THE
ARAB DHOW TRADE
IN THE
INDIAN OCEAN
Preliminary Report

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لا يوجد نص يمكن قراءته بشكل طبيعي من الصورة المقدمة.
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Preliminary Report

HIKOICHI YAJIMA
This paper is the result of my study-tour carried out in the South Arabian countries between October 1974 and March 1975 as a member of the 'Comparative Survey on Islamic Societies and their Cultural Changes' financed by the Ministry of Education in Japan, which also bears the cost of this small publication.

I am not in any way a specialist of field-research, but specialized in the commercial history of medieval Islam by using the Arabic, Persian and Chinese written sources. So it was a valuable study experience for me to have had the first opportunity of observing the actual geographical, historical and social conditions in the countries of South Arabia.

For the success of my study-tour on the Arab dhow trade around the coasts of the Persian Gulf, South Arabia and the Red Sea, I am indebted to many friends and professors: Mr. Hamid al-Ghayrani, Head of the Sur-International Ltd. at Matrah; Mr. 'Ali 'Umeir, Wakil of the Ministry of Information in Sultanate of Oman and his members; Dr. 'Ali Badeeh, Director of the Yemeni Cultural Center of the People's Democratic Republic of Yemen; Qadi Isma'il al-Akwa', the Chief Director of the General Organization of the Cultural and Archaeological Department in the Yemen Arab Republic; Dr. Mustafa Salim, Lecturer of 'Ain al-Shams University at Cairo; Mr. Mustafa Abu al-Hasan and Mr. Muhammedain, two librarians in the Ministry of Education in Kuwait; Dr. Qasim al-Khattat, Director of the Institute of Arab Manuscripts (The Arab League), and other friends of the Arabic countries.

The photographs, maps and figures are mine with the exception of some photographs. In particular, I borrowed valuable photographs from Assoc. Professor S. Hino and Mr. Okuno, a student of the Meiji University. I should like to express my gratitude for them.
Finally, I should like to thank my colleagues Assoc. Professor W. Miki, Assoc. Professor A. Nakano and Assoc. Professor Y. Nagata for their advice and assistance during our research work in the Arabic countries.

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INTRODUCTION

It is commonly believed that the Indian Ocean littorals are divided by natural, ethnic and linguistic barriers or frontiers because of the particularly dangerous conditions of communicating across the vast expanse of the sea, typhoons, reefs and currents. But the Indian Ocean and its boundaries have been organized as an united area by the continuity of the mutual waves of human migration, the relationship they connect and the communication they follow between areas bordering on the Indian Ocean for over two thousand years. In addition to the favorable conditions of special wind patterns which are marked by the seasonal phenomenon of monsoon, the south-equatorial current and tides, all very favorable to navigation (see fig. 1), the advanced techniques for navigation and ship-building possessed by the peoples such as the Arab, Persian, Indian and Malayan peoples living around the Indian Ocean.

Under the active pressure of human necessities and demands, movement, intercourse, contact and dispersion have operated in the Indian Ocean throughout history. The Indian Ocean and its boundaries came to combine many influences as an internal united area against the external impacts of social, economic and political factors. We should, therefore, accept the idea of the Indian Ocean as an united socio-economic area, that is "the Indian Ocean world" which fulfils cultural as well as economic functions within its world.(1)

The traditional wooden lateen ships known as "Arab dhow" and its trade crossing the Indian Ocean have till now continued as an unifying factor among the countries bordering on the Indian Ocean, especially its western part. This fact plainly shows the firm continuity of some traditional structures and organizations of the Indian Ocean world, even if some scholars intended to clarify many reasons for being the old patterns of the Arab dhow trade in the present.(2)

Recently, there are some comprehensive works on the same subject in which the Indian Ocean is treated as a whole. For example, L. M. Panikkar, J. Poujade,
A. Villiers and A. Toussaint are very worth consideration.\textsuperscript{3} Equally, several recent international conferences were held for the purpose of illuminating the character of the Indian Ocean world, past and present.\textsuperscript{4} But some of these studies laid emphasis on the Ocean as an area of global political and strategic importance in view of the recent world situation. Other scholars have only been absorbed in studies on the commercial relationships between the Ocean and the external world. They claim, for example, that the mutual trade and communication flows within the Ocean are too small in comparison to those between the external world and the Ocean littoral regions. They also emphasized the international luxury trade in ancient and medieval times, but did not show any interest in the intra-regional trade within the Indian Ocean world by which the transportation of daily necessities among its littoral peoples has been maintained through time.\textsuperscript{5}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{fig1}
\caption{Monsoon Winds, Tides and Currents in the Indian Ocean}
\end{figure}

\begin{itemize}
\item [-] Monsoon(Summer) \quad \text{---} \quad Monsoon(Winter)
\item [-] Tides(Summer) \quad \text{- - - -} \quad Tides(Winter)
\item [-] Currents
\end{itemize}

The important point to be grasped is that if we pay more attention to this Ocean as a stage for the purpose of finding the common element connecting the
complicated currents of Afro-Asian histories, it is necessary for us to clarify the historical roles that the Indian Ocean world has played itself, and at the same time to study the historical process with reference to the structures and organizations of the Indian Ocean world.

What then is the meaning of "world", if we consider the Indian Ocean to be a world? And also what are the necessary conditions for considering the Indian Ocean to be a world?

As already indicated above, if the Indian Ocean world has functioned as an internal united area in spite of external impacts throughout history, we should then recognize the concept of the "Indian Ocean world" in which has always possessed some unifying structures and organizations.\(^6\)

In line with the point of view of my study, I will now attempt to clarify some aspects of the Indian Ocean history in the medieval times.

If we select the main regions of movement and intermixture of human migrations in the Indian Ocean littorals, the following four regions, especially, should be indicated:

1. Oman and the Gulf regions
2. Hadramawt and Yemen
3. From Gujarat to the Malabar coast
4. Bengal

Fig. 3 presents in simplified form, the patterns of the human movement and expansion in the Ocean littorals. It is noted that peoples who lived in these four regions have mainly given birth to some typical and historical patterns of moving and mixing flows crossing the Ocean at various times, and they had played very important roles in the creation and historical development of the Indian Ocean world.

Fig. 4 indicates the typical patterns of the economic and social flows in the Indian Ocean world with which correspond these of fig. 3. From fig. 4, it is clear that there were two strong cultural currents crossing the western part of the Indian Ocean: (1) from the Gulf regions to East Africa, (2) from Yemen
to the western shores of India. As to the eastern part of the Indian Ocean, South-East Asia was situated on an important cultural point contact for the three main cultural currents from China, India and the western shores of the Indian Ocean, especially after the thirteenth century.

Fig. 2: Leading Trade Routes and Ports around the Western Part of the Indian Ocean (A.D. 9-13th)

From fig. 5, we should take note that there was an opposite current flowing up from East Africa against the southward currents originating from the northern shores of the Indian Ocean, and stretching from south to north.\(^{(7)}\)

Figs. 6, 7 and 8 indicate the trade expansions of Muslim merchants and seafarers who had lived in Siraf and Kish, two important trade ports on the shore of the Persian Gulf. They established their trade settlements along the Indian Ocean world from the ninth down to the beginning of the fourteenth centuries,
Fig. 3: Sketch Map Showing Directions of the Ethnic Movements around the Indian Ocean

Fig. 4: Sketch Map Showing Structures of the Cultural Links in the Indian Ocean World
and played very important parts in the formation of the Indian Ocean world. Their vast sphere of trade and traffic activities gives us a clear understanding of the cultural dynamics by which the mare-civilization dominates the character of the Indian Ocean world.

Some scholars said that with the decline of the Abbasid supremacy and the rise of the Fatimids in Egypt in the tenth century, the centre of Muslim sea activities in the Indian Ocean shifted from the Persian Gulf to the Red Sea. We should not however neglect the importance of the continuation of internal trade and communication among the Persian Gulf, East Africa and the western coasts of South India even after the decline of the Abbasids in Baghdad.

Fig. 5: Ethnic-flows from South to North

Fig. 6: Sea Routes and Ports of Sirafi Merchants and Seafarers in the Indian Ocean (A.D. 9-10th)
Fig. 7: The Siraf Settlements around the South Arabian Coast (A.D.10-12th)

Fig. 8: Trade Centres of Kish Merchants and Seafarers in the Western Part of the Indian Ocean (A.D.12th-14th)

- - - - Sea Routes of Kish and Their Centres
- - - - Sea Routes of Hormuz and Their Centres
- - - - Sea Routes of the Chinese Junk and Their Trade Settlements
Fig. 9 shows some of the conditions of trade and communication in the Indian Ocean world during the Mongol period (A.D. 13-14th). The Mongols sought not only to gain command of the trade and traffic across the Eurasian continent, but also desired to gain control over the main sea routes connecting through central Asia and the Persian Gulf, to China and India via South-Asia. It may be given us as an important conclusion by this figure that there was an important principle on the connection and relationship between the caravan-routes and the sea-routes across the Afro-Asian world throughout history. It should be denied, therefore, that the main lines of trade and communication in the Muslim world were land-routes and not sea-routes.

![Map of Mongol Trade Routes](image)

**Fig. 9**: Connections between the Caravan-routes and the Sea-routes in the Mongol Period (A.D.13th-14th)

Figs. 10, 11 and 12 seem to indicate that occasionally some nomads who dominated the inner caravan-routes, endeavoured to gain control over an important trade port, a point of contact between the caravan-route and the sea-route, and thereby to extend their control over the sea-routes by transferring their goods from camels to dhow-ships. The important point to be grasped is that there were co-existence and circle-routes between caravan-routes and sea-routes, and live-and-let-live relations between the nomads who controlled the land-routes and seafarers managing the sea-routes. \(^{(9)}\)
Fig. 10: Emigrations of the Hadramawt Kathiri
(A.D. 15th-19th)

Fig. 11: Controls of the Caravan-routes and the Sea-routes by the Kuwaiti Merchants and Seafarers
(A.D. 18th-19th)

Fig. 12: The Omani Expansions to the Indian Ocean World (The Oman-Zanzibar Kingdom, A.D. 18th-19th)
Fig. 13: The Horse Trade in the Indian Ocean World (A.D. 12-15th)

Fig. 14: Relationships of Mutual Exchange of Products among the Ocean Littoral Peoples
Fig. 13 shows the horse trade in the Indian Ocean world before the coming of the Portuguese. It is observed that Arabian and Persian horses had been one of the most important commodities flowing from west to east, and its trade always played considerable roles in the creation and development of the Indian Ocean unity.\(^{(10)}\)

As shown by figs. 14 and 15, the relationships of co-existence and mutual-exchange of products among the Ocean littoral peoples and regions have resulted from the variations of climate, plants and geological structures of the regions bordering on the Indian Ocean. In addition, variations in the styles of living and its stages of the littoral peoples formed historically the world of the intra-regional trade and communication crossing the Indian Ocean.

Fig. 15: General Relief Around the Western Part of the Indian Ocean and the Stages of Coastal Dhow's Activities

- Coastal Desert
- Mountains (over about 1000 m.)
NOTES


(4) The "International Historical Association of the Indian Ocean" made several attempts to hold an international conference on the Indian Ocean. As to its proceedings, see Studia, Vol. 1 (Lisbon, 1963) and Sociétés et Compagnies de Commerce en Orient et dans l'Océan Indien—Actes du huitième colloque international d'histoire maritime (Beyrouth—5-10 Septembre 1966)—Paris, 1970. Also, the theme of the conference held in Washington on March 18 and 19, 1971, under the auspices of the "Center for Strategic and Internal Studies of Georgetown University" was the Indian Ocean. The proceedings of this conference was published in the title The Indian Ocean: Its Political, Economic and Military importance, edited by A. J. C. Cottrell, New York, 1972.

(5) I pointed out in my book, A Chronicle., pp. 7-8 that in the commercial history of medieval Islam, we should not neglect studies on the trade of daily necessities such as rice, grains, livestock, peas, woods (mangrove, teak, coconut palm and different kinds of firewoods), dried-fish, salt, drugs and clothes, even if there is no reliable sources for explaining the actual conditions of these trades. These goods perfectly coincide with the main goods carrying by the Arab dhows in the present time.


CHAPTER I  CONTENTS OF FIELD RESEARCH

I had persisted in carrying out my study-tour in the countries bordering the South Arabian coasts, Persian Gulf, East Africa and the Red Sea since several years before. Because I thought that the possibility of comparative studies on the social and economic history of the Indian Ocean world would be revealed by the field research on the small wooden lanten ships "Arab dhow" by which the trade and communication from the Gulf countries to East Africa, India and Pakistan are still frequent.

Fortunately, from October 1974 to March 1975, I fulfilled an ardent desire to visit the South Arabian countries. I first visited Sultanate of Oman, primarily for the purpose of studying dhow-building yards and dhow-trade ports such as Muscat, Matrah, Suhar, Sur and Raysut, and also of discovering the important features that have characterized Omani seafarers and shipbuilders as vital pioneers and specialists for trade communications throughout the Indian Ocean. Thereafter, I spent over twelve days at Aden for studying dhow-building carried on at Ma'alla, a quarter of Aden. Ma'alla was and still is one of the three main dhow-building yards and dhow-trading ports on the South Arabian coasts (1. Sur, 2. Mukalla, 3. Ma'alla). But I was unable to visit Mukalla in Hadramawt. In northern Yemen, I visited Hudeida, al-Mukha' and its neighbouring ports. Dhow-building had formerly been carried out on the beach south of Hudeida, but there was now no trace of its manufacture there. After leaving Aden, I visited Mugadishu in Somalia. But I could not catch sight of any dhow at Mugadishu port in spite of its being in the middle of the North-East navigational season.

The following list enumerates the objectives of my study-tour on the actual conditions of the Arab dhow trade around the South Arabian coasts.

[1] Types of dhows and its classification
[2] Dhow-building yards and minute data on its construction
[3] Seasons for dhow navigation, routes and ports
[4] Navigational practices (composition of dhow-fleets, responsibility for shipwrecks, superstitions and foods)
[5] Commodities for trade and trasporation (destinations and transit ports)
[7] Equipments for dhow navigation
[8] Problems on practical affairs (languages, regulations, religions, races and money)
[10] Collections of nautical works

In this small paper, I hope to present my preliminary report on some aspects of the Arab dhow trade resulting from the above written objectives and also from my recent studies on the history of the Indian Ocean trade based on the medieval written sources. (1)

NOTES

"Dhow" (also "Daw", "Zaw" or "Zaww") was the Arabic term for ship, but in the present time, is generally unknown to the Arabs. Before and after the time of the Portuguese expeditions to the Indian Ocean, this term seems to have been widely used by the Arabs and Persians, who had conducted regular voyages and trade across the Indian Ocean. The Portuguese writers, therefore, recorded this term as the common Arab type of sailing ship in the Indian Ocean, and so popularized this name in Europe in the corrupted form "dhow".

As Ibn Baṭṭūṭa already reported, it is generally held that the Arabic "Zaw" or "Daw" was derived from the Chinese "Saw", "Zaw" or "Zhow" at the time of the Chinese expansions to the South Indian coasts in the end of the thirteenth and the first fourteenth centuries (see fig.9). At the same time it should be noted that "Daw", although originally derived from the Chinese word, had some connection with an Arabic original word "Ḍawḍaw", "Ṣawṣaw" or "Zawzaw" which means "a small river-boat for crossing the Tigris river". It seems likely that the Chinese word "Daw" was easily adopted as an Arabialized word "Daw" or "Zaww" because of its similarity to Arabic "Ḍawḍaw". But Arabic "Ḍawḍaw" or "Daww" gradually lost its original meaning as "a small river-boat". Yaqut in the twelfth century and also Ibn Sa'īd al-Maghribī already used Arabic "Daw" as a term meaning "big ship" or "ocean-going ship".

The Arab dhow is the traditional wooden lateen sailing craft that even today continues to navigate by monsoon winds and tides, calling regularly at ports along the Indian Ocean littorals. Most of the ship-owners, captains, mates and passengers who operate and utilize the dhows have their origins in the Gulf countries, Hadramawt, Yemen, Somalia, East Africa and also India as well as Pakistan. It, therefore, should be observed that the frequent dhow trade and communication throughout history of the Indian Ocean world, have helped shape the socio-economic unity, especially its western part from Ceylon round to
East Africa.

Nowadays besides the relatively small dhows used for coastal fishings and traffics in the bay, most of the ocean-going dhows have a single mast and are motorized. J. Prins has reported that by 1960 probably half of the dhows annually coming to Mombasa from the Gulf countries were motorized.\(^5\) Since the conversion to diesel-engines began, two- or three-masted dhows are now seldom seen. Of the fleets of ocean-going dhows which I saw anchored off Ashshar in Basra in March 1975, most of them had diesel-engines and a single mast and sail. It is worthy of note that the motorization of the dhow has tended reduce its tonnage and strength of crew. The former two- or three-masted dhows usually had from 25 to 40 crew members and a tonnage of over 150 tons.\(^6\) But my research on the Omani būm and its manufacture at Sur port in Oman indicated that most of the newly-built Omani būms are of a standard type and tonnage: one-mast with a diesel-engine, tonnage under 150 tons (usually from 60 to 120 tons), and dhow-crews not exceeding 20 members. Būms of 120 to 150 tons are said to be built at Kālicutt (Kozhikode), a traditional dhow port and building yard in South India.

Although A. Rowand enumerated about fourteen types of native dhows found in the Persian Gulf,\(^7\) I was unable to discover a clear differentiation between them, because of the similarity in general features and also because of the difference of local popular names.\(^8\)

When I asked some native dhow-carpenters about the name of dhows and how they are classified, their answers were always conflicting. They said that this ship belongs to "Baghla", but the others called it "Ghana" or "Sanbūk". Generally speaking, the most popular word for big wooden lateen ship sailing the Indian Ocean, beside Arabic common words 'Markab and 'Safīna', is "Sanbūk", "Sumbūk" or "Sanbūq" in Yemen and its neighbouring coasts, but "Būm" in Oman.

It is pointed out that modern as well as medieval types of dhows take their various names, not from the rig as in Europe, but from shapes of stern, stem and hull.
My field research revealed that most of the Arab dhows can be classified into two main types based on the differences in the stern shape (see fig. 16):

[1] Baghla type: This type is characterized by square transom stern and a long straight stem, and sometimes has a small ornament with some geometrical or line paintings. (9)

[2] Būm type: This type is double-ended with a long stem as well as stern heads. This double-ended shape is to be attributed to its origin from the traditional Arab type of trading ships. It is assumed that the term "Būm" is probably the same as "Būmat" or "Burmāt" or "Burm" found in some medieval Arabic sources, (10) and was derived from the Chinese word "Bo" or "Po (波)" meaning 'sea-going ship'. According to J. Needham, the word "Po" for 'sea-going ships or junks, appeared in the San Kuo period. (11) "Po", therefore, seems to have originated from a Malayan or other South-Asian word just like the origin of "Junk".

I was personally able to observe the following ten kinds of dhow, and the characteristic features of which are explained in the short description.

(a) Baghla: Before the Second World War, this ship played the most active role as the largest ocean-going dhow for trade and traffic in the Indian Ocean, ranging in size from 150-400 tons. But nowadays her beatiful figure is scarcely to be found even in the Persian Gulf, because the baghla needs more crew strength and is not suitable for carrying the heavy mangrove cargo. Some scholars believe that the design of square stern baghla with some geometrical ornaments with blue and white paintings was influenced by the Portuguese ships of the sixteen century. But I assume that her characteristic square stern shape and decorations may have been influenced by the Chinese junks which regularly called at the ports of South India such as Kalicut, Quilon (Kullam) and Jirfattan beginning at the end of the 13th

Fig. 16: Classifications of dhow

[1] Baghla Type

[2] Būm Type
<table>
<thead>
<tr>
<th>Baghla Type</th>
<th>Ocean-going Dhow</th>
<th>Baghla, Ghanja, Kūṭīya, Balam, Khanshā, Baqāla</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coastal Dhow</td>
<td>Jalībūt(Jalī), Lancha, Sanbūk(Sunbūq), Qārib, Dunkiyā(Dunḡiyā)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Būm Type</th>
<th>Ocean-going Dhow</th>
<th>Būm, Sanbūk('Ibrī), Zārak</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coastal Dhow</td>
<td>Shūway, Batīl, Badan, Sanbūk Žufārī, Jahāzī, Māshua, Hūrī, Shāsha, Fanṭāsh</td>
<td></td>
</tr>
</tbody>
</table>

century (see fig. 8). Junk-fleets of the Chen-Ho expeditions, especially, were based at Kālikut in South India as well as Hurmuz in the Gulf gate in the beginning of the fifteenth century, and a great number of the Chinese migrants called "Chīnī-bachaghān" and their carpenters who engaged in trading and repairing of junks, built their quarters in these ports. And we may, therefore, suggest that some of the traditional Arab shipbuilding as well as the navigational-techniques underwent a remarkable alteration as a result of the westward advance of Chinese nautical civilization.

(b) Ghanja: The Ghanja is a square-sterned dhow with a high poop and two hitchways, very similar in design to the Baghla but smaller in size. The Ghanja has a curved stern-head in the shape of a ring made by tying a sail-cord; and

![Fig.17: Ghanja and its decorations (Matrah)]

some parts of its hull and stern are also painted with various colours and decorations. The dhow carpenters and navigators usually believe that the main purpose of painting and decorating the dhow's stem, stern and hull is to the dhow run fast and to protect it from accidents in the open sea. These customs
and ways of thinking about the colour and and decoration are interesting because of their strong resemblance to those of the Chinese and South-Asian native crafts. Nowadays the ghanja is seldom seen even in the Persian Gulf. But I was able to find a half-broken ghanja on the beach of Matrah which had been employed in carrying cargo between the Gulf countries and East Africa during about fifteen years. This ghanja was decked fore and aft with a high poop, and had a beatifully painted stern with blue and white decorations (see fig.17).

(c) Kūtīya: This medium-sized square-stern dhow native to Karachi and Bombay, is now frequently found at Ashshar port in Basra, Kuwait, Dubai, Abu Dhabi and Matrah. The kūtīya is lightly equipped, but capable of carrying much cargo.

(d) Būm: A typical double-ended dhow, most frequently built at Sur and Kalicut carrying from 60 to 120 tons. The būm has a long straight stemhead coloured black and white, is completely decked with suitable hatchways, and has a raised poop. The būm has sufficient stability to carry heavy cargos, especially mangrove-wood from East Africa. Nowadays the būm is the type most frequently appearing at the ports around the Persian Gulf and the Indian Ocean.

(e) Sanbūk (Sumbūq or Sanbūq): The term 'Sanbūk' is commonly used as a general term for sailing-ship, and its name probably originated from the Chinese name "Sanpan". In my research, I observed that the sanbuks are of two kinds: (I) The Omanī sanbūk, a small dhow of 5 to 15 tons with a square stern, is built at Sur and Kuwait. This sanbuk was formerly used for pearl-fishing in the Persian Gulf, but is now used only in coastal fishings around Sur. (II) The Yamanī sanbūk, a larger sized dhow, is commonly called 'Ibrī built mostly at Ma'alla and Mukalla in South Yemen, and is double-ended (Būm type), completely decked with a raised poop. The Yamanī sanbūk is now frequently used in trading as well as fishing in the Red Sea and Gulf of Aden.

(f) Badan: The badan is double-ended with a high sharp stemhead and a straight sternhead, and has two edged bottoms from fore to aft. The badan, therefore, is sometimes unable to stand upright when beached or aground without three
or four prop-woods under its bottom. The badan is not decked like a boat, and is rowed with one or two oars and a long pole (usually a mangrove-pole). The badan is used for coastal fishing in Oman, but was formerly used in pearl-fishing. We can see its characteristic figure on the beach near Qurn (a little fishing village near Sib) and al-Bustān behind Muscat. The most important point to pay attention to is that the traditional construction of stitches instead of nails to fasten the planks is found in the stem part. Plates 11-13 show the minute method of its construction by which the teak-wood planks pierced with holes and sewn together with coiled cords of coconut fibres called "qinbār" instead of iron or tree-nails. (16) Its characteristics will be explained further in the detailed description which follows.

(g) Sanbūk ḫufarī: A stitched double-ended dhow. The sanbūk ḥufarī survives only on the coasts of Salala and Tāqa in Zufar district, and is used for sardine fishing ('ūma) close to the shore. The sanbūk ḥufarī has a rudder, oars and one mast. It ranges from 8-12 metres in length and an average crew of from 4 to 8 fishermen. As indicated in figs. 18-19, the distinctive feature of its construction is that this ship is entirely constructed from diverse products of the coconut-tree (naranjīl) — hulls, masts, ropes and rudder — and its planks are together with threads of coconut fibre and the gaps are with tar or fish-oil. The manner of stitched construction has been described by medieval Arabic geographers, some European travellers and even Chinese authors. (17) Marco Polo, for example, saw the Hurmuзи stitched ships of the Persian Gulf. According to his description, the Hurmuзи ships had no iron fastenings, and were only stitched together with twine made from the husk of the Indian nut (coconut palm), and fish-oil mixed with oakum was used for caulking instead of pitch. These ships had but one mast, one sail and one rudder, and had no deck, but only a cover spread over the cargo when loaded: (18) It should therefore be supposed that the construction of stitches instead of nails to fasten the plank was a typical method of traditional Arab ship-building. Hence, I would like to point out that
the stitched dhow was originally a variation evolved from raft form. We knew of a primitive method of binding a number of logs together, and of stitching boards or hides for building a ship of considerable size. Therefore, stitched ships probably achieved wide distribution and were of great use to many peoples bordering the Indian Ocean, especially its western part from very early ages.

Fig. 18: A Stitched Dhow "Sanbûk Ẓufārī"
and the Method of Its Stitching (a) Stem, (b) Stern and Rudder (c) Inside

NOTE: The rudder's style coincides with the following description of John of Montecorvino (the end of the 13th century). 'And they (the ships of Malabar) have a frail and flimsy rudder like the top of a table, of a cubit in width, in the middle of the stern; and when they have to tack, it is done with a vast deal of trouble; and it is blowing in any way hard, they cannot tack at all (H. Yule, Cathay., Vol. 1, p.217). 'And al-Muqaddasī (the ten century) described about the two control cables equipped with a rudder of ship sailing in the Red Sea. 'The ship-master (rubbān) takes his stand on the top (stem) and steadily looks into the sea. Two boys are likewise posted on his right and on his left.
On espying a rock he at once calls to either of the boys to give notice of this to the helmsman (ṣāḥib al-sukkān) by a loud cry. The helmsman, on hearing the cry, pulls one or the other of two ropes he holds in his hand to the right or to the left, according to the directions.'(al-Muqaddasī, Aḥsan...p.12)

Fig. 19 : Construction Drawing of a "Sanbūk Ẓufārī"

(h) Jalī or Jalībūt : A typical coastal dhow with a vertical square stern, ranges in size from 15 to 25 tons. This ship is sometimes covered by a cloth-reef, and is usually used for carrying passengers and cargo along the coasts. It has an engine and a sail. This ship is now seen frequently in the ports bordering the Gulf countries. The passengers and cargo communications between Matrah and Sur in Oman are now by jalībūt.

(i) Shāsha : This small double-ended coastal dhow is constructed of date-stalks alone, and is cored with coconut-fibres or a kind of cotton rope at the pointed-ends of the stern-head, the stem-head and also at parts of the hull. The shāsha is used for coastal fishing on a small scale, and carries one or two fishermen and two oars. Nowadays it is found only at Suhar and its neighboring coasts along the Batina district in Oman.

(j) Hūrī : A small double-ended boat often installed by a outboard motor, is only used for fishing close to the shore or bay. We can find its figure with
a white lateen sail off the shore. The ḥūrī is usually imported from Bombay and Kalicut.\(^{(19)}\)

**NOTES**

(1) 'Dhow' is now a Swahili rather than Arabic, meaning 'a wooden lateen sail ship in various sizes'.

(2) According to Ibn Baṭṭūṭa, in the port of Kalicut, there were then thirteen ships from China, and the Chinese ships were of three kinds: the large ships are called "Jumūk", the singular ones being "Junk (اخ""); the middle sized ones are called "Zaw(.delegate)", and the small ones "Kakam (浮餌)". A large ship has from three to twelve sails consisting of bamboo canes which are woven like mats (Ibn Baṭṭūṭa, Riḥla, Voyages d'Ibn Baṭṭūṭa, Ed. C. Defremery, Vol. 4(Paris,1858), pp. 81,86,88.


(6) ibid. pp.3-4.


(9) A name "Baghla" seems to be derived from the Arabic 'baghla(mule)', probably because of its carrying capacity, or from 'baghghal' meaning 'slow'. See A. Villiers, Sons., p.262.


(12) 'Abd al-Razzāq al-Samarqandī, Maṭrā' al-Sa'dain, Narrative of the Voyages
of Abd al-Razzāq al-Samarqandī, Ambassador from Shāh Rukh, A.H. 845 (A.D. 1442)

(13) Nowadays the dhow's anchor is generally called "Chinese stone (ḥajār ṣīnī or anjar ṣīnī)", and also some of the Hadrami carpenters who live in Aden
give the name of "Chinese blood (dam ṣīnī)" to the machine for drawing a line
(ruler). These several examples show that a great deal of Chinese instruments
for dhow-building as well as nautical information on sailing in the Indian
Ocean had spread from China at the time of the Chinese expansion to the west-
ern part of the Indian Ocean.

(14) The term "Kūtiya" probably originated from Cutch (Gujarat).

(15) In Oman, it is commonly said that the term "Sambūk" was derived from the
Arabic 'sabq', meaning 'fast', or 'getting in advance', probably because of its
fast sailing as opposed to "Baghla" meaning 'slow'. The term "Sanbūk" or "Sum-
būk" is already used in Ibn Shahriyār's Ajā'ib al-Hind as a ship sailing bet-
ween Sarīr (Saylān ?) and China (Ed. Van der Lith, p.190.).

(16) 'qīmbār' or 'kinbār' means 'the fibrous husk of the coconut-tree'. Cf.
Ibn Jubayr, Riḥla, Ed. Le Strange (London, 1907), pp.70-71 and Ibn Shahriyār,

(17) Sources for stetched ships : Sulaymān and Abū Zayd, MS. Arabe(Paris),No.
2281, ff.53b and 34a; al-Mas'udī, Murūj al-Dhaḥab, Ed. Pellat, Vol. 1, p.365;
Ibn Jubayr, Riḥla, pp.70-71; Odoric, Ed. H. Yule, Cathay.,Vol. 1, p.57; John of

(18) Marco Polo, The Travel of Ser Marco Polo, Ed. & Trans. H. Yule and Cord-

(19) In my opinion, the term "Hūrī" was probably derived from a Chinese word
'hu (桴 )' meaning 'floating boat', or 'small boat'.

29
CHAPTER III DHOW-BUILDING YARDS

Dhow-building was formerly carried on at a great many ports, estuaries, creeks and inlets bordering on the Indian Ocean, Persian Gulf and the Red Sea, particularly at Kuwait, Bahrein(Minama), Lingeh, Muscat, Sur, Mukalla, Ma'alla, Hudayda, Lamu etc. But nowadays the representative dhow-building yards for constructing ocean-going dhows are found only at Kuwait, Sur, Mukalla, Ma'alla and Kalicutt.

During my study-tour, I visited the most famous still surviving dhow-building yards at Sur and Ma'alla(a quarter of Aden).

[1] Sur: Sur is situated about 30 km. west of Ra's al-Hadd, and 150 km. south-east of Muscat. It can be reached from Muscat and Matrah in about 6-7 hours by land-rover or 16-18 hours by coastal dhow "Jalibüt" from Matrah bay. As indicated in my sketch map of Sur (fig.20), the town of Sur is now situated

Fig. 20: Sketch Map of Sur
on the low sandy shore, and from south-east to north-west beside the town a
creek (khawr) or lagoon just like a bull-horn runs at a distance of about 1.5
- 2 km. from the open-sea. The end of this creek is cut by a muddy-beach and
the road leading to Nizwa and Matrah. There are two big dhow-building yards on
the flat sandy-beach beside the town of Sur.

It is noted that dhows are always built by eye and no plans are drawn. The
carpenters probably draw the figures of the dhow as it is built and each piece
of hull-board of teak is lined, and nails caulking cotton are driven into its
holes and sprits.

Coconut and simsim-oil, and sometimes shark-oil are used to water proof the
hull. The timbers for dhow-building — teak, coconut-tree, mangrove-wood and
acacia-wood — are imported principally from the Malabar coasts, the Maldives
Islands, Mombasa, Lamu and the Zufar district.

Four or five carpenters can usually build a medium-sized būm in three months.
The diesel-engine installed in the ocean-going dhow, is too expensive, and its
price is probably much the same as that of its building. Yamaha, Kelvin and
Gardner are now usually chosen for installation.

The būm (Omani būm) is the typical dhow most frequently built there. During
my stay at Sur, I saw four būms probably able to carry from 60 to 80 tons under-
construction at the two dhow-building yards. The Būm is one of the largest dhows
found in Oman as well as the Gulf countries, and is principally constructed
at Sur. Other kinds of dhow such as "Ghanja", "Khansāh" and "Sanbūk" were for-
merly built at Sur, but nowadays these have disappeared.

[2] Ma'alla: Dhow-building is now carried on on the narrow beach beside
Ma'alla, a quarter of Aden. This dhow-building yard is probably very old. Most
of the dhow-carpenters are originally from Hadramawt. The tonnage, size, rig
and other equipment of the dhow constructed at Ma'alla, therefore, have a
strong resemblance to those of the usual type of dhow built at Mukalla in Had-
ramawt. Medium-sized sanbucks belonging to "Būm type" carrying from 40 to 60 tons
are built there. Sanbūks seem usually to be built by the order of Somali dhow-
owners who live in Berbera, Ra's Khorah and Bareda, and are used for fishing. The method of its construction and timbers are almost the same as those at Sur.

NOTES

(1) Sur has probably developed since about the fourteenth century or earlier as a waiting-port for favorable winds, and was adjacent to a famous historical port "Qalhāṭ". See Ibn Baṭṭūṭa, Vol. 2, p.220 and 'Abd al-Razzāq al-Samarqandi, p. 10.

Figs. 21, 22 and 23 show the main ports and routes for dhow trade and communications in the western part of the Indian Ocean. These maps are based on my research carried out at Sur, Matrah, Suhar, Basra, Raysut, Aden, al-Mukha' and Mugadishu. In this chapter, I shall briefly discuss the main dhow-ports and market-circles around the shores of the western part of the Indian Ocean.

![Map of the Indian Ocean and its ports and routes](image)

**Fig. 21: Leading Centres and Routes of Dhow-trade in the Persian Gulf**

**Basra**: A centre of dhow-shipping point for Basra dates is situated on the anchorage of Ashshar in Shatt al-Arab of Basra. From the middle of October to the beginning of April, Ashshar is always crowded with various kinds of dhows coming from all the shores of the Indian Ocean world, especially from Karachi, Bombay, Kalicut, Abu Dhabi, Dubai, Sur, Matrah, Mukalla and Aden. Basrah-dates are one of the most important cargos carried in dhows for the native bazaars around the Indian Ocean, and therefore its trade has been a principle factor in maintaining the continuity of dhow activities from the old times until the present. Because, as A. Villiers explained, the dhow's function as warehouse
Fig. 22: Leading Trade Ports and Routes of the Arab Dhow Around the South Arabian Coasts

as well as transportation of the Basra-dates by dhow is more suitable to the requirement of the native markets, than by steamer. If carried by a steamer, a great quantity of dates will be unloaded in a day or two, and flood the market. The dhow, carrying smaller loads, and following a more leisurely route, tend to