in July runs Sudan-Ethiopia-South Arabia-Baluchistan-Punjab-Ganges basin and thence into East Asia. Along the coast of eastern Africa there is then an important contrast between the stretches north and south of the equator, for in the former the south-east trades blow on to the coast, whereas in the later the winds flow parallel to it.[1] It might be noted here that the south-west monsoon is much too strong a wind in the period mid-May to mid-August, so that sailing craft put to sea only during the 'build-up' or the 'tail-end' of that monsoon. On each occasion of a European breakthrough into the Indian Ocean, whether in Roman or Portuguese times, the timing of voyages obliged European navigators to berth in the Gulf of Aden or in south-east Africa to await the decline of the south-west monsoon before continuing on to India.

The monsoonal rhythm generally induces corresponding changes in direction and force of currents in the western Indian Ocean. During the season of the north-east monsoon, the current flows westward in the Arabian Sea, but owing to coastal conformation, the circulation around the periphery is counter-clockwise, with the East African coast current continuing as far as the equator. South of it, the Equatorial current strikes the African coast in the vicinity of Cape Delgado and because a lesser volume of south Indian Ocean water then flows northward along the coast, the Mozambique current is at its strongest. Between February and April, the north-east monsoon weakens and though

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1 Ibid.

the current in the open waters of the Arabian Sea still flows west, it is variable, while the circulation along the coasts is reversed to become clockwise. As the south-west monsoon is established, the general current also reverses its direction and flows eastwards across the Arabian Sea. The Equatorial current is strongest during this season, and it is only then that the East African coast current flows from Cape Delgado to Cape Guardafui.[1] It will be seen in the following chapters how sailing craft were aided by these currents in certain sections.

Meanwhile, two striking examples may be given of the way the monsoon regime conditioned movement in East African waters before the age of steam propulsion. A British squadron under Blankett bound for the Red Sea in 1798 made swift progress as far as Darawa, but then failed to make headway against the north-east monsoon from the end of November. Despite a relentless struggle for two months the ships in fact lost ground, and so in February they put about and sailed to Zanzibar in only six days.[2] Conversely, in April 1841, when Hamerton, the first British Consul at Zanzibar, was off Pemba, he was informed that because of the south-west monsoon "we could not reach Zanzibar unless we stood out to sea for about eight degrees to the eastward and that even then we were not likely to reach Zanzibar under twenty or five and twenty days." Hamerton, therefore, landed on Pemba and made his way thence, apparently by a small boat, to Zanzibar.[3]

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[1] Meteorological Office, Indian Ocean Currents, 2nd ed., H.M.S.O., 1939; Weather in the Indian Ocean, H.M.S.O., 1943, I, p. 50.

[2] A. Bissell, 'A Voyage from England to the Red Sea, 1795-9', in Collection of Nautical Memoirs and Journals, reprint. A. Dalrymple, 1806.

[3] Cited by J. Gray, History of Zanzibar, Oxford, 1962, p. 242.

(b) The Coastline. First it might be observed that the western shore of the Indian Ocean follows a fairly straight line from the coast opposite Zanzibar across the entrances of the Gulf of Aden and Oman to the western border of Pakistan. This configuration, combined with the effect of the monsoonal winds, allow Arabs from the Persian Gulf and southern Arabia to hug the coast in their voyage to and from East Africa. Its importance must be assessed against a background of crude navigational equipment and consequent reliance on coastal landmarks in the determination of position at sea. As far as Indian sailors from Gujerat are concerned, evidence will be later adduced to show that they might have cut across the Arabian Sea by as early as the end of the fifteenth century.

The approach to the coast invites comparisons between East and West Africa. One of the physical contrasts is that whereas the west coast is comparatively cool, washed as part of it is by the Canary and Benguela currents, the east coast is much warmer and allows coral polyp (which can survive only in clear water at a temperature of at least 70°F) to breed. So coral reefs do not occur on the west coast and its absence, combined with the direction of seasonal winds, the trend of the coastline and the steepness of the foreshore, give rise to swell and surf. The former is of relatively minor significance but the latter makes communication between the sea and land difficult, and as it helps to build sand-bars (where the tidal range is small), it thus also hinders the establishment of ports.[1] Off the east coast,

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1 R.J. Harrison Church, West Africa, 5th ed., 1966, p. 32; H.P. White, 'The Ports of West Africa: some Geographical Considerations', Tijdschrift voor Economische en Sociale Geografie, L, 1959, pp. 1-3.

the coral reefs never form a continuous barrier, and everywhere prevent penetration of ocean swell and so ensure that the shores are not surf-beaten. Where reefs now make inshore navigation difficult for large ships, they provided in the past useful shelter for vessels with a shallow draught.

From the standpoint of modern port development, the most important geomorphological feature of the East African coast is the existence of a series of drowned valleys or rias caused by eustatic changes of sea-level in Pleistocene times. The sub-aerial erosion which produced these valleys probably took place subsequent to the formation of the 'raised' coral reefs of the coastal strip and may have been accentuated by a contemporaneous pluvial epoch. Then a positive change of base level flooded the creeks and caused gradual aggradation of the channels to give them their present flat-bottomed form.[1] Such tidal inlets vary considerably in size and the best known are those comparatively large ones which have been utilised for commercial purposes. Yet with the notable exception of Mombasa, they were largely ignored before the end of the nineteenth century. It was the smaller rias - for example, of the stretch between Malindi and Mombasa in the later Middle Ages or between Lindi and Mikindani in the late eighteenth century - which were the sites for port activity, but none ever became more than locally important.

Of greater significance in the past were the relatively large offshore islands which were variously formed. The hydrographical

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1 H.L. Sykes, 'The drowned valleys of the Coast of Kenya', J. of the East Africa and Uganda Natural History Society, Nos. 38 and 39, 1930, pp. 1-3; B.S. Hoyle, The Seaports of East Africa, Nairobi, 1967, pp.14-5.

chart reveals that the 100 fathom line departs from the mainland coast to enclose Zanzibar, while Pemba is closely bound within its own 100 fathom isopleth. So whereas Pemba was severed from the mainland by a structural dislocation, probably in the Miocene period, the large sandbank which once connected Zanzibar with the mainland was eroded in Pleistocene times with changes in the relative sea-level. These same changes also gave rise to island groups such as the Lamu Archipelago which probably represents remnants of a former delta. With the advancement of the sea, the rivers dwindled into streams and the delta became an archipelago, the constituent islands being separated by the erstwhile distributaries.[1] The importance of these offshore islands for immigrant communities was that they created a sense of apartness, albeit often more psychological than real, from the mainland. It is hardly surprising, therefore, that each major offshore island was the site of an important port at one time or another in the ten centuries before the partition of East Africa.

(c) The Littoral. Despite an equatorial location on the eastern side of the continent, there is a widespread deficiency of rainfall in East Africa which has been described as "the most impressive climatic anomaly in all of Africa."[2] The causes as yet are little understood but they arise in part from regional peculiarities in the pattern of atmospheric circulation. When the sun is overhead in the

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1 G.M. Stockley, Report on the Geology of the Zanzibar Protectorate, Zanzibar, 1928, pp. 9-10, 52; A.H.J. Prins, Sailing from Lamu: a study of Maritime Culture in Islamic East Africa, Assen, 1965, pp. 18-20.

2 G.T. Trewartha, The Earth's Problem Climates, New York, 1961, p. 121, The rest of this paragraph is based on chapter IX of the book.

southern hemisphere, a dynamic anticyclone, oriented north-south, overlies Arabia and even extends as far south as the Horn. It is this displacement which causes drought in the north as the dry, subsident air with an anticyclonic curvature - and therefore with a sea trajectory of only modest length - streams southwards over the east coast. Likewise the south-east monsoon is divergent in character and has a strongly meridional flow, so that at times it is nearly parallel to the coast or even offshore. At this season the sun is overhead in the northern hemisphere, and so a thermal low develops at lower levels, while the anticyclonic circulation prevails above, but the surface Inter-Tropical Convergence (ITC) lies at 10-15°N, compared to 20-22°N in West Africa.[1] North of the surface ITC, the air is warmer, and as the slope of the front is determined by density between the two air masses, it must incline upward to the south at a very low angle. Thus even moderate rainfall is unlikely to occur for several hundred miles south of the front, or until the depth of the southerly monsoon is sufficient to permit considerable vertical development of clouds.

East Africa, however, is also subject to incursions of a moist westerly or Congo air along its western margins (which causes general rain in the zone of convergence with the easterly airstream), so that a mean annual rainfall map is divisible into three regions by the 30" isohyet.[2] The dry central zone - with extensive areas below

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1 This is because the North African anticyclone which is oriented east-west in winter, shifts eastward and is aligned north-south over the eastern Sahara in summer, so that its influence extends unusually far to the south. Ibid.

2 East African Meteorological Dept., Mean Annual Rainfall Map of East Africa, 1959, reproduced in J.E. Kenworthy, 'Rainfall and the Water Resources of East Africa', Geographers and the Tropics: Liverpool Essays, eds. R.W. Steel and R.M. Prothero, 1964, Fig. 1, p. 112.

even 20" of rain - commences immediately behind a narrow coastal belt in Kenya and reaches the coast itself north of the Lamu Archipelago; but its prolongation into Tanzania lies westwards of the north-east south-west aligned 'rim mountains' of the central plateau. More critical is the variability of rainfall, and even within the wet easterly belt, the probability of failure to receive over 30" of rainfall is as high as 30 per cent.[1] Yet the division between the coast and the interior is more pronounced in the north than in the south, and it is not without significance that while relations between the Kenya coast and the highlands were limited even in the mid-nineteenth century, the first long-distance trade-route to be forged in ~~modern~~ East Africa stretched from Lake Malawi to the Kilwa coast.

The effects of the irregular distribution of rainfall in time and space are reflected in the landscape in different vegetation formations.[2] Most of the coastal lowlands between Lamu and the Rufiji have a mean annual fall of over 40", but whereas the regime north of Dar es Salaam shows a double maxima, that south of it is characterised by a single rainy season from November/December to April/May. Hence in the northern part, although only a limited area of tropical rain forest now remains, a derived savanna woodland represents modifications of that original community by the agency of man; in the southern part the more typical vegetation mantle of

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1 The Report of the East Africa Royal Commission, 1953-5, Cmd. 9475, H.M.S.O., reprinted 1966, used two maps to show the probability of failure to receive 20" and 30" of rainfall in a year. A composite map appears in Kenworthy, loc. cit., fig. 4, p. 127.

2 C.G. Trapnell & I. Langdale-Brown, 'The Natural Vegetation of East Africa', in The Natural Resources of East Africa, ed. E.W. Russell, Nairobi, 1962, pp. 92-101 and Map E.

savanna community generally extends beyond the coastal belt. Behind the Kenya coastal strip semi-desert, with acacia shrubs and bunch grass, is known under the graphic name of 'nyika' (wilderness), and in a broadly comparable type it extends into the eastern part of the interior plateau of Tanzania. Over the rest of the south-eastern part of that country, the chief vegetation formation is the open woodland of the 'miombo', dominated by the Isoberlinia and Brachystegia genera. One signficant aspect of the biogeographical environment is that (backed by the high or dry fly-free country) the characteristic vegetation of the wet easterly belt provides a habitat for certain species of tsetse fly (Glossina spp.) which are everywhere vectors of the bovine trypanosomaisis form of the disease.[1] Its effects is to decree the absence of some pack animals, so that before the advent of mechanical power transport was only by human porters, a factor which did not assist the process of mutual 'discovery' of the coast and the interior.

East Africa, too, lacks large stretches of navigable waterways which reach out into the heart of the East African region. The courses of the Rivers Tana and Athi lie for the most part through the semi-arid, uninhabitable country of Kenya. The Pangani does indeed tap the highland areas of the north-east, while the Ruvuma drains the productive region in the neighbourhood of Lake Malawi. Yet a combination of factors limit the utility of these and other rivers of Tanzania for navigation: the shifting bars at the entrances to rivers on which the

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1 See the map of tsetse distribution in the Royal Commission Report (or in national atlasses); P.A. Buxton, The Natural History of Tsetse Flies, 1955, passim.

sea breaks heavily; the tortuous channels which increase the distance many-fold; the existence of a line of falls and rapids which coincide with a north-east to south-west fault running from the vicinity of Tanga to the Ruvuma; and the seasonal regime of the rivers which results in obstruction of channels by sandbanks during low water. Only the Rufuji is navigable for any appreciable distance, and that only for about 60 miles by small vessels.[1] Thus, the relative isolation of the coast and the interior produced by climatological factors and manifested in the landscape in vegetation formation was, over the centuries, sustained by the absence alike of beasts of burden and of navigable rivers.

(d) The People. The earliest known account of the east coast speaks of only one, apparently permanent, trading port in the early second century A.D. Yet it is significant that south-west Arabians are stated to have intermarried with the indigenous people and to have understood their language.[2] Thence there is a hiatus in our documentary knowledge until the Arab writings commence in the ninth century. Archaeological evidence of coastal settlements too does not go farther back than the end of the first millenium A.D. Arabic sources indicate the presence of Muslim foreigners (who had, however, become Africanised as they spoke the language of Zanji) for instance

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1 Admiralty, Hydrographic Department, Africa Pilot, Part III: South and East Coasts of Africa, 10th ed., H.M.S.O., 1939, pp. 262-3, 287-90, 318-9, 320, 323-6, 405; Handbook of Tanganyika, ed. J.P. Moffett, 2nd ed., Dar es Salaam, 1958, passim.

2 W.H. Schoff, The Periplus of the Erythraean Sea, New York, 1912, p. 28.

at Kanbalū, identified with Pemba; and archaeological work at Manda has established that building in stone, a technique presumably brought over by the immigrants, was known from the outset in the ninth century.[1] However, as Mathew has argued, it is excessively improbable that there was ever an Arab colonisation of the coast in the sense that there was a white settlement in Kenya, but there were numbers of settlers to whom was probably owed the stimulus for the establishment of ports on these offshore islands.

Yet as Mathew has further pointed out, there is a suggestion in an Arabic source of the twelfth century that this foreign impact evoked a dynamic response from coastal polities which established their own ports on the mainland coast. Our author speaks of them as "large towns" but such an early development is not yet supported by archaeology.[2] Perhaps they may be likened to a seasonal Somali fair as described by Cruttenden in the mid-nineteenth century:

> Before the Towers of Berbera were built, the place, from April to the early part of October, was utterly deserted, not even a fisherman being found there; but no sooner did the season change, than the inland tribes commenced moving down towards the coast, and preparing their huts for their expected visitors [from the Yemen, the Persian Gulf and India] .... By the end of March the fair is nearly at a close, and craft of all kinds ... commence their homeward journey ... and by the first week in April Berbera is again deserted, nothing left to mark the site of a town lately containing 20,000 inhabitants ....[3]

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1 Al-Mas'ūdī, Les Prairies d'or, Ar. text & French trans., C.B. de Meynard & P. de Courteille, Paris, 1861-77, I, p. 205; N. Chittick, Discoveries in the Lamu Archipelago', Azania, II, 1967, pp. 43-5, 48-52.

2 Al-Idrīsī, Fr. trans. P.A. Jaubert, Géographie d'Edrisi, I, Paris, 1836, pp. 55-7; G. Mathew, 'The East African Coast until the coming of the Portuguese', in History of East Africa, I, eds. R. Oliver and G. Mathew, Oxford, 1963, pp. 114-6.

3 C.J. Cruttenden, 'Memoir on the Western or Edoor Tribes inhabiting the Somali Coast of N.E. Africa', dated Aden, 12.5.1848, J. of the Royal Geographical Society, XIX, 1949, pp. 54-5.

It is possible that these settlements had a permanent core of population which was augmented during the trading season, but it is improbable that more than one or two were visited by vessels from the ports of the Arabian Sea. So in character and function the majority may have been comparable to the nineteenth century feeder ports of the Mrima coast (i.e. the mainland coast opposite Zanzibar), and they may have supplied the major ports with export commodities and distributed imported trade goods to the coastal belt. Such posts would appear to have remained tribal and pagan until the thirteenth century when the East African coast first became an integral part of the urbanised and Islamised culture of the Indian Ocean community.[1]

The comparison made earlier between the East African coast and the west African Sudan may now be followed up with the chief contrasts between the two areas. While the Sudan or savanna zone of West Africa may never have been as effectively cut off from the Guinea or forested zone as the East African coast was from the plateaux and the highlands, it is certain that the states of the south (such as the Akan states of Banda and Bono, Oyo and Benin) are later than those of the north and probably date from the thirteenth century.[2] Yet the real point of contrast between West and East Africa is that when demand for exports arose, the Sudan and Guinea zones were fused into an economic unity through the initiative of Mande and Hausa

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1 J.S. Trimingham, Islam in East Africa, Oxford, 1964, pp. 6, 11; Mathew, loc. cit., pp. 105, 110.

2 Oliver and Fage, op. cit., pp. 102-7.

merchants who extended their commercial operations south; whereas in East Africa it was (with one or two exceptions) the up-country regional trade in such items as iron hoes and salt by such peoples as the Yao and the Nyamwezi which ultimately coalesced with the commercial network of the coastal belt to give rise to long-distance African trade-routes from the interior to the coast.[1]

Contrasts between East and West Africa do not stop here. Once the connection between the interior and the coast was established in East Africa, it continued to develop through the nineteenth century as Arabs and their Swahili associates, in response to a growth in demand for ivory and slaves, allied with the satiation of the areas nearer the coast with trade goods, struck ever deeper and deeper inland. West Africa, however, had for commercial purposes a dual façade, on the edge of the Sahara and the coast of Guinea. So when the Europeans began to frequent the erstwhile trafficless coast from the fifteenth century onwards, a new set of trade-routes developed from the coast which eventually extended to the Sudan zone and effected a complete reversal of orientation, from one exclusively northwards to one predominantly southwards. These directions of traffic flows have since become crystallised with the construction of railways.

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[1] Ibid., pp. 107-11; E.A. Alpers, The East African Slave Trade, Paper No. 3, Historical Association of Tanzania, Nairobi, 1967, pp. 13-5.

II. The Conceptual Framework of the Thesis

Port studies as 'open systems'

Seaports are located at points of intersection of continental and maritime routes. Before the advent of mechanical power in eastern Africa in the nineteenth century, however, there were no roads or railways and travel at sea was subject to monsoonal controls. So flexibility of sites was an important keynote in the evolution of port activity along the east coast, and an historical study must focus primarily on the relationships between the changing alignment of trade-routes and the fluctuating fortunes of ports. Prior to the early part of the seventeenth century, contacts between the coast and the interior in Kenya and Tanzania were strictly limited and the emphasis in earlier periods has, therefore, to be put on the varying pattern of 'short- and deep-sea' trade-routes. Such an analysis must perforce be based on historical data, but the viewpoint is distinctly geographical for it is, as Ullman would style it, a study in spatial interchange.[1]

Within this context, it is possible to conceive a study in the historical geography of major eastern African ports as an 'open system', a concept which has been introduced into both physical and human geography from the biological and behavioural sciences.[2] Thus

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1 E.L. Ullman, 'Geography as Spatial Interaction', Annals of the Association of American Geographers, XLIV, 1954, p. 283.

2 E.g. R.J. Chorley, 'Geomorphology and general systems theory', United States, Geological Survey, Professional Paper, 500-B, 1962; P. Haggett, Locational Analysis in Human Geography, 1965, especially pp. 17-9.

the internal and external relations of ports - the movements, lead to a consideration of the channels along which movements occur - the trade-routes, to points of intersection on those routes - the nodes, and their position in a regional port complex - the hierarchy. A series of such hierarchies, one for each significant phase in the history of ports, produce a model of the spatial patterns of port locations over that given period of time.[1] The great merit of the 'system's' approach is that it does not treat major ports in artificial isolation but views them collectively within the framework of relational patterns. However integrated the system described here may appear, it is just as logical to begin with movement and proceed to build up a hierarchy, as to start with major ports and then analyse their spatial relations. The choice of approach will be seen to depend upon the inter-related factors of the nature of historical circumstances and the length of a particular period of study.

Relevant concepts in port geography

The emphasis on landward and seaward connections of a port calls for a brief examination of the twin concepts of hinterland and foreland. Studies of hinterlands seek to analyse in terms of land routeways. the sources of exports and the destination of imports, i.e.

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[1] See, for example, E.J. Taafe, R.L. Morrill & P.R. Gould, 'Transport Expansion in Underdeveloped Countries: a Comparative Analysis', Geographical Review, LIII, 1963, pp. 503-29, and P.J. Rimmer, 'The Changing Status of the New Zealand Seaports, 1853-1960', Annals of the Association of American Geographers, LVII, 1967, pp. 88-100.

in terms of the area served by the ports. The concept must, however, be broadened to embrace, in addition to direct imports and exports to and from beyond the port-town, the port's transhipment and re-export trades. This is particularly important in an historical study of eastern African ports in view of their dependence upon coastal sea-lanes. It would in general be necessary to distinguish, as Weigend does, between the types of carrier in which merchandise leaves so as to limit the areal extent of the hinterland; thus, if a cargo is trans-shipped to another ocean vessel, it has come from a foreland and leaves again for another foreland, but if it is transferred to a coastal craft, the port of destination falls in the hinterland of the port where the cargo transfer was made.[1] Where hinterlands of two or more ports overlap, a distinction may be made between 'primary' or 'exclusive' and 'secondary' or 'competitive' hinterlands.[2]

'Foreland' is a word that has been recently introduced into port geography to serve as a counterpart for hinterland. Weigend defined it as "the land areas which lie on the seaward side of a port, beyond maritime space, and with which the port is connected by ocean carriers."[3] Thus, for the foreland concept to be complementary to that of the hinterland, it is imperative that it must analyse in terms of sea-lanes the destination of exports and the provenance of imports, i.e.

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1 T. Ouren, 'Transfer and Transhipment as exemplified by some Norwegian Ports', Tijd. Econ. Soc. Geog., XLII, 1951, pp. 378-81; G.G. Weigend, 'Some elements in the study of port geography', Geographical Review, XLVIII, 1958, pp. 195-6.

2 F.W. Morgan, Ports and Harbours, 2nd edn., revised by J. Bird, 1958, pp. 111-131.

3 Weigend, loc.cit.

in terms of the more important overseas ports with which trade is conducted. Such an exercise in a study of a modern port is beset with grave problems as statistics of port-to-port traffic in weight or value cannot be readily compiled and other less satisfactory means have to be employed.[1] However, in an historical study of eastern African ports, external trade was before the nineteenth century restricted to a few countries within the sphere of monsoonal influence, and only one or two ports of each country were actively involved in that trade. With both the hinterland and foreland of ports, there cannot obviously be any statistical analysis, for trade figures are non-existent prior to about 1800.

These considerations bring into focus Bird's suggestion that the urban concepts of situation and site should be applied to port studies as well. The distinction between the two is firmly established in geography: one is a broader view, in this case of the port's setting, and the other a closer view of the area of land and associated waters on which the port-area is actually developed. Bird moreover argues that if a town is also a port, a duplication of these conceptions is necessary, and hence recognises a land situation and a water situation, and a land site and a water site.[2] In East Africa, there were no long overland connections in the pre-seventeenth century period. So, in a manner comparable to trade-troutes, the water

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1 See G.G. Weigend, 'The Problem of Hinterland and Foreland, as illustrated by the Port of Hamburg', Economic Geography, XXXII, 1956, pp. 1-16, and A.I. Hodgers, 'The Port of Genova, External and Internal Relations', Annals of the Association of American Geographers, XLVIII, 1958, pp. 319-51.

2 J. Bird, The Geography of the Port of London, 1957, pp. 15-16.

situation of ports must be viewed from the wider Indian Ocean and the local eastern African viewpoints. The distinction between land and water sites does not arise for before the later part of the nineteenth century East Africa was visited only by seasonal dhows, and consequently, port installations were neither needed nor provided. Yet in a limited sense there were the dual considerations of anchorage - the harbour, and communication with the shore - the landing (e.g. difficult at the height of the north-east monsoon at Mogadishu without a breakwater).[1]

While the extension of these concepts to port geography is welcome, it is far from clear what phenomena should be included in a discussion of situation. Urban geographers consider a variety of them and Hoyle imitated their example in the enummeration of factors involved in the situation of East African ports. However, since such factors as the establishment of communications lines and patterns of economic development on the landward side logically come under the purview of hinterland, and Indian Ocean commerce and routeways under that of the foreland, their inclusion in a discussion of situation is merely a duplication.[2] On the other hand, only an appreciation of the physical details[3] and their impact through time on the pattern of

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1 C. Guillan, Documents sur l'histoire, la géographie et le commerce de l'Afrique orientale, Paris, 1856, II, pp. 548-9.

2 Hoyle, op. cit., 9-13.

3 E.g. topography, drainage, stability and aspect in a consideration of a land site, and configuration of the harbour and conditions of area, depth and temperature and movement of waters within it in a consideration of a water site. Hoyle, op. cit., p. 8.

development at a port is inherent in the concept of site. Hence to maintain consistency and, above all, to avoid overlap with hinterland-foreland analysis, it would seem desirable to limit situation to the general physical setting within which a port might develop connections. At a given point in time, a port may thus be seen as "a development of the potentialities of its situation and site by generations of men who have worked to make it what it is".[1]

Selection of phases for study

As the historical geography of eastern African ports is basically pivoted on their external space relations, those phases in the evolution of port activity are selected for study which were characterised by the development of new overseas connections. The first of these is the commencement of the Christian era, when trade contacts with the Red Sea were paramount through the Graeco-Romans who traded directly in India and the south-west Arabians who had penetrated south to East Africa. During the Middle Ages commercial intercourse began with the Persian Gulf, to be followed a few centuries later by direct links with the adjacent lands of north-west India. With the breakthrough of the Portuguese into the Indian Ocean from the south at the end of the fifteenth century a new element has to be reckoned with, but the study of this period is limited to the early sixteenth century, since East Africa saw a concentration and fragmentation of its erstwhile maritime connections in the wake of the

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1 Bird, op. cit., p. 15.

the Portuguese establishment. The final phase is devoted to the later part of the eighteenth century when, under the combined influence of the recrudescence of Arab merchantile activity and the extension of French slaving interest to the coast north of Cape Delgado (projected from the Ile de France), a new port group emerged which, with one or two variations, lasted through most of the nineteenth century.

The length of the period of these phases vary, and two of each may be considered to represent, in Darby's phraseology, "horizontal cross-sections" and "vertical themes" in historical geography.[1] Although the first and the last phases do not relate to a fixed point in time, they fall broadly into the former category. The aim will be to pursue seaward and, where applicable, landward connections through to the build-up of a port hierarchy, but as at the beginning of the Christian era only two ~~functionally~~ unrelated ports were involved, the progression will be incomplete for that phase. On the other hand, the intermediate phases represent Darby's second category, since they attempt to see the dynamics of change over a period of time that extends from about the ninth to the early sixteenth centuries. The approach here will be to trace the succession of major ports through the centuries which will facilitate the establishment of a model for the Middle Ages, against whose last phase the impact of the Portuguese arrival can be analysed. So where the 'cut' is made in the 'system' depends on the length of a phase of study, which, in turn, is conditioned by the nature of historical developments.

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1 H.C.Darby, 'The Relations of Geography and History', in Geography in the Twentieth Century, ed. G. Taylor, 3rd ed., 1957, pp. 643-9.

Delimination of area of study

Without the encumbrances of political divisions, the acid test in the delimitation of the stretch of eastern African coast to be studied is that it should form an economic unity in historical times. During the first phase, the extreme northern part of the coast formed an integral part of the western Indian Ocean commercial system, as a consequence of Graeco-Roman enterprise. The southern sector was very much at the periphery but it formed an extension of the trade of the Gulf of Aden and was not an independent area. When commercial contacts with the Persian Gulf were developed in the Middle Ages, the whole of the area from Mogadishu to Sofala constituted a unit, as ports south of Cape Delgado were linked by coastwise routes with those to the north of that Cape which had direct external connections. But the stretch north of Ras Hafun then came to be associated with the return voyage from South-East Asia at the end of the north-east monsoon and via southern India. There was, therefore, both an enlargement as well as a displacement of the economic unit to the south.

Despite the Portuguese establishment on the coast of Mozambique, the Swahili traders continued for several decades to engage in what the former considered to be "contraband" trade. Yet the stretches to the north and south of Cape Delgado eventually became separate economic entities. During the fourth phase, under the impact of vigorous Omani commercial involvement, the medieval unity was partially re-established. By the end of the eighteenth century, the northerly ports had made considerable inroads into the commerce of the Portuguese

ports themselves (especially of the Kerimba Islands) or their hinterlands behind the Mozambique coast. The limits of economic unity thus fluctuated during the four epochs of the study, yet the coastal stretch of modern East Africa was included under any one of them. Although the study, therefore, focusses primarily on East Africa, if ports to the north or south of it included in the unity of any phase grew into entrepôts (e.g. Opone and Mogadishu in the first and second phases respectively) or became foreign commercial centres (e.g. Sofala and Mozambique in the third phase), they are treated in extenso.

Potential for the application of the 'system's' approach

The East African coast forms the western shore of an Ocean which, despite the introduction of military warfare with the intrusion of European powers in the sixteenth century, was primarily a "theatre" of commerce. Thus before the advent of mechanical power, just as the fortunes of East African ports in time and space waxed and waned in accordance with the range of their internal and external space relations, so too did those others which dotted the shores of the Indian Ocean. For example, flexibility of port sites was as much a characteristic of the Persian Gulf as it was of East Africa, though the shift was persistently in the same direction, towards the mouth of the Gulf. By contrast, in view of the strength of internal connections and the peninsular disposition of the sub-continent, the entrepôts of western India tended, on the whole, to be located in the twin localities of the Gulf of Cambay and the coast of southern Malabar,

whether external maritime contacts were with the Graeco-Romans via the Red Sea or with the Portuguese and the English via the Cape of Good Hope.[1] The fundamental function of a port derives from the fact that it is a point of contact between continental and maritime space, and since these were differently organised at different periods of history, the 'system's' technique represents a fruitful approach that is peculiarly suited for an historical geography of ports of the Indian Ocean.

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1 A.T. Wilson, The Persian Gulf, 2nd ed., 1954, pp. 62-64, 92-109; E.H. Bunbury, A History of Ancient Geography, 1879, II, p. 469.

CHAPTER II

The Geography behind the Periplus:

Port Development in the early Second Century A.D.

The first extant description of the coast of eastern Africa as an integral part of the economic system of the western Indian Ocean is in an anonymous document entitled The Periplus of the Erythraean Sea.[1] It is a first-hand account of a Greek merchant of Alexandrian provenance and is now ascribed to the early second century A.D.[2]

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1 Greek text by H. Frisk, 'Le périple de la Mer érythrée', Högskolas Arsskrift (Götebárg), XXXIII, 1927, pp. 1-22. The oldest English translations are by W. Vincent, The Voyage of Nearchus and the Periplus of the Erythraean Sea, Oxford, 1809 and J.W. McCrindle, The Commerce and Navigation of the Erythraean Sea, Bombay, 1879. W.H. Schoff's The Periplus of the Erythraean Sea, New York, 1912 has been criticised as "a free translation of an imaginatively emended text". (G. Mathew). J.I. Miller has recently translated the text afresh and it appears as an appendix to this D. Phil. thesis, The Spice Trade under the Roman Empire, Univ. of Oxford, 1963. This is now being prepared for publication by the Hakluyt Society, while the thesis itself is in press. Quotations are from Dr. Miller's translation, except when otherwise stated.

2 The problem of the date of the Periplus has taxed scholars for over a century. On the one hand, Schoff (op.cit., p. 15) suggested c.A.D.60 but later revised his opinion and gave outside limits as A.D. 70 and 89 ('As to the date of the Periplus', J. of the Royal Asiatic Soc.,1917, pp. 827-30); and Miller in a personal communication (21 July,1966) ascribes it to c.A.D.70. On the other, J. Pirenne ('La date du Periple de la Mer Erythrée', J. Asiatique, CCXLIX, 1961, pp. 441-459) placed its composition at c.226; and von Wismann in a personal communication (9 November,1966) states that he has come to the same conclusion bu for different reasons. J.A.B. Palmer('The Periplus Maris Erythraei: the Indian evidence as to the date', The Classical Quarterly,XLI,1947, pp. 136-140) cogently argued for a date c.A.D.110-120; and D.W. MacDowall ('The early western Satraps and the date of the Periplus', The Numismatic Chronicle, 7th series, IV, 1964, pp. 271-280) has confirmed the substance of his argument on numismatic grounds but offered a revised date of c. A.D. 120-130. G. Mathew ('The dating and the significance of the Periplus of the Erythraean Sea', paper read at the Conference on "East Africa and the Orient", Nairobi, April,1967) has rightly asserted that so much ingenuity has been expended on the Periplus as a document that there is now a need for a scientific excavation at one of the sites mentioned in the text to establish with certainty the period to which it belongs.

Several place-names are mentioned by the author on the coast of eastern Africa, though only two are explicitly referred to as trading ports, viz. Opone and Rhapta. They were far apart not only in geographical distance, but also in the nature of their commercial contacts. Yet these ports appear to owe much, in one case to Graeco-Roman maritime enterprise, and in the other to their commercial stimulus. So it is logical to commence with the development of the trans-oceanic route between the Gulf of Aden and western India, and then to go on to examine its impact on the ports of eastern Africa.

Evolution of the Graeco-Roman trade-route in the Arabian Sea.

Successive stages in the development of this trade-route to the third quarter of the first century are outlined by Pliny, and the Periplus reveals the changes which had occurred during the next fifty years[1] (Fig. 1). The first contacts between the Red Sea and western India were inevitably made by a long, coastal voyage along the shores of Arabia, Persia and Pakistan. These voyages were certainly being made some years before the establishment of the Roman Empire in 27 B.C. Sometime thereafter (the probable date will be discussed later on in the chapter) came the breakthrough, for the outward journeywas considerably shortened as mariners, with the aid of the 'tail-end' of the south-west monsoon, struck across the ocean between Ras Fartak in southern Arabia and the mouth of the River Indus. This use of the navigational

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1 Pliny, Natural History, trans. H. Rackham, W.H.S. Jones & D.E. Eichholz (Loeb), 10 vols., 1938-63, vi. 26. 100, 101; Periplus, pars. 39, 57.

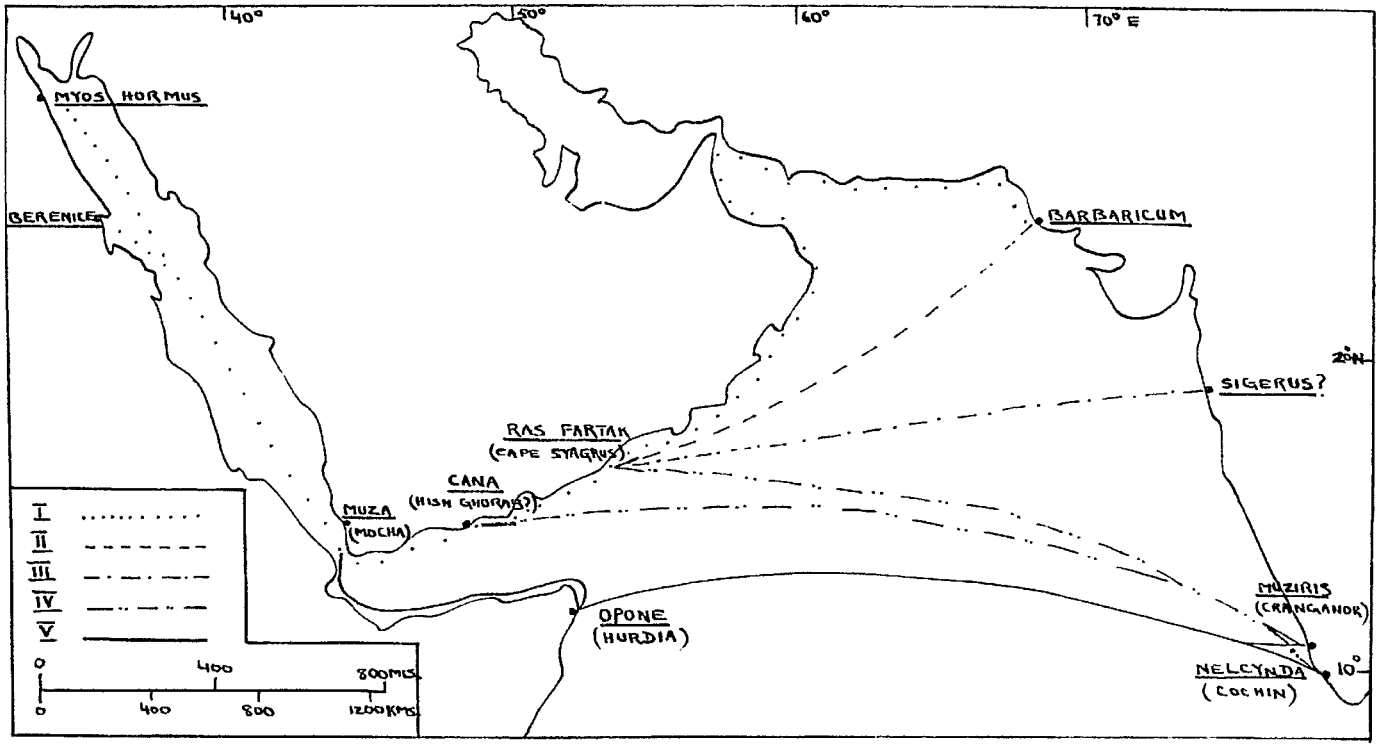

FIG. I. SUCCESSIVE GRAECO-ROMAN TRADE-ROUTES BETWEEN THE RED SEA AND WESTERN INDIA.

ADAPTED AFTER E.H. WARMINGTON, THE COMMERCE BETWEEN THE ROMAN EMPIRE AND INDIA, CAMBRIDGE, 1928 AND W.H. SCHOFF, THE PERIPLUS OF THE ERYTHRAEAN SEA, NEW YORK, 1912.

facilities of the south-west monsoon, from mid-August onwards, was alleged to have constituted a "discovery", and Hourani has assembled the reasons which purport to sustain this claim.[1]

There is no direct evidence for this early period of the way the south-west Arabians sailed to western India, but Hourani maintains that they set out during the season of the north-east monsoon and their practice was to "'ghost' along in the lee of the Hadhramaut coast [and then] to fall away before the north-east monsoon from a point sufficiently north and east."[2] The season of sail eastwards is, to be appropriate, the period of the 'build-up' of the south-west monsoon from March onwards for, as will be shown in the following chapter, reversal of winds and currents along the coasts of the western Indian Ocean precede the alternation on the high seas, the period varying slightly from one part to another. During this time, it is still advantageous to hug the Arabian rather than the African coast on a voyage to India. For part of the westerly flow of current in the open waters of the Arabian Sea is directed towards the African coast between 10 and 12°N; as the current turns north and north-east, part of it flows past Cape Guardafui and into the Gulf of Aden, so impeding progress for sailing vessels eastwards along its southern shore.[3]

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1 G.F. Hourani, Arab Seafaring in the Indian Ocean in Ancient and Early Medieval Times, Princeton, 1951 (Reprinted Beirut, 1963), pp. 25-8.

2 Ibid., p. 26.

3 Infra, pp. 124-8; Admiralty, Red Sea and Gulf of Aden Pilot, 9th edn., H.M.S.O., 1944, pp. 17-18.

On the other hand, the winter season was not ideal for Egyptian traders to put to sea. They would have had to contend with south-south-easterly winds in the southern part of the Red Sea (Fig.2), and with their square-rigged vessels they would have had to proceed far along the coast of southern Arabia, if winds happened to be contrary, before they could steer towards India. These difficulties did not arise during the summer season. Winds in the southern section of the Red Sea blow from north-north-westerly, and ships with square sails could sail straight on during the decline of the south-west monsoon to arrive in India at a time when it was comparatively safe.[1] It is not surprising, therefore, that the popularisation of the use of the 'tail-end' of the south-west monsoon on an outward voyage to India was hailed as a navigational feat of inestimable importance.

The penultimate stage in the development of this navigation was a natural corollary of the second. To reduce the distance still further and to avoid the dangerous sea approach to the Gulf of Cutch, seafarers sailed from Ras Fartak to a certain Sigerus, a port probably south of Bombay, and then coasted for the rest of the journey (Fig. 1). Pliny summarised these advantages in the comment that this was "a shorter and a safer route."[2] The final stage was yet to come, as the initial targets of the Graeco-Romans were the marts of southern Malabar with their lucrative commodities of beryls, diamonds, pearls

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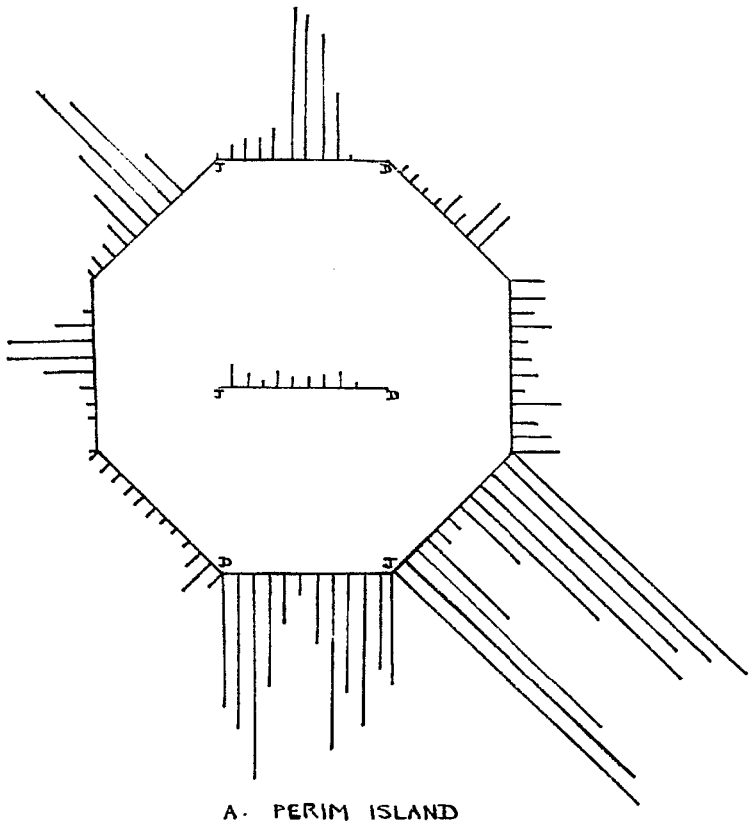
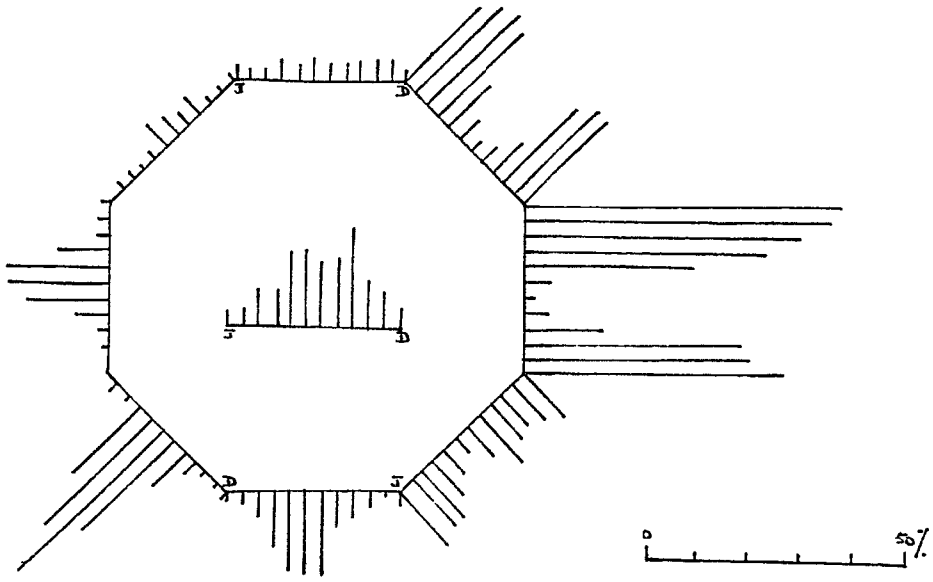
1 Hourani, op. cit., p. 27.

2 Periplus, par. 40; Pliny, vi.26.101.



A. PERIM ISLAND



B. 44-50°E

FIG. 2. WIND ROSES FOR STATIONS IN THE SOUTHERN RED SEA AND THE GULF OF ADEN.

SOURCE OF DATA: METEOROLOGICAL OFFICE, WEATHER IN THE INDIAN OCEAN, H.M.S.O., VOL. II, PART I, 1951, p. 65 & PART II, 1944, p. 136.

and above all pepper. The intermediate coasts were infested by pirates and expediency demanded that a wide berth should be given to them. There were the additional advantages of yet a further cut in sailing time and of a safe anchorage along Malabar distinguished in all India by a series of extensive lagoons which run parallel to the coast. However, according to Pliny, the development of this trans-oceanic route was not achieved for "a long time."[1]

The anonymous author of the Periplus provides the reason for this delay. It required the genius of a nameless mariner to observe, as he put it, "the situation of the ports and the state of the sea", that is to visualise the latitudinal extension of peninsular India vis-à-vis the Gulf of Aden[2] and the possibility of using the south-west monsoon for a direct route to the ports of Malabar.[3] Briefly, it was the combined effect of a geographical conception, the configuration of the western Indian Ocean basin, and a nautical innovation, which required of the helmsman "to pull constantly on the rudder" and of the sailors "to make a shift of the yard" so as to hold the course with the wind on the beam, that resulted in the attainment of Pliny's final stage.[4] The customary departure point on the Arabian coast

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1 Periplus, par. 56; Pliny, ibid.

2 Par.57. The ignorance of classical authors about the southerly extension of the Indian peninsula may be illustrated by a remark cited by Strabo: "the southern headlands of India rise opposite to the regions about Meroë [in c. lat.17°N]". D.R. Dicks, The Geographical Fragments of Hipparchus, 1960, pp. 67-9, 125-8.

3 Schoff, Periplus, p. 232 explains that "a vessel bound for the Malabar ports and sailing before the wind, with the type of rigging then in use, would have required steering off her course the whole time, thus describing a wide curve before making the Indian coast."

4 E.H. Warmington, The Commerce between the Roman Empire and India, Cambridge, 1928, p. 46; M. Cary & E.H. Warmington, The Ancient Explorers, 1929, p.76.

then came to be Cana, identified by Schoff with Hisn Ghorab.[1]

Our extant accounts of these developments are not definitive on the achievement of a certain Hippalus. The anonymous author of the Periplus seems confused for, in the same breadth, he attributes to him both the discovery of the use of the south-west monsoon on the outward voyage as well as the establishment of the trans-oceanic route between southern Arabia and southern Malabar, an untenable assertion in view of the time-lag between the second and the fourth stages of Pliny.

> Then came Hippalus, the helmsman, who, by noting the situation of the ports and the state of the sea, was the first to lay his course across the ocean; and it is since his time . . . that the south-west wind is called Hippalus, from the man who first discovered the passage across. From that time to the present day ships sail to India direct, some putting out from Cana, others from the Market of Spices . . . bound for Damirica . . . [and] for Barygaza and Scythia . . . .[2]

The fact that the south-west monsoon was locally known as Hippalus - and Pliny specifically attaches his name to the second stage - supports the view that it was the discoverer who gave his name to the wind, an instance of an immortalisation of a breakthrough. The Periplus is a second century document and it seems that in its attempt at a brief record of developments which had certainly occurred by the middle of the previous century, it contracts these into a two- rather than a four-phase evolution. Hence the error of associating the name of a single individual with a dual innovation.

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1 Pliny and Periplus, loc.cit.

2 Par. 57.

The date of the "discovery" by Hippalus is a vexed problem. Warmington, on the basis of a certain Plocanus's apparently coastal voyage to India, dated it to about the middle of the first century A.D. (A.D. 40-41); whereas Tarn, on the analysis of time-scale implicit in Pliny's four stages, pushed it back to approximately the beginning of the first century B.C. (90-80 B.C.)[1] The evidence of archaeology at an Indo-Roman trading-station at Arikamedu, two miles south of Pondicherry, and the recovery of Roman coin-hoards in India, the first being that of Augustus, has prompted Wheeler to postulate that the event occurred early in the first century A.D. He concludes thus:

> The Hippalus' may now be assumed therefore to have been in full and undisguised use at the end of the reign of Augustus (died A.D. 14); and incidentally the assumption gives a new actuality to the statement of Strabo, writing under Augustus, that from the Egyptian port of Myos Hormus alone 120 ships left for the East every year.[2]

Our immediate interest is limited to the development of Pliny's fourth stage; it is patent from his Natural History, dedicated in A.D. 77 that this route had not been in use for long[3], so it is reasonable to date it to not earlier than the middle of the century, to allow time for progression from the second to the fourth stage. The drain on Roman specie which Pliny bemoans[4] may thus be interpreted to herald

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1 Warmington, op.cit., pp. 43, 47-8; W.W. Tarn, The Greeks in Bactria and India, Cambridge, 1951, pp. 568-9.

2 R.E.M. Wheeler, Rome beyond the Imperial Frontiers, 1954, p. 129.

3 He thus significantly comments on the details which he gives about Malabar (vi.26.105): "But all these names of tribes and ports or towns are to be found in none of the previous writers, which seems to show that the local conditions of the places are changing."

4 vi.26.101.

the first phase of vigorous contacts with southern Malabar, consequent upon the inauguration of the new direct monsoon route.

The résumé of the author of the Periplus shows that there were by this time, two chief trade-routes in the Arabian Sea,[1] and that the one to southern Malabar then also skirted the African shore of the Gulf of Aden.

> [at] the present day ships sail to India direct, some putting out from Cana, others from the Market of Spices, those bound for Damirica [i.e. south-west India] throwing the ship's head considerably off the wind, those for Barygaza and Scythia [i.e. north-west India] following the coast for not more than three days, then continuing on their own courses out to sea . . . .[2]

There is here a curious omission, for if the Market of Spices, the last of the ports on the northern Somali coast was indeed the departure point, the emergence of Opone in the vicinity of Ras Hafun, apparently subsequent to Pliny, calls for an alternative explanation. The problem can be solved only by a study of the homeward journey of the Graeco-Romans, and the Periplus fortunately contains a few shreds of evidence which can be analysed in the light of meteorological conditions in the Arabian Sea to establish the inward routes.

Pliny records that the Graeco-Romans normally left India in December or, at all events, by the middle of January[3], so as to avail

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1 It will be recalled that Pliny shows that southern India was more attractive than northern. Wheeler (op.cit., pp. 154-7) has indeed recently argued that Barbaricum and Barygaza were not rivals of Muziris and Nelcynda through most of the first century, for the former were dependent for their exports on the so-called Silk Route (via clefts in the Hindu Kush) which was ~~only~~ diverted by the beginning of the second century A.D. so as to avoid passage through the hostile Parthian Empire. This was facilitated by the establishment of the Kushana Empire, with its attendant results of a more simplified and regularised system of customs dues.

2 Par.57.

3 vi.26.106.

themselves of the north-east monsoon before its strength declined in the Arabian Sea. The homeward journey would thus be as nearly direct as possible, and whether from north-west or south-west India a course would be shaped for the Gulf of Aden to the north of Socotra. The island had to be given a wide berth as the wind blows in violent gusts on its northern shore at the height of the monsoon. Ships normally called at Ocelis, just inside the Straits of Babel Mandeb, "the first landing for those entering the Gulf from the high seas", as the Periplus recorded (Fig. 3).[1] It is possible to make Socotra in February, if thought expedient, and a course laid from its western and straight for the Straits. No doubt these visits were made a little later in the season as the Periplus bears testimony to it: "Merchants from Muza used to trade with it [i.e. Socotra], and also those sailing from Damirica and Barygaza, who by chance put in there . . ."[2]

If the return journey from India was, however, delayed into March and April, the route set out above is impracticable. The north-east monsoon is nearly expended about the island of Socotra and on the Arabian coast, and is succeeded by light breezes from the south-west and west, alternating with frequent calms. Sailing directories recommend a passage about fifty miles south of Socotra, so as to make a landfall on the coast north of Ras Hafun.[3] Cape Guardafui could then be reached with a southerly wind and a northward-setting current because of the reversal along the coast which occurs some two months before the south-west monsoon is firmly established. However,

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1 Pilot, pp. 478-9; Periplus, par.25.

2 Par.31.

3 Admiralty, Ocean Passages for the World, comp. B.T. Somerville, 2nd ed., H.M.S.O., 1950, p. 277.

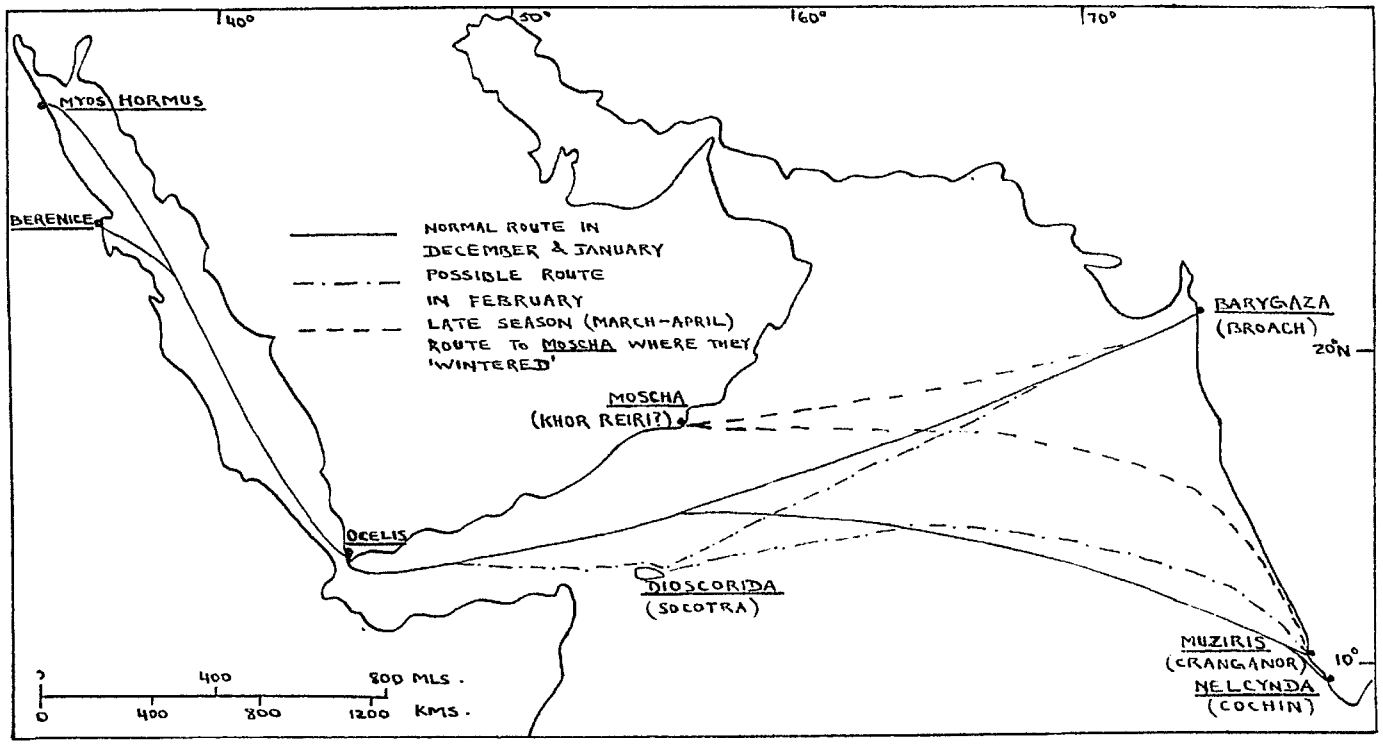

FIG. 3. RECONSTRUCTION OF THE HOMEWARD ROUTES OF THE GRAECO-ROMANS AT THE TIME OF THE PERIPLUS.

such a route was not known to the Graeco-Romans, for the Periplus makes this significant comment in respect of an Arabian port of Moscha identified with Khor Reiri: "Some ships ply regularly from Cana. Others, sailing coastwise from Damirica or Barygaza, winter there if the season is late . . . ."[1]

Opone is known to have had maritime contacts with the Graeco-Romans from Egypt and yet was not on the homeward route from India. So it appears that it was the normal departure point for the voyage from north-east Africa to the Malabar coast of India. There were certain navigational advantages to be gained if ships hugged the African rather than the Arabian coast: the easterly currents in the Gulf of Aden during the south-west monsoon are, in general, stronger on the northern than the southern side; the deep channel of over 100 fathoms lies nearer the African than the Arabian shore; the best shelter is found in the lee of the headlands on the southern coast; and a passage from the coast south of Cape Guardafui to the ports of Malabar, nearly due east, meant that ships did not have to be manoeuvred as much as if they had struck out from the Arabian coast. The fact that this new route perhaps took slightly longer than the previous one did not reduce its attractiveness. For as Pliny records, the journey to the Gulf of Aden made in July, occupied some thirty days, and from thence to Malabar a further forty,[2] so that it left mariners some two weeks to spare in the Gulf in August to time their arrival in India by the end of September or the beginning of October.

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1 Par.32.

2 vi.26.104.

With the breakthrough of the Graeco-Romans into the Gulf of Aden, south-west Arabia was divested of some of its traditional entrepôt trade. The trade across the Gulf will be later shown to have declined, and Indian ships called only at the Somali ports, sometimes en route to the Red Sea:

> There are also regular sailings [to the Somali ports] from the northern ports of Ariaca and from Barygaza which bring them the products of India . . . . Some merchants make the voyage especially to the Barbary ports, others travel coast-wise exchanging their cargo for what they can pick up as they sail along.[1]

Opone's rise to a position of importance, however, appears to be more directly related to the new alignment of the trans-oceanic route which would thus explain Pliny's lack of knowledge of the coast south of Cape Guardafui (especially since his fourth stage in the development of navigation did not occur before the middle of the first century). The subsequent position of Opone can best be illustrated by the re-export trade in cinnamon, for it is known from Agatharchides in the second century B.C., for instance, that cinnamon was previously channelled through the emporia of south-west Arabia.[2]

The description of the coast south of Ras Hafun is limited to four paragraphs in the Periplus, and it has been argued that because it is less circumstantial than those of southern Arabia or western India, the author perforce derived his information from

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1 Periplus, par. 14.

2 Cited by W.H. Schoff, 'Cinnamon, Cassia and Somaliland', J. of the American Oriental Society, XL, 1920, pp. 265-6.

hearsay.[1] This may well be so as the Graeco-Romans did not normally sail so far south, but in the discussion of the locality of Rhapta it will be seen that the account in the Periplus conforms in one or two respects with the topographical details of the coast, and thus tends to confirm the anonymous author's first-hand knowledge of it. Moreover, the mention of a southward-setting current south of Cape Guardafui in connection with a passage to Opone by a Greek mariner who would have sailed to India with the aid of the south-west monsoon is odd, and may perhaps suggest that he confused it with his own experience on a journey along the coast from that Cape.[2] It is, in fact, patent that the treatment accorded to the various sectors of the western Indian Ocean in the handbook is an unimpeachable testimony of the peripheral position of East Africa in the earlier centuries of the Christian era. For the chief trade-routes ran across the northern section of the Arabian Sea, and the extension along the African coast may perhaps be conceived as "a flank diversion". The probable circumstances which led to its development will emerge from a consideration of the ivory trade of Rhapta, the last trading port of the east coast. Suffice it to say here that the impetus appears to have been Graeco-Roman in origin.

Identification of Opone and Rhapta

The analysis of the Graeco-Roman trade-routes in the Arabian

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1 E.g. G.S.P. Freeman-Grenville, The Medieval History of the Coast of Tanganyika, Oxford, 1962, p. 24.

2 Infra, p. 56 ; par. 13.

Sea and their impact upon eastern Africa, as illustrated by the cinnamon and ivory trades of its two trading ports, may be interposed by a discussion of the identification of these ports. Since Opone was on the outward voyage of the Graeco-Romans to India and since it was also a port of call from ships from Gujerat, it is of utmost significance as well as relatively easy to indicate its position on the coast of eastern Somalia. Conversely, as Rhapta was the terminus of a branch route from south-west Arabia, and as the Periplus does not contain unequivocal clues to its identification, it is only marginally important and infinitely more difficult to suggest its location on the coast of Tanzania. For Opone was thus accessible during both the north-east and the south-west monsoons, which constitutes a vital consideration in the choice of its site; whereas Rhapta was not further south than the latitude from which the return journey could be completed within a single season, whihh in itself does not rule out any of the identifications that have been proposed.

Opone has been traditio ally located on the shore of Hafun South Bay (see pp. 53 and 54 and Fig. 4). This arose from the premise that the voyage along the African coast would be made with the north-east monsoon and, therefore, a priori on geographical grounds the port must be south of the promontory of Ras Hafun. For despite the winds which blow across the isthmus and the cross swell which rolls into the greater part of the bay during that season, sheltered anchorage is available in the eastern corner in depths of five to six fathoms about a mile offshore.[1] It has, however, already been shown ~~that~~ ~~the~~

[1] C. Guillain, Documents sur l'histoire, la géographie et le commerce de l'Afrique orientale, Paris, 1856, I, p. 100, II, pp. 389-90; Admiralty, Africa Pilot, Part III: South and East Coasts of Africa, 10th edn., H.M.S.O., 1939, p. 459.

Identification of certain eastern African place-names in the Periplus by selected editors

	Vincent (1807)	Müller (1855)	McGrindle (1879)	Schoff (1912)
1. Tabae	c. Daffui [Ras Hafun]	Ras Shenarif	Ras Hanna [Binna] (alternatively Ras Shenarif)	-
2. Opone	Bandel Caus? (. °45'N)	Ras Hafun [on Hafun South Bay]	Ras Hafun [on Hafun South Bay]	Ras Hafun [on Hafun South Bay]
3. Pyralae Is.	Lamu Archipelago ("The Channel ", however, identified with Mombasa)	Lamu Archipelago	Lamu Archipelago	Lamu Archipelago
4. Menuthias	Zanzibar	Zanzibar	-	a) Pemba, or b) Zanzibar, or c) Mafia
5. Rhapta	Kilwa	Near Dar es Salaam	-	if a) then Tangani b) then Bagamoyo c) then Kilwa (On the basis of Ptolemy, preference for a site near Bagamoyo, perhaps Dar es Salaam)

Identification of certain eastern African place-names in the Periplus and Geographia by selected commentators

	Guillain (1856)	Struck (1921)	Baxter (1944) & Allen (1949)	Wissmann (1958)	Warmington (1963)
1. Tabae	Hurdia				Ras Shenarif
2. Opone	on Hafun South Bay				Ras Hafun
3. Pyralae Is.	Lamu Archipelago		Lamu Archipelago		Lamu Archipelago
4a Menuthias in Periplus	Zanzibar		Pemba	Pemba	Pemba or preferably Zanzibar
b Menuthias in Geographia		Mafia		Mafia	Great Comoro?
5. Rhapta	Rufiji delta	Near mouth of River Kingani [Ruvu]	Pangani	Dar es Salaam	Dar es Salaam
6. Rhapta promontory				Ras[N]dege	Ras Poonah
7. Prason promontory		C.Delgado		Ras Dima [Rufiji delta]	C.Delgado

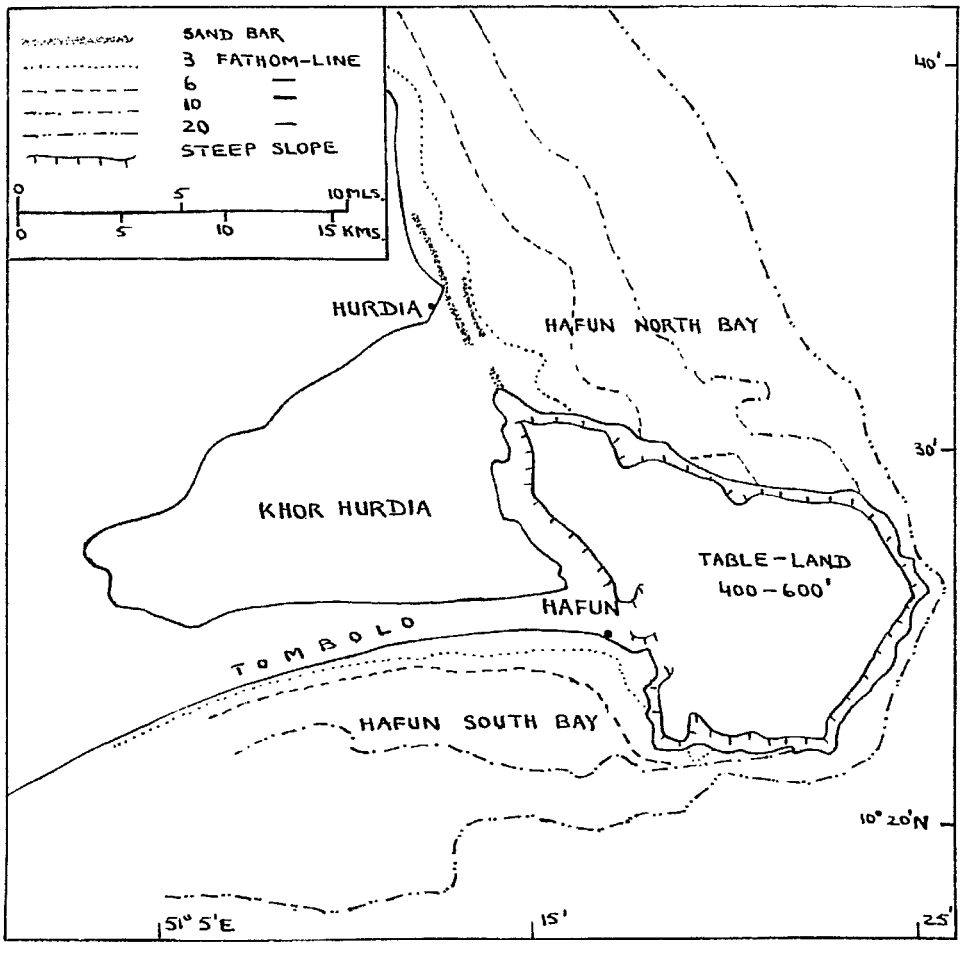

FIG. 4. THE ROADSTEAD OF RAS HAFUN.

ADAPTED AFTER ADMIRALTY CHART NO. 100A AND C. GUILLAIN, ALBUM, PARIS, [1857], PLATE 17.

that the Graeco-Romans called at Opone during the season of the south-west monsoon when the southern bay was obviously untenable. There is then a need to look at the Periplus afresh to see if Opone was not, in fact, north of Ras Hafun.

The anonymous author records that the roadstead of the Market of Spices in the immediate vicinity of Cape Guardafui is exposed to the north and so sometimes suffers from ground-swell. He states that when this happens, "all run for safety to the lee of the great cape, to a place of shelter called Tabae on its south side."[1] It is evident that Tabae cannot have been far distant from Cape Guardafui; the first promontory south of it is Ras Jard Hafun or Shenarif, eleven miles away, which is described in the Red Sea and Gulf of Aden Pilot as "a remarkably bold and ru ed headland."[2] Now Opone was four hundred stadia beyond which, on the basis of 8.7 stadia to the English statute mile, points to a location between the two projections of Ras Ali Bash Kil and the more prominent Ras Hafun, thirty three and sixty eight miles respectively along the coast south of Tabae.

Opone's location as described in the Periplus has alas been differently translated by various authors. Here, Schoff and Miller may be cited for purposes of comparisons:

> Schoff: After sailing 400 stadia along a promontory, toward which place the current also draws you, there is another market-town called Opone . . . .

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1 Par. 12.

2 P. 472.

> Miller: At a distance of 400 stadia from Tabae alongside a promontory, towards which place one is also drawn by the current, there is another market-town called Opone.[1]

Schoff thus implies that Opone was reached after coasting the promontory of Ras Hafun, while Miller indicates that it was alongside the northern shore of the isthmus. The latter position is consistent with the distance of Opone from Tabae as has been seen above; indeed, Ptolemy in his Geographia tabulated the mart three quarters of a degree north of Zingis promontory which is evidently identifiable with Ras Hafun.[2]

Hafun North Bay (Fig. 4) like its counterpart, suffers from heavy swells and violent squalls at the height of the south-west monsoon. However, the Graeco-Romans arrived after the beginning of August and so normally obtained safe anchorage in depths of seven to ten fathoms. They could have communicated with the shore only from somewhere near the site of the present village of Hurdia as the tableland, 400-600 feet high, has a steep cliffy face throughout. Small Arab and Indian vessels could find shelter during the north-east monsoon behind the sand bar which connects Khor Hurdia with the high seas via two passes. Most of this considerable inlet dries

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1 Par.13.

2 Greek text in C. Müller, Ptolemaei Geographia, 2 vols., Paris, 1883 and 1901 and English translation E.L. Stevenson, Geography of Claudius Ptolemy, New York, 1932 (cf. G.S.P. Freeman-Grenville, The East African Coast: Select Documents, Oxford, 1962, pp. 3-4), i.17, iv.7. On the dating of Geographia, see Leo Bagrow, 'The Origin of Ptolemy's Geographia', Geografiska Annaler, Stockholm, XXVII, 1945, pp.318-7. It is basically a second century document but the section on East Africa is believed to have been much edited and probably represents "the sum of knowledge acquired in the Mediterranean world by the close of the fourth century A.D." (G. Mathew, 'The East African Coast until the coming of the Portuguese', History of East Africa, vol. 1, eds. R. Oliver and G. Mathew, Oxford, 1963, p. 96).

up at low water spring tide but a seventh that does not has, at the present time, a depth of less than two fathoms.[1] On the grounds of accessibility during both the monsoons, Opone may thus be assumed to have been located at or near the present-day site of Hurdia.

The trading port of Rhapta can only be fixed by its distance from Ras Hafun which the Periplus gives in number of days' sail southward of that promontory. It is not, however, proposed to trace here the whole itinerary for there is a general consensus that the Pyralae islands could be identified with the Lamu Archipelago (see pp. 53 and 54). "The Channel" of our author has sometimes been taken disjunctively from the Pyralae islands and identified with Mombassa, but the word evidently refers to the Strait behind the archipelago.[2] Beyond the islands the Periplus contends that the coast trends "a little to the south of south-west" and the fact that this change occurs in Formosa Bay provides cogent testimony of the veracity of this identification. Rhapta lay two days' sail from the island of Menuthias which in turn was four days' run from the Lamu Archipelago, so an accurate identification of Menuthias is of cardinal importance in the location of Rhapta.

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1 Guillain, op.cit., II, pp. 390-92 (see also his Album, Paris [1857], Plate 17); R. Sea and G. of Aden Pilot, p. 474. Guillain himself travelled along the coast of eastern Africa in the mid-nineteenth century and he identified Tabae with Hurdia. It will be recalled that ships sought refuge at this port as the Market of Spices was exposed to northerly winds.

2 Pars.15-6. English translations vary on this point. Thus McGrindle gives "the narrow strait called the Canal", while Miller says "the throughfare behind them [i.e. the Pyralae islands] called the Channel". W. Vincent, The Commerce and Navigation of the Ancients in the Indian Ocean, 1807, II, pp. 168-9; Mathew, loc.cit., p. 95.

Beyond the Lamu Archipelago the voyage is stated to continue along the coast, though no topographical details are henceforth provided. Yet at Shimoni, near the Kenya-Tanzania boundary, there is a minor but significant change in the trend of the coastline which is unobserved; it might thus be inferred that vessels hauled away from the coast before Shimoni was reached to enter the channel which separates Pemba from the mainland. This is consistent with the configuration of and conditions within the Pemba Channel; the flanks of the Channel are studded with numerous reefs but they extend over a greater distance offshore on the western than on the eastern side, and the consistantly northward-flowing current is weakest on the eastern side, so that a passage along the west coast of Pemba is considered to be the safest.[1] It is hardly likely, therefore, that Pemba could have been missed by voyagers from the north, and the distance both of four days' sail from the Pyralae islands as well as of 300 stadia from the mainland accords better with it than with Zanzibar.[2]

Confusion has arisen over Menuthias because it is not normally recognised that while it designates Pemba in the Periplus, it denotes either Zanzibar or Mafia in the Geographia (see pp. 53 and 54). For

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1 Af. Pilot, p. 347.

2 Guillain (op.cit., I, pp. 96-7) reckoned that a day's course represents an average distance of 60 miles in the southern part of the coast. The direct distance between the southern point of Lamu and the northern point of Pemba is about 200 miles. Guillain's identification of Menuthias with Zanzibar (I, pp. 111-2), which has been uncritically accepted by some scholars, is based on inaccurate calculations of the distance from the Lamu Archipelago. Moreover, a position of 300 stadia or c. 34½ miles from the mainland suggests Pemba rather than Zanzibar, which are distant 30 and 22½ miles respectively at their narrowest points.

the Greek seamen places Menuthias before the trading port and gives the duration of the voyage from it to Rhapta, whereas the co-ordinates of the Alexandrian scholar fix Menuthias south-east of Rhapta which must, therefore, refer to an island other than Pemba.[1] Mafia's case will be presently seen to be a shade weaker than Zanzibar's, though the memory of Menuthias may have been preserved in its name (Monfiyeh).[2] Meanwhile, it will be appreciated that the position of Rhapta need not be affected by Ptolemy's wrongful attribution of Menthuias to one or the other offshore island of Tanzania.

Details of the site of Rhapta are provided only by Ptolemy but since they are contradictory it is impossible to fix the port with any degree of precision. It was situated on the river of the same name, but whereas in one place it is "set back a little from the sea", in another it is one-and-a-half degrees due west of one river mouth. Allen has rightly pointed out that if both statements are true, the river must run almost parallel with the coast which in turn must stretch east-west. These conditions are not met anywhere on the coast north of Cape Delgado.[3] Under the circumstances, all that can be attempted is to delimit the locality where Rhapta might have been sited.

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1 Rhapta is stated to be in 71°S.7° and Menuthias in 85° S.12° 30' (iv.7,8). The manuscript gives longitude first, followed by latitude.

2 P. Wheatley, 'The Land of Zanj: exegetical Notes on Chinese Knowledge of East Africa prior to A.D. 1500', Geographers and the Tropics, eds. R.W. Steel & R.M. Prothero, 1964, p. 165.

3 Ptolemy i.17, iv.7; J.W.T. Allen, 'Rhapta', Tanganyika Notes & Records, No. 27, 1949, p. 56.

Given that Ptolemy's Menuthias might be Zanzibar or Mafia, outside limits of Rhapta's locality should be set at Pangani and Dar es Salaam - if, that is, faith can be put in his directional relationship between Rhapta and Menuthias, and in his assertion that the coast from Opone to Rhapta trends south-west but that from the latter to Cape Prason it changes to south-east[1] (Fig. 5). While this change first occurs on the coast opposite the south-western part of Zanzibar, which would argue the identification of Cape Prason with Ras Ndege or Ras Manamku, Ptolemy allocates eight degrees of latitude between the port and the cape on the word of a certain Dioscorus that his voyage took "many days", so that Cape Prason could alternatively be correlated with Cape Delgado and his Menuthias with Mafia.[2]

Within the above locality, one popular suggestion is to locate Rhapta on the River Pangani (see pp. 53 and 54), but though its old course is known from an aerial survey to have been some distance to the south, the arguments advanced are far from conclusive.[3]

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1 See Note 1, p. 60 and Ptolemy i.17.

2 Ptolemy i.9, iv.8.

3 The Periplus mentions sewn boats in connection with Menuthias and later comments that Rhapta was "given this name from the aforesaid fibre-bound boats" (pars. 15-6). Thus H.C. Baxter('Pangani, the Trade Centre of Ancient History', TNR, No. 17, 1944, pp. 17-18) picked on the word pangaia used for boats in a seventeenth century account of an English captain who took in water at Pemba to postulate that as Rhapta vanished from existence, a new settlement sprang up called Pangani, the name having been derived from the industry of its predecessor. This hypothesis must be summarily dismissed as pangaio is a Portuguese word commonly employed in their documents to denote medium-sized coasting craft. Allen (loc.cit., pp. 57-8) suggests that Pangani might have once been known as Mnyuzi (same form as singular uzi, plural nyuzi which in Kiswahili means "thread" or "string") and therefore translates Rhaptus as Mnyuzi and Rhapta as Nyuzi. This is a moot interpretation as it must be weighed against the claim of the Arabic rabaṭā, which means "to bind".

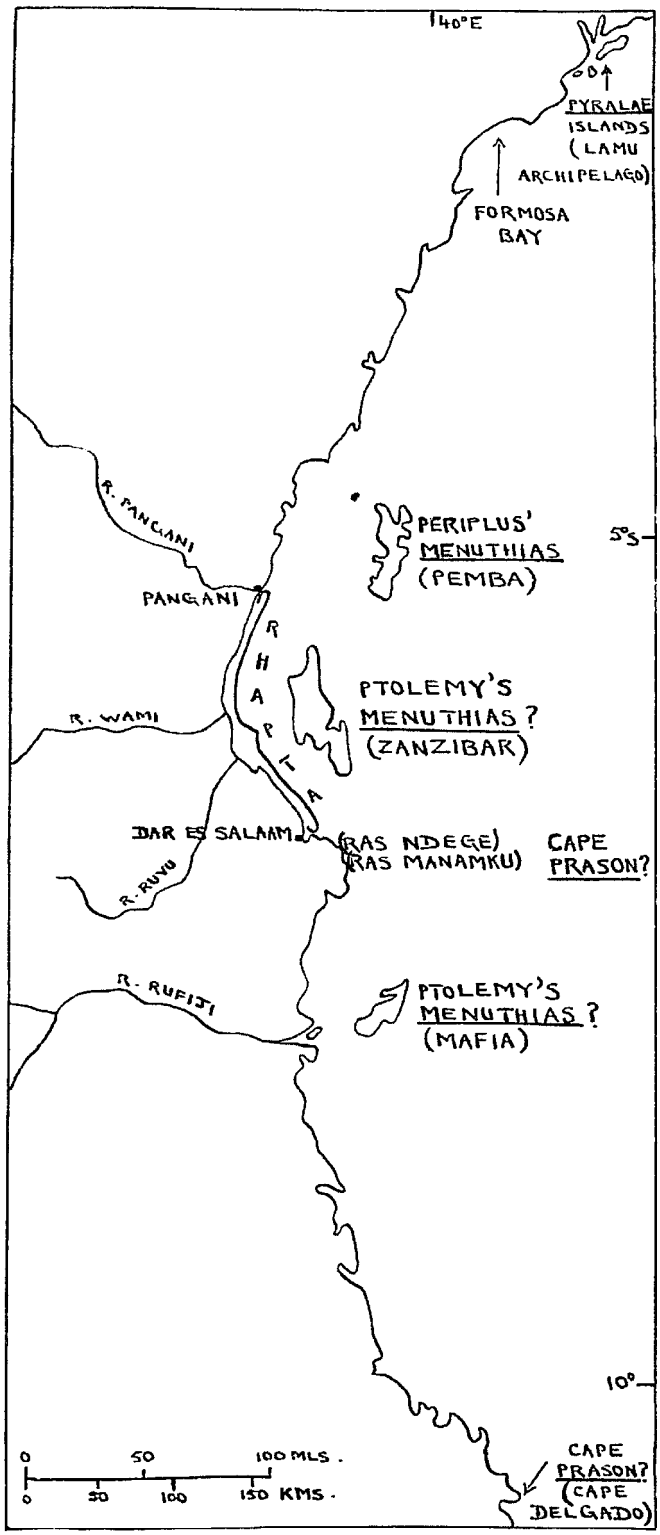

FIG. 5. IDENTIFICATION OF EAST AFRICAN PLACE-NAMES IN THE PERIPLUS AND GEOGRAPHIA.

It might be added that Ptolemy is believed to allude to an overland trade-route to Kilimanjaro, but the indication is at best vague and cannot be said to strengthen Pangani's case.[1] Another popular suggestion is to place Rhapta in the same inlet on which modern Dar es Salaam stands, since the ria could easily pass as a river and the situation of the port a little away from the sea readily explained. However, the fact that deep-water harbours in East Africa appear to have been largely ignored by Muslim mariners before the late nineteenth century should not be overlooked. Our only hope must be that the trowel of the hitherto unsuccessful archaeologist may yet discover the material relics of Rhapta.

The cinnamon trade of Opone

The Periplus reports an extensive trade in "cassia" from the ports of the Horn of Africa at the beginning of the Christian epoch but with "the greatest quantity" exported from Opone.[2] Miller points out that classical writers variously use "cinnamon" and "cassia",

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[1] Ptolemy (iv.8) speaks of "the Mountains of the Moon from which the lakes of the Nile receive snow water". He locates the mountains due west of Menuthias island but separates them by 10° of longitude. The oft-quoted H.H. Johnston (The opening up of Africa, 1911, p. 110) added that this information was supplied by a certain Diogenes who had travelled inland for twenty five days, a fair duration for a journey from the coast to Mount Kilimanjaro. Johnston, however, mistakenly inferred this from the statement that Diogenes "being off the coast of Aromata, was caught by the North wind and, after having sailed with Trogloditica on his right, came in 25 days to the lakes from which the Nile flows, to the south of which lies the promontory of Rhaptum" (i.9). It is, in fact, abundantly clear from Ptolemy that 25 days refer to the length of Diogenes' coastal voyage from Aromata to Rhapta.

[2] Pars. 8, 10, 12, 13.

but that the descriptions of Theophrastus and Pliny show that it was appreciated that these plants represented different species of the same genus of trees. He further states that cassia "d rives" from the Chinese kwei-shi or "cassia branch" and cinnamon from the Malay kayu manis or "sweet wood", though cinnamon generically covers both.[1] If this is correct, cinnamon was transported across the whole length of the Indian Ocean and the Periplus merely describes the re-export trade in it from the ports of Somalia.

To explain this pattern of trade, Miller has advanced a speculative hypothesis which invokes the so-called "southern monsoon route" from South-East Asia to East Africa via Madagascar and the Comoro Islands, and a coastwise route from Khapta to Muza in south-west Arabia. Part of the cargo is claimed to have been off-loaded at the Pyralae islands and Sarapion (identified with Mogadishu), where overland routes began. That to Alexandria passed east of Lake Rudolf , whence it branched to run north-east through Ethiopia to Avalites (identified with Zeila), where the second route converged via the Shebeli and Gerrer rivers from the east coast. At Avalites a third overland route is conjectured to have skirted the northern Somali coast to Ras Hafun. The basis for the postulation of this elaborate network is the linguistic and cultural evidence for the sea-route to Madagascar, and the authority of the Periplus for the coast-wise route to Muza, with the link between the two provided by a curious passage from Pliny. The classical author speaks of transportation of cinnamon "over vast seas on rafts which have no rudders to steer

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[1] Op. cit., pp. 57-63.

them or oars to push or pull them or sails or other aids to navigation" which is interpreted to be the double-outrigger Indonesian canoes, that put out to sea at "the time of the winter solstice, when the east winds are blowing their hardest", which is rightly taken to be the north-east monsoon. For the interior routes, the basis is Strabo's conception of the "cinnamon country", deduced to lie between 5 and 10°N latitude, allied with his contention that "cinnamon is more abundant in the neighbourhood of the places deep in the interior."[1]

The need for such a hypothesis invites two general comments. Miller is at pains to justify it on the grounds that the Periplus does not indicate any direct maritime contacts between southern India and eastern Africa, and more particularly, does not show cinnamon as an import of the ports of Somalia. These negative arguments can likewise be repeated in respect of Rhapta, the key link-port in his cinnamon route. Secondly, Miller recognises the existence of trade-routes between the South-East Asian Archipelago and the Indian sub-continent, along which moved some of the spices known in the Roman world and whose natural habitat he himself shows to have been the Far East. It thus makes little economic sense that cinnamon should have been transported by a circuitous route half-way round the world and Miller must be held to have read too much into Pliny's passage.

Both the sea and land components of his cinnamon route raise, in fact, tricky problems. The date of the first wave of Indonesian

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1 Ibid., pp. 207-38 and see map in Schoff, Periplus, end book (Pliny xii.42, 87-8; Strabo, The Geography of ---, trans. H.L. Jones (Loeb), 8 vols., 1917-32, xvi.4.14).

emigrants to Madagascar is uncertain but Miller is prepared to push it back to "the early part of the first millenium B.C." to account for the earliest classical references to a significant trade in cinnamon. The consensus of scholarly opinion, however, seems to be that a terminus a quo is provided by the advent of the Iron Age in Indonesia around the first century B.C. or A.D. and a terminus ad quem by the progressive Sanskritisation of the Indonesian languages brought about by the spread of Hinduism from the second and third centuries onwards.[1] Yet as Southall logically argues, if the discovery of a possible stone adze in Madagascar should be further substantiated, the assumption about the cultural attainment of the immigrants would have to be modified, unless it is maintained that the island had an anterior aboriginal population with a markedly lower technical equipment and population density.[2] Yet too, if the immigrants came from the non-Hinduised islands of South-East Asia, such as Borneo (as suggested by Dahl on linguistic grounds and reinforced by Dyen with lexicostatistical analysis[3]) it would leave the terminal date open. So the problem of Malagasy origins is very complex.

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1 For a bibliography of the voluminous literature on the problem of Malagasy origins, see for example A.M. Jones, Africa and Indonesia, Leiden, 1964, pp. 239-245.

2 A. Southall, 'Anthropological Reactions to the Problems of Malagasy Origins', Paper read at the Conference on "East Africa and the Orient", Nairobi, April, 1967 (M. Block & P. Verin, 'Discovery of an apparently neolithic Artefact in Madagascar', Man, new series, I, 1966, pp. 240-1).

3 C.C. Dahl, Malagasche et Maanjan: une comparison linguistique, Oslo, 1951 and its review by I. Dyen, Language, XXIX, 1953, pp.577-90.

The conjectural reconstruction of continental trade-routes throw up two questions: why should the Sabaeans discharge their cargo of cinnamon collected at Rhapta further up the coast to be transported overland for thousands of miles, and why should the commodity be carried eastwards from the port of Avalites only to be shipped westwards again from as far afield as Ras Hafun. Miller has, in any case, misinterpreted the extent of Strabo's "cinnamon country", for his claim that the region was "marked" by the intersection of the meridian from Alexandria to Meroë and beyond with the parallel which ran through Ceylon - that is, from 5 to 10°N - is based on an incidental comment by Strabo in his section on Ceylon which we know was reckoned to be much larger than it actually is.[1] Elsewhere Strabo quotes Hipparchus who indicates the position of the "cinnamon country" with a scientific exactitude.

> Now Hipparchus says that the people living on the parallel which passes through the cinnamon country - this parallel is 3000 stadia south of Meroë and 8800 stadia from the equator - have their homes very nearly half-way between the equator and the summer tropic, which passes through Syene; for Syene is 5000 stadia from Meroë. These people are the first for whom the whole of the Little Bear is contained within the arctic circle and is always visible; for the bright star at the tip of the tail, the southernmost star of the constellation, is situated on the arctic circle itself, and so touches the horizon.[2]

Dicks comments that the star in question is our Pole Star which in Hipparchus' time was about 12°24' from the pole. The distance from the equator agrees sufficiently well with this figure, for 8800 stadia

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1 Strabo ii.1.14., Periplus, par. 61.

2 Trans. by Dicks, op. cit., p. 93.

(at 700 stadia to 1°) give a latitude of 12°34'.[1] Dicks further states that Hipparchus knew from his astronomical work the position of the Pole Star but he must have relied on outside information to say that it just touched the horizon in the "cinnamon country." So his figure is slightly too high to describe, as is patent from another remark by Strabo, the southern shore of the Gulf of Aden (latitude of Babel Mandeb is 12°37' and that of Cape Guardafui 11°50'N.):

> The Arabian Gulf [i.e. the Red Sea] lies approximately parallel to the meridian in question [from Alexandria to "Meroë" and beyond], to the east of it; and where this gulf pours outside into the exterior sea is the cinnamon-producing country . . . .[2]

While cinnamon had for long been associated with northern Somalia, the most striking fact in the Periplus is the concentration of its trade in the ports of the north-east corner of Africa, and so any hypothesis which might be advanced must adequately explain this phenomenon. Since cinnamon was an Oriental product, this points to its import via southern India towards the end of the north-east monsoon when a landfall, as was seen above, would have to be made on the coast north of Ras Hafun. The Sabaeans sailed to Gujerat during the period of the 'build-up' of the south-west monsoon and if, as is generally assumed, they did proceed to Malabar, presumably at the beginning of the following season, the return journey would inevitably have been delayed into March-April and hence course might be set for

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1 Ibid., pp. 170-1. Both the figures may be described as nearly halfway between the equator and the summer tropic through Syene, which Hipparchus took for practical purposes to be at 24°N. lat.

2 Strabo, ii.5.35.

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north-east Africa. It is not without interest that Pliny's passage, on which Miller erects the whole super-structure, mentions a Cape (Guardafui?) and Ocelis, known to be the first port of call inside the Straits of Bab el Mandeb.[1] During the Middle Ages, when similar circumstances obtained, Arab ships sailed on the southern route from Malabar bound direct for Aden.[2] However, it has been shown from the Periplus that this route was unknown to the Graeco-Romans in the second century, and so doubt must remain as to its use by the Sabaeans.

The ivory trade of Rhapta

Rhapta exported in the time of the Periplus "a great quantity of ivory". It is a commodity which has been in demand from time immemorial. The Greek dynasty of the Ptolemies in Egypt obtained their supplies partly from the western shore of the Red Sea where a string of bases for its exploitation studded the coast, and partly from the entrepôts of south-west Arabia which were evidently provisioned by traffic across the Gulf of Aden. Vestiges of this pattern still existed when the Periplus was composed. Two of the Red Sea centres still survived, namely Ptolemais and Adulis (identified with Er-rih island and the Eritrean centre of Massawa respectively), but significantly, they derived their exports from farther and farther afield. Merchant seamen of Avalites, a port on the Somali coast near the Straits of

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1 Supra, p. 47; Pliny xii.42.88.

2 E.g., Ibn Mājid, Três Roteiros Desconhecidos, ed. T.A. Chumovsky and Port. trans. M. Malkiel-Jirmounsky, Lisboa, 1960, R.93v,4 (p.46).

Bab el Mandeb, were stated to cross on rafts to Ocelis and Muza in south-west Arabia, but trade across the Gulf had then clearly declined.[1] The Periplus, however, describes additional routes along which ivory travelled.

With the establishment of the Roman Empire there would appear to have been a phenomenal growth in demand for ivory, evidenced by its lavish display more particularly from the time of Tiberius (after A.D. 14). Warmington points out that the references to ivory definitely described as "Indian" in classical literature gradually increase from the beginning of the Roman Empire when, it may be added, the Graeco-Romans already made coastal voyages to India. This shift of emphasis in sources of supply is underlined by Pliny's remark a century or so later that "an ample supply of tusks is now rarely obtained except from India, all the rest in our world having succumed to luxury."[2] Finally, the Periplus lists ivory as an important export from the ports of India.[3]

It is against this background of depletion of supply from nearer Egypt and concurrent growth of Roman demand for ivory, together perhaps with the impact of the Graeco-Roman sea contacts with India, that the penetration of the Sabaeans along the coast of eastern Africa should be viewed. Contrary to a generally held belief, therefore, this development may not go farther back than the later part of the first

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1 Cary and Warmington, op.cit., pp. 67-9; Periplus, pars. 3,4,7.

2 Warmington, op. cit., pp. 163-4; Pliny viii.4.7.

3 Pars., 49, 54.

century B.C. It is true that the Periplus indicates a well established route to East Africa where the Sabaeans are stated to have claimed "ancient right" to overlordship of the coast.[1] Yet the time lag between even the "discovery" of Hippalus, now pushed back to not later than the beginning of the first century A.D., and the composition of the Periplus, recently brought forward to A.D. 120-30, is sufficiently great to account for the situation described in the Greek handbook.[2]

The Periplus states that East African ivory was inferior to that of Adulis. Freeman-Grenville claims that here the anonymous author was making the commercial distinction between soft and hard ivory and, therefore, argues that while the north-east African ivory was destined for Egypt, the softer East African variety was for the Indian market. This suggestion is prompted by the knowledge that

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1 Pars. 16, 31. The anonymous author uses in par.15, according to Schoff's rendering, Ausanitic to describe the East African coast, and this is claimed (e.g. Schoff, p. 96) to be suggestive of close and continual connections with the south-west Arabian state of Ausan which disintegrated about 700 B.C. Freeman-Grenville has recently rendered this toponymic adjective as Ausinite, following so he professes, "a strict reading of the manuscripts". There is no other reference to Ausan in the text and Freeman-Grenville further asserts that the adjective is preceded by the words for "the same". He, therefore, thinks it is associated with the name previously used by the Greek mariner, namely Azania (unpublished note on 'Zanj in the Greek Authors', 6 pp.).

2 See in this context Hayward's numismatic discovery allegedly at Burgao (Port Dunford) in Somalia near the boundary with Kenya (H. Mattingly, 'Coins from a site-find in British East Africa', The Numismatic Chronicle, XII, 1932, p. 175). The unsatisfactory circumstances of the find have been commented upon by Freeman-Grenville (e.g. 'East African Coin Finds and their Historical Significance', J. of African History, I, 1960, pp. 32-3). Mathew (loc. cit., p.98) has drawn attention to correspondence with Roman coins recovered in India. But as a hoard, it could not have been buried earlier than the sixteenth century (cf. N. Chittick, 'Six early Coins near Tanga', Azania, I, 1966, pp. 156-7).

India, which today imports half the world's supply of ivory, and which employs a good proportion of it in the manufacture of bangles for Hindu brides, could not draw on local supplies as tusks of Indian elephants are, on the whole, too narrow for this purpose.[1] Freeman-Grenville would thus explain away the considerable Indian export trade in this commodity at the commencement of the Christian era as testified by the Periplus. Since his suggestion runs counter to the characterisation of the East African route as an offshoot of that of the Red Sea, it is necessary to examine it a little closely.

Today the boundary between hard and soft ivory in East Africa is roughly the eastern border of the Congo. There is here an implicit ecological association respectively with the tropical rain forest west of the western rift valley and grasslands areas of eastern Africa. Elephants are now extinct in north-east Africa so that the quality of their ivory is uncertain but, if Christy is right in his belief that "the bush elephant" is more nearly representative of the ancestral stock and that "the forest elephant" is only a more specialised variant, it would appear that the Somalian ivory was soft.[2] This is possibly corroborated by a Chinese notice of the ninth century, where ivory is mentioned as an export of Po-pa-li, believed to be a transcription of Berbera, as it came to be prized in China as much as India, both of which had initially exploited the harder variety

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1 Periplus, par. 17; Freeman-Grenville, Med. Hist., pp. 25-6.

2 R.W. Beachey, 'The East African Ivory Trade in the nineteenth century', J. of African History, VIII, 1967, p. 274; C. Christy, 'The African Elephant', J. of African Society, XXI, 1921, pp. 92-5.

nearer home. Be that as it may, the fact that both Egypt and India imported ivory from north-east Africa - Egypt in the second century as indicated by the Periplus, and India in the sixth century as evidenced by Cosmas - clearly shows that for the earlier centuries of the first millenium A.D. it cannot be maintained that either variety was an exclusive import of one or another country.[1] Freeman-Grenville's premise may still be true, since the Periplus records that the hinterland of Adulis extended to beyond the Nile, and the Sudan today yields both hard and soft ivory, but his inference of the respective destination of ivory is inadmissable in view of contrary documentary evidence.[2]

It has been seen that though the Periplus mentions several anchorages on the coast south of Ras Hafun, only Rhapta is evidently signified as a trading port. The only other substantial document on the coast which antedates the writings of the medieval Arab geographers is the previously cited Geographia of Ptolemy. He distinguishes two more "emporia" besides Rhapta, viz. Essina and Toniki (?Nicon of the Periplus), but as the text is manifestly corrupt, their identification is far from certain. However, it would appear that they were situated on the coast south of

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1 Chau Ju-Kua: his Work on the Chinese and Arab Trade in the twelfth and the thirteenth centuries, trans. and annot. F. Hirth and W.W. Rockhill, St. Petersburg, 1911, pp. 128-9; Cosmas Indicopleustes, The Christian Topography of Cosmas, an Egyptian Monk, trans. J.W. McCrindle, Hak. Soc., 1897, p. 372.

2 It is worthy of note that the Periplus describes tortoise-shell exported from Rhapta as "most in demand after that from India" (par. 17) which shows that its destination was the Egyptian market.

the River Juba.[1] The importance of the Geographia, therefore, is that it indicates an accelerated tempo of port activity on the east coast in the couple of centuries posterior to the composition of the Periplus, a situation which underlines the initial source of impetus for a southerly penetration along eastern Africa.

What emerges from an analysis of the Periplus is that while Opone lay athwart a major sea-lane, Rhapta was the head of a feeder route, both in some way connected with the Graeco-Romans and yet functionally were unrelated to each other. It would seem that as long as direct contacts between the Mediterranean world and the Indian Ocean continued, Opone retained its signficiance as a point of departure on the Somali coast. By contrast, the route along the East African coast acquired

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1 South of Ras Hafun, the Periplus (par.15) lists "the small and the great Bluffs" and "the small and the great Beaches" and attributes to each six days' journey. Guillain (op.cit., 1, pp. 100-102) suggests, rightly so, that the former lies between the two most prominent projections of Ras Mabber and Ras el Keil, still known to the Arabs as "hazine" or rocky coast and easily recognizable in the "Bluffs" of the Periplus. He next calculates (I,pp. 96-7) that at an average speed of 48 miles a day (based on the strength of the wind and the current) a journey of six days' courses leads to the latitude of Warsheikh (I, pp. 102-3). (N.B. South of this point a speed of 60 miles a day is adopted). Surely such a procedure is inadmissable for the length of the "Beaches" is, in consequence, twice as much as that of the "Bluffs". The truth is that the whole length of the Somali coast is not amenable to a distinction other than the one the Periplus makes, so it seemed right to the Greek mariner to allocate same time to each. It may be noted that Ptolemy (i.17) too assigns twelve days for the same coverage, but sub-divides it into four and eight for the two sections of the coast. Thus twelve days' sail from Ras Hafun will cover the distance to the River Juba (Cape Verde of East Africa) where "dry savanna" supersedes "sandy wastes" (See H.E. Edwards, The western shores of the Indian Ocean before Vasco da Gama, M.A. thesis, Univ. of London, 1929-30, p. 24). The Periplus then introduces place-names between the River Juba and the Lamu Archipelago, and here there are two good anchorages at Kismayu and Burgao (Port Dunford).

a degree of importance in the post-Periplus times which too, however, may not have long survived the cessation of Graeco-Roman commercial enterprise. For in the early sixth century, when the empire of Axum was at its height, Cosmas apparently made a coastwise voyage to Ceylon, and he displays almost total ignorance of the coast of East Africa which might argue a relapse into a backwater position.[1] Apart from the unsatisfactorily recorded coin finds, there is so far no firm archaeological evidence of external contacts for most of the first millenium A.D. When material relics appear in the context of the ninth century levels, it is possible that they represent "a complete refoundation, not a renewal of existing links."[2]

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1 Op. cit., e.g. p. 40.

2 J. Kirkman, 'The History of the Coast of East Africa up to 1700', Prelude to East African History, ed. M. Posnansky, 1966, p. 111. Cf. J.E.G. Sutton, The East African Coast: an Historical and Archaeological Review, Historical Association of Tanzania, Paper No. 1, Nairobi, 1966, p. 8.

CHAPTER III

The Evolution of Spatial Patterns of Port Locations in the Middle Ages

The earliest ports of the Middle Ages have been established from archaeological evidence to date from about the ninth century. Commercial contacts then were predominantly with the Persian Gulf which was the terminus of the long-distance trade-route across the Indian Ocean to southern China. So as a tenth century author recorded, the exotic East African products, notably ivory, were transhipped via the Persian Gulf ports to India and China.[1] During the succeeding centuries, the incidence of trade contacts between East Africa and the peripheral lands of the Arabian Sea increased considerably. Firstly, there was an increase in traffic across the length of the Indian Ocean as a result both of the rise of great Islamic states in that Ocean in the thirteenth century, and of a phenomenal European demand for oriental luxuries, from the late fourteenth century channelled largely through the Red Sea. Secondly, Indians joined Arabs in developing direct merchantile links with eastern Africa in the later part of the medieval period. Thus it was that the early Portuguese explorers reported "thirty seven stone

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[1] G.F. Hourani, Arab Seafaring in the Indian Ocean in Ancient and Early Medieval Times, Princeton, 1951 (Reprinted, Beirut, 1963), pp. 61-79; al-Mas'ūdī, 'Murūj al Dhahab wa Ma'ādin al-Jawhar', Text and Fr. trans. C.B. de Meynard and P. de Courteille, Les Prairies d'Or, Paris, 1861-77, III, p. 8.

towns" on the coast, and archaeologists have demonstrated that the fifteenth century was indeed "the golden age" in its history.

The changing significance of eastern African ports over this period of some six centuries may be gauged by a four-phase model represented diagrammatically in Fig. 6. The first phase consisted of a dispersed pattern of ports located mainly on offshore islands but some also on the mainland coast, served by limited hinterlands. Seasonal dhows from the ninth century visited one or more of these ports, but as far as local traffic was concerned, save for occasional traders, there was no interconnection between the ports. With the development of coastwise trade, concentration of shipping was initiated as certain ports grew at the expense of others, as illustrated at P_1 and P_2. This process was subsequently accentuated as P_3 and P_4 began to draw from new feeder ports which sprang up on the mainland coast, based on local catchment areas. Meanwhile, however, the realignment of 'deep- and short-sea' trade-routes generated spatial readjustments as comparative locational advantages of ports shifted. The intermediate phases of the model roughly span the period between the early twelfth and the mid-fourteenth centuries. With the acceleration of the tempo of commercial activity in the fourth stage, traffic along the coast was diffused as at P_5, P_6, P_7 and P_8, while feeders increased both in number and significance. This was the situation which the Portuguese explorers described at the end of the fifteenth century. It is probably more realistic to view the whole sequence of port development in the Middle Ages as a continuous process, one phase merging almost imperceptibly with another, rather than as a series of four distinct phases, each assignable to a fixed point

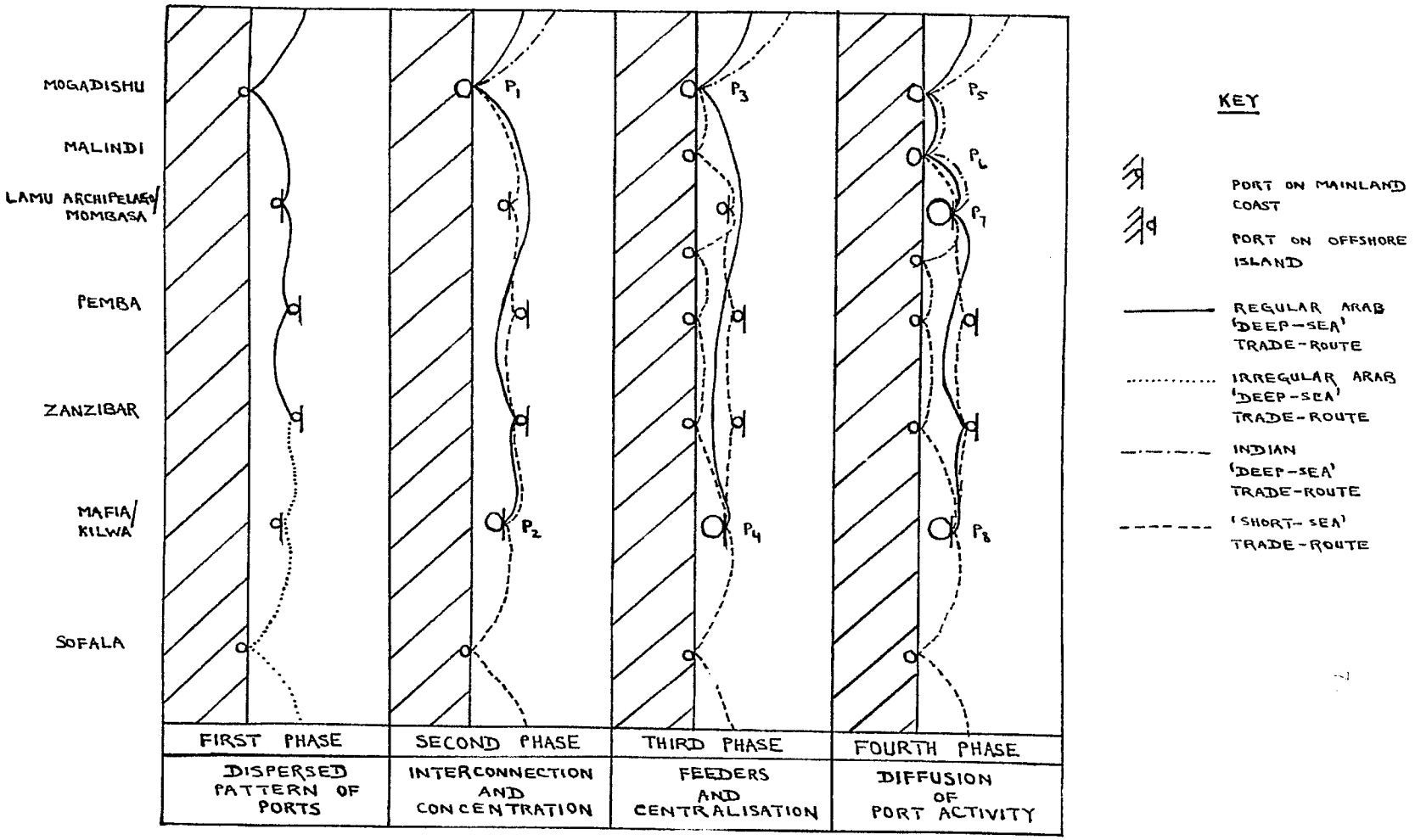

FIG. 6. MODEL OF THE SEQUENCE OF PORT DEVELOPMENT IN THE MIDDLE AGES.

in time.

PHASE ONE: DISPERSED PATTERN OF PORTS

Until about the twelfth century, eastern Africa occupied a somewhat peripheral position in the economic system of the Indian Ocean as is testified by bare mention of Bilād al-Zanj by most Arab writers. Yet, from these same scanty sources, allied with the later Chronicle of Kilwa, it is possible to identify, at least, four localities of early port development. Recent archaeological work on the coast has added a few more ports to the list, this time precise sites on islands off the shores of northern Kenya and southern Tanzania. The recovery of sherds of imported pottery at these sites, even if rare, permit us to establish an approximate chronology of the ports and confirm their existence throughout this phase. With ports deduced from documentary sources, however, all that can be said is that where one particular port declined or closed, it is likely that a successor port grew up in the same region. Before these ports can be considered, it is first necessary to enter into a discussion of the identification of Qanbalū, which medieval authors suggest was the most important for trade with the Persian Gulf.

Identification of Qanbalū

While Qanbalū receives a mention in several early geographies, al-Mas'ūdī in the early tenth century is the only writer who gives any details of its location. Since these are rather vague, suggestions for its identification have ranged from Pemba and

Zanzibar in the north to Madagascar and the Comoro Islands in the south. The erstwhile popular identification with Madagascar was primarily based on a statement which al-Mas'ūdī's translators rendered thus: "The terminus of their course on the Zanj sea is the island of Qanbalū and the regions of Sofala and Wāqwāq which are situated at the farthest boundary of Zangibar and the end of this arm of the sea." Devic, however, came nearer the truth in his interpretation that "the terminus of their run is Qanbalū; they even go farther on as far as Sofala and the country of Wāqwāq which is situated at the farthest boundary of the country of Zanj and the lower section of the sea of Zanj."[1] The inference here is that Sofala was south of Qanbalū, and indeed, corroborative evidence is provided by al-Mas'ūdī's contemporaries. Buzurg b. Shahriyār relates what is perhaps a sailor's tale of an expeditionary force sent to capture Qanbalū in the tenth century but failed as the town was well fortified. He probably retains though, the geographical relationship between place-names as he proceeds to recount that "they /then/ pillaged some islands at a distance of six days' journey from Qanbalū,

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1 Al-Mas'ūdī, ibid., I, p. 205; L.M. Devic,'Kanbaloh' in Livre des Merveilles de l'Inde, Paris, 1883-6, pp. 285-6.
The sentence reads: وينتهى هؤلاء فى بحر الزنج الى جزيرة قنبلو على ماذكرنا والى بلاد سفالة والوق واقاصى ارض الزنج والى ~~سفا~~ سافل من بحرهم ....
The repetition of the preposition الى suggests that Qanbalū on the one hand, and Sofala and Wāqwāq on the other were separated. Moreover, the last part of the sentence (من اقاصى) probably qualifies only the two places immediately preceding it, indicating that Qanbalū was to the north of them. I am indebted for this explanatory note to Mr. A.M.H. Sheriff.

and afterwards many towns and villages of Sofala of the Zanj . . . ."[1]

The next step in the argument centres on the position of Sofala in the early Middle Ages. There is a hiatus in our documentary sources for the eleventh century but it is again clear from al-Idrīsī's testimony in the middle of the next century that Sofala referred to a region and that the boundary with Zanj was in the neighbourhood of Cape Delgado. For the mountain of 'Ajrad in the following citation has been identified with this cape and the bay perhaps refers to the concave section of the coast between the Rivers Ruvuma and Rufiji.

> The town of Al-Bānes [البانس] is at the extremity of the country of Zanj. This country is close to the land of Sofala, country of gold. Along the coast, one reaches a town called But.hna [بُثْنَة] in eight days, but by sea it is one-and-a-half days of navigation. This is because between the two towns there is a large bay which extends towards the south . . . [and] . . . a high mountain named 'Ajrad. The water has eroded its flanks on all sides and the waves make there a frightful noise . . . .[2] The town of But.hna . . . forms part of the country of Sofala.

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1 'Kitāb al-'Ajā'ib al-Hind', ed. P. van der Lith & Fr. trans. L.M. Devic, Livre des Merveilles ..., p. 175 (also p. 177). Cf. J.S. Trimingham, 'Reflexions on the Arab Geographers and the East African coast', Paper read at the Conference on 'East Africa and the Orient', April, 1967, p. 9. See also R. Mauny, 'The Wakwak and the Indonesian Invasion in East Africa in A.D. 945', Stvdia, No. 15, 1965, pp. 7-16.

2 Al-Idrīsī, 'Kitāb Nuzhat al-mushtāq fī ikhtirāq al-afāq', Youssouf Kamal, Monumenta Cartographica Africae et Aegypti, Leiden, 1926-53, III, Fas. IV, p. 832; L.M. Devic, Le Pays des Zendjs, Paris, 1883, pp. 77-8. It is true that Cape Delgado is decidedly not a mountain, but confirmative evidence is provided by Ibn Sa'īd's work of the thriteenth century for which he drew heavily on al-Idrīsī's 'Nuzhat.' Both delineate the coast of eastern Africa east-west, instead of north-south, in accordance with the Ptolemaic conception of the Indian Ocean. The longitudinal distance between place-names given by Ibn Sa'īd is, in consequence, grossly distorted to pave the way for a linkage of the coasts of Africa and Asia. He states that 'Ajrad is to the west (i.e. north) of the town of Yatamīya (c. 87° long.). (Paris MS. Batita; al-Idrīsī's But.hna?), the first in the land of Sofala. Next comes Seyūna (99° long.), east of which - and here is the clue - "one enters the Straits of al-Qumr", manifestly the Mozambique Channel, which extends towards the south-east (i.e. south-west) to another mountain, Nadāma, probably our Cape Correntes (Youssouf Kamal, op. cit., IV, Fas. I, p. 1081). Medieval Arab authors show a definite propensity to exaggerate the eminence of coastal projections, as is apparent from their descriptions of the promontory of Ras Hafun and of the cape of al-Hazzanī (between Malindi and Mombasa).

Since Bān.s and But.hna were respectively the last and the first towns of the lands of Zanj and Sofala, and since the boundary between the two was conterminous, it coincidentally lay near the present-day frontier between Tanzania and Mozambique. Now, if al-Mas'ūdī indicates that Sofala was south of Qanbalū, it is improbable that the latter referred to Madagascar as Qanbalū would then be directly opposite, instead of further north, of Sofala.

Guillain's tentative identification with the Comoro islands rests primarily on the assumption that al-Mas'ūdī's Nile is the River Ruvuma. The Arab author states: "The Nile pursues its course through the country of Sudan which adjoins that of the Zanj and gives birth to a tributary which discharges into the sea of Zan. This sea is that of the island of Qanbalū." Even as late as the middle of the nineteenth century, the source of the White Nile was thought to be further south than Lake Victoria, and it has thus been suggested that it cannot be safely inferred that al-Mas'ūdī alluded either to Zanzibar or Pemba. Yet elsewhere he noted that "the land of Zanj begins at the channel which issues from the Upper Nile and extends to the country of Sofala and Wāqwāq" so that his Nile was obviously considerably north of the Ruvuma.[1]

His successors, especially Ibn Sa'īd, expressly indicate that this river, now called the Nile of Mogadishu to distinguish it from the Nile of Egypt, was not further south than the River Juba.

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1 C. Guillain, Documents sur l'Histoire, la Géographie et le Commerce de l'Afrique Orientale, Paris, 1856, I, pp. 166-171; al-Mas'ūdī, op.cit., I, p. 205, III, p. 7.

> The Nile of Maqdashaw traverses the lands subject to the town of that name, at about twelve miles from it, and flows into the sea of India. Near Maqdashaw [this river] appears, at first sight, smaller than the Nile of Egypt; but it is deep and its volume is less because it loses water during its course . . . . The river after a course of about 2000 miles emerges to the east [i.e. to the south] near Maqdashaw.[1]

Guillain has pointed out that the account refers to both the Webi Shebeli and the Juba, doubtless because the medieval Arabs did not know that the former loses itself in the sands and does not join the latter to flow into the sea.[2] That the Nile of the later writers was the same as that of al-Mas'ūdī is confirmed by the placement by Yāqūt and Ibn Sa'īd of the boundary between Barbarā and Zanj. Yāqūt writes of al-Jubbu as "a town adjacent to the country of Zanj, in the land of Barbarā . . ." while Ibn Sa'īd observes that "to the east [i.e. to the south] of this Nile [of Mogadishu] is the farthest limit of the country of Barbarā and the commencement of that of the Zanj."[3]

Clearly, Qanbalū must be sought north of Cape Delgado, and since al-Mas'ūdī located it at one or two days' sail from the mainland, the choice, in fact, narrows down to between Zanzibar and Pemba. Devic and Goeje conclude that it is Zanzibar but, apart from the fact that they do not even seem to consider the possibility that it might be Pemba, their arguments are naive and may be readily dismissed.[4]

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1 G. Ferrand, Relations de Voyages et Textes Géographiques Arabes, Persans et Turks, Paris, 1913-4, II, pp. 322-3.

2 Op. cit., I, p. 244.

3 Yāqūt, 'Mu'jam al-Buldān', Youssouf Kamal, op. cit., III, Fas V, p. 954; ibid., IV, Fas. I, p. 1081.

4 Al-Mas'ūdī, op. cit., III, p. 31; Devic, 'Kanbaloh', pp. 288-9.

Al-Maqrīzī is quoted as having recorded that Qanbalū is the residence of the king of Zanj and since Yāqūt noted likewise in respect of Unguja (Lanjūya), the Swahili name for Zanzibar, Qanbalū is thus equated with Zanzibar. Our Arab sources are inconsistent in their choice of the seat of the king of Zanj: Abu'l-Fidā', for example, on the authority of a certain Faras, cites Qanbalū as the capital in one place, and Mombasa (Manbasa) in the other, apparently on the word of Ibn Sa'īd. It is exceedingly improbable that a single ruler held sway over the whole of the land of Zanj and, indeed, Abū-Zaid makes the pertinent remark that "the Zanj have several kings at war with each other."[1] Devic and Goeje' second equation is equally illogical. Yāqūt wrote that the inhabitants of Unguja had, in his time, removed to another island called Tumbatu (Tanbātū) and Ibn Sa'īd observed that Qanbalū, formerly flourishing was now ruined, so it is concluded that Qanbalū must be Unguja.[2]

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1 Abu'l-Fidā', 'Kitāb Taqwīm al-Buldān', Text J.T. Reinaud & MacGuckin de Slane, Paris, 1840 & Fr. trans. Reinaud & S. Guyard, Géographie d'Aboulféda, Paris, 1848-83, II, Part II, p. 127 and II, Part I, p. 207; Abu Zaid in J.T. Reinaud, Relations des Voyages faits par les Arabes et les Persans .... Paris, 1845, II, p. 137. See V.V. Matveyfv, 'Records of early Arab Authors on Bantu Peoples (Muluk al-Zinj i.e., Kings of Zinj according to Arabic sources of IX-Xth centuries)', VII International Congress of Anthropological and Ethnological Sciences, Moscow, 1964.

2 Devic and Goeje' second line of argument (pp. 290-1) hinges on Abu'l-Fidā''s statement but it is totally irrelevant. "Ibn Sa'īd says that between this island of Qanbalū and Fāqaṭī [Bāqaṭī] there are 2°30'" while elsewhere, again on the same authority, he adds that "the first town in the part of Abyssinia situated on the sea of India on the western side is Pata [Baṭa] . . . it is situated 2° from the equator . . . . To the north, at a distance of 100 miles, is the Abyssinian town of Bakathy [Bāqaṭī] . . . ." The authors assume, on the basis of assonance of place names, that Baṭā is Pate, one of the islands of the Lamu Archipelago, which, as it happens, is 2° south of the equator. Bāqaṭī was 100 miles north of Baṭā so it was situated near the equator; Qanbalū was 2½° distant from Bāqaṭī and it is thus concluded that the island must be Zanzibar. Devic and Goeje, writing in the 1880s, were obviously blinded by the pre-eminence of Zanzibar, for surely, the distance, if anything, accords better with Pemba than Zanzibar! The whole argument is, however, based on a false premise. Baṭā was located, as is abundantly clear from al-Idrīsī and Ibn Sa'īd's testimony, on the southern shore of the Gulf of Aden. The reference is to 2° from the equator is a misinterpretation on the part of Reinaud for, as Ferrand pointed out, Abu'l-Fidā''s authority had in mind, not the line of the equator, but rather, the limit of the first clime of the Gulf

It will be presently seen that these and other authors wrote separately of the two places.

Notwithstanding the fact that documentary evidence at hand is fragmentary, Pemba appears to have been the site of the port of Qanbalū. Al-Jāhiz makes a distinction between Unguja and Qanbalū, while al-Idrīsī and Ibn Sa'īd, albeit centuries later, carry a notice on each. Lest it is argued that the latter could be in the former, Yāqūt in an account of al-Jaziratu 'lKhdrā' or "the isle of verdure" recorded that "on it are two cities called M.t.n.bbī (مَتَنبّى) and M.k.n.b.lū (مكنبلو)." This island is almost certainly Pemba both because it was so known to Ibn Mājid in the fifteenth century, as indeed it still is today, and because Yāqūt too has a separate entry on Unguja in his dictionary.[1] Ingrams had earlier suggested that the second town could be assimilated with Ras Mkumbuu, while Trimingham has recently indicated that the first might be linked with Mtambe Kuu. The location of Ras Mkumbuu at the end of a long promontory, on the western side of the island, opposite an anchorage protected from both the monsoons, does indeed suggest that it was economically oriented towards the mainland rather than

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1 G. van Volten, Tria Opuscula Auctore . . . al-Djahiz, Batavorum, 1903, p. 76; al-Idrisi, Fr. trans. P.A. Jaubert, Géographie d'Édrisi, Paris, 1836, I, pp. 46, 59; Ibn Sa'īd in Ferrand, op. cit. II, pp. 336-338; Yāqūt, loc. cit., p. 955; Ibn Mājid, Três Roteiros Desconhecidos, ed. T.A. Chumovsky & Port. trans. M. Malkiel Jirmounsky, Lisboa, 1960, pp. 32-3 .

of the medieval geographers. Al-Idrīsī, loc. cit., p. 831; Ibn Sa'īd, loc. cit., p. 1083; Ferrand, op. cit., II, p. 335, N.3.

Pemba. Only archaeology can confirm or refute this identification.[1]

Distribution of scattered ports

It is clear from the above discussion that both Pemba and Zanzibar had important ports in the early Middle Ages. Qanbalū was first mentioned by al-Jāhiz who died in A.D. 868, but al-Mas'ūdī early in the tenth century apparently claimed that Muslims occupied it between the end of the Umayyad and the beginning of the Abassid dynasty, i.e. about the middle of the eighth century. By the end of the eleventh century the port had ceased to exist, for although the name is perpetuated in later works, the island is displaced into the Gulf of Aden, and is sought after as a refuge by vessels driven off course. This is so in the accounts of al-Idrīsī and Ibn Sa'īd and Trimingham has concluded that the original Qanbalū was unknown to their informants. The reputation of the port, however, outlived its ruin, for Ibn Sa'īd notes that "it used to be prosperous but is now derelict."[2] Unguja was also first enumerated by al-Jāhiz,

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1 W.H. Ingrams, Zanzibar: its History and its People, 1931, p. 81; Trimingham, 'Reflexions ...', p. 13.
Excavations have been carried out at Ras Mkumbuu, but in the opinion of the excavator, the settlement could not have been founded earlier than in the late thirteenth century. However, a trial excavation ¼ of a mile to the east of the ruins produced sgraffiato which raises the possibility of an earlier settlement. J.S. Kirkman, 'Excavations at Ras Mkumbu on the island of Pemba', Tanganyika Notes and Records, No. 53, 1959, pp. 161-78; idem, Men and Monuments on the East African Coast, 1964, pp. 179-180 (see also pp. 183-4).

2 Al-Jāhiz, loc.cit.; al-Mas'ūdī, op.cit., I, p. 205 (Cf. Qutb al-din al-Shirazi, Youssouf Kamal, op. cit., IV, Fas. I, p. 1142); al-Idrīsī, loc. cit. p. 851; Ibn Sa'id, loc.cit., p. 1083; Trimingham, 'Reflexions ...', pp. 12-4.

and in the south-western part of the island at a site called Unguja Ukuu pottery and coin finds have been made which indicate a ninth century date. These include sherds of the earliest imported wares yet to come to notice (described as 'Sassanian-Islamic') and a gold dinar of the Persian Gulf dated 182 A.H./A.D. 798-9, believed to be "one of a group of coins evidently found at Unguja Ukuu." Owing to the absence of posterior wares as revealed in the stratigraphical successions at Kilwa and Manda, Chittick has surmised that it is unlikely to have been occupied after the end of the ninth century.[1] There was then a successor port in Zanzibar but its site is yet unknown.

Documentary sources attest the existence of two other ports at the extremities of the region, on the coasts of Benadir and Mozambique, from sometime in the tenth century. Thus, Barros relates a tradition of the foundation of the first towns of the east coast in Somalia, while al-Bīrūnī states that Somnāth in Kathiawar is the starting point for those who make the voyage between Sofala and China.[2] Whereas precise location of these ports is uncertain, their relative importance is hardly in doubt. The port (or ports?) on Benadir coast, most probably Mogadishu, must have been primarily a port of call, as

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1 N. Chittick, 'Unguja Ukuu: the earliest imported pottery and an Abbasid dinar', Azania, I, 1966, pp. 161-3; Letter of R.L. Playfair J. of the Bombay Branch of the Royal Asiatic Society, VIII, 1865-6, pp. lxxxiii.

2 João de Barros, Da Asia, Lisboa, 1777-8, 1.8.4. (Eng. trans. G.S.P. Freeman-Grenville, The East African Coast, Select Documents ... Oxford, 1962, p. 84); al-Biruni, 'Kitab fi tahqiq ma li 'l-Hind', Text E.C. Sachau, 1887 and English translation, idem, Alberuni's India, 1910, II, p. 104.

here some shelter is available during the north-east monsoon, between the reef and the shore, on an otherwise inhospitable Somali coast. On the other hand, the port (or ports?) on the Mozambique coast, despite its valuable export of gold, must have been irregularly frequented by seasonal dhows. For, as will be shown later, a voyage into the Mozambique Channel means that a ship on the East Africa-Persian Gulf run cannot complete the journey within the span of a single season and must perforce 'winter' in East African waters for over four months. It is perhaps significant that in his sailors' tales of two voyages to Sofala, Buzurg b. Shahriyār relates that the merchant seamen set out from Oman with the intention, on both occasions, of proceeding to Qanbalū but were driven to the southerly coast by wind and storms.[1]

Between Pemba and Benadir on the one hand, and Zanzibar and Sofala on the other, archaeological work has shown that ports on Manda, Mafia and Kilwa islands go back to the ninth century and were in existence throughout the first phase. But whereas Manda was from the start a port of considerable importance, those in the south had more humble origins. First, buildings at Kilwa and Mafia were initially built in wattle-and-daub but at Manda they were also constructed in stone. Second, the amount of imported ceramic wares and glass vessels in the lowest levels is considerably higher at the

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[1] Op. cit., pp. 50-60 (Eng. trans. SD, pp. 9-13). Additional evidence that the Arabs did, at this stage, sail as far south as Sofala is provided by al-Mas'ūdī's statement (supra, p. 80) and is implicit in the Kilwa Chronicle's account of how the northern ports later came to act as intermediaries in this trade (infra, p. 91). There is also al-Idrīsī's claim in the mid-twelfth century that the "Zanj do not have suitable ships to voyage in, but [use] vessels from Oman", and although this may relate to travel farther afield than eastern Africa, the context suggests otherwise (loc. cit., p. 832).

latter than the former sites. Combined with evidence of iron smelting from the earliest times though, this level of material culture does at least suggest that the southern settlements were permanent. Keen interest in trade is indicated more particularly at Kilwa by the profusion of grooved blocks in the lower strata, presumed to have been used in the manufacture of shell beads as articles of exchange in commerce on the coast. While there was a growing prosperity at Kilwa and Mafia, however, which culminated in their conversion into entrepôts, Manda seems to have been at its height in the ninth and tenth centuries, and declined all together after the thirteenth.[1]

Thus, the picture which emerges in the early Middle Ag. is one of a dispersed pattern of ports, each based on the exploitation of a limited hinterland and with no regular connection with any of the other ports. Buzurg lists commodities available at Qanbalū as ivory, tortoise-shell, leopard skins, ambergris and slaves. Most of them, no doubt, were exported from other ports as well, with the addition of mangrove poles from, say, Manda and Mafia, gold from Sofala and, perhaps, iron from Manda.[2] Ports on such offshore islands as Zanzibar and Pemba must have extended their hinterlands across the Channel to tap what was, perhaps, their most important item for export, namely ivory. They need have had no more than small boats to ferry ivory across, as the Channel can be safely used

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1 N. Chittick, 'Kilwa: a preliminary survey', Azania, I, 1966, pp. 4-10; idem, 'Discoveries in the Lamu Archipelago', Azania, II, 1967, pp. 40-55.

2 Buzurg, op. cit., p. 175; Chittick, Azania, II, 1967, pp. 54-5.

for cross-swise navigation throughout the year. Within this pre-eleventh century port group, Mafia and Kilwa were manifestly less important than ports on the Benadir and Mozambique coasts which, in turn, were surpassed by Qanbalū, Manda and Unguja. Such differentials in port development largely reflect the exigencies of navigational controls in East African waters. Their impact, however, was mitigated in the next phase with the initiation of lateral interconnection between the ports. For this development led to the emergence of entrepôts, which for our purpose may be defined as nodes to which goods are brought for subsequent distribution to other ports, and are themselves not necessarily either great producing or consuming centres.

PHASE TWO: INTERCONNECTION AND CONCENTRATION

The twelfth century appears to be a climacteric in the space relationships of eastern Africa. Al-Masūdī leaves no doubt from his relative emphasis on export commodities that, during the tenth century, the stretch of the coast called Zanj was economically more important than that of Sofala. Whereas, for instance, he almost casually remarks that the latter "produces gold in abundance", his compatriots from the twelfth century onwards put greater emphasis upon its exports of metal, iron and more especially gold.[1] On the other hand, Mulsim mariners had hitherto sailed direct to Sofala, but as they had to 'winter' in East Africa during the period of the

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[1] Al-Mas'ūdī, op. cit., III, p.6 ; al-Idrīsī, loc.cit., p. 832.

south-west monsoon, such visits appear to have been infrequent. The Kilwa Chronicle, however, claims that control of the gold trade later came to be vested in the entrepôts north of Cape Delgado and, as will be seen, this event probably occurred in the later part of the twelfth century.[1] With these developments in coastwise trade, exports from Zanj too began to be centralised as fewer ports were regularly visited by seasonal dhows. Hence, during the later Middle Ages, the economic basis of the entrepôts of the east coast came to rest primarily on carrying trade, especially that of Sofala, i.e. their space relationships were now basically north-south rather than east-west.

The incipient period: Concentration at Sanje ya Kati and Zanzibar

The rudimentary beginnings of port concentration seem to go back to the early part of the twelfth century. For documentary sources suggest that prior to the emergence of Kilwa and Mogadishu as entrepôts, two other ports, one in the Kilwa group and the other on Zanzibar island, enjoyed a superior commercial status. Thus the Kilwa Chronicle,[2] the most famous medieval local history, records two short-lived attempts to depose its rulers shortly after the death of the founder of the so-called 'Shirazi'dynasty. They were made by

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1 Barros, 1.10.2 (SD, pp. 90-2); infra, pp. 113-4.

2 There are two written versions of the Chronicle. The Arabic MS of the British Museum (Or.2666) has been published by S.A. Strong, 'The History of Kilwa', J. of the Royal Asiatic Society, 1895, pp. 405-430. The Portuguese, João de Barros, included a brief summary of the Chronicle in his Da Asia, Decade I, Bk.VIII, chaps.IV,VI and Bk.X, chap. II. English translations of both the versions in SD, pp. 34-49 and 83-4, 89-93.

a certain "king of Xanga" [Shanga], who ruled on an island which was, according to John Proy in 1600, close to Kilwa. Freeman-Grenville had previously equated Shanga with Songo Mnara, an island south-east of Kilwa. Now, however, it has been shown to be Sanje ya Kati, another island in the Kilwa group (Fig. 7), where the design of the mihrab and techniques of construction are believed to indicate an early period of building in stone on the coast.[1]

Commercial rivalry may have been the root cause of the belligerent policies of Shanga. For the founder of the 'Shirazi' dynasty, now credited with the introduction of coinage believed to be locally struck, made a unique display of wealth and status which perhaps indicates that an earlier entrepôt in that locality was being undermined. The inference is that Sanje ya Kati flourished before the advent of the 'Shirazi' dynasty - which Chittick now ascribes to the mid-twelfth century - and the wealth of sherds of sgraffiato found in excavations confirm that it must have been an important centre.[2] It is difficult to visualize the co-existence of two prosperous settlements in the Kilwa locality unless the superior of the two drew from an area wider than its immediate

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1 It is spelt Xanga in the Portuguese version of the Chronicle but it must be emended to Shanga as x has the sound of sh at the beginning of a Portuguese word. The Arabic text has ش ن ق ة.
J. Proy's Preface to Leo Africanus, The History and Description of Africa, ed. R. Brown, Hak.Soc., 1896, I, p. 89; G.P. Freeman-Grenville, The Medieval History of the Coast of Tanganyika, Oxford, 1962, p.86; Annual Report of the British Institute of History and Archaeology in East Africa for 1963-4, pp. 5-6; P.S. Garlake, Early Islamic Architecture of the East African Coast, Nairobi and London, 1966, pp.16-7, 59-60.

2 N. Chittick, 'The "Shirazi" Colonization of East Africa', JAH, VI, 1965, pp.281-2, 288; idem, Azania, I, 1966, pp. 11-12; Garlake, ibid., p.60.

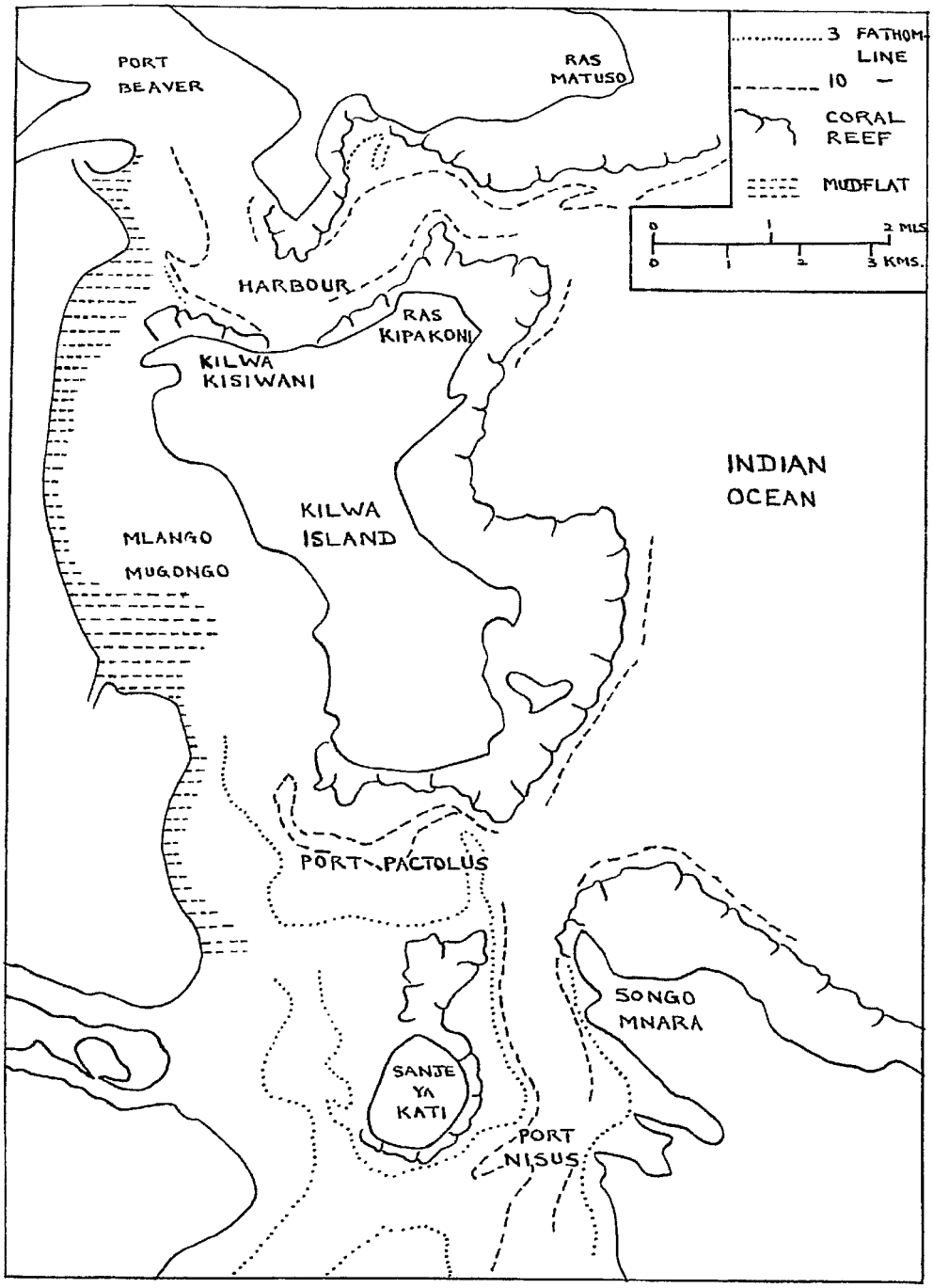

FIG. 7. KILWA AND ITS ENVIRONS.

ADAPTED FROM ADMIRALTY CHART NO. 661.

neighbourhood. Once Kilwa's ascendancy in this region was established, Sanje ya Kati rapidly declined, as is evident from lack of coins other than those of 'Ali b. al-Ḥasan (No. 1, Table p. 95) and of imported wares posterior to sgraffiato.[1]

With the initiation of lateral interconnection, one would expect agglomeration of trade to occur elsewhere on the coast. Our only external source for the twelfth century is al-Idrīsī and he indicates a prominent position for Zanzibar island:

> Among the islands of Djwaga . . . is that of al-Anjaba, whose principal town is called, in the language of Zangibar, Anfūja [Unguja], and whose inhabitants, though mixed, are at the present time for the most part Muslims . . . . each year various products and goods are brought [there] for trade and consumption.[2]

It has already been seen that the successor site to Unguja Ukuu is not known but wherever it may have been, it was in ruins at about the turn of the twelfth century. For Yāqūt in his compilation of the early thirteenth century recorded that the inhabitants of Unguja had abandoned the main island for Tumbatu, an islet off the north-west coast.[3]

Here it may be mentioned that the mosque of Kizimkazi in the extreme southern part of the island has the distinction of having the earliest dated inscription 500 A.H./A.D. 1107 incorporated in its mihrab. Trimingham suspects that the inscription came from another

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1 Chittick, Azania, I, 1966, p. 30; Garlake, ibid.

2 Jaubert, op. cit., I, p. 59.

3 Ed. F. Wüstenfeld, Leipzig, 1866-73, IV, p. 366.

SULTANS OF KILWA c. 1150 - 1350

Adapted from Freeman-Grenville, Med. Hist., pp. 66-9 and Chittick, JAH, VI, 1965, p. 293.

	Portuguese version	Arabic version	Date	Remarks
	Hocen, King of Shiraz His son, Ale, 1st ruler	al-Ḥasan b.'Alī, Sultan of Shiraz		Four minute silver coins with al-Ḥasan presumably of this man Ale of Port. version ditto graphy?
1.	Ale Bumale [Alī b.Alī] 40 years	'Alī b.al-Ḥusain b.'Alī 40 years	c.1150	Coins of 'Alī b.Ḥasan attributed to this man
2.	Ale Busoloquete. Nephew. 4½ years	'Alī b.Bashat.Son. 4½ years		
3.	Daut. Son. 4 years	Dā'ūd b.'Alī. 2 years		Brother of 1? Rare coins of Dā'ūd b.al-Ḥasan
4.	Ale Bonebaquer. Usurper. 2 years	Khālid b. Bakr. Usurper. 2½ years		
5.	Hocein Soleiman. Nephew of 3. 16 years	al-Ḥasan b. Sulaimān b.'Ali. Grandson of 1. 12 years.		
		Muḥammad b.al-Ḥusain. Another usurper. 12 years		
		al-Ḥasan restored. Further 14 years.	c.1260	

6.	Ale ben Daut. Nephew. 60 years	'Alī b.Dā'ūd b.'Alī (Mentioned only as appointed successor of his father, 3)		Possibly short reign after 3.
7.	Ale ben Daut. Grandson. 6 years	- - -		Dittography?
8.	Hacen ben Daut. Brother. 24 years	al-Ḥasan b.Dā'ūd b.'Alī. 70 years (and 70 at accession)		
9.	Soleiman. Royal Blood. 2 yrs.	- - -		cf. 9-12 with 19-22
10.	Daut. Son. 40 years	- - -		
11.	Soleiman Hacen. Son. 18 years	- - -		
12.	Daut. Son. 2 years	- - -		
13.	Taluf. Brother. 1 year	- - -		
14.	Hacen. Brother. 25 years	- - -		
15.	Hale Bonij. Brother. 10 years	- - -		
16.	Bone Soleiman. Nephew. 40 years	- - -		
17.	Ale Daut. 14 years	- - -		
18.	Hacen. Grandson. 18 years	al-Ḥasan b.Ṭālūt. 18 years 1st of House of Abū'l Mawāhib.	c.1300	Resumption of coins (but very rare)
19.	Soleiman. Son. 14 years	(Mentioned only as father of 21)		Coins of Sulaimān b. al-Ḥasan presumably of this sultan
20.	Daut. Son. Regent for 2 years	Dā'ūd b. Sulaimān. Regent for 2 years		
21.	Hacen. Brother. 24 years	al-Ḥasan b. Sulaimān al-Mat'ūn b.al-Ḥasan b.Ṭālūt Brother. 14 years.	c.1320	Visited by Ibn Battūta in 1331
22.	Daut. Brother. 24 years	Dā'ūd b.Sulaimān. Same as 20. 24 days (sic)	c.1340	Last to mint coins (rare)

site but Chittick, in his excavations, revealed the floor of an earlier mosque, and both there and in the lower levels on the surrounding site, he made scanty finds of sgraffiato which would be contemporary with the inscription.[1] The site was not evidently occupied for long and lack of indications of wealth in the form of substantial imports of ceramics ill-accords with al-Idrīsī's testimony. The presence of a highly elaborate kufic epigraph at a distant site on the island is, therefore, somewhat of a mystery.

The fledged period; Concentration at Mafia and Mogadishu

These first attempts at concentration were followed in the second half of the twelfth century by the establishment of new dynasties at Kilwa and Mogadishu, which led to a change in their status from that of a port to that of an entrepôt. Both the extant versions of the Kilwa Chronicle are at variance in respect of the establishment of the 'Shirazi' dynasty and the Portuguese text, moreover, lists a block of nine sultans (Nos. 9-17, Table pp. ~~95~~ and 96) who do not figure in the Arabic version.[2] Chittick, however, has

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1 S. Flury, 'The Kufic Inscriptions of Kizimkazi Mosque, Zanzibar, 500 A.H. (A.D. 1107)', J. of the Royal Asiatic Society, XXI, 1932, pp.257-64; J.S. Trimingham, Islam in East Africa, Oxford, 1964, N.5, p. 4; N. Chittick, 'Preliminary Report on the Excavations at Kizimkazi Dimbani, Zanzibar', Appendix II, Annual Report of the Antiquities Division for 1960, Ministry of Education, Dar es Salaam, 1962, pp.17-9. It is worthy of note that Ibn Sa'īd mentions a town of al-H.b.liya on the southern coast of Zanzibar island. Ferrand, op.cit., II, p.338 & N.4.

2 Even if the Laçah [al-Hasa] and Shiraz waves of emigration mentioned in the Portuguese version are considered as variants of the same tradition, as suggested by J. Schacht ('An unknown type of Minbar and its Historical Significance', Ars Orientalis, II, 1957, p. 167), the establishment of the dynasty cannot be pushed farther back than the second quarter of the tenth century (otherwise it stands at the beginning of the eleventh century). The Arabic text, on the other hand, dates it to about the mid-ninth century and not, as Freeman-Grenville (Med. Hist., p. 61) conveniently supposes, to "the century which followed A.H. 300", i.e. the mid-tenth century. On the omission of sultans, Freeman-Grenville (ibid., p. 51) assumed a lacuna in the Arabic version, but Chittick (JAH VI, 1965, pp. 280-1) argues that the latter reads perfectly well as it stands. See

cont.

argued, on the basis of a series of computations of reigns of sultans and of the stratification of their coins in association with imported ceramics, that the event occurred probably in the mid-twelfth century. He also suggested that it is arguable that the dynasty was initially established at Mafia (at the site of Kisimani in the extreme south-western part of the island) which is stated to have been a dependency of Kilwa in the Chronicle. Coins of the early sultans are proportionately commoner at Kisimani than at Kilwa, while foreign coins, including one of gold, a copy of a Fāṭimid dinar of the twelfth century, occur only at the former site. Material culture, as manifested by the unusually high proportion of imported wares to local pottery, is also richer at Kisimani than at Kilwa until about the middle of the thirteenth century. Moreover, it has to be remembered that at the time the Kilwa Chronicle was penned (c.1520), Kisimani had been in decline, as is clear from archaeological record, for some two centuries.[1] It is, therefore, maintained here that Kisimani preceded Kilwa as an entrepôt.

Minting of coinage was not commonplace in medieval Africa. Kilwa's copper coins may have circulated as cufrency, as is suggested

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1 Chittick, JAH, VI, 1965, pp. 281-2, 288-9, idem, Kisimani Mafia: Excavations at an Islamic Settlement on the East African Coast, Ministry of Education, Antiquities Division, Occ. Pap.N.1., Dar es Salaam, 1961; idem, 'Report on Excavations at Kisimani Mafia and Kua', Appendix I, Annual Report of Antiquities Division for 1964, Dar es Salaam, 1966, pp. 15-16.

See also Freeman-Grenville, 'Material Evidence of Cultural Connections: Coin finds and their Significance' and Chittick, 'Comments on Dr. Freeman-Grenville's Paper on Coin finds', Papers read at the Conference on 'East Africa and the Orient', April, 1967.

by the virtual disappearance of cowries in the stratigraphical succession after their introduction, or the sultans may have merely used them for "historical record" or "self-advertisement."[1] The important point is that the great number of coins recovered and finds of crucibles (used for melting copper) leave little doubt that these coins were minted locally. Yet it is unlikely that copper came from the immediate hinterland, for the mineral is usually associated with the Pre-Cambrian Basement rocks which means that ancient workings, if ever there were any, could not have been nearer than a hundred miles from the coast.[2] Copper was, on the other hand, known in the country behind Sofala and the Portuguese reported a regular trade in it on the coast. Alternatively, copper may have come from farther afield as it is included in the cargo of ships which Hu-ch'a-la (i.e. Gujerat) and the Tazi (i.e. Arab) localities are stated in a thirteenth century notice to send annually to East Africa.[3] Be that as it may, the institution of coinage was indicative of an economically soundly-based polity.

Besides innumerable coins of 'Ali b. al-Ḥasan, there are rare finds of one Dā'ūd b. al-Ḥasan, which resemble the later types of the first sultan (nos. 1 & 3, Table p. 95), but none was found usefully stratified. Chittick has, therefore, adopted an earlier

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1 Chittick, Azania, I, 1966, p. 6; Letter of J. Gray, TNR, No. 65., 1966, p. 104.

2 Chittick, ibid., p. 15; J.R. Harding, 'On some Crucible and associated finds from the Coast of Tanganyika', Man, LX, 1960, pp. 136-9.

3 Al-Idrīsī, loc. cit., p. 832; SD, p. 21.

conjecture that this man may have been his brother, Dā'ūd b. al-Ḥasan b. 'Alī, and that the name may have been corrupted in the tradition by omission of the father's name to appear as Dā'ūd b. 'Alī in the Kilwa Chronicle.[1] This is not without support if the information on the relationship of the early sultans contained in the two versions of the Chronicle is combined. The immediate successor of 'Alī b. al-Ḥasan was 'Alī b. Bashat, who the Portuguese text informs us was his nephew, and who took precedence, as the Arabic version has it, over his paternal uncles, i.e. the former's brothers, among whom was this Dā'ūd b. 'Alī.[2] The texts then proceed to record him as the third ruler and it was during his reign that the wars with the Shanga began, and so not unnaturally new coins ceased to be issued.

The significance of Kisimani's situation had changed since the early Middle Ages. It is at the western tip of Mafia island, ten miles off the mainland, but athwart a channel which is unencumbered by shoals and reefs and does not suffer from the discolouration caused elsewhere by the discharge of the Rufiji river. Thus Kisimani came to owe much of its importance to its dominant position on the coastal seal-lane, at a point where deep-water extends close inshore and where a sandspit offers protection from the south-west monsoon. It has been suggested that the River Rufiji, with its couple of northern distributaries unobstructed by bars and with one deep basin of from

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1 J. Walker, 'The History and Coinage of the Sultans of Kilwa', The Numismatic Chronicle, 5th series, XVI, 1936, pp. 71-2 and genealogy, p. 60; Chittick, EAH, VI, 1965, pp. 287, 289.

2 SD, pp. 37, 90.

four to six fathoms, must have aided Kisimani's importance.[1] The river probably carried some commerce but the extent cannot be assessed because there is as yet no evidence of its use as a highway.

When the mosque at Kisimani was excavated, Chinese celadon and porcelain were found to occur only above the last floor and they thus post-date the entire building. Owing to their scarcity, it is reasonable to deduce that the port declined towards the end of the thirteenth century.[2] Reasons for its economic ruin can only be conjectured. Kirkman suggested that it was probably due to encroachment by the sea as a result of tidal changes, for today, some of the ruins are nearly submerged and visible only at low water spring tide. Possibly, with the eviction of the second Shīrāzī usurper after the middle of the thirteenth century (see Table p. 95), the headquarters was moved to Kilwa, still within reach of seasonal dhows, to forestall the establishment of a rival across the presumed lifeline to the Mozambique coast.[3]

Unlike Kisimani, Mogadishu's development is difficult to trace for no excavations to date have been carried out at the site. Both documentary and epigraphic record, however, suggest a new position for the port from at least the late twelfth century. For Yāqūt early

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1 Admiralty, Hdrographic Dept., Africa Pilot, Part III: South and East Coasts of Africa, 10th edn., H.M.S.O., 1939, pp. 288, 290, 295; G. Mathew, 'The East African Coast until the coming of the Portuguese', History of East Africa, ed. R. Oliver & G.Mathew, I, Oxford, 1963, p. 126.

2 Chittick, Kisimani Mafia, pp. 8, 10; Garlake, op.cit., p. 70.

3 Kirkman, Men ..., p. 191. The second suggestion was first made by Mr. A.M.H. Sheriff.

in the next century sets it up as the most prominent in all eastern Africa: "Cities are found on the Bahr al-Zanj, the most important being Maqdashū." This is echoed by Ibn Sa'īd, who wrote later in the same century, that "east [i.e., south of Mercal is a Muslim town, celebrated in this region and often mentioned by travellers, namely Maqdashū."[1] Such an impression of affluence is borne out by a quantity of inscriptions unique on the coast. The earliest is on a tombstone dated A.H.614/A.D.1217 but of moment is the one over the entrance to the minaret of the Jamia of Mogadishu which records the beginning of its construction in A.H.636/A.D.1238. There are two other old mosques, Fakhr al-Din and 'Arba Rukun, both of which have inscriptions dated A.H.667/A.D.1269.[2] On the basis of this evidence, Kisimani was subsidiary to Mogadishu as an entrepôt at this time.

Trimingham has asserted that Mogadishu's prominence began shortly after A.H. 554/A.D.1159 when the Banū Mājid, driven from al-Mundhiriyya district in Yemen, divided into three sections, one of which settled in Mogadishu. The informant is Ibn al-Mujāwir (in the second quarter of the thirteenth century) who also records an influx of merchants into Mogadishu after the destruction of Yemeni ports. Trimingham goes so far as to suggest that the town changed its name with its revival under the Banū Mājid which would thus explain the apparent lack of its mention in the Arabic sources prior to the

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1 Yāqūt, loc.cit., p. 952; Ibn Sa'īd, loc.cit., p. 1081.

2 The inscriptions are published in E. Cerulli, Somalia: scritti vari editi ed inediti, Roma, 1957, I, pp. 2-10 and summarised by Garlake, op.cit., pp. 10-11.

thirteenth century.[1] The basis of the port's prosperity was, if Barros is to be believed, the gold trade of Sofala, although Yāqūt listed only sandal-wood, ebony, ambergris and ivory as its exports.[2] Some insight into this problem may be had if harbour facilities at Mogadishu are appraised.

Mogadishu is an open roadstead, and though anchorage may be obtained in depths of seven fathoms a thousand yards offshore where the holding ground is good, it is perforce exposed to the full force of the north-east monsoon, with the attendant danger of heavy swell setting in towards the shore (Fig.8). Prior to the construction of a breakwater, therefore, communication with the shore was practicable only at the beginning of the season, in October and November, or at the time the monsoon slackens, in and after February.[3] With respect to the gold trade, while Mogadishu is too far to the north to be the ideal compromise location between the 'short-and deep-sea' traffic, it is not impossible that this entrepôt function was exercised by it as a result of maritime contacts with western India. For it is argued later on in the chapter that these merchant seamen reached eastern Affica towards the end of the north-east monsoon, and they may not initially have sailed further south than Mogadishu.[4]

Whether this tentatively outlined hypothesis is true or not, Mogadishu owed at least part of its importance to trade with the Red

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1 'Reflexions ...', p.15.

2 Barros I.8.4, I.10.2 (SD, 84, 91); Yāqūt, ed. F. Wüstenfeld, IV, p.602.

3 Guillain, op.cit., II, pp. 548-9. See also A.J. Villiers, Sons of Sindbad, 1940, p.106.

4 Infra, pp. 139-40.

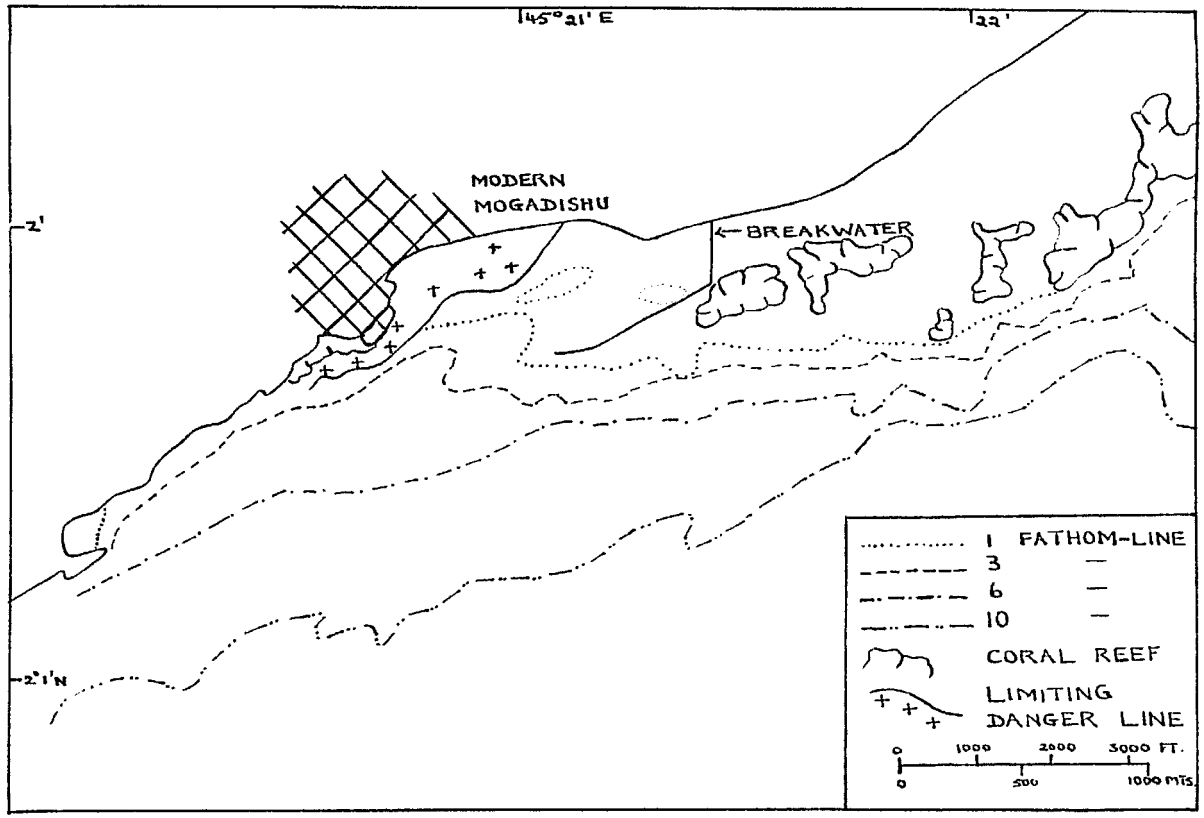

FIG. 8. THE ROADSTEAD OF MOGADISHU.

ADAPTED FROM ADMIRALTY CHART NO. 671.

Sea which would have been conducted at the beginning of the north-east monsoon (as south-south-easterly winds predominate in the southern part of the Red Sea after September. Fig.2)[1] The earliest evidence of contact in that direction which can be found is that some of the settlers in Mogadishu hailed from the Yemen. Yet when the celebrated Ibn Baṭṭūṭa visited Mogadishu in 1331, he not only met some men and observed goods which were from Egypt and the Yemen, but also some of the customs kept by the Sheikh and his retinue struck him as peculiarly south-west Arabian.[2] It is interesting to speculate whether, because of unrest in the Ethiopian interior between Christians and Muslims, trade-routes which customarily had led to the ports of the Gulf of Aden were, in the thirteenth century, directed instead to the valleys of the Juba and the Webi Shebeli on to the Benadir coast.[3]

By the end of the thirteenth century, Mogadishu assumed second place to Kilwa. There is a plausible explanation in Barros' claim that the latter wrested control of the gold trade of Sofala from the former. The event, however, is purported to have occurred during the reign of a certain Dā'ūd who is omitted in the

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1 Guillain, op.cit., I, p.95.

2 Ibn Baṭṭūṭa, 'al-Reḥla', Text C. Defrémery & B.R. Sanguinetti, Les Voyages d'Ibn Battuotah, 4 vols., Paris, 1853-8; Eng. trans. H. Gibb, The Travels of Ibn Battuta, II, Hak.Soc., 1962, pp.375-8.

3 It was perhaps such memories which prompted the Portuguese to attempt to open up a route to Ethiopia from "the coast of Malindi" in the early sixteenth century (e.g. in 1500 and 1507, Barros I.5.3, II.3.2). When Mombasa was occupied towards the end of the century interest revived, but it was reported that the route from Barawa to Ethiopia, which had been utilised in former times, was then closed because the Galla had conquered the intervening territory (El-Rei to Viceroy, Lisbon, 3/3/1594, Archivo Portuguez Oriental, ed. J.H.da Cunha Rivara, Nova Goa, III, 1861, p.443; J. Strandes, Berlin, 1899, Eng. trans. J.F.Wallwork, The Portuguese Period in East Africa, Nairobi, 1961, pp.316-7).

Arabic version of the Chronicle. But Chittick has shown that the first four of a group of nine sultans (Nos. 9-12, Table p. 96) omitted in that version evidently figure twice in the Portuguese text, the second time under the new dynasty of Abū'l Mawāhib (Nos. 19-22).[1] So Barros' Dā'ūd might conceivably be equated with Dā'ūd b. Sulaimān, the grandson of the dynasty's founder. Whereas it is true that the first Dā'ūd is stated to have been summoned from Sofala, this is, as Chittick points out, intrinsically improbable for, according to Barros himself, it was not until or after this man became sultan that Kilwa gained control of Sofala trade.[2] The solution to this puzzle is, however, far from adequate, as the second Dā'ūd did not become regent until the end of the second decade of the fourteenth century. While the grandiose structure of Husuni Kubwa is believed to have been constructed by al-Ḥasan b. Sulaimān who succeeded him (No. 21), minting of coins was resumed by the founder of the dynasty at the same time as an extension to the Great Mosque was effected in about A.D. 1300. This problem will be seen in its proper context after port activity along the Mazambique coast has been examined.

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1 Barros I.10.2. (SD, pp. 91-2); Chittick, JAH, VI, 1965, p. 280.

The only incongruity is the name of the third sultan, Soleiman Hacen (No. 11), but Chittick has indicated that it must be an error, since he is said to have been the son of his predecessor. It is significant too that the Portuguese version credits him with the construction of a fortress and houses of stone, and an inscription of al-Ḥasan b. Sulaimān (No. 21) has been found in Husuni Kubwa, dated to the early fourteenth century.

2 Azania, I, 1966, p. 25.

PHASE THREE: FEEDERS AND CENTRALISATION

The period following the thirteenth century is distinguished from the previous phase by the growing importance of mainland feeder ports but this development must be viewed against a background of accelerated tempo of commercial activity in the Indian Ocean. It will be appreciated that these ports flourished through to the fifteenth century and beyond but they merely led to agglomeration of trade at the entrepôts. Mogadishu had already been superseded by Kilwa but literary and numismatic evidence confirm that it remained an important port throughout the later Middle Ages. The celebrated Ibn Baṭṭūṭa visited it on his world travels in 1331 as did the only Chinese junks ever to venture to eastern Africa in the early fifteenth century. Coins are believed to have been minted locally at Mogadishu from about 1300 onwards.[1] Barbosa stated early in the sixteenth century that it was a port of call for ships from Cambay as well as Aden. Finally, the Portuguese contemplated the sack of Mogadishu, at least three times between 1505 and 1509 definitely in their desire for plunder.[2] Nevertheless, Mogadishu was a poor second to Kilwa, and so discussion in this section is devoted to the southern entrepôt. Yet examination of

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1 Baṭṭūṭa, loc.cit.; J.J.L. Duyvendak, China's Discovery of Africa, 1949, pp.26-32; P. Wheatley, 'The Land of Zanj: Exegetical Notes on Chinese Knowledge of East Africa prior to A.D. 1500' in Geographers and the Tropics: Liverpool Essays, ed. R.W. Steel & R.M. Prothero, 1964, pp.162-6; G.S.P. Freeman-Grenville, 'Coins from Mogadishu, c.1300 to c.1700, The Numismatic Chronicle, 7th series, III, 1963, pp.179-200.

2 Duarte Barbosa, Port.text in Collecção de Noticias ... das nações ultramarinas, Academia Real das Scienoias, Lisboa, II, 1813 & Eng. trans. M.L. Dames, The Book of ---, Hak.Soc., 1918-20, I, p.31. For Portuguese attacks, see F. Lopes de Castanheda, Historia de descobrimento e conquista da Inida pelos Portuguezes, Coimbra, 1934-33, ii8, 117; Barros II.1.2.

Kilwa's hinterland and its role in carrying trade has a bearing on Mogadishu's position in view of the latter's erstwhile control of the Sofala gold trade.

The growth of feeder ports

While several of the feeder ports were first founded in the thirteenth century, they attained the height of their prosperity in the fifteenth. This phase then may be looked upon as a period of consolidation for the more important feeder ports, as well as the genesis of lesser ones. These were in addition to the successor ports of phase one, such as those on Zanzibar and Pemba islands, which over the subsequent centuries evacuated their exports via the nearby entrepôts. Most of the new ports, such as Kilepwa or Mtwapa, were now situated on the mainland coast at the mouths of creeks or inlets which provided sheltered, deep-water anchorages. It is apparent from the map of the distribution of ports in A.D.1500 (Fig.19) that there was, as a natural corollary to the concentration of commercial activity, a greater preponderance of feeder ports on the Kenya rather than the Tanzania coast.

Within a wider context the thirteenth century saw, as Mathew has demonstrated, the establishment of great Islamic states as Indian Ocean powers. They lay athwart the trans-oceanic routes which stretched from the Red Sea to the Malay Archipelago. There was, too, a revival of commerce between the western and eastern Mediterranean in the twelfth century, which created some opportunities for African products in the rapidly expanding markets of Western Europe. Thus, soft ivory was ideally suited for the carving industry

of medival Europe, while the first gold coins struck at the London mint have been found by assay to be of African gold. These developments were given a fillip between the late fourteenth and the late fifteenth centuries for, as Mathew has again remarked, this was the period between the eclipse of the overland routes from the Far East to the West and the discovery of the sea-route round the Cape of Good Hope. Simultaneously, the emergence of the so-called international court culture in the West provided a fresh market for luxury goods from the Indian Ocean. The upshot of all these events was that there was a concomittant increase in traffic across the Indian Ocean.[1]

Archaeological work has demonstrated the effects on East Africa. Most of the standing monuments of mosques and tombs in the lesser settlements belong to the fifteenth century. There was, incidentally, also a revival in building activity in the major ports themselves. With respect to Chinese porcelain in the excavated levels of that century, fine quality sherds are found mixed with many coarse wares which largeness of demand was apparently able to absorb. Finally, the use of carved coral ornaments on mihrabs and tombs was replaced by the universal use of porcelain bowls in the latter part of the fifteenth century, an instance, as Kirkman commented, of cultural development being outstripped by material prosperity.[2] The fifteenth century then was a period of marked affluence on the east coast.

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1 Mathew, loc.cit., pp.110-2, 119-121.

2 J.S. Kirkman, 'The Culture of the Kenya Coast in the later Middle Ages', South African Archaeological Bulletin, II, 1956, pp.92-8; idem, 'Historical Archaeology in Kenya, 1948-56', Antiquaries Journal, XXXVII, 1957, pp.16, 18.

Feeder ports relied on coastwise traffic as it combined ease of travel with a measure of security unrivalled by overland transport. They were based on local catchment areas and provided the entrepôts with a quota of East African staples, including ivory then available in the coastlands. Between such towns, there is archaeological evidence for smaller settlements - as Mathew put it "villages with only two buildings in coral rag; a mosque and a rich man's house, perhaps a trader's, perhaps a headman's." Kinuni, twenty five miles north of Mombasa, described by Kirkman as "an Arab manor" may be cited as one of such "numerous small settlements" on the Kenya coast.[1] Their economic basis appear to have been the agricultural exploitation of the coastal belt. That local trade in foodstuffs was brisk at the end of the fifteenth century is abundantly confirmed by such Portuguese accounts as exist. Thus, Ravasco who cruised in the "canal for the navigation of the coast", i.e. the Zanzibar and Pemba Channels, for two months in 1503-4, captured during that period "more than twenty zambucos laden with provisions of the country."[2]

The later development of Kilwa

The archaeological record at Kilwa shows a marked cultural break in about A.D.1300 which is most apparent in architecture but which is coupled with changes in imported Islamic pottery. These

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1 Mathew, loc.cit., p.122; J.S. Kirkman, 'Kinuni - an Arab Manor on the Coast of Kenya', Journ. of the Royal Asiatic Society, 1957, p.145.

2 Barros I.7.4 (SD, p.76).

are associated with the establishment of a new dynasty, that of Abū'l Mawāhib as recorded in a new chapter of the Arabic version of the Chronicle, and now believed to have been a Yemeni family.[1] Kilwa entered a period of unprecedented prosperity on the east coast which finds dramatic expression in Husuni Kubwa, characterized as it is, by "a variety and splendour never again equalled." It consists of two juxtaposed yet distinct entities, a palace and a "factory", and as it is on a headland about a mile east of the town and overlooks the sea to the north, it was ideally situated to discharge both these functions. For from this eminence and conspicuousness, the town and the anchorage can be seen far down to the west, while the harbour entrance is clearly visible to the north-east. The section that is of particular interest is the so-called South Court with its vast area of uniform storage rooms - the "warehouses" of Kilwa - which provided the economic foundation that enabled Husuni Kubwa to be built.[2]

a) The hinterland of Kilwa

Kilwa's prosperity was based largely on the carrying trade of the Mozambique coast and it is convenient at this point to examine briefly the development of port activity south of Cape Delgado. The purpose is to set in perspective the entrepôt function of the ports north of that Cape, especially the claims of Mogadishu and Kilwa to

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1 Chittick, Azania, I, 1966, pp.17-20, 24-5.

2 N. Chittick, 'Kilwa and the Arab Settlement of the East African Coast', JAH, IV, 1963, pp.182-190; Garlake, op.cit., p.105.

control of the Sofala gold trade. It has already been seen that Sofala as a regional name long antedates the port of that name.[1] Our only authority for the ports of the present Mazambique coast is al-Idrīsī's rather confused account of the mid-twelfth century. Ibn Sa'īd who wrote in the next century has evidently drawn heavily from him, and the couple of details which he adds do not allow positive indentifications.[2]

Both sources agree that there were two important ports for the export of gold, namely, Ṣayūna and Dāghūṭa. Each was sited on a large bay into which descended, to the north of them, a river. Ibn Sa'īd adds an important sentence that it was alleged that both the rivers had the same source. This was evidently one of the fanciful concepts which the medieval Muslim geographers had about the disposition of such features as lakes and rivers in the interior of Africa. For when Randles examined printed maps of the early sixteenth century, he was struck by the consistency with which two rivers which rise from

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1 Supra, p. 91. No inference of a port can be drawn, for instance, from al-Bīrūnī's remark that Somnāth was the starting point for those who make the voyage between "Sofala of the Zanj" and China, since in the early Middle Ages, Muslim authors only meant to distinguish it from Sofala of India (Skt. Sūrpāraka, popularly Supāra). H. Yule & A. Burnell, Hobson-Jobson: A Glossary of Anglo-Indian Colloquial Words and Phrases, 1895.

Witness al-Bīrūnī's own description of where the equator ran: " . . . and the northern part of the Zanj, through the islands and the coasts and their Sofala . . . . " 'Kitāb al-Tafhīm', Youssouf Kamal, op.cit., III, Fas. III, p. 715.

2 Loc.cit.; see also A. Malecka, 'La côte orientale de l'Afrique au moyenage d'après le Kitāb ar-Rawḍ al-mi'ṭār de al-Ḥimyarī (XVe S.), Folia Orientalia, IV, Krakau, 1962, pp. 331-9.

the same source debouch on the south-east coast of Africa. The two rivers have different names on different charts, but while Randles was thus led to believe that knowledge of them went back to the period before the Portuguese discoveries,[1] the problem of identification still remains. Barros is the only contemporary Portuguese who tried to identify the two rivers and, if he is not mistaken, the northerly one is the Zambezi.[2] Between the two river ports al-Idrīsī located a third, Djasṭa, which, too, was a point of gold export.

The first unequivocal mention of Sofala as a town is by Yāqūt early in the thirteenth century. Many Arab authors subsequently refer to Sofala as the farthest town of the land of Zanj.[3] It might, therefore, be [illegible]

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1 W.G.L. Randles, 'S.E. Africa and the Empire of Monomotapa as shown on selected printed Maps of the 16th century', Stvdia, No. 2, 1958, pp.105-116.

2 Barros writes: "The country which we treat of as the Kingdom of Sofala is a vast region . . . . It is surrounded like an island by two arms of a river which proceed from the most notable lake in the whole continent of Africa . . . . The river which flows towards Sofala, after leaving this lake and running a great distance, divides into two arms, one of which reaches the ocean on this side /i.e. south/ of Cape Correntes, and is that which our people formerly called Rio da Lagoa, and now Espirito Sancto, which name was given by Lourenço Marques, who went to explore it in the year 1545. The other arm enters the sea twenty five leagues beyond Sofala and is called Cuama, although in the interior other people call it Zembere /i.e. the Zambezi/." I.10.1, Eng. trans. G.M. Theal, Records of South-Eastern Africa, 1898-1903 (reprinted, Cape Town, 1964), VI, pp.264-5.

Barros clearly identifies the northern river with the Zambezi and so Sayūna might have been situated on it. For the southern river, however, he confuses the Limpopo with the Incomati, and the bight does not accord with the locational details of Dāghūṭa supplied by Ibn Sa'īd. Randles, loc. cit.

3 Loc. cit., p.958; see G. Ferrand on Sofala in Encyclopaedia of Islam, Leyden, 1934.

suggested that with the increase in importance of the later Portuguese port of Sofala, it came to appropriate to itself the name of the region in the second half of the twelfth century, in consequence of which the towns were henceforth listed with those of the Zanj. Thus Mogadishu's control of Sofala's gold trade in the twelfth century seems feasible. Yet while the development of ports along the Mozambique coast cannot be traced through to the fifteenth century, due to a hiatus in documentary evidence, the Zambezi remained a secondary gold-route, for Ibn Mājid mentions Kilvānī, apparently the modern Quelimane river, as a route for export of gold.[1] So neither Mogadishu nor Kilwa's hold on the gold traffic could have been exclusive.

Portuguese accounts are unanimous in locating Sofala on a river. Barbosa, for instance, early in the sixteenth century wrote that "there is a river of no great size upon which . . . is a town of the Moors which they call Sofala", while Santos late in that century stated that "the residents of the fortress of Sofala navigate this river and carry their merchandise to Manica, which is a land of much gold more than sixty leagues inland".[2] Today only a small stream enters the estuary at Sofala and since it does not join the River Buzi which discharges at Beira, it must be concluded that the river has, over the centuries, changed its lower course and so cut-off the link

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1 Op.cit., R.92r, 14-9 (p.42), R.93v, 25 (p.47).
Some scholars have also argued for an important port in the estuary of the River Sabi which tradition recognises under the name of Singa. H.V. Sicard's identification ('The Ancient Sabi-Zimbabwe Trade Route', Nada, S. Rhodesian Native Affairs Dept. Annual, No.40, 1963, pp.6-16) of it with Barbosa's Hucica (op.cit., I, pp.4-5) or Ibn Mājid's Vasīka (op.cit., R.93v, 34-5, p.47) appears, however, to be mistaken. Both, in any case, do not mention gold as its export. The route up the Sabi seems to have been unknown in the early sixteenth century.

2 Barbosa, op.cit., I, p.6; João dos Santos, Ethiopia Oriental . . . , Evora, 1609, i.2.

with the interior. Whether the river was used for navigation in the medieval period or whether the valley was only a convenient routeway, a tributary of River Buzi (R. Revue) rises in Manica which then controlled the transit route from Mwanamutapa to Sofala.

It has been suggested that, apart from control of the seaborne trade of Sofala, Kilwa was also linked overland with Rhodesia by a network of "trade contacts" in the Middle Ages.[1] There is, however, no firm documentary evidence for such a route. Ibn Baṭṭūṭa wrote that, according to his informant, Sofala lay at a distance of half a month's "journey" from Kilwa, as Gibb has it, or half a month's "march", as translated by Freeman-Grenville. Later, Ibn Mājid dismissed the overland route as "undiscussable" (indiscutivel) and, in fact, a distance of over eight hundred miles makes it inconceivable that it could be completed within a fortnight, so that Gibb's rendering seems preferable to Freeman-Grenville's. Alpers makes the pertinent comment that if tradition of an overland route from Kilwa to Rhodesia existed in the Middle Ages, it is odd that, even after the Portuguese withdrawal from Kilwa in 1512, the Swahili should have had recourse to the Angoche-Zambezi route to subvert Portuguese control of the trade, and not resuscitate the old-time land connections.[2]

Kilwa's hinterland north of Cape Delgado is not easy to delimit. The only scrap of evidence is contained in Barros' version of the

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1 E.g. Mathew, loc.cit., pp.117-8.

2 Gibb, op.cit., II, p.80; SD p.31; Ibn Mājid, op.cit., R.91v,4 (p.40); E.A. Alpers, The role of the Yao in the development of Trade in East-Central Africa, 1698-c.1850, Ph.D. thesis, Univ. of London, 1966, p.7.

Kilwa Chronicle where, after an account of Kilwa's acquisition of control of the Sofala gold trade, he claims that the sultan "made himself lord of the commerce . . . of the islands of Pemba, Monfia Zanzibar, and a great part of the shore of the mainland." Coins of the Kilwa sultans have indeed been recovered from the offshore islands but there have been only a few mainland finds, so it seems safe to assume that these coins circulated within narrow limits.[1] Kilwa's commercial orientation in the medieval period is reflected in Portuguese complaints after the detachment of Sofala. Thus Kilwa's first captain, Fogaça, mourned in December 1506 that "until now, Sire, I have not ordered payment of any wages as I have not the wherewithal and this Sire, is because there is no trade from which money can be made." Then Albuquerque in a letter of 1511 assured his King that "only a little ivory comes from Kilwa and that much comes from Sofala."[2]

b) Intermediaries in the sea-borne trade of the Mozambique coast

The main fact which stands out from a consideration of eastern African port groups in the later Middle Ages is inclusion of one of the islands of the Kilwa-Mafia group as its prominent member. Northerly ports such as Mogadishu in the thirteenth century or Mombasa from the late fourteenth century did hold a more important position. Yet for the role of an intermediary in the carrying trade of the Mozambique coast, the offshore islands of southern Tanzania enjoyed a good geographical location. They will be shown to be within reach of seasonal shows from the northern rim of the Arabian Sea and, at the

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1 Barros I.8.6 (SD, p.92); G.S.P. Freemen-Grenville, 'East African Coin finds and their Historical Significance', JAH, I, 1960, pp.42-3.

2 Documentos sobre os Portugueses em Moçambique e na Africa Central, 1962-(in progress), I, pp.760-1(See also II, pp.27,29), III, pp.6-7.

same time, are not far from the northern entrance to the Mozambique Channel where during the off-season - i.e. the period of the south-west monsoon - the weather is fair.

The first consideration is the spatial extent and the relative strength of the north-east monsoon which is the major influence in East African waters from November to March.[1] The air-flow achieves its greatest areal extent in January (Fig. 9) but predominant winds with a constancy in excess of 60 per cent blow only as far as the equator. South of it, it averages between 41 and 60 per cent as far as 10°S. lat., and although a wind with a northerly component can be traced into the Mozambique Channel almost to 20°S., its constancy varies between only 21 and 40 per cent. Likewise, the strength of the north-east monsoon diminishes southwards, as is clear from the following data for January.

	Station	% of winds of Beaufort Force 1-3	4-5
A.	16-19° N., 64-67° E.	43	52
B.	10-13° N., 57-60° E.	63	35
C.	2-5° S., 50-53° E.	71	29

Source: U.S. Navy, Marine Climatic Atlas of the World, Vol. III, Indian Ocean, 1957, chart 2.

Thus, despite its prevalence almost to the latitude of historic Sofala, the north-east monsoon is seldom a steady wind beyond Cape Delgado.

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1. See W. Kirk, 'The north-east monsoon and some aspects of African History', JAH, III, 1962, pp.263-7 and D.N. McMaster, 'The ocean-going Dhow Trade to East Africa', East African Geographical Review, No. 4, 1966, p.17.

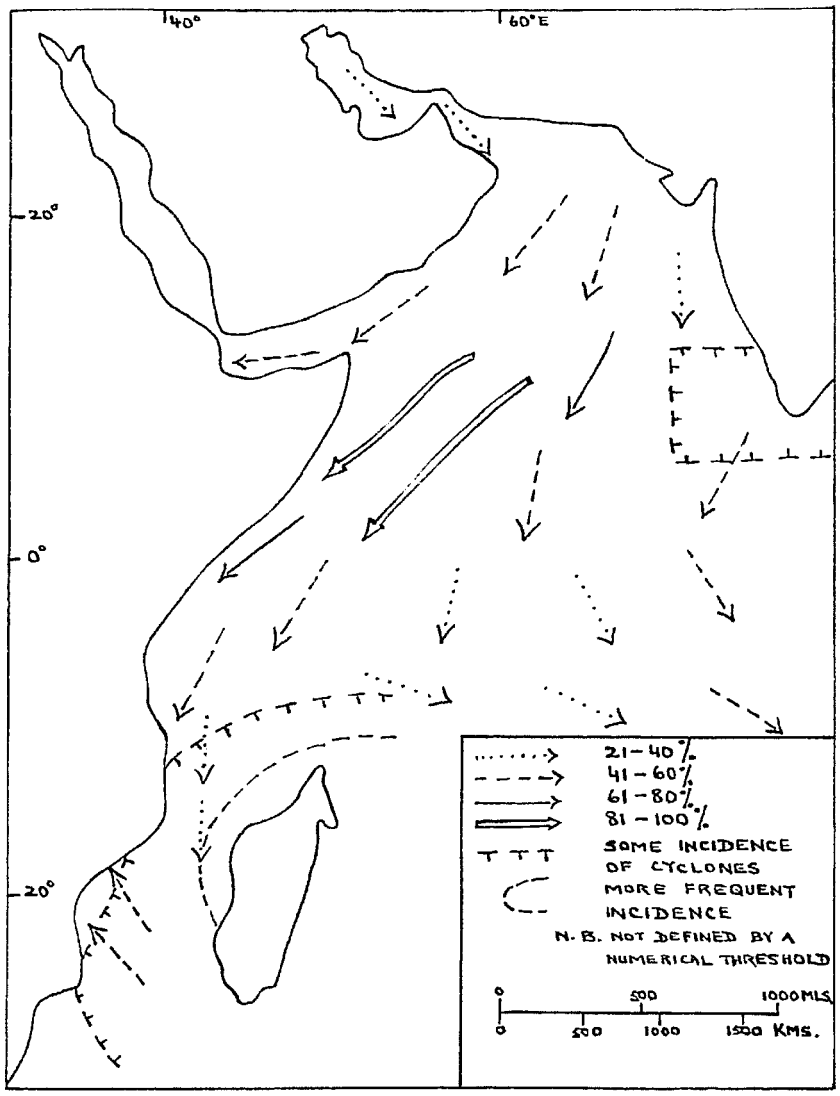

FIG. 9. PERCENTAGE CONSTANCY OF PREDOMINANT WINDS IN JANUARY.

SOURCE: METEOROLOGICAL OFFICE, MONTHLY METEOROLOGICAL CHARTS OF THE INDIAN OCEAN, H.M.S.O., 1949, p.3.

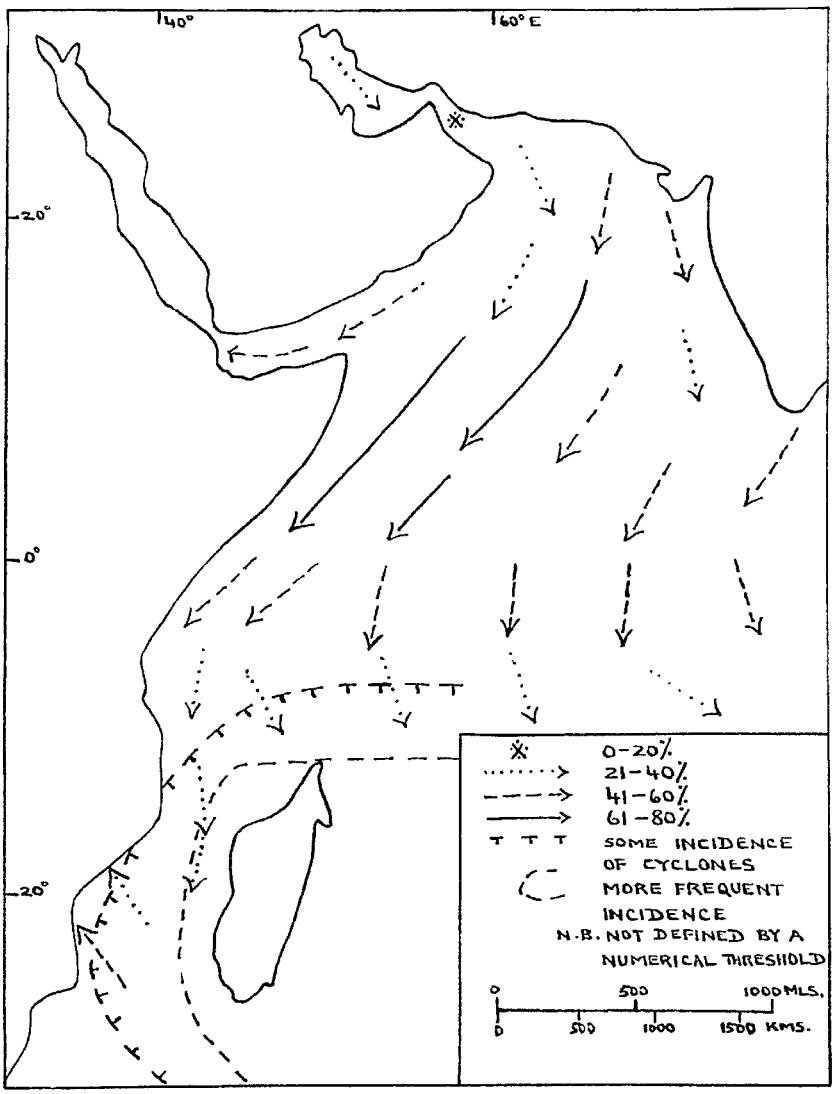

FIG. 10. PERCENTAGE CONSTANCY OF PREDOMINANT WINDS IN FEBRUARY.

SOURCE: MET. OFF., MON. MET. CHARTS OF THE IND. OCE., H.M.S.O., 1949, p. 11.

Here, it may be argued, seafarers could avail themselves of the Mozambique current which, from December to February, flows southward from about 9 or 10° S. lat. This is a gradient current, since the Equatorial current flowing past the northern point of Madagascar, normally strikes the African coast in the neighbourhood of Cape Delgado. Thus, the Mozambique current is strongest during the season of the north-east monsoon when, owing to a southerly set along the eastern African coast as far as about 2° S., a lesser volume of the south Indian Ocean water flows northward. The mean set and drift of the current between 10 and 26° S. averages, for the months of December to February, about 19 miles, compared with 8 from May to July.[1] With a weak monsoon in the Mozambique Channel, the ports on the Bight of Beira can still be reached if vessels sail within a reasonable distance of the African coast to keep in strength of the current.

The northerly airstream which prevails in the northern part of the Mozambique Channel is, at this time, exceeded in frequency and opposed in direction by a south-south-easterly wind directed towards the Beight of Beira. So the position of the Inter-Tropical Front between these two airstreams oscillates in the latitude of Sofala, and January and February are the two months of maximum incidence of tropical cyclones in the Channel.[2] Yet it is really the return, northward passage which is difficult to accomplish, as Arab vessels normally left East Africa, as will be presently seen, after the beginning of April, when feeble wind and contrary current obtain in the northern section of the Mozambique Channel. The only practicable

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1 Af.Pilot, pp.30-31.

2 Kirk and McMaster, loc.cit.

course in March and April, evidently, is to beat a passage across the Channel and then to utilise the northward-flowing current up the west coast of Madagascar and across via the Comoro Islands.[1] On the other hand, the south-west monsoon is a fair season in the Channel, and traders on the local run could return to the Kilwa-Mafia group of islands, where goods would be warehoused to be exchanged at the change of the season.

The emergence of the offshore islands of southern Tanzania as entrepôts for trade between the Mozambique coast and the Aden and Persian Gulfs is ultimately linked with the length of the sojourn of the northern seafarers in East African waters. The south-west monsoon is fully established by June when it blows from 20° S. (but with a constancy in excess of 80 per cent from about 4° S.) all the way to the Indian sub-continent. It is, however, a boisterous monsoon, as is clear both from the graphs which show the relative strength of the north-east and the south-west monsoons (Fig.11) as well as from isopleths of winds of gale force for December and June (Fig.12). Contrary to popular belief, therefore, it is impossible for sailing craft to utilise the south-west monsoon in the months of June and July. Except for the few dhows which 'wintered' in East Africa, the period of the return journey was during the months of

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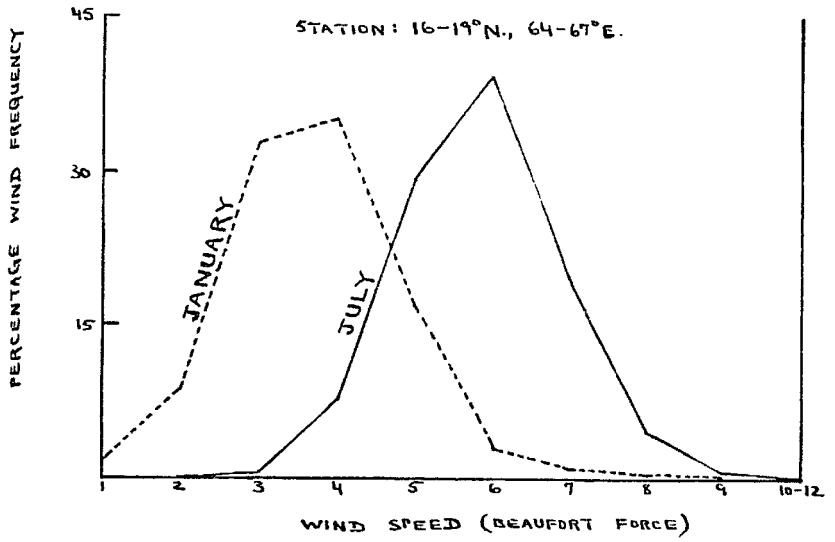
1 R. Summers, 'Environment and Culture in S. Rhodesia: a study in the "personality" of a land-locked country', Proceedings of the American Philosophical Society, CIV, 1960, p.284.
See relevant charts in Met. Off., Indian Ocean Currents, 2nd edn., H.M.S.O., 1939 and Sheets A of Koninklijk Nederlands Meteorologisch Instituut, Indian Ocean Oceanographic and Meteorological Data, No. 135, 1950.



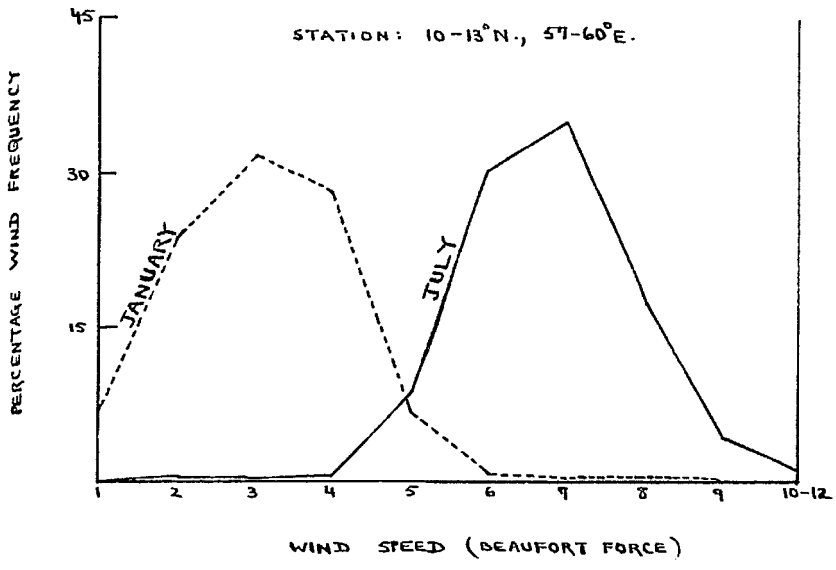


FIG. II. RELATIVE STRENGTH OF THE NORTH-EAST AND SOUTH-WEST MONSOONS IN THE WESTERN INDIAN OCEAN.

SOURCE OF DATA: U.S. NAVY, CHIEF OF NAVAL OPERATIONS, MARINE CLIMATIC ATLAS OF THE WORLD, VOL. III, INDIAN OCEAN, WASHINGTON, 1957.

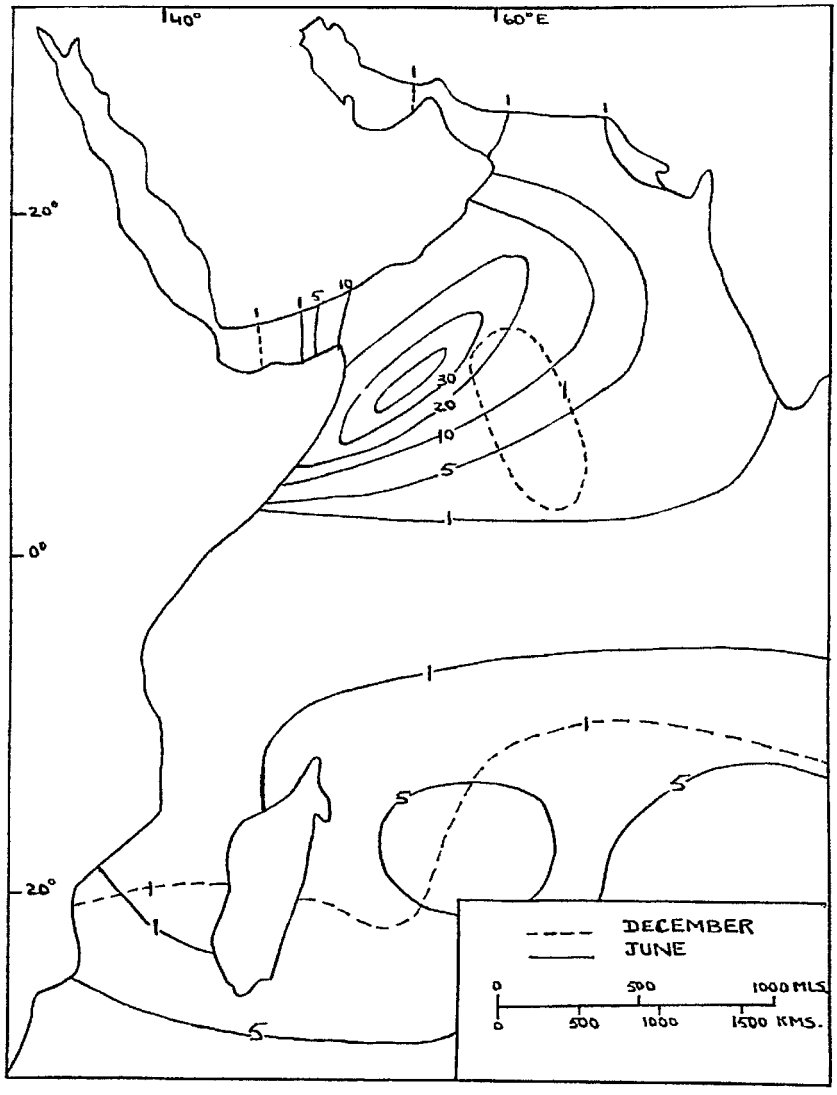


FIG. 12. PERCENTAGE FREQUENCY OF WINDS OF GALE FORCE (BEAUFORT 7 & ABOVE) IN DECEMBER AND JUNE.

SOURCE: MET. OFF., MON. MET. CHARTS OF THE IND. OCE., H.M.S.O., 1949, pp. 43 & 91.

the 'build-up' of the south-west monsoon, i.e. from the first of April onwards.

Although the drift in the open waters of the Arabian Sea is then still towards the African continent, reversal of currents along the coast occur before the onslaught of the south-west monsoon (Fig.13). Between Cape Delgado and the equator, the number of northerly over southerly sets increases in March, and the northerly current is strongly re-established in April. The mean set of the current north of the equator is westerly and north-westerly in the months of February to April, as this is an extension of the strong westerly oceanic drift, aided by the prevailing wind which changes from north-easterly in February to easterly in March. North of 4° N. lat., however, precisely as a result of this westerly drift, the northerly current is re-established as early as February, and gains in strength during March and April. Currents along the south Arabian and west Indian coasts are generally reversed by the end of February, and so complete the clockwise circulation of the Arabian Sea. When the south-west monsoon sets in, the only change which accompanies it, therefore, is the alternation in the direction of the open waters, while the coastal clockwise circulation is strengthened.[1]

Figures 14 and15 summarise wind conditions for the homeward passage. Winds with a southerly component already prevail in April northwards to 5° N. and along the south-eastern sector of the Arabian

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[1] Af. Pilot, p.41; Red Sea and Gulf of Aden Pilot, 9th edn., H.M.S.O., 1944, p.17; West Coast of India Pilot, 8th edn., H.M.S.O., 1937, p.42; Met. Off., Weather in the Indian Ocean, H.M.S.O., 1943, I, p.50.

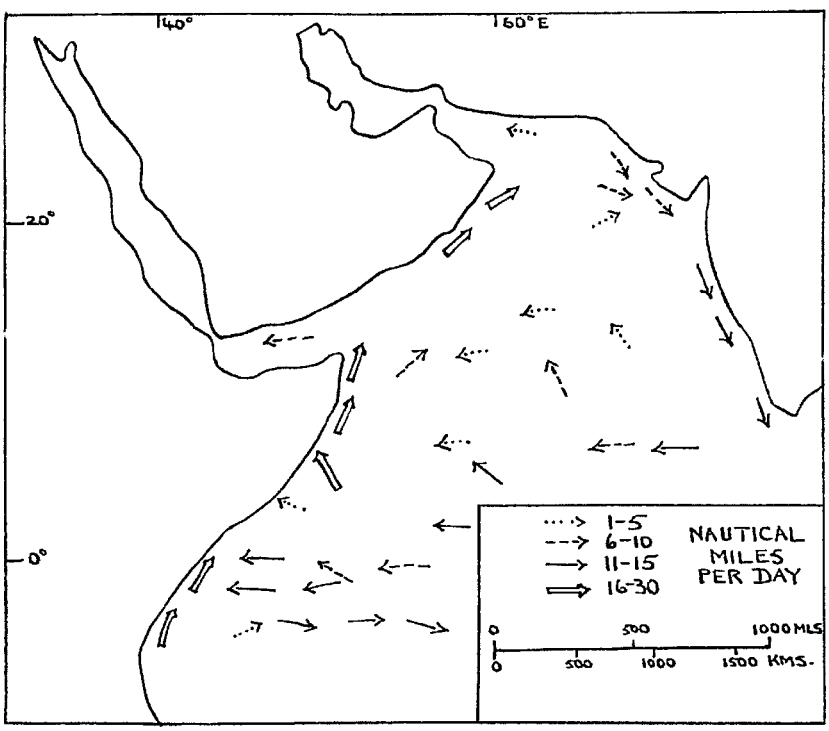

FIG. 13. MEAN DRIFT OF CURRENTS, FEBRUARY-APRIL.

SOURCE: METEOROLOGICAL OFFICE, WEATHER IN THE INDIAN OCEAN, H.M.S.O., 1943, VOL. I, P. 50.

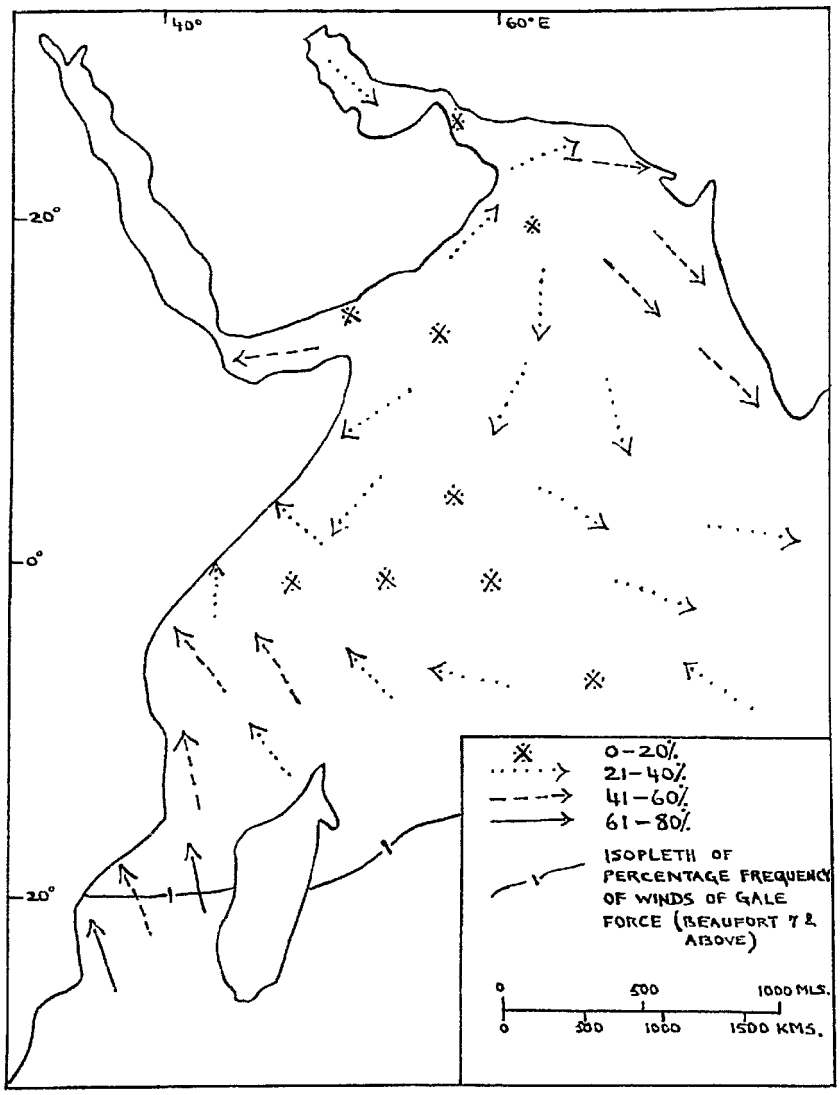

FIG. 14. PERCENTAGE CONSTANCY OF PREDOMINANT WINDS IN APRIL.

SOURCE: MET. OFF., MON. MET. CHARTS OF THE IND. OCE., H.M.S.O., 1949, p. 27.

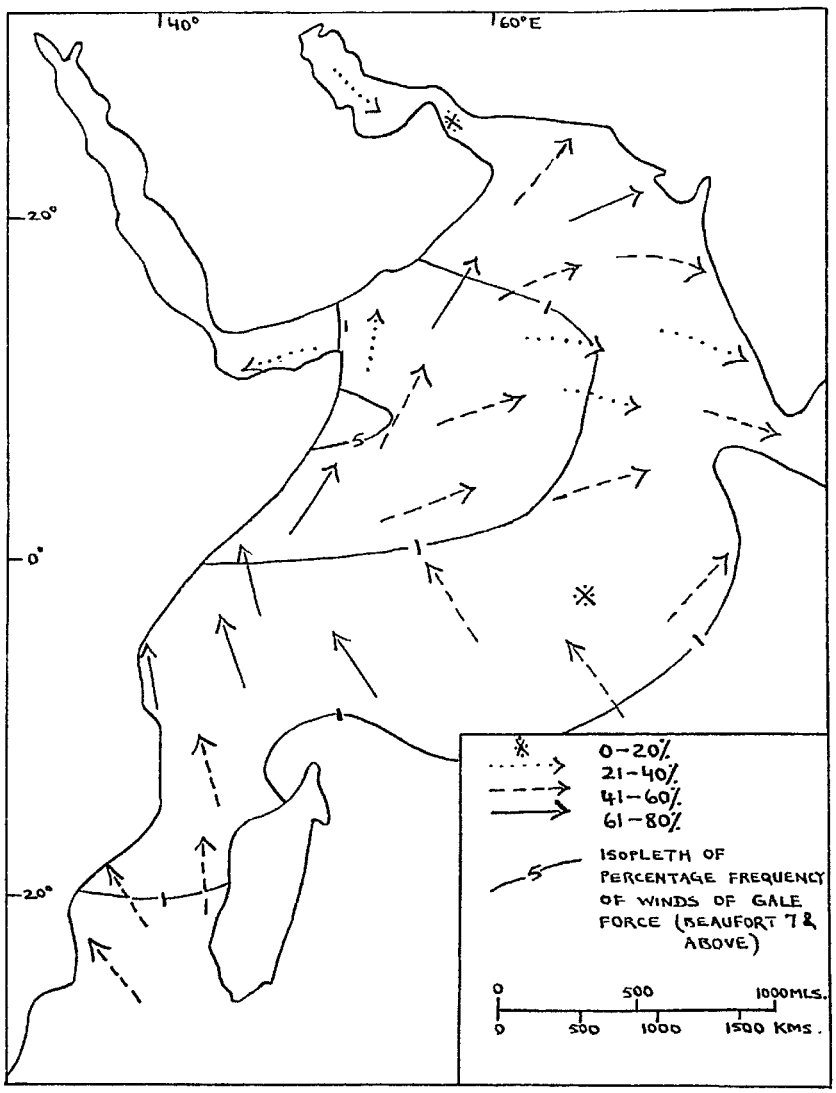

FIG. 15. PERCENTAGE CONSTANCY OF PREDOMINANT WINDS IN MAY.

SOURCE: MET. OFF., MON. MET. CHARTS OF THE IND. OCE., H.M.S.O., 1949, P.35.

peninsula; the constancy ranges from 41 to 60 per cent almost as far as the equator but elsewhere it drops to between 21 and 40 per cent. Over most of the area, above 90 per cent of marine wind observations record a Force of 0-4 on the Beaufort Scale. May witnesses a general increase in direction constancy to between 61 and 80 per cent and winds become progressively stronger. Off East Africa, from north of about 3° S. lat., only 70 to 80 per cent of all observations are of Force 0-4, although south of it a figure of over 80 per cent is attained, as is generally the case in the western half of the Arabian Sea. Fog is virtually absent in both the months, while the frequency of mist and haze, under 2 per cent along East Africa and 20 per cent near the mouths of the Red Sea and the Persian Gulf in April, increases to over 10 per cent north of the equator and to over 30 per cent at the entrance to the Red Sea and the Persian Gulf in May. There is likewise a slight increase in the amount of cloud cover but throughout the length of the return route, it does not exceed five-tenths.[1] That weather conditions in the western Indian Ocean are perfect for a homeward journey in the months of April and May is evidenced by visibility observations.

Station	% of all visibilities under 10 Nautical miles or less				
	April	May	cf.	June	July
16-19° N., 64-67° E.	2	5		40	50
10-13° N., 57-60° E.	3	7		36	40

Source : Marine Climatic Atlas of the World, vol. III, Indian Ocean, 1957, Charts 40, 52, 64 & 76.

During the 'build-up' of the south-west monsoon, dhows bound for the Aden and Persian Gulfs tend to leave East Africa earlier than those bound for western India. The passage takes [illegible]

[1] See relevant charts in Met. Off., Monthly Meteorological Charts of the Indian Ocean, H.M.S.O., 1949.

slightly longer since winds in early April are invariably less strong and sure. But Arab vessels, fitted as they are today, and as at any recorded time in the past, with lateen sails, can utilise any wind except an easterly on the return journey.[1] The chief consideration in leaving early is to avoid the stormy conditions which begin to develop near the Horn of Africa by May (Fig.15). Winds of gale force, Beaufort Force 7 and above, are under 1 per cent of all observations over the whole area in April but in May they attain 5 per cent off the northern part of eastern Somalia and only slightly lesser frequency in the north-western part of the Arabian Sea.[2] With the season of sail thus limited to between November and April, it was imperative that the ocean-going traffic with the northern seaboard should be supplemented by a coastwise trade along the East African coast, if products from Mozambique were to be readily exported.

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1 Guillain, op.cit., III, p.362; McMaster, loc.cit., p.18; A.J. Villiers, The Indian Ocean, 1952, p.121.

2 It is instructive to recall the point that Duarte de Lemos made to the Council of Offials of the Straits Fleet which met at Mozambique on 24th February, 1509:

> He, the captain-major, told them forthwith that once the first fifteen days of next March were past, he could not go further than Malindi until after the middle of August as he had already sought the advice of all pilots . . . . They had said that whosoever was not already in port in the straits /of the Red Sea/ by the end of April or the beginning of May could not sail - namely in May and June and July, as the winds were very strong at Cape Guardafui . . . . (D, II, pp.332-3).

Moreover, once past Cape Guardafui, contrary winds make the voyage difficult for the Red Sea dhows after May (Fig.2).

Ports in the past showed a clear preference for island sites and the Kilwa-Mafia group of islands, situated as they are to the north of the Mozambique Channel, were uniquely suited for this entrepôt function. Kilwa's harbour (Figs. 7& 16) is the seaward end of an extensive inlet, protected fromthe swell of the Indian Ocean by the island itself and by coral reefs. The entrance is provided by a gap in the reefs between Ras Kipakoni, the north-eastern extremity of Kilwa island, and Ras Matuso, about two miles to the north-east. Near the entrance, tidal streams are strong and there is often an eddy at the anchorage but, since the holding ground is good, vessels can ride safely at anchor. The best anchorage, however, is obtained off the ruins in the north-western part of the island, about two miles within the entrance, in depths of nine to fifteen fathoms. Here too, on the mudflats opposite the town, Arab vessels could avail themselves of the facilities for careening, as did Almeida's fleet in 1505.[1]

The chequered history of Kilwa as an entrepôt during the later Middle Ages is faithfully mirrored in the Great (or Friday) Mosque, whose evolution has been reconstructed on the basis of archaeological and documentary evidence. It consists of two distinct parts: the northern part was built at the time of the establishment of the 'Shirazi' dynasty but a large quadrangle to the south was enclosed (and presumed roofed) about A.D. 1300, probably to accommodate

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[1] Af. Pilot, pp.277-9; Barros I.8.4.

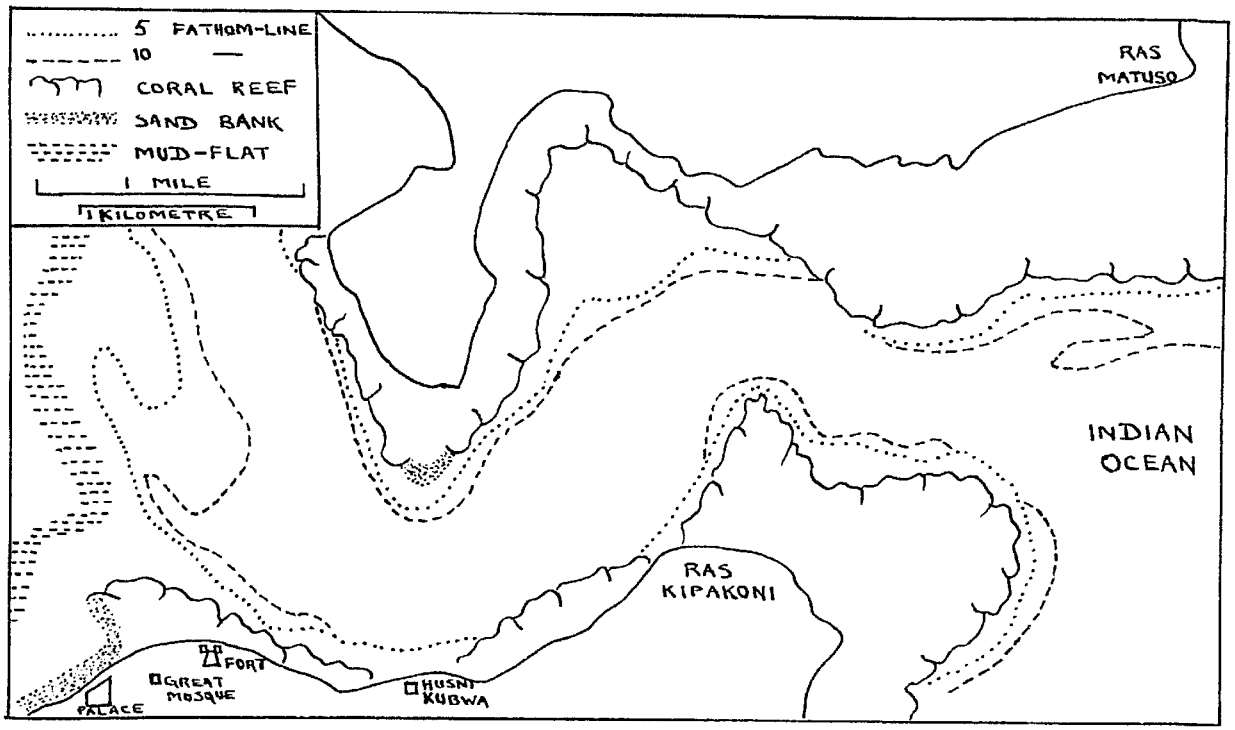

FIG. 16. THE HARBOUR OF KILWA KISIWANI.

ADAPTED FROM ADMIRALTY CHART NO. 661.

a new influx of population. Thus the extension is thought to be a little earlier than Husuni Kubwa which symbolised the primacy of Kilwa on the east coast. Further, an additional irregular space was enclosed in the south-east, part of which was subsequently surmounted by a great dome "under which he /al-Ḥasan b. Sulaimān, N.21, Table p.96/ was wont to pray", as the Kilwa Chronicle recounts. It goes on to record that before this sultan died, sometime in the 1330s, all the mosque except for the dome had collapsed, and that it was not restored until the reign of Sulaimān (b. Muḥammad) al-Malik, who is reckoned to have ruled in the second quarter of the fifteenth century.[1]

While it is known from archaeological study that the northern part of the mosque remained substantially intact, there was none-the-less a relative decline at Kilwa in the later part of the fourteenth century. It is also confirmed by the cessation of major building activity and the minting of coins from about the same time.[2] This decline had, hitherto, been associated with the allegedly expansionist policies of a Nabhani dynasty at Pate in the fourteenth century whose exploits have been preserved in a local chronicle. Songo Mnara, an island half-a-mile south-east of Kilwa (Fig. 7), was believed to have been seized and fortified as a base by these Pate sultans with the object of controlling trade in Kilwa harbour.[3] Recently, however,

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1 Chittick, Azania, I, 1966, pp.25-33; Garlake, op.cit., pp.35-6, 54; SD, p.39.

2 Chittick, ibid., p.20.

3 Several versions of the Pate Chronicle exist and the relations between them have been studied by A.H.J. Prins, 'On Swahili Historiography', Journ. of the East African Swahili Committee, No.28/2, 1958, pp.29-31. Two versions published in English are: C.H. Stigand, The Land of Zinj, 1913 (Reprinted, 1966), pp.29-102 (also reproduced in SD, pp.241-296)

Cont.

it has been shown that the architectural style of the greater part of Songo Mnara is attributable to the mid-fifteenth century, while test excavations at Pate itself have revealed that the town was of little importance before Portuguese times.[1] Sutton has wondered if the ostentatious living that the dynasty of Abū'l Mawāhib brought to Kilwa had not exhausted her resources, at a time when, it might be added, Mombasa was apparently rising to a position of greater importance.[2]

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and A. Werner, 'A Swahili History of Pate', Journ. of the African Society, XIV, 1913-4, pp.153-161 & XV, 1915, pp.279-297.

G. Mathew, 'Songo Mnara', TNR, No.53, 1959, pp.156-8; Freeman-Grenville, Med. Hist., pp.111, 115, 119.

The idea that Songo Mnara served as a base was inspired by the presence of a mnara or tower about 50 feet offshore, below high water mark. Chittick, however, believes that finds of carved stone decoration is evidence of a mihrab (Ann.Rept. of the Ant. Div. for 1958, p.27) and Garlake suggests a plausible reason for the peculiar site of such a mosque (op.cit., p.4). The link with the Pate dynasty was provided by the tradition of existence of a Nabhani mosque first reported by R. Burton in the last century (Zanzibar; City, Island and Coast, 1872, II, pp.358-9). This mosque has now been shown to be not earlier than the fifteenth century (Ann.Rept. of the Antiq. Div. for 1961, p.5).

1 Garlake, op.cit., pp.56, 91; Chittick, Azania, II, 1967, pp.55-63.

Garlake (p.94), moreover, argues that the spacious layout of Songo Mnara has "an air of relaxed leisure" and, coupled with the fact that there are no stone-built commercial buildings, he is tempted to conclude that it was probably "more a residential retreat from Kilwa than a commercial centre." It may be noted that communication with the Kilwa Kisiwani harbour is possible by boats, at all states of the tide, via Mlango Mugongo, a wide channel westward of Kilwa island (Fig.7).

There may be a parallel in Gedi, a late medieval settlement eight miles south-west of Malindi, for its excavator likewise maintains that it was the palace quarter of the Sheikh of Malindi. Gedi did not attract the notice of the Portuguese which is held to indicate that it was not an independent political entity, but in the case of Songo Mnara, there is one shred of evidence which evidently suggests that it formed part of the domains of Kilwa. When Nuno Vaz Pereira was sent to settle the dispute of the succession to the sultanate of Kilwa in 1506, "some of the principal Moors of the land and the Kaffirs of the island of Songo, a league from Kilwa, declared that it was not conducive to the service of the King of Portugal that a man of such low origin as the son of Mohamed Ancony should reign." J.S. Kirkman, Gedi: the Palace, The Hague, 1963, p.11; Barros 1.10.6 (SD, p.114).

Kilwa's decline, it must be emphasized, was relative rather than absolute, and the port regained a measure of prosperity in the first half of the fifteenth century.

PHASE FOUR : DIFFUSION OF PORT ACTIVITY

When the Portuguese arrived at the end of the fifteenth century, they found that port activity along the east coast was highly diffused. Here interest is limited to major ports of which there were now more than ever before. This is not to deny that there was a gradation among them. Kilwa had already yielded pride of place to Mombasa; Malindi, though poised as a rival to Mombasa in the Indian traffic, was none-the-less a poor second; Mogadishu had continued in an attenuated form since its heyday; Ungwana, near the mouth of the River Tana, was apparently a new focus of trade with Egypt; and Lamu and Zanzibar had relatively recently acquired a degree of importance.[1] Clearly, the pace of economic activity on the east coast had quickened, and the affluence which had hitherto been enjoyed only by a handful of entrepôts came now to be more generally shared. The process seems to have begun in the later part of the fourteenth century and was checked when the Portuguese made a breakthrough into the Indian Ocean at the close of the next century.

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2 J.E.G. Sutton, The East African Coast : an Historical and Archaeological review, Historical Association of Tanzania, Paper No.1, Nairobi, 1966, p.19; infra, p.135

1 Supra, p.107 ; J.S. Kirkman, Ungwana on the Tana, The Hague, 1966; idem, Men ..., p.79; Chittick, Azania, II, 1967, pp. 65,67; Freeman-Grenville, JAH, I, 1960, pp.37-8.

The rise of Mombasa and Malindi

Medieval authors mention Mombasa from the twelfth century onwards, but it is not as a rule described as an important port. For though al-Idrīsī, for example, claims that it was "the residence of the king of Zanj", he dismissed the town itself as "a small place." The world trotter, Ibn Baṭṭūṭa, spent a night on the island in 1331 en route to Kilwa, and he leaves us with an impression which contrasts with the busy character of the port indicated by the Portuguese.[1] It may be surmised then that Mombasa rose to a position of prominence after his visit, probably at the time of Kilwa's relative decline in the second half of the fourteenth century. The port's subsequent opulence is underlined by the fact that when the Portuguese sacked it in 1505, they were overwhelmed by the booty which they amassed. Thus, while Vespuccius found it impossible to reckon its value, Gaspar da Gama hazarded an estimate of 20,000 cruzados; and despite another eye-witness's claim that "there was left in the city as much wealth as they took", the viceroy, Almeida, reported that it took fifteen days to load the riches.[2]

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1 al-Idrīsī, loc.cit., p.832; Gibb, op.cit., II, p.79. Kirkman (Men ..., p.119) remarks that "he /i.e. Ibn Baṭṭūṭa/ was not received by the Sheikh or ruler and he describes the inhabitants as pious, honourable and upright, which was his way of writing off a people as being without financial or other interest."

2 A. Vespuccius, The Voyage from Lisbon to India, 1505-6, ed. C.H. Coote, 1894, p.29; Gaspar de Gama to el-Rei, India, n.d., Cartas de Affonso de Albuquerque, ed. R. Antõnio de Bulhão Pato, Lisboa, 1884-1935, III, pp.200-201; D, I, p.535; Almeida to el-Rei, 20/9/1508, li ted by E. Axelson, South-east-Africa, 1488-1530, 1940, Doc. 25, p.248.

The clue to Mombasa's change of fortune is to be found in Barbosa's account:

> This [i.e. Mombasa] is a place of great traffic, and has a good harbour, in which are always moored craft of many kinds and also great ships, both of those which come from Sofala and those which go thither, and others which come from the great kingdom of Cambaya . . . .[1]

These maritime connections of Mombasa are confirmed by a first hand account of the sack of the town, probably written by a German, Hans Mayr: "from here [i.e. Mombasa] trade was being carried on with Sofala and with Cambay by sea."[2] It will be appreciated that Cambay provided the trade goods - cloths and beads - which the Swahili used to barter for gold and ivory from Sofala. Mombasa had, therefore, become the headquarters of the Cambay merchants on the east coast, and because of its control of vital imports it had undermined Kilwa's position as a go-between in the Sofala trade. Hans Mayr bears testimony to Mombasa's hold on commerce: "There were in this city [of Mombasa] many cotton cloths from Cambay as the whole coast dresses in these cloths." So does Barbosa, who relates that the kings of the islands of Pemba, Zanzibar and Mafia are "clad in many fine silk and cotton garments, which they purchase at Mombasa from the Cambaya merchants."[3]

The problem which merits consideration now is the reason behind Mombasa's emergence as the headquarters of Indian ships. It is not known for certain when Indians first began to set course for

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1 Op.cit., I, p. 20.

2 D, I, pp. 530-1.

3 Ibid., 532-3; Barbosa, op. cit., I, p. 28.

eastern Africa in the later Middle Ages, but it seems that opportunity to sail to these waters arose when the Red Sea again succeeded the Persian Gulf as the highway for commerce between the Indian Ocean and the Mediterranean Sea. This had certainly occurred by the mid-twelfth century and, indeed, Chao Ju-kua provides the first unarguable literary evidence of Indian contacts with East Africa early in the next century. He writes: "Each year Hu-ch'a-la [i.e. Gujerat] and the Tazi [i.e. Arab] localities along the sea coast send ships to this country of Ts'eng-pa [Zanqibar, i.e. the East African coast]."[1] Truly, potential for inter-regional contact between southern India and East Africa was always limited as the demand for the commodities of Malabar came only from small, alien communities on the coast. So it is only the route from Cambay which need be fitted into the seasonal wind pattern of the western Indian Ocean.

Evidence for the reconstruction of this route has to be gleaned from such diverse accounts as Marco Polo at the end of the thirteenth century, Ibn Battūta in the second quarter of the next century, and the Portuguese, Barbosa and Pires at the beginning of the sixteenth century. From all these sources, Aden emerges as the prime focus of Indian mercantile activity in the western Indian Ocean. Ibn Battūta is the most expressive of them all, for he calls it the

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1 Chau Ju-kua, his work on the Chinese and Arab Trade in the 12th and 13th centuries, trans. F. Hirth & W.W. Rockhill, St. Petersburg, 1911, p. 126; G.R. Tibbetts, 'Early Muslim Traders in S.E. Asia', J. of the Malayan Branch of the Royal Asiatic Society, XXX, 1957, p. 12. The word "Indian" is used here to designate ships which came from western India, whether owned by Arabs long settled there or owned by Indians and manned by Arabs.

port of the merchants of India." Barbosa makes it evident that it was the farthest Cambay ships went, and that the Red Sea port of Jidda was the destination of only Calicut ships. Unlike the latter which sailed into the Gulf of Aden past Cape Guardafui, the former skirted the northern periphery of the Arabian Sea and made calls at Qalhat, south of Oman or at Dhofar on the Hadhramaut coast. On departure from Aden Cambay ships, presumably, next set their course for the ports of Somalia and Kenya.[1] It is possible that indepedant of this route, some ships sailed direct to the East African coast from India.

Indians probably started from their home ports later than Arabs, partly because October and November are dangerous months for tropical cyclones which usually occur east of the Persian Gulf,[2] and partly because winds off the coasts of Makran and Cutch blow mainly from the north-west and north in those months. Coupled with this late start was the necessity of making egress from the Gulf of Aden in the face of an easterly monsoon,[3] and it may thus be assumed that Indian ships reached East Africa in or after February. Those which came direct would have left India even later, in January, when the

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1 Gibb, op. cit., II, pp. 372, 382-4; Marco Polo, ed. & trans. A.C. Moule & P. Pelliot, 1938, I, pp. 440-1, 445; Barbosa, op. cit., I, 31, 33, 47, 55, 65-6, 77; T. Pires, Suma Oriental e, trans. A. Cortesão, Hak. Soc., 1944, I, pp. 16, 42-3.

2 Monthly frequency percentage of tropical cyclones in the Arabian Sea: October 18, November 23. Cf. December 6, January 4. Sheet B, Ind. Oce. Oceanog. & Met. Data.

3 The Arab dhow on which Villiers sailed took twelve days on the journey from Aden to Mukalla in December, while he was told that a direct voyage from Mukalla to Zanzibar could be completed in less than eight days with a steady north-east monsoon. Sons of Sindbad, pp. 41, 52 (see also pp. 24, 39-40, 62-3).

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monsoon is firmly established so as to shorten the duration of the journey.[1] During February, winds with a constancy of 61 to 80 per cent barely reach the equator and those of 41 to 60 per cent only 5°S. lat. (Fig. 10), and it was thus imprudent to sail too far to the south so late in the season. With a relatively short trading season, Indian vessels were sometimes forced to 'winter' in East Africa; Cabral found three Cambay ships, each of about 200 botte [one-third ton], at Malindi in early August 1500, and Almeida similarly saw several at Mombasa in mid-August 1505.[2] Normally, however, ships which left the home ports early probably completed the round journey within the span of a single monsoon.

It is in this context perhaps that the role of Mogadishu as an entrepôt for the gold trade can be explained, as at the time of their début on the east coast Indians would have had to set sail for home in early April as the merchant seamen from the Red Sea and the Persian Gulf. There is one rather dubious piece of evidence which might lend support to this hypothesis. At the end of the thirteenth century Marco Polo wrote of an island south of Socotra, which is variously spelt in the extant manuscripts and which most commentators were inclined to identify with Madagascar. The fourteenth century transcript edited by Moule has the form Mogedaxo and Pelliot has, in fact, argued that in Polo "neither the description nor the name applies to Madagascar."[3]

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1 Guillain, op. cit., III, p. 360; McMaster, loc. cit., p. 18.

2 P.A. Cabral, Italian text ed. F. di Montalboddo, Vicenza, 1507, and English trans. W.B. Greenlee, The Voyage of --- to Brazil and India, Hak. Soc., 1938, p. 65; Barros I.8.7.

3 Marco Polo, p. 428; P. Pelliot, Notes on Marco Polo, II, 1963, pp. 779-81; (cf. The Book of Ser Marco Polo, ed. & trans. H. Yule, rev. H. Cordier, 3rd ed., 1903, II, pp. 413-4, n.1).

Mention of an island doesnot negate this possibility. For Chao Ju-kua wrote of Ts'eng-pa, identified with Zanzibar, as an island of the sea south of Hu-ch'a-la /i.e. Gujerat/, and Polo himself (probably because he gathered his information in China) spoke of Canghibar, by which he also evidently meant the whole coast, as "a very exceedingly great and noble island" that is "2000 miles round." Under Mogadishu, he mentioned arrival of ships from Maabar, which is held to correspond to the Coromandel coast, although the attribution of twenty days for the outward and three months for the homeward journey is alone sufficient to make his account suspect.[1] The attractiveness of the hypothesis lies in the offer of a plausible explanation to Barros' claim that Mogadishu once controlled the Sofala gold trade.

The pattern of trade in Chinese porcelain, however, suggests that the tempo of Indian mercantile activity on the east coast increased only in the fourteenth century. Medieval Chinese coins so far recovered fall, with the exception of six, within the range 618 to 1295 A.D. The exceptions are coins of Cheng Tsung of Ming dynasty (1403-24) and are thought to have been connected with Chinese voyages to eastern Africa early in the fifteenth century. Lack of coins after the thirteenth century is associated with the "cash famine" in China and successive edicts to check the drain on specie. The famous edict of 1219 specifically recommended that silks, brocade, porcelain and lacquered wares should be used to pay for foreign goods instead of coins.[2] Of these, all but porcelain are perishable and,

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1 Chau Ju-kua, p.126; Marco Polo, pp.430, 431.

2 G.S.P. Freeman-Grenville, 'Some Problems of East African Coinage. From early times to 1890', JNR, No. 53, 1959, p.243.

indeed, Chittick in his excavations at Kilwa has shown that at the turn of the thirteenth century, imports of sgraffiato nearly ceased and Chinese porcelain became the typical luxury ware. Yet further north, on the coasts of Kenya and northern Tanzania, heavy imports of Chinese porcelain began only from the middle of the fourteenth century, and evidently coincide with the rise of Mombasa as the chief entrepôt of the coast.[1] The wares were not imported into East Africa direct from China and Gujerat was the main centre of distribution for the western Indian Ocean.[2]

By this time, Indians had probably discovered that they could stay in East Africa until late April and yet repair to the home ports before the onslaught of the south-west monsoon. The map for May (Fig. 15) shows that predominant winds in the western half of the Arabian Sea blow between south and west, and attain about Force 3, whereas in the eastern half they blow mainly from the west, and record a Force of 2 to 3 on the Beaufort Scale. Between the Horn and northern and southern India, the constancy of the wind varies during this month from 41 to 60 per cent and 21 to 40 per cent respectively. Besides, the East African coast current divides at this time at about 9° N., with the main current flowing eastwards across the central part of the Arabian Sea.[3] So in May a swift, if slightly riskier, passage

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1 Chittick, JAH, VI, 1965, p.286; Kirkman, S.Af. Arch. Bull., II, 1956, p. 92; G.S.P. Freeman-Grenville, 'Chinese Porcelain in Tanganyika', TNR, No. 41, 1955, pp.63-6; G. Mathew, 'Chinese Porcelain in East Africa and on the coast of South Arabia', Oriental Art, New Series, II, 1956, pp.50-5.

2 P. Wheatley, 'Geographical Notes on some Commodities involved in Sung Maritime Trade', Journ. of the Malayan Branch of the Royal Asiatic Society, XXXII, Part II, 1959, p.40; Barbosa, op.cit., I, p.146.

3 McMaster, loc.cit., p.18; Af.Pilot, p.39.

to Cambay can be readily accomplished from about the latitude of Mogadishu, while in April ships have to coast south Arabia and can only cut across in the neighborhood of Ras Hadd. Indians had, however, to reach their destination by about the middle of May so as to avoid the danger of being blown onto the land by the boisterous south-west monsoon.[1]

That this route was used in the fifteenth century is indicated by the course which Vasco da Gama set for India on his first voyage with the help of an Indian Ocean pilot. When he left Malindi at the end of April, he sailed within sight of the African coast for a couple of days before cutting across the Arabian Sea to make a landfall a few miles north-north-west of Calicut, soon after the middle of May. The pilot is stated in once source to have told Vasco da Gama,

> Do not approach the coast in this part /of the east coast of Africa north of Malindi/, steer straight for the open sea; you will then reach the coast /of India/ and be sheltered from the waves.[2]

Obscure as the last part of the quotation may be at first appearance,[3] it is susceptible of a meaningful interpretation if it is related to the time in which the voyage was made. The pilot's advice, evidently, was that only of a trans-oceanic route in late April would enable the

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1 See, for example, G. Pereira, ed., Roteiros portuguezes da viagem de Lisboa á India nos seculos XVI e XVII, Lisboa, 1898, p. 59.

2 Vasco da Gama, Port. text ed. A. Fontoura da Costa, Lisboa, 1960, & Eng. trans. E. G. Ravenstein, A Journal of the First Voyage of ---, Hak. Soc., 1898, pp. 46-7; al-Nahrawali (1511-1582), 'al-Bark al-Yamani fi 'l-fath al-'Othmani', cited by G. Ferrand, Introduction à l'astronomie nautique arabe, Paris, 1928, p. 186.
It might be mentioned here that in 1518 the Portuguese captured a Gujerati vessel between Socotra and India. It was stated to come from Malindi and to be bound for Cambay. D, V, pp. 506-7.

3 See Shumovsky, Três Roteiros ..., N. 51, p. 132.

the ship to beat the deadline of arrival in India.

Thus, with the curtailment of the 'deep-sea' journey consequent upon direct Indian commercial contacts with eastern Africa, the entrepöt function came to be invested in the ports of the northern part of the coast. Mombasa was preferable to any other site because it has the best natural harbour in eastern Africa (Fig. 17). The island lies in an indentation of the mainland, and the entrance is formed by a 1.2 mile wide break in the coral shelf between the Andromache and Leven reefs. The entrance channel then branches and leads to the two chief arms of the ria system, which are contrasted in area and depth. Mombasa Harbour or the eastern inlet, is narrower and shallower than the western one, formerly called Tuaca but now known as Kilindini Harbour. The latter is twice as wide, being on average some 600 yards across and slightly deeper with depths of five to twenty fathoms. Also, the channel of the former is contracted by a rock bar which has depths of less than three fathoms.[1] Yet the medieval town of Mombasa grew up beyond the anchorage of the eastern harbour. The chief reasons include the arrival of Muslim ships at the port during the north-east monsoon, the adequacy of the harbour for sailing craft of the Middle Ages, and the use of Port Tudor, approached through a winding but deep channel from the Mombasa Harbour, for careening dhows.[2]

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1 Af.Pilot, pp. 387-93; I.S. van Dongen, 'Mombasa in the land and sea exchanges of East Africa', Erdkunde, XVII, 1963, pp. 18-20; B.S. Hoyle, The Sea-ports of East Africa, Nairobi, 1967, pp. 15-17.

2 Guillain, op. cit., III, p. 231; idem, Album, Paris [1857], Pl.43. Cf. Hoyle, ibid., pp. 8-9, 17, 121-2. Almeida in 1505 apparently availed himself of the facility for careening, SD, p. 111, (Cf. D, I,p.535 .

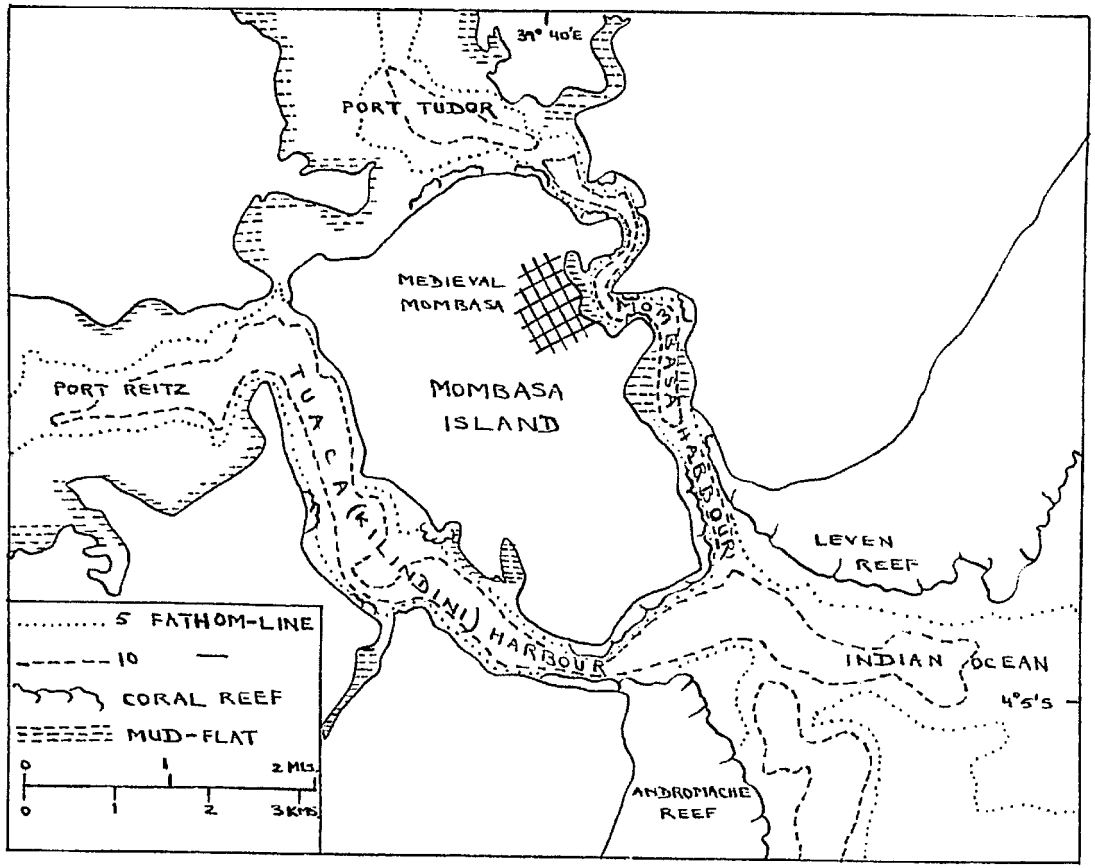

FIG. 17. THE HARBOUR OF MOMBASA.

ADAPTED FROM ADMIRALTY CHART NO. 666.

It is, however, clear from Portuguese records that Mombasa did not have a monopoly of the Indian traffic, for Malindi had similarly grown into an entrepôt, albeit subsidiary to Mombasa, on account of its intermediary position in the Sofala-Cambay commerce. Barbosa provides evidence of these contacts:

> They [i.e. Malindi merchants] are great barterers, and deal ... with the Moors and Heathen of the great kingdom of Cambaya; and to their heaven come every year many ships with cargoes of merchandise, from which they get store of gold [from Sofala], ivory and wax.[1]

Once again, the date of this development cannot be precisely determined but Malindi was sufficiently important to have been visited by Chinese junks early in the fifteenth century. Just as with Mombasa, so too with Malindi, the monsoonal regime in the western Indian Ocean for ships on India-East African route was the fundamental factor in the growth of both entrepôts.[2]

The roadstead opposite the town of Malindi - for there can be no doubt that the Melinde of the Portuguese is the modern settlement - is, however, no match for the harbour of Mombasa (Fig. 18). Here, anchorage may be obtained in depths of five fathoms but it is exposed to the full force of the north-east monsoon. There is a

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1 Op. cit., I, pp. 22-3.

2 It is relevant, in this context, to draw attention to a later event. When with the construction of Fort Jesus, the Portuguese made Mombasa their headquarters on the East African coast, they subsequently had to have, as Rezende recorded in 1634, an ancilliary customs house north of it. They chose Pate, apparently more to placate the local ruler than for its intrinsic site advantage. Rezende, however, significantly adds: "Ships arriving from the coast of India never call at the island of Pate on their outward journey, unless they are prevented by the monsoon from preceding to Mombasa." SD, p. 181.

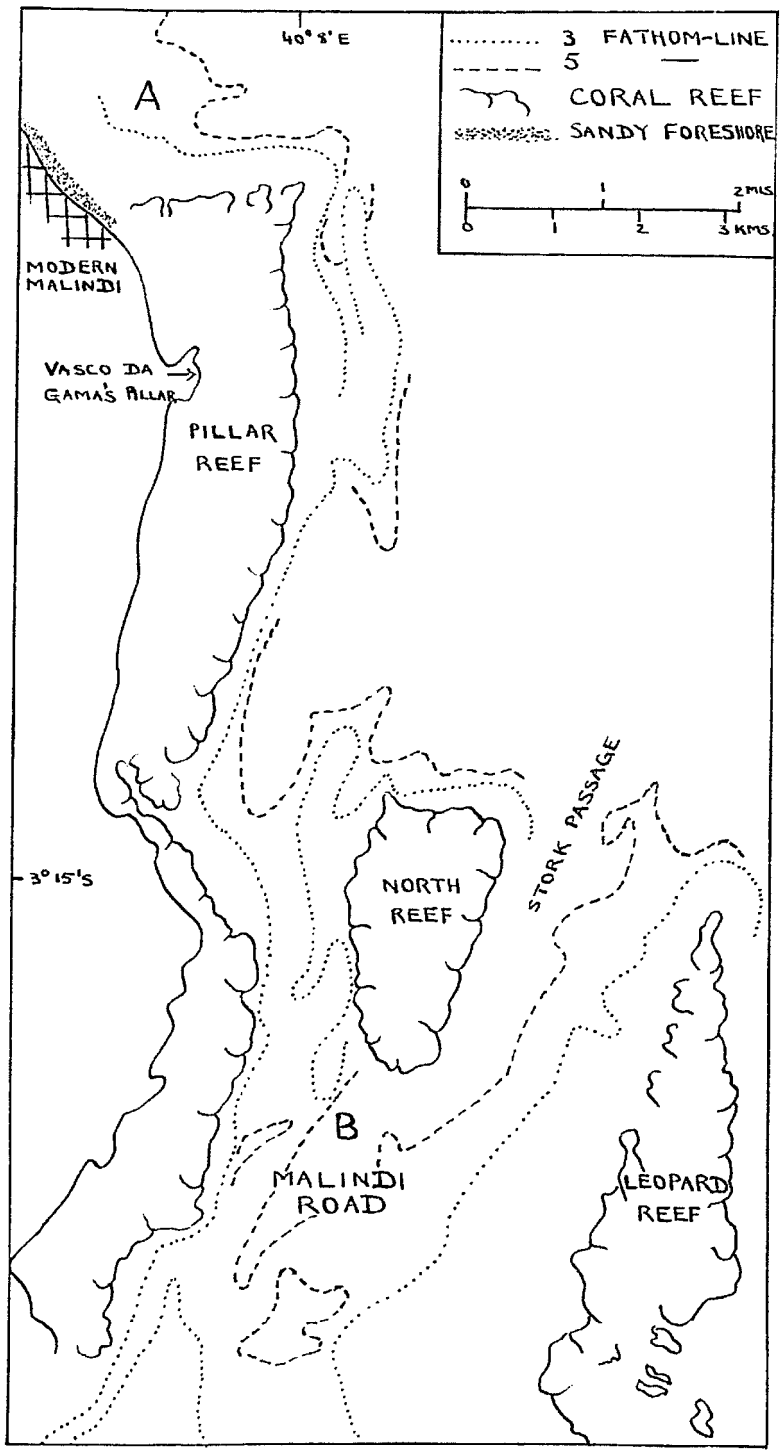

FIG. 18. ANCHORAGES NEAR MALINDI (A & B).

ADAPTED FROM ADMIRALTY CHART NO. 667.

better road three miles south of the town as it is sheltered from the north and the east by North and Leopard reefs; access to it is via Stork passage between the two reefs with a least depth of five-and-a-half fathoms.[1] Both Gama and Cabral anchored off the town, evidently close to Cambay ships, as outside the season of the north-east monsoon the anchorage is adequately sheltered. But that the southern roadstead was in use is indicated by the sixteenth century chronicler, Damião de Góis, who in an account of the former's first visit to Malindi remarked that "the anchoring place is far from the town as it [Malindi] is situated on a wild coast (costa brava)".[2]

On the other hand, there is a hint that Indians were not allowed a free hand in commerce at Mombasa, as is evidenced by an observation in the anonymous journal of the first voyage of Vasco da Gama. It is stated that "the Christian [i.e. Hindu] merchants in the town of Mombasa are only temporary residents, and are held in much subjection, they not being allowed to do anything except by the order of the Moorish king."[3] So Malindi may have given special inducements to Indians to draw them away from Mombasa. The Portuguese discovered that there was a deep-seated enmity between the two but they tend to blame dynastic relationship for it, just as they do for that between Calicut and Cochin on the Malabar coast.[4] It is perhaps

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1 Af. Pilot, p. 401.

2 Gama, op. cit., p. 44; Cabral, op. cit., p. 65; Góis, Crónica do felicissimo Rei D. Manuel, Coimbra, 1926, i.38.

3 Op. cit., p. 39.

4 Op. cit. E.g. Barros II.1.2.

more than just coincidental that these four were among the chief ports of the coasts of East Africa and southern Malabar. The basis of the inter-port rivalry may rather be sought in their attempts to attract traffic from across the ocean to their respective ports. It is noteworthy that the Portuguese received a friendly welcome at the lesser ports and, indeed, during the first few years of the sixteenth century, they made Malindi and Cochin provisional headquarters of their mercantile activity in the western Indian Ocean.

Symbiotic relationship between East African entrepôts in the fifteenth century.

The distribution of ports in about A.D. 1500 is shown on Fig. 19. While several ports, designated major, were visited by ocean-going vessels, only three, namely Malindi, Mombasa and Kilwa are recognised as entrepôts, dependent on coastal sea-lanes. The most striking proof of this set up is provided by the first voyage of Vasco da Gama in 1498 which was, as far as East Africa was concerned, a reconnaisance. On the advice of a local pilot secured at Mozambique, Gama called both at Mombasa and Malindi and deeply regretted his failure, owing to contrary winds and currents, to put in at Kilwa. It is patent from the following citation from Barbosa's treatise that these entrepôts throve primarily on the seaborne commerce of Sofala, and so an attempt is made in this section to explore the nature of the relationship between them:

> And the manner of their [i.e. Moors'] traffic was this: they came [to Sofala] in small vessels named zambucos from the kingdoms of Quiloa [i.e. Kilwa], Mombasa and Malindi, bringing many cloths . . .

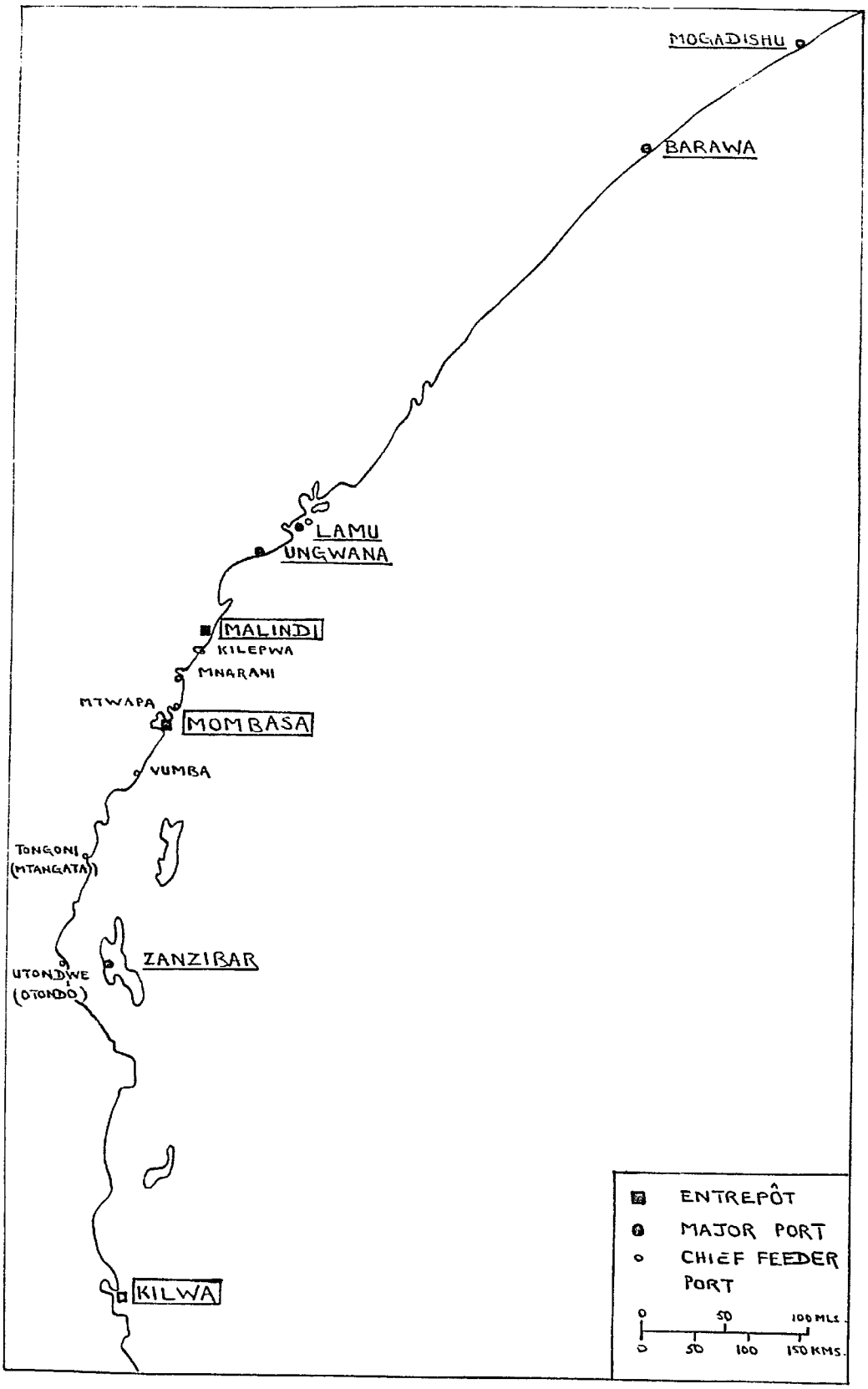

FIG. 19. PORTS OF EASTERN AFRICA IN A.D. 1500.

> and many small beads . . . . and these wares the said Moors who came from Malindi and Mombasa, purchased from others [i.e. Cambay merchants] who bring them hither and paid for in gold at such a price that those merchants departed well pleased.[1]

Despite the rise of Mombasa and Malindi, therefore, Kilwa had not been 'squeezed out' from the lucrative trade of Sofala. The regimento which the King of Portugal gave to his first viceroy indeed spoke, in connection with Kilwa, of "the great wealth in gold due to the long period of time they have had the trade of Sofala" and of "much merchandise of profit to the trade of Sofala due to the ships which put in there to trade."[2] Barbosa states and Alcaçova implies that the local run in fact comprised two legs, one from the Kenya ports to Kilwa, and the other from Kilwa to Sofala. Yet on the return journey from Sofala Alcaçova remarks that a call was not necessarily made at Kilwa, while Cabral sighted two vessels in the Mozambique Channel in 1500 which had come from Sofala and were bound for Malindi.[3] These considerations raise the dual problem of the relationships in the fifteenth century between Kilwa and Sofala, and between the former and Mombasa and Malindi.

Barros' version of the Kilwa Chronicle has it that after Kilwa had wrested control of the Sofala gold trade from Mogadishu, "the kings of Kilwa thenceforward , always sent governors to Sofala, that

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1 Op. cit., I, p. 68.

2 D, I, pp. 198-9.

3 Barbosa, op.cit., I, p. 18; Diogo de Alcaçova to el-Rei, Cochin, 20/11/1506, D, I, pp. 396-9; Cabral, op. cit., p. 62.

all business might be transacted through their factors." It is, however, claimed that relations between the two had been strained before the arrival of the Portuguese. For a certain governor Yusuf, whom Pero d'Anhaia had found at Sofala in 1505, had assumed the title of "king" and refused to obey his overlord "because of revolts and differences then rife [in Kilwa]."[1] Yet when Cabral enquired of the captain of his two prizes in the Mozambique Channel about Sofala, he was informed that it was "a mine of much gold and that a Moorish king possessed it, that this king lived on an island which is called Chiloa [i.e. Kilwa]." Further Alcaçova, who was the first clerk at Sofala, recorded that "after the king of Sofala whom Pero d'Anhaia killed began to reign, he never again paid dues to the king of Kilwa from those collected in Sofala."[2] Thus the rupture between Kilwa and Sofala appears to have occurred sometime between 1500 and 1505.

The relationship between Kilwa and Sofala gives us the background to the system of levy described by Alcaçova in this same letter:

> And when he [the merchant] returns to Kilwa, coming from Sofala he must needs go to Kilwa, and of the gold he brings he pays the king fifty miticals for each thousand miticals of gold and on going to Mombasa he pays nothing. And if he goes past Kilwa and does not enter there he must, however, go to Mombasa, and if he does not carry a clearance (alvara) to show that he has paid in Kilwa, there they will take these fifty miticals for each thousand miticals and send them to the king of Kilwa. [Italics mine].[3]

This part of the letter is, to a certain extent, marred by internal

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1 Barros, 1.10.2 (SD, p. 91).

2 Cabral, loc.cit., D, I, pp. 398-9.

3 D,I, pp. 398-9.

inconsistencies and the cumulative duty claimed to have been paid by merchants is incredibly high. Yet Alcaçova's is a unique document which purports to show the existence of a symbiotic relationship between Kilwa and Mombasa. He does not speak of the former's connections with Malindi but it has been argued that Malindi wrung "extra-territorial rights" from the sultans of Kilwa from the beginning of the fifteenth century. These concerned appointments to the newly-founded institutions of amīr and wazīr, apparently always bestowed upon personages connected with Malindi.[1]

The Middle Ages thus saw a progression from ports with no interconnection between them to entrepôts that were dependent on coastwise traffic. This was symptomatic not only of the changing organisation of commerce, but also of increasing affluence on the eastern coast of Africa. Yet neither Kilwa nor Mombasa ever gained the same measure of importance as Aden or Malacca enjoyed during the later Middle Ages. The reasons for this disparity in commercial importance between the two sets of ports are two-fold. The wind systems in the Red Sea and Gulf of Aden, and the Bay of Bengal and China Sea converge respectively upon Aden and Malacca, and these ports thus formed the hub of the Indian Ocean trade-routes. On the other hand, in the East African zone the monsoon regularly alternates between the

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[1] J.M. Gray, 'The French at Kilwa, 1776-1784', TNR, No. 44. 1956, pp. 29-30; Freeman-Grenville, Med.Hist., pp. 56, 118-20.
For the supposed continuation of the practice into the eighteenth century, see Gray, ibid., pp. 44-5 and G.S.P. Freeman-Grenville, The French at Kilwa Island, Oxford, 1965, pp. 42-5.

north-east and the south-west, so that Kilwa and Mombasa were the termini of a branch route, while the trunk route skirted the northern shores of the Arabian Sea. The configuration of the Indian Ocean, moreover, endowed the Gulf of Aden and the Straits of Malacca with a nodality which enabled Arab and Indian merchants to set up trade monopolies. But in eastern Africa, the southerly source of the most prized for exports and the length of the sailing season perforce diffused management of commerce. Clearly, the east coast entrepôts could enjoy only regional importance.

CHAPTER IV

The Superimposition of Portuguese Establishments on the Indigenous Pattern of Ports in the early Sixteenth Century (1498 - 1512)

With the breakthrough of the Portuguese into the Indian Ocean in 1498, their ships regularly began to visit eastern Africa en route to western India. The experience of the early voyages, however, soon taught them that it would not suffice merely to send an annual expedition to take on a cargo of spices, but that it was essential to maintain permanent establishments in the Indian Ocean, protected by forts and manned by garrisons. So it was that the first viceroy, Francisco de Almeida, was dispatched in 1505 armed with a regimento of some 30,000 words, which is as much a bold outline of Portuguese strategy as detailed instructions for the successful accomplishment of the expedition. The route to western India was via eastern Africa, but rather than conceive the latter as an obstacle to be circumvented, it was envisaged that it could contribute towards the cost of exploitation of India's riches.

The chief means of exchange in India was gold, and to avoid the drain on specie from Portugal it was resolved to utilise the gold of Sofala as "funds for pepper (cabedal da pimenta)". Thus Cide Barbudo, who was the first captain from Portugal to call at Sofala after the establishment of the fortress, carried these instructions:

> And we hereby order Pero de Anaia [captain of Sofala] that, when and as you leave Sofala, he should deliver to you all the gold lying ready in our factory for you to carry to India . . . where it is very necessary to further her resources (pera o cabedall della).[1]

To trade for gold in Sofala, however, it was necessary to import Cambay cloths and beads, and that Lisbon was cognisant of this by 1505 is shown by the King's assertion in his regimento to Almeida that "the merchandise of Cambay brings much profit in Sofala according to the information we have."[2] These goods from Gujerat could in turn be paid for by African products, more especially ivory and copper, which were available in abundance in the country behind Sofala.

The Portuguese knew that they thus proposed to enter into what had hitherto been a Muslim preserve but failed to estimate the latter's capacity to respond to their challenge. They had a need for a spacious, deep-water harbour in eastern Africa where their India fleets could put in to await the commencement of the appropriate season to complete the last lap of the journey to India. It had been planned to use such a port as a base of operations against the Swahili, to impose a blockade of trade goods in demand at Sofala so as to 'squeeze them out'. Yet so long as these traders could have access to Cambay cloths and beads, and could breach the ineffective maritime

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1 Regimento [September ? 1505], Documentos sobre os Portugueses em Moçambique e na Africa central, Lisboa, 1962, (in progress), I, pp. 240-1.

2 Regimento, 5/3/1505, D, I, pp. 240-1.
Barter trade in Cambay goods yielded exorbitant profits. See analysis of extant statistics in A. Lobato, A expansão Portuguesa em Moçambique de 1498 à 1530, Vol. III, Aspectos e problemas de vida economica de 1505 à 1530, Lisboa, 1960, pp. 320, 353, 363, 365.

blockade, they were assured a share in the carrying trade of the Mozambique coast. Initial Portuguese commitment in eastern Africa was too limited for their monopoly to be exclusive.

It is, therefore, unrealistic to look upon the early sixteenth century as a period of co-existence of a dual port complex, for the Portuguese and the Swahili respectively endeavoured to usurp and prevent the gold monopoly. Rather, it must be viewed as super-imposition of the Portuguese establishments on the indigenous pattern of ports, since spatial readjustments on the part of the Swahili are implicit in the process. The Portuguese strategy and the Swahili response are shown diagramitically in Fig. 20. With their limited aims in eastern Africa, the Portuguese thought they could centralise trade at a few ports. Almeida's regimento was based, as will be seen later, on the historic voyage of Vasco da Gama, but owing to developments in 'deep-sea' trade-routes subsequent to that reconnaissance, the Portuguese were obliged to reappraise their position soon after the establishment of the first fortresses. Meanwhile, with the continuation of the Swahili traffic, changes occurred in the relative status of certain ports as trade-routes were realigned to avoid centres under Portuguese control. Both processes proceeded simultaneously but it is convenient to examine them in turn.

Portuguese fortresses at Sofala and Kilwa

Owing to Lisbon's single-minded concentration on gold, it is natural that Sofala should have been the site of a fortified factory. The port was famous as the most important outlet for gold but in the

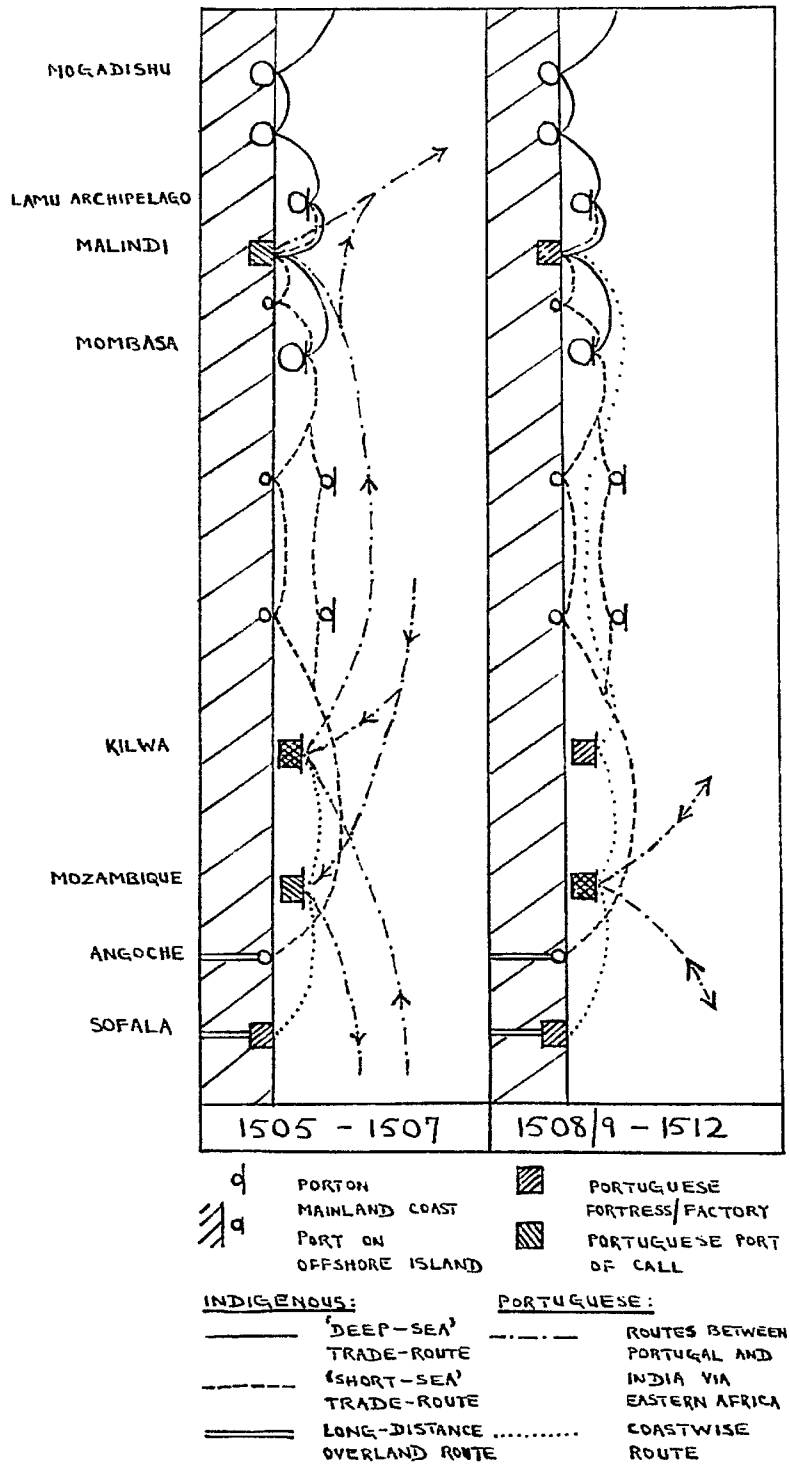

FIG.20. PATTERNS OF PORT DEVELOPMENT IN THE EARLY SIXTEENTH CENTUARY.

later Middle Ages its trade was regulated by a nominee of the Sultan of Kilwa. So when Pedro Alvares Cabral followed in the wake of Vasco da Gama, he was entrusted with letters for that sultan with "the purpose of granting us [i.e. to the Portuguese] the traffic and trade of the said island [of Sofala]."[1] The request was, according to Barros, met first with prevarication and then with refusal, but the Portuguese soon discovered that they could dispense with the protocol of prior approval of the sultan of Kilwa. For when Gama returned to the Indian Ocean in 1502, he succeeded to barter some gold in Sofala, and if Correia can be believed, both Sancho de Tovar in 1501 and Afonso de Aguiar in 1504 did likewise.[2] It must have been clear to the Portuguese that Kilwa could be by-passed, but they erroneously assumed that if a factory were established at Sofala and control of imports retained, gold would continue to flow to Sofala and so into their coffers.

The fortress was to have been put up by the armada of 1505 but because the first captain of Sofala dropped out at the last minute, the burden of establishing it fell on Anhaia himself, who accomplished the task by the end of October 1505.[3] Sofala was not, however, suited

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1 El-Rei to King of Castile, 1505, D, I, pp. 46-7.

2 João de Barros, Da Asia, dos feitos que os portuguese fizeram no descobrimento e conquista dos mares e terra do oriente, Lisboa, 1777-8, I.5.3; Tomé Lopes, Italian text in Ramusio, Navegationi et Viaggi, I, Venice, 1563 & Port. trans. in Collecção de Noticias para a Historia e Geografia das nações ultramarinas, Academia Real das Sciencias, II, No. 5, Lisboa, 1813, p. 160; Gaspar Correia, Lendas da India, Lisboa, 1858-66, I, pp. 227-9; EPM, vol. I, Descobrimento e occupação da costa, 1498-1508, Lisboa, 1954, pp. 68, 71-4, 204-5 (N.289), 206, (N.293).

3 Barros I.9.6; EPM, 1, pp. 97-8.

to accommodate ships of the carreira da India (Fig. 21). First, along this stretch of the coast there is an extensive shoal or bank which extends far into the sea, and upon which waves sometimes run so high and currents are so strong, that the locality was dreaded by mariners. Near Sofala, however, it is pierced by two channels which have depths of two to three fathoms, and the Portuguese established their fortress near to the point where these channels meet, as indicated on the map. Secondly, across the entrance to the northern channel (which receives a small river at the head of the bay) is a bar which prevents the passage of large vessels. Anhaia himself entered the river with four ships, while the two larger ones rode at anchor outside.[1] The Portuguese, therefore, had to select another port as a way-station for Indiamen and, as will be apparent later, it had to be north of Sofala in view of the monsoonal regime in the Indian Ocean.

Kilwa was Lisbon's choice in 1505 and, as Correia recorded, it was "to control (senhorear) the coast in the traffic of cloths for Sofala and also [to enable] the naos of the kingdom which cannot cross over [to India] to winter there."[2] Both these functions come through the extant correspondence of the first captain of Kilwa, Pero Ferreira Fogaça. He made a special point of reporting to his King the prizes which he made and enumerated the contents of each. He also

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1 Pedro Barreto de Rezende, 'Do Estado da India' in G.M. Theal, Records of south-eastern Africa, London, 1898-1903 (Reprinted, Cape Town, 1964), II, pp. 380, 403; Correia, op. cit., I, pp. 570-1.

2 Op.cit., I, p. 540.

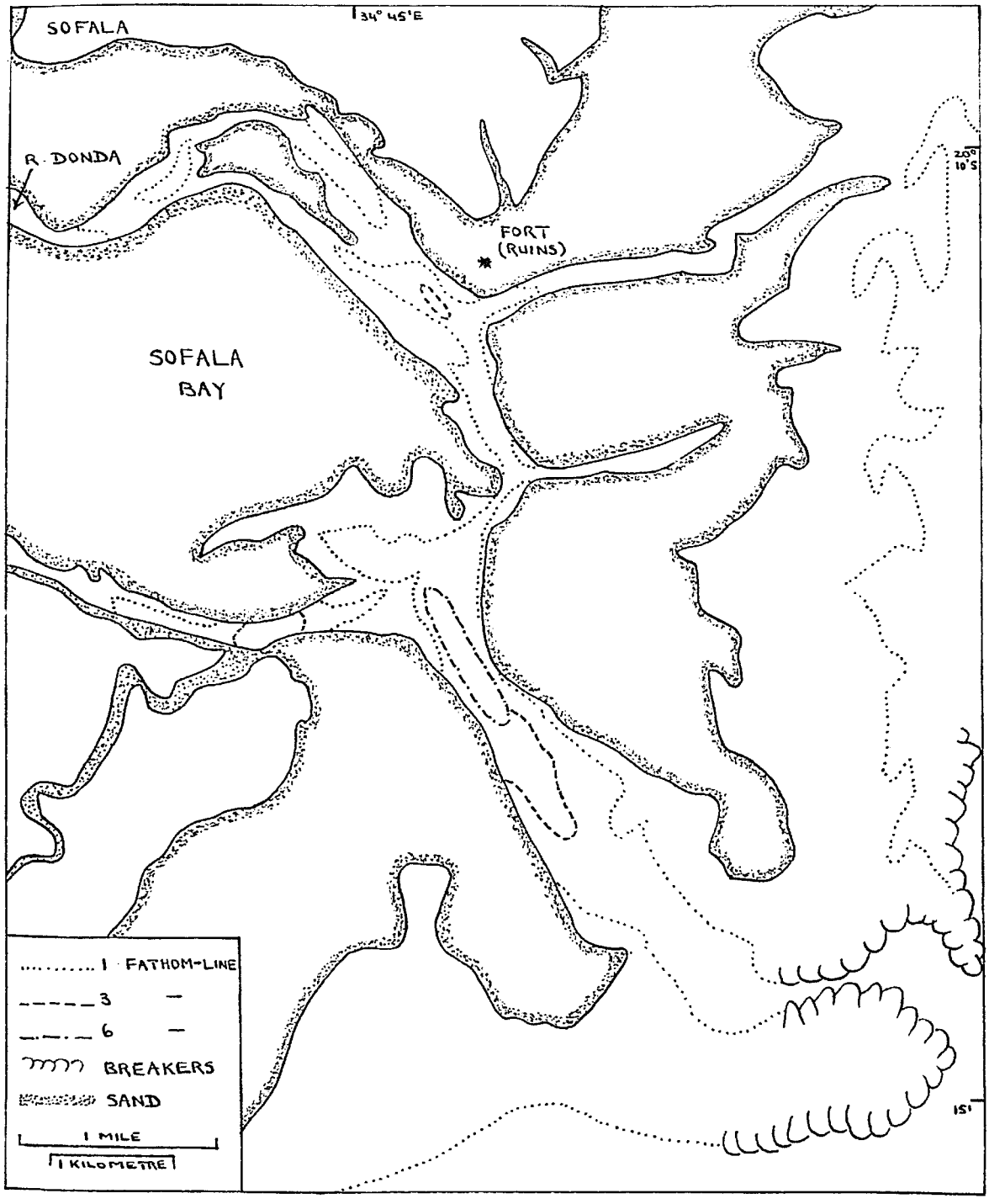

FIG. 21. THE SOFALA RIVER.

ADAPTED FROM ADMIRALTY CHART NO. 642.

repeatedly emphasised the necessity of seeking provisions, chiefly from the islands of Pemba, Zanzibar, Mafia and the Comoros, so as to provide the garrison of the fortress at Kilwa, as well as the crews of ships of the carreira which called at the port.[1] It is first necessary to assess Kilwa's success or otherwise in carrying out these functions before reasons for its choice can be analysed.

The Portuguese aspired to monopolise the traffic in gold and so their policy was to bar the Swahili from the carrying trade in "cloth and [other] merchandise" used for barter in Sofala. This imposed upon them the arduous task of impeding Swahili passage beyond Cape Delgado. During the first year, only four zambucos were captured with gold (worth about 2775 miticals) and none with cloth.[2] The total number of prizes was higher but most of the rest carried provisions, and as the chronicler Barros admitted "our men in the ships that guarded the coast, on pretence of the King's service, sometimes exceeded their orders (o modo)."[3] The ineffectiveness of the blockade, however, was not due to Kilwa's intrinsic disadvantage

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1 Fogaça to el-Rei (Summary), Kilwa, 31/8/1506 in E. Axelson, South-East Africa, 1488-1530, 1940, pp. 240-4 (partially trans. in D, I, pp. 617-621); same to same, Kilwa, 22/11/1506, As Gavetas da Torre do Tombo, Centro de Estudos Históricos Ultramarinos, Lisboa, 1961- (in progress), IV, pp. 396-8, 402-4 (partially trans. in D, I, pp. 755-761).

2 Barros I.10.6; Fogaca to el-Rei, ibid.
Fogaça stated in the same letter that he had then over 4000 miticals in the factory but the amount did not wholly consist of booty from the Swahili vessels. He had, for example, confiscated 1410 miticals carried by Francisco de Anhaia, since the gold had not been "registered (recadaçam)".

3 Ibid.

as a base of operations, but rather, due to the inadequacy of ships to cope with the magnitude of the task. For the port had been equipped only with one caravel and one brigantine, one of which had, moreover, been detailed for the service of the fortress of Sofala.[1]

Kilwa's role as a way-station of the carreira da India was to provide shelter and provisions for outward-bound ships, which had to wait for an opportune time to cross over to India, as well as to tranship to Sofala Cambay goods discharged by vessels on the return journey from India. Even those ships which put in at Kilwa on the voyage from Lisbon had, more often than not, previously called at Mozambique. This was contrary to the King's intentions for he had laid down in Almeida's regimento that ships separated from the convoy will "seek you in ------ [Kilwa] since you shall not have need to call at any other place on the coast before this."[2] Similarly, on the homeward journey from India, ships had, since the second voyage of Vasco da Gama in 1502, found it expedient to call only at Mozambique. With no warehouses in the port and no coastal crafts at hand it was difficult to arrange for the transhipment of goods to Sofala, as Vasco Gomez de Abreu discovered in 1506.

The provision of these trade goods from India may be examined here in some detail for the years 1506-7. When Abreu and João de Nova left India in February 1506, the viceroy entrusted both with a cargo of cloths for Sofala. The former put in at Mozambique

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[1] Barros, I.8.7; Almeida's regimento, D, I, pp. 200-1.

[2] D, I, pp. 170-1.

and vainly attempted to persuade Pero de Quaresma, who was bound for Kilwa, instead to "take to Sofala some of the cloths she [Abreu's vessel] carried." It is not known how they were eventually transported to Sofala but the captain's acknowledgment of receipt in early November apparently refers to this cargo.[1] Nova, on the other hand, made for Kilwa and his load was transhipped by Quaresma's caravel which must have reached Sofala at the beginning of 1507.[2] So did the consignment carried by Nuno Vaz Pereira, who was sent out by the viceroy to settle the succession dispute at Kilwa and to assume the capitainship of Sofala. There is only one more reference to a cargo for Sofala in 1507 but unlike the others, Lucas da Fonseca was evidently bound direct for that port. Despite Castanheda's claim, Lobato dates this voyage to the second half of 1507.[3] Thus, of the four known shipments from India, only one was off-loaded at Kilwa, when the number might have been two, if not three.

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1 Barros I.9.5; Quaresma to el-Rei, Mozam., 31/8/1506, D, I, pp. 628-9; Manuel Fernandes to el-Rei (Summary), 2/11/1506, D.I, pp. 692-3.

2 Fogaça to el-Rei, 22/12/1506, D, I, pp. 756-9; See acknowledgment by Alvaro Fernandes, 31/12 [1506], D, I, pp. 778-9.

3 Viceroy to el-Rei (Summary), 27/12/1506, D, I, pp. 764-5; F. Lopes de Castanheda, Historia de descobrimento e conquista da India pelos Portuguezes, Coimbra, 1924-33, ii. 31 (cf. Damião de Góis, Crónica do felicissimo Rei D.Manuel, Coimbra, 1926, ii. 21); EPE, I, pp. 141-4.
Almeida informed Albuquerque in a letter dated to 1507 that "I had sent from here very urgently a ship to Sofala with merchandise and things they are in great need of there . . . ." (D, II, pp. 12-3). This is presumably an allusion to the voyage of Fonseca mentioned by the chroniclers.

With Kilwa's patent failure to discharge its functions as a way-station, it is incumbent to seek reasons which influenced its choice in the first place. The pattern of factories outlined in Almeida's regimento is clearly related to the route pioneered by Vasco da Gama in the Indian Ocean in his epic journey of 1498. That section of the route between eastern Africa and western India on the outward journey was consistently followed by his compatriots for almost a decade. Now, Gama left Lisbon in July, and as Barros observes, he could not have made "choice of the months, as we [i.e. the Portuguese] do at present to profit by the trade winds which blow in those parts, for at that time as little was known of the lands they were going in search of as of the winds which were favourable for navigation."[1] He reached the coast of eastern Africa in March of the following year and the course which he fashioned from Malindi to Calicut towards the end of April was under the pilotage of an Indian Ocean mariner. It was argued in the previous chapter that this was the route probably used by Indian ships in the later Middle Ages, for wind and current conditions in May are favourable for a passage away from the coast north of Malindi and across the ocean in an arc to approach land in the neighbourhood of Goa.[2]

When Cabral set out in 1500, it had already been decided, as Barros again observes, that the appropriate time to leave Lisbon was in March.[3] This meant though that ships normally arrived in the

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1 I.4.2.

2 Supra, pp.141-2.

3 I.5.1.

Indian Ocean in August and had to sail for India with the 'tail-end' of the south-west monsoon, in contradistinction to the passage made by Gama during the 'build-up' of that monsoon. So although the Portuguese promptly realised the propitious month to sail from Lisbon, they slavishly adhered to the April-May route on the outward journey between eastern Africa and western India for almost a decade.[1] Consequently, it was this route which came to be studded with factories, as envisaged in Almeida's regimento of 1505. Later the Portuguese discovered that they could leave Lisbon, with equal facility in September to arrive in East African waters in March. Such winter fleets first began to set sail in the fourth decade of the sixteenth century, and were occasionally fitted out after 1570. Had the Portuguese decided in 1500 that Indiamen should leave Lisbon in September rather than in March, the subsequent history of the east coast might well have been different.[2]

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1 The roteiro of Aleixo da Motta (c.1621) lays down the same route from Lisbon to Mozambique irrespective of whether ships depart in March or September, but from Mozambique to Goa he discusses separately the route in the months of August and March. G. Pereira, ed., Roteiros portuguezes da viagem de Lisboa á India nos séculos XVI e XVII, Lisboa, 1898, pp. 95, 117-8, 122-3.

2 A. Braamcamp Freire, 'Emmenta da Casa da India', Boletim da Sociedade de Geographia de Lisboa, 25ª and 26ª serie, 1907-8 (list of Indian fleets to 1561); L. de Figueiredo Falçao, Livro em que se contem toda a fazenda e real patrimonio dos reinos de Portugal, India . . . e outras particularidades, Lisboa, 1859 (list to 1612); S.F. Paez, As famozas armadas portuguesas, 1496-1650, Rio de Janeiro, 1937. It is of interest, in this context, to note that Gaspar Manuel(c.1604) in his roteiro recommended that ships should 'winter' at Mombasa rather than Mozambique towards the end of the south-west monsoon if it was feared that a passage to India could not be effected. At the time that he wrote, the Portuguese had a fortress in both the ports. Pereira, loc. cit., p. 54.

It is instructive to compare the positions of the offshore islands of Kilwa and Andjediva in the Portuguese strategy, for they were selected as the first ports of call in eastern Africa and western India respectively. They were thought to lie at cross-roads, at the intersection of the outward route of the Portuguese in the Indian Ocean with the local Muslim routes to Sofala and Jidda respectively. It was apparently reasoned that they would thus provide facility to berth as well as opportunity to pillage. Ships would put in at Kilwa to await the opportune time to cross over to India, and those that arrive there late in the season will 'winter' at Anjediva rather than risk the coastwise journey to the Malabar marts.[1] Kilwa and Anjediva, too, would harass local shipping and so ensure absolute Portuguese monopoly in the vital commodities of gold and spices.[2] Within a year of the establishment of fortresses at these two ports, however, the Portuguese realised their folly. Both were suitable points on the April-May route but not on that of August-September, and their value as bases for depredations was reduced in the one case because of inadequacy of patrol boats and in the other because of the realignment of spice routes via the Maldive Islands to the Red

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1 On Anjediva, e.g., some of the ships which accompanied the first captain of Sofala were to leave for India immediately after the construction of the fortress. They called at Kilwa and Malindi and reached Anjediva about the middle of May (Castanheda 13th and Góis 18th) 1506 but feared that "they would be driven ashore if they went to Cochin, it being the beginning of Winter" and so 'wintered' there. Castanheda ii.27.

2 On Anjediva, e.g., when the first viceroy reached there in September 1505, he sent two ships with instructions "to proceed from that place of Anchediva to Monte de Eli and to force to it [i.e. Anjediva] all Moorish naos [and] those that did not do so to sink them (as metessem no fundo), chiefly those of Mecca and Calcicut". Barros, i.8.9.

Sea.[1] Under the circumstances, the Portuguese abandoned both the fortresses.

By December 1506 the viceroy had sized up the position and advised his King "to exchange the fortress of Kilwa for a small shelter (escapola) in Mozambique."[2] The decision to pull out was, strangely enough, put off till 1512, but to all effects and purposes, Kilwa had ceased to be important to the Portuguese after 1507. As for the Swahili traders, they had deserted it for the northerly ports two years earlier because of the King's regulation which forbade to them traffic in any articles that had value in Sofala.[3] Kilwa, consequently, failed to pay the annual tribute of 1500 miticals imposed upon it in 1502, and when the viceroy was pressured to act, he wrote back that it was futile to insist on payment but that he had "ordered him [i.e. the sultan of Kilwa] to pay half of all his dues, and it will be much if it amounts to 100 cruzados [= 80 miticals per annum]."[4] Pereira, upon whom the viceroy had conferred special powers, abrogated the King's order in 1506, and the immediate effect was that "more than twenty zambucos accompanied him, full of people

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1 Supra, p.162; Barros 1.10.5.

2 Viceroy to el-Rei, 27/12/1506, D, I, pp. 764-5. Note that the letter did not reach Portugal before the departure of the armada of 1507. See EPM, I, p. 154.

3 Barros 1.10.6.

4 Portuguese chroniclers disagree on the amount of tribute exacted from Kilwa but contemporary evidence fixes it at 1500 miticals. J. Strandes, Berlin, 1899, Eng. trans. J.F. Wallwork, The Portuguese pe iod in East Africa, Nairobi, 1961, N.26, p. 53; Axelson, op.cit., N.3, p. 57. Almeida to el-Rei, 5/12/1508 in Arquivo Português Oriental (Nova edição) ed. A.B. de Bragança Pereira, Bastorá-Goa, 1936-40, IV.1.1, p. 298.

and carrying a quantity of merchandise to Kilwa."[1] The King, however, does not appear to have endorsed this action and Kilwa so lapsed into insignificance that it did not recover, even after the Portuguese withdrawal in 1512.

Portuguese factories at Mozambique and Malindi

Notwithstanding the King's signature in the extant copy of Almeida's regimento, it is considered to be a final draft as it contains blank spaces where the first port of call in the Indian Ocean should have been specified. The King's ambivalence is underlined by inconsistencies in his instructions, for in one place Kilwa, and in another Mozambique, appears to be the port meant.[2] It has already been remarked that Almeida was supposed to help construct the fortress of Sofala but when its first captain dropped out of the fleet, amendments were made to the regimento and Kilwa became the first stop in the Indian Ocean. The King had been persuaded that expediency demanded only one other establishment besides Sofala, and it seems that Mozambique was considered as Almeida's first port of call only because the viceroy's original instructions were to proceed to Sofala with a few of the smaller ships, while the rest anchored in Mozambique.

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1 Barros, loc.cit., Pereira also ordered the restoration of some of the booty made by the Portuguese off Kilwa, and explained that his action was "to bring people to this city that is presently totally deserted that they may see how favourably His Highness looks upon the Moors." Mandado, 14/1/1507, D, II, pp. 36-9.

2 D.,I, pp. 174-5, 178-9 and 190-1.

It must, nevertheless, be recognised that Mozambique had been shown to be useful as a port of call on the return journey from India. Cabral had, for instance, dispatched a letter from Mozambique to Kilwa by a zambuco for the commander of the 1501 India fleet, and Almeida detached a ship from his convoy to collect any letters left behind in Mozambique by the 1504 armada while he himself proceeded to Kilwa. Castanheda comments that it was then usual for captains returning from India to leave letters in Mozambique "that those who were on the way thither might know if the country was at peace or war."[1] This need arose from the fact that the outward and inward fleets always crossed at sea. The reason why homeward-bound ships called at Mozambique rather than at any other port is to be found in the spatial extent of the north-east monsoon.

Ships were recommended to leave India by the end of December or the beginning of January at the latest, depending upon the port of departure.[2] They were, however, frequently delayed in their attempts to make up the cargo, and when they finally put to sea they were anxious to sail as quickly as possible into the Mozambique Channel, and so to the farthest extent of the north-east monsoon. Otherwise they risked a sojourn of some six months in eastern Africa until about October, when they could resume their journey to Portugal.[3]

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1 Barros I.5.10; Gaspar da Gama to el-Rei, [1505], D, I, pp. 124-5; Castanheda ii.3.

2 Motta, loc.cit., pp. 140, 146.

3 Letter from Albuquerque, Cochin, 11/10/1510, D, II, pp. 532-5. Ships which were delayed into February sailed east of Madagascar on the way to Portugal but, as will be seen below, this route was not common, at least in the first decade of the sixteenth century.

The King was well informed about this problem, as is clear in his instructions to Cabral. On return from India, the captain was advised to divide his fleet at Malindi into fast and slow sailers so as not to retard the progress of the former by having to wait for the latter.[1] Mozambique subsequently became the only port at which ships called on the homeward run to leave a message for the fleet which would have set out from Lisbon in March. With the advent of permanent establishments in India, that port lost much of its importance as a centre for communication and, in any case, as the Portuguese met no hostility there, they could rely on the person of the Sheikh as they did at Malindi.

The position of Mozambique vis-à-vis Kilwa, as visualised in 1505, is reflected in the King's regimento to Cide Barbudo who sailed from Lisbon in the same year as the viceroy on a special mission in south-east Africa. He was to set course from Sofala for Mozambique to ascertain whether or not ships bound for Portugal had already passed, but he was to dispatch his companion, Pero de Quaresma, to Kilwa to await the arrival of the commander of next year's fleet.[2] However, Lisbon's early disenchantment with Kilwa prompted a reappraisal of Portuguese strategy in 1507. There exists a draft of a letter, dated from internal evidence to 1507, in which the King informs his viceroy of his decision "to set up an establishment (fazer huũa casa)", i.e. a factory, at Mozambique.[3] The task

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1 Regimento in Arq.Port.Orien., I.1.1, pp. 109-10.

2 Regimento, D, I, pp. 276-7, 280-1.

3 Cited in EPM, I, p. 214.

was entrusted to Vasco Gomes de Abreu, who set out in that year to take up his appointment as captain of Sofala and Mozambique. Some Portuguese chroniclers thus maintain that the factory was established in 1507, but on the strength of contemporary evidence Lobato has shown that work on it began in April or May of 1508. The delay occurred because Duarte de Melo, who was to be the first factor, waited for seven months for the return of the captain from Sofala who had, meanwhile, been lost at sea.[1]

Mozambique thus came to supplant Kilwa as a way-station in eastern Africa and the reasons for this change of fortune may now be considered. As has already been seen, Indiamen left Lisbon in March and the general consensus was that if they rounded the Cape of Good Hope before the 20-25th July, they should proceed via the inner route, west of Madagascar, but that if they doubled the Cape between the end of July and the end of August, they should take the outer passage east of Madagascar (por dentro ou por fora da ilha de São Lourenço)[2]. Ships which arrived at the Cape later than the beginning of September normally had to 'winter' in eastern Africa until March or April of the following year. Passage through the Mozambique Channel

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[1] Barros II.1.6. Castanheda i.44 and Correia, op.cit., I, p. 275 even claim that it was established by Vasco da Gama in 1502. See EPM, I, pp.218-21,225-8. Duarte de Lemos to el-Rei, Mozam., 30/9/1508. This is the crucial part of the sentence: "Duarte de Melo waited for him [i.e. Vasco Gomes de Abreu] for seven months . . . but when he did not come, he gave orders to begin the fortress with very few people" (D, II, pp. 290-1). Abreu reached Sofala from Lisbon in September 1507.

[2] Vicente Rodrigues in Pereira, loc.cit.,pp.20,24; Motta, ibid. p.107; Dom Antônio de Ataide in C.R. Boxer, 'Moçambique island and the "carreira da India"', Stvdia, No.8,1961,p.100; F.de Vasconcelos, 'Sobre a navegação entre Lisboa e a India, segundo uma junta de pilotos em 1635', Boletim Geral do Ultramar,XXXV, Nos. 403-4,1959,p.44. Gaspar Manuel (loc.cit.,pp.46-7) challenged the ruling on dates and claimed that ships which were in lat. 26°S could take the inner route until 3rd September. His was, however, a minority opinion. The voyage from that latitude to India is stated to take 50 to 55 days, which entailed the risk of failing to reach the Indian destination before the commencement of the north-east monsoon. But then Manuel considered it better to 'winter' in eastern Africa rather than to follow the passage east of Madagascar, and Montez (infra p.187) has intimated that he was motivated by economic considerations.

was not recommended after about the 25th of July, because it was considered essential for vessels to reach the way-station before the end of August so as to catch the 'tail-end' of the south-west monsoon and be in India by late September or early October.[1] Wind constancy in the Mozambique Channel in September (Fig. 22) is only between 21 and 40 per cent but beyond, for the greater part of the route, it is in excess of 60 per cent, to fall again to 41 to 60 per cent in the eastern part of the Arabian Sea. Hence, a swift passage could be made if ships left the Mozambique coast towards the end of August.

Unlike the April-May route to India, that of August-September did not have to skirt the East African coast. For while wind and current conditions during the 'build-up' of the south-west monsoon facilitate a trans-oceanic voyage generally from beyond Malindi, during the 'tail-end' of the monsoon, it still extends in a deep curve from the Mozambique Channel all the way to the Indian sub-continent (cf. Figs. 15 and 22). From the point of view of both the outward and homeward journeys, the ideal location of a way-station was near the zone of convergence of two wind systems, somewhere in the Mozambique Channel beyond the latitude of Sofala. Mozambique port in about latitude 15°S had clearly the best location, for the north-east monsoon blows with a constancy between 21 and 40 per cent as far as about 20°S in the Mozambique Channel in January, and the south-west monsoon prevails with the same constancy in the Channel from about 20°S in September.

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1 Rodrigues, loc.cit., p. 22; Manual, ibid., p. 53; Motta, ibid., p. 117.

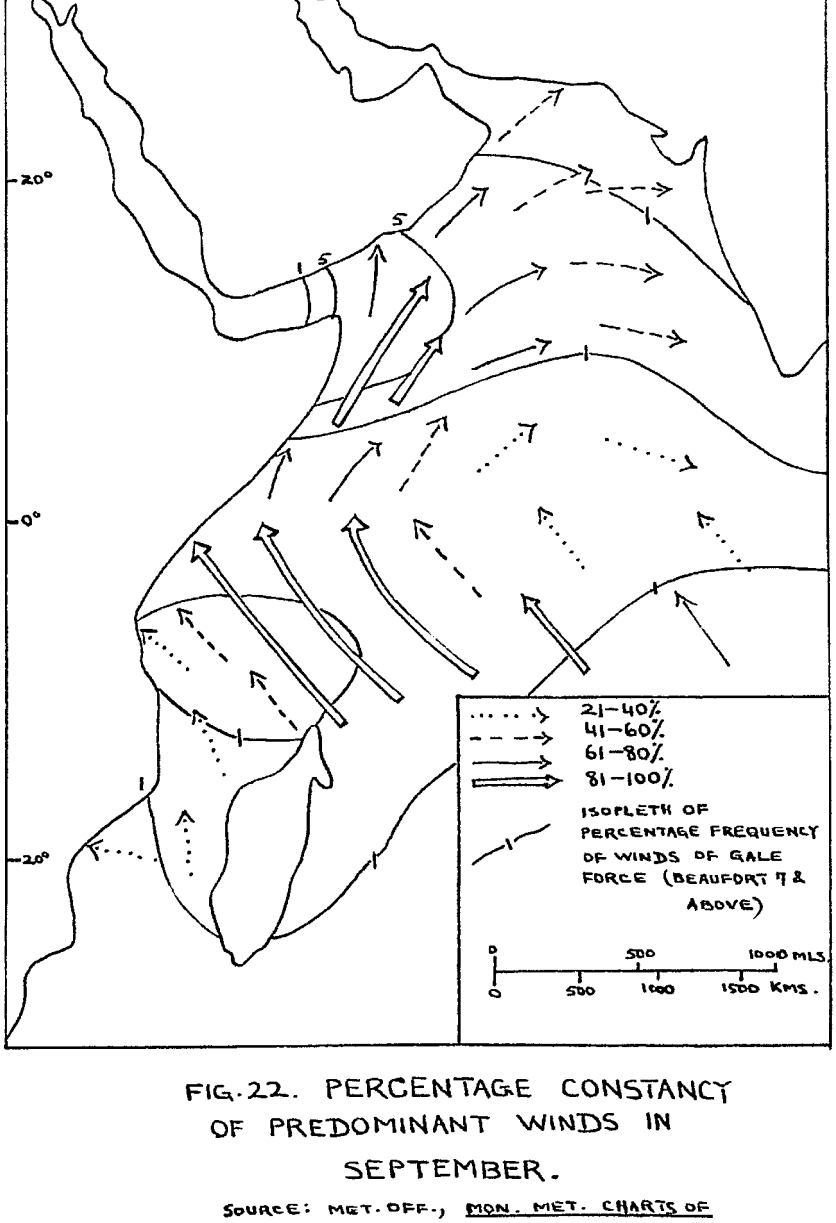

FIG. 22. PERCENTAGE CONSTANCY OF PREDOMINANT WINDS IN SEPTEMBER.

SOURCE: MET. OFF., MON. MET. CHARTS OF THE IND. OCE., H.M.S.O., 1949, p. 67.

The island of Mozambique, moreover, is situated across the mouth of an inlet behind which is a spacious harbour for several principal anchorages, easily accessible and perfectly sheltered (Fig. 23). Vessels of moderate draught can obtain the anchorage between the island and Leven bank in depths of from 3 to 5 fathoms, and those of deep draught between Leven bank and Harpshell sands in depths of from 12 to 15 fathoms.[1] Mozambique was also as good as Kilwa as a base for patrolling the coast, situated as it was to the north of the gold outlets of Sofala and the Zambezi. The port, in fact, came to occupy such a unique position that Barros in the mid-sixteenth century could speak of it as "the most renowned station in the world, and the most frequented which the Portuguese possess."[2]

When the King informed his viceroy of the decision to establish a factory at Mozambique, he instructed him to arrange for delivery of Cambay cloths which would then be forwarded to Sofala. There exists a letter of discharge of the first factor and his receipts in money for the years 1507 to 1513 represent only 3427 miticals, which gives an annual average of just over 570 miticals. Such a turnover, Lobato argues, does not justify the high imports of textiles listed in the letter of discharge, so that part must have been imports for Sofala, transhipped in Mozambique.[3] Yet in

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1 Admiralty, Hydrographic Dept., Africa Pilot, Part III: South and East Coasts of Africa, 10th edn., H.M.S.O., 1939, p. 226.

2 I.4.4.

3 El-Rei's letter cited in EPM I, pp. 214-5; letter of discharge to Diogo Vaz, Evora, 3/11/1520, D, III, pp. 470-5; EPM, III, p. 135.

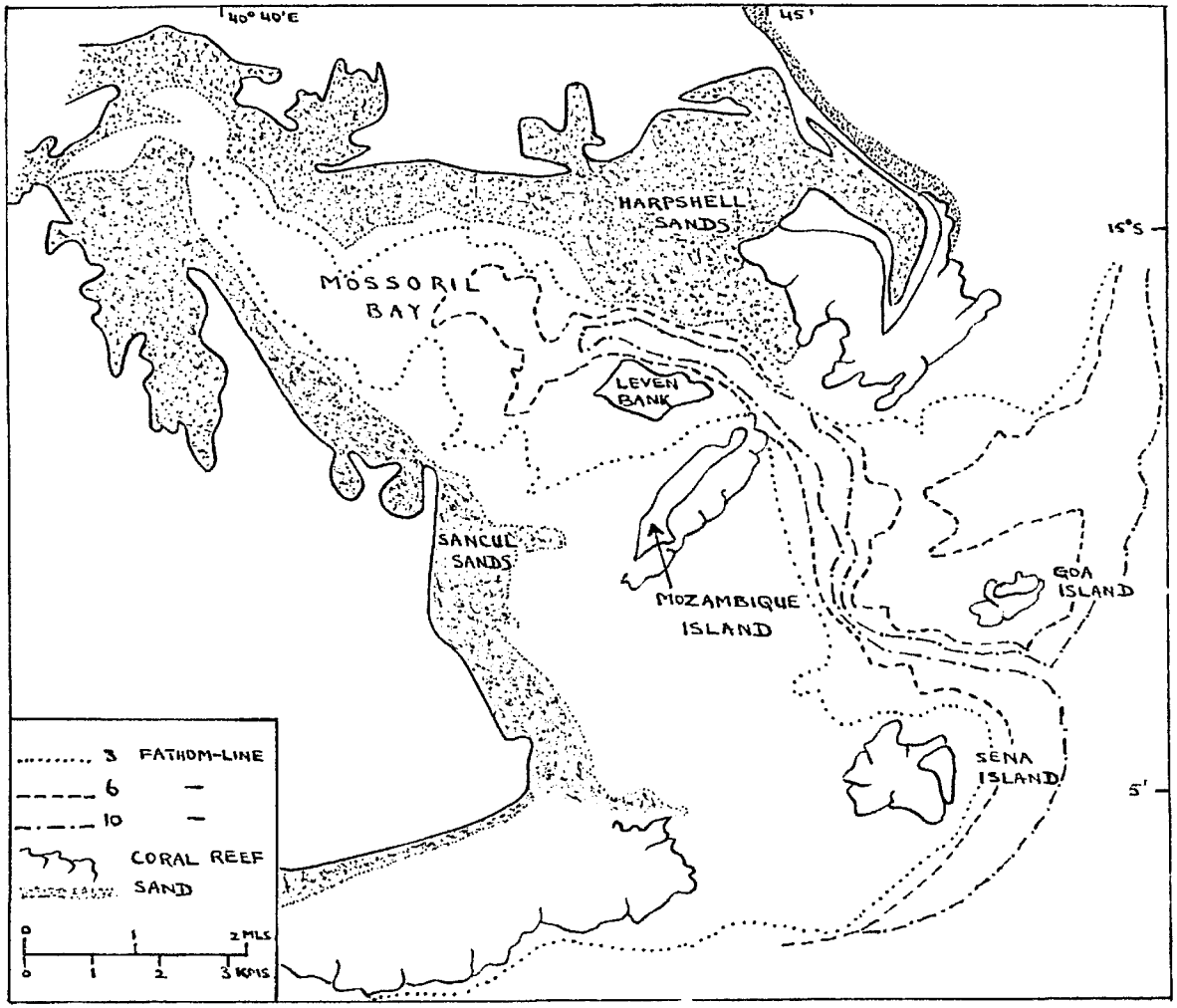

FIG. 23. THE HARBOUR OF MOZAMBIQUE.
ADAPTED FROM ADMIRALTY CHART NO. 653.

1508, only a year after his decision to occupy Mozambique, the King ordered that another factory be set up in Malindi for the trade in Cambay goods for Sofala. As at Mozambique, so too at Malindi, there was a year's delay, for the factor sent out in the armada of 1508 was lost at sea, and the task was accomplished by Duarte de Lemos in April 1509.[1]

It does, on the face of it, seem odd that a need should have been felt for a factory at Malindi. Barros gave as the reason "the trade of Sofala, as some Cambay naos call there, bringing cloths, with which they barter gold with the Cafres."[2] This was an allusion to the so-called "contraband" trade in gold run by the Swahili. When the Council of Officials of the Straits Fleet was summouned in Mozambique in 1509 to decide whether Lemos should proceed to Socotra or Sofala, he was advised to make for Socotra because "as for the affairs of Sofala he had stopped [sic] the passage of [?cloths] by placing a factor in Malindi which is the main thing."[3] The primary reason for the establishment at Malindi then was to counter the clandestine traffic in trade goods which was, as will be seen later, undermining the trade in Sofala. With a monolopy over imports of Cambay goods into Malindi, however, the Portuguese could supplement the supply irregularly dispatched by the viceroy via Mozambique. Thus a caravel was sent out from Sofala in 1510 "to look for (catar)

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1 Barros II.4.2; Almeida to el-Rei, 5/12/1508 in Arq.Port.Orien., IV.1.1. p. 307; D, II, pp. 340-1; ?Duarte de Melo to el-Rei,Mozam., 4/9/1509, D, II, pp. 370-1.

2 Barros, ibid.

3 Minutes of the Council, Mozam., 24/2/1509, D, II, pp. 352-3.

cloth and merchandise for this fortress" at Malindi.[1]

No sooner had the factory been established, than grave doubts were expressed about its utility.[2] The factor in an undated (but of 1510?) letter to the King stated that it was "in the interest of your service to close down the factory there", while Albuquerque in a letter dated to 1511 likewise expressed the opinion that "the factory at Malindi does not seem necessary to him." Only summaries of these letters prepared by the Secretary of State have come down to us, so the factor and the viceroy's reasons are not known.[3] However, before Lemos set out for Malindi to establish a factory, he had warned the King that although he would endeavour "to reach agreement regarding the cloths of Cambay", it was, "a thing, I am told, the king of Malindi is not very willing to do (tem açaz vomtade)."[4] Despite his protestations of friendship to the Portuguese, the Sheikh was

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1 Mandado of Bartolomeu Perestrelo, Sofala, 15/1/1512, D, III, pp.198-9 (cf. Mandado of António de Saldanha, Sof., 25/6/1512, ibid., pp. 292-3).

2 The King in his regimento to Gonçalo de Sequeira in 1510 informed him that he was sending by the fleet some merchandise for the factory at Malindi, but that if he had firm word at Mozambique that Ormuz had been occupied by the Portuguese, it was to be sent instead by way of Socotra to Ormuz. For "it seems to us that we may well dispense with the factory in Malindi as the supply of the said cloths for Sofala which . . . can now better be made by way of Ormuz" (D, II, pp.476-7). Such an arrangement is incomprehensible in view of the reasons behind the establishment at Malindi. However, this chapter of the regimento, along with others, was later crossed out.

3 Duarte Teixeira to el-Rei, D, II, pp. 572-3; Albuquerque to el-Rei, D, III, pp. 8-9.

4 Lemos to el-Rei, 30/9/1508, D, II, pp. 300-1.

evidently not prepared to allow them to control trade in Cambay goods, and so to forsake his own as well as his subjects' interests. Dom Manuel was persuaded to close down the factory, to judge by a comment in the margin of Albuquerque's letter referred to above. He did apparently envisage that a royal agent would continue to reside in Malindi, an office which in later years came to be awarded usually as a royal favour but occasionally leased out, and the nominee had the privilege to conduct trade on his own account.[1]

Thus by 1512 the Portuguese had more or less retreated from the coast north of Cape Delgado, to remain so until almost the end of the sixteenth century. Soon after the first voyage of discovery in the Indian Ocean, they travelled the whole length of the east coast between Sofala and Mogadishu. However, when they first formulated their plans in 1505, as embodied in Almeida's regimento, they decided to ignore the coast north of Malindi as it lay beyond the outward route to India. With the development of a new trans-oceanic route between south-east Africa and western India, the fortress at Kilwa was run down after 1507 and finally abandoned in 1512. And when Malindi proved ineffective in suppressing the Swahili clandestine traffic, it was decided to dismantle the factory that had been instituted in 1509. Looked at from the viewpoint of the Portuguese, 1512 is a watershed in the history of the east coast.

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1 EPM, vol. II, Politica da Capitania de Sofala e Mozambique de 1508 a 1530, Lisboa, 1954, p. 113; Strandes, op. cit., p. 130.

The Crown's turnover in gold

Difficult as it is to calculate the amount of gold traded by the Portuguese in Sofala, the exercise is worth attempting in order to assess the extent of success, or rather failure, of the Crown's monopolistic policy. The first factor, Manuel Fernandes, handed over to his successor, Sancho Tavares, in July 1506 a sum of 359 miticals. Yet the King's letter of discharge states that the former received from "the 1st day of January 1505 until the end of the year 1506 when he was our factor in Sofala" 592.5 miticals of gold.[1] The dates are palpably wrong because Fernandes arrived in Sofala in September 1505 and relinquished his duties as factor in July 1506, but if the figure represents the quantity of gold bartered during his tenture of office, then 232.5 miticals were expended by the factory. Tavares used up the balance for he passed on to António Raposo in March 1507 only the debt owed to the factory by a local merchant which amounted to 376 miticals.[2]

During this period, however, two remittances are known to have been made to India, one of 4000 miticals delivered to Tristão da Cunha, captain-major of the 1506 fleet, and the other of 2680 miticals received by the factor of Cochin in 1507.[3] It was alleged, too,

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1 Acknowledgment by João Roiz Mealheiro, Sof., 28/7/1506, D, I, pp.578-9, 594-5; letter of discharge to Fernandes, Santarém, 8/1/1511, D,I,pp.784-5.

2 Acknowledgment by Delfim Soares, [Sof.], 25/3/1507, D, II, pp.212-3 (cf. Enquiry ordered by Nuno Vaz Pereira, [Sof.], 25/2/1507,D, II, pp.172-3).

3 Manadado of Manuel Fernandes, Sof., 21/11/1506, D, I, pp. 704-7 (also letter of discharge to Pero Carneiro, Almeirim, 28/4/1510, D, I, pp.364-5); letter of discharge to Lourenço Moreno, Almeirim, 15/12/1509, D, II, pp. 14-5 (see EPM, III, p. 88.)

that on the night of the arrival early in 1507 of a new captain to replace Fernandes, the latter stole a sum of about 1000 miticals.[1] Hence the total for the first one-and-a-half years is 8648.5 miticals but this figure does not take into account any expenses paid out in gold during Tavares's term of office as factor. Lobato has argued that such computations are unrealisitically low as they ignore the amount consumed as keep and salary for the garrison.[2]

It is true that at first the quarterly lists of maintenance payments specify the amount due to each in miticals, but since the men could not have bought provisions, at least from the natives in gold, the allowance probably represented the value of merchandise distributed for this purpose. Corroborative evidence is provided by the later correspondence of Albuquerque. He was of the opinion that the garrison in Sofala should not be paid maintenance in cloth but in provisions. For he argued that if the men bought their supplies in cloth, it diminished the trade in gold, whereas if the onus of maintenance was on the establishment, provisions could be brought from outside.[3] The captain, António de Saldanha reluctantly accepted to implement his suggestion but the first such list of maintenance payments extant is that of June 1510 and was, in fact, prepared by the factor while the captain was still away in Mozambique.[4]

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1 Enquiry by Pereira, 25/2/1507, D, II, pp. 170-7.

2 EPH, III, pp. 84-91.

3 Albuquerque to el-Rei (summary), [1511], D, III, pp. 6-7; same to same, Goa, 25/10/1514, D, III, pp. 560-1.

4 Saldanha to el-Rei (Summary) [1511], D, III, pp. 18-9; list of maintenance payments, 1/6/1510, D, II, pp. 452-461.

There are a number of mandados for the period August 1506 to March 1507 which order payment in miticals for purchase of foodstuffs (in contrast to others which specify the merchandise) but some were made to the Portuguese for rations brought from Lisbon and others presumably to the Swahili at times when the local supplies failed. These add up to 342.5 miticals, and together with 23 miticals spent on gifts, all during Tavare's tenure in office, a new figure of 9014 miticals is arrived at for gold traded up to March 1507.[1]

On the other hand, there is evidence to show that at least part of the salary of officials was payable in miticals of gold. Lobato points out that until the end of May 1506 the factory was not in a position to pay them, since the emolument which accrued to Anhaia as captain was paid to his heirs in Lisbon.[2] He argues, however, that his successor, Fernandes succeeded in paying by the end of the year all salaries which had been in arrears. Three of the four mandados on which this claim is based were issued in June and raise, therefore, a strong suspicion that reaes from Lisbon might have been available as a result of Cide Barbudo's arrival in that month.[3] Nevertheless, there is Saldanha's testimony to the effect that he had been instructed

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1 Mandados for foodstuffs: D, I, pp. 604-5, 696-7, 700-1, 714-5, 772-3, D, II, pp. 6-7, 104-5, 109-10, 130-1, 184-5, 186-7, 192-3; Mandados for gifts: D, I, pp. 608-9, 668-9.

2 EPM, III, pp. 89-90; Mandado of D. Manuel, Lisbon, 12/6/1514, D, I, pp. 542-5.

3 Mandados in D, I, pp. 550-1, 564-5, 568-9, 688-9.
These reveal that officials normally received several months pay in advance before departure from Lisbon, while those who were indebted to the state forfeited part of their emoluments. So it is erroneous to assume that salaries for the whole of their sojourn were paid from factory receipts.

from India before 1511 that, as the men who went there carried a lot of gold, wages due to them (dinheiro dos soldos) should be handed over to the factor of the ship, so that the amount which went concealed might be discovered.[1] But it is clearly impossible to estimate the sum expended on wages for the garrison.

The figure of 9014 miticals, computed above as the amount of royal trade in gold for one-and-a-half-years from October 1505 to March 1507, does not take into account any expenses above 365.5 miticals incurred during Tavares's factorship and ignores any payments of wages in gold. Comparisons with other periods for which information is available may not be altogether fair, as the flow of gold to Sofala varied according to conditions in and Portuguese relations with the hinterland. Yet the aforementioned sum compares favourably with 9000 miticals given by Saldanha as the amount traded between the end of 1509 and mid-1511, but slightly less so with the 6500 to 7000 stated by Pero Vaz Soares to have been bartered during eight months in 1512-3.[2] Even more reliable are the statistics for the two periods - eight-and-a-half months in 1515 and of just over two years from the end of August 1516 to the end of August 1518 - compiled from the earliest account books of the Sofala factory which have come down to us. For the first and second periods, turnovers of 5812.5 and 12,122.5 miticals, respectively, are recorded.[3] These four sets of figures

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1 Saldanha to el-Rei, D, III, pp. 18-9.

2 Ibid., pp. 16-7; Soares to el-Rei, Sof., 30/6/1513, D, III, pp.458-61.

3 Expenditure book of Pedro Lopes, D, IV, pp. 25 ff; Receipt and Expenditure book of Cristóvão Salema, D, IV, pp. 297 ff. The adjustment in the exchange rate of the mitical (see the glossary) is ignored in these computations to allow comparisions to be readily made with other figures.

indicate that the annual amount traded by the Portuguese in Sofala was between 6 and 10,000 miticals of gold.

The Portuguese contraband in gold.

No reliable estimate is, unfortunately, available of the quantity of gold marketed by the Swahili in the pre-Portuguese period. Tomé Lopes's claim in 1502, or Diogo de Alcaçova's of four years later, that in peace time 2,000,000 and between 1,000,000 and 1,300,000 miticals, respectively, were exported from Sofala may be dismissed as an exaggeration.[1] Almeida asserted in 1505 that he had been assured that "a fifth of your /i.e. the King's/ fifth" was worth 7000 or 8000 dobras, equivalent to a yearly trade in gold of 175,000 to 200,000 dobras, or 43,750 to 50,000 miticals.[2] It will be clear later on why this figure seems a conservative estimate but it is in all probability not far from the truth. The factory's low receipts, therefore, underline the measure of the Crown's failure to appropriate the trade in gold. The beneficiaries were local Portuguese officials and Swahili traders, and to set in perspective the activities of the latter it is necessary to examine first the share of the former in the so-called "contraband" traffic.

Lobato argues that the Portuguese apparently had the privilege to trade on their own account in Sofala (the system is

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1 Lopes, loc.cit., p. 169; Alcaçova to el-Rei, Cochin,20/11/1506,D, II, pp. 394-5.

2 Almeida to el-Rei, Cochin, 16/12/1505, D, I, pp. 330-1 (see also mandado of Nuno Vaz Pereira, Kilwa, 16/1/1507, D, II, pp. 50-3.)

described as regime de liberdades), but as they could not handle prohibited merchandise, i.e. Cambay cloths and beads, he maintains they used articles brought over from Portugal as a means of exchange. Otherwise he finds it difficult to account for some 1410 miticals which the captain of Kilwa had confiscated from Francisco de Anhaia, and which Nuno Vaz Pereira ordered to be restored to him in January 1507.[1] There are, too, instances when the captain of Sofala bought in miticals certain articles from the men in order to give gifts or to obtain rare supplies such as wine.[2] Despite the fact that Sofala had initially a large garrison - 70 men in July 1506 and over 120 in February 1507 - the men must have been handicapped by lack of new supplies of merchandise for barter.

The entrepôt of Mozambique, however, had regular maritime contacts with sources of supply. It is ironic that in the year in which the King ordered a factory to be set up in Mozambique (1507), partly because of the trade with Sofala, Pero Vaz da Horta should have advised him to do just that but because "much gold would /thus/ be collected." He seems to have been the first to have made known in the same letter that "the cloths of Cambay which are sold in Mozambique when the naos come from India is to your disservice", a positive indication of the contraband carried on by the crews of the

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1 EPM, III, pp. 78-83 (Fogaça to el-Rei, 31/8/1506, D, I, pp. 618-9, mandado of Pereira, Kilwa, 12/1/1507, D, II, pp. 32-5).

2 See note 1, p. 181.

Indiamen on the return journey. The drain caused by ships on the outward voyage was presumably not as severe in view of the relatively limited demand for European goods in East Africa. That it did exist is indicated by a friar's report to the King in 1523 that "merchant ships each year cross over to India . . ./but/ . . . those of Your Highness do not as the captains forsake (se leixa) it /-i.e. the voyage/ to be in Mozambique, making their profit."[2] The earliest political opponents of the Portuguese in the Indian Ocean were the Turks and the extent of the contraband is highlighted in this outburst of the factor of Mozambique; "the real Rumes are ourselves . . . and there is none who wages greater war against His Highness than /our/ own countrymen."[3]

It is apposite to consider briefly the evolution of inner and outer (i.e. west and east of Madagascar) routes of the Portuguese in the Indian Ocean. For the frequency of the use of these passages during the first fifteen years is obviously an important consideration in any assessment of the prospect of contraband trade at Mozambique. Since the first voyage of Gama, the return journey of the Portuguese had been much the same as their outward run, except that they sailed farther away from the east coast and normally made only one call at Mozambique. Then in 1506 Fernão Soares unwittingly pioneered a passage outside Madagascar[4] and, as has been seen above, this came to

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1 Horta to el-Rei (Summary), 4/3/1507, D, II, pp. 178-9. Albuquerque likewise alluded to this problem when he reported to the King that "the route (escala) of the naos, when they leave loaded from India, is damaging to Sofala" (25/10/1514, cited in D, III, pp. 558-9).

2 F.F. Tamayo to el-Rei (Summary), 25/12/1523, cited in EPM, III, p.379.

3 Diogo Vaz to António Carneiro, Mozam., 4/9/1509, D, II, pp. 380-1.

4 D,I, pp. 96-7; Hans Mayr in D, I, pp. 538-9; Castanheda ii.21; Góis ii.8.

be accepted as the only conceivable route back to Portugal for ships which left India in February.

Gaspar Ferreira Reimão later claimed that in fact it was not until twenty five years after Gama's voyage that this route began to be regularly used.[1] The evidence at hand suggests that he was at most out by a few years. It is true that an official at Sofala complained in 1516 that despite the demand for Cambay merchandise in Sofala, the King's factors in India "do not want to send them or, if they send them, it is by the other side of the island (por detras da ylha) and without touching Mozambique."[2] However, that same year homeward-bound Indiamen did not call at Mozambique and this was held to be a sign that India was not peaceful because "it is not yet customary to go with the load outside the island of São Lourenço [i.e. Madagascar]."[3] The ships apparently failed to call again in 1517 and the captain had to send a letter to Portugal via India, as he feared that "the naos will not come this way as they usually do."[4] Hence the regular use of the outer route might be argued to date from the late 1510s.

As has already been seen, ships from Lisbon arriving at the Cape of Good Hope after the 20 - 25th July were advised to proceed east of Madagascar. The first to have accidentally chartered this route seems to have been Albuquerque who set out on his first voyage

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1 Roteiro da Navegação e carreira da India, 2nd edn., ed. A. Fontoura da Costa, Lisboa, 1940, pp.44-5.

2 João Vaz de Almada to el-Rei, Sof., 26/6/1516, D, IV, pp.292-3.

3 João da Silveira to el-Rei, Mozam., 14/2/1517, D, V, pp.28-9.

4 Cristóvão de Távora to el-Rei, Mozam., 20/9/1517, D, V, pp.198-9; EPM, II, p.150.

in 1503.[1] Montez has argued that this passage was more frequently used in the early sixteenth century than is normally realised. His reasons for the preference of the outer over the inner route at all times have been challenged by Boxer, but more importantly, as he was not cognisant of the first intimation in 1516 of a royal regulation in respect of these passages, there is an internal inconsistency in his argument. The Crown, he suggested, had an economic reason in fixing a date beyond which it was obligatory for captains to follow the outer passage. For if they proceeded through the Mozambique Channel, they would normally miss the monsoon to make for India the same season, and so while they 'wintered' at Mozambique, they would seize the opportunity to engage in illicit trade at the expense of the royal exchequer.[2] Had the inner route not been popular in the first two decades of the sixteenth century, the King

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1 Correia, op.cit., I, p.375; EPM, I, pp. 71, 201.

2 C. Montez, 'Moçambique e a navegação da India', Moçambique Documentário Trimestral, No. 40, Lourenço Marques, 1944, pp.15, 19-20; Boxer, loc.cit., N.36, p.114.

The intimation is given by the captain-major of the 1516 India fleet. He reached the Cape of Good Hope on the 25th of July and "after it had been doubled, I sought to find a landmark in order to set my course outside the island of São Lourenço /i.e. Madagascar/ should I not yet have reached Cape Racife, in accordance with the instructions I had from the admiral regarding the navigation of this fleet and which Your Highness had ordered me to observe without any change whatsoever." Owing to contrary winds, however, he could not take the outer passage and had to 'winter' at Mozambique. Silveira to el-Rei, 14/2/1517, D, V, pp.24-7.

would not have felt the need to give a ruling on dates.[1]

When Indiamen put in at Mozambique, their complement traded both with local corrupt officials and Swahili traders. The factor of Mozambique, for instance, related in 1514 that the captain had bought cloths and beads from these ships and counselled the King that "to learn the truth Your Highness should pardon those who sell in order that you may know the officials you have and punish the guilty."[2] These officials must have sought gold and ivory through their agents, presumably domestic slaves and conceivably even Swahili traders. There are "two or three of them" in Mozambique, so Lemos bemoaned in 1508, who did little good to the King's service, since they bartered provisions for cloths with crews of Indiamen which they then forwarded to Angoche, the contraband port, by the same almadias that brought supplies from there to Mozambique.[3]

Owing to the nature of the Portuguese contraband, no figures are unfortunately available. However, a summary of a letter states that "none of Your Highness's gold leaves Sofala whilst in the year 1510 those who went there brought to India (trouxeram a India que de la foram) more than 30,000 miticals."[4] Rather than consider

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1 Cf. the unimplemented decision of Dom Manuel in 1521 to build a fortress in Madagascar as a way-station of the carreira da India (Castanheda v. 79) with comments of Dom João III in 1536 on the advantages claimed for the outer passage by Martin Affonso de Sousa (El-Rei to Dom Antonio D'Atayde, Evora, 3/3/1536 in J.D.M. Ford, ed., Letters of John III, King of Portugal, 1521-1557, Cambridge, Mass., 1931, p.254 and copy of Sousa's letter p.255).

2 Pero da Fonseca to el-Rei, Mozam., 9/2/1514, D, III, pp.530-3.

3 Lemos to el-Rei, 30/9/1508, D, II, pp.296-7.

4 Lourenço Moreno and Diogo Pereira to el-Rei (Summary), 20/12/1510, D, II, pp.560-1.

this figure as the amount traded merely by those members of the Sofala garrison who left for India in 1510, it is probably more realistic to take it as an estimate of the total illicit gold which reached India in that year. It may be compared with the sum of 9000 miticals stated by the captain in 1511 to have been amassed since his assumption of office from the end of 1509.[1] No wonder Boxer is of the opinion that "neither Swahili smugglers nor Muslim pirates did as much harm to the royal exchequer as did the officers and men of the Indiamen who called at Mozambique."[2]

Swahili spatial readjustments

When the Portuguese first arrived on the east coast at the end of the fifteenth century, they found that management of commerce was diffused through three entrepôts. They sought to appropriate to themselves the trade in gold, and so fortresses were built at Kilwa and Sofala, and informal alliances established with rulers of Mozambique and Malindi. Also, the carrying trade of the Mozambique coast was prohibited by a royal decree and a maritime blockade instituted for its implementation. Where they set themselves up by force, as at Kilwa, the town was deserted by the Swahili traders, never to recover even after the Portuguese withdrawal. Where they gained a foothold by consent, as at Malindi, the alliance was exploited by the local merchants, and the importance of the port

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1 Saldanha to el-Rei, D, III, pp.16-7.

2 Boxer, loc.cit., p.99.

was consequently enhanced. There were other fundamental spatial readjustments in the wake of the Portuguese establishment which led to the investment of entrepôt functions in several other ports of Kenya and Somalia, and to the emergence of a rival to Sofala as an outlet of the Rhodesian gold.

The Portuguese intended that their own centres should overshadow the East African port complex. Thus, the same expedition which set up a fortress at Kilwa want only attacked and sacked Mombasa, then the chief entrepôt on the coast. Castanheda is forthright when he writes that Almeida proceeded to Mombasa with the intention of breaking its back "because with its destruction, Kilwa will be stronger and mistress of that coast." When a messenger of the local ruler later sued for peace, the viceroy is stated by Castanheda to have contemptuously retorted that the Portuguese "have no need for peace nor of the port of their city, as it was near Malindi and /?/ Kilwa (perto estava Melinde de Quiloa)."[1] Yet the economic vitality of the port does not appear to have been more than temporarily sapped. By the end of 1506 the captain of Kilwa, for instance, clamoured only for carpenters to build boats and people to man the oars so that he could "starve Mombasa to death", dependent as it was on imported foodstuffs for its survival. Albuquerque in 1507 reported that the port had begun to recover and that while "it will be enough to make them tributaries on the wild coast /i.e. Somalia/", he was of the opinion that "it would be very dutiful to your /i.e. the King's/ service to have a fortress there /at Mombasa/."[2] His suggestion was at the

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1 ii.4, 7.

2 Fogaça to el-Rei, 22/12/1506, D, I, pp. 760-1; Albuquerque to el-Rei (Summary), 10/11/1507, D, II, 216-7.

time ignored and Mombasa's position remained unimpaired.

As the armada of 1506 had to 'winter' in East Africa, the captain-major Tristão da Cunha was, according to Barros, persuaded by the Sheikh of Malindi to attack Oja, identified by Kirkman with Ungwana near the mouth of the River Tana. Lamu promptly yielded a year's tribute when he put in there, and so escaped destruction. Cunha next launched an assault on Barawa, whose leaders while at sea with a heavily loaded ship some three years before had accepted vassalage but subsequently renounced it. Finally, he was only dissuaded from attacking Mogadishu by the advice of his pilots, who feared that they might otherwise miss the monsoon to cross over to India.[1] Thus by the beginning of 1507, the Portuguese had either contemplated or mounted an attack or had imposed a tribute on almost all the ports which had direct maritime contacts with the northern seaboard of the western Indian ocean. The Portuguese chroniclers give the impression that these deeds were solely on the initiative of Cunha who was presumably influenced by the allure of booty. Even so, he must have acted in the certain knowledge of the King's concurrence in his choice of ports.

This show of force was accompanied by a prohibition order referred to above. Yet the northern stretch of the coast continued to be visited by Indian ships for among others, the captain of Sofala and Mozambique, Simão de Miranda, informed Albuquerque that cloth was infiltrated south from Malindi and Mombasa, Barawa, Pate and Lamu

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[1] Barros II.1.2; Castanheda ii.36-8.

and Mogadishu . . . where the naos from Cambay come each year loaded with cloth."[1] There are some specific references to the capture of Cambay ships by the Portuguese, as in 1510 when the sale of confiscated cloth from a ship at Malindi realised c. 72.5 miticals of gold, or again in 1518 when a ship which came from Malindi yielded ivory, copper and other merchandise worth 12 to 15,000 pardaos (representing 9250 to 11,563 miticals at the new rate of 467 reaes to a mitical) as well as 79 miticals of gold and 150 of silver.[2] There are other indications of Indian ships in East African waters; for example, the brigantine of Kilwa seized a vessel, apparently in the Pemba Channel in 1506, as did Francisco de Tavora in the latitude of Mogadishu in 1508.[3] The net result of Portuguese presence then appears to have been further decentralisation of port activity, for while prior to A.D. 1500 Indian ships normally put in at Mogadishu, Malindi or Mombasa, in the subsequent decades Barawa, Pate and Lamu also became occasional ports of call.

Notwithstanding examples of seizure of Cambay ships just cited, the Portuguese usually waylaid only the smaller Swahili coastal crafts that transported Cambay goods beyond Kilwa. Hence Albuquerque's advice to the King that "the caravels should patrol off Mombasa and other places of that coast which would be doubly profitable:

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1 Albuquerque to el-Rei, 25/10/1514, D, III, pp. 558-61.

2 D, II, pp. 422-3, 426-7; Diogo Lopes de Sequeira to el-Rei, Cochin, 23/12/1518, D, V, pp. 596-7.

3 Fogaça to el-Rei, 22/12/1506, Gavetas, IV, p. 398; Commentarios do grande Afonso Dalboquerque, ed. António Baião, Coimbra, 1922-3, Eng. trans. W. de Gray Birch, Hak. Soc., 1875-84, I, pp. 201-2.

they could capture the cloth that comes to those parts and keep the Moors from damaging the trade of Sofala." He solemnly declared that "there is no other way to keep the cloth out.'[1], i.e. the only solution to Swahili clandestine trade was to harass Indian shipping. When he wrote in 1514 the nearest Portuguese base was Mozambique and his proposal was rejected or, at any rate, not put into effect. Yet Albuquerque all too well appreciated that so long as the northern ports had access to Cambay products, the Swahili would attempt to breach the blockade or would procure "safe-conducts" (cartas de seguro) to subvert the Portuguese monopoly.

Such safe-conducts were available to allies, and sometimes to others, at least in the early years of the sixteenth century. Nuno Vaz Pereira ordered the restoration of confiscated goods at Kilwa in 1507, inter alia, to a certain sheikh who, oddly enough, carried a safe-conduct from the captain of Sofala.[2] It was Malindi, however, which fully exploited its friendship with the Portuguese. The same Pereira gave the ruler permission to send two faraçolas [60 lbs. at Sofala] of Cambay beads to be exchanged in Sofala for gold. Then in 1509 an alleged "vassal" of his bound for Angoche, with an estimated 100,000 pieces of Cambay cloths, put in at Mozambique. Lemos summoned a council of captains to consider the case. He told the members that his instructions were "to safeguard the things of the King of Malindi and to cause them no harm," and further that "His Highness's service requires

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1 D, III, pp. 558-61.

2 Mandado of Pereira, 14/1/1507, D, II, pp. 36-7.

a factory in Malindi as without it the affairs and trade of Sofala are as nothing." The Council, therefore, concurred in his opinion to allow the "vassal" to proceed, but warned that "henceforth they were not to go beyond Kilwa."[1] There are, indeed, two extant letters of the Sheikh of Malindi (one written in 1515) which plead for permission to sail the seas unmolested but they were presumably ignored in Lisbon.[2] The realignment of the trade-routes in the Indian Ocean and the closure of the Malindi factory made the Portuguese less favourably disposed than hitherto to their ally. With or without the safe-conducts, however, the Swahili continued to engage in the carrying trade of the Mozambique coast.

Contemporary Portuguese records identify Angoche as the chief Swahili port for this clandestine trade, and Diogo Vaz, in fact, reported that it was considered to be "a second Sofala".[3] The first early sixteenth century account to be known was Barbosa's, but he gave - or so it appeared - two different locations for the port.

> Journeying from Sofala forty leagues more or less towards Mozambique there is a very great river which they call Cuama [i.e. the Zambezi] . . . . from this river is formed another which goes to a town called Angoya [i.e. Angoche . . . .

and

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1 Barros 1.10.6; Minutes of Council [Mozam., 25/1/1509], D, II, pp. 326-9; Diogo Vaz to Estevão Vaz, Mozam., 4/9/1509, D, II, pp. 374-5, (or see D, II, 380-1).

2 Sheikh of Malindi to el-Rei, 30/9/1515 in João de Sousa, Documentos Arabicos para a historia portugueza, Lisboa, 1790, pp. 67-73; same to same, n.d., in Cartas de Affonso de Albuquerque, ed. R.António de Bulhão Pato, Lisboa, 1884-1935, III, p. 337.

3 Diogo Vaz to Estevão Vaz, 4/9/1509, D, II, pp. 374-5.

> Further on, leaving this Cuama, a hundred and forty leagues from it, skirting the coast is a very great town of Moors called Angoya . . . .[1]

Dames, who edited this work, took the view that the former passage describes the mouth of the Zambezi, that Cuama was the most southerly branch of the river which is now known as Luabo, and Angoche was the most northerly and corresponded with the Quelimane river.[2] However, he believed the second quotation identified the port with the island of Angoche between 16° and 16°40' lat., which corresponds well with the distance of a hundred and forty leagues from the Zambezi.[3]

Dames made no attempt to reconcile the two identifications. When the reports of a certain António Fernandes' journeys, accomplished in 1511-2, were discovered in the Portuguese archives, Godlonton positively correlated Angoche with Quelimane. For João Vaz de Almada reported to his King that the river visited by Fernandes is "the one that lies forty leagues fmm here towards Mozambique and is called Cuama", and that he was certain "it is from Angoge [i.e. Angoche] along small rivers that come through the interior to join this river

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1 D. Barbosa, Port. text in Collecção de Noticias . . . das nações ultramarinas, II, 1813 & Eng. trans. M.L. Dames, The Book of ---, Hak. Soc., 1918-20, I, p. 14.

2 The Quelimane is today obstructed in its upper reaches, and so is not the main outlet of the Zambezi, but in the sixteenth century it was one of the two navigable channels. Thus Father Monclaro in a first-hand account of Francisco Barreto's journey to the Zambezi in 1572 states:

> it [i.e. the Zambezi] enters the sea by seven or eight mouths, of which the two extreme are navigable to the body of the river in the interior, where they unite. The one which is called Quilimane is navigable only for six months . . . . The other mouth which is Luabo . . . is navigable all the year. Theal, op.cit., III, pp. 172, 218.

3 Barbosa, loc.cit., n. 1 & 4.

(vem por ryos pequenos ue vem por ho sertam ter a este ryo)" that forbidden merchandise was being pumped into Rhodesia.[1] It must be stated that Fernandes' itinerary did not take him to the delta of the Zambezi and that his information was at best second-hand.

The early sixteenth century evidence in fact confirms that Angoche referred to an island which, as Silveira indicated, lay between Mozambique and Ilhas Primeiras and that, as Távora described, merchandise was dispatched from the island to the Zambezi and thence inland.[2] It was the northerly branch of the Zambezi, the Quelimane, then connected with the main river, which was used for this traffic. For Ibn Mājid, who describes the delta of that river under the names of Kuvama [i.e. Cuama] and Kilvani [i.e. Quelimane], speaks of the latter as an outlet of gold.[3] Now, the river which enters the bay in which Angoche stands has the same name as the island.[4] Barbosa, therefore, concluded that the northerly arm of the Zambezi, by which Angoche communicated with its hinterland, was the same as the river which entered the bay behind that island. It is odd that Barbosa should not have realised that the two navigable channels of the Zambezi were

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1 26/6/1516, D, IV, pp. 286-7 (also cf. infra, p.203); W.A. Godlonton, 'The journeys of Antonio Fernandes - the first known European to find the Monomotapa and to enter S. Rhodesia', Proc. and Transactions of the Rhodesia Scientific Association, XL, 1945, pp. 91-2.

2 Silveira to el-Rei, 14/2/1517, D, V, pp. 26-7; Távora to el-Rei, 20/9/1517, D, V, pp. 202-3.

3 N&,195; Três Roteiros Desconhecidos, ed. T.A. Chumovsky & Port. trans. M. Malkiel Jirmounsky, Lisboa, 1960, R.92r, 14-9 (p.42), R.93v,25 (p.47).

4 See evidence as far apart as Lemos in 1508 (D, II, pp. 284-5) and Owen in 1823 (W.F.W. Owen, Narrative of Voyages to explore the Shores of Africa, Arabia and Madagascar, ed. H.B. Robinson, I, p. 199.

thus separated by over a hundred and forty leagues, but he does not evidently distinguish between his two Angoya. Finally, the fact that the Portuguese built a fort at Quelimane in 1544 to control the entrance to the Zambezi lends support to the view that Angoche lay elsewhere.[1]

Alcaçova informed his King that "he endeavoured to learn if any gold went out from the kingdom of Ucalanga [Ucaranga, Mwanamutapa's kingdom] by any part of the interior" and had been told that, besides Sofala, Angoche acted as a minor outlet. His letter represents the sum total of knowledge that the Portuguese had obtained of the interior of Sofala up to February 1506. He reported that only five per cent of what the Portuguese believed Swahili traders annually carried away from Sofala before their establishment, was exported by way of Angoche.[2] This supply was drawn, as has been seen from Ibn Mājid's testimony, from the Zambezi. Further, António de Saldanha related that merchandise was being carried from Angoche to Maena, evidently the Cuama, for a distance of six leagues (c. 20 miles) to the residence of a king. Here duties were paid to the king who provided almadias for cloth to be conveyed up-river. The journey continued with another transhipment for a further distance of twenty leagues (c. 65 miles) to the fair at Otonga.[3]

There is evidence to show that by the beginning of the second decade of the sixteenth century, Angoche had made inroads into Sofala's

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1 I am indebted for this suggestion to Dr. R. Gray.

2 Alcaçova to el-Rei, 20/11/1506, D, I, pp. 394-5; EPM, I, pp. 103-4.

3 Saldanha to el-Rei, D, III, pp. 14-5.

hinterland. Its most important component was the kingdom of Mwanamutapa, the area drained by the right bank tributaries of the Zambezi below Tete and in the north-eastern part of Rhodesia. Alcaçova had complained as early as 1506 that the route to Sofala had dried up but he attributed this to wars which were then being waged in the interior. When Soares wrote in 1513 he confessed that he was at a loss to account for the decline in the gold traffic "because though up to now there have been wars amongst them . . . now the whole land is at peace as far as Monomotapa."[1] António Fernandes made extensive journeys in the intetior in 1511-2 and his remark that the kings of Barue and Betomgua had "no gold save that which comes from outside (que lhe vem de fora)" will be shown to represent a diversion of the trade-route from Mwanamutapa to Angoche instead of to Sofala.[2]

Fernandes's itinerary has been plotted on the basis of notes prepared by Veloso in 1512 which often, alas, are no more than a list of kings or lands visited by the traveller. Fernandes proceeded from Manica to the kingdoms of Amçoce, Barue, Betomgua and Ynhaperapara before he struck for the headquarters of Mwanamutapa.[3] There is considerable variation in the alignment of the route in the various attempts at reconstruction but Schofield's seems to be the most satisfactory for this section of the itinerary. He argues on the

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1 Alcaçova, loc.cit..; Soares to el-Rei, 30/6/1513, D, III, pp. 460-1.

2 Notes by Gaspar Velso, D, III, pp. 182-3. H. Tracey believes that the words ouro ... que lhe vem de fora is an allusion to alluvial gold. António Fernandes, descobridor do Monomotapa, trans. & notes by C. Montez, ~~Imms~~. à ~~notes~~ Lourenço Marques, 1940, p. 39.

3 Ibid., pp. 180-9.

basis of two authorities that Fernandes went from Manica to Sena.[1] Thus Rezende stated in 1634 that Sena stood in the land of Botonga and that passage to Manica lay through Baro; while Barretto in 1667, in a description of the country south-west of Sena, mentioned Botonga, Baroe and Manica, in the reverse order in which Fernandes visited them.[2] Given this disposition of the various kingdoms, and the distribution of goldfields of Rhodesia, it is patent that Veloso's remarks delineate a new route for Mwanamutapa gold via Barue and Batonga, instead of via Manica and Quiteve.

This interpretation of a swift reorientation of trade begs the question of its organisation. Soares stated that the output of individual diggers was so small that it was not worthwhile for them to bring their gold to the coast. So fairs came to be established in the interior where they could barter the merchandise that was dispatched from the coast. He added that those who could buy any appreciable amount of merchandise did come to the coast but that they numbered only a few. These were, evidently, emissaries of chiefs who even after the Portuguese establishment occasionally sought their supplies at Sofala. The amount which the Portuguese traded with them was small and Soares reported that in 1513-5 this represented no more than 7 to 8 per cent, the remainder having been bartered with the Swahili in Sofala.[3] It was, incidentally, for this reason that

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1 J.F. Schofield, 'The journeys of Antonio Fernandes - some footnotes' Proc. and Trans. of the Rhodesia Scientific Assoc., XLII, 1949, p. 47.

2 Theal, op. cit., II, pp. 387, 411, III, pp. 462, 493. See esp. M.V. Jackson Haight, European Powers and South-East Africa, 1967, pp.42-3.

3 Soares to el-Rei, 30/6/1513, D, III, pp. 458-61; mandado of Pero de Anhaia, Sof., 19/5/1506, D, I, pp. 506-7; Almada to el-Rei, 26/6/1516, D, IV, pp. 278-9.

Albuquerque refused to support suggestions that the Swahili should be thrown out of Sofala. With Portuguese control of imports of goods into Sofala, the majority of the Swahili traders were drawn to Angoche where merchandise was offered, so Távora claimed in 1517, at less than half the price of that in Sofala.[1]

No mention has so far been made of the important carrying trade in ivory south of Cape Delgado. The Swahili share in it was even greater than that in gold, for the Portuguese had, in the early years of the sixteenth century at least, paid little attention to its exploitation. Thus Pero Pessoa, who was factor of Sofala for about 20 months in 1508-9, traded only 76 quintaes and 2.5 arrobas, i.e. c. 9808 lbs., while Soares in a period of two years 1513-14 bartered 81 quintaes, 2 arrobas and 2 arrates, i.e. c. 10,434 lbs.[2] Such limited interest as the Crown had in this staple arose from the need to pay for cloths and beads bought in Gujerat, and which were so much in demand in Sofala. Manuel Fernandes had ordered 45 faraçolas or c. 1350 lbs. to be delivered to the captain-major of the 1506 fleet, and Soares dispatched 40 quintaes or c. 5120 lbs. to India in 1513 for this purpose.[3] The trade in ivory was lucrative, and it is known that in the mid-1530s the commodity was worth 35 miticals a bar in Sofala and sold at 120 pardaos or about 93 miticals (of Sofala) in India, a

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1 Albuquerque to el-Rei, 25/10/1514, D, III, pp. 560-1; Távora to el-Rei, 20/9/1517, D, V, pp. 202-3.

2 Letter of discharge to Pessoa, Lisbon, 16/7/1532, D, II, pp. 390-1; letter of discharge to Soares, Lisbon, 27/6/1521, D, III, pp. 516-7.

3 Mandado of Fernandes, Sof., 22/11/1506, D, I, pp. 708-9; Soares to el-Rei, 30/6/1513, D, III, pp. 468-9.

gross profit of 166%. Prices seem to have been relatively stable for in 1515 ivory was valued at about 32 miticals a bar in Sofala, while in 1525 it fetched about 94 miticals (of Sofala) in Diu.[1]

Despite their indifference to ivory, the Portuguese did not allow the Swahili to trade in it at will. The first captain of Kilwa records the capture of a vessel to which "everything was given back save the gold and ivory" as it carried a safe-conduct from the captain of Sofala. Both these articles were, therefore, prohibited merchandise and, indeed, during the first year, Fogaça reported seizure at sea of 160 quintaes of ivory, equivalent to about 20,480lbs.[2] This is four times the amount traded by the Portuguese in the early years and it may be presumed that the quantity which evaded Portuguese blockade was even higher. The Portuguese fear was that if the country behind the Mozambique coast were satiated with trade goods obtained in barter for ivory, then the flow of gold to Sofala would be affected. When they saw the supply of gold fail anway, they seem to have given ivory greater attention. Thus, the factor Cristóvão Salema in the two years 1516-8 obtained 616 arrobas or c. 19,712 lbs., and Francisco de Brito in his first year 1518-9 amassed 140 quintaes or c. 17,920 lbs. of ivory.[3] Nevertheless, the Swahili share must have continued to be substantial.

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1 'Informação to el-Rei', n.d., but mid-1530s in Documentação para a história das missões do padroado português do Oriente (Insulindia), ed. A. Basílio de Sá, Lisboa, 1954-6, I, pp. 339-40; EPM, III, pp. 185-7, 351. The Portuguese made a considerably higher profit because the merchandise used to barter a bar of ivory in 1515, for instance, valued at 32 miticals in Sofala cost only 6 miticals in India. (See EPM, III, p. 208.)

2 Fogaça to el-Rei, 31/8/1506, D, I, pp. 618-9. The Sheikh of Mozambique sought to bring 10 bars (c. 5180 lbs.) of ivory from Sofala, but permission was refused. Sheikh to el-Rei (Summary), [?1510], D,II, pp. 578-9.

3 Suera, p. 180; EPM, III, p. 324.

Proposals to counter the Swahili clandestine traffic

Portuguese strategy had been nullified by 1512. The decision to abandon the factory at Malindi had already been made for in spite of it the Swahili continued to infiltrate Cambay goods south of Cape Delgado. Sofala was still looked upon as the trading centre for gold but the Swahili had undermined its potential by diverting the trade-route to the rival port of Angoche. There was then an imperative need for a new policy initiative. Two basic suggestions were made and intermittently revived during the next eighteen years. It might be observed that neither was concerned with the problem of Portuguese contraband.

The genius of Albuquerque saw that accommodation with, rather than displacement of, the Swahili was the least expensive means of participation in the gold trade. Thus in two summaries of his letters it is known that in 1507 he advised the King to leave it to the Swahili to barter gold in Sofala, and in 1511 to leave it to Malindi to supply Sofala with trade goods, and to arrange with Cambay to supply Malindi.[1] By controlling the price of cloths and beads in Malindi, and gold and ivory in Sofala, the Portuguese (so he presumably argued) would be guaranteed a fixed steady profit at little cost to themselves. The King was probably opposed to collaboration with infidels, and in his persistent determination to exclude all middlemen he lost a good measure of the traffic to them.

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1 Albuquerque to el-Rei, 10/11/1507, D, II, pp. 218-9; same to same, [1511], D, III, pp. 6-7.

His attention had instead been directed to the Zambezi which had become an alternative outlet for the Rhodesian gold. The first to have done so was António Fernandes, who as a result of his journeys in the interior in 1511-2, made recommendations for a factory to outflank Angoche. These were communicated to Lisbon by Veloso:

> this land [of Quitenque] has a river that runs to Cuama [i.e. the Zambezi] and flows into the sea 16 leagues from the bar of Sofala and in this same river . . . a factory house (casa de feitoria) can be built on an islet which is in the middle of the river . . . . If this house were built Your Highness could have all the gold of this land and also that of Monomotapa because this islet lies ten days' journey away . . . and in this way could be set right the trade of Sofala which is damaged by a smaller river which runs ~~about~~ from Amguoge [Angoche] to join this one at Quitengue [and] along which come many zambucos loaded with cloths . . . . And once Your Highness has built this house a brigantine could be kept there to patrol these rivers [so] that no merchandise passes from Amguoge nor from any other part . . . .[1]

Godlonton has argued that either Fernandes was confused or that Veloso mistook the identies of the Shire and the Zambezi, and on the presumption that the Zambezi above the confluence with the Shire was a tributary, described it as joining the main river and so flowing into the sea.[2] The most southerly arm of the Zambezi is much more than 50 miles from Sofala but Montez' suggestion that the river in question is, therefore, the Púngüè is untenable.[3] For the two rivers are joined only during the rainy season by a north-south tributary through

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1 D, III, pp. 186-7; EPM, III, pp. 105-8, 114-5, 227-34, 243-4.

2 Godlonton, loc. cit., p. 91.

3 Tracey, op. cit., N. 1, pp. 47-9.

the swamps of Gorongosa and, moreover, such an identification does not accord with Angoche' connection with the middle Zambezi as described above. The distance of sixteen leagues may be a miscalculation on Fernandes or Velso's part or it may possibly relate to the shoal rather than the port of Sofala. Godlonton would thus identify Fernandes island with Inhangoma as the Quelimane river in the sixteenth century forked from the Zambezi only a few miles below that island.[1] Such a strategic location of the island could be expected to have the advantages which Veloso claimed for it.

Fernandes journeyed during Saldanha's capitaincy and may have informed him of the Zambezi route, for an extant summary of the captain's letter bears a striking resemblance to Veloso's report. Both saw Sofala as the trading centre, and both agreed that Angoche ought to be denied access to the Zambezi. But while Saldanha asked only for a pair of the smallest caravels with thirty men who would "patrol Amgoje [i.e. Angoche] and winter there, and always remain there, and have no other task", Fernandes advocated the establishment of a factory on the Zambezi to facilitate the surveillance of these thoroughfares.[2] The importance of Fernandes's journeys then is that he made Lisbon aware, for the first time, of the futility of the establishment at Sofala so long as the Zambezi outlet was not blocked. It was not until 1518 that the first abortive attempt was made to put his recommendations into effect, and twelve additional years were to elapse

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1 Godlonton, loc. cit., p. 92.

2 Saldanha to el-Rei, [1511], D, III, pp. 14-7; A. Lobato, António de Saldanha; His times and his achievements, trans. M. Freire de Andrade, Lisbon, 1962, p. 30.

before the area which later became known as the Rivers of Sena began to be occupied. Thus a fair was established at Sena in 1531 and another at Tete sometime thereafter, while a factory was set up at Quelimane in 1544 to supervise the entrance to the Zambezi.[1]

Despite the detachment of Sofala in 1505, the Swahili had a share in the carrying trade in gold and ivory of the Mozambique coast, but it must have declined after the 1530s with the Portuguese penetration up the Zambezi. The first suggestion for such a policy came in 1512, and so from the viewpoint of the Swahili, just as seen earlier from that of the Portuguese, this year must be regarded as a landmark in East African coastal history. Yet archaeological study has shown that on the coast of Kenya at least, there was continued prosperity in the sixteenth century, as is manifested by the number of houses and mosques rebuilt, and by quantities of Chinese and Islamic pottery imported. Thus it is believed that the coup de grâce was, in fact, dealt by the Zimba and Galla invasions towards the end of the sixteenth century.[2] The reason for this uninterrupted

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1 Francisco de Brito to el-Rei, Sof., 8/8/1519 in Theal, op.cit., I, pp. 101, 105-6; A. Lobato, 'Para a História da Penetração Portuguesa na Africa Central' in Colonização Senhorial da Zambézia e outros Estudos, Lisboa, 1962, pp. 77-80; J.J. Peixeira Botelho, História Militar e Política dos Portugueses em Moçambique, Lisboa, 1934, pp. 93-4, 146-7, 162-70, 175-207; J. Duffy, Portuguese Africa, Cambridge, Mass., 1959, pp. 35-8, 107-8.

2 J.S. Kirkman, 'The Culture of the Kenya Coast in the later Middle Ages', South African Archaeological Bulletin, II, 1956, pp. 98-9; idem, 'Historical Archaeology in Kenya, 1948-56', Antiquaries Journal, XXXVII, 1957, pp. 16-7, 22-3.

affluence is to be found in the fact that by 1500 the coastal economy was so broadly based that the Portuguese neither had the will nor the means to engross the traffic north of Cape Delgado, where, in consequence, the traditional trade pattern persisted. It is fitting, in conclusion, to emphasise this point.

CHAPTER V

Port Hierarchy in the Later Part of the Eighteenth Century

East Africa became a backwater between the early seventeenth and the mid-eighteenth centuries. This was the period after the construction of Fort Jesus in Mombasa and the debacle caused by the Zimba and Galla invasions from opposite directions along the coast, and before the Busaidi ousted the Yorubi dynasty in Oman and began to pay greater attention to East Africa half a century after the capture of the Portuguese fort.[1] The effects of the former events were new impediments for Muslim seafarers in East African waters, and the abandonment of towns on the Kenya coast with the consequent restriction of port activity to offshore islands beyond the reach of the mainland tribes. The sequel to the latter event was the widening of the overseas contacts of East Africa and the development of continental trade-routes of great depth which, even before the transfer of the court from Muscat to Zanzibar in 1840, had raised the latter to the status of a great commercial metropolis.

During the interval, the Portuguese captains of Mombasa, appointed on triennial terms between 1593 and 1698, unsuccessfully attempted to monopolise trade between East Africa and western India through factors posted on other islands and through the royal regulation which

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[1] J.S. Kirkman, 'Historical Archaeology in Kenya, 1948-56', Antiquaries Journal; XXXVII, 1957, p. 17; C. Guillain, Documents sur l'histoire la géographie et le commerce de l'Afrique orientale, Paris, 1856, I, pp. 543-7.

bade ships to call at Mombasa (and for a short time Pate as well) to pay customs dues. Doubtless the hardy merchant seamen of the Persian Gulf and southern Arabia continued to visit the coast to exchange Indian goods for African staples.[1] Yet unlike the periods which preceded or followed it, these 150 years saw the concentration and fragmentation of trade contacts and, in consequence, the decline of the total volume of trade. It has already been stated that the revival of prosperity after the middle of the eighteenth century was due to the increased vigour of Omani commercial involvement, reinforced from the last quarter of the century by the extension of French slaving activities from the coast of Mozambique to that of Tanzania.

The recrudescence of Arab activity

Zanzibar became the Omani headquarters in East Africa, and to set this choice in perspective it is necessary to consider monsoonal conditions in the western Indian Ocean and the duration of voyages to and from its northern seaboard. When the north-east monsoon commences in November, winds with a constancy between 41 and 60 per cent blow to c. 5°N., i.e. to half-way along the eastern Somali coast; at its height in January, this figure is attained as far south as c. 10°S, i.e. to beyond Kilwa. By February, predominant winds with the same

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1 G.S.P. Freeman-Grenville, The East African Coast: Select Documents, Oxford, 1962, pp. 138-43, 152-68, 175-90; J. Strandes, Berlin, 1899 and English trans. J.F. Wallwork, The Portuguese Period in East Africa, Nairobi, 1961, pp. 130-2, 166-7, 170-1, 173-4, 218-20, 239-43; C.R. Boxer and C. de Azevedo, Fort Jesus and the Portuguese in Mombasa, 1593-1729, 1960, pp. 26-8, 31, 37, 43-5, 53, 76-7; E. Axelson, Portuguese in South-east Africa, 1600-1700, Johannesburg, 1960, pp. 9-13.

constant retreat northwards to about c. 5° S., and in March still further to the equator.[1] It was shown in chapter III that whereas Arabs can set out in early November, Indians usually start on their journey a month or so later. The return journey can be made during April when winds with a southerly component and currents with a northerly set already prevail along the coast, or can be delayed until September when the strength of the south-west monsoon has appreciably declined. It was further argued in chapter III that Indians can leave three or four weeks later than Arabs during the 'build-up' of the south-west monsoon, although the early nineteenth century evidence shows that most of them 'wintered' in East Africa, and sailed home with the 'tail-end' of the monsoon.[2]

Arab dhows which set course for East Africa in early November usually take 30 to 40 days to reach Mombasa or Zanzibar, while Indian dhows which set out in early December average 20 to 30 days for the same voyage. The duration is shortened if dhows put out to sea when the monsoon is at its height in January.[3] Cont.

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1. See relevant charts in Meteorological Office, Monthly Meteorological Charts of the Indian Ocean, H.M.S.O., 1949.

2. Supra, pp.138, 141-2.
Morice states that only two Indian ships visited East Africa in the 1770s (but see infra, p.219) and gives the impression that they 'wintered' there (G.S.P. Freeman-Grenville, The French at Kilwa Island, Oxford, 1965, pp.82, 107). Tomkinson found "three Surat grabs" in Zanzibar in mid-July 1809 and Hardy escorted four back to India in September 1811 (Public Record Office, Adm. 1/63, 'Report of Capt. Tomkinson of H.M.S. Caledon', R.122a; India Office Library, Marine Records, Miscellaneous No.586, 'Steam Communication with East Coast of Africa. Various Reports'). Mr. A.M.H. Sheriff is of the opinion that the phenomenon of 'wintering' was important prior to the settlement of Indians in East Africa and the institution of long-term credit facilities. The practice persisted throughout the nineteenth century, though the number of vessels which 'wintered' as compared with those which left in April may have been small.

3. [illegible] Lancaster, 'The Ocean-going Dhow Trade to East Africa', The East African Geographical Review, No.4, 1966, p.18.

Hence, in terms of meteorological conditions, it is possible for dhows to sail as far south as Kilwa (as happened in the Middle Ages) and yet make the return voyage within the span of a single season, provided they sail past Zanzibar by January and do not have to wait long in the harbour to make up a cargo. Most dhows, however, prefer to leave for East Africa when the monsoon is firmly established, and as they often make several stops in the ports of Benadir and Kenya en route, say, to Zanzibar, they arrive there in February or even March.[1] Given the spatial extent of the north-east monsoon in these months, coupled with the steady decline of its force south along the coast, a passage farther souther than Zanzibar would be imprudent, whether the homeward course is fashioned during the 'build-up' or the 'tail-end' of the south-west monsoon. So the northern ports of East Africa had a decided climatic advantage over the southern ones as regards trade with the peripheral lands of the Arabian Sea.

On the premise that the Omani stronghold had to be on an offshore island, the effective choice was reduced to between Mombasa and Zanzibar, as the Lamu Archipelago is on the periphery of the East African region, while Pemba had not had a major port since the early Middle Ages. It is, therefore, instructive to make a comparative analysis of the situation and site of the ports of Mombasa and Zanzibar. Situation may be considered both from the physical and economic standpoints, i.e. from the points of view of proximity to the mainland coast and to 'source-areas' of the East African economy. Considerations of site must focus on the availability both of sheltered anchorage during the two monsoons, and of

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1. Ibid., pp.17-8; Guillain, op.cit., III, pp.359-60.

careening facilities for dhows. Where particular and relative defects in these dual aspects of situation and site emerge, that port must be regarded as inferior to its rival.

Zanzibar is separated from the mainland by a channel which at its narrowest is 22½ miles, whereas a ford connects Mombasa with the mainland, and can be used at low tide. The importance to an alien power of a readily defensible site is illustrated by the experience of the Portuguese in Mombasa after they had made it their headquarters in East Africa at the end of the sixteenth century. Not only did they have to build blockhouses to guard Makupa, as the ford is known, but they also had to give large presents of cloth to the mainland tribe of "Musungulos" in order, as Razende so eloquently put it, "to be allowed to live in security".[1] It is of interest to note that periodic suggestions were made to move the headquarters to Pemba but these were turned down in Lisbon.[2]

Closely connected with this problem of security was Mombasa's overly dependence upon imports of foodstuffs. Since the later Middle Ages, Pemba had acted as Mombasa's chief granary. The Portuguese exploited this weakness when, for example, Ravasco stationed himself off Mombasa in 1503 to prey on vessels (most of which evidently carried provisions) bound for that port in an attempt to forestall the ruler's attack on Malindi.[3] The Omanis themselves captured Pemba in the early

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1. SD, pp.179-80; on the identification of the "Musungulos", see Kirkman's notes in Strandes, op.cit., p.351.

2. Boxer & Azevedo, op.cit., p.43.

3. SD, pp.78-9.

nineteenth century and they must in part have been influenced by the fact that if Mombasa's food supplies were cut off, its Mazrui rulers' will not to compromise on political independence would be undermined.[1] On the one hand, therefore, Mombasa was vulnerable to the incursions of the Nyika from across Makupa, as well as to severance of grain supplies from across the sea, while on the other hand, Zanzibar had a weak local adversary and a good natural endowment to provide the basic foodstuffs.

Location vis-à-vis the 'source-areas' of the regional economy was another important consideration. It is Alpers thesis that before Fort Jesus fell in 1698, Kilwa was the main outlet for ivory brought by the Yao traders from east-central Africa; and although the commodity was channelled through Mozambique for the first half of the eighteenth century, the Yao gradually began to shift back to Kilwa after the assertion of Omani authority in East Africa in the 1750s.[2] Sheriff doubts if the latter shift occurred before the end of the century but Kilwa, nevertheless, received ivory from the Lake Malawi region from at least the 1770s.[3] The Kilwa coast (i.e. the stretch between Kilwa and Mikindani) was, therefore, potentially the most important source of export commodities, while the Mrima coast (roughly between Pangani and the Rufiji) was for Zanzibar, as the 'nyika' backcountry was for Mombasa, only a secondary source. This is because central Tanzania was not traversed by long-distance trade-routes until about A.D.1800 and the 'nyika' hampered the development of commercial relations with the far interior.

Now, whereas lateral movement between the offshore islands and the mainland coast (with a limited north-south extent) is possible almost

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1. J.M. Gray, History of Zanzibar from the Middle Ages to 1856, 1962, pp.114-6.

2. E.A. Alpers, The Role of the Yao in the Development of Trade in East-Central Africa, 1698-c.1850, Ph.D. thesis, Univ. of London, 1966.

3. Sheriff, p.31.

throughout the year, longitudinal communication along the coast is generally subject to monsoonal controls. The voyage to Kilwa and beyond is best accomplished during the season of the north-east monsoon, and Norice states that merchants left Zanzibar for that port in March and April.[1] Yet African traders from the interior must have arrived at Kilwa after the dry season commences in May, and in the mid-nineteenth century Burton and Guillain gave June and August respectively as their month of arrival.[2] Guillain elsewhere states that boats equipped specially for the commerce of Kilwa left Zanzibar after the middle of August, which evidently coincided with the sojourn of the Yao on the coast. During that period of contrary winds, an inshore voyage has to be made with the aid of land breeze and tidal currents, and it takes seven to eight days to reach Kilwa from Zanzibar.[3] The distance from Mombasa is double that from Zanzibar, and the same voyage, therefore, would take a fortnight, but with a fair wind the return journey would make little difference in number of days' sail.

It was seen in chapter III that the ria system of Mombasa provides excellent anchorage and careening facilities for dhows,[4] and now it only remains to show that the natural site of Zanzibar once offered similar facilities. The harbour (Fig.24), unlike that of Mombasa, consists of an open area of water sheltered by a number of islets rising from coral reefs which form a semi-circle, and so ensure that the waters

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1. Guillain, op.cit., III, p. 371; FKI, p.82.
2. R. Burton, Zanzibar: City, Island and Coast, 1872, II, p.367; Guillain, op.cit., III, pp. 374-5.
3. Guillain, op.cit., III, p. 371.
4. Sacra, p.143.

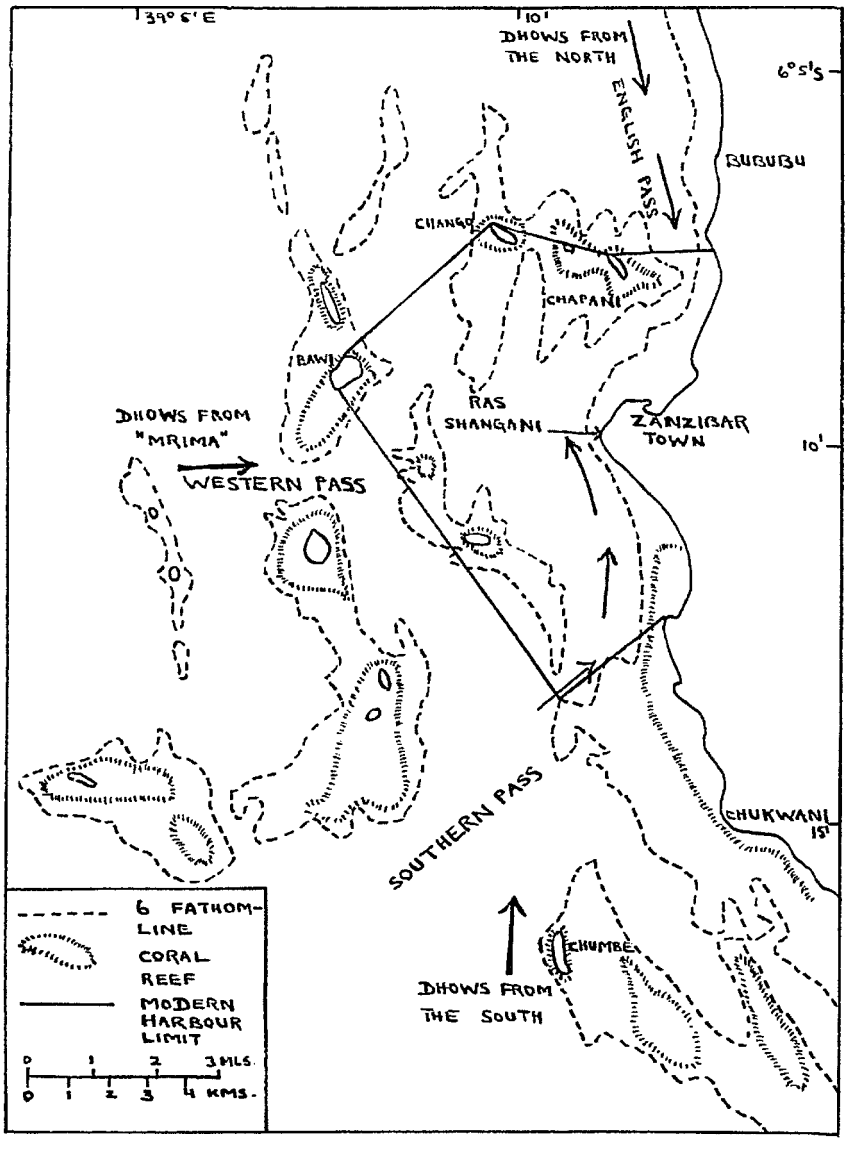

FIG. 24. ZANZIBAR HARBOUR.

ADAPTED FROM ADMIRALTY CHART NO. 665.

within are almost always fairly calm. Access is via three chief passes all of which have a minimum depth of six fathoms, and entry therefore is dependent upon direction of arrival at the port.[1] Christie gives a graphic description of the land site of the port which governed anchorage of vessels before the constructional works of the early twentieth century.

> The triangular spit of land [Fig.25] on which the principal portion of the town is built, may be described as foot-shaped, the sole being exposed to the north-east monsoon, and the ankle to the south-west monsoon, the arch representing that portion separated from the main part of the island by the creek.
>
> Zanzibar has thus .....two harbours, the one being safe to shipping during the north-east monsoon, and the other during the south-west monsoon. The two harbours are separated by the heel, or angle..... The northern harbour being sheltered from the powerful and long continued south-west monsoon is the more important of the two, but both are filled with native craft during the respective seasons. While the south-west monsoon blows hard, vessels cannot ride with safety in the southern harbour, and during the north-east monsoon, native craft are not safe in the northern harbour, and vessels cannot discharge and load owing to the surf on the beach. There being no jetty or pier, the loading and discharging of ships is accomplished by cargoboats only.[2]

The creek which Christie refers to has now been infilled so that only the part to the north of Hollis Road, known as Funguni creek, is tidal (Fig.25). But before the present century, it formed a natural dry dock and dhows could refit here in preparation for the homeward journey.

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1. Admiralty, Hydrographic Department, Africa Pilot, Part III: South and East Coasts of Africa, 10th edn., H.M.S.O., 1939, pp.329, 333, 338, 342; B.S. Hoyle, The Seaports of East Africa, Nairobi, 1967, p.98.

2. J. Christie, Cholera Epidemics in East Africa, 1869, pp.268-9 (see also Guillain, op.cit., II, pp.69-70).

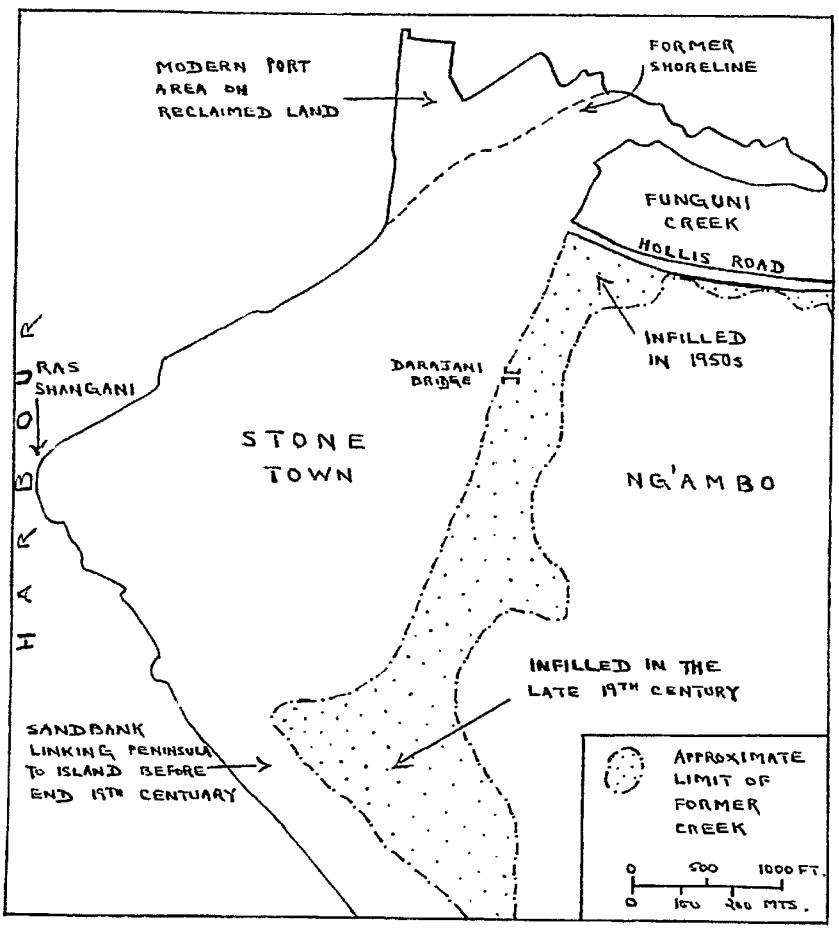

FIG. 25. THE SITE OF ZANZIBAR IN THE EIGHTEENTH CENTUARY.

AFTER B.S. HOYLE, THE SEAPORTS OF EAST AFRICA, NAIROBI, 1967, FIG. 21.

From this comparative study, it is evident that while site conditions at Zanzibar and Mombasa were comparable, the former had a somewhat superior situation than the latter. The choice, however, appears to have remained open, but when the Mazrui Governor of Mombasa renounced the allegiance to Oman after the overthrow of the Yorubi dynasty in the 1740s, Zanzibar became the Omani headquarters. Portuguese intelligence reported in 1754 that the town had the largest number of Arabs, 400 of them, described as "all merchants"[1]; and the French trader Morice, who first visited Zanzibar in 1775, describes its entrepôt role thus:

> The Arabs who came after the Portuguese..... monopolised the whole of the coast trade, that is to say that it is to them and to their centres in Zanzibar that the ships from India go in preference to unload their cargoes for distribution all along the coast. When the ships from India arrive in December, January or February, all the Moors from Kilwa, Mafia, Mombasa, Pate etc., go to Zanzibar to buy cargoes and distribute them subsequently in their districts in exchange for ivory tusks, provision and slaves etc.[2]

Morice gives the impression that Zanzibar monopolised the direct trade with India and so made the whole coast dependent upon it for stores of trade goods. He himself, however, admitted that he lacked first-hand knowledge of the coast north of Zanzibar[3], and it will be seen presently that one or two ports of Kenya might have shared in this trade. Due allowance too must be made for Indian goods which were doubtless brought to East Africa in Arab bottoms. What should perhaps be inferred from

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1. Melo e Castro to el-Rei, Mozam., 27/11/1754, quoted by Alpers, op.cit., p.154.

2. FKI, p.82.

3. Ibid., p.126.

Morice's account is that largeness of the market at Zanzibar drew part of the exports of the Kenya and Somali coasts. Thus Bissell saw a vessel arrive from Pate at Zanzibar in 1779, while Smee met there two "respectable Soomaulee /Somali/ merchants" from Barawa in 1811.[1]

While Zanzibar was normally the final destination of most Arab and Indian dhows, where most of the return cargo would thus be made up, Pate and Mombasa were ports of call en route, where only a limited amount of trade was therefore carried on. It is significant that in 1739 and again in 1744 the Compagnie des Indes, supported by the Court in Paris, should have unsuccessfully requested Portugal to withdraw her claims on Pate and Mombasa to allow the Company to extend its commercial operations to East Africa.[2] These two ports barely receive a mention in French archival sources for the late eighteenth century, apparently because the French from the Ile de France (Mauritius), having been ill-received on their initial ventures, did not trade there for slaves. Thus, a French vessel put in at Pate a few years before 1770[3] and Morice sent one to Mombasa in

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1. A. Bissell, 'A Voyage from England to the Red Sea, 1795-9' in Collection of Nautical Memoirs and Journals, reprin. by A. Dalrymple, 1806, p.31; I.C., M.R., Misc.586.

2. Strandes, op.cit., p.300.

3. Archives Nationales, Paris, Colonies série C4, 29, Brayer du Barré to Poivre, Ile de France, 4/10/1770 (see also FKI, pp.193-4). Subsequent to the collection of documents for the publication of his FKI, Dr. Freeman-Grenville resumed the search through C4 up to Vol.118 (1803). He listed his finds in an unpublished note 'Some eighteenth Century Documents concerning eastern Africa in the Archives de France' and I am grateful to him for the use of this paper. It should be noted that Dr. Freeman-Grenville has mis-dated a number of documents and his description of their contents are often inaccurate. The present writer has completed the search through C4 Vols. 119-140 (1804-1810) on the Ile de France, Vols.145-8 (1770-1810) on the Seychelles and Vols. 150-3 Various. Also, Colonies série C3, Ile de Bourbon, Vols. 14-20 (1771-1789) were searched but no important document was found in this series.

1778.[1] Barré, however, had been informed from Mozambique that "slaves and ivory are in abundance" at Pate. Mombasa too is known to have marketed ivory, among other commodities, and Abbé de la Tour, who advocated a French establishment there in 1753, stressed the value of this commodity.[2]

There is some evidence to suggest that these Kenya ports received ships from the northern rim of the Arabian Sea. Morice claims that the English sent "small ships" only to Pate to take on cargoes of cowries, though the Governor of the Ile de France stated in 1773 that they likewise went to Mombasa "to trade there for ivory, [gum] copal, ambergris and ---- [illegible]".[3] The latter should almost certainly be regarded as Indian vessels which plied under English colours.[4] No reference to Arab trade at either port has been found but it may be safely presumed. It might well be that the French failed to obtain slaves at these ports because the limited supply was absorbed by the northern markets and the Arabs consequently feared competition. For the Governor in the aforementioned letter observed with regard to Mombasa that "the country could furnish up to 6000 slaves; but the Arabs do not wish to sell them to any Christian power; and for this reason this trade does not take place [with the Europeans?]". Such an experience befell a Dutch frigate in Zanzibar in 1777, though here the local governor was

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1. AMF, C4, 73, Souillac to Loémaria, Ile de Fr., 20/11/1786; Souillac to Imam of Muscat, Ile de Fr., 20/11/1786.
The ship in question was L'Abyssinie and was captained by a certain Pichard. Morice states in his correspondence that he sent a ship by that name to Kilwa in 1776 and its captain was apparently the same man (FKI, pp.71, 74, 83-4, 207).

2. AMF, C4, 29, extract of a letter written from Mozambique to Brayer du Barré, n.d.; C4, 7, Tour, 'Projet concernant les iles de France et de Bourbon pour leur procurer les noirs.....', Ile de Fr., 12/5/1753.

3. FKI, pp.114, 221.

4. Cf. Gray, op.cit., p.94; see also J.M. Gray, 'The French at Kilwa', 1776-1784", Tanganyika Notes and Records, No.44, 1956, pp.34-5.

acting on explicit instructions from Muscat.[1]

On the East African section of the route from southern Arabia and north-western India there were then three principal nodes. Zanzibar was easily the most important and probably took a good portion of the entrepôt trade of the Kilwa and Mrima coasts. Pate and Mombasa had also local catchment areas but there is nothing concrete to suggest their relative importance at this time. It might be added, however, that Pate's decline did not apparently come until very late in the eighteenth century.[2] Before trade contacts with the French from the Ile de France began after 1775, several ports on the coast of southern Tanzania, notably Kilwa and Mongalo, fell wholly within the economic ambit of the northern entrepôts. So evidence will first be adduced to show the internal and external relations of the southern Tanzanian ports, and the impact of the French advent on the latter will be analysed after a discussion of the activities of the French.

Feeder ports of the Kilwa coast before 1775

The revitalisation of commercial activity along the East African coast brought renewed prosperity to ports of southern Tanzania for, if contemporary Portuguese commentators can be believed, African traders began to rechannel their trade, probably in the 1760s. Thus Pereira do Lago, on the basis of information collected during an unsuccessful expedition to recapture Mombasa in 1769, gave as his opinion

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1. FKI, p.221; infra, p.24.

2. Thus as late as 1789 it was reported that of the 35 Swahili boats which put in at Ibo in the Querimba Islands, 17 were from Pate and a further 10 from around Pate. Alpers, op.cit., N.2., p.226.

that the coast north of Cape Delgado has "a greater quantity of ivory than is brought to this capital by the Yao and the Makua, all running to that coast, as the goods which the Arabs and foreign nations introduce there are 100 per cent cheaper."[1] By mid-1770's Kilwa's kingdom, so Morice claimed, stretched inland as far as a "fresh water sea" and Cossigny informs us in his reminiscences of conversations with him that "this lake is apparently that which is designated in our maps under the name of Maravi [i.e., Lake Malawi]."[2] Like his medieval ancestors, the sultans of Kilwa evidently presided over a kingdom which was primarily commercial, and it seems best, therefore, to interpret Morice's statement as the extent of Kilwa's hinterland. Alpers believes that slaves at Kilwa did not emanate so far from the interior but Morice's information was that African traders "come to the coast in bands, with their slaves carrying ivory".[3]

Morice unmistakably implies that Kilwa fell within Zanzibar's primary hinterland. The Arab governor and his associates were indeed thrown out of Kilwa in about 1770 but Arabs were none-the-less informed that they were welcomed as traders. Morice gives the impression that there was intense antipathy between the two communities of Arabs and Swahili at Kilwa.[4] Perhaps as Sheriff suggests, he deliberately

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1. Lago to el-Rei, Mozambique, 21/1/1770, quoted by Alpers, op.cit., p.160. Alpers rightly observes that Lago exaggerated the role of European traders as even the French (who in any case paid for their purchases mostly in piastres) had not yet begun to trade in East Africa.
2. FKI, pp.76, 102. Morice further states that "I estimate [the lake] is a month's march from the sea doing seven or eight miles a day" which could easily allude to a trade-route from Lake Malawi. For Morice's informants would know better the total duration of the journey rather than the actual distance covered in a day's march; and it is known that Gaspar Bocarro's servants took 25 days for the much longer journey from Kilwa to Tete in the early seventeenth century (SD, p.168).
3. Alpers, op.cit., pp.203, 267; FKI, pp. 106, 118.
4. FKI, pp. 151-2, 109, 123, 137.

exaggerated it to suit his commercial scheme of French collaboration with the Swahili to the exclusion of the Arabs. Elsewhere Morice gives certain indications which attest that commercial links between Zanzibar and Kilwa remained intact despite the expulsion of the Omani representative. Thus on a second visit to Zanzibar in 1775 he was "persuaded" to go to Kilwa in a bid by its traders to undermine the slave market at Zanzibar, which then drew most of its supply from Kilwa and its vicinity.[1]

Of the smaller ports south of Kilwa, the most important was Mongalo, which as shown on a French manuscript map of the late eighteenth century (Fig.26) lay between Lindi and Mikindani, in the same bay as modern Sudi, and came later to be known as Ngau Mwania. It would appear from Comarmond's memoir drawn up in c.1787[2] after a six months' stay in Mongalo that slaves here did not originate from the far interior.

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1. Ibid., p.168. When Morice wrote to the Minister of the Navy on 3 March 1776, he had then made two voyages to Zanzibar. He refers in the context of his second journey to contracts that he entered into, not only with the governor of Zanzibar, but also with the sultan of Kilwa for supply of slaves (p.64). On his third voyage in September 1776, he set out himself for Zanzibar in Le Gracieux and dispatched L'Abyssinie to Kilwa. When he arrived at Kilwa from Zanzibar, he went "on board L'Abyssinie to find out whether the Moors were observing the letter of the treaty I had made with them the year before" (pp.74, 87-8). This shows that it was in 1775 that Morice made his second journey to Zanzibar and Kilwa (so Freeman-Grenville, p.11, is clearly wrong in suggesting that Morice's first visit took place late in 1775), although the cargo was dispatched to the Ile de France early in the following year. It should be added that the contract with the sultan of Kilwa was probably verbal (cf. p.91) for one such formal treaty was signed on 14/9/1776 (pp.70-2).

2. AnF, C4, 85, 'Mémoire su la nécessité & les moyens de former un établissement français à Mongalo.....', n.d. Guillain (op.cit., I, M.1, pp. 559-60) had stated that such a memoir was composed by Mondevit, the officer who went on a mission of reconnaissance to East Africa (infra, p.335. It should, however, have been clear to Freeman-Grenville from internal evidence that it was not drawn up by him. The memoir is almost identical with a copy of another entitled 'Projet sur un établissement français à Mongalo' (C4, 146) and signed by Comarmond. The Governor's covering letter which Freeman-Grenville lists (C4, 85, Souillac to Min. of Navy, 14/3/1787. Extract of this letter in C4, 146 is dated 1/3/1787) is, in fact, for Comarmond's, not Mondevit's project of a French establishment at Mongalo. On the part played by Comarmond in trade ventures to Mongalo, see infra, p.336.

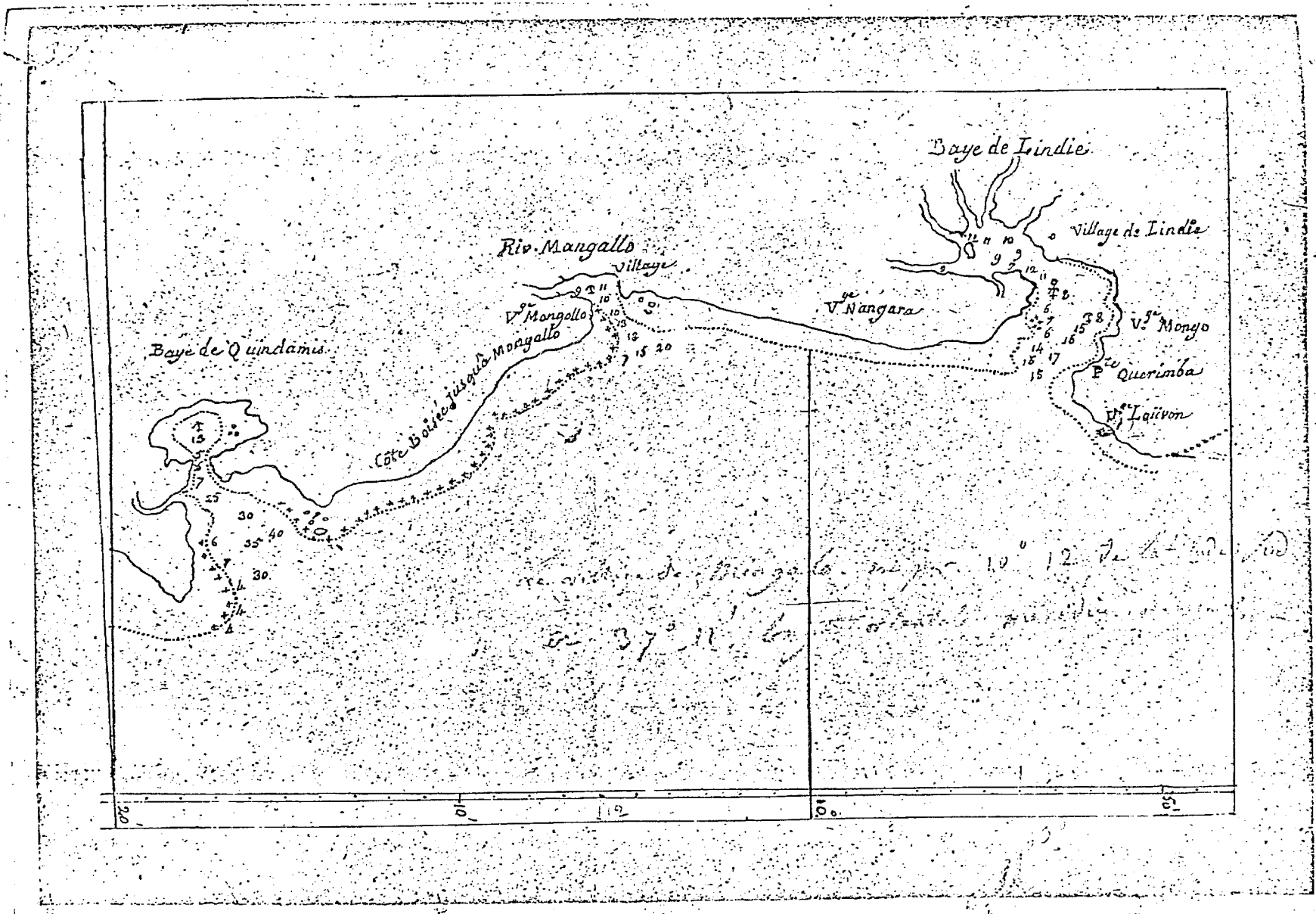

FIG. 26. FRENCH MANUSCRIPT MAP OF MONGALO
LATE 18TH CENTUARY.
ARCHIVES NATIONALES, PARIS, COLONIES SÉRIE C^4, 153.

THE MAP GIVES THE CO-ORDINATES OF MONGALO AS 10° 12' S. & 37° 11' E. (OF THE MERIDIAN OF PARIS = 39° 31' OF THE MERIDIAN OF GREENWICH
THE POSITION OF MGAU MWANIA IS 10° 7' S & 39° 59' E.

For he observes that:

> Mongalo is on the deepest indentation of the /East/ African coast; consequently, it is nearer the mountains inhabited by the Macouas /Makua/, the Macondes /Makonde/, the Doules /Wdonde/, and the Moujavas /Yao/, people of diverse groups, continually at war, solely to make of each other prisoners, whom they sell. The line of chained slaves from this region would come primarily to Mongalo (and to places in its vicinity such as Minguindami /Mikindani/ and the Bay of Lindi), if there were a European establishment there.1

Mongalo is decidedly not on so major an indentation as Comarmond states, but the edge of the Makonde plateau is close to the extreme southern part of the Tanzanian coast. So the importance of the statement is that the tribes listed were already in occupation of the area by the 1780s and provided most of the slaves. The Swahili had trade contacts with the Kerimba Islands on the seaward side, but apparently Mongalo made inroads into the Islands' ivory hinterland on the landward side. Judice warned in 1776 that "the Arabs will come with cloth to distribute them in Mongalo, as well as throughout these islands /of Kerimba/..... because of the certainty they have that cloth no longer comes from Mozambique, due to the great duties which it pays in that alfândega /i.e. customs house/." Two months later, he confirmed his worst fears: "cloth....has already reached our territory and causes considerable damage to His Majesty's vassals through their not being able to procure any ivory...."[2]

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1. Ibid., memoirs 1 & 2.

2. Judice to Pereira do Lago, Bringano, 26/6/1766 and Ibo, 1/9/1766, quoted by Alpers, op.cit., p.158.
J.J. Varella confirmed in 1788 that the inhabitants of Mongalo "communicate" with the moradores (i.e., Portuguese colonists) of Cape Delgado (Junta de investigações do Ultramar, Estudos de História da geografia da expansão portuguesa, Anais, Vol. IX, Tomo I, 1954, p.283 or A.A. de Andrade, Relações de Moçambique setecentista, Lisboa, 1955, p.375). Alpers (N.2, p.158) notes that though the History of Sudi (MS, pp.230-2) is a garbled account, it contains interesting place-names (Misanga and Sawasawa) which suggest connection with the Mozambique coast.

Evidence of Mongalo's external relations is provided in 1754 when several small boats from Mombasa and Pate which had come there to trade passed south to the Kerima Islands in search of slaves.[1] Mongalo was then politically independent of Zanzibar or Kilwa but in 1766 Arabs seized it from its Makonde chief and placed a governor. Yet neither Mondevit nor Comarmond, both of whom visited it in 1766, speak of a Omani representative, and so Alpers thinks that the governor was ousted probably at the same time as at Kilwa, i.e. in about 1770.[2] By the time of Comarmond's visit, all trade at Mongalo was apparently handled by émigrés from Mombasa, and though the relevant passages are obscure, the implication presumably is that the port fell in Mombasa's sphere of influence.[3] Further on in the same memoir, however, Comarmond relates that these Arabs entrusted chiefs with merchandise, and in accordance with the prevalent monsoon, sailed either for Zanzibar or Mozambique, and that on their return they collected their cargoes of slaves and ivory. The active Swahili trade at the Kerimba Islands

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1. Melo e Castro to Sousa e Brito, Mozam., 19/5/1754, quoted by Alpers, op.cit., p.156.

2. Op.cit., pp.158, 160.

3. "The Maconde Moors, settled in Mongalo, seem desperately anxious to be delivered from Arab tyranny, and it would be all the easier to assure them that these itinerant (ambulant) Arabs would be deprived(?) of arms and lodging, since this horde consists of an emigration of those who previously lived in Mombasa and who in fleeing from there broke the yoke of the Imam of Muscat" (Memoir 1, C4, 85).
Cf. "It would be very easy to liberate them, given that the Arabs have no establishment in this area, their commerce being only transitory (passager). Henceforth, slaves will not be bought from this intermediate source, from which they can only be obtained by payment in piastres. It is noteworthy that the majority of these Arabs come from Mombasa, and /so/ have shaken off the yoke of the Imam of Muscat" (Memoir 2, C4, 146).

appears to have covered the extreme southern coast of Tanzania as well, and so Mongalo's exports might have been channelled through one or the other of the northern entrepôts.

Extension of French interest to north of Cape Delgado

French from the Mascarene Islands had traded for slaves at Mozambique and Ibo (the chief port of the Kerimba Islands) from the late 1730s, though the traffic did not assume important proportions until the late 1760s.[1] Yet it was in 1775 that French commercial involvement in modern East Africa began when Morice obtained his first cargo at Zanzibar. Many followed in Morice's wake, but this did not, as is sometimes implied, constitute a "shift", but rather an"extension" of French interest from the Portuguese possessions to East Africa. Alpers estimates that in the decade 1770-1780, the French obtained 3000 slaves every year from the south, whereas in the second half of the decade Morice probably traded less than 1500 per annum, most of whom came from Kilwa. During the next five years, 7790 slaves were exported from Mozambique abroad Portuguese vessels, and on the assumption that as many left on French vessels and that the yearly export of 1500 from the Kerimba Islands was maintained, about 4500 slaves were carried away from the Portuguese possessions each year; for the same period, Grassons' figure for Kilwa, then the principal French slave mart in the north, suggest a minimum annual average of 1800.[2]

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1. Alpers, op.cit., pp.94-100, 102-4, 126-31, 151-2, 163-9.

2. Review of FKI by Alpers in Journal of African History, VI, 1965, pp. 418-9; Alpers, op.cit., pp.165-6, 168, 197-8; infra, pp. [illegible] SD, p.196 (also FKI, p.216).

So in the ten years from 1775 to 1785, at least twice as many slaves were exported from the south as from the north of Cape Delgado, and there is no reason to suppose that the proportion changed in the next decade.

It will have been noticed that the above figures show a steady increase in demand and this factor, coupled with the extortions of the Portuguese officials, caused a few adventurous slavers to seek new sources. Brayer du Barré worked out in 1773 that on a cargo of 3866 male slaves bartered for the equivalent of 79 cruzados each (irrespective of age or size), an additional cost of 30,638 cruzados would be incurred. If only the levies payable for acquisition of slaves are taken into account, then 4.8 cruzados would have to be added to the cost of each slave.[1] Barré also deducts 306 slaves from the total because of a 10% tax payable in kind (pour commission a 10 pour cent en nature), the cost of which when distributed over the remainder of the cargo of 3480, yields an additional expense of 9.2 cruzados per head. So a slave purchased at 79 cruzados plus a further 14 cost 93 cruzados or 23¼ piastres. Now, this is only a little more than 20

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1. ANF, C4, 146, Brayer du Barré to Min. of Navy, 'Etat de cargaison a rapporter d'Europpe pour etre employe a faire la traite a Mozambique avec 2 vaisseau de capacité', Ile de Fr., 19/11/1773. Barré gives this breakdown: droit de traitte 8000 cruzados, droit de douanne 6000 (omitted in the calculation because this would be on imports of articles for exchange of slaves), droit pilote, calfats et autres 1038 (omitted), droit de Baptême 6000, and frays de maisons, gardes et raffraichissement 9000 (only half included in the calculation).
Cf. Levies listed by Alpers as payable in Mozambique in the 1770s: 4200 cruzados paid by the captain of each ship for licence to trade; 16 cruzados capitation tax on slaves; a gift proportionate to the size of each cargo which seems to have averaged about 1000 cruzados per ship; and an unspecified sum in rents for use of houses on land. All this money went into the Governor-General's pocket, but he charged a further head tax of 8 cruzados in the name of the Crown. Alpers, op.cit., p.186.

not, however, say much more on the first reason, and so it may be examined a little more closely.

Sailing vessels no longer ply between the Mascarene Islands and East Africa. Yet from the few available notices of ships' arrival at and departure from the Ile de France[1] and from a couple of other remarks by Morice, together with meteorological conditions in the southern Indian Ocean, it is possible to reconstruct the trade-routes to and from East Africa. Morice makes it clear that the voyage to Kilwa could be made in both the monsoons, but whereas it took 12 to 15 days during the "good season", it occupied 35 to 40 days during "the contrary season".[2] The recommended route is past the northern tip of Madagascar, and the most propitious periods of sail would be in April-May and August-October. During these months, the south-east trade winds (which extend beyond the equator to become the south-west monsoon), blow to the East African coast with a percentage constancy of at least between 41 and 60. The route to Mozambique is likewise round northern Madagascar, and the best time to sail would be outside the months when the south-easterlies are strongly prevalent in the northern part of the Mozambique Channel. For as Morice intimated, it is then difficult, but not impossible, to make

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1. The table is based on information extracted from the French archives for the period 1775-1810. Unfortunately, since the total number of arrivals at and departures from Ile de France is small, the table is no more than a rough guide:

	J	F	M	A	M	J	J	A	S	O	N	D	Total
TO:													
East Africa:	1	2		1	1			3	1	1		2	12
Mozambique :			4	1	1		1	1		2	1	1	12
FROM:													
East Africa:						1		1		1		3	6
Mozambique :	1	2		1		2	1	1		2		2	12

2. [illegible], pp. 13, 167.

a southerly passage.[1]

The return journey, whether from Kilwa or Mozambique, was long and tedious because of the permanence of high pressure cells in the southern Indian Ocean and, therefore, the perpetual dominance of the south-east trades in the zone east of Madagascar. Norice states that it took 40 days or more from Kilwa and Blancard gives the same number of days for the voyage from Mozambique.[2] During the south-west monsoon, ships from Zanzibar are recommended to stand to the eastward, regardless of whether or not the equator is crossed, until east of the Chagos Islands when southing should be made into the trade wind and a direct course set for the Ile de France. The route in the opposite season is to make easting with the north-east monsoon, while keeping north of a line drawn from Zanzibar to the Seychelles, until the 'cross-monsoon' is met, and so proceed to cross latitude 10° S. in about longitude 70° E. and then to continue as above. For the journey from Mozambique during both the monsoons, the recommended route is to stand southward, keeping in the strength of the Mozambique current, and from the southern end of the Channel to stand south-eastward into the westerly winds. From April to October easting has to be made on about the latitude of 30° S., whereas from November to March south of latitude 35° S., until the longitude of the Ile de France whence a direct passage

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1. Admiralty, Hydrographic Dept., South Indian Ocean Pilot, 6th edn. H.M.S.O., 1946, pp.29, 31; relevant charts in Monthly Met. Charts of Ind. Oce.
   Confirmative contemporary evidence of the route to Mozambique is provided by Blancard in c.1787. He writes: "Ships sent from the Ile de France to trade in slaves often call at Kerimba where they /not only/ sometimes procure all those /things/ of which they are in need, but /also/ always obtain a part of their cargo, which they go to complete at Mozambique." P. Blancard, Manuel du commerce des Indes et de la Chine, Paris, 1806, p.20.

2. [illegible], loc.cit.; Blancard, op.cit., p.14.

can be made through the trade wind.

With this knowledge of sailing periods and routes, Norice's assertion of the number of voyages possible to Mozambique or Kilwa in the course of a year may now be taken up. There are two optimum periods in which to leave for Kilwa, and as they are separated by a couple of months when the wind is boisterous, two voyages can be made by the same vessel. It may just be possible to make a third one during the later part of the second period as conditions are generally favourable as late as November. On the other hand, the voyage to Mozambique is best accomplished during the season of the north-east monsoon when, however, the return route is in the direct path of tropical cyclones which attain greatest incidence in January and February.[2] So unless the voyage can be completed before then, a ship cannot undertake a second one before the south-easterlies are firmly established in the whole of the Mozambique Channel.

The number of voyages that could be made to Kilwa or Mozambique also depended, as Norice states, on the time needed to make up a slave cargo.[3] This took "several months" at Mozambique as the trade there was not officially legalised until 1787. Hence it would have been normally difficult for a ship to complete two voyages to Mozambique in a year. Without a resident agent in the port, the possibility of a

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1. S.Ind.Oce.Pilot, pp.29, 30-1 (also, Admiralty, Hydrog. Dept., Ocean Passages for the World, comp. B.T. Somerville, 2nd edn., H.M.S.O., 1950, p.246.).
   Ships from Zanzibar can use the north-east monsoon route from Mozambique and those from Mozambique the route during the same season from Zanzibar, though these are less favoured than the routes set out above.
2. Monthly percentage frequency of tropical cyclones in southern Indian Ocean west of 80°E. : January 26.5 and February 26. Cf. November 4 and December 11. Koninklijk Nederlands Meteorologisch Instituut, Indian Ocean Oceanographic and Meteorological Data, No.135, 1950, Sheet B.
3. [illegible], p.199.

third journey to Kilwa would almost certainly have to be ruled out. Yet at least before the steep rise in demand for slaves at Kilwa in the 1780s[1], the sailing periods left a sufficiently long time for two voyages to be made to that port in a year. Finally, it should be remembered that this climatological potentiality could be exploited only for the run between the Ile de France and East Africa, and that those ships of the 1780s which were bound for French America could not do more than one voyage a year whether they picked up their cargo at Kilwa or Mozambique.

Encouraged by the information he acquired at Kerimba, Morice naturally turned first to Zanzibar (as did the Dutch from the Cape[2]), where in two trips in 1775 he secured a cargo of 1625 slaves.[3] On his second voyage, probably towards the end of the year, he was "persuaded" to call at Kilwa and he evidently decided to trade henceforth at both the ports. For when he set out on Le Gracieux on his third voyage to Zanzibar in 1776, he dispatched another ship, L'Abyssinie direct to Kilwa. At Zanzibar, however, a certain Monsieur Clonard's "little war (petite guerre)" with the Arabs - doubtless over supply of slaves - obliged him to retreat to Kilwa where the two ships obtained a total of 700 slaves. Then on the 14th of September Morice signed a formal treaty with the

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1. Thus in 1777 slave cargoes for Morice's two ships were assembled at Kilwa in less than three weeks (FMI, p.207). It is possible, however, that he had by then set up a factory there (ibid., p.53).

2. The Dutch periodically traded for slaves at Zanzibar between 1742 and 1777 (Gray, Zanzibar, pp.89-90) when they switched from Madagascar to East Africa (C.Nalls, 'Dutch Navigation off the East African Coast', TNR, No.67, 1967, p.46).

3. FMI, p.64; supra, N.1, p.aaa.

Sultan for an annual supply of 1000 slaves at a price of 20 piastres each and a capitation tax of 2 piastres.[1] It served both to have direct trade contacts and so cut out the profits which accrued to the middlemen of Zanzibar. Few other details of Morice's activities at Kilwa exist before his death in c.1781, but he set up a small company in 1777 which fitted out two ships to Kilwa in that year.[2] If he traded the number stipulated in the treaty, it brought to Kilwa an annual sum of 20,000 piastres and a revenue of a further 2000. These indices will be useful in ascertaining the importance of Kilwa's slave trade with the French as the century wore on.

With Morice's death the treaty, by virtue of which he had enjoyed a monopoly of French trade in slaves, lapsed. Given the subsequent laissez faire at Kilwa and the continual growth in demand as a result of trade with French America,[3] it is not surprising that Crassons should have complained by 1784 that "the /French/ expeditions have never been properly thought out...., and so it happens that three or four ships find themselves in the same place and crowd each other out".[4] The crux of the problem was that without resident agents, the cargo had to be negotiated while the ships rode at anchor.[5] These conditions were

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1. Ibid., pp.168, 74, 87, 82, 70-2.

2. Ibid., p.207; Alpers, op.cit., p.171. (Morice's death, SD, p.193, FKI, pp.54-5).

3. Morice had sent on Le Gracieux to San Domingo in 1776 with a cargo of 400 slaves from Kilwa (FKI, pp.87-8) but he otherwise seems to have concentrated on trade with the Ile de France. Crassons (SD, p.196), however, indicates that trade with the Atlantic was already important in the early 1780s, and when his ship was grounded in 1788, he himself was taken on as a passenger at Kilwa aboard Le Don Royal bound for San Domingo with 500 slaves (J.M. Gray, 'The Recovery of Kilwa by the Arabs in 1785', TNR, No.62, 1964, p.25).

4. SD, p.196.

5. A. de Melo e Castro to M.de Melo e Castro, Mozam., 14/8/1786 where it is stated that once the cargo was completed, the French departed from Kilwa "without a single Frenchman remaining there, leaving evacuated a house in which they usually stayed on land, which is perhaps what has given place to it being said that the French have an establishment, and a factory there". Quoted by Alpers, op.cit., p.201.

reflected in increased prices, for since Morice's treaty in 1776, the price of slaves had doubled and the head tax trebled. It was still, however, cheaper to trade at Kilwa than at Mozambique, for though the price differential was small (see table below), it did not include "presents and tiresome vexations".[1] Crassons' count showed

COMPARATIVE PRICES OF SLAVES IN c.1787
in piastres

	Mozambique	Kerimba	Kilwa	Mongalo
Males, aged 20 and over	35-45	35-40	35-40	
Males, aged 15-20,				
4'6" tall	35-45			Prices stated to be the same as at Kilwa
4'1"-4'5" tall	25-30	25-30	+25-30	
Males, aged 8-15				
3'6"-3'11"tall	20-25	18-20	+16-20	
Females, aged 18 and over	30-35	30-35	25-30	
Females, aged 8-15				
4'6" tall	30-35			
4'1"-4'5" tall	25-28	22-25		
<4' tall	18-22	18-20	+12-18	
Capitation Tax	4	None	6½	3
Baptism Tax	½	None	None	None

+ Only the age group is specified.

Source: P. Plancard, Manuel du commerce des Indes et de la Chine, Paris, 1806, pp.14-23.

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1. Crassons in c.1784 alleged that the price of a slave at Mozambique and Kerimba was 50 or 60 piastres (SD, p.197), but in view of Blancard's figures only three years later, it was probably an exaggerated estimate. Blancard (op.cit., pp.22-3) also stated that for a cargo of 300 slaves at Kilwa, presents worth 280 piastres had to be given to the sultan, his relatives, the Arab governor and other officials. However, even if such presents were paid in Crassons' time, they amount to less than one piastre per head of slave, compared with 1½ to 1¾ piastres at Mozambique in c.1787 (ibid., p.20).

that slavers personally known to him had carried away 4193 slaves in a period of 28 months,[1] which gives an annual figure of 1800 for the first half of the 1780s. The amount which accrued to Kilwa, therefore, was at least 72,000 piastres plus a duty of 10,800 piastres. Clearly, the trade with the French had then assumed important proportions.

It was about this time that French commercial interest in Mongalo began. The French Minister of the Navy ordered the frigate La Venus, under the command of Count de Rosily, to make a special mission of reconnaissance from the Ile de France to the Persian Gulf and East Africa. It set out in July, 1785 accompanied by the royal corvette La Prévoyance, capitained by Saulnier de Mondevit.[2] The latter sailed to Kilwa at the end of 1785 or the beginning of 1786 to acquire a pilot who would conduct him to Mongalo or at least to obtain information about that port. It was instead intimated that only small boats usually went there, a move to discourage the French to open direct commercial relations with another port in the vicinity. So Mondevit proceeded unaided first to Lindi and thence to Mongalo where

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1. SD, p.196; FRI, p.216.

2. AMF, C4, 73, Souillac to Min. of Navy, Ile de France, 2/12/1786. Dallons later claimed that in 1788 the French Government ordered a Monsieur de Roussillon, a commander of a frigate, to visit Muscat to fix the capitation tax which the French should pay in East Africa (SD, p.200). This is evidently the same mission and that Dallons erred on the date and the man's name. He states that the tax was fixed at 5 piastres, and if this was so, the limit does not appear to have been observed. For in c.1787 Blancard (op.cit., p.22) gives it as 6½ piastres at Kilwa.
Note that Lislet Geoffrey's Memoir and Notice Explanatory of a Chart of Madagascar..... together with some Observations on the Coast Africa, 1819, refers to a second voyage that Mondevit made to East Africa in 1787 when he sailed from Cape Delgado northwards.

on c.10th of January, 1786 a trade agreement was drawn up. The chief clauses were that the French were to supply Mongalo with all the merchandise that it should request and that these were to be bartered for slaves and ivory. It was stipulated that the price of male slaves, regardless of age or size, shall never exceed 25 piastres, a much lower price than obtained at any of the markets at the time.[1] The treaty was, however, never ratified.

When the French Minister ordered this reconnaissance, he requested the Governor-General at the Ile de France to propose to a local shipowner to follow it up with one or several ships and promised to indemnify him in case of loss. The administrator enlisted Comarmond's services because of his experience in mounting lucrative voyages to East Africa, and in response to a favourable report from Mondevit, Comarmond promptly dispatched Le Furêt and Les Bons Amis to Mongalo in February, 1786.[2] The former did not make it and the latter was lost at the Ile de France on return in December, though a cargo of 400 slaves, wax and ivory was apparently salvaged. Comarmond fitted out four more in 1787 and even set up a factory (magazin) at Mongalo: La Bonnite in May, La Légère in August, La Française in December, and Le Mongalo was being prepared for the voyage in the same month.[3] The first was on a

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1. AMF, C4, 8C, 'Memoire sur la Baye de Lindy et la Rivière de Mongale, située à la côte de l'Afrique - Extrait du journal du Ch.er Saulnier de Mondevit.....' n.d., but 1786.

2. AMF, C4, 72, Monsieur Le Brasseur to Min. of Navy, n.d., but 1786; C4, 96, Le Chevalier d'Entrecasteaux & Motais de Narbonne to Min. of Navy, Ile de Fr., 30/1/1789; C4, 78, Comarmond to Min of Navy, Ile de Fr., 1/11/1787.
Les Bons Amis had apparently accompanied La Venus on the mission of reconnaissance and returned with a cargo of 74 slaves (C4, 85, Comarmond to Min. of Navy, Ile de Fr., 20/6/1789). This was, therefore, its second trip to East Africa at Comarmond's directive.

3. C4, 78, Comarmond to Min., 1/11/1787; C4, 85, same to same, 20/6/1789.

political mission and the third was lost at Zanzibar in February, 1798.[1] Nothing is known of the other two but, according to Blancard, several small French vessels which visited Mongalo at this time traded 100 to 150 slaves. Mongalo, however, soon lost its competitive advantage over Kilwa, for by 1787 prices of slaves were equal to those of Kilwa (table p.234) and by mid-1789 had doubled since Mondevit's visit 3½ years before, so that a lighter capitation tax of 3 piastres made little difference.[2]

While Portuguese intelligence reported that there were two French ships at Mongalo in December, 1788 and that the French then also traded at Mikindani where there were apparently two more ships, it is probable that trade ventures at these smaller ports ceased after 1789.[3] Even during these last four years, however, Kilwa remained the principal source of slaves for the French north of Cape Delgado, since Comarmond evidently exercised a monopoly at Mongalo and slave cargoes there were, in any case, relatively small. Neither the recovery of Kilwa by the Arabs and the installation of a governor in c.1785, nor the revival of the old Compagnie des Indes in the same year and the introduction of a system of passes (which lasted until 1790) for the Mascarene shipowners who traded in eastern Africa, impeded in any way the French

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1. Comarmond advocated a French establishment at Mongalo in 1787, just as Morice had previously done for one at Kilwa (C4, 85 & 146, memoirs 1 & 2). The proposal, however, did not receive the support of the home government in Paris. Comarmond persisted with his plans until the outbreak of the French Revolution. To this end, he stationed La Bonnite at Mongalo for two years "to show the French flag", while the government considered his proposal. The ship was mounted with four cannons and had a crew of twelve (documents cited in Alpers).
2. Blancard, op.cit., p.23; C4, 85, Comarmond to Min., 20/6/1789.
3. Tigre to A.M. de Melo e Castro, Ibo, 24/12/1788 and A.M. de Melo e Castro to M.de Melo e Castro, Mozam., 14/1/1789. Quoted by Alpers, op.cit., p.238.

slave trade at Kilwa.[1] On the former, Blancard states that an agreement had been reached whereby Kilwa granted to Zanzibar half of all the dues which accrued from this trade, so that the French continued to trade "in complete safety"; on the latter, though Dermigny's statistics of ships records at the Ile de France do not exclusively refer to East Africa, they nevertheless show that passes were readily available.[2] The demand at Kilwa was as high, if not higher, in the second as in the first half of the decade 1780-1790. Thus it was reported in December, 1788 that there were seven French ships at Kilwa, and Andrade was informed in the following year by a French captain that he was at Kilwa for nine months competing with five other ships (aonde residio nove mezes na concorrencia de outros cinco navios)[3] to make up a slave cargo.

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1. Gray, TNR, No.62, 1964, pp.20-6; on the dispute over the reading of the inscription on the fort, see FKI, N.1, p.57.
The Company was revived on 14th April, 1785 but "commerce of India beyond the Cape of Good Hope" was thrown open to all French subjects on 3rd April, 1790. J. Conan, La dernière compagnie française des Indes, 1785-1875, Paris, 1942, pp. 201, 119.

2. Blancard, op.cit., p.22.
At Port Louis, between November, 1786 and January, 1788 inclusive, 6 ships arrived from Madagascar and 14 from the African coast, while 12 departed for the African coast and 4 for the African coast and San Domingo. L. Dermigny, Cargaison Indiennes - solier gie, 1781-1793, Paris, 1959-60, I, p.103 (see also ibid., pp.98-102 and Conan, op.cit., p.109).

3. Tigre to Castro, 24/12/1788, quoted by Alpers, op.cit., p.238; J.J. Nogueira de Andrade, 'Descripção do estado em que ficavão os negocios da capitania de Mossambique nos fins de novembro o anno de 1789', Arquivo das Colónias, Lisboa, I, 1917, pp.123-5.
Cf. Crassons' figure of 14 French voyages to Kilwa in a period of 28 months in the early 1780s. SD, p.196; FKI, p.216.

The French impact on external relations of ports of the Kilwa coast

Nothing is known of the French slave trade at Kilwa in the early 1790s, but it presumably continued to flourish into 1793, after which fear of war might have caused a temporary hiatus, as happened at Mozambique.[1] When it was resumed after 1795, Zanzibar evidently began to surpass Kilwa as the chief mart for slaves, so this is the point at which to examine the changes in the pattern of trade caused by the French. With the prospect of a higher price for slaves at Kilwa, that port's hinterland expanded, as offshore islands in the vicinity, as well as smaller ports to the southward, stopped sending their cargoes to Zanzibar. Thus Morice claimed that in 1777 he purchased slaves at Kilwa from the nearby islands whose Swahili traders hitherto had "the custom of taking /them/ to Zanzibar". More important was the diversion from ports on the coast of southern Tanzania, as attested by Crassons in his statement in c.1784 that "a prodigious number of slaves" from this region, and especially from Monçalo, were brought to Kilwa to be sold to the French.[2]

With the truncation of Zanzibar's hinterland, the inflow of slaves was inevitably curtailed. Morice claimed in 1777 that in response to a letter from its Arab governor, he replied that he would have returned to the island if he "had not thought that Monsieur de Clonard's war had made him indisposed towards the French".[3] Though in 1779 he contracted to supply the Ile de France 600 slaves whom he would deliver either at Zanzibar or Kilwa, the ship sent to collect them, Les Bons Amis, was ill-received and had to proceed to Kilwa.[4]

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1. Alpers, op.cit., p.238.
2. FKI, p.168 (also p.182); SD, p.192.
3. FKI, p.173.
4. AF, 34, 49, Souillac & Foucault to Min. of Navy, Ile de Fr., 2/11/1779 & draft treaty; 34, 153, Anonymous, 'Mémoire relatif....(3) a la traite des Nègres sur la côte orientale d'Afrique...', n.d... but c.1786; Alpers, op.cit., N.1, p.172.

Then the experience of two Dutch frigates which called at Zanzibar in 1776 and 1777 show that the supply was indeed limited. For the captain of the second frigate, Jagtrust, was specifically informed by the governor that on instructions from his master in Oman, he would not be allowed to trade until two vessels from Muscat had completed their cargoes.[1] Evidently, the Kilwa region was in the eighteenth century, as it remained in the nineteenth, the most important source of slaves.

Despite Kilwa's new-found relationship with the Ile de France, its trade contacts with Zanzibar were not severed. The French, according to informants as far apart as Grassons in c.1784 and Fisher in 1809, paid for their slaves largely in piastres which, in the former's words, "do not remain long in their hands", for they were exchanged for trade goods brought from Surat and Muscat in dhows that did not normally visit Kilwa.[2] Besides, the French were the earliest body of traders on the east coast who were interested, about all else, in slaves. So ivory markets existed only at the northern ports, Zanzibar being chief among them, where the seasonal dhows took on their return cargo. It is indicative of Kilwa's market potential that in a legend to a plan of River Mongalo delineated by Dalrymple in 1789 from

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1. EMI, pp.32-3, 141-2, 88, 208; Gray, Zanzibar, pp.89-90; Walls, loc. cit., pp.47-8.

2. SD, p.197; Public Record Office, Adm. 1/62, 'Report of Capt. Fisher of H.M.S. Racehorse', R.74.
It should be noted that Dallons stated in 1804 that he carried to Zanzibar such goods as cloves, sugar and iron (SD, p.199), while Salt claimed in 1809 that the French supplied the island with arms, gunpowder, cutlery, coarse Indian cloths and Spanish dollars (H. Salt, A Voyage to Abyssinia, 1814, p.91).

a French manuscript (which was almost certainly the product of Rondevit's reconnaissance), it is stated that they "carry on a great trade as well in blacks, which they send to Quiloa, as in ivory, which they sell to the Arabs /from the northern ports/."[1] Moreover, there is one later instance on record which confirms the above inferences: in 1797, French pirates captured a dhow from Kilwa bound for Zanzibar "with a cargo of 300 blacks, 50 large ivory tusks and 1000 dollars".[2] By that time, however, the French probably traded more at Kilwa than at Zanzibar, and hence the inclusion of slaves in the cargo.

While the French advent did not thus break the previous pattern of coastwise routes, among the commodities which travelled along them, it removed one, viz. slaves, and introduced another, viz. piastres. The result was that Kilwa and Mongalo continued to look to the northerly ports as their markets for ivory and as their sources for trade goods. Yet the network of trade-routes became denser as islands off, and smaller ports on, the southern coast of Tanzania developed new links with Kilwa (and for a time Mongalo as well) in the wake of their direct contacts with the Ile de France. The overland route to Kilwa though, was not a product of French enterprise as it preceded their arrival and tapped both ivory as well as slaves. Inevitably, however, the quickened tempo of commercial activity on the

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1. Cited by J.M. Gray, 'Early History of Mungulho', TNR, No.63, 1964, pp.226-7 where, however, it is misprinted to 1769.

2. J.M. Gray, 'The French at Kilwa in 1797', TNR, Nos. 58 & 59, 1962, pp. 172-3.

East African coast gave a new fillip to Zanzibar's imports from Surat and Muscat, which in turn stimulated Kilwa's trade with its hinterland. So the most important effect of the French advent was perhaps indirect in that it enabled Zanzibar to reach the stage of "take off" in the sphere of external trade.[1]

The emergence of Zanzibar as the commercial metropolis

The earliest comparative indication of the trade of Kilwa and Zanzibar is given by Dallons who states that in 1804 they respectively transmitted 6000 and 40,000 piastres a year to Muscat. In 1809 Fisher reported that Kilwa and Mafia jointly paid $6000 (same unit as the piastre) which does not contradict Dallons' statement, since sometime after Kilwa's recovery by the Arabs, Mafia was put under its jurisdiction and farmed out to a nominee of its governor. Likewise, Fisher confirmed that Zanzibar's annual contribution amounted to $40,000.[2] These figures, however, do not represent the total revenue either at Kilwa or Zanzibar. For in 1812 Prior claimed that the sum "produced" by Kilwa and Mafia varied between $12,000 and $20,000, while the Earl of Caledon asserted that Muscat received $40,000 in 1807 as "rent" from Zanzibar, though the "produce" equalled $60,000.[3] The

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1. W.W. Rostow, The Stages of Economic Growth, Cambridge, 1960.

2. SD, pp.198, 200; PRO, Adm. 1/62; Gray, EHR, No.62, 1964, pp.20-6.

3. J. Prior, Voyage along the eastern Coast of Africa...., 1819, p.68; Earl of Caledon to Nicholas Vansittart, C. of Good Hope, 27/6/1810 in G.M. Theal, Records of south-eastern Africa, 1898-1903 (reprinted, Cape Town, 1964), IX, p.13.
Cf. Smee's statement in 1811 that Muscat received $60,000 a year from Zanzibar, though customs duty amounted to $150,000. T. Smee, 'Observations during a Voyage of Research on the east coast of Africa...', Transactions of the Bombay Geographical Society, VI, 1844, pp.23-61; reprinted in Burton, op.cit., II, appendix III, p.512.

difference between the total revenue collected and the amount transmitted to Muscat may in the case of Kilwa be explained by the Sultan's entitlement fixed at the time of Arab recapture,[1] and in the case of Zanzibar by the local cost of administration. Given the lower figure of $12,000 for Kilwa and $60,000 for Zanzibar, the total revenue at the beginning of the nineteenth century of the former compared with the latter was in the ratio 1:5.

Now, it has been seen that in the 1780s, the revenue which accrued to Kilwa from its slave trade with the French alone amounted to over 10,000 piastres. There was besides the important trade in ivory on which, so Norice claimed, a 7½ customs duty was charged. Nothing is known of an import duty, if any, although at Zanzibar an ad valorem duty of 3% was levied on imports and exports (ivory included) alike.[2] So Kilwa's revenue in the 1780s was substantially more than Prior's sum of $12,000 to 20,000, which probably relates to the first decade of the nineteenth century. It now remains to show that the drop in revenue occurred because of a decline, not in the ivory trade with Zanzibar, but in the slave trade with the French.

When Manuel Caetano Pereira visited the Court of Mwata Kazembe in the Luapula valley south of Lake Mweru in 1796, he confirmed not only that the Bisa-Yao trade-route then extended to the kingdom of that potentate, but also that the Yao preferred Kilwa to Mozambique as their

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1. Blancard (op.cit., p.22) states that the sultan was allowed one-half of customs dues on the slave trade, whereas Albrand claims that he retained a fifth of all dues (F. Albrand, 'Extrait d'un mémoire sur Zanzibar et sur Quiloa', Bulletin de la société de géographie de Paris, 2e série, 1, 1836, p.82).

2. Negro, p.335; FMI, pp.115, 172.

coastal terminus. He is stated to have informed Lacerda e Almeida, who made a similar journey two years later that

> the great quantity of ivory which every year leaves the kingdom of Kazembe and those kingdoms or lands that he has conquered....ends (vai ter) in the hands of the Mujaos /Yao/, their /Misa's/ neighbours, and these do not sell it all in Mozambique, because there is a notorious difference between the quantity of ivory which the Yao formerly brought to Mozambique, and that which they presently introduce in /view of/ increased commerce which the people of Zanzibar have conducted in that commodity since then.[1]

Almeida on the course of his journey became convinced of the veracity of this communication, and on interrogation Kazembe concurred that he obtained trade goods from and sent ivory and slaves to Mozambique and the Zanzibar coast.[2] When Prior visited Kilwa in 1812 after the cessation of French trade, he remarked that "Quiloa seems to offer only ivory and tortoise-shell for commerce, both of which can be sometimes procurred in considerable quantities".[3]

There is, indeed, evidence of continued French trade at Kilwa until the Ile de France was ceded to Britain in 1810. Thus to cite known instances up to 1804, a certain Jean Naud put in at Kilwa apparently to trade in 1797, and Dallons obtained slaves there two years later. Further, a register of arrival and departure of ships at Ile de France for 1803-4 shows that 2 voyages were made by French

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1. F.M. de Lacerda e Almeida, Travessia da Africa, ed. M. Murias, Lisboa, 1936. (The translation in R.F. Burton, The Lands of Cazembe, 1873, p.37 is faulty).

2. Ibid., pp.155, 233 (Eng. trans. in Burton, pp.57, 95). Meneses da Costa to Sousa Coutinho, 29/7/1800, ibid., p.71 (actually it is there misdated to June).

3. Op.cit., p.80.

captains to Kilwa, though three were made to Zanzibar.[1] Yet Bissell, who visited Zanzibar in 1799, says that it had "a great deal of trade with the French for slaves and coffee". Dallons who, like Morice before him, went both to Zanzibar and Kilwa on his first voyage in 1799 preferred, unlike Morice however, to trade at Zanzibar, where Smee was informed in 1811 that a Monsieur Dulon had recently left with a cargo of slaves.[2] The impression of decline in French trade at Kilwa left by the revenue figure given above is further strengthened by the fact that whereas the capitation tax on slaves was six piastres in the 1780s, it had doubled by 1804. This is not, however, to suggest that the flow of slaves to Kilwa had fallen off, as a differential head tax on Arab and French trade would not have had much impact on Kilwa's revenue if slaves were exported, say, to Zanzibar, rather than to the Ile de France. For Dallons states that at Zanzibar at least, a capitation tax of 11 piastres was exacted from the French, while the rest paid only one piastre.[3]

This shift of emphasis in the French trade from Kilwa to Zanzibar, possibly sometime after 1795, was in part due to a readier supply of slaves at Zanzibar, as it began to draw on the Mrima as well as the Kilwa coasts, aided perhaps by a slight difference (of one

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1. Gray, TNR, Nos. 58 & 59, 1962, pp.172-3; SD, p.200. AMF, C4, 122, 'Extrait du registre des arrivées et départs des vaisseaux, à l'Ile de France en l'an 12'. The above figures do not include the trip of the American Stilman of New York to Kilwa nor of the special mission of Le Diligent to Zanzibar (for which see R.Decary, Les Voyages du chirurgien Avine à l'Ile de France et dans la mer des Indes au début du XIX siecle, Paris, 1961). Besides, of the five voyages to the African coast, a couple might have traded north of Cape Delgado.

2. Bissell, loc.cit., p.35; SD, p.200; I.O., M.R., Misc.586 (This contains a copy of the journal presented to the East Indian Company which varies in details from the published version mentioned in N3).

3. SD, pp.194, 199-200; Blancard, op.cit., p.22.

piastre in 1804) in the head tax. The Napoleonic Wars had, moreover, led to a realignment of the French trade-route, which eliminated the advantage that Kilwa had over Zanzibar of a shorter sailing time from, and in the season of the north-east monsoon, to the Ile de France. It arose from the maritime blockade of the Mascarene Islands mounted by English vessels during the last years of the eighteenth century, but lifted after the peace of October 1801, reimposed when hostilities were resumed in 1803, and considerably tightened after 1806.[1] Tomkinson, who visited the East African coast in 1809, describes the French response to the blockade whenever it was operative. Word went out from the Ile de France as, for instance, on 4th September, 1804 (17 fructidor, an 12) when Le Papillon was dispatched with orders "to proceed to Mozambique and to sail north up to Kilwa and Zanzibar in order to inform every French or allied vessel which you [i.e., the captain] should find in these establishments of the presence of the enemy in front of the Ile de France.....".[2]

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1. A. Toussaint, Port Louis: deux siècles d'histoire (1735-1935), Port Louis, 1936, pp.173-4, 206, 207, 209.
The war did not seriously dislocate the trade between the Ile de France itself and East Africa. Thus in a report of 1804 it is stated that "the war has naturally paralysed the greater part of these ships; consequently, with the exception of those of Madagascar and the African coast which have been enabled to continue ....all [trade] has been suspended" (AMF, C4, 120, 'Rapport général pour les 2e, 3e & 4e trimestres de l'an 12' ; commerce, fl.107-8. See also C4, 125, Le Prefet Colonial to Min. of Navy, Ile de Fr., 30 nivose, an 13, enclosing 'Rapport général sur l'ensemble du service administratif de la colonie'). When Franco-Portuguese hostilities were joined in the Indian Ocean in 1808, slave trading ventures were restricted to modern East Africa. So de Caen, in support of the Imam of Muscat's wish to modify an article of the Maritime Convention signed with the French on 16/6/1807, commented that, among other reasons, "it was necessary to maintain the potential (conserver la ressource) of the slave trade at Zanzibar and Kilwa, places dependent on the sovereignty of the Imam of Muscat" (C4, 129, de Caen to Min. of Navy, Ile de Fr., 1/8/1807, enclosing copies of the Convention in Arabic and French; C4, 133, same to same, Ile de Fr., 4/9/1808).
2. AMF, C4, 120, 'Rapport des événemens maritimes de guerre, qui ont eu lieu aux iles orientales françaises, pendant l'an 12 & le 1er trimestre de l'an 13', fl.57.

With the imposition of the blockade, a triangular route was inaugurated in the western Indian Ocean. The French from the Ile de France sailed to Kilwa or Zanzibar in the period of the south-west monsoon, then set course for the Seychelles at the beginning of the north-east monsoon, whence they left in company usually towards the end of December, to arrive back home during the months of the greatest incidence of tropical cyclones, from which danger English cruisers beat a retreat to the Seychelles. It might be observed that the route from the Seychelles was not in the parabolic path of the tropical cyclones.[1] Now, any time gained in the shorter voyage to Kilwa than to Zanzibar was inadequate to compensate for the loss on the run to the Seychelles, an easting has to be made north of a line drawn from Kilwa to that archipelago at the beginning of the north-east monsoon, in contrast to the passage south of the Seychelles once the monsoon is firmly established. For the 'cross-monsoon' in November prevails only between 0 and 5°S. latitude and to the eastward of 58°E., while in January it blows up to 10°S. and is met east of 50°E.[2] As Tomkinson was informed, the rendezvous was Mahé Island in the Seychelles group, so that French vessels acquired security in numbers on their last lap of the triangular run to the Ile de France.[3]

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1. P.R.O., Adm. 1/63; AAE, C4, 135, Quinn? to de Caen, Mahé, 25/2/1809: J. Prior, 'Voyage in the Indian Seas in the Nisus Frigate...', in New Voyages and Travels, I, 1820, p.46; S. Ind. Oce. Pilot, p.29.

2. Supra, p.230 relevant charts in Monthly Met. Charts of Ind. Oce.

3. When Franco-Portuguese hostilities broke out in the Indian Ocean in 1806, the pattern of French trade changed in detail. Tomkinson (PRO, Adm. 1/63) recounts that French corsairs "fitted up for the reception of slaves" set out from the Ile de France "without merchandise and nearly so as to provisions". After preying on Portuguese shipping in the Mozambique Channel in the fair season of the south-west monsoon, they made for Kilwa or Zanzibar to trade slaves, while the prizes were sent on to Mahé, where they were later joined by corsairs. The return journey to [illegible] was then accomplished as above.

Owing to bias in our documentation, two erroneous ideas persist, namely that by the end of the century the French trade in slaves was still greater than that of the Arabs and that slaves already formed the most important item of export from East Africa. There is no precise indication of the number of slaves carried away by the French after 1790. However, in 1811 Smee estimated that between 6,000 and 10,000 slaves passed through the Zanzibar market annually, of which less than 1,000 were probably sold to the French who, in addition, carried perhaps under 500 from Kilwa. For in 1803-4, a total of only five French voyages had been made to East Africa from the Ile de France, and because of the rather limited demand there, slave cargoes tended to be small.[1] The Arabs, however, paid an infinitely lower capitation tax than the French, and so it should be evident from the 1811 figures for Zanzibar that the slave traffic was not yet the all important trade that old scholars believed it to be. Fisher was impressed in 1809 by "an extensive commerce" carried on by the Arabs in which the French had no interest, and Smee two years later noted that the export of ivory is "very great". That Muscat's annual revenue was payable in dollars as in ivory also argues for the great importance of this commodity at the beginning of the nineteenth century.[2]

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1. Burton, Zanzibar, II, pp.493-4; supra. pp.244-5.
It is known that in 1806 one French ship carried away from Zanzibar 130 slaves, and in 1809 two ships carried away from Kilwa a total of 230. 34, 135, Quinn? to de Caen, 25/2/1809.
Smee in 1811 (ibid., p.512), as others before him, gave the sum that Zanzibar annually transmitted to Muscat as $60,000 which fell, according to Prior in 1812 (op.cit., p.51) to $50,000. Should the drop be entirely due to the cessation of the French traffic, then it shows that they traded about 800 slaves a year at Zanzibar.

2. I.R., Aca. 1/12; Burton, Zanzibar, II, pp.493-4.

By that time the Mrima coast - which together with the Kilwa coast formed the two components of Zanzibar's hinterland - began to be increasingly important. An anonymous advocate of a French establishment at Zanzibar in c.1786 testified that "the boats and dug-outs of the country traverse [the Zanzibar Channel] with ease in order to communicate with the mainland",[1] but the Mrima coast then must have provided only a limited quota of exports. Dallons, who first visited Zanzibar in 1799, complained five years later that the governor prevented the French from making "contact with the continent of Africa" and that he was the only one to have been granted that favour; and Hardy in 1811 confirmed that he forbade "any person to trade to the [Mrima coast]".[2] Sheriff sees in these statements the operation of the so-called "Mrima monopoly" which later on in the century came to be the cornerstone of Seyyid Said's economic policy. It amounted to the reservation of the commerce of that coast for the Arab and Swahili traders to the exclusion of the French and, perhaps, also the Indians. Having described the division of civil and military powers between the Imam of Muscat's representatives in Zanzibar, Dallons in fact added that "he [i.e., the Imam] has farmed out the mainland to a third person who has similar sureties [of rich estates in Muscat] to give him".[3]

The significance of the "Mrima monopoly" lay in the fact that this stretch of the coast was the termini of long-distance African

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1. C4, 153, "Mémoire relatif...(3) a la traite des Nègres sur la côte oriental d'Afrique, et à un établissement facile à former pour cet objet dans l'ile de Zanzibar", n.d.

2. SD, p.200; I.f., M.B., Misc.506.

3. SD, p.[illegible].

trade-routes across Tanzania. Much the most important was the central route from modern Tabora, along which trekked Nyamwezi traders. Its commencement is now thought to be later than has hitherto been assumed, so it is best to start with incontrovertible documentary evidence of this route and to work backward through the years. When Smee listed the principal tribes available for sale in Zanzibar's slave market in 1811, he placed the Nyamwezi first and added that their country abounds in ivory.[1] Two years earlier Salt had been informed by the Monjou [i.e., the Yao] that "they were acquainted with other traders called Eveezi" and he wrote in an unpublished note that "the Monjou trade up as far as Quiloa - the Ambeze or Eveze higher up".[2] Alpers identifies the Evezi with the Nyamwezi and suggests that the Yao ... them at Kazembe's court, as Baptista in c.1806 found there traders called "Tungalagaza", who sound like Burton's Wakalaganza, inhabitants of one of the districts of Unyamwezi. It should be noted that, unlike the Bisa traders who carried away ivory, the "Tungalagaza" are stated to bring (trazer) to Kazembe slaves, brass bracelets, cowries and palm-oil, though some of these commodities came from the coast.[3]

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1. Burton, Zanzibar, II, pp.510-1.
Smee's list appears to be in order of importance, for after the Nyamwezi, slaves from the Kilwa route are mentioned (e.g. the Makua and Yao), followed by those from the Kilimanjaro route (e.g. the Chagga and Usambara).

2. Salt, op.cit., pp.32-3; British Museum, Add.Mss. 19419, fl.14.

3. Alpers, op.cit., pp.272-3; 'A viagem de Angola para rios de Senna', Annaes Maritimos e Coloniaes, Lisboa, III, 1843, p.190 (Eng. trans., Burton, Kazembe, p.188); R.F. Burton, The Lake Regions of Central Africa, new edn., New York, 1961, I, p.406.

Captain Rieult of Le Diligent, sent on a special mission to Zanzibar in 1804, was instructed to profit from his stay on the island by making enquiries inter alia about its commerce. On return, he evidently reported that

> During the months of prairial, messidor, thermidor and fructidor /from c. the third week of May to the third week of September/ the inhabitants trade on the mainland of Africa, from which they are distant about ten leagues. About the month of vendémiaire /which varied from 22-24 September to 21-23 October/ they return to Zanzibar and resell /sic/ their slaves to Europeans; ivory, beeswax and other objects which they bring to the vessels which come from Muscat, from Surat and from the Persian Gulf.[1]

It is perhaps more than just coincidental that in the mid-nineteenth century these months correspond with the sojourn of Nyamwezi caravans on the Mrima coast: they left for the coast in April, and after 65 to 70 days' march arrived there in June and July, and started on their homeward trek in September, so as to avoid the long rainy season from October (near the coast) to April (in western Tanzania) during periods of travel.[2] Documentary sources yield no other anterior evidence of long-distance Nyamwezi trade ventures and, indeed, Robert's recent research in their oral tradition strongly suggests that, despite the earlier 'filtration' of coastal goods to Buganda via Karagwe, these traders did not begin to visit the coast until about

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1. C4, 120, 'Rapport des événemens...pendant l'an 12 & le 1er trimestre de l'an 13', fl.48-9 (see also fl.45).

2. Guillain, op.cit., III, pp.374-5, 380.

When the switch in the relative importance from the route to Kilwa to that to Pemba was effected, Zanzibar consolidated its position as the chief commercial metropolis of East Africa. The Nyamwezi traders trekked along the central plateau of Unyamwezi which in the east, however, is bounded by 'rim mountains' that trend north-east to south-west. They attain a height of over 3,000 feet whence there is a drop eastwards first to the low foreland plateau, and then below the 500-feet contour, to the narrow coastal lowland. The most northerly gap in this mountain girdle is cut by the upper course of the River Wami, the Mkondoa, between Kilosa and Dulwe. That upper course was utilised by the explorers in the nineteenth century as it is today by the central railway to the lakes. From Kilosa the route naturally led to the coast opposite the island of Zanzibar. As the nineteenth century progressed, this route attained ever greater significance, as first the Nyamwezi and then Arabs and their Swahili

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1. E.A. Alpers, The East African Slave Trade, Historical Association of Tanzania, Paper No.3, Nairobi, 1967, p.14; J.M. Gray, 'Trading Expeditions from the Coast to Lakes Tanganyika and Victoria before 1857', TNR, No.49, 1957, p.227.
There is one mention of "Musucuma" tarders as early as 1758, but these are not evidently identifiable with the modern Sukuma south of Lake Victoria. For they are stated to carry gold to the Mozambique coast along a route which enabled them to confirm that "in all Macuana and Mujava /i.e., Makua and Yao territories/ there is no sign of gold" (I.C. Xavier, 'Noticias des dominios portuguezes na costa de Africa oriental', Mozam., 26/12/1758, Andrade, op.cit., p.151). Lacerda e Almeida on his journey to Kazembe in 1798 came across these "Mussucumas, a tribe mixed in small numbers with the Muizas /Bisa/ on this side /i.e. south/ of the Zambeze /River Chambezi/". He adds later on in his diary that he was assured "that to the north, between the Mussucuma, who reach the banks of the Shiri /Shire/ or Nhanja /Nyasa, the modern Lake Malawi/, and the Muizas, are interposed the Demba /Bemba?/ tribe" (Lacerda, op.cit., pp.272, 293-4; Eng. trans. Burton, Cazembe, pp.94, 98-9).

2. J.D.L. Gamer, 'The East African Environment', History of East Africa, I, eds. R. Oliver and G. Mathew, Oxford, 1963, pp.4, 8; Burton, Lake Regions, I, p.377, II, p.246.

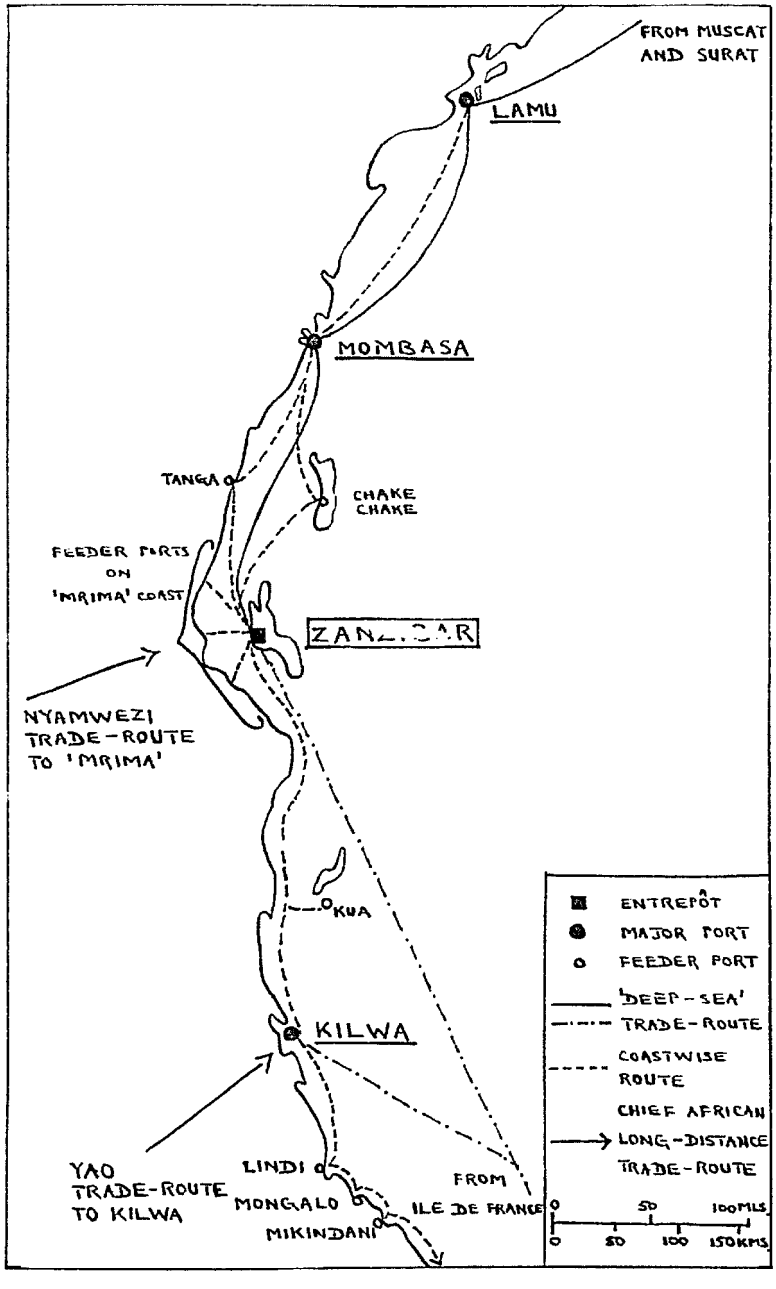

FIG. 27. THE PATTERN OF PORTS
AND TRADE-ROUTES IN A.D. 1800.

associates extended their trade links from Tabora north-westwards to Buganda and Bunyoro, westwards to Ujiji and the Congo, and south-westwards to Nyamwezi and Katanga.

Fig. 27 represents the pattern of trade-routes and the hierarchy of ports in c.1800. The route from the south Arabian and north-west Indian coasts usually terminated at Zanzibar, with Pate and Mombasa being ports en route; while the route from the Mascarene Islands led either to Kilwa or Zanzibar, with Mikindani and Mongalo being ports of call only in the period c.1796-1730. Owing to French preference for Zanzibar over Kilwa by the end of the century, however, the pattern of coastwise routes had simplified as its secondary focus, viz. Kilwa, itself sent a good many of its slaves to Zanzibar. So Zanzibar had already emerged as the chief entrepôt of East Africa for trade with Muscat and Surat in the north, and for the Ile de France in the south, in exchange for cargoes from the Kilwa and Mrima coasts. Mombasa was a poor second, and by 1800 Pate must have trailed a considerable way behind. These ports combined an inferior situation relative to the twin 'source-areas' as compared with Zanzibar, together with an inhospitable hinterland which impeded extensive overland trade connections. Except for French contacts with Kilwa, the pattern of ports and trade-routes which had emerged by the end of the eighteenth century endured until the 'scramble' of the late 1880s, which led to the dismemberment of the East African region.

CHAPTER VI

Conclusion: eastern African ports in their spatio-temporal Perspective

When East Africa was partitioned between the European powers towards the end of the nineteenth century, the pattern of port development crystallised into a more or less permanent system as first railways and later roads were laid inland from selected harbours on the coast. During all the long preceding centuries, however, the eastern African littoral formed an integral part of the Indian Ocean commercial system, and in view of the changing internal and external space relations, successive historical epochs saw the emergence of widely different port hierarchies. It is proposed in conclusion to focus on certain geographical relationships in their spatial and sequential perspective, to examine the impact of situation on the development of ports, and the factors both in the choice of their sites and the degree of their importance. These considerations will serve to illustrate the essential geographical basis of disparities in affluence, not only between the different stretches of the east coast through time, but also between the ports at any one period.

East Africa has had maritime contacts with the northern seaboard of the western Indian Ocean from time immemorial. These were possible because of the seasonal reversal of wind direction in that ocean as an outward voyage to East Africa can be made with the north-

east monsoon between November and February and a return journey fashioned with the 'build-up' of the south-west monsoon in April or the 'tail-end' of the monsoon in September. Within the sphere of monsoonal influence, however, the farther south a dhow sails, the shorter its sailing season becomes, since the monsoon attains its maximum areal extent only in January and then it gradually recedes northwards to be replaced by the opposite monsoon. So too does the constancy and the force of the north-east monsoon decrease southwards. Dhows bound for ports in the Mozambique Channel can indeed avail themselves of the Mozambique current which is at its strongest in this season, but owing to the prevalence of only a feeble southerly wind in the Channel in March and April, a contrary current makes the return voyage arduous in those months.[1] Thus, in terms of meteorological conditions, a dhow cannot normally sail beyond Cape Delgado and still hope to make the homeward journey during the early part of the south-west monsoon.

The implications for port development are profound. It explains why the gold and ivory which flowed to Sofala in the Middle Ages came to be channelled through the entrepôts north of Cape Delgado from the twelfth century onwards. The fortunes of those entrepôts depended, in fact, on control of the life-line to Sofala. Not long after the establishment of the Portuguese on the coast of Mozambique, however, this meridional extension of their hinterland was truncated and all foreign trade was centralised at Mozambique. Indian vessels

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1. Supra, pp. 117-119.

from the Portuguese colonies in India which sailed to Mozambique were forced, therefore, to 'winter' there so as to await the decline of the south-west monsoon. These ships would have left India by the end of December in view of so southerly a destination, and would have set sail for home after the middle of August, as did the Portuguese India-men.[1] On top of the extra length and duration involved in a journey into the Mozambique Channel, the time left to attend to the cargo and to refit in the home port was also appreciably curtailed. Hence for trade with the peripheral lands of the Arabian Sea, there were definite advantages in the location of ports to the north of Cape Delgado.

Even within East Africa, however, ports to the north of Zanzibar are better placed than those to the south of the island to engage in this traffic. The reasons are the same as those which pertain to the outward journey into the Mozambique Channel, coupled with the fact that most dhows prefer to depart for East Africa when the monsoon is firmly established and then make several stops en route in the ports of Somalia and Kenya. While Arab dhows can leave their home ports as early as November, many now call at Persian Gulf or south Arabian ports to collect a cargo and even passengers before they finally sail south.[2] Indian vessels do not start on their journey until a month or so later, owing to the greater incidence of tropical cyclones

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1. M.N. Jackson Haight, European Powers and South-East Africa, 1967, pp. 63, 76-83.

2. Supra, pp. 8-10; A.J. Villiers, Sons of Sinbad: an Account of Sailing with the Arabs, 1940.

east of the Persian Gulf and the generally northward flow of the winds off the coast in October and November. The fact that Indians could stay on in East Africa two to three weeks longer than the Arabs - as wind and current conditions are more favourable for a trans-oceanic voyage in May which thus avoids the stormy passage off the Horn - does not detract from the limitations imposed by the spatial extent of the north-east monsoon late in that season.[1]

It must be emphasised that seasonal dhows can sail to the southern ports of East Africa and yet make the return journey in April if they sail past Zanzibar by January and do not have to wait long in the harbour to dispose of and then make up a new cargo. Thus when control of the sea-lane to Sofala was of prime importance, Kilwa became an entrepôt in the later Middle Ages, a function that was aided by an advanced commercial organisation which enabled exports to be warehoused during the off-season and imports to be distributed subsequently. However, with the accelerated tempo of Indian commercial activity, Mombasa and to a lesser extent Malindi, undermined Kilwa's position as an intermediary in the Sofala trade. Once the Portuguese had detached the Mozambique coast from the erstwhile economic unity, and East Africa underwent a fundamental economic reorientation, the northern part once again became, as it had been in the early Middle Ages, the focus of port activity. Thus the Portuguese made Mombasa their stronghold towards the end of the sixteenth century, and when they were

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1. Supra, pp. 136, 141-2.

expelled at the end of the next century, the Omanis selected Zanzibar as their headquarters.

Here it is apposite to consider if the need to 'winter' was entirely obviated by a northerly location of an entrepôt. There is a dearth of information on this point, but it would appear that in the later Middle Ages, as in the late eighteenth and the early nineteenth centuries, that while Arab vessels for the most part sailed home with the 'build-up' of the south-west monsoon, at least some of the Indian ships fashioned their homeward course with the 'tail-end' of that monsoon. The fact that these vessels did not 'winter' farther south than Mombasa and Zanzibar in the first and second periods respectively[1], suggests that they arrived in East Africa, deliberately or otherwise, in late January or February, when a passage to Kilwa (the intermediary in the Sofala trade and the terminus of an overland route from Lake Malawi in those periods) would have been imprudent, despite the length of their projected stay. Dhows did not merely carry cargo for discharge but merchandise for sale, and without locally resident agents Indian vessels might not have been ready to depart in April. Should they have purposely opted to 'winter' they were probably motivated by such economic considerations as the cheaper price of export commodities during the off-season, and greater security on trade goods given on credit to local traders.

Within the Indian Ocean, the only 'deep-sea' connections that East Africa had from the south was with the Ile de France from the late

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1. Supra, pp. 139, 209.

eighteenth century onwards. The optimum periods of sail from the French island were the early and the later part of the south-east trades' northerly shift as the route was past the northern tip of Madagascar. Owing to the permanence of the trades east of Madagascar and the varying extent of the 'cross-monsoon', the alignment of the return route was different in each season. It lay between 0 and 10°S. latitude and to the west or east of longitude 70°E. before southing could be made and a course set for the Ile de France.[1]
The effect of these meteorological conditions was that the southern ports of East Africa had a slight advantage over the northern ones as the voyage from, and in the season of the north-east monsoon, the journey to the Ile de France was shorter. However, when the English mounted their blockade off the French islands from the end of the eighteenth century (with a brief interlude between 1801-3) and the homeward journey was routed via the Seychelles at the beginning of the north-east monsoon, this advantage was eliminated. It may have been a contributory factor in the replacement of Kilwa by Zanzibar as the chief slave mart for the French north of Cape Delgado.

On the occasions of a European breakthrough into the Indian Ocean, whether in Roman or Portuguese times, the comparative locational advantages of ports shifted as eastern Africa lay en route to western India. Once the Graeco-Romans discovered the use of the 'tail-end' of the south-west monsoon, they began to set a direct course for Malabar, initially from the coast of south Arabia, but by the beginning of the

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1. Supra, pp. 229-31.

second century from the coast north of Ras Hafun. Such an alignment had certain navigational advantages, and the fact that the Graeco-Romans departed from the Red Sea ports in July and made the journey to the Gulf of Aden in thirty days, and from thence to Malabar in a further forty, meant that they had some two months in the Gulf to effect their arrival in India by the end of September or the beginning of October.[1] The timing of voyages which originated outside the Indian Ocean obliged them, therefore, to berth in the ports of north-east Africa to await the decline of the south-west monsoon and so avoid the danger of being blown on to the land on approaching India.

Likewise the Portuguese discovered that they would have to mark time in East Africa before they could complete their last lap of the journey to India at the end of August or the beginning of September at the latest.[2] They failed, however, to see its implications for a time, since they first selected Kilwa as their way-station in the Indian Ocean, which would not have been inappropriate if the outward journey was made with the 'build-up' rather than with the 'tail-end' of the south-west monsoon. But within a decade of their arrival, the Portuguese recognised that the ideal position for such a port was near the zone of the farthest limit of the north-east monsoon, so that homeward-bound ships could put in if in need, and the starting point of the south-west monsoon in order that vessels might make a trans-oceanic

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1. Supra, p.49.

2. Supra, pp.171-2.

voyage to India. Mozambique satisfied this requirement and was, moreover, located to the north of the main gold outlets of Sofala and Zambesi which it could thus guard against Swahili "interlopers". Portuguese interest in the other port north of Cape Delgado, namely Malindi between 1503-12, was connected with unsuccessful attempts to counter the infiltration of trade goods at the source, and not just at the market.

Viewed in its chorological and chronological perspective, the East African coast was thus a focal area of port activity whenever trade contacts with the peripheral lands of the Arabian Sea were of paramount importance, supplemented, as in the late eighteenth century, by commercial links with the Ile de France. When, however, the Europeans burst into the Indian Ocean with India as their goal, it is the sections to the north and south of East Africa that in Roman and Portuguese times respectively became important because of their position relative to the sea-route to India. So it is that coastal studies of the early second and sixteenth centuries have to be extended to beyond the borders of East Africa in order to understand the impact on port activity in the central area. It must be emphasised though that the advent of the Portuguese was not the primary factor in the decline of coastal prosperity from the early seventeenth century, while the advent of the Graeco-Romans provided, in fact, the economic incentive for a southerly penetration of the south-west Arabians along the African coast.

So far the water situation of East African ports as a whole has been examined from the wider Indian Ocean viewpoint. It must now be considered from the local East African standpoint, as it was the 'short-sea'

trade-routes which connected the 'deep-sea' and the overland routes. The evolution of overland connections in the Middle Ages is implicit in the model of the sequence of port development which has been set up for that period. At the beginning, lateral connections of shallow depth fed a string of ports, but as the demand grew, there followed in the twelfth century a meridional expansion of the ports' hinterland as the continental trade-route along which flowed gold and ivory to Sofala was linked with the East African entrepôts by coastwise trade. Once the Portuguese established themselves on the Mozambique coast these longitudinal connections were broken, and owing to lack of research in the succeeding centuries the extent of economic reorientation is rather obscure. When the east coast began to feel the Omani stimulus in the 1750s, there was a repetition of the medieval pattern, though the longitudinal contacts did not extend beyond the Kerimba Islands in the vicinity of Cape Delgado. Soon, however, long-distance overland routes were forged which brought the Kilwa coast in commercial contact with the lands adjacent to Lake Malawi and which, by the turn of the century, likewise linked the Kerima coast with the region centred upon modern Tabora.

While the space relationship of the East African coast was east-west, even the farthest offshore islands enjoyed easy communications with a limited north-south stretch of the opposite coast of the mainland. For although meridonional movement in these waters is generally subject to monsoonal controls, lateral connections is possible almost the whole year, and especially favourable during the bi-annual seasons of

variable winds between the two monsoons. With the development of links with ports as far south as Sofala, it was imperative that the entrepôt for this lucrative trade should have a compromise location between the 'deep- and the short-sea' trade-routes. The offshore islands of southern Tanzania, notably Kilwa and Mafia, were well-suited for this intermediary function, for they were within reach of Arabian dhows and yet fairly close to the northern entrance to the Mozambique Channel where the south-west monsoon is a fair weather season. It might just be reiterated that the position of these islands was undermined when Indians actively began to trade in East Africa, as initially perhaps Mogadishu, and later Mombasa, became the prime focus of their activities. During the eighteenth and nineteenth centuries, with the coastal termini of long-distance African trade-routes not farther south than Kilwa, the most favourable location of entrepôts was in the northern part of East Africa.

The most important sites for port development might, at first thought, be assumed to have been the deep-water inlets or rias which pierce the coast at intervals. Today the larger rias constitute the four chief ocean terminals of East Africa, namely, Mombasa, Tanga, Dar es Salaam and Mtwara. These were, however, selected as points from which railways were laid inland in the late nineteenth and twentieth centuries. Prior to that period, with the notable exception of Mombasa, each of the others were largely ignored for nearby sites. Thus Pangani instead of Tanga, Bagamoyo rather than Dar es Salaam and Mikindani,

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1. J. Christie, Cholera Epidemics in East Africa, 1869, pp.11-2.

and not Mtwara, were the feeder ports of Zanzibar in the nineteenth century. For before the era of steam navigation, the physical characteristics, particularly of Dar es Salaam and Mtwara, made them unsuitable for sailing craft which needed only a limited sheltered anchorage.[1] With the partition of East Africa and associated developments of the late nineteenth century, there was on the mainland a geographical shift from the open roadsteads to the natural deep-water harbours, a shift which was enforced chiefly by increasing size and increasing manoeuvrability of ships.

Mombasa is the only port which has been of major significance almost continuously since the later Middle Ages. Besides its advantageous water situation as regards the northern rim of the western Indian Ocean, the dual existence of a defensive island site for the town and the twin harbours with widely different attributes (Fig.17) account for its continuous activity and development. However, the difference between medieval and modern times is not just that Mombasa Harbour offered adequate shelter for sailing craft and Kilindini Harbour provides plentiful deep water for large ships.[2] In the past the season of arrival of ships at Mombasa determined to a large extent the respective use of the harbours, as Mombasa Harbour is open to the influence of the south-west monsoon which makes anchorage unsafe and exit from it difficult in that season, and vice versa for Kilindini

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1. R.S. Hoyle, The Seaports of East Africa, Nairobi, 1967, pp.37, 39-41, 45-6.

2. Ibid., pp.8-9, 17, 121-2.

harbour.[1] So Arab and Indian dhows which plied during the north-east monsoon utilised the former harbour in the medieval period, while Portuguese ships which arrived in East African waters in the south-west monsoon preferred the latter harbour in the seventeenth century.[2] Mombasa is, therefore, an interesting example of the varying interaction of geographical circumstances and historical events.

Much the most important sites for major ports in the past were the relatively large offshore islands of East Africa. Not only did each one of them become prominent sometime between the ninth and the nineteenth centuries, but also each group of islands carried an important port almost throughout that period. These groups may be identified as the Lamu Archipelago where Manda in the early medieval period was succeeded by Shanga, Lamu and Pate in the subsequent centuries; Mombasa island which, as has been seen, held its own since the later Middle Ages; Pemba and Zanzibar islands with the latter playing the dominant role after the eleventh century; and the Kilwa-Mafia group of islands which, although ceased to be visited by Arabian dhows since the end of the medieval era, remained the most important feeder ports in the south. Some of the major ports in East Africa

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1. C. Guillain, Documents sur l'histoire, la géographie et le commerce de l'Afrique orientale, Paris, 1856, III, p.231; idem, Album, Paris, [1857], Pl.43.

2. Manuel Monteiro in 1593 (J. Gray, 'Description of the island of Mombasa and its harbour by...', Tanganyika Notes & Records, No.25, 1947, p.21) and Gaspar de S. Bernadino in 1606 (G.S.P. Freeman-Grenville, The East African Coast: Select Documents, Oxford, 1962, p.156), for example, state a clear preference of Kilindini over Mombasa harbour, and in his instructions to Ruy Freyr de Andrade in 1622 the King of Portugal permitted him, if necessary, to call at Mombasa en route to Ormuz but added that "if you are forced to enter, you will do so over the bar of Tuaca /former name of Kilindini harbour/ and on no account in that of Mutuana" (C.R. Boxer, ed., Commentaries of...., 1930, p.215).

proper were indeed located on the mainland coast but there were only a handful of them as, for example, Malindi and Ungwana in the Middle Ages compared with some nine which flourished during that period on the offshore islands. On the coast of Somalia lack of island sites meant that ports were situated on the Benadir stretch, but south of Cape Delgado Mozambique island and Ibo in the Querimba Islands, among others, were utilised.

Where the islands lay some distance from the coast, the immigrant-dominated ports had a defensive site. Where they lay close inshore, there was at least a psychological barrier between settlement and mainland. Thus the Galla towards the end of the sixteenth century wrought havoc at Kilwa and Mombasa but the ports of the Lamu Archipelago were spared the annihilation that the southward penetration of the Galla caused to the mainland ones. Two foreign powers, the Portuguese and the Omanis, selected Mombasa and Zanzibar respectively as their headquarters, and while the former were finally subdued by an invasion from the sea, they were obsessed by the security risk posed by a fordable strait behind the island. Islands which are separated by wide channels from the mainland could easily communicate with it as crosswise navigation is possible almost throughout the year. They are also generally well-endowed and so were not heavily dependent on imports of foodstuffs which could undermine their security. So long as East Africa remained one economic whole, and the unit of cargo small enough not to require overland rail connections and elaborate transhipment facilities, ports on offshore islands could readily exploit

the region through a series of feeder ports, and yet enjoy a measure of security from the mainland tribes.

Arab and Indian dhows arrived in East Africa in the season of the north-east monsoon, but some 'wintered' and sailed home during the later part of the south-west monsoon. French vessels called at Kilwa and Zanzibar mostly during the period of the south-west monsoon, while Portuguese ships put in at Mozambique, and in the seventeenth century sometimes at Mombasa in that same season. So the major ports had to offer sheltered anchorage in both the monsoons if they were to be visited by all the craft. With some, the alignment of the harbour - for example, east-west in the case of Kilwa (Fig.7) and north-south in that of Lamu - together with the protective effects of islands and reefs, made the anchorage safe in both the monsoons. With others, there was a separate anchorage for each monsoon - for instance, at Mombasa as detailed above, and at Zanzibar, north and south of Ras Shangani in the south-west and north-east monsoons respectively (Fig.25).

It would seem that lack of such a facility hampered the development of certain ports. Thus Mogadishu is exposed to the full force of the north-east monsoon, and prior to the construction of a breakwater communication with the shore was practicable only at the beginning of the season, in October and November, or towards the end, in and after February (Fig.8). Fortunately, the effects were mitigated to some extent by a northerly location which allowed at least the early dhows from the Persian Gulf as well as those from the Red Sea to put in. On the other hand, Malindi in the fifteenth century was a poor second

to Mombasa in the Indian traffic, despite the disabilities suffered by Indian traders at the latter port. This was presumably because while anchorage may be obtained in five fathoms off the town in the south-west monsoon (though some swells set in), it is necessary to proceed to a roadstead three miles south for shelter in the opposite monsoon (Fig.13). Further, it is not without interest that the Portuguese deserted Malindi for Mombasa once they began to play an active role in East African commerce from the late sixteenth century.

The fact that East Africa had several major ports in the ten centuries before the 'scramble' is, however, evidence of the existence of the choice of sites. Their number at any one period varied widely, and depended upon such factors as the level of development of local shipping, the nature and direction of external contacts, the extent of the coastal stretch included in the economic unity and the commercial policies of such foreign powers as the Portuguese and the Omanis. When the Middle Ages commenced, a number of ports studded the east coast, each based on its own local catchment areas. With the development of interconnection between ports, the number of major ports rapidly dwindled as trade became centralised. As the medieval period progressed, the entry of Indians diffused the pattern of port activity. The process continued under the Portuguese in the early sixteenth century at the same time as they established a new centre in south-east Africa. Soon, however, East Africa became a backwater and the number of major ports fell again. It was not much larger when the revival came with the Omani stimulus, but the French added a couple to the list for a time. Yet it was only in the nineteenth century (given the

exclusion of Zanzibar) that the importance of the chief entrepôt ever transcended the East African region.

All the major ports had previously been significant merely in a regional context. One reason is that the configuration of the east coast does not endow any point with a neutrality that, say, that of Malacca enjoyed. So several ports could grow up within the general monsoonal limit. Another reason is that before the eighteenth century, the lateral trade-routes were shallow, while the longitudinal connections once extended to Sofala. Hence the diffusion of commerce along the coast was an inevitable consequence of any realignment of 'deep-sea' trade-routes. The Zanzibar of the nineteenth century largely overcame these limitations. Used by the Omanis as the capital of their East African dominions, Zanzibar developed on the seaward side an extensive commercial network that made its central position a great asset in its contacts from the north as well as the south. On the landward side, Zanzibar stood as the eastern terminus of a series of routes from the Nyasa coast which reached out beyond the Great Lakes to Uganda, the Congo and Zambia. The irony of Zanzibar's present-day situation is that the very factors which once actively encouraged its rise as a commercial metropolis of East Africa now strongly militate against its growth.[1] It heavily underlines the point that the late nineteenth century was the end of an era in port development, an era which except for the previous century or so had been characterised by changing port hierarchies associated with varying patterns of trade-routes.

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1. Hoyle, op.cit., pp.97-8.

Appendix

Published Portuguese Roteiros of the sixteenth and the seventeenth centuries on the western Indian Ocean

Professor C.R. Boxer's article, 'Portuguese Roteiros, 1500-1700' in The Mariner's Mirror, XX, 1934, pp. 171-186, based on Commander A. Fontoura da Costa's lecture on Este livro he de Rotear, Lisboa, 1933, has been superseded by the latter's 'Roteiros portugueses até 1700' pp. 288-343, coupled with 'Bibliografia náutica portuguesa até 1700' pp. 411-474, in his A Marinharia dos Descobrimentos, 3rd edn., Lisboa, 1960. This has been drawn upon for the compilation of the following list.

For biographical notes on the authors of these roteiros see F.M. Sousa Viterbo, Trabalhos nauticos dos portuguezes nos séculos XVI e XVII, 2 vols., Lisboa, 1898-1900, and Frazão de Vasconcelos, 'Pilotos das navegações dos séculos XVI e XVII (Apostila aos Trabalhos Nauticos do Dr. Sousa Viterbo)', Ethnos, Lisboa, II, 1942, pp. 249-336.

1. 1514. João de Lisboa, Livro de Marinharia: Tratado da Agulha Marear de ---, ed. J.I. de Brito Rebello, Lisboa, 1903, esp. pp. 173-190.

2. c. 1530. 'Darrotas de Portugal para a Índia e desta para Malacca, Java, Sunda, Molucas, etc.' contained in above pp. 211 et seq.

3. c.1536. Diogo Afonso. The original has been lost (see, however, 5 below) but was copied by J.H. van Linschoten and translated into Dutch in 1595. It was subsequently translated into English by W.H. [William Philip], J.H. van L. his discours of Voyages, London, 1958, pp. 308-12, 317-20.

4. 1538. Dom João de Castro, Roteiro de Lisboa a Goa, 2nd edn., ed. A. Fontoura da Costa, Lisboa, 1939.

5. c. 1545. Manuel Alvares, 'Colecção de Roteiros de ---', in A. Fontoura da Costa, ed., Roteiros portugueses inéditos da carreira da Índia no século XVI, Lisboa, 1940.

   The roteiro of India, pp. 31-46, is practically identical with that of Diogo Afonso.

6. c. 1548? [Bernardo Fernandes?] 'Regimento de Portugal para a Índia', in Livro de Marinharia de ---, ed. A. Fontoura da Costa, Lisboa, 1940, pp. 55-107.

7. Vicente Rodrigues:
c. 1575, first roteiro. The original has been lost but it was copied by Linschoten. Eng. trans., op. cit., pp. 312-7.

c. 1591, second roteiro. This 'roteiro da Índia' is an expanded and corrected copy of the first and was published by G. Pereira, ed., Roteiros portuguezes da viagem de Lisboa a Índia nos séculos XVI e XVII, Lisboa, 1898, esp., pp. 15-34.

8. 1600. 'Roteiro da carreira da Índia de Manuel Monteiro e Gaspar Ferreira [Reimão] estando presente João Baptista Lavanha' (in Spanish) in da Costa, Roteiros port. inéditos, pp. 143-173. This is an abridged version of the roteiro of G.F. Reimão, 12 below.

9. Beginning of the seventeenth century? Vicente de Sintra, 'Roteiro de --- de Goa para Mossambique', ed. Virginia Rau, Stvdia, No. 11, 1963, pp. 257-261.

10. c. 1604. Gaspar Manuel, 'Roteiro da carreira da Índia', in Pereira, loc. cit., esp. pp. 40-76.

11. 1608. Manuel de Figueiredo, Hydrographia. Exam de Pilotos ... com os roteiros de Portugal para a Índia ... segundo Vicente Rodrigues piloto-mór, e agora novamente pellos pilotos modernos, Lisboa. It was reprinted with slight alterations in 1614, 1625 and 1632. 'O roteiro da Índia' is based on the second roteiro of Vicente Rodrigues.

12. 1612. Gaspar Ferreira Reimão, Roteiro da Navegação e carreira da Índia ... tirado do que escreveu Vicente Rodrigues e Diogo Afonso, pilots antigos, 2nd edn., ed. A. Fontoura da Costa, Lisboa, 1940. The author, however, 'wintered' in the Kerimba Islands in 1608 and adds considerable detail on the section on eastern Africa.

13. c. 1621. Aleixo da Motta, 'Roteiro da carreira da Índia', in Pereira, loc. cit., esp. pp. 93-167.

14. 1635. 'Sobre a navegação entre Lisboa e a Índia, segundo uma junta de Pilots', ed. Frazão de Vasconcelos, Boletim Geral do Ultramar, XXXV, Nos. 403-4, 1959, pp. 43-51.

15. 1642. António de Mariz Carneiro, Regimento de pilotos, e roteiro das navegaçoens da India oriental, Lisboa, reprinted 1666. 'O roteiro da Índia' is a word by word copy of that of G.F. Reimão, 12 above.

16. 1681. Luiz Serrão Pimentel, Arte pratica de navegar e regimento de pilotos ..., 2nd edn., ed. A. Fontoura da Costa, Lisboa, 1960. 'O roteiro da Índia oreintal' is based on that of Aleixo da Motta, 13 above.

17. 1699. Manuel Pimental, Arte pratica da navegar, e roteiro das viagens ..., Lisboa, reprinted 1762. This is a slightly improved reprint of the work of his father.

Bibliography

I. East African Coast: General

Coupland, R., East Africa and its Invaders, Oxford, 1938 (reprinted 1965).

Freeman-Grenville, G.S.P., The East African Coast: Select Documents from the First to the Earlier Nineteenth Century, Oxford, 1962.

Gray, J.M., History of Zanzibar from the Middle Ages to 1856, London, 1962.

Guillain, C., Documents sur l'histoire, la géographie et le commerce de l'Afrique orientale, 3 vols., Paris, 1856.

" " Album: voyage a la côte orientale d'Afrique, Paris, [1857].

Hoyle, B.S., The Seaports of East Africa: a Geographical Study, Nairobi, 1967.

" " 'Early Port Development in East Africa: an Illustration of the concept of changing Port Hierarchies', Tijdschrift voor Economische en Sociale Geografie, LVIII, 1967, pp. 94-102.

Ingrams, W.H., Zanzibar: its History and its People, London, 1931.

Kirkman, J.S., Men and Monuments on the East African Coast, London,1964.

" " 'The History of the Coast of East Africa up to 1700', in Prelude to East African History, ed. M. Posnansky, London, 1966.

McMaster, D.N., 'The Ocean-going Dhow trade to East Africa', The East African Geographical Review, No. 4, 1966, pp. 13-24.

Oliver, R. & Mathew, G., eds., History of East Africa, vol. 1, Oxford,1963.

Pearce, F.B., Zanzibar: the Island Metropolis of eastern Africa, London, 1920.

Prins, A.H.J., The Swahili-speaking Peoples of Zanzibar and the East African Coast, Ethnographic Survey of Africa, London, 2nd edn., 1967, esp. pp. 36-49.

" " Sailing from Lamu: a study of Maritime Culture in Islamic East Africa, Aseen, 1965.

Sutton, J.E.G., The East African Coast: an Historial and Archaeological Review, Historical Association of Tanzania, Paper No. 1, Nairobi, 1966.

Theal, G.M., ed., Records of South-Eastern Africa, 9 vols., London, 1898-1903 (reprin. Cape Town, 1964).

Villiers, A.J., Sons of Sindbad: an Account of Sailing with the Arabs, London, 1940.

" " 'Some Aspects of the Arab Dhow Trade', Middle East Journal, II, 1948, pp. 398-416.

II. The Early Period

Allen J.W.T., 'Rhapta', Tanganyika Notes and Records, No. 27, 1949, pp. 52-60.

Bagrow, Leo, 'The Origin of Ptolemy's Geographia', Geografiska Annaler, Stockholm, Arg.27, Häft, iii-iv, 1945, pp. 318-87.

" " 'Supplementary Notices to "The Origin of Ptolemy's Geographia"', Imago Mundi, IV, 1947, pp. 71-2.

Baxter, H.C., 'Pangani: the Trade Centre of Ancient History', Tanganyika Notes and Records, No. 17, 1944, pp. 15-25.

Bunbury, E.H., A History of Ancient Geography, 2 vols, London, 1879.

Cary, M. & Warmington, E.H., The Ancient Explorers, London, 1929.

Charlesworth, M.P., Trade Routes and Commerce of the Roman Empire, Cambridge, 1926.

Chittick, N., 'Six early Coins from near Tanga', Azania, I, 1966, pp. 156-7.

Cooley, W.D., 'On the Regio Cinnamomifera', J. of Royal Geographical Society, XIX, 1849, pp. 167-191.

Cosmas Indicopleustes, Eng. trans J.W. McCrindle, The Christian Topography of ---, Hakluyt Society, 1897.

Dicks, D.R., The Geographical Fragments of Hipparchus, London, 1960.

Edwards, H.E., The western Shores of the Indian Ocean before Vasco da Gama, M.A. Thesis, University of London, 1929-30.

Freeman-Grenville G.S.P., 'The Times of Ignorance: a Review of Pre-Islamic and Early Islamic Settlement on the East African Coast', in Discovering Africa's Past, Uganda Museum, Occasional Paper No. 4, Kampala, 1959, pp. 4-17.

Hourani, G.F., Arab Seafaring in the Indian Ocean in Ancient and Early Medieval Times, Princeton, 1951 (reprinted Beirut, 1963).

" " 'Did Roman Commercial Competition Ruin South Arabia?', J. of Near Eastern Studies, XI, 1952, pp. 291-5.

MacDowall, D.W., 'The early western Satraps and the Date of the Periplus,' Numismatic Chronicle, 7th series, IV, 1964, pp. 271-280.

Mathew, G., 'The East African Coast until the coming of the Portuguese', in Hist. of E. Africa, I, pp. 94-127.

" " 'The Dating and the Significance of the Periplus of the Erythrean Sea', Paper read at the Conference on 'East Africa and the Orient', Nairobi, April, 1967.

Mattingly, H., 'Coins from a site-find in British East Africa', Numismatic Chronicle, XII, 1932, p. 175.

Miller, J.I., The Spice Trade under the Roman Empire from ... B.C.29 to 641 A.D., D.Phil. Thesis, University of Oxford, 1963.

Müller, C., Tabulae in Geographos Graecos Minores, Paris, 1855, maps XI-XIV drawn to illustrate the Periplus.

Murray, G.W., 'Trogodytica: the Red Sea Littoral in Ptolemaic Times', The Geographical Journal, CXXXIII, 1967, pp. 24-33.

Palmer, J.A.B., 'Periplus Maris Erythraei: the Indian Evidence as to the Date', The Classical Quartertly, XLI, 1947, pp. 136-40.

Periplus, Eng. trans. W. Vincent, The Voyage of Nearchus and the Periplus of the Erythraean Sea, Oxford, 1809.

" " " J.W. McCrindle, The Commerce and Navigation of the Erythraean Sea, Bombay, 1879.

" " " W.H. Schoff, The Periplus of the Erythraean Sea, New York, 1912.

" " " J.I. Miller, Appendix to the thesis.

Pirenne, J., 'La date du "Periple de la Mer Erythrée"', Journal Asiatique, CCXLIX, 1961, pp. 441-459.

Pliny, Eng. trans. (Loeb) H. Rackham, W.H.S. Jones & H.A. Eichholz, Natural History, 10 vols., London, 1938-1963.

Ptolemy, C., Eng. trans. E.L. Stevenson, Geography of ---, New York, 1932.

Schlichter, H., 'Ptolemy's Topography of eastern Equatorial Africa', Proceedings of the Royal Geographical Society, 1891, pp. 1-41.

Schoff, W.H., 'As to the Date of the Periplus', J. of the Royal Asiatic Society, 1917, pp. 827-30.

" " 'Cinnammon, Cassia and Somaliland', J. of the American Society, XL, 1920, pp. 260-70.

Strabo, Eng. trans. (Loeb) H.L. Jones, The Geography of ---, 8 vols., London, 1917-32.

Struck, B., 'Rhapta, Prasum, Menuthias', Zeitschrift der Gesellschaft für Erdkunde zu Berlin, 1921, pp. 188-196.

Tarn W.W., The Greeks in Bactria and India, 2nd edn., Cambridge, 1951.

Vincent, W., The Commerce and Navigation of the Ancients in the Indian Ocean, II, London, 1807.

Wainwright, G.A., 'Early Foreign Trade in East Africa', Man, XLVII, 1947, pp. 143-8.

Warmington, E.H., The Commerce between the Roman Empire and India, Cambridge, 1928.

" " 'Africa in Ancient and Medieval Times', in The Cambridge History of the British Empire, vol. VIII, ed. E.A. Walker, Cambridge, 1963, pp. 51-76.

Wheeler, R.E.M., 'Roman Contact with India, Pakistan and Afghanistan', Aspects of Archaeology in Britain and Beyond. Essays presented to O.G.S. Crawford, ed. W.F. Grimes, London, 1951, pp. 345-381.

" " Rome Beyond the Imperial Frontiers, London 1954.

Wismann, H. von, 'Die Südgrenze der Terra Cognita von Juba und Pilnius bis Ptolemäus', Schlern-Schriften No. 190, Geographische Forschungen, H. Kinzl-Festschrift, Innsbruck, 1958, pp. 311-325.

III The Middle Ages

Note: Portuguese sources for this period are listed under IV below.

Abu'l-Fidā', Fr. trans. M. Reinaud, Géographie d'Aboulféda, 2 vols., Paris, 1848-83.

Arkell, A.J., 'Cambay and the Indian Ocean Trade', Antiquity, X, 1936, pp. 292-306.

Al-Bīrūnī, Eng. trans. E.C. Sachau, Alberuni's India, 2 vols., London, 1910.

British Institute of History and Archaeology in East Africa, Triennial Report, 1959-62 and Annual Reports 1962-.

Burke, E.E., 'Some Aspects of Arab Contact with South-East Africa', in Historians in Tropical Africa (Leverhulme Inter-Collegiate History Conference held in September, 1960), Salisbury, 1962.

Buzurg b.Shahriyār, Ar. text ed. P. van der Lith and Fr. trans L.M. Devic, Livre des Merveilles de l'Inde, Paris, 1883-6.

Chau Ju-Kua, His Work on the Chinese and Arab Trade in the Twelfth and Thirteenth Centuries, Eng. trans. F. Hirth & W.W. Rockhill, St. Petersburg, 1911.

Chittick, N., 'Notes on Kilwa', Tanganyika Notes and Records, No. 53, 1959, pp. 179-203.

" " Kisimani Mafia: Excavations at an Islamic Settlement on the East African Coast, Ministry of Education, Antiquities Division, Occasional Paper No. 1, Dar es Salaam, 1961.

" " 'Kilwa and the Arab Settlement of the East African Coast', J. of African History, IV, 1963, pp. 179-90.

" " 'The "Shirazi" Colonization of East Africa', J. of African History, VI, 1965, pp. 275-294.

" " 'Kilwa: a Preliminary Report', Azania, I, 1966, pp. 1-36.

" " 'Unguja Ukuu: the Earliest Imported Pottery and an Abbasid Dinar', Azania, I, 1966, pp. 161-3.

" " 'Discoveries in the Lamu Archipelago', Azania, II, 1967, pp. 37-67.

" " 'A Coin Hoard from near Kilwa', Azania, II, 1967, pp.194-8.

Department of Antiquities, Dar es Salaam, Annual Reports, 1957 - .

Devic, L.M., Le pays des Zendjs, ou la côte oriental d'Afrique au moyen-age, Paris, 1883.

Al-Dimashqī, Fr. trans. A.F. Mehren, Manuel de la cosmographie du moyen age, Copenhagen, 1874.

Duyvendak, J.J.L., China's Discovery of Africa, London, 1949.

Encyclopaedia of Islam, Leyden.

Fabuleé, J. & Urbain-Fabuleé, M., 'Madagascar vu par les autres arabes avant le XIe siècle', Stvdia, No.11, 1963, pp. 445-462.

Ferrand, G., Relations de voyages et textes geographiques Arabes, Persans et Turks relatifs à l'extrême-orient du VIIIe au XVIIe siècles, 2 vols., Paris, 1913-4.

....., Introduction à l'astronomie nautique arabe, Paris, 1928.

Flury, S., 'The Kufic Inscriptions of Kizimakazi Mosque, Zanzibar, 500 H. (A.D. 1107)', J. of the Royal Asiatic Society, 1922, pp. 257-64.

Freeman-Grenville, G.S.P., 'Chinese Porcelain in Tanganyika', Tanganyika Notes and Records, No. 41, 1955, pp. 63-6.

....., 'A New Hoard and Some Unpublished Variants of the Coins of the Sultans of Kilwa', Numismatic Chronicle, XIV, 1954, pp. 220-4 (Reprinted in TNR, No. 45, 1956, pp. 62-5.).

....., 'Coinage in East Africa before Portuguese Times', Numismatic Chronicle, XVII, 1957, pp. 151-75.

....., 'East African Coin Finds and their Historical Significance', J. of African History, I, 1960, pp. 31-43.

....., The Medieval History of the Coast of Tanganyika, Oxford, 1962.

....., 'Coins from Mogadishu, c. 1300 to c. 1700', Numismatic Chronicle, 7th series, III, 1963, pp. 179-200.

Garlake, P.S., Early Islamic Architecture of the East African Coast, Nairobi & London, 1966.

Gray, J.M., 'A History of Kilwa', Part I, Tanganyika Notes and Records, No. 31, 1951, pp. 1-24.

....., 'The Wadebuli and the Wadiba', Tanganyika Notes and Records, No. 36, 1954, pp. 22-42.

Harding, J.R., 'On some Crucible and Associated Finds from the Coast of Tanganyika', Man, LX, pp. 136-9.

Hourani, G.F., Arab Seafaring in the Indian Ocean in Ancient and Early Medieval Times, Princeton, 1951 (reprin. Beirut, 1963).

Ḥudūd al-ʿĀlam, The Regions of the World: A Persian Geography 372 A.H. - 982 A.D. Eng. trans. V. Minorsky, London, 1937.

Ibn. Baṭṭūṭa, Eng. trnas. H.A.R. Gibb, The Travels of--- 1325-1354, II, Hakluyt Society, 1962.

Ibn Mājid, Aḥmad., ed. T.A. Chumovsky & Port. trans. M. Malkiel-Jirmounsky, Três roteiros desconhecidos, Lisboa, 1960.

Ibn Sa'īd, q.v., Youssouf Kamal, Tom.IV, Fasc.i.

Al-Idrīsī, Fr. trans. P.A. Jaubert, Géographie d'Édrisi I, Paris 1836.

....., q.v., Youssouf Kamal, Tom. III, Fasc. iv.

Al-Jahiz, ed. G.van Volten, Tria Opuscula Auctore.... al-Djahiz, Batavorum, 1903.

Kirkman, J.S., 'Excavations at Kilepwa', Antiquaries Journal, XXXII, 1952, pp. 168-184.

...., The Arab City of Gedi, London, 1954.

....., 'The Cutlure of the Kenya Coast in the Later Middle Ages', South African Archaeological Bulletin, II, 1956, pp. 89-99.

....., 'Historical Archaeology in Kenya', 1948-56', Antiquaries Journal, XXXVII, 1957, pp. 16-28.

....., 'Kinuni: An Arab Manor on the Coast of East Africa', J. of Royal Asiatic Society, 1957, pp. 145-50.

....., 'Excavations at Ras Mkumbuu on the Island of Pemba', Tanganyika Notes and Records, No. 53, 1959, pp. 161-178.

....., 'Mnarani of Kilifi: The Mosque and Tombs', Ars Orientalis, III, 1959, pp. 95-112.

....., Gedi: The Palace, The Hague, 1963.

....., Ungwana on the Tana, The Hague, 1966.

Marco Polo, ed. & trans. A.C. Moule & P. Pelliot, I, London, 1938.

Al-Mas'ūdī, Text & Fr. trans. C.B. de Meynard & P. de Courteille, Les Prairies d'Or, 9 vols., Paris, 1861-77.

Mathew, G., 'Chinese Porcelain in East Africa and on the Coast of South Arabia', Oriental Art, new series, II, 1956, pp. 50-55.

....., 'The Archaeology of the Coast' in Handbook of Tanganyika, 2nd edn., ed. J.P. Moffett, Dar es Salaam, 1958, pp. 22-25.

....., 'Songo Mnara', Tanganyika Notes and Records, No. 53, 1959, pp. 154-60.

....., 'The East African Coast until the coming of the Portuguese', in Hist.of E. Af., I, pp. 94-127.

Mauny, R.,, 'Notes on the Zimbabwe-Sofala Problem', South African Archaeological Bulletin, XIV, 1959, pp. 18-20.

Miller, von Konrad, Mappae Arabicae, arabische welt-und Länderkarten des 9-13 Jahrhunderts, ... i, Stuttgart, 1926.

Pelliot, P., Notes on Marco Polo, 2 vols., Paris, 1959-63.

Randles, W.G.L., 'South-East Africa and the Empire of Monomotapa as shown on Selected Printed Maps of the Sixteenth Century', Stvdia, No. 2., 1958, pp. 103-163.

Schacht, J., 'An Unknown Type of Minbar and its Historical Significance', Ars Orientalis, II, 1957, pp. 149-173.

Sicard, H.V., 'The Ancient Sabi-Zimbabwe Trade Route', Nada, Southern Rhodesian Native Affairs Department Annual, No. 40, 1963, pp. 6-16.

Sleen, W.G.N. van der, 'Trade-Wind Beads', Man, LVI, 1956, pp. 27-9.

....., 'Ancient Glass Beads, with special reference to the Beads of East and Central Africa and the Indian Ocean', J. of the Royal Anthropological Institute, LXXXVIII, 1958, pp. 203-16.

....., Trade-Wind Beads Once More,' Man, LXIII, 1963, pp. 128-9.

Trimingham, J.S., Islam in East Africa, Oxford, 1964, pp. 1-18.

....., 'Reflexions on the Arab Geographers and the East African Coast', Paper read at the Conference on 'East Africa and the Orient', Nairobi, April, 1967.

Walker, J., 'The History and Coinage of the Sultans of Kilwa', Numismatic Chronicle, XVI, 1936, pp. 43-81 (Reprinted in TNR, No. 45, 1956, pp. 33-58).

....., 'Some New Coins from Kilwa', Numismatic Chronicle, XIX, 1939, pp. 223-7 (Reprinted in TNR, No. 45, 1956, pp. 58-61).

Wheatley, P., 'Geographical Notes on Some Commodities involved in Sung Maritime Trade', J. of Malayan Branch of the Royal Asiatic Society, XXXII, Part II, 1959.

....., 'The Land of Zanj: Exegetical Notes on Chinese Knowledge of East Africa prior to A.D. 1500' in Geographers and the Tropics: Liverpool Essays, eds. R.W. Steel & R.M. Prothero, London, 1964, pp. 139-187.

....., 'Analecta Sino-Africana Recensa', Paper read at the Conference on 'East Africa and the Orient', Nairobi, April, 1967.

Yāqūt, q.v., Youssouf Kamal, Tom. III, Fasc. v.

Youssouf Kamal, Monumenta Cartographica Africae et Aegypti, Leiden, 1926-53, Tom. III & IV

IV The Early Sixteenth Century

Albuquerque, A. de., Cartas de ....., ed., R.A. de Bulhão Pato, 7 vols., Lisboa, 1884-1935.

....., The Commentaries of the Great ....., Eng. trans. W. de Gray Birch, 4 vols., Hakluyt Society, 1875 - 84.

Alguns Documentos do Archivo Nacional da Torre do Tomo ácerca das navigações conquistas portuguezas, ed. J.R. Coelho, Lisboa, 1892.

Archivo Portuguez Oriental, ed. J.H. da Cunha Rivara, 8 vols, Nova Goa, 1857-76.

Arquivo Português Oriental (nova edição), ed. A.B. de Bragança Pereira, Bastorá-Goa, 1936-40, I.i.i, IV.i.i.

As Gavetas da Torre do Tombo, Centro de Estudos Históricos Ultramarinos, 1961 - (so far 5 vols.)

Axelson, E., South-East Africa, 1488-1530, London, 1940.

Barbosa, D., Eng. trans. M.L. Dames, The Book of ....., 2 vols, Hakluyt Society, 1918-20.

Barros, João de, Da Asia: dos feitos que os portugueses fizeram no descobrimento e conquista dos mares e terras do oriente, Dec.1, Coimbra, 1930, Dec. 2, 3 & 4, 7 vols., Lisboa, 1777-8.

Boxer, C.R., 'The Portuguese in the East: 1500-1800' in H.V. Livermore, ed., Portugal & Brazil: An Introduction, Oxford, 1953, pp. 185-247.

.....& Azevedo, C. de, Fort Jesus and the Portuguese in Mombasa, London, 1960.

....., 'Moçambique Island and the "Carreira da India"', Stvdia, No. 8., 1961, pp. 95-132.

Cabral, P.A., / W.B. Greenlee, Eng. trans. The Voyage of ..... to Brazil and India, Hakluyt Society, 1938.

Castanheda, F.L. de, Historia de descobrimento e conquista da India pelos portuguezes, 3rd edn., 4 vols, Coimbra, 1924-33.

Collecção de noticias para a historia e geografia das nações ultramarinas, Academia Real das Sciencias, II, Nos. v & vi, Lisboa, 1813.

Correia, G., Lendas da India, 4 vols., Lisboa, 1858-66.

Cortesão, A. & Teixeira, A. da M., Portugaliae Monumenta cartographica, 5 vols., Lisboa, 1960.

Documentos sobre os portugueses em Moçambique e na Africa central, (Documents on the Portuguese in Mozambique and Central Africa), Centro de Estudos Históricos Ultramarinos, Lisboa, 1962- (so far 5 vols).

Duffy, J., Portuguese Africa, Cambridge, Massachusetts, 1959, esp. pp. 24-48.

Fontoura da Costa, A., ed., Roteiros portugueses inéditos da carreira da Índia no século XVI, Lisboa, 1940.

Freeman-Grenville, G.S.P., 'The Coast, 1498-1840' in Hist. of E. Af., I, pp. 129-168.

Gama, Vasco da, Engl. trans. E.G. Ravenstein, Journal of the First Voyage of ...., 1497-99, Hakluyt Society, 1898.

....., Calcoen, ed. & trans. J.P. Berjeau, London, 1874.

....., The Three Voyages of ....., trans. from G. Correira by E.J. Stanley, Hakluyt Society, 1869.

Godlonton, W.A., 'The Journeys of Antonio Fernandes - The First Known European to find the Monomotapa and to enter S. Rhodesia', Proceedings and Transactions of the Rhodesia Scientific Association, XL, 1945, pp. 71-103.

Góis, Damião de, Crónica do felicissimo Rei D. Manuel, 4 parts, Coimbra, 1926.

Linschoten, J. H. van, Eng. trans. W.H. [William Phillip], J.H. van L. his discours of Voyages, London, 1598.

Lisboa, João de, Livro de marinharia: tratado da agulha de marear de ..., ed., J.I. de Brito Rebello, Lisboa, 1903.

Lobato, A., A expansão portuguesa em Moçambique de 1498 a 1530, 3 vols., Lisboa, 1954-60.

....., Colonização senhorial da Zambezia e outros estudos, Lisboa, 1962.

....., Eng. trans. M.F. de Andrade, António de Saldanha: his times and his achievements, Lisbon, 1962.

Montez, C., 'Moçambique e a navegação da India', Moçambique Documentário Tremestral, Lourenço Marques, No. 40, 1944, pp. 5-22.

Paez, S.F., As famozas armadas portuguesas, 1496-1650, Rio de Janeiro, 1937.

Pereira, G., ed., Roteiros portuguezes da viagem de Lisboa a Índia nos séculos XVI e XVII, Lisboa, 1898.

Pires, Tomé, Eng. trans. A. Cortesão, Suma Oriental of ....., 2 vols., Hakluyt Society, 1944.

Prestage, E. & Newton, A.P., 'The Portuguese in South Africa' in The Cambridge History of the British Empire, VIII, ed. E.A. Walker, Cambridge, 1963, pp. 77-111.

Reimão, G.F., Roteiro da vavegação e carreira da Índia, ed. A Fontoura da Costa, 2nd edn., Lisboa, 1940.

Sá, A.B. de, ed., Documentação para a história das missões do padroado português do oriente (Insulíndia), 4 vols, Lisboa, 1954-6.

Schofield, J.F., 'The Journeys of Antonio Fernandes - Some Footnotes', Proceedings and Transactions of the Rhodesia Scientific Association, XLII, 1949, pp. 84-95.

Silva Rego, A. da, ed., Documentação para a história das missões do padroado português do oriente (India), 12 vols., Lisboa, 1947-8.

....., 'Viagens portuguesas à India em meados do século XVI', Anais, Academia Portuguesa da História, 2nd series, V, 1954, pp. 77-142.

Sousa, J. de, Documentos Arabicos para a história portugueza copiados dos originaes da Torre do Tombo, Lisboa, 1790.

[Springer, Balthasar], Of the Newe Lãdes and of ye People found by the Messengers of the Kynge of Portȳgale named Emanuel, [Antwerp], c. 1515?

....., De Novo Mondo, ed. M.E. Kronenberg, The Hague, 1927.

Strandes, J., Eng. trans. J.F. Wallwork, The Portuguese Period in East Africa, Nairobi, 1961.

Teixeira Botelho, J.J., História militar e politica dos portugueses em Moçambique, Lisboa, I, 1934.

Theal, G.M., History of Africa South of the Zambesi, vol. I, The Portuguese in South Africa from 1505 to 1795, 3rd edn., London, 1916.

Tracey, H., Port. trans. C. Montez, António Fernandes, Descobridor do Monomotapa, Lourenço Marques, 1940.

Vespuccius, A., The Voyage from Lisbon to India, 1505-6, ed. C.H. Coote, London, 1894.

Vidago, J., 'Anotações a uma bibliografia da "carreira da Índia", Stvdia, No. 18, 1966, pp. 209-241.

V The Later Part of the Eighteenth Century

A. Manuscript Sources

Archives Nationales, Paris:

Colonies Série C^4 (Ile de France), Vols, 29, 49, 72, 73, 78, 80, 85, 95, 96, 120, 122, 125, 127, 129, 133, 135, 146, 153.

These volumes cover the years 1770-1810.

British Museum, London:

Additional MS 19419. Notes by Henry Salt on his travels in Mozambique and Abyssinia.

India Office Library, London:

Marine records, Miscellaneous No. 586. 'Steam Communication with East Coast of Africa. Various Reports. 1810 etc.'

This contains Captain Smee's original journal which varies in detail from the published version. (q.v.). It also includes the unpublished journal of his companion, Captain Hardy.

Public Record Office, London:

Admiralty 1/62, 'Report of Capt. Fisher of H.M.S. Racehorse on visit to Pemba in 1809', R. 74.

Admiralty, 1/63, 'Report of Capt. Tomkinson of H.M.S. Caledon on visit to Zanzibar in 1809', R. 122a.

B. Printed Works

Albrand, F., 'Extrait d'un mémoire sur Zanzibar et sur uiloa', Bulettin de la Société de Géographie de Paris, 2nd series, X, 1938, pp. 65-84.

Alpers, E.A., The Role of the Yao in the Development of Trade in East-Central Africa, 1698-c.1850, Ph.D. Thesis, University of London, 1966.

....., The East African Slave Trade, The Historical Association of Tanzania, Paper No. 3., Nairobi, 1967.

Andrade, A.A. de, Relações de Moçambique setecentista, Lisboa, 1955.

Annaes Maritimos e Colonaes, 6 vols., Lisboa, 1840-6.

Arquivo das Colonias, Publicação official e mensal, 5 vols., Lisboa, 1917-32.

Bissell, A., 'A Voyage from England to the Red Sea, 1795-9' in Collection of Nautical Memoirs and Journals, reprin. by A. Dalrymple, London, 1806.

Blancard, P., Manuel du commerce des Indes et de la Chine, Paris, 1806.

Burton, R.F., The Lake Regions of Central Africa, 2 vols, London, 1860 (reprinted New York, 1961).

....., Zanzibar: City, Island and Coast, 2 vols., London, 1872.

....., The Lands of Cazembe, London, 1873.

Christie, J., Cholera Epidemics in East Africa, London, 1869.

Conan, J., La dernière campagnie française des Indes, 1785-1875, Paris 1942.

Cunnison, I., 'Kazembe and the Portuguese', J. of African History, II, 1961, pp. 61-76.

Dermigny, L., Cargaisons Indiennes - solier et Cie, 1781-1793, 2 vols., Paris, 1959-60.

Freeman-Grenville, G.S.P., The French at Kilwa Island: An Episode in Eighteenth Century East African History, Oxford, 1965.

....., 'Some Eighteenth Century Documents concerning Eastern Africa in the Archives de France', Draft Ppaer.

Gray, J.M., 'Kilwa in 1812', Tanganyika Notes and Records, No. 24, 1947, pp. 49-60.

....., 'A History of Kilwa', Part II, Tanganyika Notes and Records, No. 32, 1952, pp. 11-37.

....., 'The French at Kilwa, 1776-1784', Tanganyika Notes and Records, No. 44, 1956, pp. 28-49.

.....The British in Mombasa, 1824-6, London, 1957.

....., 'Trading Expeditions from the Coast to Lakes Tanganyika and Victoria before 1857', Tanganyika Notes and Records, No. 49, 1957, pp. 226-46.

....., 'A Note on Joseph François de Cossigny (1736-1809)', Tanganyika Notes and Records, No. 51, 1958, pp. 246-9.

....., 'The French at Kilwa in 1797', Tanganyika Notes and Records, Nos. 58 & 59, 1962, pp. 172-3.

....., 'The Recovery of Kilwa by the Arabs in 1785', Tanganyika Notes and Records, No. 62, 1964, pp. 20-6.

.....'A French Account of Kilwa at the End of the Eighteenth Century' and appendix on the 'Early History of Mungulho', Tanganyika Notes and Records, No. 63, 1964, pp. 224-8.

Halls, C., 'Dutch Navigation off the East African Coast', Tanganyika Notes and Records, No. 67, 1967, pp. 39-48.

Ingrams, W.H., 'Some Points of Contact between Mauritius and East Africa', Transactions of the Royal Society of Arts and Sciences of Mauritius, series C, No. 1, Port-Louis, 1932, pp. 37-68.

Jackson Haight, M.V., European Powers and South-East Africa: A Study of International Relations on the South-Eastern Coast of Africa, 1796-1856, London 1967.

Junta de Investigações do Ultramar, Estudos de história da geografia da expansão portuguesa, Anais, Vol. IX, i, 'Fontes para a história, geografia e comércio de Moçambique (Sec. XVIII)', ed. L.F. de Carvalho Dias, Lisboa, 1954.

Lacerda e Almeida, F.M. de, Travessia da Africa, ed. M. Murias, Lisboa, 1936.

Lislet Geoffrey, [J.B.], Memoir and Notice Explanatory of a Chart of Madagascar ... together with Some Observations on the Coast of Africa (Observations communicated by Lieut. the Chevalier Saulnier de Mondevit), London, 1819.

Mathew, G., 'The Culture of the East African Coast in the Seventeenth and the Eighteenth Centuries', Man, LVI, 1956, pp. 65-8.

Prior, J., Voyage along the eastern coast of Africa to Mosambique, Johanna, & Quiloa ... in the Nisus Frigate, London, 1819.

Salil b. Razik, Eng. trans. G.P. Badger, History of the Imams and Seyyids of Oman, A.D. 661-1856, Hakluyt Society, 1871.

Salt, H., A Voyage to Abyssinia .... in the Years 1809 and 1810, London, 1814.

Smee, T., 'Observations during a Voyage of Research on the East Coast of Africa from Cape Guardafui south to Island of Zanzibar', Transactions of the Bombay Geographical Society, VI, 1844, pp. 23-61, and reprinted in Burton, Zanzibar, II, pp. 458 - 519.

VI Modern Sailing Directories and Meteorological Data

Great Britain, Admiralty, Hydrographic Department, Africa Pilot, Part III: South and East Coasts of Africa, 10th edn., London, 1939.

....., Red Sea and Gulf of Aden Pilot, 9th edn., London, 1944.

....., West Coast of India Pilot, 8th edn., London, 1937.

....., South Indian Ocean Pilot, 6th edn., London, 1946.

....., Ocean Passages for the World, comp. B.T. Somerville, 2nd edn., London, 1950.

Great Britain, Meteorological Office, Indian Ocean Currents, 2nd edn., London, 1939.

....., Weather in the Indian Ocean, vols. I and II, London, 1943.

....., Monthly Meteorological Charts of the Indian Ocean, London, 1949.

Horsburgh, J., The India Directory or Directions to and from the East Indies ...., 8th edn., 2 vols., London, 1864.

Kirk, W., 'The N.E. Monsoon and Some Aspects of African History' J. of African History, III, 1962, pp. 263-7.

Koninklijk Nederlands Meteorologische Instituut, Red Sea and Gulf of Aden Oceanographic and Meteorological Data, No. 129, 1949.

....., Indian Ocean Oceanographic and Meteorological Data, No. 135, 1950.

U.S. Navy, Chief of Naval Operations, Marine Climatic Atlas of the World, vol. III, Indian Ocean, Washington, 1957.

Map References

These are listed by B.S. Hoyle, ... Seaports of East Afr..., Nairobi, 1967, pp. 136-7.