MARITIME HISTORY OF SOUTH INDIA



G. VICTOR RAJAMANICKAM V.S. ARULRAJ



Eighth World Tamil Conference Revolving Fund Publication



TAMIL UNIVERSITY, THANJAYUR

MARITIME HISTORY OF SOUTH INDIA

(Indigenous Traditions of Navigation in Indian Ocean)

Editors

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DEPARTMENT OF INDUSTRIES & EARTH SCIENCES



EIGHTH WORLD TAMIL CONFERENCE REVOLVING FUND PUBLICATION No.1

Tamil University Publication No. 158

Thirdvalluyar Year 2025 Karthikai - November 1994

Editors

G. VICTOR RAJAMANICKAM

V. S. ARUL RAJ

Title

MARITIME HISTORY OF

SOUTH INDIA

Edition

First - 1994

Price

: Rs.125/-

:

Press

Tamil University (Offset) Press,

Thanjavur - 613 001.



DR. AVVAI NATARAJAN VICE-CHANCELLOR

TAMIL UNIVERSITY THANJAVUR

Date: 12-12-94

PREFACE

The Tamil University is a child of the Fifth World Tamil Conference conducted at Madurai in the year 1981. It was established on the 15th of September in the same year at Thanjavur. During the past thirteen years, it has established itself as a Centre for Tamil research the world over. Native speakers of Tamil are spread over more than seventy countries. One of the aims of the Tamil University is to fulfil the dreams and the nostalgic longings of the 130 million Tamils living in different parts of the world.

The Eighth International Conference seminar of Tamil Studies is scheduled to be conducted in the Tamil University Thanjavur, during January 1-5, 1995. The Government of Tamil Nadu has generously made financial allocations for various useful academic activities in the University, as well as for substantial civic improvements for the town as a

whole, of permanent value and utility. One such is the creation of revolving fund in the Tamil University to the tune of Rupees 10 lakhs. This is to be utilised for bringing out a number of publications needed by the Tamil people all over the world.

A number of manuscripts, all of them products of research by scholars and academics, have been waiting for the propitious time to see the light of day in the form of a printed book. The book in your hand is one such publication intended for the delectation of the general Tamil reader, and for use and reference by the Tamil cognoscenti.

I hope readers may find this book useful in the related field.

Dr. Avvai Natarajan

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PROLOGUE

The Department of Industries was co-ordinating with the Investigator Dr. V. I. Subramoniam, Vice-Chancellor of Tamil University in guiding and supervising this work. From the date of his leaving this University (July, 1986), the whole work was taken up and completed by this Department under the supervision of the undersigned in the middle of 1987.

However, the preparation of the report could not be carried out in the prescribed period. I would like to place on record hearty thanks to the former Vice-Chancellor, Dr. S. Agesthialingam for having granted the extension of time and the necessary financial assistance to the scholars from the University fund, for the preparation of the reports.

Mrs. Margaret Deacon, Honorary Research Fellow, Southampton University, England, has commented the amount of work carried out in this project. She has further forwarded an abstract of the project work to the "Mariners Mirror", a principal and prestigious Journal in the United Kingdom on "Maritime History".

Prof. Fathimi, who is working in the field of Maritime History had made an exclusive visit to this Department on March, 1989 to have a glimpse of the work being carried out in this project. After going through the project reports, he gave some useful suggestions to improve the reports. The project reports have been modified as per the suggestions of the experts.

At first, we were able to make only twenty copies, but subsequently the scholars who could get opportunity to go through the same both in India and abroad, have shown greater interest in this work and recommended to circulate more copies to the organisation of similar interest, especially abroad. In order to oblige the request of many researchers in the field of "Maritime History of South India" we are bringing out the following reports in a book form.

- History of Traditional Navigation (As gleaned from Tamil Literature - compiled by Dr. G. Kulathuran & Revised by Dr. V.S. Arul Raj).
- History of Traditional Navigation (As gleaned from Malayalam Literature - compiled by Dr. V. S. Arul Raj).
- History of Traditional Navigation (As gleaned from Telugu Literature - compiled by Dr. Giri Prakash).
- History of Traditional Navigation (As gleaned from Kannada Literature - compiled by Dr. C. Sivashanmugam).

Realising the importance of the reports, the previous Vice-Chancellor, Prof. C. Balasubramanian and the Registrar, Dr. R. Muthian, have consented to bring out this report in a book form.

However, the dream of bringing out this one in a book form could be materialised only by the great effort of Dr. Avvai Natarajan, Subsequent Vice-Chancellor of Tamil University, Thanjavur. We are grateful to him, for his encouragement and help rendered in making the hard earned research results to see the lime light.

I would like to acknowledge with thanks all those who have rendered all assistance in successfully bringing out this anthology.

G. VICTOR RAJAMANICKAM

PROFESSOR & HEAD DEPT. OF INDUSTRIES & EARTH SCIENCES TAMIL UNIVERSITY, THANIAYUR-5.

ABBREVIATIONS

A ... Amba

ABBS .. Adhunika Bhuloka Bhumi Sastram

Acuvacă ... Acuvacattiram

Adi ... Adipurana

aińk ... Ainkurunuru

akam ... Akananuru

AS ... Alankara Samksepam

ASR ... Angala Samrajyam

astap ... Astappirapantam

AS(V) ... Abhijnana Sakuntalam (Vallathol)

AY ... Apatkaramaya Yatra

B ... Bharata

Basavapur ... Basavapurana

BB ... Bhasabharatam

BBG(M) ... Bhasabhagavad Gita

(Kodungaloor Kunnikuttan

Thampuran)

BGB ... Bhagavatam Bhasa

BhN ... Bhasanaisadham

BhV ... Bhuloka Vivaranam

BR ... Bhutarayar

C ... Cemmin

Can. aka ... Cankattakarati
Catu ... Caturakarati

CB ... Cerusseri Bharatam

C. Bp. ... Cannabasavapurana

C.E.M. ... Terms from the College of

Engineering Manuai

Cetupuranam

C.G. ... Classified Glossary

Ci. Ci. pa ... Civanana Cittiyar parapakkam

Cintā.ni ... Cintamani nikandu

Ci. po. pa ... Civanana pota pasyam

Cilap ... Cilappatikaram

Civap. ... Civappirakaca Cuvamikal

pirapan pirapantattirattu
Civa. taru ... Civatarumottiram

Civaka ... Civaka Cintamani Colloq ... Colloquial usage

CR ... Cempakarama

CT ... Cattampi Swami Thiruvadhikal

Culamani ... Culamani

Cūtā ... Cudamani nikandu

Daa.Saa. ... Daasarathi Satakamu

DMM ... Dharmamrutam

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(A)		
DR	•••	Dharmaraja
EMP		English - Malayalam
		Pazhamozhikal
G		Malayalam and English
		Dictionary (Gundert)
GC		Gauri Caritam
Giri		Girija Kalyana
HS		Haryaksamasa Samarotsavam
Insc.		Inscriptions
J		Jaffna term
Jaga		Jagannatha Vijayam
Kali	•••	Kalittokai
Kallā		Kalladam
Kampa		Kamparamayanam
Kantaran	***	Kantarantati
KAS	•••	Kaudaliyam Artta Sastram
Kavy.	••••	Kavyavalokana
KBM		Keralavum Buddha matavum
K·C-M		Kerala Caritram (Manuscript)
K.K.		Kaatamaraaju Kathalu
KKED	•••	Kittel's Kannada - Kannada
		English Dictionary
KLC	•••	Keralattile Lattin Kristyanikal
Ko <u>nr</u> ai ve	•••	Konrai Ventan
Kõvila. ka		Kovilan Katai
KP	•••	Kalkkipuranam

KP(G) ... Kerala Palama

KR ... Kerala Varma Ramayanam

K₁R ... Kannasaramayanam

KRBE ... Koccirajakkanmar Batteviyakkayacca

Eluttukal (M.E. 865 - 964).

KS ... Kalyana Saugandhikam(Malayalam)

Kural ... Tirukkural

Kurun ... Kuruntokai

KS ... Kaligananathana Sangathya

(Kannada)

KSP ... Kumaranasanre Sampurnna

Padyakrtikal

KSP₁ ... Kottaram Sadhanangalute

Pakarppu - 1872

KSS ... Kerala Svatantrya Samaram

KT ... Kiratam (tuLLal)

KU ... Keralotpatti

KV ... Kucelavrttam

KV-AK ... Kirmmiravadham (attakkathakal)

Hamsa - Hamsavimsati

ilak, Vi, ... Ilakkana vilakkam

irai ... Iraiyanar akapporul

irāmanā ... Irama natakam

Iccuvara.ni ... Iccuvara niccayam

īt ... Itu

Liila ... Liila (Khanda Kavyam)

Lokalokam

LL	•••	LUKAIUKAIII
Loc.	•••	Local usage
LV	•••	Laksmi Vilasam
Malaipaţu	•••	Malaipadu Kadam

Maṇi ... Manimekalai maturaik ... Maturaikkanci

T T

maturaip patir ... Maturai patirruppattantati

MB ... Matrbhumi alcappatippu

MB ... Matrbhumi alcapp

MB₁ ... Mahabharatam

MBh ... Mahabharatam (Kilippattu)

MC ... Mrga Caritam (Kottayam)

mēruman ... Merumantara puranam mīnāt, pillait ... Minacci ammai pillaittamil

M.L.I. ... Malayalam Lexicon Vol. I

M.L.II ... Malayalam Lexicon Vol. II

M.L.III. ... Malayalam Lexicon Vol. III

MM ... Mangalamala

M.M.¹ ... Manual of the administration of

· the Madras Presidency

M.Navi. ... Manual of Navigation

MPP ... Malabarile Panappattukal

MPS ... Manipravala Sakuntalam

MR ... Malayalam Reader

M.R. (A.K.) ... Molla Ramayanam (Aranya Khanda)

MS' ... Manassakti

MS ... Megha Sandesam

MS₁ ... Mayura Sandesam

MV ... Munnattu Viran

mīt.a ... Vaittiya mulikai virivakarati

N ... Nalodayam

naitata ... Naidatam

NAK ... Nurri onnu Attakkathakal

naļa ... Nalavenpa

nan ... Nanneri

nāma.tipa ... Nama tipa nikandu

nañ. ... Nancil Nattu Usage

nana ... Nanamirtam

nā.ti.pi. ... Nalayira tivviya pirapantam

nar ... Narrinai nālaṭi ... Naladiyar

netunal ... Nedunalvadai

NK ... Nalukettu (Novel)

NP ... Natan Pattukal

Nr. ... Nauka Caritre

NS ... Nikuti Sastram

Olivi ... Olivilodukkam

OMB ... Outboard Motors & Boating

Pa.ra. ... Paramayogi Vilasam

parav. ... Paravar usage

paripā ... Paripadal

pa.ti. ... Panniru tirumurai

pattinap ... Pattinappalai

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Payanoor Pattu Pay Makaparatam Pārata Pampa Bharatam PB Periyapuranam Periya Perumpanarruppadai perumpān Perunkatai peruñ Pinkala nikandu pin Piramottira kandam piramõt Pradosamahatmyam (tullal) PM Putana Moksam (attakkathakal) PM-AK Pracina Malayala Gadya Matrkakal PMGM Pondicherry usage pond Patinayiram Palancollukal PP Patappattu PP₁ Pravasi Kanda Indiya Pravasi Proverb Prov. Prasangatarangini PΤ Pancatantram PT₁ PV- TK Paundraka Vadham (tullalkkathakal) Purananuru puram Purapporul Venpa malai pu.ve. A Dictionary of Tamil Language R

Rama Caritam

Rama Chandra Vilasam

Ramayana Kalpa Vriksham

RC

RCV

R.K.V.

xviii

RM ... Ravanyu Manual

RMC ... Rukmangada Caritam

RRB ... Ramaraja Bahadur

Sabara ... Sabarasankara Vilasam

Sabda ... Sabdamani darpanam

San ... Sankhanadam

Santi ... Santipurana

SB - AK ... Setubandhanam (attakkathakal)

SC ... Silavati Caritam

SC/Soma ... Somanatha Caritra

S.D.S.R. ... Sri Dharma Saara Ramayanam

Sipu/SP ... Sivapuranam

Si.naa.re. ... C. Narayana Reddi

Sivara. ... Sivaraatrimaahatmyam

SKC ... Sri Krishna Caritam

SM ... Smaranamandalam

S₁M ... Sahitya Manjari

SMT ... Syamantakam (tullal)

SN ... Sukraniti

SPS ... Selected Proclamations by

the Sovereign

SR ... Subhasitaratnakaram

S.R.R. ... Sri Rauganadha Ramayanam

SS ... Sukasandesam

SS¹ ... Satyasvayam Varam

SSV - AK ... Sitasvayam varam (attakkathakal)

Std.dict.	•••	Standard English - English -
		Kannada Dictionary

STM ... Sujatodvaham

STOT ... Saktan Thampuranre oru

tiruveluttu

STV ... Sabda Taravali

Suka ... Sukasaptati

SV ... Satyavati

SV - AK ... Sambaravadham (attakkathakal)

SVP - K ... Satyaveda Pustakam - Korintiar

SVP - Y ... Satyaveda Pustakam - Yakkopu

tailava ... Tailava Curukkam

takkayakap ... Takkayakap parani

tanti ... Tandiyalankaram

tāyu ... Tayumana Cuvamikal Padal

TBSC ... Tekkum Bhaga Samudaya Caritram

tēvā ... Tevaram

ti.mā.nū. ... Tinai malai nurraimpatu

tiru ... Tiruttondar makkatai

tirukkaruvaip.

patirrup ... Tirukkaruvai patirrup pattantati

tirukkō ... Tirukkovaiyar

tiruman. ... Tirumantiram

tirumu. ... Tirumurukarruppadai

tiruppo.Can ... Tirupporurc Canniti murai

tiruvaca ... Tiruvacakam

ti.pu	•••	Tiruvilaiyadar puranam
tiva.	•••	Centan tivakaram
tiv.iya <u>r</u>	•••	Nalayira tivviya pirapantam
	¥1	(iyarpa)
tiv.periyatiru	van	Nalayira tivviya pirapantam
		(Periya tiruvantati)
tiv. tiruccan		Nalayira tivviya pirapantam
		(tiruccanta viruttam)
tiv. timuurur	1	Nalayira tivviya pirapantam
		(tirukkuruntandakam)
tiv.tiruma.	•••	Nalayira tivviya pirapantam
		tirumalai
TK	•••	Kuncan Nambiyarute
		tullalkkathakal
T.L.	•••	Tamil Lexicon
tol.Col.		Tolkappiyam Collatikaram
tol.porul	•••	Tolkappiyam Porulatikaram
TP	•••	Torram Pattukal
TR	•••	Tellichery Records
TSM	•••	Travancore State Manual
UC	***	Unniyadi Caritam
UCTC	•••	Unniccirutevi Caritam
UK		Usha Kalyanam
UKM		Umakeralam
UP		Udyanapravesam
US	•••	Unnunili Sandesam

xxi

upatecakă ... Upateca kandam

US1 ... Uttara Sandesam

V ... Vaddharadhane

vairāk.tīpa ... Vairakya tipam

Val ... Valmiki Ramayana

Var ... Varttamanapustakam

VC ... Vetala Caritram

VD ... Vijnana Dipika

Veedaant ... Vedanta treatise

Vināyakapu ... Vinayaka puranam

Vivili, ... Viviliya nul

VK ... Venmanikrtikal

VP ... Vadakkan pattukal

VP₁ ... Vadakkan Pattukal (Reddiar, S.T.)

VR ... Valmiki Ramayanam

VS ... Veni Samharam

Vul. ... Vulgar usage

W ... Winslow A Comprehensive

Tamil - English Dictionary

Yal.aka ... Yalppanattu manippayakarati

PREFACE

The great temples that have survived the ravages of time, the dams built by kings for irrigation, the traditional occupations like fishing, navigation, astronomy, weaving, animal husbandry, agriculture, medicine, stone quarrying, metallurgy and such other indigenous crafts which still survive are the products of expertise in different fields. Those who are conversant with the subject refer the relevant books on the subject which are mostly found in Sanskrit or Prakrit and a few in their mothertongues. Those who learnt the profession from their parents or guardians continued the tradition with varying degrees of efficiency which increased according to the demand and fell flat when the demand was very little. In Science, besides the written records, the long and continuing tradition of the artisans and workers is equally valid.

The archaeological findings so far unearthed are tangible in some areas of scince but very sketchy in other areas. Further they are inferential on the basis of the folk tradition and relevant literature, if any.

The Sastras like Kalpataru on boat building are purposeful. The pleasurable ones like the Sangam classics of the Tamils make use of specific knowledge in their creative work and their cognisance of the subject matter is according to the needs of poetry. To illustrate, a buffalo or an elephant in water is described as a boat in water. This indeed for a student of literature is a fascinating simile. For a student of navigation, the information he can

make out of this description is that the boat is made up of a body like buffalo. It was black and it had a face like a buffalo. Perhaps the use of boats at the time of the composition of the Literature could also be cofirmed. On the other hand the Sastras can help in dating the boats and at the same time can give the details of the ports and the mechanics of building and operation. Folk literature, adages, riddles, also give a general picture of the object to infer indirectly its nature. Among the sources folk tradition plays an important role especially in India where literates are less whereas traditon is strong and continuing due to social classification and occupational specialization. Sastras in the respective fields are fewer in some areas but considerable in fields like astronomy. They have a place in the history of science though their help is indirect. Similarly folk literature (adages, riddles) have a role similar to written literature

Another rising field in the reconstruction of culture (material culture included) is linguistic Archaeology. On the basis of words or terms it can recover the original form of the word and help the reader in locating the area where the 'thing' was used and how it spread to other areas. Unless the world and the thing are coterminous, this inference will have little value. An illustration will help us to understand the point.

Tamil: ampi meaning small boat, raft,

float, ship, etc.

Malayalam: ampa-ppattu 'rowers song'

kannada : ambi 'boat', ambiga, amboga, ambuja,

ambigara, 'man who rows a boat'.

Tulu : ambigira 'boatman'.

Marathi : ambi, ambekari. 'a boatman'

D.E.D.177: ambi can be reconstructed which is found in Tamil, Kannada and Telugu and the boat is found in the Malayalam area as well as in parts of Maharashtra. The word is of Dravidian origin because of its ancientness, widespread and phonetic conservativeness and hence the word and the object should have gone to Marathi region from the Dravidian area. Also all the Dravidian languages which preserve the word have the same coastline. The word ambi is attested in the Tamil Sangam classics about the beginning of the Christian era.

For the question that a borrowing of the word need not ensure the borrowing of the object, the answer is, largely they go together. If there are exceptions, they have to be proved. The new method gives a clue to the origin of a thing, its spread and the borrowing into other languages. As an effetive tool for history or prehistory, the use of linguistic archaeology is more and more realised though it depends on a few assumptions, which are valid, until they are not otherwise proved. Also if a word is indigenous to the family of languages, it goes with it that the object is also indigenous to that culture. The horizontal spread of the word within the family, the earliest form of the word, which is reconstructed out of the attested forms in the member languages and inference, regarding the object based on the linkage can be made which will resolve many problems in the history of material objects. Linguistic archaeology may not help fully in drawing information regarding the material with which the boat was built or its length and such other details. But it can give us clues to the earlier form of that word and the spread of the word in the member languages and also in the languages of other families. For relative dating, the help of linguistic archaeology is thus considerable.

To summarise, for describing the details regarding the branch of science like navigation, the folk tradition gets priority. Followed by Sastras, where details will be

preserved, though interpretation will vary. The Sahityas and folk literature will have confirmative value and perhaps give clue to the strata of society which produced the object and used it. Linguistic archaeology can help in relatively dating the word/object, its spread and the question whether it is indigenous or borrowed.

The information from the literatures of Tamil. Malayalam, Kannada and Telugu have been extensively collected in this report. The old Nigantus, dictionaries and lexicons have been checked for words connected with navigation (boats, parts of boats, use of boats, ports and such other details). In a few places, wherever available, adages and riddles have been collected. This collection will give a broad picture about the words/objects, their use, and their chronology. The actual corroborative details will have to be provided by the collections which will be the second phase of our work. These, when completed, can be compared with the available sastras (which by no means are clear in details) and a fuller and continuous picture on the history of navigation can be furnished.

V. I. SUBRAMONIAM
Principal Investigator
(Ex.Vice-Chancellor,
Tamil University)

ACKNOWLEDGEMENTS

The Editors express their pleasure in recording their indebtedness to the founder Vice-Chancellor of Tamil University, Dr.V.I.Subramoniam and the principal Investigator of the project entitled "History of Traditional Navigation in South India (As gleaned from Tamil, Malayalam, Kannada and Telugu Literatures)" for his responsibility in this project and his constant encouragement and guidance.

We express our sincere thanks to the authorities of CSIR and NISTADS especially Dr. Ashok Jain, Director, NISTADS, Shri. N.N. Saareen, Under Secretary, EMR Division, Dr. Deepakumar and Dr. Sangwan, Scientists, NISTADS, New Delhi, who rightly recognised the importance of this work and gave liberal financial assistance for doing this project

We thank prof. Fatimi from Pakistan and Mrs.Margaret Deacon from England for their valuable suggestions and comments.

We Acknowledge our deep gratitude to the former Vice-Chancellor of Tamil University. Prof. S. Agesthialingom, for having given us permission to execute this project in an exemplary manner.

We are grateful to our former Vice-Chancellor Dr. C.Balasubramanian and the Registrar Dr.R.Muthian who gracefully permitted us to bring out this work as Tamil University publication.

Indeed, such an effort could be materialied only by the strong perseverence of our present Vice-Chancellor Dr. Avvai Natarajan. We are highly grateful and thankful for his unpolluted and genuine keeness in raising the spirit of Tamil above board, by bringing such volumes to see light of the day.

We are deeply indebted to Dr.G.Kulathuran, Dr.C.Sivashanmugam and Dr.T.S. Giriprakash for compiling the literary works of Tamil, Kannada and Telugu respectively regarding the History of Traditional Navigation.

We are grateful to Dr.P. Arangasamy, Professor & Head, Dept. of Translation, Tamil university, and Prof. K. Muthuswamy, Head, Dept. of English, Serfoji Govt. College, Thanjavur, for the English correction of this manuscript in a grant success.

Finally we thank our typists Mrs. S. Jamuna Rani, Mrs.V.Kannagi Devi, Miss. S. Senthamil Selvi and Miss.D.Jothilakshmi for typing this manuscript in a book form and the staff of Publication Dept. of Tamil University especially Mr. N. Ramakrishnan and Mr. D. Rajarajan for printing this volume nicely within a short time.

G. VICTOR RAJAMANIĆKAM V.S. ARUL RAJ

PART - I

Introduction

From prehistoric times, the Southern part of India had maritime contacts with the rest of the world. It may be the reason that South India is bounded on all the three sides by sea and naturally the ancient South Indians took very great interest in the Sea-faring activities. The prehistoric maritime contacts of South Indians have been well recorded by the earliest accounts of the classical writers and by the references found in the indigenous literary works of South Indian Languages. A rich tradition has prevailed in the coastal strips of South India especially among the fishermen community and ship builders and the same is reflected in the legends, stories and folklore. There are many evidences in historical writings, such as the import of peacocks, apes, sandal wood, etc., in Solomon's period (962 to 930 B.C.) ancient Chaldean reference of South Indian contact, the kinds of materials flowing into Assyria during the 14th century B.C. from South Indian ports, Vasco da Gama's landing in Calicut with the help of the Malayalee pilot from Madagaskar, e.c. An attempt has been made in this book to trace the ancicut navigational techniques and knowledge of the sea in South India from available literature in South Indian languages. This book is prepared mainly based on the data from the South Indian literary works pertaining to traditional Navigation in South India. The data will be analysed and interpreted in the light of modern technology wherever possible, to get an idea about the ancient scientific knowledge generated in the field of boat building and navigation.

2. NATURE OF LITERATURE

Out of the four South Indian languages such as Tamil, Malayalam, Kannada and Telugu, Tamil is the earliest one. Tamil Literature has many references, on the bravery of mariners during the regime of its early kings Chera, Chola and Pandya through the poems in Purananuru (poetry dealing with bravery). In the ancient Tamil work Tolkappiyam also, has given the way in which a separate landscape is provided for the Coastal strip neytal as one among the five kinds of physiography, based upon the nature of land and profession of people. This, in itself suggests that an appreciable part of the human livelihood must have sprung up from the sea. The people of neytal are none other than the one who are involved in the sea- faring activities either for establishing Inter-Continental Commerce or in search of sea-food.

On reviewing the corpus of Tamil Literature from the Sangam period (2nd Centrury B.C. to 3rd Century A.D.) to the 19th Century, a lot of references on navigation are found. Many of the stereo typed occurrences of words or passages have been omitted in part II - Tamil section, as they are mostly found in very general contexts of similies, metaphors, etc., and as they do not add any significant information on the item concerned.

The origin of Telugu language as such, dates back to the first or the second Centuries before Christ in close association with the Andhra king Satavahana who ruled the major portion in South India for nearly four Centuries i.e. from 225 B.C. to 250 A.D. The Satavahana dynasty revived the Vedic religion. Buddhism also flourished. Afterwards, the Renati Cholas made Telugu their court lan-

guage. Then comes the rule of Eastern Chalukyas (From 7th Century to 12th Century A.D.) in whose period the Telugu poetry emerged slowly and reached its culmination. The Nelloor king Raja Raja Narendra 11th Century A.D. has emerged like a bolt from the blue and with him the Ithihasa Age, i.e. the age of puranas. After this prabandha age appeared by which the fragrance of poetic expertise and artistry spread in the nook and corner Andhrapradesh. Later on, the Southern School of Telugu literature i.e. in the regime of Nayak kings in Tanjore and Madurai brought many new varieties in the Telugu literature viz., Yakshaganas and as well as prose writings. Afterwards the Sathaka Literature entered and brought out sociological reformation, Subsequently, with the advent of Britishers, many new literary forms arose in the Telugu literature. With this bird's eyeview, it can easily be concluded that the Telugu literature, used the navigational words in a very limited way. But, many proverbs were in vogue since time immemorial using the names of boats or ships.

The literature of Kannada can best be studied by grouping the literary works under the following three heads, as suggested by Rice². These groups correspond to the religious systems dominant in successive times.

- a. Until the middle of the 12th century, Jainism was the exclusive religion that was followed by the society. The Jaina literature of the period includes most of the ancient and eminent Kannada works.
- Lingayat literature commenced from about 160 A.D. when Basavanna revived the Veerasaiva or Lingayat religion.
- The Vaishnava revival, that commenced under Ramanujacharya in the beginning of the 12th century

up to the 16th century, introduced a period in which Brahmanic thought became dominant, an ascendence which has continued till the present time.

A scrutiny of the Kannada literature belonging to the three groups mentioned above reveals the fact that the interest of Kannada authors is almost religious. Of course, there was a continuous change in the subject. The change, however, was restricted to religious groups only. The philosophy of literature varied as new religion or religious sects got evolved. There are no purely secular Kannada literary works until the 19th century.

In spite of the above facts there are still some references to boats and navigation and they have been collected. Moreover, the innumerable metaphors and similes which decorate the Kannada literary works have also been taken into account, wherever they have thrown light on the boats or navigation techniques.

Navigation was well known to the ancient Keralites even before the beginning of the Christian era. Even though there are no literary works in Malayalam before the 12 the century from which we may collect evidence about the Keralites navigation practice, we have ample evidences in this regard from the ancient Tamil literary works and the accounts of foreign travellers. Besides simple river boats, Keralites also used large ships to cross oceans and seas. Malayalam literary work starts with Ramacaritam in the 12th Century A.D. and reflects its society through its poems on heroic deeds and love matters. There are scattered references to navigation in Malayalam literary works from the 12th to the 17th centuries A.D. and a good number of references in the works of the 18th and 19th centuries also.

Malayalam literature does not give much information on technical details of navigation but gives ample data

regarding the names of different types of boats and vessels, names of the parts of boats, the crew and the oceans, and general information regarding navigation, i.e. light house, harbour, etc.

3. Ancient South Indian Ports

The names of different ancient ports were pooled up by referring to foreign travellers' notes, folklore, inscriptions, early Dravidian literatures like Tamil, Malayalam, Kannada and Telugu and the findings in archaeological excavations. There are so many references in literature to the ancient ports like Muciri, Thondi, Pukar, Korkai, etc. The Muciri harbour of Sangam period (2nd century B.C. to 3rd century A.D.) is considered to be the port of the Chera king Imayavarampan Neduncheralathan (c.27 to 85 A.D.)³. This port of the West Coast, had commercial contacts with the Yavanas. Thondi was another important harbour of the Chera King Kanaikkal Irumporai (c.200 to 225 A.D.). Pukar, the famous port of the Chola King Karikal Peruvalathan's (c.50 to 95 A.D.)⁴ occupied a very prominent place, being the port in which even big ships could enter without lowering the sails. Korkai, another port city in the mouth of the Thamaraparani was the capital of early Pandyas (c. 575 to 966 A.D.)⁵. Akananuru⁶, a Sangam literature describes this place as an important place for pearl fishery, which has also been substantiated from the archaeological findings'. Parameswaran Nair⁸ quoted as follows:

"It needs no substantiation that Kerala held a preeminent position in respect of foreign trade since the earliest days in known history. All the important ancient civilisations in the world, such as Egyptian, Arabian, Babylonian, Roman and Chinese maintained close commercial contacts with its shores, for the highly priced teakwood, sandal wood, spices and peacock feathers".

Large number of such citations have been seen in ancient South Indian historical works about many ports of South India (both ancient and modern) and also the accounts of foreign travellers are of immense value and help us in this regard.

Though many ports were active all along the South Indian coastal area, Muciri, Thondi, Bacare and Nelcynda were often referred to in ancient literature and history. There were also some other minor ports like Naura, Balita, Mante, Vakai and Pantar.

Archaeological excavation conducted in recent years atong the Tamil Nadu coastal areas have brought to light a large number of ports, viz. Mahapalipuram, Vasavasamutiram, Panerji, Kanchipuram, Korkai, Thondi, Alagankulam, Kayal, Periyapattinam, Chingamedu, Arikkamedu, Karaikadu, Kaverippumpattinam.

A few citations also have been quoted in Malayalam literature about the ancient ports. They are Colachel (Malayalam 1.1.3.25:2), Cochin (Malayalam 1.1.3.25:7), Valiyatura, Manakkudi (Malayalam 1.1.3.25:12), Cirayinkail, Quilon, Pirakkadu, etc., (Malayalam 1.1.3.25:13), Tiruvanchikulam (Malayalam 1.1.3.26:40) and Elicape (Malayalam 1.1.3.26:50).

Sreedhara Menon¹⁰ points out some ports on the western coast like Muciri, Thondi, Bacare, Nelcynda, Naura, Balita, Mante, Vakai, Pantar, Quilon, Cochin and Calicut. Now a days, the above ancient ports do not enjoy much importance. They are remembered as great traditional sea trading Centres of South Indians. It may also be noted here that some of the above ports are not in those

names, at present. Only after the 13th Century Quilon, Cochin and Calicut became very popular ports in Kerala.

The Periplus of the Erythrean Sea (1st Century B.C.) has mentioned some ancient ports like Muciri, Korkai, Kamara, Poduca, Mikama, Comari and Sopatma in the Tamil region. Kamara, Poduca, Sopatma, Nikama and Comari of Periplus might have been the modern towns of Karaikkal, Pondicherry, Madras, Nagappattinam and Kanyakumari respectively. From Periplus statements, we came to understand, that Naura and Thondi were the leading markets of attractions to the Greeks, Europeans and Arabians, over Muciri and Nelcynda. Muciri and Thondi were the sea ports mainly involved in imports whereas Nelcynda and Bacare were famous river ports of exports. Nelcynda was situated from Muciri at a distance of about 500 stadia or 58 N. Miles. That port along with Bacare was mainly exporting pepper produced from their hinter land only. It is also known that the foreign ships after Bacare port move to the east towards the other small ports of this region like Balita and Comari.

In the Karnataka region, the port of Mangalore is mentioned as a flourishing one. There are also other ports like Honavar, Bhatkal and Karwar. The famous historian Ptolemy (2nd-Century A.D.) referred to two more famous ports along the Southern Andhra Pradesh. i.e. Machilipatnam and Motupalli. He had also made out the business contacts of Andhra Kings with Arabia, Egypt, Greek and Rome. Marcopolo, has clearly mentioned that diamonds were exported from Andhra Pradesh.

Afterwards the Dutch with the permission of Golkonda Sultan (king) established a ship factory in 1628 A.D. at Kakinada. The ships belonging to Dutch, French and Europeans used to reach the port of Kakinada. The workers used to go to Burma in the ships from this place. In 1861, the transport of raw materials for manufacturing

clothes were exported from this place. Near Kakinada one more place by name Korangi was mentioned. Very strong rock wall has been constructed there for ship parking. Now it is not seen because of many natural devastations."

The ships used to be parked 5 km wide near Kakinada. As a symbol to this, four lights in all the four rock pillars have been used for guiding the ships. The light house (rock pillar) is unused from 1877 A.D. onwards. The only light house situated in the western side of Kakinada near the viliage Vakalapudi is in good condition. Even the big boats were transported through the ships to this port. Srikakulam, Visakhapatnam, Yanam and Chirala are also some of the ports in Andhra Pradesh referred to in the earlier period.

4. Varieties of Boats Quoted in Literature

Various kinds of ships and boats were used in ancient days for fishing, race, piracy, transporting both cargoes, passengers, etc, in rivers as well as in oceans. The varieties of crafts mentioned in each literature have been briefly given below.

4.1. Crafts In Tamil Literature

On reviewing the Tamil literature from the Sangam period (2nd century B.C. to 3rd century A.D.) to the 19th century, 20 terms both native and non-native to denote boats alone, have been identified. Moreover, more than 100 words in Tamil are found referring to the word boat in dictionaries and lexical

4.1.1. Ampi

It is a type of boat frequently mentioned in literature. Tamil lexicon points out that *ampi* is a classical word in-Tamil, meaning water. This word might have been derived from *ampu* which means water, sea and world surrounded by water and cloud. It also means bamboo. Bamboo might have been used to make *ampi* in ancient days. This word is frequently used in ancient literature but not in medieval and modern literature. Perhaps, it is a common word to denote both small boats and ships. In literature the shape of the *ampi* is generally compared to an elephant (Tamil 1.1:10) or a buffalo (Tamil 1.1:3) or a bullock (Tamil 1.1:6) and that gives an idea about the ribs, side planks and in general, the shape of a boat.

The phrase tin pini ampi' (Tamil-1.1:3) clearly indicates that the side planks or logs of wood might have been tightly tied. In Cilappatikaram, three types of 'ampi' are mentioned (Tamil-1.1:10). They are 'ampi' with a horse face, 'ampi' with the face of an elephant, 'ampi' with a shaped prow. In Tamil, they lion are called 'parimukavampi', 'Karimukavampi' and 'arimukavampi', respectively. From the above citation in Cilappatikaram, it is inferred that many passengers crossed the rivers by ampis floating near the great landing ghat. It is not frequently mentioned in literature for fishing, But, the citations available from the literature, one can assume that 'ampi' might have been used mainly for crossing the rivers and coastal transport. In modern times no boat is in usage by the name 'ampi' among fishermen. 'Ampi' denoted only small boats in some literary works. In Manimekalai and Ciyakacintamani, 'ampi' denotes a 'kalam' means a ship (Tamil-1.1:11). In Kamparamayanam (Tamil-1.1:13) While describing in praise of Guhan, Kampan says as Follows:

ayiram ampikku nayakan 'Lord of thousand ampis'.

Sails and masts are not mentioned with 'ampi' in literature. Kamparamayanam also mentions 'oar' (Tutuppu) in one instance which is associated with 'ampi' 13

4.1.2. Punai or Pinai

It is a type of float. The lexical meanings for punai are a. float, raft b. boat, vessel, ship c. support, help and d. bamboo. Punaikkattai is a Tamil word which denotes the catamaran. Since trees or logs are tied together, the float is termed as kattumaram in modern times. 'kattu' means 'to tie' and 'maram' means 'tree'. Uniting the logs, i.e. tying (pinai)14. There is a compound word in ancient Tamil literature called nërmpunai which means light raft (Tamil-1.2:10). While crossisng the river or escaping from the shipwreck, this light raft is brought in use (Tamil-1.2:8). In Akananuru, it is said that the punai is made up of velam i.e. 'Korukkampul' (a grass or bamboo or nānal) (Tamil-1.2:4). The Stems of this Vēļam were tied and used as punai. From this evidence, it is understood that the name punai is derived from the type of log used, i.e., bamboo (punai) and the mode of uniting the logs, i.e., tying (pinai).

The stem of a punai was called in ancient Tamil work as talaip punai and the stem was called as 'kataip punai'. Sails or oars are not mentioned with 'punai' in literature. For fishing also 'punai' was used (Tamil-1.2: 5). 'Punai' was also used for playing in the river by ladies. This kind of play is known as punai Vilaiyattu (Tamil-1.2: 1). For deep sea fishing 'Kattumaram' is used in modern days. Majority of the fishermen are using 'Kattumaram' in modern times. This is the first and foremost float of the ancient times. In modern times this tradition continues and the Kattumarams are of different types. They are:

- 1. inaik Kattumarm
- 2. Mukkattu Maram
- 3. irukkumaram
- 4. tantil maram

In 'inaik kattumaram' two logs are joined together and tied either by koti or 'nār'. It is otherwise called 'Kotamaram'. In mukkattumaram' three logs are joined together. In 'irukkumaram' four logs are joined together.

4.1.3. Timil

Timil is another type of boat. The meanings given in Tamil Lexicon' for 'timil' are 1. Catamaran, small boat and 2. Vessel, ship. So, both for fishing and long voyage 'timil' would have been used. But, from the literary sources it is understood that 'timil' would have been used. But, from the literary sources it is understood that 'timil' had been mainly used for fishing and it resembles a Catamaran. No boat is mentioned by the name 'timil' in modern times. Majority of the literary references indicate 'timil' as a fishing boat (Tamil - 1.3:1). For pearl fishing also 'timil' was used (Tamil - 1.3:12). The 'timil' that was used for fishing, is referred to in literature as 'tin timil' or kotuntimil (Tamil - 1.3:2) because of its sturdiness and also its use in killing big sharks. A particular section of the people of the maritime tract are known as 'timilar'. The 'timil' was used for night fishing in olden days (Tamil-1.3:6). While fishing at nights, lamps were used by the fishermen in 'timil' not only to get light but also for finding out fishes (Tamil - 1.3:6). In literature, 'timil' is generally compared with elephant which suggests its general size (Tamil - 1.3:5). Sail is not mentioned with 'timil'. Perhaps only oars might have been used.

4.1.4. Navay

'Nāvāy' is a vessel or ship having many sails and masts. Perhaps it may also denote big boats. The word 'nāvāy' may be related to the Sanskrit word 'nāvikā'. In ancient Tamil literature this 'nāvāy' was frequently mentioned for Intercontinental trade and voyage. Wind power was used by these vessels (Tamil - 1.4:1). 'Nāvāy' was used to carry horses and other trade commodities from foreign countries (Tamil - 1.4:7). It was also used to go from one pattinam (coastal town) to another pattinam (Tamil - 1.4:2). Flags were hoisted in the upper region of the mast (Tamil - 1.4:6). From 'Cilappatikaram', it is inferred that to cross the Vaigai river, 'nāvāys' were used. 15 Nāvāy also moved with the aid of 'tutuppu' and 'kōl' (Boatman's pole) (Tamil - 1.4:13). The nāvāy was directed by a 'mikāman' (Captain). 'Nāvāy' was generally compared with elephant (Tamil - 1.4:3) in literature and sometimes with the shape of a crab (Tamil -1.4:13). This sometimes with the snape of a crab (Tamil -1.4:13). This latter analogy suggests that it may be a big boat with many side oars. The big size of the ' $n\bar{a}v\bar{a}y$ ' is inferred from the description that the ' $n\bar{a}v\bar{a}y$ ' looks like the mountain which is surrounded by clouds (Tamil - 1.4:6). Drums beating is depicted in the literature while the ' $n\bar{a}v\bar{a}y$ ' moves in the sea (Tamil -1.4:6). The boats ' $n\bar{a}v\bar{a}y$ ' bringing gold to Kuttuvan find mention in Sangam literature. From all the above citations we can come to a conclusion that the boats 'nāvāv' were used for long distance sea-voyage.

4.1.5. Vankam

'Vankam' is another kind of boat. It denotes a large vessel with sails. The Tamil Lexicon gives the meaning for Vankam as a swift-moving ship. It also means, 'wave' and 'sea'. Generally, the description given in literature for 'Vankam', 'Kalam' and in some instances for navay are one and the same. They denote only big boats or ships with masts and sails. Perhaps the name of 'Vankam' might

have been derived from the names of the sea or wave which are otherwise called 'Vankam'.

In the river Ganges, 'Vankam' was used to cross the river (Tamil-1.5:6,7). It is a masted boat according to the literature 'Narrinai' (Tamil - 1.5:1). The 'Vankam' with its flag hoisted, is compared to a war elephant with flags. The 'Vankam' is having many side ribs on both sides and it is bent in shape (Tamil - 1.5:3). The big size of the 'Vankam' can be inferred from the expression of 'ulakukilarntanna urukelu vankam' (Tamil - 1.5:4). The Captain of this Vankam is called nikan (Tamil - 1.5:4) or niyan (Tamil - 1.5:8). In the night with the help of the light house (volleri) the captains of 'Vankam' recognize the sea-shore or ports (Tamil - 1.5:4). 'Vankam' with the sail is expressed in 'Maturaikkanci' as 'Valitai etutta valitaru vankam' (Tamil -1.5:5). 'Vankam' was also used for Intercontinental trade (Tamil - 1.5:5). Sometimes, to find the direction or sea-shore, a bird was used in 'Vankam' (Tamil 1.5:9). This method of direction finding was used by Noah (In Bible) and the early Indus Valley people (Kosambi, 1981:6). During Pallava period the Tamil literature mainly mentions 'Vankam' and 'Kalam'. No other boat or ship is mentioned so often in the literature of this period.

4.1.6. Kalam

'Kalam' in Tamil means a pot as well as a ship. It is equivalent to the Sanskrit 'pātram' or 'yānapatram' meaning a ship. Tamil Lexicon gives the meaning for 'Kalam' as a boat. Its size is identified by the comparison of 'Kalam' with a mountain. Since the earliest sailing vessels were made of wooden planks, they were called 'marakkalam' (vessel of wood). In course of time they were called by the generic name 'kalam'. 'Kalam' was used for Intercontinental trade (Tamil-1.6:3). Horses were brought from other countries in 'Kalam' (Tamil-1.4:7) The association of wind with 'Kalam' is clearly mentioned in

some works (Tamil-1.6:11). Gold was brought by the Yavanas and pepper was taken back in exchange for gold in their 'Kalam' (Tamil-1.6:2). The caulking of kalam is mentioned in Paripadal (Tamil-1.6:1). While sailing into river waters, the kalams are used to reduce the load of their cargo and let down the sail, since the water depth of the river is less than at the sea (Tamil-1.6:4). The movement of 'Kalam' in a particular sea area was controlled by the kings of that area. The kalam builders were called in ancient days as 'Kalampunar Kammiyar' (Tamil-1.6:6) or 'Kalamcey kammiyar' (Tamil-1.6:7). The sailors usually sailed out through their 'Kalam' for trade only after confirming auspiciousness of the day. Finding a good day for journey is noticed here. In a Sangam literature²⁰, it is mentioned that 'kalam' had sails which were lowered when entering into the port.

4.1.7. Toni

The one, which is a dug out, is called 'tōṇi' (totustōtus - to dig out). 'Tōṇi' is used by Tamils to signify the vessels larger than a dugout canoe, though it is sometimes applied to the outrigger fishing boats. But, it is more properly used for the trading vessels with two masts in modern times. In some places there is a small boat called taṇṇu tōṇi. There is another term called tāvaṭittōṇi which means a boat going near the shore to cut out the vessels of an enemy. In some places the ferry-boat is called 'turaittōṇi'. A flat-bottomed boat is called 'Karaivalaittōṇi'. A caulked boat is called 'Kalapparrut tōṇi'. A piratical vessel engaged in plunder is called 'Kalapparrut tōṇi'. A canoe in the Maldives constructed wholly from the coconut tree is called 'Kuntirāttōṇi'. The boatman of the 'tōṇi' belonged to the lower caste in ancient days (Tamil-1.7:1). The tōṇi is run by the boatman with oar (tuṭuppu) (Tamil-1.7:2). It is used both in sea and river for coastal transport and fishing (Tamil-1.7:6). It is also mentioned in the literature that 'tōṇi' has been used for river sport (puṇal vilaiyāṭtu). 21

4.1.8. Otam

That which runs on water is called as 'otam' (otu+am). Centan Tivakaram gives the meaning for 'otam' as boat and ferry boat. It is also a raft, float, vessel of any kind (Tamil Lexicon). A very few occurrences are present in literature about 'otam'. In a Sangam literature it is mentioned that the 'otam' is like the sun in the sky, probably suggesting its association with the wide sea (Tamil-1.8:1). Oar is called in Tamil as 'otakkol' which is referred in 'Periyapuranam' (Tamil-1.8:2).

4.1.9. Pataku/Patavu

Perhaps the boat used by the 'Paţavar' gained the name of 'Paţaku'. 'Paṭavar' are a section of the people of the coastal tract. The term Cempaṭavar may perhaps denote them. The term 'paṭavu' is the alternate form of 'paṭaku'. The word 'paṭavu' first occurs in the 'Periyapuranam' (Tamil - 1.9:1). 'Paṭaku', 'Conku' and 'tōṇi' are different form each other. 'Paṭaku' is smaller than 'tōṇi' and 'Conku' is bigger than 'tōṇi' as inferred from the 'Tiruvilaiyatar Puranam' (Tamil - 1.9:2).

4.1.10. Matalai

'Matalai' means 'kalam' or 'marakkalam'. It is a pure Tamil word. 'Matalai' is a big boat used for Inter-continental trade (Tamil -1.10:1). The Chola king by name Kulottunkan who maintained a very popular navy of his time in this continent has used an extra large boat named as 'matalai' for transhipping even elements from other countries (Tamil - 1.10:3). The stem of the 'matalai' is called 'aniyam' in Tamil and the stern is called 'aram' (Tamil - 1.10:2). Very few references are found in Tamil literature to 'matalai'.

4.1.11. Mitavai

The earliest contrivance of man to ply over rivers and lakes was the float, made up of logs of light wood and tied together with ropes. In order to cross over the waters by sitting comfortably, the ancient Tamilians might have framed this structure. Such type of structures, used to drift over the waters is called as 'mitavai' in Tamil. This is from the verbal root 'mita' (to float). 'Mitavai' is a float made up of 'netti' (Sola pith, Aeschynomene aspera, or bamboo or Indian mast tree polyalthia longifolia) and it was used for water sports (punal vilaiyattu) in ancient days (Tamil - 1.11:1).

4.1.12. Teppam

'teppam' is another float of raft. In Tamil, 'teppakkulam' means the tank of a temple, where the deity floats on a raft or float during festival occasions. In Centan Tivakaram 'teppam' is given the meaning of a raft or float. 'Teppakkattai' is a raft or logs of a raft. 'Teppam' is otherwise called 'teppal' or 'teppai'. 'Teppai' is quoted in Merumantara Puranam. 23 'Teppam' is first occurred in Periyapuranam (Tamil-1.1:13). 'Teppa', 'teppa', 'teppe', 'tarpa' and 'tappa' are the terminologies used in Kannada, Tulu, Telugu, Sanskrit and Prakrit languages, respectively.

4.1.13. Kaipparicu

It is a small raft used to cross small rivers or tanks and also used for fishing. It is a wicket-like large basket where leather lining is used for the structures. It is used to cross rivers. It is first mentioned in a 17th Century Tamil work (Tamil -1.14:1).

4.1.14. Kappal

The word 'kappal' is first mentioned in a 17th

century Tamil work only (Tamil-1.15:1). Caldwell explains that the word 'Kappal' probably a verbal noun from 'kappu' (Telugu word) meaning to cover over. The verb is not found in Canarese or Tamil. The Malay word for ship is 'Kappal' but this has probably been borrowed directly from Tamil and forms one of a small class of Malay words which had a Dravidian origin and is introduced into the Eastern Archipelago. ²⁴ In Malayalam also the same terminology is used. 'Kopol', 'Kappalu' and 'Kappali' are the terms used in Toda, Tulu and Telugu, respectively.

4.1.15. Conku

It is a type of float which is used for shark hunting. In a Tamil literary work 25 it is mentioned that the fishermen tried to kill the shark by going through a boat named 'paṭaku' initially and which was broken by the shark and then they moved in the boat ' $c\bar{o}nku$ ' to catch but again they failed to catch and so the king of Parathavas (fishermen) suffered. From this citation one can predict the sturdiness of the boat ' $c\bar{o}nku$ ' when compared to 'paṭaku' and $t\bar{o}ni$.

4.1.16. Other Boats

In one of the literary works²⁶ the following boat names are mentioned. $T\bar{o}ni$, $c\bar{o}nku$, pataku, mutuku, $p\bar{a}ru$, palacam, $p\bar{a}nu$. In that citation, it is mentioned that the above referred boats are small boats used for fishing and Coastal transports. They are frequently mentioned in the Pallu literature of the 17th, 18th and 19th Centuries. 'Pahri' is a wide mouthed boat which is described in a Sangam literature. Here, it is mentioned that 'Pahri' which brought paddy from 'conadu' in exchange for salt. The size of the 'pahri' is indicated by the adjective, 'valvay' (Wide mouth).

4.2. Crafts in Malayalam Literature

The crafts of Kerala are mainly used for different purposes i.e., fishing, racing, pirating, transporting both cargoes and passengers, and navy. 22 terms are found to refer the ancient boats in the literature, while 38 words are included in the dictionaries and lexicon. 28

Out of the different names of boats, on etymological analysis, some are seen to have been borrowed from other languages such as Sanskrit, Portuguese, English, Chinese or Tamil. 'Cannātam, Varkkass, Vanci, Vattēl and olamaī' have been taken from Portuguese words of 'jangala', 'barca', 'manchua', 'batel' and 'almadia', respectively. The use of jangāla in Tulu language and jangar along the Malabar coast even today supplement the possibility of the derivation from Portuguese, because of the good intercourse of these languages and the region with the Portuguese Colonialism. However, there is another view on the derivation of 'Cannātam', from the Sanskrit word 'Sangara' meaning 'trade'. Similarly 'plavam, ulplava, potam, nau and tarani' might have been absorbed from Sanskrit. 'Campa', meaning 'three planks'. 'Oṭam, marakkalam, nāvāyi, onnal' and 'pattamāri', have been adopted from Tamil. In the case of the word pattamāri one cannot be sure that it has been derived from Tamil, because in French and in Portuguese languages a word of semblance 'pataxopinnace' leading to the meaning of a 'boat' is in use even today. 'Bōttu' is same as the English 'boat'.

Out of the 38 names of boats mentioned in the Malayalam-lexicon and dictionaries, item numbers 1-35 can be grouped under the indigenous or non-mechanised category while the rest are brought under mechanised category. Out of these terms, item numbers 1-22 are described in the Malayalam literary works. The non-mechanised category may again broadly be classified into 6

groups based upon the purposes and utility of the boats viz.

- i. Fishing vessels
- ii. Passenger vessels
- iii. Cargo vesseis
- iv. Piracy vessels
- v. Racing vessels
- vi. Naval vessels

4.2.1. Fishing Vessels

Today though the motor boats have come into use for fishing operations, but mainly in deeper waters, the ancient fishing vessel 'cannatam' also continues to be used in Kerala. 'Cannatam' was used by fishermen in olden days even for deep sea fishing. It is made by binding 3 or more big logs of timber. Gundert mentioned that 'campa' is a fishing boat. But in Tamil, it is called by the name 'sampan' which means three planks. This primitive boat is able to withstand the lashings of the waves better than the bigger boats. The various names given in the Malayalam lexicon for 'Cannatam' are 'Kattumaram' and 'Calattati, Paru, Otam, Vallam' and 'Vanci'. They are also the vessels used for fishing in Kerala. Normally, they have been used for transporting passengers and cargoes. Rarely, they have also been used for fishing. Malayalam literature cited the vessels 'campattoni' and 'vanci' for fishing.

Generally, the fishing crafts are keelless, but the dugout and plank built boats are also used for fishing. 'Pāru' is a type of fishing craft which is mentioned in the Malayalam lexicon. Gundert (1982:231) mentioned that a kind of 'ōṭam' is also used for fishing. It is known as 'kōṭōṭam'. Small plank built boats (koccuvaṭṭam) are also used for fishing. Mathur (1978) points out that most of the

Mappila house-holds have atleast one boat (vallam) because of its utility and cheapness in building.

4.2.2. Passenger Vessel

As the flat topped cannatam is found to give less grip and stability during the crossing over the waters, the early mariners must have attempted to evolve a solution to get a float of better stability and grip for transporting passengers as well as cargoes. So, they constructed two types of vessel which is mainly used for transporting passengers from bank to bank. It is not only used for transporting passengers, but also used for fishing and piracy. 'Katavutōni, kēvutōni and kaṭattu tōni' are the names used for ferry boat in Malayalam literature. In a Malayalam literature³⁰, there is a reference regarding the habit of ladies steering the boat in a ferry crossing point. In addition, there seems to be a practice of ferrying the people free of cost, too. An ancient Malayalam literature³¹ has spelt out clearly that the vessel (ōṭam) has been used for Intercontinental Passenger transport especially with China and Sumatra.

Generally, the ferry boats are decorated. We come to know through another work³², that the ferry boat (\overline{o}_i am) was built with roof for giving protection and shelter from rain and hot sun. Obviously ' \overline{o}_i am' was used for passenger traffic. Normally, the ferry boats are rowed with the help of bamboo poles.³³

It is also interesting to observe that ancient Keralites also used leather ferry boats (tolotam) for crossing the straits, specially of such places where the sea engulfed the land, introducing narrow passages. Since the leather ferry boats (tolotam) were in use mainly on straits, one can understand the sturdiness of these otams, as the straits are generally, considered to be the passages of high currents and tidal activities.

In Malayalam literature³⁵ there is a reference regarding the people who boarded the ferry boat (Kalivallam), assembled in the middle of the river where there is no movement, competed with each other, went against the water current and thus enjoyed. The ferry charge of a ferry boat (vanci) is found to have owned by an aged man and the same is indicated in a Malayalam literature.³⁶

In another citation³⁷ the small ferry boat (vanci) is referred. It was used by the Arabians who used the long pole (Kalukkol) for navigating their vessel. The vessel marakkalam is also used for transporting the passengers. In a reference, 38 it is mentioned that more than 100 people are travelling in a boat called marakkalam. It is mainly used for ferry services only in the ocean.³⁹

'Taragi' is a variety of ferry boat which is used for crossing the river. There is a reference regarding the boat called 'uru' which is used for passenger traffic in the Malayalam literature.

4.2.3. Cargo Vessels

The following vessels are mentioned for transporting cargoes in the literature. ' $T\bar{o}ni$, Patavu, $b\bar{o}tiu$, vallam, $\bar{o}ti$, uru, $pattam\bar{a}ri$, $civ\bar{a}ta$, plavam' and 'kappat'. There is a citation in the literature that number of boats from many islands are berthed. All these boats are loaded with such goods as arecanut, pepper, etc. They have been brought from hinterland and these goods are bartered for some other goods and loaded to the full capacity of their vessels ($t\bar{o}ni$). In another reference, t^{43} it is mentioned that the camels are coming like boats (Patavu) in the sea carrying heavy loads and passengers. From this one can presume that 'patavu' type of vessels is also used for transporting cargoes. The vessels t^{44} and ' t^{45} are also used for transporting cargoes. ' t^{45} and ' t^{45} are also used for transporting cargoes. ' t^{45} and ' t^{45} are also used for transporting cargoes. ' t^{45} and ' t^{45} are also used for transporting cargoes. ' t^{45} and ' t^{45} are also used for transporting cargoes. ' t^{45} and ' t^{45} are also used for transporting cargoes. ' t^{45} and ' t^{45} are also used

vessel which is mentioned in the literature⁴⁶ in connection with transhipping the rice bags.

An ancient Malayalam literature ⁴⁷ has spelt out clearly that the vessel (ōtam) has been used for International trade especially with China and Sumatra. One can presume the size and capability of the 'ōtam' when it is used for foreign cargo traffic. 'Plavam' and kappal' ⁴⁹ are also referred to in the literature as cargo vessels. There are so many references in the literature, that the cargo vessel 'uru' is used frequently for transporting goods from other countries. In one reference, ⁵⁰ it is mentioned that the big boat (uru) is loaded with 15,000 logs of woods. From this, one can assume the big size of this boat.

4.2.4. Pirating Vessels

'Pataku' is a word used for vessel not only transporting but also for piracy because the vessels used for piracy are called 'Kallappataku' in the lexicon. Malayalam lexicon⁵¹ gives the following terms for piracy vessels. 'Kallappataku' (-vu) 'Kallappāku (variant form), Katalkallanmāruta vanci' and 'Kallakkappal'. There is a citation in the literature⁵², as though about 60 sea pirates are found coming in a vessel called 'iruttukuttivallam'.

4.2.5. Racing Vessels

In Kerala, some of the boats are used for racing purpose, Malayalam Lexicon gives the following terms for racing boats, i.e., 'ōṭi vaḷḷam, cunṭan vaḷḷam, matsarak-kalikku upayōgikkunna vaḷḷam, vañici'. In a Malayalam literature, ⁵³ it is mentioned that the crew on board of a large sea boat (ōṭi) are beating their drums forcibly and in accordance with the rhythm of the sea, while it is sailing fiercely.

4.2.6. Naval Vessels

From the days of Cheras, the Kerala coast is noticed to have actively engaged in sea faring activities. Cheran Senguttuvan had an organised naval force which took part in many battles. In the later period the Zamorin of Calicut and his admirals were famous. The long drawn naval battles between the Kunjalis and the Portuguese are felt to have arrested the growth of the Portuguese in the West coast to a very great extent. We do not have adequate information on ancient Indian warships. But, in a Malayalam literature⁵⁴ one gets evidences for the usage of the boats 'uru' and 'kappal' for navy. Ships might have been used in India for the protection against sea pirates or cargo ships carrying merchandise to the Western and Eastern countries. Some of the vessels known as 'patakkappal' are used for naval purpose.53 The submarine vessels known 'antarvahinikkappal' are also deployed for the same purpose by the Keralites. It is quoted in the literature that no foreign goods came to India because of the assault of the sub-marine vessels on the trade vessels

Names of Vessels Occurring in Literature (Malayalam)

Fishing	Passenger	Cargo	Piracy	Racing	Naval
Cahhājam	Topi	Tōqi	Pataku	Ōμ	77
Campa	Otam	Bögu	Vanci		Uni
Kattumaram	Vallam		Kappal	Vallam Vafici	Kappa
Cilattați	Vafici	Vallam Oji	Vallam		
Piru	Marakkalam	Pattamari		Toni	
Ojam	Tarani	Civata	-		
Vallam Vallam	Uru	Uru			
Valici					
	Patavu	Patavu			
	••	Plavam	••	••	••
·· .		Kappal			

4.3. CRAFTS IN KANNADA LITERATURE

Thirty seven words, both native and non-native, have been collected from Kannada literary works which denote boats and ships. The Descriptions about various types of boats and ships used for passenger and cargo traffic, fishing and ferrying over the river are found in the Kannada literary works.

4.3.1. Hadagu

The term 'hadagu' refers to a ship. This word is a cognate of the Tamil word 'padagu' meaning 'boat'. This word is attested in the ancient works belonging to the 12th Century. Moreover, in ancient Kannada works this word is given as 'padagu' also (that is before the change of p into h). 'Pērvadagu' refers to a large ship.

'Adipurana' (Kannada-1.1:2) and 'Basavapurana' (Kannada-1.1:5,6) which belong to the 10th and 14th Century, respectively, speak about 'pervadagu'.

'Sabarasankaravilasam', a work belonging to the sixteenth Century, describes the sea that is fully packed with ships (Kannada-1.1:6). The same work presents the following description (Kannada 1.1:5).

The mango tree found in the forest looked like a ship in the ocean . . .! The central tall trunk of the tree looked like the mast of the ship and the cuckoo bird which was on the top of trunk appeared like the pilot of the ship

Though no technical points can be drawn from the above description, we can make out the following points. In those days, the Kannadigas had built large ships. They sailed on the ships using wind power. The presence of

mast in an ancient ship implies that there must be sails in it and the technique of using wind power for the movement of ships must have been known to them.

The Kannadigas are quite aware that navigating in the sea is not an easy task and it needs a sturdy ship to undertake a voyage. It is impossible to cross the sea without a proper ship, according to the 'Jagannathavijayam' (Kannada - 1.1:7,15).

The same literary work speaks about the merry voyage in a 'haqagu' when the sea is calm and further says that the plight of the passengers will be very pathetic if the sea becomes rough (Kannada - 1.1:11).

Quite many descriptions regarding the plight of the passengers on board of a broken or damaged 'hadagu' are available. Natural calamities are usually compared with the ship wreck. 'Santipurana', for instance, compares the agony of a person who has lost his wealth and has become a bankrupt, to an unlucky passenger on board of a wrecked ship (Kannada - 1.1:11). Another off-quoted item about 'hadagu' is the comparison of its pilot with the king of a country. The above work compares the king of a country with the pilot of a ship (Kannada - 1.1:17) in this way. 'The king rules his country carefully and skillfully just as a pilot steers his 'hadagu' without any diversion of attention'.

4.3.2. Nave

The word nave is a cognate of the Tamil word nava which means a boat. Some scholars are of the opinion that the word nave is derived from the Sanskrit words 'nau', 'nauka' which means a boat. In Kannada also 'nave' refers to a boat. But, Prof. Fatimi has pointed out that 'nau' is an Indo-European base of navy/navigation. In Dravidian

Etymological Dictionary it is not mentioned. So, 'nāve' may be derived from Indo-European base of 'navy/ navigation'.

The first occurrence of the word 'nave' is attested in the 'Santipurana' of the 10th Century which refers to a 'nave' that was carrying beautiful women across a river (Kannada-1.2:4).

'Siddharama carite' of the twelfth Century depicts the picture of a 'nave' in the following way (Kannada-1.2:5).

On the earth, the continents are following like a 'nāve' on the river, and the Himalayas look like the mast of the boat. In this passage, the continents are compared to a boat, the ocean itself is compared to a river on which the 'nāve' (the continent) floats and the Himalayan mountain is compared to the mast of the boat. That is, the whole world appeared like a 'nāve' with a high mast floating on a river.

'In Adipurana', there is a passing reference to the 'nave' involved in a fight (Kannda-1.2:8).

Many other kannada literary works like 'Sabdamanidarpana' and 'Ramayana' also simply refer to the term ' $n\overline{a}ve$ ' and we cannot derive any inference from them. However, the mention of ' $n\overline{a}ve$ ' in Ramayana is interesting. In that, it compares a ' $n\overline{a}ve$ ' with a ' $d\overline{o}ni$ ' (See the section on $d\overline{o}ni$).

4.3.3. Teppa

Teppa refers to a float or a raft. It is an elementary type of boat. This is equivalent to the Tamil word 'teppam' which also has the same connotation as the Kannada word. The first occurrence of the word 'teppa' is attested in Dharmamruthm, a Kannada classic of the twelfth Century

(Kannada 1.3:8). From the description available, we infer that the 'teppa' type of floats have been mainly used for inland navigation, that is, for ferrying over a river. Teppotsava, the float festival, is a popular festival in many Hindu temples. 'Teppa' is a reliable type of float which may not capsize under any circumstance. Moreover, the rowing of 'teppa' does not require any special skill on the part of the navigator.

4.3.4. Harugol

'Harugol' is yet another type of boat. The word 'harugol' may be a cognate of the Tamil word 'parical' which refers to a round shaped basket boat lined with leather. In Kannada too, the word 'harugol' refers to a round basket boat lined with leather. Kittel's dictionary defines it as a boat made of wicker work covered with hides. Prof. Fatimi pointed out in his comments of this report that similar kind of vessels are found to have used in Ancient Mesopotamia and are still seen in modern Iraq.

'Dharmamruthm' is the first work to quote this word (Kannada-1.4:10). 'If a person claims that he can cross the ocean with the help of a 'harugol', he is none but a fool The vastness of the sea makes it impossible to any one to cross it without a proper vessel. 'Harugol' can be used only for minor purposes such as crossing the river, fishing in a tank, etc..

'In Dharmamrutam' there is yet another reference to 'harugol' in which the 'harugol' is compared with 'dōni' (Kannada-1.4:13) The author says 'the single paddle of a 'dōni' type boat is better than a dozen paddles of a 'harugol' boat'. From this comparison, we may infer the fact that the paddles used in a harugol are comparatively less effective than those used in 'dōni'

The travelogues of Jean Baptiste Tavernier, a seventeenth Century French traveller, describes the construction of the 'harugol' as follows:

'We crossed the river with the help of a 'harugol' boat. Harugol boats are built by connecting a few wooden planks and then covering the bottom with the skin of Ox. Horse-carts and bullock-carts are being transported from one bank of the river to the other bank by way of tying the yoke on one 'harugol' boat while the hind part on the other 'harugol' boat and holds the harness of the horses swim to the other bank. In each 'harugol' boat there are four corners of the boat and the paddles are rowed. If one of the persons does not row the paddle coherently, the boat does not move but starts rotating and falls a prey to the current of the water in the river' (Kannada - 1.4:24)

From these descriptions we see that the 'harugol' is used in inland transport mainly for the purpose of crossing the rivers. The round bottom of 'harugol' makes it preferable to other types of boats. The round bottom of 'harugol' enables it to easily negotiate the whirlpools found in the rivers. Other types of boats may find it difficult to overcome this menace.

4.3.5. Doni

The word ' $d\bar{o}ni'$ which refers to a boat is a cognate of the Tamil word ' $t\bar{o}ni'$ which also refers to a boat. Some scholars are of the opinion that this word is a tadbhava of the Sanskrit word ' $d(r)\bar{o}ni'$. Both ' $d\bar{o}ni'$ and ' $dr\bar{o}ni'$ are attested in Kannada literary works. These type of boats has been kept both for inland and coastal navigation, for boarding and loading to a bigger vessel in the offshore and fishing in the coastal areas in addition to their use in the rivers as ferry boats.

Starting from the 10th century, this word is found attested in literary works. 'Adipurana', 'Jagannathavijayam', 'Sabarasankara vilasam' all speak about 'doni'. 'Valmiki Ramayana' (c.17th Century) describes very beautifully about 'dōni's' deployment for crossing the river. There is a description in it about the fleet strength of Guha and a contrast is made between 'nāve' and dōni. The encourage of the royal family is found to have crossed the river Ganges by deploying nearly 500 'dōni's'. However the royal passengers are found to have kept 'nāve' a very spacious and luxuriously decorated one with woolen carpets and musical bells.⁵⁹

4.3.6. Other Crafts

There are a few other crafts mentioned in Kittel's Dictionary. They are given in Kannada - 1.6:1-30. Kittel speaks of 'Sangāda' a platform with railing placed on two boats, used as ferries, 'Sanka' a bridge or float of rude and nasty construction, 'manji' a large boat with single mast used in coastal trade, 'pindi' a raft-like arrangement for crossing the river in floods and 'pattemāri' a large sailing vessel with one mast.

4.4. CRAFTS IN TELUGU LITERATURE

The boats and ships are mentioned by different names in Telugu Literature which imply that boats are classified differently. There are nearly 27 words both native and foreign collected from Telugu literary works which denote boats and ships. It is possible that these boats were classified according to their place of usage, size, purpose of use, etc. For example, the word 'oda' is used for small boats which sailed in rivers. Similarly the word 'Jogu' denotes small vessels deployed in sea. Some important names of the vessels obtained from Telugu literature are given below:-

1. oda	7. Putti
2. nauka	8. Naura
3. Jogu	9. Padava
4. Kappali	Droni
5. Yannappatra	11. Dunga
6. Teppa	12. Tarani

A perusal of the Telugu literature brings out different types of vessels that are used but according to the purpose and place of sailing. References to various types of vessels indicate existence of different types of transport in different vessels for various purpose. Boats and ships have been kept for military purpose, as public conveyance, recreation, for transporting goods for commerce, etc.

5. BODY PARTS OF CRAFTS

While perusing the literature, one could accumulate large number of terms not only for the whole boat but also for the different parts of the boat. A string of different parts of a boat support the developed science of boat building and navigation of a country. The parts retrieved from oceans and lakes have furnished adequate information to arrive at important design and constructional features of ancient crafts. The discovery of parts of ancient boats can useful technical information furnish to enable reconstruction of such crafts. The most primitive type of propulsion on shallow rivers is considered to be the one by putting into the water a long pole down to the river bed and pushing the float by making the pole as lever. It has been replaced by the paddle, a short, broad and spoon shaped piece of wood. As the size of the craft is increased, a longer piece of wood like the oar, with a better leverage has been used. Some of the words like 'tula'. 'pankayam', etc., have been used for both the paddle as well as the rudder in Malayalam literature. In Malayalam, it is called as 'kalakkõl', 'kalikkõl', kalukkõl'. There is a reference⁶⁰, to the Arab's use of the long pole for navigating their small dug-outs.

Rudder is considered to be the most important part of a craft. It is said in a Malayalam literature⁶¹ that whatever be the size and speed of a boat, it can be controlled even during the period of strong wind, by a very small rudder, if the helmsman is efficient.

There are so many terms in practice for anchor in literature. In Sanskrit, it is written as 'langala' which means 'plough'. In Portuguese, it is called as 'ancora' and in Latin, it is referred to 'anchora'. Tamil Lexicon says that the Tamil term 'nankūram' is borrowed from Persian 'langar'. An anchor in Malayalam literature is also assigned to 'kal', as in the case of sister language Tamil. The habit of using simple stone or stones as anchors persisted throughout the ancient period. Gundert denotes 'cini' for an anchor, probably for a wooden anchor. A similar word is in use for anchor in Tamil.

The mast of a boat or ship is referred to in many of the literary works, but they are of no practical value to us as they simply refer to the name only without giving any description. In a Kannada literature, there is a comparison of the mast with a soldier who has lost his strength and valour (Kannada - 2.1:11). The poet compares a soldier who has lost his strength and arms, and stood still on he warfield like the mast of a boat which is also motionless bereft of the sail. Thus, we get numerous metaphors in which the mast of a boat is equated with the Himalayas. Another literature says that the Himalayas is found to appear like the mast of a beautiful boat (Kannada - 2.1:14).

A great step forward in the transport of men and goods on the seas with ease is the harnessing of the wind through sails for propelling the craft. It is understood from the literature that the sails have been used for almost all types of crafts and that too, is made up of jute cloth in ancient days (Malayalam - 2.6.2:2). Among the various parts of the crafts, the sails are found to be a common part for any type of vessel, inland or offshore, big or small, cargo traffic or fishing.

Keel is the principal timber of a craft, extending from stem to stern at the bottom of the hull and supporting the whole frame. From a Malayalam work, we come to know that the ancient Keralites have used the keel as the decisive part for determining the size of the boat and purpose of the craft. They have adjudged the cost of the fabrication of a particular boat from the length of the keel, a practice which is popular even today.

The terminologies used for the various body parts of crafts mentioned in literature are given in Table : 1.

6. NAVIGATION PERSONNEL

The different names for the crew clearly suggest the better understanding of the division of labour, involved during the sailing. Skilful members of the crew are as important as well built vessels in order to make the voyage successful and a pleasant event. A pilot is the head of the members of the crew whose orders are obeyed by others. The important personnel in the field of navigation in those days are pilot, boatman, master of a boat, the helmsman and so on. The available terms used in literature to navigation personnel are given in table :2.

Table 1

Body parts of boats

S.No.	Name of parts Tamil of boats	Tamil	Malayalam	Kannada	Telugu
ï	Paddle/Oar	uju, čjakkči, majavai, marakkči, tujuppu.	ka <u>l</u> ukköl, taņn, <u>mla,</u> nayampu, punkäyam.	pujju, dāruhasta, hutgu udupu, nauka, dandu.	nppaı
તં	Rudder	alcā, cukkān.	atanampu, pankayam, Tinakkai, Karnnam, cukkan tu <u>la</u> .	cukkana, Kama, kenipataka.	cukkāni
ę.	Anchor	lafikar, nafikürm, cîni.	ankuram, nankuram, irimputiliti, cini, lanka.	nangal, langar, sthapya	langaru
4	Stern	aņiyam	aniyam, cantu	manga	
νi	Siem	aiji, aparam, amaram.	armarram.		
9	Sail	pāy, itai.	otupaya, kappalpayu, pay kamuppayu, tamman	pata, hahe, hay, tere	teracapa
7.	Mast	pāymaram,	kampam, kūmpu, kompu, pāmaram	kūve, patastambha, kampu	
œi	Keel	čra, crappalakai.	era/eravu, taimaram, panti		
6 ,	Outrigger	katucu	cira		
10.	Blade of an Oar	palakanākku	palakanāku, amakkai	***************************************	
11.	Rib	vanku	manikkīl, mallam, mallu		

Malayalam	Kannada	Telugu
pajakojti, anjyakkāran, ottakkaran, otakkaran Kajukkolkāran. tõnikkaran.		marakadu
cukkāni cukkānkāran, amarakkāran.		
nāvikan, nāvikan, amarāļ, ō <u>tţi,</u> nikaman. kappitān.	nāvika, mālima, taņģal.	
		aniyakkāran, Ōţiakkaran, Kalukkõlkāran. cukkānkāran, amarakkāran. nāvikan, amarāl, Ōṭṭṭ, kappitān.

7. SOME PRACTICES OF ANCIENT MARINERS NAVIGATION

In those days elephants were used on the western coast for launching boats. Quisar (1982:33) points out that in 1501, Indians on the Southwest coast formerly were accustomed to use two elephants, one on each side for launching a craft. The ancient mariners of South India navigated with the help of the stars. Venkatraman suggested that the Tamilians mainly used ten stars to find out the directions but they gave much importance only to the following three stars.

1. iranai velli (Twin star)

2. Kūtta velli (Crowded Constellation)

3. otta velli (Single star)

Moti Chandra (1977:205) points out that after sunset and during poor visibility, the ancient sea faring men fished out a sample of mud from the sea bed with a line and a hook, and determined the depth of the sea by its smell.

In the historic past, the boats sailing along inhospitable coasts were finding the shore by an ingenious system. If driven out of sight from the land, the crew used to release a bird, which would fly towards the nearest point of the coast. This was precisely the method Noah followed in the Bible. A similar kind of finding the land is mentioned in Tamil literature (Tamil - 4:1). Here, it is said that a bird flies to find out where the sea-shore or land is and in case it does not find the shore nearer, it returns and sits on the top of the mast. Prof. Fatimi comments that it was neither a direction finding nor a haven finding device; it was a life saving device for the

shipwrecked or for one who was in whichever place or country direction it might be.

Ancient mariners used wood, stone and metal for anchoring. The term cini in Tamil literature might have meant a wooden anchor as the same is used by Gundert (1982:110) for wooden anchor. Later period literature introduced another term for anchor i.e. Kal (stone). The Kal seems to be a simpler device with a sizable stone tied on to a rope. The rope and the kal of a navay are referred to in Tamil literature. The literature after entry of the Europeans mentioned the terms lankar, nankaram for anchor.

Duty collections is also mentioned in Tamil literature. The port officials had to place a mark of the king's tiger seal after getting the custom duty and then they were allowed to unload or load the cargoes.

Customs duty was collected on Exports from and Imports into the Cochin port in big boats (uru) (Malayalam 1.1.3.25:7). Big boat (uru/kappal) was constructed even before 1772, according to Koccirajakkanmar Batteviyakkayacca eluttukal (Malayalam - 1.1.3.25:9).

In Kerala, boat building was mainly concentrated along the coast. Since teak was available in plenty, it was used commonly.

The work called 'Tōrrampāttukal' gives vividly the types of woods used by Keralites for boat building (Malayalam - 1.1.3.11:12). They were wild nutmeg tree (jatti), sandal (candanam), crocus sativus (kunkumam), and pinus deodar (dēvatāru).

In addition to the above woods, the woods Artocarpus hirsuta (āñātili), calophyllum (punna), a kind of teak (pulintāku), and mango tree (māmaram) were also used for boat

construction. The reference to sandal wood cannot be taken seriously. It may be just a poetic exaggeration. Inference is that the sandal logs must have been costlier than other logs of wood even in those days.

The work called 'Bhūtarāyar' vividly describes kunnu Maraikayar's efforts to stop the European colonialism (Malayalam - 3.5:1). 'Torrampāṭṭukal' (Malayalam-3.9) attested to the fact that the Maraikkayars had sufficient number of ships not only for carrying out their guerilla activities, but also for providing passenger and cargo traffic. They used to provide the boating facilities for rent or hire.

The capability of the Kerala seamen in the sea faring deeds can be understood from the fact that the Maraikkayar provided protection when requested for sea cargoes from Kerala ports to the Arabic ports (Malayalam - 4.1.7).

The ancient South Indian mariners had a very good knowledge of tides and waves. Regarding tides in Kannada literature, ⁶⁶ it was mentioned that the ocean had high tide at the time of moon rise. In another instance, ⁶⁷ it was described that the wind thus set in motion, increased the number of waves in the ocean. Tamil literature, ⁶⁸ referred to the water current as follows: "The hero's Chest was drawn out by the beauty of the ladies like his float was drawn in the current of water and moved as the water current moves".

It is known from our sources that in ancient days lamps were used in the fishing boat *timil* (Tamil- 1.3:6). The lamps in the *timil* twinkles like the stars (Tamil - 2:1). The head fishermen of *timil* shows his sons and yougsters, in the night, with the help of lamps the place where fishes lie (Tamil - 1.3:9). The fishermen of *timil* go in the night with lamps in their timil for fishing and bring fishes in the morning (Tamil - 1.3:9). The fishermen of *timil* go in the

night with lamps in their *timil* for fishing and bring fishes in the morning (Tamil - 1. 3:13). The forest fire which result out of the rubbing of bamboo looks like the lamps of the *timil*, while the fishermen are fishing in the sea, at the night (Tamil - 2:2). The lamps of *timil*, the sea, looks like the (Cevvāy) Mars in the sky (Tamil - 2:3).

In ancient days the lighthouses were found near the seashore or port. The sea-shore was identified by $mik\bar{a}m\bar{a}n$ or Captain by the presence of a lighthouse in the sea-shore or port (Tamil - 1.5:4; 3:1 & 2). The fishermen, while fishing in the night identify the sea-shore by the lamps which are still burning at the Pattinam (Tamil - 1.3:15).

Before entering into the sea, the fishermen find the favourable wind and sea (Tamil - 5:1). Because of wind many ships come to port from foreign countries (Tamil - 1.4:1). Because the ceaseless wind blows, the vankam moves in the sea rapidly (Tamil - 1.5:4). In the timil, the fishermen moves rapidly along with the speedy wind (Tamil - 1.3:11). The ship that moves rapidly with the wind is expressed as Valiputaitta kalam (Tamil-5:2). The sail ships that moves by the wind is expressed as Valitai etutta valitaru vankam (Tamil - 5:3). The ship that is sailed by the wind is otherwise expressed as mayankukāl etutta vankam (Tamil - 5:4). Thus, the knowledge of wind to sail a ship or boat was clearly understood by the ancient Tamil people.

The ancient people had a very sound knowledge of the winds and monsoons to sail ships and boats in the sea. Cōlakam, Kaccān, Vāṭai and Konṭal are still commonly said by the modern boatmen. Likewise, they had a fair knowledge of the cloud and water-currents. The modern boatmen still preserve this kind of knowledge. They classified the water currents under different types. They are: Vānivāṭu, Cōnivāṭu, āranivāṭu, Karaikkaṭṭivāṭu, etc., (Raghavan, 1968). Vānivāṭu runs from North to South,

Conivatu runs from South to north, araqivatu runs from west to east and karaikkattivatu runs from east to west respectively. They use tavuk kayitu to measure the watercurrent by immersing a rope (Kayitu) with a stone into the water. Similarly they find the direction by reading stars and flying birds in the night and morning respectively.

In those days the merchants repaired their ship and strengthened it when it lose its strength and because it had crossed over long routes of the seas (Tamil - 6:1). The method of caulking was known by the merchants and they caulked the ship with the payin since its sail, mast and other parts were ruptured owing to strong wind (Tamil - 6:2). Anchoring a ship is understood from the literary evidences. Because of heavy wind the anchoring stone of a ship from the rope and the ship was found in the midst of heavy whirlwind and circling water (Tamil - 7:1).

8. CONCLUSION

Even though there are more than 100 words in Tamil, 38 in Malayalam, 37 in Kannada and 27 in Telugu, Lexica and Dictionaries to denote names of boats, they are not attested in Tamil, Malayalam, Kannada and Telugu literature respectively. Only a few words are attested. Through the varieties of crafts attested in literature, one can assume the development of ship building technology of different kinds of crafts among the South Indian people during the historic past. Besides, one can presume the purposes of the different kinds of crafts used in ancient South India. Of the references available in literature only a few of them are helpful to us in constructing the history of traditional navigation in South India. This may be due to the reason that the poets were not technical people and hence they did not bother to give technical details in their works.

In spite of a vast tradition in navigation upto the 15th Century i.e., upto the arrival of the Portuguese there are no literary references in Malayalam about the navigation techniques. Keralites might have been actively engaged in this field. There are so many historical evidences to support this effect. The Kunjali Maraikkayars fought with the Portuguese for more than 100 years using their own naval fleet and gave a strong opposition to the Europeans' naval monarchy. This could have been achieved only if the Kunj-Alis had been much advanced in the field of navigation techniques since a long time. They could have had Centuries of naval tradition. Otherwise, they could not have all of a sudden rose to great heights in the field of navigation and opposed the Portuguese.

The lack of references to navigation and allied techniques in Malayalam literature may be attributed to the reason that there were not many literary works during that period. We get only a few books of those time and even those books do not have much references to navigation.

Malayalam started to evolve as a separate language during the 9th Century and however, we get literature in Malayalam from the 12th Century. Before that Kerala did not exist as a separate country, but it was a part of Tamil land. So, there is no question of Malayalam literature for that period. The navigation tradition of those period had been quoted in some of the ancient Tamil literary works like Purananuru and Patirrupattu.

Since we are mainly dependent upon the Malayalam literary sources available to us from the 14th Century to the 19th Century, we are unable to get a complete picture

of the traditional navigation in kerala. There is a clear cut gap in the sources. This is one of the weaknesses of the data.

From the foregoing interpretation of the citations found in the Kannada literary works and other related materials, it becomes clear that the Kannadigas were brisk seafaring people. They had travelled not only the rivers and lakes but also the oceans. The big trade corporation called "the five hundred Svamis (Lords) of Aryyavale" of the medieval period bear a clear testimony to the above fact. This corporation was active in overseas trade also.

The non-availability of data regarding how the Kannadigas built their sea going vessels, what technology they adopted in building the vessels and steering them on different waters should not come in as a stumbling block in concluding that the Kannadigas were seafarers. Non-availability of data regarding technical details about navigation is not a feature unique to Karnataka only but it is a pan-Indian phenomenon. It is completely dependent upon the sources that are available from Kannada literary works not much can be said about the technology adopted in the field of navigation. Navigation Technology could not be traced from the literature whose themes were something different.

The foregoing description gives us a somewhat clear idea about the marine technology of the ancient South Indians. Bigger vessels for the sea-voyage of long distance, the concept as well as even the nomenclature were apparently from South India. This may suggest also that the technology was ours. This partly explains the reason of available specialists in ship-building in our sources pertaining to the period under discussion. It took quite sometime to acquire the technical know-how and the specialists like 'Kalampunar kammiyar' and 'kalancey

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kammiyar' made their appearance only in Tamil works such as 'Cilappatikaram' and 'Manimekalai'. Coming to the smaller boats, the indigenous technology and mastery over the material are evident. They were mostly engaged in river navigation and sea-board fishing. The presence of different types of boats and a section of society as specialists in sea-fishing strongly implies a fairly long tradition of technology of boatbuilding and navigation. But one can only speculate on the services of specialists. Considering various aspects of the problem of maritime activities, we are of the opinion that the participation of the early South Indians in overseas trade was too much. Foreign traders mostly 'yavana', Romans who collected mainly spices and some prestigious goods like pearls and semi-precious stones and sold them in Rome for hundred times higher than their original price. The profit oriented professional Roman trader belonging to a money economy had no counter part in the Tamil society in which the dominant mode of exchange was barter, supplemented by redistribution as alluded to in a large number of songs of the period.

This does not minimise the amount of interest shown by the ancient South Indians especially Tamils towards transmarine trade relations. The measures taken by some Cheras to prevent the pirates on the western coast may be taken as an example for this. The 'arrangements' of lights on the shore as indicators of the coastline for the ships at night would be another example. Our point here is that the resourcefulness which resulted in the achievements and victories of the medieval South Indian mercantile groups and conquerers is to be traced in its rudimentary form back to the early South Indians. At the sametime exaggeration of the early activities may fail to recognize the later accomplishments in their full scale.

The strong point of the data is that we get a string of information about the ancient boats, parts, crew, etc. From the string of different names of boats and their parts, one can have an idea about the science of ship building and navigation in South India.

The above mentioned minor drawbacks of the data may be overcome by conducting a coastal survey for collecting the oral tradition in South India. The coastal survey may also help us to evolve a comprehensive account of the techniques adopted in navigation.

FOOTNOTES

- 1. Dravidian India, Sesha Iyengar, T.R., 1982, p. 131.
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- 4. Ibid. 1978, p. 460
- 5. Ibid. 1978, p.128
- 6. Akananuru 350: 10-15
- 7. Indian Archaeology A Review, 1968-69, p.32,33.
- 8. History of Malayalam Literature, Parameswaran Nair, P.K., 1977, p.1
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- 12, 1, Ampi 2. punai 3. Timil 4. Navay
 - 5. Vankam 6. Kalam 7. Toni 8. Otam
 - 9. Pataku 10. Matalai 11. Mitavai 12. Teppam
 - 13. Kaipparicu 14. Kappal 15. conku 16. Paru
 - 17. Palacam 18. Mujuku 19. Panu 20. pahri
- 13. Kamparamayanam 2.12.56:1,2; 2.12.60:1,2
- 14. Manvidututu 52:1.2
- 15. Cilappatikaram 14:72-75
- 16. Purananuru 126: 14-16
- 17. kuruntokai 240:5-7
- 18. Purananuru 126:14-16
- 19. Periyapuranam 1949
- 20. Purananuru 301:10,11
- 21. Civaka Cintamani 967; Perunkatai 1.37:264-267
- 22. Kantapuranam: Kumarapuripadalam 4.
- 23. Merumantara Puranam Urai 1201
- 24. Vidwan F.X.C. Nadarajan op. Cit. p.549
- 25. Thiruvilaiyadar Puranam 3.57. 38:1-4
- 26. Kurukurpallu 19:9-12
- 27. Pattinappalai 1:30
- 28. 1. cannātam 2. plavam 3. ponnu 4. pāru 5. toņi 6. pajaku 7. potam 8. vanci 9. ottulakkam 10.bottu 11. vallam 12. marakkalam 13. cīņu 14. oti 15. olamāri 16. pātram 17. pattamāri 18. taraņi 19. cīvāta 20. uru 21. kappal 22. ulplava 23. campa 24. orgataņi 25. vahitram 26. ārāti 27. pātti 28. valar 29. vattēl 30. iruttukkutti

- 31. nāvāyi 32. nau 33. oninal 34. kattumaram 35. varkkas 36. brittāniya 37. antarvāhini 38. emdan
- Patinayiram Palancollukal 125:25; Satyasvayamvaram 1:66
- 30. Malabarile Panappaddukal v: 79,80
- 31. Lokalokam II: 93
- 32: Butarayar V:289
- 33. Mälabärile Panappaddukal 84
- 34. Lokalokam II:21
- 35. Ramaraja Bahadur Vol 11:485
- 36. Patinayiram Palancollukal 206:7-8
- 37. Apatkaramaya yatra 19
- 38. Keralavarma Ramayanam (Gundert:791)
- 39. Kiratam (tullal) 229;5-8
- 40. Mahabharatam (Gundert:432)
- 41. Angala samrajyam 1:6
- 42. Uttara Sandesam 7:1-4
- 43. Kumaranasanre sampurnna padyakrtikal 216:28-29
- 44. Tellichery Records (Gundert:183)
- 45. Ibid (Gundert:607)
- 46. Ibid (Gundert:370)
- 47. Lokalokam II:93
- 48. Kerala varma Ramayanam (Gundert:744)
- 49. Abhijnana Sakuntalam (Vallathol) VI:231
- 50. Nadan Paddukal 30
- 51. Malayalam Lexicon Vol III:522
- 52. Tekkum Bhaga Samudaya Caritram 243

- 53. Sahitya Manjari II-52
- 54. Dharmaraja V:176
- 55. Sukasandesam 372:15-17
- 56. Lokalokam IV: 178
- 57. 1. hadagu
 - 2. pērvadagu
 - 3. bhaitram
 - 4. harigöl
 - 5. kaphile
 - 6. döni
 - 7.
 - jang
 - 8. nave
 - 9. teppa 10. paros
 - 11. ballδn
 - 12. sambūkhi
 - 13. talpa
 - 14. kõl
 - 15. siyampane
 - 16. mancive
 - 17. masūla
 - 18. machuva
 - 19. ambi
 - 20. ōda
 - 21. tari
 - 22. plava

- 23. pattemāri
- 24. pota
- 25. pravahana
- 26. plavāka
- 27. mangini
- 28. yānapātra
- 29. subhaitra
- 30. sangada
- 31. manji
- 32. bedalveda
- 33. pindi
- 34. paru
- 35. jangäl
- 36. kalagam
- 58. Prof. Fatimi from Pakistan who was working in the field of Maritime history of Pakistan visited the Department of Industries, Tamil University, Thanjavur, during March 1988 and held elaborate discussion about the etymology of 'nāve'.
- 59. Kannada Version of Valmiki's Ramayana 11:12.
- 60. Apatkaramaya Yatra V:19
- 61. Satyaveda Pustakam Yakkopu 3:4.
- 62. Rev. H. Gundert 1982, p.368
- 63. "Astronomy of the Tamils: A field study in Kanyakumari" - An article presented in the workshop on History of Traditional navigation in South India by R. Venkatraman., sponsored by NIS-TADS & Tamil University, Thanjavur, 1986
- 64. Maturaikkanci line 378

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- 65. Pattinappalai lines 129-136
- 66. Dharmmamrutam 8:184
- 67. Jaganatha vijayam 8:80
- 68. Paripadal 11:108

PART II

DATA

TAMIL LITERATURE

1. DIFFERENT TYPES OF BOATS

1.1. ampi

 partturaip punari alaittalir putaikontu müttuvinai põkiya murivay ampi

(Nag. 315:2,3)

Near the landing place there is an useless 'ampi' which was discarded because of its long years of service and it is now broken at its stem by the dashing waves.

 elli anna irulnirap punnai nallarai mulumutal avvayin totutta tunkal ampit tuvalan cerppin

(Nag. 354:5-7)

The 'ampi' is tied at the base of the stem of a punnai (Calophyllum inophyllum) tree near the sea-shore.

 tanpuna laţun taţankoţ ţerumai tinpini yampiyir ronru mura

(Aink.98:1.2)

The buffallo, which stands in a pond, looks like the 'ampi' that can carry many people.

4. perunkatar karaiyatu ciruven kakkai turaipati yampi yakamanai inum

(Aink. 168:1,2)

The crow lays it's eggs beneath the ribs of 'ampi' which stands near the shore.

5. aruku patiyaka ampiyir ralppikkum

(Pari.6:75)

Because of 'ampi', the time is postponed.

 maraiērrin mēlirun tāţit turaiyampi yūrvānpor ronru mavan

(Kali.103:38,39)

... Riding on a bullock like riding on an ampi

7. kaţaluţ paratava rampiūrn tānkūrntā rēru

(Kali,106:24,25)

Like the fishermen who rode on an ampi he rode on the bullock

 nāļvēţţu elunta nayanil paratavar vaikukaţal ampiyil tonrum

(Akam. 187, 22,23)

Like the merciless fishermen who are on board the *ampi* on the sea.

 Vemmai tantā eriyuku parantalaik kommai vāţiya iyavul yānai nirmarun kariyātu tērmarun koţi arunir ampiyin nerimutal unankum

(Akam. 29;15-18)

The thirsty and tired elephant on the desert land looks like an *ampi* which lies near the side of a dried pond.

 parimuka ampiyum karimuka amiyum arimuka ampiyum arunturai yiyakkum perunturai marufikir peyara tankan matavat tattiyotu marappunai poki

(Cilap. 13:176-179)

They avoided the great landing ghats where were moored the *ampis* --- some shaped like horses, some like elephants, and others

like lions. Instead, they crossed over the river on a raft (Punai)

 taţaikaraik kanitta vampi kaţutalum marakkalan keţutton maintanaik kana

(Mani.29:9,10)

While the Khampala chetty was moving on a ship (marakkalam) during mid night the ship wrecked near the shore and he caught a float (ampi) and escaped.

 kölkon mallar käli nöti nampi veen mampi varukena anaiyirriri iya rancanmi nirenat toni yilippulit tutuppunani tinti

(Peruñ.1: 36: 171-174)

The warriors, who have boatman's pole (kol) drove the ampi swiftly as the wind and brought the ampi for Uthayanan.

13. aya kalaiyin ayiram ampikku nayakan

(Kampa. 2:7:1:1,2)

It is known that he is the Lord of thousand ampis.

1.2. punai

punar punai yanna cayiraip panaittol

(Kurun.168:5)

Her sturdy shoulder is like that of a secured punai in the river.

Karaikanap pauvattuk kalancitain talpavan tiraitarap punaiperrut titinri yuntanku

(Kali. 134:24,25)

Like the person who lost his ship in the deep sea and got a float by the waves to escape.

3. arampunai yakalumuntu.

(Kali. 144:48)

She said that the God of justice will help as a punai.

4. Kolunkāl vēlattup punaitunai yākap

(Akam, 186:8)

A float which is made up of bamboo.

 nāmurai tēem marūupeyam tavanoţu irunire cērppin uppuţan ulantum perunirk kuţţam punaiyoţu pukkum paţuttanam panintanam aţuttanam iruppil

(Akam.280:7-10)

He will give only when we leave our place and go to the sea shore and worked with fishermen and live with them by doing his work and move with him in his punai.

6. netunir punaiyingi nintuta linna

(Innanarpatu:3-2)

It is very difficult to cross the great river of depth without a punai float.

 Önkunir māţamoţu nāvā yiyakkip pumpunai taliip punalāţ ţamarntu.

(Cilap.14:72-75)

They navigate the ferry boats (nīrmāṭam) and (nāvāy) in the river and also by catching the puṇai (floats) they played in the river happily.

 önkiya pauvat tutaikalap patton vanpunai perrena marravat kuraippon

(Mani.18:64,65)

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Like he who escapes from the sea of waves and from the wrecked ship by catching a punai on the way.

 noymmara neţumpunai kaimutar rallik kura rayamoţu kuluukkon rinti ara rayamo tanivila vamartai

(Perun. 2:11:30-33)

With all the floats they went to play in the river. They take with them the long *punai* which is made up of light wood.

10. nīraņi māta vāni nērmpuņai niraittu nīņīr

(Civaka.2654)

They occupied the water pond with the light puṇai (rafts).

11. piţitten piravik kaţalnintap periya punaiya unataţiyai

(Tirukaruvai patirrup,5:5.6)

I catch your foot as a punai to escape from the sea of birth.

mitakkum punaiyum tüntir kayirum ventum pavalak kotikalum.

(Katiraimalaippallu, 47:11,12),

There is floating *pupai*, fishing ropes and coral reaves (*pavalakkoţi*) in the running water.

1.3. timil

 Ventiral ilaiyavar vettelun tänkut timilmer kontu tiraiccuram ninti välväyc curavotu vayamin kenti ninampey töniyarikumanal ilitarum perunkalip pakkan kallena varumē toli konkan tērē

(Nar.111:5-9)

The young boys getting on the timil go to the sea and catch the sharks and other fishes and then come back with the fishes and let down the fishes in the sea shore.

 Kolvinaip polinta kūrva yeriyuļi mukampaţa maţutta muţivetir nonkal tañkaru nirccurat terintu vankuvicaik koţuntimir paratavar kotţumi neriya.

(Kurun.304:1-4)

The fishermen ir swift, curved timil on the to thous sea, throw on the water their batcle axe framed for killing with its sharp edge, and long bamboo handle tied tightly to its face, to bill a homed shark.

3. innum värär varūu:
panmin vettat tennaiyar timilē

(Kugun. 123:4,5)

Our brothers have returned after catching the fish in timil but our hero has not yet come.

 Kallotu kāmam kalantu karaivānkum vellan tarumip punal punalporutu melintār timil viţa

(Pari.10:69-71)

. . . . The !adies played in the floods using timil.

5. niraitimil Kalirakat tiraiyoli paraiyakak

(Kali,149:1)

The timils look like elephants.

 irunkali tulavum panittalaip paratavar tintimil vilakkam ennum

(Nar.372:11,12)

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In the night, with lamps in the boat, the fishermen are fishing in the sea.

 netunkatal alitta kotun timil paratavar kolumin kolkai alimanal kuvaii minney attik kilincil pottiya

(Nar.175:1-3)

The fishermen went into the deep sea with their sturdy *timil* and bring the fishes to shore to extract oil from that and collect all the fishes in the sea-shore.

8. varutimil ennum turaivanotu urē

(Akam.190:3)

- ... The sea shore where numerous boats are coming to the shore in the evening
- iralccuram ulanta tintimil vilakkir panmin kuttam ennaiyark kattiya entaiyum cellumar irave

(Akam.240:5-7)

In the sea, with my brothers, with the help of lights on the *timil* my father shows the fishes to my brothers and after catching the fishes, return to the sea-shore

 uţanuppu ēri entai timilitu nuntai timilena valainir vēţţam pokiya kilainar tintimil ennum tankatar cerppa

(Nag.331:5-8)

The paratava girls welcome the *timil* which comes towards the sea-shore and shout that this is my father's boat, that is your father's boat.......

11.tintimil ellut tolin matutta valvinaip paratavar

kūrvaļik kaļuvicai maņļalir payntutaņ koţcurāk kiļitta koţumuţi neţuvalai taņkaṭal acaivaļi eritorum viņaiviṭṭu

(Akam.340:18-22)

The paratavas used to get into the sea in their sturdy *timil* using wind, and catch the sharks and other fishes.

12. ilankirum parappin ericura nikki valampuri mulkiya vanrimil paratavar olitalaip panilam arppak kallenak kalikelu korkai etirkola ilitarun kuvavu manal netunkot tankan uvkkan tonnumen cirunal fure

(Akam.350:10-15)

The paratavas enter into the sea with their timil to get pearls, braving the sharks near about korkai.

13. Kayirukatai yatta katunatai eriulit tintimil paratavar oncutark kolii natunal vettam poki vaikaraik katalmin tantu kanal kuvaii onkirum punnai varinilal iruntu

(Nar. 388:3-7)

The hero belongs to a village where the paratavas go to the sea in their sturdy timil with equipments to kill sharks and with lamps in their boat to catch fishes in the night and after catching fishes they come to the shore in the morning.

 munnir nappat timircutar polac cemmi nimaikku maka vicumpin

(Puram.60:1,2)

The star mars looks like the lamps in the timil floating at the mid-sea.

15. netunkal matattu olleri nõkkik kotuntimil paratavar kurüuccutar ennavum

(Patti.111,112)

The paratavas of the sturdy *timil* identify the shore with the help of the lights on tall houses on the sea-shore.

 tenţirai valun timilun kalankalun konţirai yaka vuyirkollun catiyun

(Culamani.1955:1,2)

Those who kill fishes in the sea with the help of the *timil* (boat) and *kalam* (ship)

1.4. navay

 vērupal nāţţir kāltara vanta palvinai nāvāy tongum perunturai

(Nar.295:5,6)

At the nearby harbour, the $n\bar{a}v\bar{a}y$ which have come sailing from different countries.

 tām vēntum paţţina meytik karaicērum ēmuru nāvāy varavetri koļvārpöl yām vēntum vaiyaip puna letirkoļ kūtal

(Pari.10:38-40)

Like the merchants who go to the ports of their choice anticipating the arrival of $n\bar{a}v\bar{a}y$.

3. Kalire munnir valanku navay polavum

(Puram.13:5)

This elephant is like that of the navay in the sea.

 cinamiku tanai vanavan kutakatar polantaru nava yöttiya vavvalip pirakalan celkala taniyem

(Puram.126:14-16)

The Chera king navigates $n\bar{a}v\bar{a}y$ in the western sea and he did not allow other ships (Kalam) in his own territory.

 Vāluļaip puraviyotu vatavaļam tarūum nāvāy cūlnta naļinirp patappai.

(Perumpan.321-322)

The sea shore is having plenty of nāvāy ships which brought good things and white horses from foreign countries.

 i......irum pauvattu koţumpunari vilankupola kaţuñkāloţu karaicera neţuñkoţimicai itaieţuttu imicaiya muracamulanka ponmalinta viluppanţam naţara naŋkilitarum atiyar perunavay

(Maturaik.74-83)

In the fearful dead, black sea the sails are spread to move with the wind and the drums are beaten on the $n\bar{a}v\bar{a}y$ ship, which bring commodities from foreign countries.

 vilumiya nāvāy perunī roccunar nanantalait tēettu nankalan uymmār punarntuţan konarnta puraviyo ţanaittum vaikal torum valivalic cirappa.

(Maturaik, 321-324)

The great navay ships with horses, come from far off lands to this country

Katuvicai nāvāy karaiyalaikkun cērppa

(Nalati, 224:2)

Lord of the sea shore!.....frequented by the fast moving $n\bar{a}v\bar{a}y$.

 perunkar punnaik karunkot tanaitta navay pannu maviran mallarkkuk

(Perun.1:40:68.69)

For the warriors (mallar) who tied their $n\bar{a}v\bar{a}y$ to the punnai tree.

10. nāvāy kaviltta nāykan pola ovā vavalamotu kāvalan kalanki

(Perun.2:9:46,47)

The king worried as the captain of a ship worried when his ship sank in the sea.

11. tõlutai nimirkõlin tulavita, elu näväy, kalutai netunentin cenratu katitu ammä

(Kampa.2:7:35:3.4)

The boat $(n\bar{a}v\bar{a}y)$ moved when the boatman's pole who used and it went swiftly as the crab.

 iyalvuuru celavin nāvāy, irukaiyum eyinar tūnta tuyalvana tutuppuvicum

(Kampa.2:12:56:1-2)

The boats $(n\bar{a}v\bar{a}y)$ are moving smoothly as the boatmen spread their oars.

 tulipajat tulāvu tiņköl tujuppu irukālin tonra naļirpunal kankal ārril naņļu enac cellum navāy (Kampa.2:12:60:1,2)

On both sides of the boat are the oars moving swiftly and the boat moves in the river as the crab that moves.

1.5. vankam

 akalañ kāţi acainilar kuvitta paccirāk kavarnta pacunkan kākkai tūnkal vankattuk kumpir cēkkum marunkūr paţţinattu

(Nar.258:7-10)

The crow that has stolen the prawn fish from the fish-shop perches on the top of the mast of the *vankam* in Marungur pattinam.

 aruńkalan tariiyar nirmicai nivakkum peruńkali vańkan ticaitirin tańku

(Patirru.52:3,4)

Like the vankam which sail on the seas to bring goods from foreign countries.

3. vanankukal vankam

(Kali.92:47)

The vankam which has strong stems inside.

 ulakukilarn tanna urukelu vankam pulavuttiraip perunkatal niritaip pola iravum ellaiyum acaivin raki viraicela liyarkkai vanku lattak kotuyar tinimana lakannurai nikan mata volleri marunkarin toyya

(Akam.255:1-6)

Verily like the world, the great ship (vankam) moves with the help of the wind and they move day and night; the captain navigates it with the help of the light house on the sea shore.

5. välitai etutta valitaru vankam palvēru panta militarum pattinattu

(Maturaik.536,537).

The vankam having big sails, which comes to the shore, bring goods and unload them near the shore.

 Kańkaip pēryāru katattar kāvana vańkap perunirai ceyka tāmena

(Cilap.26:164,165)

Let them arrange a number of vankam for crossing the big river of Ganges.

 Kankaippē riyārruk kannarir perra vankap parappin vatamarun keyti.

(Cilap.26:175,176)

With the help of the boat (vankam) which were given by hundred kannar they crossed the Ganges river and reached the northern side.

8. niyā naţunka naţuvunin tonkiya kumpumutan muriya vinkupini yavilntu kayirukāl pariya vayirupāl patţān kitaicitain tārppat tiraiporu munnir iyankuticai yariyā tiyankanu moţi mayankukāl eţutta vankam pola

(Mani.4:29:34)

Like a vankam which due to the breaking of mast, sails and the loosening of ropes is shaken badly by the whirling wind.

 eńkumpöyk karaikānā terikaţalvāy minţēyum vankattir kūmpērum mapparavai ponrene

(Na.Ti.Pi.692:3.4)

As the bird that flies everywhere and finds no seashore or land, finally reaches the top of the mast of the ship where it comes.

1.6. kalam

 itaiyun kayirum pinaiyu miriyac citaiyun kalattaip payinar riruttum ticaiyari nikanum ponm.

(Pari.10:53-55)

As the sail, ropes, planks of the *kalam* broken by the wind that shakes the ship in the sea the captain tries to save it by caulking it with *payin* (a gum).

 yavanar tanta vinaimā nankalam ponnotu vantu kariyotu peyarum valankeļu muciri yārppela valaii.

(Akam.149:9-11)

In the harbour of Muciri the Yavanas bring gold in their strong *kalam* (ships) exchange it for the pepper.

- irankunirp parappir kanalam perunturait tanantaru nankalan citaiyat takkum ciruvel liravin kuppai yanna (Akam.152:6-8) Like the small group of silvery ira fish that break the Kalam which bring gold from foreign countries to this shore.
- 4.kūmpotu mippāy kaļaiyātu micaipparan tontātu pukkāarp pukunta perunkalan

(Puram.30:10-11)

Without lowering the sails and without unloading the kalam enter into the Pukar harbour.

5. vāna mūnriya matalai pola ēņi cāttiya ērrarun cenni viņpora nivanta vēyā māţattu iravin māţiya ilankucuţar nekili uravuni raluvat toţukalan karaiyum turai pirak koliyap poki

(Perumpan.346-351)

The big houses, which were near the sea-shore, having lights on the top of the houses which calls the ships which were unable to identify the sides and moves in different direction.

6. mulankunir munruraik kalampunar kammiyar tulantatu kallin roppiyun tayarntu

(Mani.7:70-71)

The builders of *kalam* (ships) enjoying the liquors

7. Kalancey kammiyar varukenak kuuy

(Mani.25:125)

He called those people who are working and building ship.

 Kālinun kalattinun calat tanta mānitic celvattu vānika makalirum

(Perun.1:42:177,178)

The Vaisiya ladies (merchant community) are having wealth which brought from the ship and cant.

 mākkaţar perunkalan kalin marupaţ takkiya kayirarin toţi yenkanum pokkarap poruvana ponru tippaţat takkina varacuvat tammu lenpave

(Civaka.2231)

Like the big ships (Kalam) that moved in different direction, because of the breaking of anchor and they collide each other, the elephants which were run by the kings fought each other.

 Kalańcelluń kaţalatanaik Karrepo luntātām

(Nîlakēci.293:5,6)

While the ship is moving in the sea, the sea becomes a functionless instrument and the sea would not make run the ship as the wind.

 Kalancamait tatarkku ventun kammiyarutane cellm pulankalil virumpum pantam poruntuva nirampavarric calantaru kaţavuţ pōrrit talaimaiyānāyakan rānum
nalantaru nāli lēri nalirtiraik kaṭanmēr pōnān
(Tiruttonṭar Mākkatai Page 324 song 33)
The merchant, on a good day, with the help of ship

The merchant, on a good day, with the help of ship builders and captain, started to other countries for trade after constructing a boat (Kalam).

1.7. toni

 toni yiyakkuvan tollai varunattuk Kanir kataippattan enrikalar

(Nālati.136:1,2)

People cross the river with the help of the toni driver even though he belongs to the lower caste.

2. toni yilippulit tutuppunani tinti

(Perun:1:36:174)

If the toni moves in different direction, use the oar to run it smoothly.

 viļaiyāţ ţīrani virrun koļļum tolaivin mūtūrt tonrina maranturāyt töniyu maramun turainā vāyum nīriyan māţamu nīntiyar punaiyum

(Peruñ.1:37:264-267)

To play in the river (punal) they moved with floats, boats, navay and other floats.

 Kiţţun töniyaip paţakinaik kilipaţa vicaipöyt taţţun cönkinai meliţu carakkoţun kavila muţţun cirimel varumpala curavela muţukki veţţun köţuköt tenaiya mine lam vicum

(Ti.Pu.3:57:34)

The big shark attacks and breaks the *tōni* and *pataku* which pass nearby and destroys the conku with its cargo and kills other fish by its horn.

paţavu ţaippavör tönimer payntumat töni
viţavu ratterit terintiţa vicaittoru cönkin
iţaipu kuntunil valaiyerin tinnanam vevve
ruţalpu kuntula luyirenap paratanu mulalvan
(Ti.Pu.3:57:38:1-4)

In this way they tried to kill the shark by going on a pataku initially and after the pataku was broken by the shark, they took the tōni and spread the net to catch it but again that tōni was broken by the shark and then they moved in cōnku to catch it but again they failed to catch it and so the king of parathavas (fishermen) suffered.

 ikkaraikā limorunai akkaraik kālinmalaik kēma menrun cāma menrum nāmallo povom takkatoņi yaitturaiyir cikkenak kattum

(Mukkutar Pallu:36)

In the day and night, without considering the rain, we people go to that side of the river and tie the *toni* in the ghat tightly.

1.8. ötam

 akaliru vicumpir kotam polap pakalitai ninra palkatir nayir

(Akam. 101:12,13)

The sun appears in the sky as the *otam* (in the wide sea).

 alaiperuki yāliyankā vanna māru perukatalā latturaiyi lanaiyu monam nilaipuriya motakko nilaiyi lāmai nir vainar karaiyinka niruttip pola

(Periya. 2798:3-6)

Since water is running fast in the river, the boatman though that the otakkol (Boatman's (pole) will not stand in the river and leaves the boat in the river side.

1.9. Pataku

 pānkoru kalli lanaittup pācam pinittör paţakil vinkoli vēlaiyi lērri vilitumi nenru viţuttān (Periya.1388)

(That person) take him in a paṭaku and let him in the sea.

paţavu ţaippavor tonimer pāyntumat toni
viţavu ratterit terintiţa viţaittoru conkin
iţaipu kuntuniţ valaiyerin tinnanam vevve
ruţalpu kuntula luyirenap paratanu mulalvan
(Ti.pu.3:57:39)

To kill the fish, they went through the paţaku which was broken by the big fish.

Kattuh kaţalil neţum paţavil
 (Tirucentūr Pillaittamil 44:1)
 As in the paţavu which is in the roaring sea.

1.10. Matalai

 Konarntana panţam virra kolunitikkuppai yellă munarntutan matalai yerri yoruppaţut türkţu milvan (Civaka.505:3,4)

The merchant after selling his goods, returns to his native place with the amassed wealth in a matalai boat.

 aniyamu māramun kotincun kolumāt tuņaivinaik kavanamāt turakkum pākarā manaiyavir terenu matalai nayakar panivarun kurutinirp pavvat töttinär

(Culamani:1403:1-4)

The oar's kotincu and kol look respectively like the stem and stem of a matalai

3. paravarum matalaikal matakari corivana etturai (Kulottunkan Pillaittamil.38:1)

There are landing ghats where boats (matalai) bring elephants.

1.11. Mitavai

veňkitai mitavalyar

(Pari.6:35)

People having the mitavai.

1.12. Cōnku

patinta timilum palacam pārum parac conku mitakkave

(Tiruvarur Pallu. 26:9,10)

Timil, palacam, paru and conku are floating in the running water.

1.13. Teppam

1. apperun kallumah karacu melkolat teppamāy mitattalil

(Tiruttontar makkatai.p.266)

That big stone itself becomes a teppam and that floats.

tajavut torpala kaittokai yavum 2. talaitaru teppamenap (Cenkalunir Vinayakar Pillaittamil.43:3,4)

The shoulder as planks and by catching it as teppam.

1.14. Kaipparicu

1. Kaipparicu kārarpol arivāna vankamun kaivittu matima yanki

(Tayumanavatikal tiruppatalkal.12:2:9,10)

I look like those who have given up the ship because of greediness and having the *kaipparicu* and do not know what to do.

1.15. Kappal

- tēkanilai yallavē uţaikappal kappalāyt tiraiyāli yūţucelumō (Tāyumānavaţikal tiruppāţalkal.9:11:11,12)
 The body of mine is not static. Can a broken ship run smoothly in the great sea?
- Valarpannai pallane valamvarutu kappal elelo
 (Poykaippallu. 71:8)
 Oh Palla of the Farm, that ships (Kappal) come around eleeloo.

When we worry that the *kappal* (ship) has wrecked, simultaneously the *teppam* (float) also has broken.

2. LAMPS USED IN FISHING BOATS

 kojuncurā erinta kojuntimil paratavar vānkuvicait tūnţil ūnkūn kāki vaļiporak karrai tāay naţicuţar nilni<u>r</u>u vicumpi<u>n</u> mi<u>n</u>otu puratyap paipaya imaikkun tu<u>r</u>atva<u>n</u>

(Nar. 199:6-10)

The fishermen who are having the boats to catch fishes fishes in the night with lamps in their boat and the lamps look as the fishes.

malaitorum
mālkalai picainta kālvāy kūceri
minkol paratavar koţuntimil nalicutar
vāntōy punari micaikkan ţānku

(Akam.65:9-12)

The lights in the fishermen's timils in the sea look like that of the burning bamboo in the forest while bamboos scratch each other due to wind.

 munnir nappat timircutar polac cemml nimaikku maka vicumpin

(Puram. 60:1,2)

The lamps of timil in the mid sea look like the 'Cevvay star' of the sky.

3. LIGHT HOUSE

 viņpora nivanta vēyā māţattu iravin māţţiya ilankucuţar nekiţi uravuni raţuvat toţukalan karaiyun tuţaipiţak koţiyap pöki

(Perumpan. 348-351)

In the tall tower on its top there is a light which shows the direction for captains to the shore.

 ilankunir varaippir kalankarai vilakkamum vilanku valaip paratavar mintimil vilakkamum (Cilap. 6:141,142) Because of heavy wind the anchor rope has detached from the anchor and the ship find a dilemma and they collide each other.

8. DRUM BEATING IN SHIP

 vaniyainta irumunnirp pēenilaiiya irum pauvattu koţumpunari vilanku polak kaţunkaloţu karaicera neţunkoţimicai itaiyeţuttu innicaiya muracamulanka

(Maturaik. 75-80)

In the fearful dead black sea the ships sail is spread to move with the wind and the drums are beaten in the ship.

MALAYALAM LITERATURE

1. DESCRIPTION ABOUT THE BOATS, SHIPS, ETC.

1.1. Non Mechanised Boats

1.1.1. CATAMARANS TYRE

1. Ferry boat, Junction of 2boats.

Cannaiam, plavam, ulplava, campa, ponnu, and paru/varu/var/akattepparu are the words used for catamaran in Malayalam Literature.

1.1.1.1. Cannatam

	Tulu-jangala Portuguese-Jangada	(G. 341)
2.	Sanghāṭam 'A raft'	(G.1030)
3.	tõnikal cannātannal vancikal	

onikai cannatannai vancikai

patavukai (G. 341)

Different types of boats are mentioned here!.
i.e., toni, cannatann, vanci, patavu, etc.,

4. cannatam kettuka, cannatattil kerri 'To build a raft, loaded in to the raft' 5. Sanghātam
unanniya mulakalum muriccu camaccu
sanghātam (KR) (G. 1030)
'To cut the dried bamboo and built the raft'.

6. adu 'raft' sanskrit (adu)

(M.L.Vol.II. p.62)

pilippu 'raft'
 kappalum pāru pilippumityādikaļ
 kelpētu mantum marakkalakkūţtannaļ varum
pāru = one kind of sea boat

pilippu = with a kind of tree i.e., pilivakai prepared a raft to go into the sea. Now it is called as 'Calattati'.

(PV-TK, 938:35,939:1,2)

'Ship, pāru types of boat made of pilivākai wood and fast moving flocks of boats (marakkalam) are coming'.

8. = udupam

Sanskrit (udu-pa(m))

'A raft, float'

(M.L.Vol.II.p.521)

 (b) udupataraniyanam bhūvibhāgattilenye divipunar oriţattum kantiţātulla maţţil

'Udupam type of boat is not seen anywhere in this world or in the heaven'.

9. ovu 'a light raft or float'

(M.L.Vol.II.p.1282)

10. kolam / kol 'Raft'

(G. 318)

11. kettumaram 'A raft'

(G. 291)

12. adu 'A raft'

(STV. 261)

13. kattamaram

(M.L. Vol. III. p. 79)

The various names given in Malayalam Lexicon for kattamaram i.e., 'Catamaran' are kettumaram, Cālattati and cannatam and it is constructed for fishing in sea by tying planks together.

kattumaram

(M.L. Vol.III, p.83)

Tamil - kattumaram

14. = kataram Sanskrit (katara) (M.LVol.III. p. 635)

15. tõnikal cannatannal vancikal patavukal anupõkata valar (MB1. 143) kappalum palataram

'There are different kinds of boats such as toni, cannatam, vanci, patavu, big ships which never will immerse, and so on'.

1.1.1.2. Playam

 'A float, raft' (G. 744) Sanskrit - plu

- 2. plavannalil errikkatannitu cilar (KR) (G. 744) 'Somebody loaded on the float and gone away'.
- 3. jñanaplavam kontu papamokkayum ni katanitum (BBG(K) 4:36)

'With the wisdom of float you can cross sins'

1.1.1.3. Ulplava

Sanskrit (ut-plava) 'Ponnikkitakkunnatu' Vallam, bottu

'A boat'

(M.L. Vol.II. 584)

1.1.1.4. Campa

Tamil-Campan (Chinese: Sanpan = 'three planks')
'A fishing boat'
(G. 347)

1.1.1.5. Ponnu

1. 'A float, raft, buoy, a boat' (G. 709)

2. ponnutati 'A raft, Catamaran' (G.709)

3. pontu 'A float' (G. 713)

4. ikkajum kölil kijaccoru pohneri yakkara kanman sramikkanallu (KSP 630:19, 20)

'(He) is trying to reach the other side of the shore using the ponnu type of float which (he) got during the severe storm'.

1.1.1.6. pāru/vāru/var/akattēppāru

- 1. 'A small boat, A boat made of one piece Catanaran' (G. 6.50, 651)
- 2. kappalum pārum tōniyum (PT) (3.650) 'Ship, a kind of Sea boat and dug-out.
- 3. vāru 'A sea-boat' (M.L. Vol. I. . 17) mīn piṭikkānulla oru taram vallam

(ati parannum mukalbhagam itunniyum maddiyabhagam vittum ullatu) 'A kind of fishing boat'.

4. See also 1.1.1.1:7

1.1.2. DUG-OUT CANOES

Toni, pataku/patavu, otam and orrattati are the names used in Malayalam literature for dug-out canoes. Literary references are given below.

1.1.2.1 toni

1.	katavutõni	'ferry-boat'	(G. 193)
2.	kēvutōņi	'Passage boat'	(G. 294)
3.	toni/droni	'A boat'	(G. 492)

4. katattu tõni 'A ferry boat' (M.L. Vol. III. p.42)

5. katalttõni (M.L.Vol.III. p.55)

'Boat which is going into the sea, small ship, pattemari'

6. kalittoni 'ferry boat' kalivallam

(M.L.Vol.III.p.511)

- 7. toni
 - 1. tōniyute natuvilninnu tulayuka (Prov.)
 "To oar the boat standing on the middle of the boat'.
 - akkare ninnavan toniyurutti (PP.Page 22 Line 5)
 'The person standing on the other shore made the boat to capsize'.
 - 3. akkare nilkkunna pattar toni mukki (varient form) (PP.page 22:4)

'The Brahmin standing on the other shore turned the boat up side down'.

- 4. akkaraccellanam, toniyum mukkanam (PP. page 22:4) 'One can go the other bank and sink the boat'.
- 5. ālkku nilayillenkilum tõnikku nila vänam (PP. Page 48:41)

'Even if a man does not need the balancing position a boat needs balance'.

- 6. alu elutalaykku toni mututtala (P.P.49:8)
 "The passengers on board of a boat have the boat as their basement."
- irutoniyil kaluveccal natuppulayil kanam (P.P. 55:15)
 'If a person boards on two boats he will be in trouble'.
- ēnānmākkil tōţunţenkilē tōŋi vēntū (P.P.74:1)
 Only when we have river at ēnānmākku we need a boat to cross it'...
- 9. olukunna tõnikku oruntu (P.P.70:31)
 'As oruntu in a floating boat'.
- 10. õţunna tõnikkoruntu (P.P.80:21)
 'As oruntu in a boat which is moving'.
- 11. kālattettōņi kajavattettum (P.P.99:37)
 'The boat reaches the shore in the morning'.
- 12. cukkānillātta tōṇippōle
 (P.P.127:1)
 'As the boat which is not having the rudder'.
- 13. talaykkumite vellam vannāl atukku mite toni
 (P.P.139:27)
 'If the flood is heavy, boat has to be used'.
- 14. ulayariyānnāl toni otalanna (P.P.145:36) 'If the paddling techniques is not known, the boat is useless'.

15. tulayullappōl tōniyilla; tōniyullappōl tulayilla (P.P.145;40)

'When we have the paddle, we do not have a boat, when we have boat, we do not have a paddle'.

- tulayariyannal toni yurulum (P.P.145;39)
 'If the paddling technique is not known, the boat may capsize'.
- 17. toniyil kitannotiyal kompattolam (P.P.149:17)
 'One can run upto the mast only in a boat
 (in order to escape)'.
- toni marinnal puram nallatu (P.P.149:12)
 'If the boat is capsized the backside of the boat is good (for escaping)'.
- tōniyil kiţannu paraññāl karaykānayumō? (P.P.149:15)
 'If something is said from a boat it won't be audible at the shore'.
- 20. tōṇiyil kiṭannu pāññāl kara kāṇukayilla (variant form) (PP.149:16)

'If one jumps from a bot, he cannot reach the shore'.

21. toni pokum tura kitakkum (P.P.149:15)

'The boat may move but the port will be stationary'.

22. toniyakkare tulayikkare (P.P. 149:1-

'The boat is in one shore and the paddle is on the other shore'.

23. toni kalinnal tulakontu (P.P.149:9)

'Even if the boat is lost (one can survive) with the paddle'.

- 24. toni katannal tulakontu (variant form) (P.P.149:10) 'Even if the boat is far away (one can survive) with the paddle'.
- 25. toni katannal tulaventa

(P.P.149:11)

- 'After the boat has crossed, there is no need of paddle'.
- 27. toniyute natukkuninnu tulayum pole (P.P.149:19)
 'Just as paddling from the middle of the boat'.
- toniyurulum nılayariyannal (P.P.149:20)
 'If the paddling technique is not known the boat may capsize'.
- 29. totunțenkile toni ventu (P.P.148:45)
 'Only when we have river we need a boat to cross it'.
- niratōṇi tulayumpōļ ilakōlla (P.P.161:11)
 'A fully loaded boat should not be tilted'.
- pana kērān pōyōnum tōni tulayān pōyōnum vanniţu ariyetuttāl mati.
 (P.P.170:43-44)

'It is enough if food is prepared for a palm tapper and a boatsman after their return from their duty'

32. puraykkumīte veļļam ponniyāt atukkumīte tōni
(P.P.182:19)
'If the flood comes up of the house, boat has to be used'.

sailing'.

- ranţu toniyil kalu veccal naţuppulayil (P.P.214:6)
 'If a person boards on two boats he will be in trouble'.
- 34. akkareccellanam töniyum munnanam (EMP.21:162) 'One can go to the other bank and sink the boat'.
- 35. irutōniyil kāluvaccāl vellattil kitakkum (EMP.26:235)
 'If a person boards on two boats he will be in trouble'.
- akkare ninon toni mukki (EMP. 59:680)
 'The person standing on the other shore made the boat to capsize.
- 37. patavukal vañcikal vallam tōnikal patayērum cila kappalumenniva katalilirakkippāyum ketti (SS.372:15-17) The following types of boats i.e., patavu, vañci, vallam, tōni and the ship kappal, are navigating by
- 38. toni katannal tulakontennoru naniyamuntu (TK.150:27,28 'There is a proverb that even if the boat is far away (one can survive) with the paddle'.
- tonikku amarakkarannaya karnna (VS. 72)
 'karna who is the Steersman of the boat'.
- 40. õţiyum tõniyum vanciyum vallavum kutippala tumirakkippatukkave. . . . (SP.32)
 - 'Different types of boats such as oti, toni vanci, vallam, etc. are moving slowly'.
- 41. dwipāl dwippālkkaṭalarikoļam conkil vannartha

kūtakkūta kramukamaricamkontu cenra nnunaļķi tonikkūttam

muluka mulukakkontu cenronrinoto
nrettittinnattanalilana
yattālamē vitumētam. (US17:1-4)

'In this port a number of boats from many islands are berthed. These boats contain such goods as arecanut, pepper, etc. have been brought and these goods are bartered for some other goods and loaded to the full capacity of their boats'.

42. carikkumindriyannalkku manassum kūte yettukil harikkum

prainayatu karrambhassittoni polave.

(BBG (K) 2:67)

'If (one) doesn't have control over the senses, then, he will be like a boat in the wind'.

- 43. svayam guhantānamaram piticcēttunna tēņiyil
 (KSP. 293:11)
 'In the boat where Guhan himself steers the boat'.
- 44. vēntenkilum toniyil vaccannolukkikkotte (VP.2) 'Even if (he) rejects, let it go in the boat'.
- 45. urappulloru nalttoniyettiykka katavil drutam (VR II. 52-6)

'A large crowd is awaiting to receive the well built boat'.

46. tõni katattunna mahkamäre, pinne enneküti marukaraya naccutanne; dharmmattõni ünniyiviteyalla (MPP.79,80)

'(Someone asked) Oh! You ladies, steering the boat, you please take me also to the other shore. The ladies replied that the steers woman who paddles the free boat is not here'

47. gangakatattenenkikkulitarenam pinne kulikkottetunenre Kaiyyilila tonikku kuli pesakunnanerattu pustakak kettoru toniyakki

(MPP. 81)

'If you do not have money to pay to the ferrymen to cross the Ganges, you use your bundle of books as boats'.

48. mūrcciyālē toniveţţi
mulayile tolapiţiccu
elupatu mahādēvanmār
toniyēri kaliccannane

(MPP.84)

- 'Seventy deities enjoyed cruising in the boats that were built with sharp instruments and rowed with bamboo poles'.
- 49. ātā tōniyum tōnnunnu tolayum tōnnunnu (TP.132)
 'A still boat is seen and an oar is also seen'.
- 50. tõniyellam jalam tannilani põkatirippanum . . . Kataksikkenam

(SV-AK.532, 533)

- '(The God) must protect the boats from being capsized'.
- 51. ottationilu veccanno lukyūttallo atunna kappalu veccoticcirru

(STP. 82)

- 'You sent (something) in a broken boat and you travelled in a ship'.
- 52. See also 1.1.1.1:15
- 8. valiya toni

valiya tõniyil nirttumorõţu päykketiriţum cira kontiru pakkavum (RCV 8-64) 'In a big boat, there are two outriggers just opposite to the sail'.

9. campattoni

campattonikku cimpakkalukkol (PP. 125:25)
'A useless paddle is used for a fishing boat'.

10. cerutoni

1. oru valiyeyolukku karrumay twarayotu pom cerutoni polival

(Lila. 1-49)

'She is like a small boat which moves in the water current with the wind force'.

2. cerutőni kappalu kotuttütt allo cerutőni Kappalil kéri nalu vankalaru köttakkatuppiccalló (TP. 395)

'Having given a small boat to (somebody) and we entered into a small boat and reached the Bengalees fort'.

1.1.2.2. pataku-patavu

1. 'A large boat' - patavu

(G. 596)

 paţavukal vañcikal vallamitullavar kaţavillatuttu Kampippotupote veţi tuţarumpol

(PM.4)

'Having heard the sound of explosion the owners of different boats like patava, vanci and vallam moored their boats on the beach'.

 kaṭalil bahu carakkumālumāy paṭavukal pol varumoṭṭakannalum

(KSP. 216:28,29)

'The camels are coming like boats in the sea carrying heavy loads and passengers'.

4. kallappataku 'piratical vessel'.

(G. 227)

5. kallappataku (-vu) 'pirate vessel'

(M.L. Vol.III p. 522)

Variant form = kallappāku Katalkallanmārute vanci, kallakkappal

6. See also 1.1.2.1.7:37

7. See also 1.1.1.1:15

1.1.2.3. otam

1. 'Boat, ferry boat'

(G.183)

palliyotam 'A royal boat'

(G. 635)

3. kolotam 'A fishing boat'

(G. 321)

ōṭam 'a boat'
 T. ōṭam; K. ōḍa; Tu. ōḍa; Te. ōḍa (Gond. ōḍa;
 Par. ōḍa), Br. bōḍi, cf. Mar. hōḍi; Guj.hōḍi.
 H.hōlā, Sinnalese oruva; cf. S. Vēḍā Dr. Ety. Dic.
 76 ōṭuka = vañci, vallam, tōṇi

(M.L. Vol. III. p, 1315)

5. kaliyotam 'feery boat'

(M.L.Vol.III.p.515)

= kalivallam

6. olukkilpetta otam pole

(PP.79:32)

'Just like a boat kept in water current'.

7. õtam põkumpõ õlakkett vere põkano?

(PP. 80:34)

'Should the bundles of coconut leaves also go along with the boat'.

- Oţannaļum konţu dāsapparişakal vannu vananninār (SP.32)
 - 'A group of fishermen came along with their boats and prayed (to her)'.
- jalattil cancarikkunnatinulla oru taram toni ('palliyotam'. otam kali = vallam kali) 'A ferry boat'.

(STV.443)

- 10. pētiyum prēmavum kūti ninnambinototam tulannu katakkunēram. (CB. 50)
 - 'While crossing in the boat with fear and affection'.
- 11. avar tekkan cinattu ninnu otam kayari sumātrādvipil etti.
 (LL.II.93)
 - 'They reached the Sumatra island from the South of China in a boat'.
- 12. ponnanippannakam vecca palliyotam 'otitta' viliccu vali nirutti katavilatuttu

(BR. 289)

otitta = 'A shout of boat'

- '(He) brought the boat which was roofed with gold towards the beach after shouting otitta'.
- 13. kalindiyil -pal liyotam kalikkenam (Sipu) (G.635)
 - '(you) enjoy boating in the river Yamuna'.
- 14. ōṭam māṭāykku pōkum pōl olakkeṭṭu vērē pōkaṇamō (Prov.)

'When the boat goes to Matay (the capital of kolattiri king) should the bundle of coconut leaves also go?'.

 อัเฉฑ tolayum moyacerukka อิเฉฑ tolaทีกันโล kontu vae อิเฉฑ tolaทีกันโล kontu vannu

(TP.364)

Moyacerukka = mukkuvaccerukka tolannuta = tulannu + ivite
'Oh, fisherman boy: you are paddling the boat.
You come here quickly in the boat. I have come here in the boat, said the boy'.

16. ötattil enkilum kappalil enkilum

(TR) G.182)

'Either in the boat or in the ship'.

17. innum a vali katal kayarip poyirunnittum bihrinnu katal itukku vali tolotannalil alsancaramuntatre (LL.II.21)

'Even though the sea had washed away that place, even now people are navigating through Bihring strait by leather boat (tol otam)'.

1.1.2.4. orrattați

orrattati vallam = orē tatiyil vettiyuntākkunna vallam; palakakal cērttu kettiyuntākkunnatu kettuvallam 'A dug out'.

(M.L.Vol.II: 1298)

1.1.3. PLANK BUILT BOATS

põtam/bõdham, varkkass, vahitram, ārāţţi, pātti, õţţulakkam, bōţţu, vallam, vañci, marakkalam, cinu, valar, vattēl, ōţi, iruttukutti, olamāri, nāvāyi, nau, pātram/yānapātram, onnal, pattamāri, taraņi, cīvāta/cīvāti, uru/uruvu, and kappal

are the terms used for plank-built boat in Malayalam literature. Literary references are given below one by one.

1.1.3.1. potam/bodham

1. 'A boat'

(G. 724)

 rāmapādapōtam kontu samsāra vāridhiyekkaṭakka (AR) (G.724)
 'Cross the ocean of family life, on the boat of Rama's feet.

1.1.3.2. Varkkass

Portuguese - barca 'A Sea-boat'

(G.913)

 Kaţalil ninnu varkkāss olukkikkonţu varunnu (TR (G. 913)

'A sea boat comes from the sea'.

1.1.3.4. Vahitram

'A boat' (G.922)

1.1.3.5. aratti

apakatamuntenkil ariyikkan mumpe pokunna vallam

(M.L.Vol.II.247)

'A pilot boat'

1.1.3.6. patti

'A small boat'

(M.L.Vol. II:1323)

1.1.3.7. ottulakkam

1. otam oru taram vallam

(M.L. Vol. II: 1323)

'A kind of boat'

 Ölamari kappal veppiccu öttulakkattin mel vannu tirumanca alimukhattu anayum

(KU:20)

'Having constructed a ship (olamari) (He) boarded a boat (ottulakkam) and reached the port Tirumancam'.

1.1.3.8. bottu

1. 'A boat'

(G.753)

English - boat

2. bottu tantum piticcu

(MS1, 1:31)

'having caught the paddle also'

3. apra tiksitamayita, bottanayunnu

(KSP 873:21,22)

'The boat is reaching the shore unexpectedly'.

4. Kappalinre oru lankabottu

(TR) (G. 753)

'A long boat of a ship'

 kalpālakaţavilum iţavākkaţavilum oru boţţum vaļļavum vitam atilēkku vēnţunna āļukaţeyum tayarākkiccu ā vakakku kūliyum koţuppiccu

(KSP1 1872)

'Having arranged for the crew and other essentials for a boat and a small boat (of the type vallam) at kalpalam dock and Idava dock and paid for the wages'.

1.1.3.9. vallam

- 1. A canoe or a boat in size between toni and manci
 (G. 924)
- 2. veppuvallam 'A built boat, large boat' (G.977)
- 3. Kalivallam = kalivanci
 - matsarakalikku upayogikkunna vallam, oti, vallam cuntan vallam mutalayava.
 (M.L.Vol. III, 515)
 - 'A racing boat'.
 - kunnunnalkku kalikkanayi katalasukontum marrum untakkunna ceruvallam.
 (M.L. Vol.III:515)

'A toy boat'.

4. Vellam keriyal vallam kayaranam

(PP. 229:31)

'If flood comes one should get into a boat'.

5. Vellam Kayariyal vallam irakkanam

(PP.229:24)

'If flood comes boat should be used'.

6. Vellamillatta dikkil vallamõtumõ?

(PP. 228:47)

- 'Is boat going in the direction where water is not abailable?'.
- 7. Vallattilkkitannõtiyal vallam karaykkatukkumõ?
 (PP. 219:16)
 'If one runs in the boat will it reach the shore'.
- 8. mēlotupoya malavinu oru koccuvallavum tirnnu (PP. 212:16)

'Even in the handle of an axe, a small boat can be built'.

9. māmvallattinu cemputara entinu?

(PP. 203:1)

'What is the necessity of copper nail to the boat which is made of mango tree?'.

10. kayal kanattavan vallam kalikkuka

(PP.99:7)

'One who not saw the lagoon, plays with boat'.

11. kinnam kattavan vallattil kayararutu

(PP.103:6)

'One who stole the bowl should not get into the boat'

12. nēr kārrinu vaļaccu vallam vaykkaratu

(PP. 164:3)

'Don't place the boat horizontally against the wind'.

 pakṣē kārru anukūlamāyirunnatukonţu vallam oruvidham ikkare vannu cernnu

(SM.39)

'Because of the favourable wind the boat reached the shore safely'.

 ñānō anujanō kalukkōl konţu kuttippiticcatil nilkkāte vallam tekkōtţu pōyittuţ anni

(SM.113)

'Either I or my brother stopped the boat with the help of the oar, it did not stop and begin to move in the southern direction'.

 vellatinu mītē sancarikkānāyi maram veţţikkuliccuntākkiya vāhanam. ceriya toni (valuppattil tonikkum vancikkum iţaykkullatu). Vallunnatu ennarttham.

(STV: 1539)

 curulanmār kaļivaļļannal enniva nadiyuţe olinnu kiţakkunna madhyabhāgattu kuţi matsariccum olukku maruttum anusariccum vikridikkunnu.

(RRBVol.II.485)

'The people boarded the ferry boat, assembled in the middle of the river where there is no movement, compated with each other, went against the water current and thus enjoyed'.

17. orikkal 60-ilparam tiveţţik koţļakkār ētānum iruţţu kuttivaţļannalil vannu iţţikkuruviļattarakanre katavil atuttu.

(TBSC.243)

'Once about 60 sea-pirates came in a small boat and reached the beach of a broker called Ittykuruvilatarakan'

18. innu nelāle nūru parayaļakkunnuņte valļam nirayoļam nellalannē.

(NP. 98)

'Today hundred measures of paddy are measured. Please measure the paddy till the boat gets filled.

 karayilēkku vaļļam varumvaļi pahkāyam pāļi cempan kunnu kaṭalil vīnu.

(C. 174)

= tula = atanampu

'While the boat was coming to the shore, Chempan kunni fell down into the sea by stumbling of the paddle'.

20. ayyāte cinivallam arumāsattinakam ēnre
(C.76)

'His boat (Cinivaliam) will become mine after six months'

21. cunta meticcālekkontu koccuvallam vēnte?

(C. 209)

'Is not a small boat required in addition to the fishing hook for fishing?'.

- 22. āruteyenkilum oru ceruvaļļam taļļi katalilirakkum (C. 210) '(I will) pull some one's boat into the sea'.
- vaļļavum naympum kaikku irayilla. tanatāyi
 oru valiya vaļļam vēņam. ā vaļļattinre arrattu
 valiya naympum etuttu nilkkaņam.

'The boat and the paddle are not in hands. One should have a big boat. At the end of that boat one should stand with the paddle'.

- 24. See also 1.1.2.1.7:37
- 25. See also 1.1.2.1.7:40
- 26. See also 1.1.3.8:5
- 27. See also 1.1.2.2:3

1.1.3.10. vanci

1. = vanni

(G. 900)

'A large boat'

2. = manci.

(G. 772)

'A large sort of boat, single-masted pattimar in Coasting trade, holding 10-40 tons'.

Portuguese = manchua

 inavanci 'A pair of boats joined together ferry-boat, raft. = cannatam.

(M.L.Vol. II.304)

- 4. kettu vanci 'A boat with sewed planks'.
 (G. 291)
- kaţavu vanci 'A ferry boat' = kaţattu vallam (M.L.Vol.III.60)
- 6. mēlppottu pokunna maļukoņtu enikkoru vanci (P.P. 212:21)
 'From the handle of an axe, I want a boat (Vanci)'.
- muttappanre vanci, putuputtankuli (mukkal panam kuli)

kuttumpo kuttum, ettumpo ettum.

(PP.206:7,8)

"The ferry charge for a boat (Vanci) owned by an aged man may be less. But one cannot be sure as to when it starts and when it reaches the destination."

8. ennittum vanci tirunakkarettanne

(PP.69:44)

'Yet the boat (vanci) is on the other shore'.

 kuppuvannāvikku uppuvanci munniyiţţu tupranu toppippāļa poyiţţu

(PP.106:17)

'The boat of kuppu had capsized and everything was lost'.

10. pāy keţţi vannākkumaņi tūkkiccēlotta cēruvvoţum takka karrēsi vilasum iŋavañcikaţ vērēyum konţu vannāl guhan tannē vehkampiţi viriccatum

(VR. ii. 89:11)

'If the boats (*ipavanci*) come with sails and big bells in favourable wind, Guha will spread the carpet'.

muruki valiya kolu, kanyayam cerukalivanci kutunn iyatalil.

(KSP. 217:19,20)

'When the boat (Cerukalivañci), which is like a young girl jerked gently, a storm appeared'.

 ceruvañcikal kalukköl kuttiyanu arabikal nayiccu kontu pôkunnatu.

(AY:19)

'The Arabians used kalukkōl (the long pole) for navigating their small boats'.

 vālanmār vanci veccāppulayil vaļare yōţippatahh aykku kāṇām.

(SS 1:66)

'(One can) see the fishermen (Valanmar) sighing after boating a long distance in their boat (vanci)'.

kuliyil bata! viņu kāloţiññaliyilttāņa kaţattu vañci pol.

(UKM 8:102)

'Just like a ferry boat (katattu vañci) whose hull is broken and got immersed in the ocean near the port'.

- 15. See also 1.1.2.1.7:37
- 16. See also 1.1.2.1.7:40
- 17. See also 1.1.2.2:3
- 18. See also 1.1.1.1:15

1.1.2.11. marakkalam

1. 'A kind of boat'

(G. 791)

2. marakkalattinu aticcarakku manal, Sarīrattil aticcarakku malam

(PP. 199:5)

'Sand is the least thing in boat where as faece is the least thing in our body'.

3. marakkalaitinnu kalkontankuram talttinritu, sarirattinu svasam kontu prananiyahhinritu,

'Just as an anchor (made of stone) is important for a boat, breath is essential for life'.

4. marakkalam samudrattileyotuvitu

. (PM,GM.10)

'The boat passes only on the ocean'.

5. kilmel marinnuvarunna tirakalil kanman kurannu marakkalakkuttavum.

(SP. 32)

'The number of boats are less to see on the roll of the waves up and down'.

mõtiyelunnumarinnalayaliyil mulukitunna 6. marakkalamotte

(BBG, 2:32)

'As the boat which is drowned in the ocean dashed'.

7. caruvam marakkalattil

. nūrre

ttaliyatum katannu cennu

(TP.22)

'Having crossed over 108 oceans with the help of boat'.

8. malanātu kanmatinnu marakkalameri vanna smarcharasvasanām daivam

(TP. 23)

'Having to see Mala Nadu, the God Pumarutan who comes in a boat'.

 orunāļ.... malanāţu kānmān arippamatām marakkalattilavar pukuntu ariya guņamērunna pūmārutan tān karayumatililiccu kappal tāsiyōţe nirantaramēyārttu viļiccularriloţi vekka motannāli palatum kaţannu

(TP. 25, 26)

'One day Pumaruttan who has good character entered into a boat and having gone to see Malandu. His boat crossed many oceans with high speed'.

10. malanāţu koticcu kāņmān āriyarājananu vadicca marakkalam tān āscaryam viswakarmmāvottu tīrttu ālimātāvāya pūmāla tānum āriyappūmārutanum čekor tānum ākkamiyannuļļa māripperum paţayum marrum ārttu lokar tīrttamarakkalam pūntān.

(TP. 27)

'The boat (marakkalam) permitted by the Ariya king to be used for visiting the Malanadu was very admirable. It was constructed by the divine architect. (He) boarded the boat, and at that time the Goddess of ocean and other deities like Aryapumārutan, Cēkor, Māriperumpatai, and others shouted in happiness. At that time he boarded the boat'.

11. ulakinu karaniyalayute vanna marakkalattil

(TP.33)

'In the boat (marakkalam) which came on the waves'.

12. eni enikkoru marakkalam paṇiyorukkeṇam
virakkarmma viswakarmmavina teti varutti jatti
candanam kuñkumam devataramenna maram kuraccu
melkkantam melkkiliccu kilkkantam kilkkiliccu.
naṭuvile khanṭamkoṇṭu marakkalam paṇiyorukki
marakkalattil karakayarannu daiva kannyāvu
āriyakkarayinnu kaṭukayōṭunnu marakkalamō
nūrreṭṭaliyellām kaṭannu koṇṭāre

(TP. 63)

'A boat (marakkalam) has to be constructed for me. Fetch virakarma and Viswakarma for the purpose. Cutting the wild nutmeg-tree (Jatti), sandal tree (candanam), crocus sativus tree (Kuńkumam) and pinus Deodar tree (Devatāru) and after removing the branches and roots and using the trunk, the boat was constructed. In such a boat the divine ladies started from the Arya shore, and travelled very fast crossing several seas'.

13. marakkalam paņītirppānāy viswa karmmā vāyuļļa taccane varuttikkoņţu jātitān candanattāl marakkalam paņitīrttirru marakkalam tannil kērri samudrattil<u>l</u>akkikkontān

(TP, 112, 113)

'Having called Viswakama for constructing a boat (marakkalam) using the Sandal wood. After loading that boat, it was pushed into the ocean'.

14. marakkalam atil oru nūru janam

(KR) (G. 791)

'There are hundred people in the boat'.

15. marakkalam ē<u>r</u>i

(pay.) (G. 791)

'Having got into the boat'.

16. marakkalattil ghöşam untayi.

(sipu.) (G. 791)

'There is a loud sound in the boat':

17. arnnava māsu katappān nalloru kappal marakkalam (KT. 229:5)

'A fine boat (marakkalam) to cross the ocean fast'.

18. kalam 'a boat'

(M.L. Vol. III. p.378)

Tamil - kalam

Sanskrit -kala

kappal, marakkalam, toni, vallam.

19. See also 1.1.1.1:7

1.1.3.12.Cinu

1. A large river boat

(G. 368)

= vallam

= cina

2. A large boat

(G. 368)

3. A large boat

(STV. 805)

4. 2 tōṇi ehkilum valutāya oru cīnehkilum _ (MR) (G. 368)

'Either two boats (toni) or a big boat (cinu).

1.1.3.13. Valar

'A boat larger than vanci'.

(G. 923)

1.1.3.14. Vattel

Portuguese -batel

'A sea-boat (Larger than mancu)'.

(G. 905)

1.1.3.15. ōti

 'A large sea boat'. 'long and narrow chiefly from the Laccadives'.

(G. 183)

'A kind of large boat used for racing'.
 = savāri vanci, kaļivaļļam
 anayoti = valiya vallam

(M.L.Vol.II. p. 1317)

3. tāļamūnnipitiyukkuvin, nīļe srutuyoppikkuvin oļam muriccotum nalloroti veykkuvin.

(S1M II. 51)

'The crew on board of a large sea boat are beating their drums forcibly and in accordance with the rhythm of the sea. The of is sailing fiercely'.

4. otiyum toniyum,

(Sipu) (G. 183)

'oti and toni'

- dipinnu or oţiyil, carakkukal oţiyil kayarri
 (TR) (G. 183)
 'The load is loaded in an oţi to an island'.
- 6. kaṭalōṭi = 'A kind of sea boat'.

 (M.L. Vol. III p. 52)
- ayyōṭṭa mōṭiye ōṭivallam alavukkāran pilleṭe
 viṭṭiccennu nālika onninu mumpu tanne.
 (NP:97,98)

 '(Some one) rushed fast to the house of Pillai who
 was in charge of measurements in the boat (ōṭivallam),
 forty minutes back'.
- 8. ānayōţi
 - a) The largest kind of boat, brig (Cannanore)

(G. 183)

- b) 'A kind of sailing boat, pattemari. It is available in olden days in Cannanore'.
 (M.L.Vol.II, p. III).
- 9. (āna-ōţi) valiya ōţi (vaḷḷam) pattēmāri 'a kind of sailing boat'

(STV.271)

10. See also 1.1.2.1.7:40

11. See also 2.1.8:1

1.1.3.16. iruttukutti

orutaram öti vallam

(M.L. Vol.II:366)

'A kind of small boat in middle Travancore'.

1.1.3.17. olamari

1. 'A kind of big boat'

(G.179)

Portuguese -almadia

2. 'A kind of big boat'

(M.L.Vol.II. p. 1279)

Portuguese-almadia

3. = ölamāri

(M.L.Vol. II. p. 1351)

4. See also 1.1.3.7:2

1.1.3.18. navayi

Tamil - navayi

(G. 546)

'A big boat'

1.1.3.19. nau

Sanskrit - nau Latin - navis 'A boat'

(G. 587)

1.1.3.20. patram/yanapatram

1. 'boats, vessels'

(G. 644)

- namukku ranţūmunnu uruvum pātravum uļļatu 'We have got a few big boats (uru) and (pātram)
- 3. 'A boat'

(G. 872)

 valiya yānapātrannaļ atingemēl vitānattil kūtiyum kaļunākkappalukaļ antarbhāgattu kūţiyum oţikkonţē irikkunnu.

(CT. 7)

'Voluminous boats (yānapātranha!) were moving on the surface of the ocean and the submarine ships (kalunākkappa!) were moving under the ocean'.

1.1.3.21. onnal

Tamil - öñkal, kappal

(ML. Vol. II:1311)

'A big boat'

1.1.3.22. pattamāri

- 'A pattimar, native vessel larger than manci' Tamil-pattavi 'a boat' French, Portuguese - Pataxopinnance.
- alimukhattinkal kaţalöţikappalukalum pattēmārikalum kūţutalāyikkānmānunţāyirunnu.

(BR. 302)

'There had been seen big boats and pattimars i.e., native vessels larger than manci in the port'.

3. Carakkukal kontuvarunna pattemāri.

(TR) (G. 607)

'Pattimar which brings the load'.

1.1.3.23. tarani

1. 'A boat'

(G. 432)

2. = tari 'A boat'

(G. 432)

3. nadiyil tarani katappan

(MB1) (G. 432)

'To cross the river in a boat (tarani)'

1.1.3.24. civāţa/civāţi

1. 'A sort of 'Sea boat'.

(G. 370)

2. Sīvātayil koņtupõya ari mūta

(TR) (G.370)

'The rice bag which was taken in the boat'.

(Sivāja)

1.1.3.25, uru/uruvu

'A big boat, Canoe, Schooner, Sloop, Vessel'.
 kappal, patavu, vallam.

(M.L. VOL.II. p. 800)

pīranki nāṭṭiya kappalum uruvum konṭu ādyam kulaccal tuṛayilatuttu

(DR. 176)

'(They) alighted at the Colachel port from the ship (kappal) and the big boat (uru) armed with canons, and a boat of the type uru'.

Cālējalam vaļiyurukkaļilēriyum mēl pālannaļūţeyum katannitunnu.

(ASR. 1.6)

'(Passengers) board the big boat (uru) in the sea port through water and used the over bridge for crossing'.

 munnūru kantikku mēl carakku kērunna uruvinu kanti onninu arakkaliyanum vītam uruvu maryāda cavukķiyilt tirppippān cattam vaccu tirppiccu varunnatinālum 1817.

(SPS. 47)

'It has been consulted in a casuarina garden that for a big boat (uru) constructed load of above three hundred kantis (one kanti = 500 lbs.). the cost of construction charged must be two cakkaras per kanti'.

 suvesil oru kappalinum põrunna maravum illallo, pakṣe makkattu ninnu cila urukkalayirunnum (KP (G) 89)
 There were no woods in any ship (kappal) in Swiss,

but in the big boats (uru) in Mecca there were'.

6. paricil carakkukal niravil pitippicciţiorumicceţuitavaruruvil karerriccu.

(HS.4)

'The goods which were complimented were bundle together and brought to the shore from the big boat (uru)'.

 nammuţe vahaykku carakkukaţ urukkaţil kayarţi kocci aţi kaţannu purattēkku pokunnatinum purattuninnu akattēkku konţu varunnatinum alpānticcunkam koţukkāte oru taţavum kūţāte etre pūrvvāpurvvamāyiţiu lantakkumpaññi nāţilum inkiriya asukumpaññi āyatil pinneyum kaţiññu vannirikkunnatu.

(STOT. 540)

'If our cargo is to be sent from the Cochin port in a big boat (uru) or if it is brought from outside, duty is collected on the cargo. No one can avoid the levy of

duty at the port. This practice has been in force since a long time, even before the rule of the Holland company and the British company'.

8. iruvarum oru uruvil põyi

(TR) (G.140)

Both of them went in a big boat (uru)'.

 Puttanayiita urukkal vaykkunna vaka nattii vacca kappala puttanayiita panata erakkiyal kappal onnukku tirumukalca rupa 150-m (Cunkanirakkukal elutiyirikkunna variyolayute pakarppu) 1772.

(KRBE: 25) 'If a big boat (uru/kappal) is constructed newly and if it has to be launched into the sea, the duty (tirumuk-kalca) collected is Rs.150/-' (This is a copy of the excise accounts, found written in palm leaves) 1772.

10. patinayyāyiram taţikaļokke uruvum purattu kayarrikkunnē

(NP. 30)

'The big boat (uru) is loaded with fifteen thousand logs of woods'.

11. uruvu 'a big boat, vessel'.

(ML. Vol.II. 810)

= patavu, vallam, kappal.

 agrasāla pakkam, tinnal vakakku uruvil kērri valyaturavil irakki alavu koţukkunnatinu manakkuţi turayil nellu eţuppiccu alavu koţuppān cattakkūli vakakku 1795.

(RM.V.129)

'As a freight for measuring and loading the paddy in a big boat at the Manakkudy port and delivering it at the Valiyature port on monthly contract'. 13. i rājyattu cilavuvakaykku i yānţu yālppānattu ninnum 14,000 tunţu pukayila varaykkum uruvu valikku varuttuvān avasyam ontākakonţu ā vaka pukayila yālppānattu ninnum urukkalil kērri cirayinkil, kollam, pirakkāţu mutalāya turamukhannalil konţu vannu irakki. 1819.

(SPS:90)

'This year for the consumption of the people of this country, 14,000 pieces of tobacco were to be imported from Yalpanam. Hence, tobacco pieces were loaded on big boats (uru) at Yalpanam and they were unlaoded at Cirayinkil, Quilon, Pirakkadu and other ports'.

14. = uruva 'a big boat'

(ML Vol.II:809)

= uru, kappal

 aviţe ninnum appoļ lisbo āyikku varunna uruva onnum illāyka konţum aviţe ninnu lisbo āyikku kaţalil kūţi varunna vali kure prayāsamullatākunnu ennu kelkkakonţum.

(Var.:345)

'From there, as there was big boat (uru) which goes to Lisbo and as the sea journey to Lisbo was tedious'.

1.1.3.26. kappal

1. 'Ship'

(G. 204)

2. kevukappal 'freighted ship'

(G. 294)

3. kotikkappal 'Galley'

(G. 502)

4. patakkappal 'An armed ship'

(G. 595)

5, utannakappal 'broken ship'

(4. 0)

utaññakappal vannu atiyuka.

(ML.Vol.I: 184)

ujannakappan vanna ajiyaka

6. Samudrasancārattinuļļa (Yantram upayogiccum

marrum natattuna) valiya taram vāhanam, pākkappal: āvikkappal; nau; pōtam; yānapātram; antam lōpiccu kappa ennum kāṇām.

(M.L. Vol. III. 210)

'A ship'

 kaļļakkappal kaļļanmāruje kappal

(M.L.Vol.III: 518)

'A pirate vessel'.

8. ati takarnna kappal tanupõkum

(PP.22:44)

'The ship whose hull is broken will get immersed'.

9. inci vyaparikkentinu kappal varttamanam.

(PP. 51:2)

'Why a ginger trader should deal with small talk about the ship?'.

10. ōtākkappalinu ompatu mālumi.

(PP. 80:6)

(mālumi = kappittān)
'There are nine helmsmen to a stationary ship'.

12. kappal põkum tuga kiṭakkum

(PP. 88:31)

'The ship may move, but the port will be stationary'.

13. kappal põyälum tätikku kai kotukkarutu.

(PP. 88:32)

'Even if the ship is lost, don't bother'.

14. kappal veccu katalokke öticcālum kapliccate atanhattulļu

(PP.88:33)

'Even if one engages a ship and navigates all over the sea he will get only that much what is destined to him'.

15. kappalil kallanuntö?

(PP.88:35)

'Is there thief in the ship?'.

16. kappalilttanne kallan

(A.R.) (PP.88:36)

"The thief is in the ship itself"

17. kappalinu panitupanitoru cimi<u>l</u>āyi

(PP. 89:1)

'Constructed a ship, but it became a small box'.

18. kappalil svatantryam pöräte katalilccäți

(PP.89:2)

'Because of lack of freedom in ship (he) jumped into the sea'.

19. kappalötikkuvān vellamuntākum

(PP. 89:3)

'There is water to steer the ship'.

20. kappaluţaññālum kavilil kai vaykkaratu

(PP. 89:4)

'Even if a ship is wrecked, do not bother'.

21. kūra kappalil põyapõle.

(PP.111:25)

'As the cockroch going in the ship'.

22. cettiyanre kappalinu daivam tuna

(PP.129:2)

'God is the guard of Chetty's ship'.

23. paniveļļam perukiyāl kappal ōṭumō?

(PP.171:10)

'Will the ship move in the dew water?'.

24. väyil ēļu kappalotikkān veļļamuņtayirikkuka

(PP.221:11)

'In (Someone's) mouth there is sufficient saliva (desire) to steer seven ships'.

25. kappalinakattu tanne kallanirunnalö

(EMP.97:1197)

'If a thief is inside the ship'.

26. amarakkāranillātta kappalenna kaņakkine

(SR.1)

'As the ship without helmsman'.

 nayikkānamarattil nāvikkanillennāyāl nesikkumpōle kappal jaladhi natuvinkal.

(SN:10)

'As the ship will get destroyed when there is no steersman in the stern, the ship is struggling in the middle of the ocean'.

darppakāmbunidhiyekkaṭattiṭum kappalām priya vidarbhaputriye.

(Bh.N.18:1)

'Damayanti is like a ship with which one can cross the ocean of arrogance'.

 amarakkāranillātta kappaloju kūţiya kaccavajakkāran samudramaddhyattilennapõle samsāra samudrattil munnip põkunnu.

(BGB:II:149)

'Just like a person who is suffering in a ship that does not have a helmsman, (Someone) is suffering in the ocean of life'. kappalum etra valiyatu āyālum koţunkārraţiccu ōţunnatāyālum amarakkāran ērravum ceriya cukkān konţu tanikku bōdhicca dikkilêkku tirikkunnu.

(SVPY: 3:4)

'Whatever may be the size of the ship and whatever speed of the ship by the strong wind it will be controlled by the helmsman by a very small rudder'.

31. dhansmitranenna kaṭalkkaccavaṭakkāran, kappal polinnatināl mṛtippeṭṭupōyi.

(AS(V) VI: 231)

'The famous sea trader of Dhanamitran died because of his ship wrecked'.

32. cukkān poyuļļoru kappal pole

(KSP: 627:20)

'As a ship which lost it's rudder'.

33. karakantifatta katalinnatuvil tarammarru talumoru kappalil

(RMC.15:70)

'In a ship which is getting immersed, after loosing the balance, in the middle of the deep sea'.

 dhanamitran enna kappalkkaccavatakkāran kappalccētattil apāyap pettu poyl.

(MRS:119)

'The famous sea trader called Dhanamitran died because of ship wreck'

35. kappal ötikkum vidya pathikkavēņam kappittānötu pathiccavarum-

(VP.235)

'Even a learned man has to learn the techniques of navigation from the navigators'.

36. ōlamāri kappal veppiccu ōṭṭulakkattin mēl vannu tirumanca alimukhattuanayum. (KU:20)

'Having constructed a ship (olamāri) (he) boarded a boat (ottuļakkam) and reached the port Tirumancam'.

37. olamāri kappal veppiccaņayum

(KU) (G. 179)

- 'A ship (olamari) will be constructed and will reach (the shore)'.
- ñannalkku aniyātra vanna mūppan pātiriyum marru janannalum orumiccu kappal kēruvānāyitu katavil vannappōl

(Var: 544)

'When we came to the dock to board the ship, the old priest and other persons came along with us to see off us'.

39. alimukhattinkal kaṭalōṭikappalukalum pattēmārikalum kūṭutalāyikkānmānuṇāyirunnu.

(BR. 302)

'Sea-going ships and pattimars were seen in abundant at the port'.

 tiruvancikkuļattinnu vēdakkāruţe kappal karaykketticcu.

tiruvañcā<u>l</u>imukhattuninnum vēdakkāţumāyi cēramān perumāl

asuvinu elunnallukayum ceytu.

(KC-M:50)

'The ship of the missionaries grounded at Tiruvancikulam. The missionaries and Cheraman Perumal rode on horses from the port of Tiruvanci'.

 Kappalil vanna karimpatam kaippatamney bharanikkutamuppitum koṭṭayum.

(PP1:63)

'The blankets, ghee, jars and other things which came in the ship'.

42. kappalakkattoru kallanirunnal eppolumilloru sukhamariyānam.

(SMT:120)

'If there is a thief inside a ship, it will be a big thrill'.

43. vankappaluntitinu currilumullasippu.

(UKM:19:133)

'There is a big ship to travel around it pleasantly'.

44. mahāpraļayakālattu novāyute kappal uļļatāyi baibilil kānnunnu

(LL:17)

'It is said in the Bible that Noah had a ship at the time of deluge'.

- 45. a) kappal paṇiñūu paṇiñūu atoru cimilāyi 'Constructed a ship, but it became a small box'.
 - b) kappaluţannālum kaviţil kaivaykkarutu
 'Even if the ship is broken, don't worry'.
 - c) kappal vaccu kaṭalokke ōṭiyālum kalpiccatē kiṭaykkū.

'Even if one steers the ship every where in the sea, he will get only that much which is destined to him'.

d) kappal põkum turakitakkum

'The ship may move but the port will be
stationary'.

(proverbs) Source: (M.L.Vol.III:210)

46. a) kappalil pāti pākkiṭuka
'Load half the ship with Arecanut'.

b) kappalinakattu tanne kallan irunnalo?
'If a thief is inside the ship'. (Phrases)

Sources: (M.L. Vol. III:210)

47. kappal paņi tīrnnu

(TP) (G.204)

'Completed the ship building'.

48. kappal veppikka

(KU) (G.204)

'To build a ship'.

49. eniyoru kappal vēņamenikke nnariyiccu rājan viswakarmmāvinojariyiccu tirtta marakkalattil koriniracca poņņotumuttumālakaļeriniva koṭṭiviļiccinnārttu cuļala vannanayunna kappal.

(TP:16)

'The king told that he wanted a ship. A ship constructed by Viswakarma heavy loads of gold and omaments studed with pearls reached roaring loudly'.

50. akkara yatinre valabhāgamirakkī kappal pinnayannati vēgattil ēlitan munampu nõkki kappalöttam tutanni.

(TP:19)

'After unloading the ship on the right side of the other shore, it started at high speed towards the Eli Cape and went ahead with its voyage'.

sankumāla mukkuvan tān kappalil kayarikkontu vitakam pukkānaliö

(P:113)

'The person who fishes conches came to his house through the ship'.

52. ceriyoru kappappani tiranam

kappappaņi nāneţuppiccāle
kappalveccōţiccirzanwōmappā
nānennane ninnaļa kānwōmappā
kappappaṇi = kappalappaṇi
kānwōmappā = kānum + kōmappā.

(TP: 113)

'A small ship construction work has to be done If I construct a ship and if it is used it will get immersed. Then how can I see you, komappa?'.

- 53. See also 1.1.1.1:15
- 54. See also 2.1,6:12
- 55. See also 1.1.2.1.7:37
- 56. See also 1.1.1.1:7
- 57. See also 3.9
- 58. See also 1.1.3.25:2

1.2. MECHANIZED BOATS

Since only wooden boats and ships will be dealt with, covering the period from the pre-historic time to the end of the 19th century, the mechanized boats are not given much importance. Anyhow the available sources regarding mechanized boats in Malayalam Literature are also given below:

1.2.1. ävikkappal

1. Aviyuțe saktikonțu oțunna kappal

(M.L.Vol.II.204)

'A steamer'

 tīvaņţiyum āvikkappalukaļum sthalajala mārggataraņatte sulabhamākki.

(LL.III:2)

'The train and steamers facilitated the road way traffic and the water way traffic respectively'

3. lõkattilulla ävikkappalukalil pakutiyiladhikavum grērrbrittanil untākkiyatāņu.

(Bh.V.L169)

'More than half of the steam ships in the world were produced in the Great Britain'.

1.2.2. kalunākkappa!

 jalattinaţiyil kūţi sancarikkunna kappal, antarvāhini, munnikappal.
 (M.L.Vol.III.550)

'A sub-marine'.

1.2.3. armäskappal

1. äyudhakkappal

(M.L.Vol.III.721)

'An armed ship'

2. armāsukappalumāļum Yajamānanmārum paṭakkoppu bhandāravum

'An armed ship (armasukappal) with the crew, the owners and heaps of arms'.

1.2.4. antarvvahini

 samudrattil munni sancarikkunna kappal, munnikkappal

'A subterranean ship'

(M.L.Vol.I: p.409)

yuddhattil satrukkalute antarvähinik kappalukal 2. kaccōtappatavukale mukkikkalyukayēl indyayilēkku marunāttu carakkukal varātāyi.

(LL.IV:178)

'No foreign goods came to India because of the assault of the sub-marine ships on the trade ships'.

1.2.5. brttāniyā

jayikka bṛttaniya. jagadisanre nitya dayaykkum prasadosampattinum patramay ni

(KSP. 740:1,2)

brttaniya = britania enna prasastamaya kappal. britta kappaline kanunnu.

'Oh Britannia ship! Victory be unto you! Let the grace of the creator of this world be upon you. Let fortune fall upon you'.

1.2.6. emdan

'Emden, name of a large submarine vessel which belonged to Germany in the first world war'. (M.L.Vol.II.p.1059)

2. PARTS OF BOATS IN KERALA

The aim and objective of this chapter is to collect the available references regarding parts of boat and write a systematic account of the knowledge and technology generated in the field of Navigation in Kerala since ancient days. The source material for this study will be mainly ancient Malayalam Literature upto the 19th century.

Malayalam dictionaries, laxicon, encyclopaedia and literature have been consulted and words regarding parts of boat have been collected. They have been classified into many subgroups which are as follows:-

- 1. paddle or Oar
- 2. Rudder
- 3. Anchor
- 4. Stem
- 5. Mast
- Sail
 Keel
- 8. Ribs
- 9. Stem
- 10. other parts of boat

Each sub-group is further elaborated here.

2.1. Paddle or Oar

Oar is "a device for propelling or steering a boat, being a slender piece of wood made with a handle at one end, and a broad blade at the other, working as a lever. In rowing, the fulcrum is at rest and is called the Oarlock or rowlock" (OMB: 435). In Malayalam literature one can find out various names for Oar. They are given below:

- kalakköl/kalikköl/kalukköl
- 2. kaikkol/kaykkol
- 3. tantu
- 4. tula/tulakõl
- 5. nayampu/naimpu/maimpu/nampu
- 6. pankāyam/pankān
- 7. iranköl/eranköl/oranköl/urakkól
- 8. aritram
- 9. cukkān

In olden days paddles were used as rudder. That is why, some of the words refer to the paddle as well as rudder. For instance, Cukkan has two meanings; viz. the paddle and rudder.

In ancient times the paddles were of many shapes. They may be merely a long pole or they may be having a long handle with the blade at the end. The bade of an oar is called palakanākku, tantinne palaka, patti and tantupatti. The long pole is called tantu kurri. The occurrences from dictionaries, lexicon and literature are given below.

2.1.1. aritram

Cukkān, tula, Pahkāyam itu koņļu toņi gamikkunnatinal

(STV. 195)

'To steer a boat with the help of cukkan, tula and pankayam'.

2.1.2. irankol / erankol / orankol / urakkol

1. irankõl

irankol, urankol

(M.L.Vol.II.p.424)

'Pole of a boat man'

2. eranköl

oru erankolinre rupamanu ayalkkullatu 'His shape is like a pole of a boatman'

(MB XXXIII: 24;49)

3. orankõl

= urankol, urankol, irankol, erankol, 'Pole of boat man'.

(M.L.Vol.II.p.1268)

4. urakkõl

= urańkol vańci unnanulla kalukkol 'A boatman's pole'

(M.L.Vol.II.p.790)

2.1.3. kalakkõl / kalikkõl / kalukkõl

1: kalakkõl

= kalukköl

Vallam unnunnatinulla mula (M.L.Vol. III. p. 531)
'A long pole used for propelling a boat'.

2. kalikkõl

Tamil - kalikkõl Kalukkõl

(M.L.Vol. II,p.539)

'A long pole used for propelling a boat.'

3. kalukkõl

1. Long pole of boat men. (hence: measure of about 3 fathoms)

(G.229)

2. Vallam ünnunnatinulla mula, kala

(M.L.Vol.III. p. 545)

'A boatman's pole for propelling the boat'.

 kaļukkolukaļute praharamērru nurakaļ sakalitann alākunnatumāva ā nadi.

(VD:IV:84)

'The forms in the river were disturbed by the blade of the paddle'.

kompattēkku cāţikkayari ayāļ (tōnikkāran) kalukkōl etuttu

(NK:299)

'The steersman claimbed up the mast and took the paddle'.

 aţanampukaļum tanţukaļum, punariţayilneţutta kalukkōlukaļum

(SS:372:18.19)

'The boats moved when the paddles were put into action'.

 nānō anujanō kalukkōl koṇţu kuttippiţiccatil nilkkāte vaļļam tekkōṭṭu poyit tuţanni

(SM.113)

'Either my brother or myself stopped the boat with the help of the oar, it did not stop and begin to move in the Southern direction'.

- 7. See also 1.1.2.1:9
- 8. See also 1.1.3.10:14

2.1.4. kaikkõl / kaykkõl

1. kaikkõl 'pole of boatmen' 2. kaykkol

= kaikkõl

'pole of a boat man'

(M.L.Vol.III.p.245)

2.1.5. tantu

1. 'An Oar'

(G.424)

- katutta vāsiyōte irukūṭṭarum tanṭu valikkunnu 'Two groups are striving hard with their paddles'.
- 3. mānātī taprathita kalarum bōṭṭu taṇṭum piṭiccaṇayu nāṭōpattoṭu vipulamām kāyal tāṇṭunna kaṇṭāl (MS:1:31)

'If someone sees the boat while crossing the lagoon where many boats were anchored'.

 vaļļam tuļayānuļļa Sādhanam 'Oar'

(STV.898)

 vaļļakkār taņţu maţakki veccu karaykku cāţi vaļļam valiccu kayarti

(C.63)

'The boatmen kept aside the paddle and beached the boat'.

naympu avanre kaiyilallenkilum tantu tanneyum oru valivil terriccittal pöre?

(C.200)

- 'Won't it be enough if the tantu (paddle) is thrown away, though the naympu is not available'.
- 7. See also 2.1.3.3:5
- 8. See also 4.1.1.

2.1.5.1. tantukkurri

'An Oar pin'

(G.424)

2.1.5.3. tantinre palaka

'The blade of an oar'

(G.631)

2.1.5.4. patti

'The blade of an Oar'

(G. 608)

2.1.5.5 palakanākku

= tantupatti

'The blade of an oar'

(G. 631)

2.1.6. tula / tulakkõl

1. 'paddle'

(G. 474)

- bhagnamām tōṇi kaittulayyāyi nintiţtulalunnatu pole.
 (KR) (G.474)
 'The time boat was moving like a boat paddled by the hand'.
- 3. uttamammāya niyamādiyām tulakaļum (Vēdānt.) (G.474) 'Good and well structured paddle'
- 4. tonikkoru tula

(PT) (G. 474)

'Each boat has a paddle'.

5. karayatuttālum tula kaļayarutu

(PP. 90:11)

'Even if we have reached the shore we should not loose our oar'.

6. karayatukkumpõl tula vittukalayarutu

(PP. 90:10)

'Even if we have reached the shore we should not loose our oar'.

- 9. See also 1.1.2.1.7:15
- 10. See also 1.1.2.1.7:22
- 11. See also 1.1.2.1.7:23
- 12. See also 1.1.2.1.7:24
- 13. See also 1.1.2.1.7:25

2.1.7. nampu / naimpu / nayampu / maimpu

1. nampu

' A paddle'

(G. 532)

 nampu / maimpu 'A paddle'

(G.584)

3. nayampu

1. = nampu, tula
'A paddle'

(STV. 1056)

2. See also 1.1.3.9:27

2.1.8. pankān / pankāyam

1. pankān

ī samayattu arupatarupattinālu pankān kuttittuļannu koņțu oru oti sāmāṇyam vēgattil pānnu kayari varunnuṇtāyirunnu.

(BR.282)

'At this time, a boat being paddled by numerous oars was seen coming with force at normal speed'.

2. pankayam

1. 'A paddle' vaṭṭappankayam

'A rounded paddle' Portuguese - pangayo

(G. 592)

See also 1.1.3.9:23

2.1.9. Cukkan

'A paddle'

(G. 370)

2.2. RUDDER

Rudder is "a flat piece of Wood or metal attached upright to the stempost by hinges or gudgeons so that it can be turned, as by a tiller, causing the vessel's head to turn in the same direction, because of the resistance offered to the water by the rudder'.

(OMB:438)

'A device by which a vessel or boat is steered is called rudder'.

(TIM:118)

In Malayalam literature the following terms were used for rudder.

2.2.1. atanampu

 valiya pankāyam; vaļļattinre gati niyantrikkān amarakkāran piţikkunna tula; = aţanayampu 'A rudder of a country boat'

(M.L.Vol.I. p. 157)

 atanampu piţiccu vanciyute gatiniyantrikkuka 'To steer a boat'

(M.L.Vol.I.p.579)

3. See also 2.1.3.3:5

2.2.2. aritram

1. Sanskrit - aritra
cf. Latin - aratrum
tōṇiye naṭattunnatu; tula, paṅkāyam, cukkān
'An oar, a rudder'

(M.L.Vol.I.p.685)

cukkān, tula, pankāyam
 (itu kontu töni gamikkunnatināl)
 'An oar, a rudder'.

(STV:195)

2.2.3. amakkai

bõṭṭu mutalāyavayuṭe gati niyantrikkuvān avayuṭe pinnil ghaṭippikkunna upakaraṇam, cukkān.

'Rudder of a boat'

(M.L.Vol.II.p.136)

2.2.4. karnam / karnnakam

1. karnnam 'Rudder'

(G. 213)

2. karnnakam

= cukkān

(M.L.Vol.III.p.330)

'The helm or rudder of a boat or ship'

2.2.5. Cukkan

1. 'Helm, rudder'

(G. 370)

Arabic - Sukkan

- 2. See also 1.1,2.1,7:12
- 3. See also 1.1.3.26:33
- 4. See also 1.1.3.26:35

2.2.6. tula

1. 'A rudder'

(G.474)

2. tōnikkoru tula 'Each boat has a rudder'

(PT) (G.474)

- 3. See also 2.1.6:2
- 4. See also 2.1.6:12

2.2.7. nayimpu / naympu

 kaļivaļļannalkku upayogikkunna ghanavum valippavum kuranna tuļa

(M.L.Vol.III.p.511)

= kalinayimpu
'A small rudder'

2. cempankuññu naympu ețuttu sirassil vaccu

(C.55)

'Chempan kunni took the paddle and put on his head'.

 naympu avanre kaiyillenkilum tantutanneyum oru valivil terriccittal pörë?

(C.200)

'Even the rudder is not in his hand atleast to pull his paddle in a movement?'.

2.2.8. pankayam

1. = tula

Portuguese - pangayo valiya pankayam = atanampu.

(STV.1136)

'Rudder'

2. See also 1.1.3.9:23

2.2.9. palakanākku

'A rudder (without the tiller)'.

(G. 631)

2.3. ANCHOR

Anchor is 'a device that is attached to a boat by a rope or cable, and that when being cast overboard fastens itself to the bottom, thus keeping the boat in a particular position or place. Also any weight secured to the boat by a rope or chain and thrown overboard to prevent drifting'.

(OME:420)

In Malayalam literature the following terms were used for anchor.

2.3.1. ankuram

1. = nahkūram 'anchor'

(M.L.Vol.I.p.96)

2. See also 1.1.3.11:3

2.3.2. irimputāltti

'An anchor' = cini

(G.110)

2.3.3. kollāyka

'An anchor, grapnel'

(G.368)

2.3.5. nankūram

'An anchor'

(G.525)

Portuguese - langar

2.3.6. lankar

- nankūram 'An anchor' Portuguese - langar

(G.891)

2.4. STEM

Stem is 'the extreme forward timber in a vessel'

(TBM:120)

It is 'the upright timber in the forward part of a boat joined to the keel by a knee'.

(TBM:43)

In Malayalam literature two names were given for stem. They are as follows:

2.4.1. aniyam

1. 'boat's head, prow' (opposite to amaram)

(G. 19)

vaļļam, kappal mutalāya jala vāhanannaļuţe munbhāgam

(M.L. Vol.I. p.200)

'Prow of a ship or boat, stem'.

2.4.2. Cantu

'Head of boat'.

(G.343)

2.5. MAST

Mast is 'a spar set upright from the deck, to support rigging, yards, booms and sails'.

(TBM:116)

In Malayalam literature the following terms were used for the mast.

2.5.1. kampam

'Mast'

Tamil and Malayalam's kampam
(kannada - kambam, assimilated form of stambham)

2.5.2. kümpu

1. 'Mast of a ship'

(G.285)

kūmpunāṭṭi, kāṭṭil marakkūmpu veṭṭivannu.

(pay)(G,285)

'Erected the Mast of a boat, (Some one) cut the mast of a boat from the forest'.

2.5.3. kompu

 kompattēkku cāṭikkayari ayāļ (tōṇikkāran) kalukkōl etuttu

(NK:299)

'The steersman climbed up the mast and took the paddle'.

2. See also 1.1.2.1.7:17

2.5.4. pay maram / pamaram

'A Mast'

(G. 647)

2.6. SAIL

Sails are 'pieces of fabric spread so as to catch wind in either of two ways: square sails, which hand from yards, their foot lying across the line of the keel, as the course, top sail, etc., and fore-and aft sails, which set upon gaffs, booms, etc., their foot running with the line of the keel.

(TBM:118)

The following terms were used for sail in Malayalam literature.

2.6.1. otupayu

vaļļam kappal enniva kārru piţiccu ōţuvān vēņţi keţtāruļļa pāyu; kappal pāyu; kārru pāyu.

(M.L.Vol.II.p.1319)

'A sail'.

2. See also 1.1.2.1:8

2.6.2. kappalpāyu

 Tamil - kapparp pāy. kārrinre saktiyāl kappal ōţikkunnatinu keţţunna pāy.

(M.L.Vol.III.p.211)

^{&#}x27;A boat's sail'

aviţutte cana kappalppāya mutalāytinnum upayogappeţţirunnu

(L.V.VII:97)

'Crotolaria juncea of that place were also used for the preparation of the boat's sail'.

2.6.3. kārrupā(yu)

kārrattu viriccuketti vallattinreyum marrum gativēgam kūttunnatinu upayogikkunna pāyu: otupayu 'The sail' (M.L.Vol.III.P.805)

2.6.4. tamman

'The large sail of native vessels'

(G.430)

2.6.5. pay

1. 'A sail'

(G.647)

- 2. See also 1.1.2.1.7:37
- 3. See also 1.1.3.10:11

2.7. **KEEL**

'The principal timber of a boat, extending from stem to stem at the bottom of the hull and supporting the whole frame' is called keel

(TBM.42)

'A longitudinal structure incorporated with the framing of a boat to contribute stiffness and prevent local deformations' is called keel

(OMB:432)

The following terms were used in Malayalam language for keel.

2.7.1. ērā / ērāvu

 Tamil - ērā = ērāvu 'keel of a ship or boat' (M.L.Vol.II.p.1177)

Tamil - ērā
 vaļļattinre aṭippalaka,
 kappalinre aṭibhagam.

(M.L.Vol.II.1178)

'The bottom plank of a boat, the keel of a boat'-

 kaccavajakkār mutalāya āļukaļ ī rājyattu ninnum tirppiccu koņţu pōkunna urukkaļkku ērāvu aļannu mūnnuru kanţikku mēl carakku kērunna uruvinu kanti onninu arakkaliyanum munnūru

kantikku kīla oļļatinu ērāvu aļannu kōl onninu mukkāl rūpāyum . . . vitam uruvu maryāda cavukkiyil tīrppippān

cattam vaccu tirppiccu varunnatinālum.

(SP:47)

'For the big boats (uru) which the traders and others buy from this country, the keel of the boat is measured and the price of the boat is fixed accordingly. If the tonnage of the boat is above 300 'kandi' then the price will be at the rate of 'kalipanam' per a 'kandi' and if it is below 300 kandi, the length of the keel is measured and the price is fixed at 1/4 rupee per a 'kol'- In this way the boats are made in the causurina'.

2.7.2. taimaram

'The keel of a boat'.

(G. 487)

2.7.3. panti

1. 'The keel of a boat'.

(G. 643)

2. kōļ otta pāṇṭi (In kappal pattu)

(G.643)

'The keel of a boat is suitable for the sea'.

2.8. RIBS

'The frame around with which a boat is built' is called ribs

(OMB: 437)

The following names were used for ribs of a boat in Malayalam literature.

2.8.1. manikāl

'The ribs of a ship or boat'.

(G. 777)

2.8.2. mallam / mallu

'The ribs of a boat inserted in the keel'

(G. 801)

2.9. STERN

- 'After end of vessel' (never say rear, back, or behind) is called stern (TBM: 120). 'The after part of a boat' is called stern in Malayalam literature. The occurrences are given below.
- 'The stern of a vessel' (G.40) Tamil amar; amaram pitikka = 'to steer'
- valļam, kappal mutalāyavayute pinbhāgam, ivite irunnāņu cukkāņō, atanampō koņtu gati niyantrikkunnatu aniyam.

(M.L.Vol.I.p. 579)

'Stern of a ship or boat, helm'.

 vallam, kappal mutalāyavayuţe pinbhāgam. (amaram X aniyam) amaratiilirikkunnavanānu vāhanagati niyantrikkunnatu. amaram terruka = apakaţattilakuka amaram pittikka = cukkan pitikkuka

(STV. 173)

- Svayam guhantānamaram piţiccōţunna tōniyil
 (KSP. 293:11)
 'In the boat where Gugan himself steers the boat'
- (pampānadi) kaṭakkunnatinu valiya tirakaļō kārum pisarumō untenkil prāya pūrttiyuļļa āreyenkilum amaram piṭiykkuvān nānnaļ karutik koļļum.

(SM:38)

'If there is high waves and strong wind we arrange a young man to steer the boat for crossing the river Pamba'.

 añujan piţiccamaram pūnţa vañchikkambhōdhi pukkōnamāpattil munnum.

(BB. 63:4)

'If younger brother steers and navigating the boat in the ocean it will be sunk'.

7. eti avvalikkō amaram etuttiriyukkunnatu? akkatavatukkān tolayantā.

(PCP:59)

'Oh lady'. Is the boat navigating on that way? There is no need to paddle to reach that tank'.

 Cempankuññu amarattu ninum ... karayilēkku oru cāţţam cāţi.

(C.63)

'Chempan kunni jumped to the shore from the stern'.

9. See also 1.1.3.26:29.

2.10. OTHER PARTS OF BOAT

So many other parts of boat were given in the dictionary and in some of the literature. They are given below.

2.10.1.ammär

Tamil -ammär (Portuguese - amarra 'Cable, rope' in Portuguese -English Dictionary p. 18) kappalkkayaru 'Ship's cable'

(M.L.Vol.I.p.636)

2.10.2. arddhanavam

1. toniyute pati

(M.L.Vol.I.p.716)

'Half of a boat'

2. töniyute pati (Sthalam)

(STV:203)

'Half portion of a boat'.

2.10.3. avagādam

vallattilninnu vellam tekkik kalayunnatinulla marappairam

(M.L.Vol.I.P. 757)

'A small wooden basin for bailing water out of a boat'

2.10.4. anca/ancan/ancal

1) āñca

 =añcān, añcakkampa.
 vaļļannaļute pāmarattil pāy valiccu kayarrunnatinuļļa Kayaru

(STV. 259)

'A rope tied to the mast of a boat'.

āncān
 Tamil - āncān
 cf. Italian - alzaja.

 Pāmarattil pāyu totuţiyiţānuļļa kayaru. pākkayaru; āncān.

(M.L.Vol.II.p.48)

- 'A halyard, rope for hoisting a sail'
- tōṇi valiccukayarrānulla kayaru.

(M.L.Vol.II.p.48)

'A towrope by which a boat is drawn'

3) āncāl

(M.L.Vol.II.p.48)

= ancan 'A halyard'

2.10.5. ālāttu

Arabic -allas Tamil - ālāttu (variant form - ālās) Kappalil nankūram kettān upayōgikkunna

kappatit nankuram kejian upayogikkunn valiya vatam.

(M.L.Vol.p.190)

'A large cable used for tying anchor in a ship'

2.10.6. irukkāvi

irikkānuļļa Kāvutați. cālattațikaļe kūţtiyiņakkunna taṭikkasnam.

(M.L.Vol.II.p.366)

'A small piece of wood which connects the planks of a catamaran'

2.10.7. otanci

vaļļattinu uņṭākkunna ceriya vaļapura. Prakritam cf. - otinnil

(M.L.Vol.ii.p. 1230)

'An arched cabin on a fisherman's boat'.

2.10.8. Katavallam

'A boat's partition at the stern'

(G.190)

2.10.9. Katiyal

Tamil-kaţiyal (beam set across a small sailing boat). calattaţiyuţe talaykkal kurukevaccu keţţunna taţi.

(M.L.Vol.III. p. 65)

'A small beam tied across at the end of a catamaran'.

2.10.10. Kannātikayar

Kattamarattilum marrum payum mulayum küti bandhikkunna kayar

(M.L.Vol.III.p.131)

'A rope or cable which binds the sail and bamboo in catamaran'.

2.10.11. Kammattu

Tamil - Kampattu < Portuguese - gamote 'Wooden bowl in boats used for leakage'.

(M.L.Vol.III.p.236)

2.10.12. Kalānchi/Kalāññi

'Ship's ladder'

(G.218)

Kappalile kövaņi

(M.L. Vol.III. p.397)

'Ship's ladder'

2.10.13. Kiţţi

Kettuvallattinre kettukayar valiccumurukkanulla kolu (M.L. Vol.III.p.824)

'An instrument for tightening the rope that serves as a holdfast of the planks of a wooden boat'.

2.10.14 Kil

kolarakku, painkara mutalayava certtu vallattineyum marrum villalataykkuvan uniakkunna oru taram kuttu. (M.L.Vol.III.p.881)

'A mixture of sealing wax, the resin of pine-tree etc., used for filling up holes of boats'.

2.10.15. Kututi

'Pieces of wood to fill up crevices in boats'

(G.258)

2.10.16. tattupați

'Cross board in boat'

(G.422)

2.10.17. tammanre kutti

"The rope that fastens it to the stern of the vessel' (G.430)

2.10.18. tumpakkam (tumpu)

'The cross-beam on deck of a native vessel, to which the sail ropes are fastened'

(G. 469)

2.10.19. pattayam

=nirpattayam

'A cistern, reservoir in ships'

(G.608)

2.10.20. pannakam

'Boat cover'

(G. 613)

2.10. 21. parimaram

'The yard of a boat'

(G.623)

2.10.22. pantikkuli

'The yard of a ship'

(G. 643)

2.10. 23. pampuvari / pampūri

'The gun-wall of a boat'

(G. 647)

2.10.24. murittöņi

1. 'A boat's half'

(G. 840)

 conku tinkittūmappāţītamikkum turayiloru murittōni kānāyā pōle

(AS. Slogam 14)

'As a broken boat missed in the harbour where China's big boats gathered'.

2.10. 25. mēlūttu

'Deck'.

(G.862)

2.10, 26, vankam

viit kuranna vankattu peruviral mätram amarttinilkkän pēti vannāyirikkām

(G.174)

'It may be the fear to press (his toe on the narrow plank (If the boat)'.

2.10.27. valappura

'An arched cabin on a boat'

(G. 922)

2.10. 28. valavupati

'A curved wood fixed on the top of a baggage boat'
(G.923)

2-10.29. vallattati

1. 'Timber roughly cut in shape of a canoe'

(G. 924)

2. vallattinulla tați

(STV. 1538)

'Timber roughly cut in shape of a canoe'

2.10. 30. vallattutar

1. 'A chain for locking a boat'

(G.924)

2. vallam pūttunnatinulla cahhala

(STV. 1539)

'A chain for locking a boat'.

2.10.31. vallappati

1. 'A plank from where one sits and paddies'

(G. 924)

vallattinakattirunnu tulayunnatinum marrumullapaţi
 'A plank from where one sits and paddles'
 (STV. 1539)

3. Parīkkuṭṭi ā vaļļappaṭiyil irunnu pāṭukayānu

(C.13)

'Parikuty is singing on the plank from where one sits and paddles'.

3. HISTORICAL ASPECTS OF TRADI-TIONAL NAVIGATION IN KERALA

3.1. EXPORT

 kocciyilum ālapuļayilum sēkhariccirunnaparippu kayarriyayaccu. pakşē, rangoņil vilayitivāņu. mutalilppakuti vilayēyuļļu ennu sēttumār parayunnu. oru kappal katalil takarnnu poyipolum. Kaņakku tīrkkunnatu pakuti vaccāņu. parikkuttikku dyiram rūpa poyi.

(C. 103)

'They imported the dhal which was collected from Cochin and Allephy. But, the price was very low in Rangoon. Sait told that the price was half the price as at Rangoon. One ship might have been broken in the sea. That was why, they settled their accounts by keeping the rate of the dhal at half price. On this way Parikutty lost Rs. 1000/-.'

 rabbar, kāppi, pukayila, mahhanīs ivayum pala turamukhahhaļil ninnu grēggubrittan ādiyāya pala rājyahhaļilēkkum kayrrumati ceyyunnu.

(ABBS, 122)

'Rubber, Coffee, tobacco, manganese, etc. were exported to Great Britan and other countries from so many ports'.

3.2. Important lagoons in Kerala

Kēraļatti<u>nr</u>e samudratīrattil anēkam kāyalukaļ k<u>it</u>akkunnu.

vēļikkāyal, añcutennu kāyal, kadhinamkulam kāyal, paravūr kāyal, koṭunnallur kāyal, veļļāyaṇikāyal, astamutikkāyal, kāyam kuļamkāyal, vēmpanāttu kāyal,

sāstām kōṭṭa kāyal tuṭaṅṅiyava.
(M. L.Vol.III.p. 684)

'There are so many lagoons near the sea shore in kerala. They are veli lagoon, Anjutengu lagoon, kadinam kulam lagoon, Paravur lagoon, kodungalur lagoon, vellayini lagoon, Asthamudi lagoon, kayam-kulam lagoon, vembanattu lagoon, Sastam kotta lagoon, etc.,'.

3.3. Japanee's Navigation to Singapur

brittīşukārute Şellum mallum vakavekkāte āyiram vārayōļam akalamuļļa katal itukku katannu jappānkār sinkappūr dvīpil etti

(BR.13)

'Japanese never minded the shells of British militants and crossed the strait which was 1000 yards in breadth and reached the Island of Singapore'.

3.4. Function to buy a boat

vaļļavum valayum vārnānuļļa anuvādattinu turayilarayanu veykkēnta kāļca entennu puņyan cōdiccu. atu ēļila pukayilayum patinancu rūpāyumāņu. valakkāranmārum atu ceyyaņam.

(C. 38)

'Punyan asked what are the things presented to the head of the fishermen for getting the permission to buy a boat and net. Those are seven tobaccos and Rs.15/-. Valakkaran is the caste name. Those people should also do the same'.

3.5. Kuññu Maraikkayar's fame

 akkālannaļil pascima Samudrapparappil kunnumaraykkār ennoru kaṭalkkaḷḷanre sancāram unṭāyirunnu

(BR. 168)

'In those days, in the western coast area, the sea-pirate Kunnu Maraikkayar's movement was there'.

 Kaţalccarakkum peņkiţānhaţēyum işţampole tēţippiţiccukonţu kunnu marakkār kaţaloţiyāyi sañcarikkunatiniţayil

(BR.264)

'While kunnumaraykkayar looting the sea cargoes and abducting young ladies'

3. See also 3.9

3.6. Indian's Navigation from 1st century

Kappalõttattilum, samudra sañcārattilum kristuvarsattinre ādikālattupõlum virutarāyirunnu bhāratīyar

(L.L.1:144)

'Indians were experts in the art of navigation from the first century itself'.

3.7. Port trust's power

kappalccālukaļ, jaṭṭikaļ, turamukhāṭrttiyiluḷḷa tīvaṇṭi vaḷikaḷāppīsukeṭṭiṭaṅhaḷiva Samrakṣikkunnatu turamukha sabhayuṭe cumatalayāṇu (NS:227)

'It is the duty of the port trust to project the office premises which are located in the sea routes, Jettys and train tracks in the harbour'.

3.8. Supersitious belief

tirakaļkkum o<u>l</u>ukkinum etirāyi mallatīccu oru tatikkaṣaṇattil cakravāļattinappurattēkku pōya ādyatte mukkuvaṇre bārya vrataniṣṭhayōṭe kaṭappurattu paṭinnārēkku nōkki ninnu tapassu ceyyukayāyirunnu..... olukku vaḷḷatte oru valiya cuḷiyilēkku valiccu koṇṭu pōyi, inhōṭtu pōkkēṇa āṇunnaļu tarīccu varēṇatu entānnānirīccatu? karēkku peṇnunna nerīm morēmāylṭṭṭrunniṭṭā. allēlu vaḷḷattōṭe cuḷiyannā piṭiccu viḷunnum. kaṭāli pōnōṇre jīvan karēlirikkaṇa peṇṇiṇre kaiyilā.

(C.10.11)

'A wife of a fisherman was doing penance and looking on the West direction when her husband was going to the other side of the horizon against the waves and water current on a piece of wood The water current pulled the boat into a whirlpool. Those of the males who went to that place thought that wives are responsible for their lives. If they are virgin we would be saved. otherwise the whirlpool will swallow them with the boat. The lives of the fishermen who go to the sea are in the hands of their wives' who are on the shore'.

3.9. Ship - wreck

kõṭṭakkal kuññali marakkārōṭu kappalum vāṭakakku vāṅṅi ñāļu kappalikkēri ñāļu pōyōtēnā pāti kaṭalilaṅṅettunnēram tekkunorūḷānum kārrum vannu. kārrilakkappalu piṭiccupōyi orrappalayonnu kiṭtiñākku.

(TP. 394-395)

"We hired a boat from Kunnali Marakkar of kottaikal and we were travelling in the middle of the sea, there was a sound of whistle and a big storm. The boat was broken by the wind and we got a piece of wood."

3.10. Navigation

kappalu veccöţikkān pöyi<u>r</u>rāņu ammārēyum koņţu nān vannittuntu

(TP.159)

'I have brought my mother when I went to navigate a boat'.

3.11. Boat-building-period

mūvāņietukkēņia kappappaņi mūnnumāsam itavittum tīrkkunnaliō

(TP.81)

'The boat-building work had to be completed within three years. Now, three months had passed after three years, yet the construction work is incomplete'

3.12. Boat building ceremony

tāmūri koyilotte pantakkūlu Kaļiccontoru kappappaņi etuttituntu kappalu palārum kāccīkkilla kappalu nilayiloraccu poyi kappalu nīrāyam kontillāle kappalunīrāyam kontillāle kappalappalannane kāceyeneto ninte kayyale poruttam vēņam pakaram parannalio kunnampati tāmūrikkoyilotte tampurāne kappalu pālu nān kāccantikki oru kiņti pālum taraņēnakku.

(TP. 156)

'In the palace of Zamorin, a boat was constructed. But no body was there to boil the milk for the boat, so the boat was not launched. Then they arranged a suitable person kunnampadi to boil the milk. He demanded a cup of milk for boiling the milk'.

3.13. Arabian Navigators

arabikkathakalile kappalöttak kāranötu nökkumpõl säksäl sindubädu nissäran tanne

(AY:20)

'While comparing the Navigators mentioned in the Arabic stories with Sindubad, Sindubad is nothing'.

3.14. Bahrain Navigators

innum ā vaļi kaļal kayarip pōyirunnittum bīhrinnu katalitukku vaļi tōlōtannaļil āļsancāramuntatre

(LL.II:21)

'Eventhough the sea had washed away that place, even now people are navigating through Bihring strait by leather boats'.

3.15. Buddhist Navigators

cola rajyattinte talasthanamaya kaveripattanam katal etuttu poyappol buddha sanyasikal vancinagaratteyanu abhayam prapiccatu

(KBM:25)

'When kaveripattinam, the capital of Cola dynasty was swallowed by the sea, the monks of Buddha sought shelter at Vanci city'.

4. DESCRIPTION ABOUT NAVIGA-TION PERSONNEL

Descriptions regarding navigation personnel have been collected from the Malayalam Literature. They have been classified into many sub-groups. They are as follows:

- 1. Oars man / Sailor / Boatman
- 2. Helmsman / Steersman
- 3. Captain / Admiral
- 4. Ship Owner
- 5. Ship Builder
- 6. Fisher man
- 7. Other personnel

Each sub-group's occurrences from Malayalam Literature are given below:

4.1. OARS MAN / SAILOR / BOATMAN

There are so many names given in Malayalam Literature for Oarsman.

They are aṇiyakkāran, urukkāran, ūṇṇukāran, ōṭṭak-kāran, kaṭattukāran, kaṭalāḷi, kaṭalōṭi, kaṭavukāran, kaṭassan, kaṭassan, kappalkkāran, kalāsi!kalāss, kaḷukkōlkkāran, kuttukāran, koḷāḷ, taṇṭal, taṇṭāḷar, taṇṭukār, taṇṭuvalikkāran, taṇṭēḷ, tōṇikkāran, naympukāran, vañcikkāran, vappūravar and vaḷḷakkāran.

4.1.1. aniyakkaran

amarakkāraņu tala terrumpoļ aniyakkārute tantukal terrum

(SC: 514:1,2)

'If the helmsman doesn't work properly, the oarsmen cannot work properly'.

4.1.2. urukkāran

Kappolottakkaran, kappalkkaran

(M.L.Vol.II.802)

'A sailor'.

4.1.3. ünnukäran

1. 'Boatman'

(G.150)

Vallam unnunnavan

'One who propels a boat with a pole'

(M.L.Vol.II:922)

3. ünnukkāran piļļayannunnunttē tantukāran piļļa valikkunnunte!

(N.P.:97)

'The poleman Pillai is pulling there!'
The Oarsman Pillai is paddling there!'

 vēdāntikaļ kāvyarasikanmār mutalāya vidvānmāril tuļanni

gāṭṭu nilkkunna paṭṭāṭassipayimār, kēvu vañci ūnnukār mutalāva

Pāmaranmār parayantam

(PT. 1:9)

'Right from the elites such as philosophers, those finding pleasure in literature and others upto the laymen such as soldiers, paddlors of the boat (kevu vanci) and other illiterates'

kölkkārum ūnnukārumkūţi nampyāre etuttu karakku kiţatti.

(MV:18)

'The polemen and the oarsman took Nambiar and laid on the shore'.

4.1.4. öttakkaran

1. kappalöţţakkāran, kappaluţamasthan

'A sailor, ship-owner'

(M.L. Vol.II: 1320)

2. ötakkāranā amarattu?

(C.85)

'Is sailor in the stern'?

4.1.5. katattukāran

1. 'A ferry man'

(M.L. Vol. III: 42)

 atin karayilāy mukuļapāņipōl kaţattukarānre mātam

(Kalittoni, 58)

'The ferry man's cottage is near the shore like a bud'.

4.1.6. Katalāli

samudrayātrakkāran

(M.L.Vol.III.51)

'A sailor, mariner'

 ennāl alimukhattinkal kaṭalōṭikkappalukalum ... kaṭalālikaluṭe tirakkum.

(BR:302)

'But there are heavy rush of big ships and sailors in the port'.

4.1.7. Katalöţi

kunnumaraykkar kaṭalōṭiyāyi sañcarikkunnatiniṭayil iravikkottanre vāṇibham vanni rahhunnatil kuravonnum kanunnilla.

(BR:264)

'When Kunni Marakayar was popular as a pirate, Ravi korran's sea trade was flourishing well'

4.1.8. Katavukkāran

'Ferry man'

(G.193)

4.1.9. katassan

kațalil carikkunnavan kappal yātrakkāran 'A sailor, mariner'

(M.L.Vol.III:60)

4.1.10. Kappalkkāran

1. 'Ship owner, Sailor'

(G.204)

2. kappalkkāranre jīvitam kārraticcāl pokum (prov).
(M.L.Vol.III:20)
(PP.88:34)

'The life of the sailor is spoiled by strong wind'

3. munneram kappalkkāran, pinneram bhiksakkāran.

(PP.206:43)

'once he was a ship owner, now he is a beggar'.

4. Kappalutamasthan, kappal jölikkaran.

(M.L.Vol.III:210)

'Ship owner, A Sailor'

4.1.11. Kalāsi/kalāss

'A Sailor'

(G.219)

4.1.12. Kalukkolkkaran

Vallam ünnukāran 'Boat poleman'

(M.L.Vol.III:546)

4.1.13. kuttukāran

'A boatman'

(G.263)

4.1.14. kölä!

'A Sailor'

(G.320)

4.1.15. tanţal

'A boatman, Sailor'

(G.424)

4.1.16. tantāļar

'Boatmen, Sailors'

(G.424)

4.1.17. tantukār

tantukār tantu valikkunuņtu samayattinu mumputanne karayilēkku vaļļam tiriccu. tantukār atentanennu codiccu.

(C. 174)

'Oarsmen are paddling The boat returned the shore before the actual time. Oarsmen are asking what is that?'.

4.1.18. tantuvalikkaran

ādyam cempankunnu vaļļatil taņţuvalikkāranāyirunnu. ippōļ amarakkāranāņu.

(C.16)

'At first, Chempan Kunni was an oarsman of a boat. Now he is a steersman'.

4.1.19. tantēl

uruvilē taņtēline bhayappetutti

(TR) G.424)

'(Some one) caused the boatmen to fear'.

4.1.20. tõņikkāran

1. 'Boatman'

(G.492)

2. ārruvannikkātinullip poy marannu toņikkāran.

(San:59)

'The boat man has hidden in the Arruvanji forest'.

4.1.21. naympukkāran

vaļļattile jölikkāranāņu pa<u>l</u>ani, ādyam valanirattān kaṭalilirannukayāyirunnu atilninnum avan naympukāran vare yāyi.

(C. 201) 'Palani is a worker in the boat. First he entered into the sea for spreading the net. From that he became a steersman'.

4.1.22. vañcikkāran

1. 'Boat man'

(G.900)

2. maryāda vancikkāranu

(PP:200:13)

'The respect is to the boatman'.

4.1.25. vappūravar

'A class of sailors'

(G. 908)

4.1.24. vallakkāran

1. 'Boatman'

(G.924)

2. Vallam unnunnavan

(STV. 1538)

'Boatman'

4.2. HELMSMAN / STEERSMAN

There are so many words given in Malayalam Literature for steersman. They are

amarakāran, öṭṭi, kappittān, karṇṇadhāran, karṇṇagrāhan, kalamōṭumavaral, kalāssukāran, cukkānkāran, nāvikan, niyāmakan, marakkān/marakkayān and mālimi/mālummikkāran.

4.2.1. amarakkāran

amaram piţikkunnavan, karnnadhāran
 'The stearsman of a boat, helmsman'

(M.L.Vol.I:580)

- 3 jivita samudrattil amarakkāran illāte alannutirikavākunnu.

(MS:23)

'(He) is roaming about without any aim in the ocean of life'.

- 4. See also 1.1.2.1.7:39
- 5. See also 1.1.3.26:28
- 6. See also 1.1.3.26:32
- 7. See also 1.1.3.26:33
- 8. See also 4.1.1
- See also 4.1.18

4.2.2. ōtti

kappalõṭikkunnava<u>n,</u> kappittā<u>n</u>

(M.L. Vol.II.1322)

'Steersman, captain of a ship'.

4.2.3. kappittän

kațalilk kappittănum kulikkāmallō

(VP:206)

'The steersman can also take bath in the sea'.

4.2.4. karnnadharan

1. 'Helmsman'

(G.213)

 Sanskrit (karna - dhāra) cukkān piţikkunnavan, amarakkāran, kappittān, niyantāvu.

(M.L.Vol.III:331)

'Helmsman, Captain, Pilot,

 atu (mātāvinge hrdayavēdana) kaţakkānoru kappalō kaţatti viţānoru karnnadhāranō lōkattil innu vare yunţāyiţtilla.

(amba:69)

'No ship has yet been constructed and no helmsman is yet born to help her to cross over her mental agony'.

 sariyāy mahāviṣṇubhaktiyām kappalkoṇṭu marutīrattilākkum karnnadhārannām bhavān.

(KP:183)

'(One can) reach the other side of the river with the help of the ship of bhakti towards Mahavishnu'.

 Kappalö kaţaline nernaţukk ulalunnu karnnadhārar kannaţaykkanamenno

(S1 M III:35)

'When the ship is at distress in the middle of the sea, why the helmsmen is carefree'.

 vellattil viņumunni naranāthanum uļļattil ādhi ponni karņņadhāranum

(VC:177)

'Vishnu having got drowned in the water and helmsman having got overflown with anxiety'.

4.2.5. karnnagrahan

Sanskrit (karņa - graha) cukkānpiṭikkunnavan; karṇṇa dhāra<u>n.</u>

'Helms man'

(M.L.Vol.III:331)

4.2.6. kalamõţumavaraļ

kalamotumavaral irupatu poliyak kotuppitu.

(KAS III:64)

'The helmsman gave twenty polip panam i.e., money given at a marriage to the church'.

4.2.7. kalāssukāran

kappalkkāran, nāvikan.

(M.L.Vol.III:331)

'A Navigator, Sailor, one of a crew of a ship'.

4.2.8. cukkankaran

'Steersman'

(G. 370)

4.2.9. navikan

1. 'A Steersman'

(G. 546)

 ratnasrēņī kanakanikaram kāļcayum veccukāņmān tikkikkūţum punararikilō nāvikānām nikāyam

(US-prastaavana 79:1,2)

'when the king Ravi Varma asked them to go with that person, the helmsman who came from so many countries presented diamond and gold and expecting to see that person'.

3. See also 1.1.3.26:29

4.2.10. niyamakan

'A Steersman'

(G. 553)

4.2.11. marakkān / marakkayān

1. marakkayanmār

(pay) (G.791)

'A steersman, Sailor'.

2. kaiyur

(Pay) (G.791)

'A steersman, Sailor'.

4.2.12. mālimi / mālummikkāran

1. Arabic - mu'allim - 'Pilot, Steersman'

(G. 815)

See also 1.1.3.26:10

4.3. CAPTAIN / ADMIRAL

The following words are used for captain / Admiral in Malayalam literature. amaral, otti, kappalttalayali, kappittan, naka, suva.

4.3.1. amarāl

1. nāvikasēnānāyakan, valiya kappitān, amirāl

(M.L.Vold:583)

'Admiral'

 pinneyamarālum mannavanum kūţe vannu karappugattāsu patayötum

(PP1:46)

'Later the Admiral and the king started along with the naval personnel'.

 892 - āmatil amarālumāyiţţu elutipiţicca uţampaţikka prakāram 1763

(TSM II:168)

'According to the agreement reached with Admiral or 892 (Malayalam era) (A.D. 1763)'.

 caliyür tavaliyil vira kerala tampuran kolampil pöyi lantakkampani amaralek kantu gunadöşamokkayum pagaññu utampitiykkayum ceytu.

(MM:1:21)

'Verakerala Thampuran of Caliyur tayvai went to Colombo, met the Admiral of Holland and heard the good news. And then they came to an agreement'.

 iprakāram eluti kayyēlpiccatu januvari māsam 7-am tiyati 1663 - āmatu itil oppukuttiyatu paranki janarāļum ulanta kumpanniute pērkku amarālum. (portugisukār taccukkārumāyi ceyta utampati)

(KLC: 76)

'The agreement was written and signed on the 7th of Jan. 1663. Those who signed in the agreement are the General of Europe and the Admiral on behalf of the Holland Company'.

4.3.2. otti

'Ship's captain'

(G. 183)

4.3.3. kappalttalayāļi

'kappittan'

(M.L.Vol.III:20)

'captain of a ship'

4.3.4. kappittan

Portuguese - capitao
 Cf French - Capitaine
 'Captain of a ship'

(M.L.Vol.III:212)

2. kappittänmärum marikkunnu vegattil

(PP1:44)

'The Captains are also died in short period'

 intyayiluntāyirunna parankikkappittānmāril palarum atra kūrullavarāyirunnilla.

(KSS: 71)

'Most of the foreign helmsmen were not so much clever'.

 aviţunnu dayittörum kappittānmārum kūţe paţiññāre vali pāppinni vaţţattu neţiyirippinre sthalavum kaţum cuttukalakayum ceytu

(KRBS:5)

'There the helmsmen and others burnt the house and farm of Pappini Vattom Nediyirippu which are located on the western side'.

 mariccupōya ikkappalinre munpilatte kappittān pārttirunna muriyum tannu.

(Var. 122)

'A room of the helmsman who was already dead was given'.

6. See also 1.1.3.26:38

4.3.5. naka

'The pilot or captain of a ship'

(G. 524)

4.3.6. suva

'The captain of a ship'

(G. 1060)

4.4. SHIP BUILDER

Oţāyi, ilantaccar and vākaritāltār are the names used in Malayalam literature for ship builders.

4.4.1. otāyi

1. 'Ship builders'

(G. 182)

ōṭivaḷḷappaṇikkāran

(M.L.Vol.II: 1317)

'Ship builder'

3. ötäyine kuţţipani tutanni

(TP) (G.182)

'(They) invited the ship builder and began to construct (a ship)'.

4.4.2. ilantaccar

'Ship wrights'

(G. 115)

4.4.3 vākaritālttār

'In ship building- a kind of people'.

(G. 928)

4.5. Ship owner

1. 'Ship owner'

(G. 183)

2. õttakkārannu pāttam cērukayilla

(Prov)

'The lease will not go to the ship owner'

4.5.2. valiamutamasthan

vaļļamuļamastha<u>ņr</u>e atuttuninnum raņtu rūpā vāhhi kotuttu

(C. 32)

'(Some one) got rupees two from the ship owner and gave it (some one)'.

4.6. FISHER MAN

arayan, anayi, katakkoti, katalkketti and maraykkan are the names used for fisherman in Malavalam LIterature. In certain, the author pointed out 5 kinds of arayans. They are arayan, valakkaran, muduvan, maraykkan and valanmar. out of the above 65 types of arayans only valakkaran type is eligible for fishing. In olden days, the head of the fishermen would give the permission to buy boat and net only to valakkaran. (G. 36)

4.6.1. arayan

matsyabhandhanam kulavrttiyayittulla oru jati. 1. vālan, mukkuvan, maraykkān, nulayan, sankhan, a mukkuvan, paravan ennu marru vibhagakkar.

(M.L.Vol.I: 672)

'Name of fishing community whose main occupation is fishing'.

- arayan guhananparunnu nittu kaiyenti raghayan 2. (KSP. 293:1) 'Rama greeted Guha, the fisherman'.
- vala cuntalivarra kontu cennā narayarkkiyulakattil 3. min piţittan

(SV.3:15)

'The fishing in this world to the fishermen community is by taking the net and the hook'.

4.6.2. anayi

Sanskrit - anavin anayam kontu upajivikkunnavan, majhya bandhakan. mukkuvan.

(M.L.Vol.II: 113)

' A Fisherman'.

4.6.3. katakkoti

maraykkan, katappurattukaran

(M.L.Vol.III:39)

'Fisherman'.

4.6.4. katalkketti

mukkuvan,

(M.L.Vol.III: 53)

'A fisherman'

4.6.5. maraykkān

maraykkānuņţo mininre nărram?

(PP.199:33)

'Is there any fish smell to fisherman?'

4.7. OTHER PERSONNEL

4.7.1. katalkkaccavatakkaran

dhanamitranenna kaṭalkkaccavaṭakkaraŋ, kappal poliññatināl mṛtippeṭṭu pöyi.

(ASV VI:23)

'The famous sea trader of Danamitran died because of his ship wrecked'.

4.7.2. kevi / kevukaran

'Freigher, Shipper'.

(G.294)

5. DESCRIPTION ABOUT MISCELLANEOUS ITEMS

The miscellaneous items are classified into

- Harbour
- 2. Light-House
- 3. Sea shore
- 4. Waves
- 5. wind
- 6. Mariner's Song
- 7. Boat building trees/ Tar/ Wharf
- 8. Nail / Wooden trough / Compass
- 9. Sailing / Navigation channal
- 10. Custom house / Cargo / Wages for loading boats
- 11. Island / Ship wreck / Naval force / Sea pirate

and

12. Other items. The occurrences of each group are given below:

5.1. Harbour

The following words are used for harbour in Malayalam Literature. alimukham avatutura, katalttura, katavu, cattu, tura, turamukham, pantal / bantar.

5.1.1. alimukham

1. A Sea port, river-harbour

(G. 69)

2. turamukhamāyi upayögikkunna ali

(M.L.Vol.I:888)

'A river-harbour, an estuary, a sea port'

3. vatakarakkõtta pukuntu lantakal katannu kocciyilalimukhamappõl

(PP:24)

"The Europeans crossed by entering into the Vadakarai port. At that period the harbour of Cochin was

 kanyākumāri gökarnnattinniţayil tekku mangalapuratta aliyum vaṭakku putuppaṭṭanatta aliyum kilakku patineṭṭupurattil Vāṭilum paṭiññāru kaṭalkku patineṭṭu alimukhavum inhane etre cēramāmānṭṭile avastha.

(KU:21)

'From kanyakumari to Gokarnam, there is a lagoon at Mangalore in the South, another lagoon at Puthupattanam in the North, there is an entrance at Patinettupuram in the East and in the sea which is on the West Coast there are 18 ports . . . this is the topography of the Chera country'.

 alakil parappērunnoralimukhamokkey onnu kiļumēl marināu vattacculiyum nurayum ponhi.

(VK III:14)

'Water whirls and surf were found in the port of Paraper'.

 alimukhattinkal kaṭalöṭi kappalukalum pattēmārikalum ... kūṭutalāyikkānmānunṭāyirunnu.

(BR: 302)

'Sea going ships and Pattimars were seen in abundent at the port'.

ennāl aļimukhattinkaļ kaţalōţik kappalukaļum . . . kaṭalālikaļute tirakkum

(BR:302)

'But sea-going ships and many navigators were seen in the port'.

kappalumatuppiccutan perinkallalimukhamatil ninnu ...
(TP:20)

'Having constructed a ship (he) stood in the port of
Perinkal'

5.1.2. avatutura

(Variant form - auvātu tura) (āvu - āṭu - tura: pasu āṭu mutalāyavaye kayarrumati ceyyānuḷḷa turamukham)

(M.L. Vol. II:202)

'Name of a place in South Travancore, Harbour for exporting cattle and sheep'.

5.1.3. katalttura

turamukham 'A harbour'

(M.L.Vol,III:54)

5.1.4. katavu

1. tõni katavattu ketti

(TR) (G.193)

'Landed the boat on the beach'

2. kālatte tulannal katavilettām

(PP.99:44)

'If it is paddled in the early morning (one) might have reached the harbour'

3. tõniyil katavu katatti varunnu

(MR) (G.193)

'To ferry over the beach in the boat'

5.1.5. Cattu

- 1. 'A harbour'
- kölikköttu tuzayötu viyanagariyötu 12 cattotitavil

(KU) (G.355)

'From the port of Calicut to the port of Vijayanagar there are 12 ports'.

5.1.6. tura

1. 'A harbour'

(G. 470)

 turayāy naţannu tuņayarru nin padam turayāyariññi tulayunnatokkeyum

(KSP 81:15.16)

- 'I tried several ports atlast I came to the port of your feet and I am paddling'.
- See also 1.1.2.1:21
- See also 1.1.3.25:2
- 5. See also 1.1.3.26:12

5.1.7. turamukham

1. 'Sea - port'

(G. 471)

2. vativil turamukhannal turakunna tirattallum katalilum palam paniturappikkunnu

(KSP 787:21,22)

'Because of the high technology achieved in navigation (they) have constructed bridge over the sea'.

5.1.8. pantal / bantar

'Harbour'

(G. 612)

5.2. LIGHT-HOUSE

tikkuri, dipastambham, and minnāram are the words used for light house. The occurences in Malayalam literature are as follows:

5.2.1. tikkuri

'A light- house'

(G. 461)

5.2.2. dipastambham

ambara dipam dipastambham

(UP:34)

'Light-house'.

5.2.3. minnaram

'A light-house'

(G. 820)

5.3. SEA SHORE

kacham, kaṭalkkara / kaṭalāram / kaṭalpuram, karataṭi/ taṭam/tiram and parakulam, are the words used for sea shore in Malayalam Literature.

5.3.1. kachan

'Shore'

(G. 190)

5.3.2. katalkkara/kataloram/katalpuram

1. 'Sea shore'

(G.192)

kaţalppuţatte maṇalu vāruvān anuvādam cödikkāruntō?

(PP.82:42)

'Is there any permission to take sand from the sea shore'.

5.3.3. kara

1 'Shore'

(G. 207)

5.4.5. tiramāla

'A wave, succession of waves'

(G. 453)

5.4.6. tiravāyi

'Crest of the waves'

(G. 453)

5.4.7. vici

'A wave'

(G. 969)

5.5. WIND

kaccavatakkārru, kaccān, kaṭalkkārru / kaṭakkārru, karamāṭu, cōļakarakkārru, cōļappuram and pēkkārru are the names used for wind,

5.5.1. kaccavatakkārru

pākkappal (kaccavaṭakkappal)

(M.L.Vol.III:20)

'Trade wind'

5.5.2. kaccan

 'The long-shore wind blowing in January and February'.

(G. 189)

2. patinnaran karru, vatakkan karru.

(M.L.Vol.III.21)

'West Wind' 'North Wind'

5.5.3. katalkkärru/katakkärru

'Sea-breeze'

(G.192)

5.5.4. karamatu

kațalil ninnum karayilêkku visunna kārru; vațakkõțtu visunna kārru (koļaccal) 'Sea-wind'

(M.L.Vol.III.267)

5.5.5. colakarakkarru

'North-East Wind'

(G.399)

5.5.6. colappuram

'North-West Wind'

(G.399)

5.5.7. pēkkārru

culalikkārru, kotunkārru 'East Wind, Whirl Wind'.

(G.702)

5.6. MARINER'S SONG

kappalpāṭṭu, cinturāgam, vañcippāṭṭu and vallappāṭṭu are the terms used for mariner's song.

5.6.1. kappalppāttu

gūdhārtthamuļļa orutaram pāṭṭu. tamiļile rīti anusariccu uṇṭākkappeṭṭatu. Samsāratte samudramāyum sarīratte kappalāyum saṅkalpiccu nirmmicciṭṭuḷḷatu-(M.L.Vol.III.210)

'Mariners Song'

5.6.2. cinturāgam

'A song of Roman Cathelic Oarsmen'

(G.363)

5.6.3. vancippattu

'Boat song'

(G.900)

5.6.4. vallappāttu

1. 'Boat song'

(G.924)

 vaňcippāṭṭu; vaḷḷam kaḷikku upayôgikkunna pāṭṭu (natônnata)
 'Boat Song'

(STV:1539)

5.7. BOAT BUILDING TRESS / TAR /WHARF

annili, punna and pulintēkku are the trees used for boat construction. katrānam is the term used for tar which is used for covering the holes in boat, katavāram is the term used for a wharf.

5.7.1. annili

Tamil-ācini, āyini (other forms are agani, ayini, ayani, āñhali, āhhil, āyani, āyini and āņi) vaļļam paņi tuṭahhiyavaykku upayōgikkunna oru vrksam

(M.L.Vol.II:49)

'A kind of tree which is used for boat building' 'the tree Artocarpus hirsuta'.

5.7.2. punna

'A tree used for mast'

(G.677)

5.7.3. pulintékku

'A timber used in ship building'

(G.686)

5.7.4. katranam

'Tar'

(G.201)

5.7.5. katavāram

'Wharf'

(G. 193).

2. katavāranhalil maram kayarruka

(MC) (G.193)

'Wharf'

5.8. NAIL / WOODEN / TROUGH / COMPASS

āṇi and cirrāṇi are the terms used for nail. kaṇōṭam and kammāttu are the terms used for wooden trough. Kampās is used for compass in Malayalam which is an English word.

5.8.1. ani

marakkalattinnu mirumpāņi, Šarīrattinnu rõmanhaļāņi

(PMGM.10)

'Boat needs nails, body needs hair'.

5.8.2. cirrani

'A wooden peg'

(G.365)

5.8.3. kattōtam

vṛkṣatte veṭṭikkuraccatinek koṇṭu tanne koṭṭōṭam, marakkoṭta tōṇiyumulakkayum

(MB1:199)

'Wooden trough, tub, boat and pestle are made out of trees'.

5.8.4. kammattu

Portuguese - Gamote

(G.206)

'Wooden bowl in boats, leakage'.

(G. 206)

5.8.5. kampās

English variant form kõmpas vaṭakku nõkki yantram

(M.L. Vol. III. 229)

'Compass'

5.9. SAILING / NAVIGATION CHANNEL

uruvõttam, katalõttam, karakuttuka, karapitikka and kilävu are the words used for sailing. katalvali and kappalcāl are the words used for navigation channal.

5.9.1 uruvõttam

1. 'Sailing'

(G.140)

2. kappalöttam 'Sailing'

(M.L.Vol.II,811)

5.9.2. katalõttam

'Navigation'

(G.192)

5.9.3. karakuttuka

'To sail or row to the shore'

(G.208)

5.9.4. karapitikka

'To sail close to the shore'

(G.208)

5.9.5. kilavu

To pull a boat over long waves or a long sea'

(G.250)

5.9.6. katalvali

'By sea'

(G.192)

5.9.7. kappalccal

1. 'Track of ship'

(G.204)

kaṭalil kappal sādhāraṇa pōkunna vali
 (M.L.Vol.III:210)

'A navigation channel'.

5.10. CUSTOM HOUSE/CARGO/WAGES FOR LOADING BOATS

alpānti and turaccunkam are the terms used for a custom house. Likewise kajalcarakku and kappalcarakku are used for cargo. kalli and pulakkūli are used for Boat freight.

5.10.1. alpanti

Portuguese - Alfandega. kaṭalccuñkam. kocciyil nilaviliriunnatu.

(M.L.Vol.I:746)

'A custom House'.

5.10.2. turaccuńkam

'Sea - customs'.

(G.471)

5.10.3. katalcarakku

'Goods imported by sea'

(G.192)

5.10.4. kappalcarakku

'Cargo, imported goods'

(G.204)

5.10.5. kalli

Oşattil carakku kayarrunnatinuşla küli (Lakşadipu)

(M.L. Vol.III:526)

'Wages for loading boats'

5.10.6. pulakkūli

'Boat freight'

(G.688)

5.11. ISLAND / SHIP WRECK / NAVAL FORCE/ SEA PIRATE

antarīpam and tīvuidvīpu are used for island. kappal cētam is the word used for ship wreck, kaṭalōṭaṭal and kappalppaṭa are the words used for Naval force. kaṭalkkallan is the word used for Sea pirate.

5.11.1. antarīpam

Sanskrit - dvīpam 'Island'

(G.32)

5.11.2. tivu/dvipu

'An island'

(G.464)

5.11.3. kappal cētam

1. 'Ship wreck'

(G.204)

2. kappal kajalil vaccu takarnnunjākunna nāsam (M.L.Vol.III:210)

'Ship Wreck'

mūnnu vaļtam kappalcēttatil akappettu.
 (SVP - K II:11:25)
 'Three times it was affected in ship Wreck'.

5.11.4. Katalötatal

kațaloțațal porutițina pațayoțahamivițe

(KV-AK:247)

'The sea battlers are sea-battling here'.

5.11.5. kappalppata

1. 'Battle at Sea'

(G.204)

2. nāvika Sainyam

(M.L.Vol.III:210)

'Naval force'

 bhayañkaramāya koţunkāzril södrēyum kappalpaţayum atile bahūbhuripakṣam āļukaļum naśicc.

(KSS:60)

'In the severe storm Sodare and many armymen in the navy died'.

5.11.6. katalkkallan

kaṭalkkaḷḷaṇmāruṭeyum karakkaḷḷanmāruṭeyum kavarccakkāruṭeyum akramannaḷum kavarccakalum oṭṭum asādhāraṇavumallāyirunnu.

(TBSC:80)

'The looting and other anti-social activities of the sea pirates, thieves were very common'.

5.12. OTHER ITEMS

5.12.1. konkanam

'The Western Coast'

(G. 301)

5.12.2. cõttukali

'Boat racing' (Travancore)

(G.753)

5.12.3. bottukili

'A clearance given to a boat, ship; Port clearance'.

(G.753)

7.12.4. vañcippura

'Cabin'

(G.900)

5.12.5. Under ground River

taṭattinro eviteyō oru mūlaykkal uļļa turavilkkūṭi antarvvāhini yāyiṭṭāyirikkān ēļimala yārinōṭu cērunnatu.

(BR:312)

'The under ground river confluences with the Elemalai river near a landing place which is in some corner of the channel'.

KANNADA LITERATURE

DESCRIPTION ABOUT SHIPS AND BOATS

1.1. HADAGU

1. haḍaga haḍagu haḍahu 'A ship'

KKED

pērvadagu
 'A large ship'

Adi 13.60:BP 2.4

padangu
 padagu
 hadagu
 hadega
 'A ship: a large boat'

KKED

1. padangu 'A boat'

Sabda, 48

 māvina maravu vanavemba samudradalliruva haḍaginamte kangoļisuttidditu. madhyada ettaravāda kombeyu haḍagina kambadantidditu. aḍari mēleridda kogileyu nāvikana rītiyalli kangoļisuttidditu.

Sabara.2.44

"The mango tree looked like a ship in the ocean of trees. The tall branches which were standing erect in the middle of the bush looked like a mast of a ship. The cuckoo birds which were resting on the branches looked like the steers men of the ship".

 nugguttiruva hadagugaļu, dodda alegaļa sālugaļu, samudradalli kangoļisuttidduvu

Sabara, 1.34

"Ships and large and continuous batches of waves were seen in the ocean".

- yuddha mahôtsavakkāgi samudra mēlina haḍagugaļa samūhadante baruva ratha samūhava:inū nānā astagalinda nāsapaḍisidanu

Jaga.15.28

- "(He) destroyed many chariots, which were coming like ships on the sea, with the help of different kinds of arms".
- 10. hadagēri samudrayāņamādi

Santi.6.48

"(He) boarded the ship and travelled on the ocean".

11. yānamādida hadagu hodedu hodante

Santi, 1.26

"As though the ship in which one was travelling was wrecked".

 samsāravemba sāgaravannu dāṭisuvudakke banda haḍagante

Santi. 12.41

"(He came like a) ship with which one can cross the ocean of family life".

13. dodda hadagugaļu hoguva samudradalli

Santi.15.93

"In the ocean where big ships float and travel"

14. samudradol bhaitramam nadeyisuvante dusyankitamemba kallaram pordaliyade

D.M.M.6.211

"The pilot of a ship is doing his work very carefully and hence his ship is safe; in the same way one should carefully avoid the company of bad people".

 balbhaitramanēridavanentu samudradoļāļade sukhadim samudrada tadiyaneydugumante

D.M.M.10.74

"A passenger who boarded a strong-built and versatile ship is quite sure of his successful voyage and he crosses the ocean without any danger and reaches the destination happily.

In the same way"

16. bhaitramillade samudra doļpõpenembeparugolillade toreyam päyvenemba paccapasiyegganam põlgum (ā sanyagda darsanavillade nirantaravägi nilluva mukti sampattannu padeyuvenembuvanu...hadagillade samudrada mēle höguttēne.....narugolillade nadiyannu dätuvenembe hasidaddanannu holuttānē)

D.M.M.1.67

"If a persom claims that he can attain 'moksha' without the darshan of the supreme, he is not wiser than a person who claims that he can cross the ocean without a ship; cross the river without a boat".

 āga ātana vistāravāda sāmrājyavemba haḍagigel karņadāranantiruvavanū

Santi.2.66 va

"(Here the country is compared with a ship. The ruler is) like an able steers-man who conducts his big ship carefully".

18. padangēri kadaloļ bengottu

Soma.2.15

"Having embarked in a ship and returned by sea"

19. (mangaļūrnalli) hadaginamēle hõgabēkāgi bandāga avalakki mādi tegedukoņdu hõguttāre

Pravasi.3.403

"(At Mangalore) when it happens that one has to undertake ship travel (he) prepares flat-rice and take them as his food".

20. Ī sthalagaļinda (kanarā) govākke varşa varşa 300 athava 400 hadagugaļu hoguttave. T hadagugaļannu kaphilegaļ kareyuttāre. T hadagugaļannu idī govā pattanavē nirīksisuttā iruttade.

Pravasi.3.489

"From the kanara region each year some 300 or 400 ships go to Goa. These ships are called kaphile. These kaphile ships are anxiously awaited by the whole of Goa city".

21. onörninda (Nonāvar) prativarsa hēralavāgi menasannu hadagugaļalli tumbi kaluhisuttāre

Pravasi.3.519

"From Honnavar, a lot of pepper is loaded in ships and sent (elsewhere) every year".

22. kanarādalli horaduva hadagugaļu samudradalli ondumaili āce langaru hāki iruttave. horaduva samaya
bandāga paṭṭanadallellā tuttūri ūdisuttāre. prayāṇa
māda bēkādavarellā tamma neṇṭariṣṭaroḍagūdi tōne
(dōṇi) mattu "pallange" gaļalli kuļitu hadagige hōguttāre. prayānakke bēkāda tiṇḍi tīrthagaļannu avarē
taruttāre. high hadagu haitalu bandavara munnūru
nānūru dōṇigaļannu nōḍabahudu.... hadagu bhartiyāgi
horajigaļu (cables) nīrige tākuttiruttave.... ellā siddavāyitu endāga hadagu horaduttade ondu
mailiya tanaka hadagige haccikoṇḍē dōṇigaļu

hõguttiruttave. samudra teppagiruvudarinda dõņigaļu astu dūra hõgalu sādhya.

Pravasi.3.533

"In the port of Kanara region, the ships which are to start from a particular port, are anchored one mile away from the port in which they are stationed. When it is time to start the voyage, a type of blow called "tuthu" is blown. Those who have to board the ship reach the ship accompanied by their kiths and kins by means of a boat or by a palanquin. They themselves carry the food, water and other items required during the voyage. In this way 300 to 400 boats by which passengers come near the ship can be seen. When the ship is fully loaded and everything is alright, the ship moves. Those boats also accompany the ship upto a distance of one mile. Since the ocean is calm, it is possible for the boats to travel such a long distance".

 honnāvara rāja pēgan.....ēleņţu haḍagugaļannu iţţukoŋḍiddāne

Pravasi.4.17

"The king of Honnavar is Pegan. He possesses some 7 or 8 ships".

24. mangaļūrninda aivattu aruvattu haḍagugaļaṣṭu akki ravāneyāguttade

Pravasi, 4.17

"From Mangalore some 50 or 60 loads of ships of rice are exported".

25. varşamprati illige (mangaļūrige) 200 hadagugaļu baruttave.

Pravasi.4.17

"Each year some 200 ships come here (to Mangalore)".

 kananörnalli änegaļu samudradinda hadagondannu bhūmige eļedutandudannu nānu kannāre kandiddēne Pravasi 4 18 "I saw with my own eyes that elephants were pulling a ship from the ocean and laying it on the shore of Cannanore".

 illi (Konarā) bahāļa bhāri haḍagugaļannu upayōgisuttāre. inthahaḍagugaļalli ondu taraha haḍagige "juyinkni" ennuttāre (Jung emba hesarina doḍḍa hadagu).

Pravasi. 4.24.

"In the Kanara region very big ships are being used. Of these ships a typical ship is by name juyinge. This is called as jung also. These ships are very big in size".

 ondu kalleseva dūradalli namma hadagina balagade hadagigintalū doddadāgi kāņuttidda eradu timingilagaļannu kandevu.

Pravasi.4.60

"We saw two whales very near to our ship and these whales were larger than ships".

 göveyinda banda sastrasahita kāvalu hadagu bahala svārasyakaravāda suddiyondannu tilisitu.

Pravasi.4.63

"The galley-ship which came well prepared from Goa passed a quite interesting news to us".

30. illi (göve) kāvalu kāyuva haḍagugaļannu eṣṭu bēkādarū kattuttāre bahaļa sundaravāda haḍagugaļannū dōṇigaļannū kaṭṭuttidda.

Pravasi, 4.65 - 66

"At Goa, as many Galley boats as required are built....
Moreover, very beautiful ships and boats are also constructed here".

 ādare bhūmiyakadeyinda balavāda gāli bīsi namma hadagu gaņtege hattu maili vēgadalli sāguvante mādiddarinda ā vēgadalli namma kadege baruvudu ā

saņņa nāvegaļige sādhyavāgalilla. ādare ī nāvegaļa jotege innū nālku nāvegaļu sērikoņḍāga namage bahala bhayāvayitu.

Pravasi. 4.68

"But because of the strong gale from the land, our ship travelled at a rate of 10 miles an hour and hence those small boats were unable to follow us at that high speed. However, when four more boats accompanied the already sieging eleven boats our condition became more terrible".

32. göre bandarina baļi samudrada nīru heccu āļavillavāddarinda doḍḍa haḍagugaļu adannu pravēsisalu āgalilla.

Pravasi.4.68

"Near the port of Gore, the ocean is very shallow and hence big ships cannot enter into the port".

- idī haḍagu apāyakke oļagāguva sambhavavittu
 Pravasi.4.193
 "There was a situation where in the whole of the boat may perish".
- 34. āru gaņiegaļigondusala badalāguva samudrada ēriļita gaļige takkante haḍagugaļannu naḍesutta
 Pravasi.4.193
 "The ships were steered taking into consideration the tide and ebb of the ocean which gets changed every
- 35. adhyaksa kelavara samēta hadagige bandu......
 Pravasi 4.193
 "The President came to the ship being accompanied by a few persons".
- hadagininda ilisida nanna sāmānugaļannu mariyukka idda maneyalliyē hākide.

Pravasi, 4,207

six hours".

"I kept those articles which were unloaded from the ship in the house of Mariyukka".

37. saṇṇa puṭṭa haḍagugaļu sēri hattu haḍagugaļu iddavu Prāvasi. 4.211 "There were some ten ships including some small boats".

38. ulida aidū, yuddhada hadagugalu
Pravasi.4.211
"The remaining five were war ships (galley)".

 hadagu ēruvamunna nāyakana rāyabhārige nanna paricaya mādikoţţiddaru.
 Pravasi. 4.211

"Before boarding the boat, I was introduced to the secretary of Nayaka".

- 40. belagge namage malabār kaḍalugallara-avaru parōs (paroes) endu kareyuva-nālku haḍagugalu kāṇisiduvu. Pravasi.4.211 "In the morning we saw, four ships of the Malabar pirates which they call as Paroes".
- istallade hindina varşa kaluhisida menasina hadagugalu mulugi hodavu emba kāranadinda Pravasi. 4.216
 "Not only this, the loads of pepper which were sent lost year were drowned".
- 42. nānu hadaginalli mangaļūrige horate.

 Pravasi. 4.259
 "I started to Mangalore in a ship".
- ā kattaleyalli haḍagu nelakke baḍidu magucikonḍu nasavaguva sambhavavuntayitu niru hadaginolakke

nuggitu. müru bāri daḍakke baḍiyitu. nāvikaru dikkeţtu digbhrāntarāgibiṭṭaru.

Pravasi. 4.259

"In that darkness unfortunately our ship dashed against the land and started drowning. Water very forcibly entered into the ship. The ship dashed against the coast thrice. The pilots were much afraid and became helpless".

44. ellā haḍagugaļū oṭṭagi sērikoṇḍu daksina dikkige eeḍagadege sikkuva tīradalle hōdavu

Pravasi.4.260

"All the ships followed one another and formed a flock. They started their course from the south towards the left coast".

45. ivugaļalli ondara samīpakke namma haḍagu hōyitu. anēka jana haḍagininda iļidu alli sikkuva parivālagaļannu hiḍidukonḍu bandaru...... āmēle ārātri hottige mangaļūru talupidevu.

Pravasi, 4.269

"Our ships came near one of these islands. Many of the passengers alighted the ship, went there and returned with parrots which were available there freely in plenty......

Later, we reached Mangalore port in the night".

 aidu dinagaļa prayāņamādi hadagu taņda mangaļūru talupitu. allinda akki tumbida hadagondu nammodane gövākke horaţitu.

Pravasi. 4.284

- "After the journey of five days, the ship flock reached Mangalore. From there a ship loaded with rice started along with us to Goa".
- 47. disembar 12neya tārīju (1624) vyāpārada haḍaginalli bāsrākke (Basra) horațe adare gāļi bisade haḍagu samudradalli nintalliyē nintu biṭṭitu. intha vēļe

paduvāda santa antōniya (St. Antony of Padua) vigrahavannu kambakke kaṭṭi gāḍi bīsuvante māduvavaregū kaṭṭanu biccadiruvudu ondu paddatiyāgittu.

Pravasi. 4. 285

"I started to Basra on the 12th of December (1624) in a merchant ship. But because of bad wind, the ship did not move and was standing in its place. At such juncture, it is in practice to fix the statue of st. Antony of paduva at the top of the mast. The statue will be kept there till the wind blows. According to this belief, the statue was fixed on the top of the mast".

48. honnavarinda horaţu bhaţkalge bandevu. dāriyalli 200 hadagugalannu kandevu. ivugalalli 16 dodda hadagugalalli silonninda benda dālanni tumbiddaru. Kelavu yuddhada hadagugalidduvu. işţu biţţarē ulida hadagugalalli govage bekāta akki muntāda davasa dānyagalu tumbiddaru.

Prayasi. 4.330

"We started from Honnavar and reached Bhatkal. On the route we saw some 200 ships. Of these 200 ships, 16 ships were loaded with Cinnamon, brought from Ceylon. There were a few galley ships. The remaining ships were loaded with rice and other grains needed for Goa".

 gövä seridamele hadaginindu ilidu nanna sämänugalannu ballön (Ballon) endu kareyalpaduva döniyalli häkikondu sunkada katteya balike hödenu. Pravasi, 7.115

"After reaching Goa, I unloaded my goods from the ship and loaded them in a boat called Ballon. I moved the boat towards the customs office".

 belagge hadagu gövä talpitu, illi ilidu bröcge höguva hadagu ideye endu vicāriside. obba hinduvina hadagondannu pattehaccide.

Pravasi. 7.328

"The ship reached Goa in the morning. Having alighted here, I enquired whether there was a ship to Broach and later I got a ship owned by a Hindu, which goes to Broach".

 sūryōdayada munnarē nānu bādigege padeda hadagu horaţitu. dru ganţeya yanadalli broc talupitu. hadugu ilidu doniyamele urannu pravesisalu eradu dina bekayitu.

Pravasi, 7,329

"Even before the dawn, the ship, which I hired, started. After the travel of six hours it reached Broach. It took two days to alight the ship and enter into the city through a boat".

52. alli (kanarādalli) 20 vyāpārada hadagugaļu bēre bēre dēsagaļige hogalu siddhavāguttidduvu. nānu āga rahīma embavanige sēride hadagige hode.

Pravasi, 7.430

"In the Kanara region 20 business ships were getting prepared for going to different places. I, at that time, went towards the ship owned by Rahim".

53. Thadagina ardha bhagavannu obba parsyan vartaka tanna svantakke bādigege padedidda. bhartiyāda hadaginalli hākalu innu nālku donigaļastu sāmānugaļu hadagina yajamānanodane jagala ārambhisidanu.

Pravasi. 7.430

"A half portion of this ship was hired by a Persian business man to load his goods. There were goods in four more boats to be loaded in the ship".

 kaleda varşa hige heccu hore hāki nālku haḍagugaļu mulugi khōgidduvu

Pravasi. 7.430

"Last year four ships got drowned because of overload".

55. pērvadagu
"A large ship"

C.Bp.2-4., KKED

pērvade vārāsiyolirda baitradoļagandettam teraldirdavol.

Ap.13.60, KKED

"Like a ship which was in the ocean. . . . ".

57. hadagada mēle tageda upavāsa ēkādasige sandāya (Prov.) "The fast the observance of which was taken on a ship losts only upto 'Ekadasi'.

58. hadaga muridu höyitu madadi bittu hödalu

(Prov.)

"The ship wrecked and the wife expired".

59. hadagu hadapalla madadi rāņiyalla

(Prov.)

"Boat is not a trivial thing wife is not a queen". (here the comparison of boat which is ascribed as trivial with wife who is described as queen is not clear).

1.2. NĀVE

- 1. nave "a boat" KKED, Ap. 5.60
- 2. nau "a boat" KKED, Smd. 67 Mdb. Ms.
- 3. navu "a boat" KKED, B. 3.66 B. 4.30

 sreşţavada strī vatnagaļannu tumbikondu horaţa nāvege sadrusavāgi munnuggi

Santi. 2.83 va.

"(He) went along with the boat which started moving with beautiful and chaste women on board".

 ā rucira vananidhiyoļiţţa vasumatiyemba caru naveya kuvakambamenteseva mēruvinguttaraseyoļu kappulivante lēsagi kisi kadida

Siddha, 1.14

"The land mass of the world appeared like a boat, the oceans of the world looked like a river and the Himalayan mountain appeared like the mast of the boat. Thus, the boat (the land mass) with its mast (the Himalayas) was floating on the river (the oceans)".

 gangeyanutaledanāvedeyolirdapanō maru dingaļanu mudida nellirdapanō holeva phani

3iddha. 2.42

"Lord Shiva was wearing the Ganges on his head . . . "

7. nav

Sabda, 85

"A boat"

- 8. gaganā bhōgadoloppi barva . . . nāveye gettu

 "Having won the boat".

 Adi. 7.110
- 9. näva nav nävu näve nauke

KKED

"A boat, a ship, a vessel".

 iyaru (mangaļūrinavaru) nāvegaļannu illiye kaṭṭuttāre. ivu nānā taraha ive. yāvuvendare sambūhki, kapal, paravo, almādiya mattu cathuri. (Sambūkhi - arabhī bhāseya sanbūk mattu sanbuk, hadagu ninta kadeyinda tīrakkū tīradinda hadagu nintedegū hōgalu upayōgisuttidha saņņa dōņi jambokō, sambukhi, sambukh, jabūkkōs, jambūkh ivu sambūkhige bēre pravāsigaļu upayōgisiruva hesarugaļu).

Pravasi. 4.20

"The people at Mangalore built boats for their use at Mangalore itself. They construct different varieties of boats. They are called sambukhi, kapal, paravo, almādiya and cathuri. (The word Sambukhi may be from Arabic language. The Arabic forms are Sanbūk and Sanbuk. This type of boat is used as ferry boats for loading and unloading a ship of its passengers as well as cargoes. jambukō, sambukhi, sambukh, jabukhōs, jambūkh, sambūkhige are the different names used by foreign travellers to refer to these type of boats).

 samudradalli hõguttiruväga mūru asāstra sajjita nāvegaļu nammedege baruttiddudannu kaņdevu. avu malabār kadalugaļļara nāvegaļāgidduvu.

Pravàsi. 4.65.

"While we were voyaging on the ocean, we saw three well armed boats approching us. Those were the boats of Malabar pirates".

 illi höguttiruvāga samudrada kadeyinda ombattu nāvegaļu bēre bēreyāgi namma kadege baruttiruvudu kanditu.

Pravasi, 4.66

"When we were travelling here, we saw nine boats were coming from different corners of the ocean and they were approching us".

- 13. ondu raksanā nauke nammannu samīpisitu
 "A galley boat approached us".

 Pravasi. ^.67
- sanje malvam emballige bandevu. illi nammannu malabari kadalagallara i navegalu suttugattiddavu.

Pravasi, 4.68

"In the evening we came near Malvam. Here eleven boats of the Malabar pirates sieged us".

 ādare kyālikaţţige hōguva naukātanda kūdale horaduttade endu tilidāga karnāţi rāniyannu kānuva prayatna kaibittu naukā tandadalli kyālikattige horate.

"But, when I understood that the flock of boats which go to Calicut are starting immediately, I abandoned my plan to meet the Queen of Karnataka and boarded one of the boats and set off to Calicut".

1.3. TEPPA

1. teppa

Smd. 48

"A float".

2. talpa, talpe

KKED

"A raft, a float"

3. teppa harudare döni

(Prov.)

"If a boat (teppa) breaks up it becomes a doni"

4. tepa haridare muppinavane sayuvano

(Prov.)

"If a teppa breaks up will only old persons die?"

5. oludeppa

KKED Abh. p. 13.79

Sabara. 5.14 va.

"A float"

6. teppõtsava

KKED

"A float festival"

7. teppam

Sabda, 56.6 p.60

"A float"

8. ājyayutamappuvam meldu toreyol popavange teppavanikkidantikkida (nadivalli teli hoguttiruvavanige teppavannu kotta hage)

DMM, 1,148

"Just as giving a float to a person who is washed away in a river".

1.4. HARUGŌL

Hinduism ".

- endodambadisi harigola hattire bandu sandanisi 1. nudidanā somanāthagandu mattondu daivamuntembudam bagedodam mattondu samayamuntendam nāmnudi dödam enna satiyalla danyakkelasi nindodam. Hari. 309 "Having accepted to this, (he) came near the boat (harugol) and told that if he believed in any god other than Lord Shiva, believed in any religion other than
- 2. nīvellarāyasam golvudenagadu bēda dēvonalavim meccalintu malpem noda ondu harigola nani tadeyolikkuvem mundeyā kadege bharadim daliyikkuvem naduve bārade nilalu bēdikombem balika poda vigatyadbhutam mādi torpem balika.

"You all need not be worried. We will see that the God appreciates me. I will launch a boat (harugol) in

Hari. 309

a small river, cross it and go to the other side of the river. Then I will perform miracles ".

3. ninnavaragalalla danyaraginitanittodam nudivalli satyavallade bēre nudidodam nadevalli nā durācāradim nadedodam manassinolnīnalladanvavam nene dodam kanasinol ninalladanyavam kandodam idu divyamendenute harigola nëridaru.

Hari. 309

"I shall not give anything to those who are not your devotees. If I give anything to others, if I speak anything other than truth, if I behave in an impolite manner, if I think any one other than you, if I dream of any other than you, let it become an ordeal. so saying (they) boarded the boat (harugol).

4. harugalu kada

KKED, Ganga, Nighantu

"A ferry for a boat"

5. köl

KKED

"A float, a raft"

6. parugōl
kōl
poragōl
haragal
haragōl
harugāl
harugāl

KKED.

"A round basket boat lined with leather; a boat made of wicker work covered with hides".

7. parugōloļ kuļļirdam

KKED, Smd. 163

"We were sitting in a boat"

8. parugõl kõl "a boat" parugol

Sabara, 1.43

9. parugol

KKED, Abh, p. 9.81

"A boat"

 parugöloļ vārdhiya tadigarade barangeydu popane begganna pol

(harigōlinalli samudravannu rabhasadinda dāṭi daḍa sēruvenemba daḍḍana hāge yinavākya samudravannu dāṭivemba namaginta gaṭṭigaru bēreyāriddāre?)

DMM. 1.52

"If a person claims that he can cross the ocean with the help of a boat, he is none but a fool. In the same way, if we claim that we can understand the Jina Dharma fully we are also fools".

- 11. parugolaneridavanantadaka mullavanum (harigolannu hattidava rente adakavagiruvavennu)

 DMM. 5.99

 "Just like a person who, having boarded a boat, sits patiently".
- 12. naqugaqalol parugolam naqeyisiuambiganante (ägamavannu tilidu samudra madhyadalli harigolannu naqesuva ambigana hage durmārgavemba alegaļannu mosagolisi)

DMM. 6.209

"Just like a boat-man who paddles his boat in the middle of the sea".

13. parugola pannir kolindam doniyorkole lesembante (harigolina hanneradu kolugaliginta doniya ondu kole vasiyembante manusya lokadalli aguva muru savira laksa kala janmagalalli labhisuva sukhavellavu suvargadalli iruva vahanadevana ondu galigeya sukhavannu holadu)

DMM. 7.136

"The solitary paddle of a boat of Doni type is better than a band of 12 paddles of the boat of harugol type".

14. harugölane jogayisi kölutali toreya däntuvaru Prabulinga. 3.56 "By making use of harugöl boat (they)cross the river".

15. harugõl

"A boat"

Basavapurana. 32.33

 kāntiyemba huttannu hākuttā kappumodavemba harigolannēri ākāsavemba samudradalli prayāņa balasuttiruvante kangesedalu

Sabara. 1.44

"It appeared as though they were voyaging in the ocean of space with lustre as her paddle, and black clouds as here harogol boat".

17. kesarige haragolu beke?

(Prov.)

"A small and shallow pond does not require a boat to cross it"

18. haragölilladavanu hadagu hattidante

KKED, Anbuhavamritam. 2.15

"Just like a person who does not have a harugol boarded a hadagu".

19. harugal hatti nadiyannu dati

Vrishabendravijayam, 13.45

"Having boarded a harugol boat (he)crossed the river".

20. harugalikkuvanīru

K.S. 3.45

"In the water where harugol boat is floating".

21. harugaleruvata

Hari. 46

"A passenger on board a harugol boat".

22. harigõlambiga

Pur. 86.1

"The steersman of a harugol boat".

23. beteharigolu -

Reeve. Ka-Eng. Dict.

"A small boat for taking the tappal across the rivers".

24. nadiyannu harigolinalli däţidevu. kaddigaļa mele ettina carma hāsi dodda buṭtiyante mādidavugaļē i harigolugaļu. kudure gādigaļannu mattu ettina gādigaļannu eradu harigolugaļa madhye gādiya īcu mattu nogagaļige bigidu dāṭosittare. kuduregaļu avē ijikondu barabēku; hindininda obba cāvaṭiyinda bārisidare innobba harigolinalli kuļitu avugaļa lagamu hididiruttāne. hērettugaļannu nadiya samīpadalli hore ilisi nadiyalli ījikondu hogalu aṭtutāre. pratiharigolinalli nālku janariruttāre. ivaru nālku mūlegaļalli nintu huṭtu hakuttāre. yārādarū obba samangāi huṭtu hākade hōdarē harigolu mūrunālku sala girrendu tirugi pravāhada seletakke sikki apāyakki dāgabahudu.

Pravasi, 5.385

"we crossed the river with the help of harugol boat. Harugoal boats are built by connecting a few wooden planks and then covering the bottom with the skin of ox. Horse carts and bullock-carts are being transported from one bank of the river to the other by way of tying the yoke harugol boat. The horses swim to the other bank. In each harugol boat there are four persons on board and these four persons sit on four corners of the harugol and row their paddles. If one of the persons does not row the paddle coherently, the boat does not move but starts rotating and falls a prey to the current of the water in the river.

 idannu harigölugaļalli dāţalu ardha dinave āguttadeyante. nāvu bandāga kadavinalli harigölāgali janarāgali iralilla.

Pravasi. 5.386

"It takes half a day to cross this by means of a harugol boat, it is said. When we came there, there were neither boats nor any people".

26. işţu mādida mele harigolu samēta bara bēkendu tanna kadeyavarannu kūgi kareda. bēkendalē ī harigolugaļannu āce dadadalli bacciţţiruttāre. ī dadada kade nadi dāţalu jana baruttārendare ākade harigolugaļannu kaluhisibiţţu pukkaţe nadi dāţisuvudannu tappisikoļļuttāre. Īga duddu kaige bandamēle ākade janaru harigolugaļannu taleya mēla hottu dadakke bandu nīrinalli hāki nadi dāţi īcege bandaru.

Pravasi. 5. 386

"After doing all these things he ordered his people to come along with the harugol boat. Willingly they have kept the harugol boat on the other bank of the river. If some passengers come to cross the river, they keep the harugol boat in the other bank of the river and escape the work of rowing the boat. But now after getting the money, he shouted his people on the other bank to bring the harugol and now they are rowing the harugol boat towards us".

1.5. DŌNI

 samudradalli muluguttiddavanu doniyannu hidida ritiyalli.

Sabara.5.15

"Just like a person who was downing in the ocean got hold of a boat".

 söpāna paddhatigaloļ giridurgārāhanamum dröņiyānapātrā digaloļ jaladurgōttaranamuman upadēsangeydu.

Adi. 6.62

"(He) preached (him) the techniques of climbing the mountains and rowing boats in rivers and oceans".

 I sariyanı bisilölayya nınodedegedu susuvayasamam bidu saku navi pradesadolu kereyagi toreyagi döneyagi vapi kupangalagi

S.C.4.23

"In this place where there are a plenty of water storage places like lakes, rivers, etc . . . ".

4. droņi

KEED

"A boat"

 harigölina hanneradu kölugaliginta döniya ondu köle väsiyembante (parugöla pannirkölindam döniyörkele iesembante)

DMM.7.136

"A single paddle of the doni boat is better than a dozen paddles of harugol boat".

6. drŏņa

KEED

"A wooden tub saped like a boat"

7. doni

KEED.

"A boat"

8. döniyalli nadiyannu däţi

DMM.2.34

"Having crossed the river by means of a doni boat".

 kallina döniyannu hattikondu pūrna pravāhavirva toreyalli höguvenembuvanū krūranādantha āpatannu hididukondu möksakke höguvenennuvavanū sudha daddare

DMM.7.37

"A person who claims to cross the flooded river with a doni boat made of stone and a person who claims to attain salvation by means of his help are all none but fools".

10. dőni

Manga. Nighantu

"A boat"

11. dŏņi

Jaimini Bharata Bib. Carna.

"A boat"

12. doni

Amarakosa, KKED

"A boat"

13. dōni

Dept. of Pub. Inst., KKED

"A boat"

14. döni tatbhava of droni

Smd. 345, KKED Cpr. 8.43 KKED

"A boat"

15. jaladroni

Hla., KKED

"A boat"

 droni nīrina mēle cillare sāmānugaļannu vaiva marada doņi

Si. 84 KKED

"A wooden boat used for carrying small articles across rivers".

17. pradēsadoļu kereyāgi toreyāgi doņeyāgi vāsi kūpangaļāgi i sanabhisavadagrajalake sandippevemda.

Siddha. 4.23.

"In this place where there are a plenty of water storage places like lakes, rivers, etc....."

18. Agiruva tanna edeya döniyantiruva gayada

Jaga. 16.21

"The wound which is shaped like a boat".

19. dōņi

Sabda, 345

"A boat"

ondu halli talupidevu. alli aneka dönigalannu (junks)
mele elediddaru. (jank endare ondu ritiya sthalada
döni. i hesaru maleya desada bhaseyinda bandira
bahudendu cini hadagugalige i padavannu upayogi suttiruvudu itticege endu gottaguttade)

Pravasi. 3. 181

"We reached a village. There, many boats (jungs) have been beached. (Jungs are a type of local boats. The name jung might have been drawn from Malaysian language. cini boats are only recently called as jungs)".

21. prayāṇa māḍutta dāriyalli sikkida nadigaļannu dönigaļalli dātuttā nāvu

Pravasi. 3.182

"We continued our journey on road and crossed the rivers using doni boats then and there".

22. nāvu illi (Kanarādalli) kelavu dinagaļu mātra iddu siyampane endu kareyalpaduva hadagu ēri bēre vartakarodagūdi silonige hodevu. (Siyampane embudu ondu tara sanņa doņi. ciyampāna, campana, campana, campane, sampan ivu adē doņige heļiruva bēre bēre hesarugalu).

Prasavi. 4.22

"We stayed in Kanara region for only a few days. Later, we boarded a boat called Syampane and started to Ceylon along with other traders. (Syampane is a type of small boat. The following are the variant forms used to refer to these boats. Ciyampana, campāna, campana, sampan and sāmpan).

23. illi (göveyalli) nävu ondu märu agala mattu nälku märu uddavuļļa döņigaļannu upayōgisi minu hidiyuvudannu nödidevu.....ādare döņi talekeļagāguva sambhavavē illa. ēkendare döņiya ondu pakkadalli eradu tuņdu maragaļannu horacācuvante ī maragaļa tuņdugaļa keļage döņiya innondu pakkadalli cappatteyāgiruva dodda maravondannu bigidiruttāre. ī mara nīrina mēliddu döņi tale keļagagadante tadeyuttade ondu pakkada marada tuņdugaļu innondu pakkada cappatte mara ivu döņi samatölavāgi sāguvante māduttave.

Pravasi, 4.66

"At Goa we saw boats of one yard breadth and four yard length are being used of for fishing purposes....there will never turn up-side-down. This is because on one of the sides of the boat two wooden planks are fixed. These wooden planks float on the water and prevent the boat from turning up-side-down. The wooden planks on one side and the square wooden plank on the other side balance the boat so fantastically that the boat never capsizes".

 āga balloni endu kareyalpaduva doņigaļu nammannu samīpisiduvu. balloni doņiyannu onde maradinda koredu mādiddāre.

(Konkani bhaseya baliyām emba mātininda ballōni emba mātu bandira bahudu endu The)

Pravasi. 4.73

"At that time boats by name Balloni approached us. These Balloni boats are dug out boats (The term balloni might have been drawn from the Konkani language word baliyam which means a boat).

- 25. namma dönigalannu tirakke kaluhisi kottevu Pravasi. 4.193
 - "We sent our boats to the shore".
- 26. nadiyannu döniyalli däţidare dögana sikkuttade.

Paradēsiyarige paravānāgi (licence) ideyā embudannu noduttāre.

Pravasi. 4.194

"If we cross the river by means of a boat we can reach Dogana. Here the passengers belonging the other countries are searched for their licences".

27. sumāru 200 sanna puṭṭa haḍagugaļu dōṇigaļu idduvu (gōveyalli)

Pravasi. 4.202

"At Goa, there were some two hundred boats and ships of various dimensions".

 Konege matu mugisi punah döniyalli honnavarge hindirugida.

Pravasi, 4.215

"At lost we completed our discussion and then we returned to Honnavar by means of a boat".

29. avaniddalige mancive emba döniyalli höda. manciveyendare malabār tiradalli heccu upayogadalliruva dodda sāmānina döni. 'manca' emba padadinda ī pada bandideyendū īcege mancī emba pada heccu balakeyalli ide endū gottaguttāde.

Pravasi, 4,215

"We went to his place making use of a boat called 'mancive'. Mancives are a type of big boats much prevalent in Malabar coastal area. These boats are used to transport cargoes. This word might have been drawn from 'manca'. Now-a-days the word manci is much in use".

 ātana joteyalli nāvellā mancive emba doņiyalli kuļitu horaţevu.

Pravasi. 4.216

"With him we all started our journey in the mancive boat".

 nadiyamēle pravāhakke edurāgi doņi nadeyisi mūru haridarigaļastu dūra prayāņamādi garsopa (gērusappa) emballige hogi alli bidaramādidevu.

Pravasi. 4.216

"We travelled a distance of 3 haridaris (8 miles) in a boat against the water current of the river and then reached Garsopa and settled there".

 idu kiridăgiddaru dăţuvudakke doni bekāyitu. idannu doniyalli daţi nalku gudisalugalidda ondu halliyalli tangidevu.

Pravasi, 4,225

"Though this river was small, it required a boat to cross it. We crossed this river by means of a boat and reached a small village having four huts".

 idda ondē ondu doņiyalli namma sāmānugaļannu sāgisalu hattu gaņţe āyitu.

Pravasi, 4,255

"It took ten hours to transport our goods with the help of the only one boat that was available"

34. Tadiya uttara dadadalli guluvan emba halli. Tadiya madhye ondu kuduru (bahusah hatti kudur) ide. allige döniyalli högi allinda äce dadakke nirinalli nadedukondu hödevu.

Pravasi, 4,257

"On the north bank of this river there is a village called Gulvan. In the middle of this river there is a Kudur. We came there by means of a boat and from there we came to the other bank on foot".

 mēlina barsalornalli ūţa visrānti mugisikondu doniyondaralli kuļitu daksina dikşina nadiya mēle horate.

Pravasi. 4.258

"Having taken food and rest for a while at Barsalore, we engaged a boat and sailed towards the south".

 mangaļūrinda horaţu nadiyannu döniyalli dāţi allige (ullālakke) höde.

Pravasi. 4.263

"We started from Mangalore, crossed the river in a doni and reached Ullal".

 janarannu ondu kadeyinda innondu kadege sägisalu yävägalü conigaliruvudarinda nadiyannu däţi baralu hottăgalilla.

Pravasi 4.263

"As there was a round-the-clock service of ferry boats, it was not a time consuming task for me to cross the river and reach the other bank".

 uttarada kadeyinda mangaļūrige haridubaruva dodda nadiya mēle (gurupura nadi) rāņiya āsthānaviruva sthalakke hoguvudendu nirdharisi ondu doniyannu gottumādide.

Pravasi, 3.263

"Having decided to visit the palace of the Queen which is on the banks of the big river Gurupa, flowing from the northern region towards Mangalore, I arranged a boat for my journey on the river".

 māraneya dina beļagge hottu huţţuvudakkinta modale döniyalli kuţite. döniyannu nadesalu mūru janariddaru. munde ibbaru mattu hinde obba huţţu hākuttiddaru. agalavagidda huţţu, cukkāniyu agittu.

Pravasi, 4,263-4

"The next day even before dawn, I boarded the boat. There were three crews on board to paddle the boat. Two persons rowed the boat from the fore part of the boat and the third from the stern. The paddle, whose blade was broad acted as a rudder also".

40. i nadiya (Great northern river) eda dadada mele saraku tumbida dönigalavarinda venkatappa nayak-

kana kadeya adhikārigaļu sunka vasūļu māduva sthalavide.

Pravasi. 4.264

"The customs office of Venkatappa Nayaka from where duties on cargoes are collected is situated on the left side of the great Northern river. The officials collect duty from the owners of the boats which carry goods".

41. nirigedurāgi döņi sāgisi, balagade dadadallidda sāle emba sthala muţtidevu.

Pravasi, 4.264

"We rowed the boat against the water current and reached sale".

42. sāleyalli ūļa mugisikoņdu munde dōņi nadesi ullāļa rāņiya nādannu pravēsisidevu . . illi nadi astu ālavāgilla. Ī kāraņa nammadu saņņadōņiyādarū adu āgāgge nelakke tāguttitu.

Pravasi, 4,264

"Having taken our food at Sale we went ahead with out boat and reached the region which was under the control of the Queen and Ullal Here the river was not so deep. Because of this shallow river, although our boat was a small one, our boat quite often grounded".

 nānu nanna sāmānu saranjāmugaļa samēta döņiyalli hōgi mancuvā (machave) endu kareyalpaduva ondu yuddha naukeyalli jāga mādikonde.

Pravasi. 7.115

"I started with my bag and baggage on a boat and reached a machuva boat and arranged for my journey".

44. nāvu massūla (māsūla) emba doniyalli tirakke hodevu. baggisida halagegaļannu tengina nārininda hoļidu dammar (dāmaru) ninda sandugaļannu mucci entha alegaļannū tadedukkoļļuvante i donigaļannu māḍiruttāre (massūla endare māsūla, mīlnu hidiyuva dōṇi, matsya (Skt.) = macchi (Hi)

"We came to the coast making use of a masula boat. The wooden planks which are bent are tied together making use of coconut rope. The gap between two planks are filled with damar. These masula boats are capable of withstanding strong wind and tidal forces. (This word must have been derived from the Sanskrit word matsya which means fish. That is, the boat used for fishing purpose)".

 ondu 'kayāno' dōṇiyalli kuļitu tumba tāpatrayadinda namma haḍagu sērikoṇḍe.

Pravasi. 7.151 "Using a canoe boat, I reached the ship with much difficulty".

46. nāvu namma samudrayāņavannu munduvarisi malabār tiravannu hādu kanāţik (Karnātaka) tiradalliruva baṭṭikalai (Bhatkal) samīpadalliruva onör (Honnavar) muṭṭidevu idakke munce eraḍu malabār kaḍalugal-laru nammannu kolle hoḍeyalu sancunadesiddaru. ādare adu sāgade tamma dönigalannu jörāgi sāgisi namma kaige sikkade ödihodaru.

Pravasi. 7, 152

"I continued my voyage. After crossing the Malabar coast, I reached the Kamataka region. There I went to Honnavar which was near Bhatkal, we came across the Malabar pirates who tried to loot our ship. but it was not possible for them and after their failure they rushed away on their boats and escapped from us".

47. mūvattāru jana nadesida dōdiyalli kuļitu bhāri vādhyadodane bahu vaibhavadinda samudrada mele sāgida (Kanarīs rāja kumāranalli obba)

"One of the princes of Karnataka was travelling on the sea in a boat rowed by 36 paddlers. There was a

band of musicians playing many kinds of instruments. The prince was travelling on the boat pompously".

48. māraneya dina 16 huṭṭugaļa dōṇiyalli nāvu gōvākke horatevu.

Pravasi, 7, 194

"The next day we proceeded to Goa in a boat rowed by 16 paddlers".

49. hanneradu ganţe samayakke malabar kadalugallaru namma mele biddaru. avara doni nammadakkinta hattarăşţu doddadagittu. doni nadesuvavarallade bere aravattu janariddaru.

Pravasi. 7. 196

"At about twelve O' clock, the Malabar pirates started their attack on us. Their boats were ten times bigger than ours. In addition to the steersmen, there were 60 other persons on board the boat".

50. modalu döniyalli caul nadiya mēle olabhāgakke hogi

. . . .

Pravasi, 7, 338

"First we visited the inlands by travelling on the river Caul, making use of a boat".

51. döniyava ellarannü ilisidanu

Pravasi, 7, 338

"The steersmen of the boat vacated the passenger from the boat".

52. göveyinda döniyalli bikholange hindirugide.

Pravasi. 7. 345

"From Goa, I returned to Bikhola in a boat".

1.6. ODAM, ETC.,

 baŋdu toreyatadiyolodamam nadeyisuva mastyagandhiyam kandemmani toreyam payisembudum säsirvareridodalladi odam nadeyadembudum binpa mappe merisendodante geyvennendodemerisi nadeyisuvalli divyakanneyanalkartunodi.

P.B. 1.68 va.

"Having came (he) met a lady by name Matsyagandhi who rowed boats and asked her whether she will take him to the other side of the river in their boat. She replied sharply that her boat will not move unless some thousand passengers board the boat. I understood her boastful nature and agreed to her words. Then she took me into the boat and helped me to cross the river".

2. ambi "a boat"

KKED

3. oda "a baot"

KKED

4. kõla "a raft, a float"

KKED

5. tari "a boat, a ship"

KKED

6. udupa plava "a float; a raft"

Hla., KKED

7. udupa, plava, kola "a float; a raft"

Nr., KKED

 pattēmāri "a pattimār; a large native sailing vessel with one mast".

B. 3.116, KKED

9.	pōta "a boat; a ship"	
10	pota vānij "a sea-trader"	KKED
10.	pour variej a sea-srader	KKED
11.	pravahana "a ship; a boat"	
	põta	
	bhaitra	
	hadagu "	
	a ship; a boat"	0.4.400
		(Mr. 407)
12.	udupa, nirannde hayva teppa "a float; a raft	,11
12.		(Mr. 416)
13.	plavake "a float; a raft"	(VVED)
	to a sala	(KKED)
14.	bagala "An Arab boat of a particular description"	
	"An Arab toat of a particular description	(B,3.116)
15	plava	(2.5.220)
15.	"A float; a raft"	
	A libat, a fait	(Mr. 416)
16.	jāna pātra	
	"A boat; a ship"	
		(KKED)
17.	subhaitra (haḍagu)	
	"A ship"	
		(Nn.119)
18.	sāngada	
	sangade "A platform with railings placed on	two boats,
	used as ferries".	(KKED)
- 0	***	(WYED)
19.	sanka "A bridge or a float of rude and hasty const.	nuction [#]
	"A Dridge of a most of fuel and hasty const.	(KKED)
		(121200)
20	manji	
ZU.	"A large boat with one mast used in coastal	trade"
	12 vm 04 prom	(KKED)

21. mañjini

"A boat; a ship"

(KKED)

22. bēda

vēda "A boat"

(KKED)

23. pravāhana

"A ship; a boat"

(KKED)

24. plaväke

"A float; a raft"

KKED

25. pindi

"A raft-like arrangement for crossing a river in floods".

26. paru

KKED

"A boat made of wicker work covered with hides; a round basket-boat lined with leather".

27. jangāl

"A platform with railings placed on two boats used as ferries".

28. kõl kõla "A float"

KKED

29. haru

"A round basket boat lined with leather; a boat made of wicker work covered with hides".

30. kālagadoļ kūvakambhadantire nindam

DMM.13.160

"In the war (he was) standing as a mast in a boat"

1.7. FERRY BOAT IN RAMAYANA

māḍuvavanāgu" endu hēlidanu

 ā mātu gaļannu kēļi srī rāmanāmavannē dhyānisuttidda ā bharatanu avanannu kuritu"elai! bēdaroḍayanāda guhane namagē rātriyellavū sukhavāgi kaļeyitu. namage nānā vidhavāgi pūjeyannu māḍide. antaha nīnu īga ninna bandhugaļāda nisādaroḍaguḍi anēka dōņigaļannu tandu nānu

sainva sametanāgi īgangā nadiyannu dātuvante

Val. 1.7.

"Having listened to those words, Bharata, after praying to Rama said to Guha 'Oh, Guha! We spent the night happily. You treated us very pleasantly. My army men and myself have to cross the Ganges river. Now you order your fellow people to fetch their boats and arrange for our travel across this great Ganges river".

 i prakāravāgi hēļida bharatana ānjā vacanavannu kēļida ā

guhanutanna pattanakke bandu tannavarellarannīt nōdi "elai

bandhugaļirā! jāgrateyāgi ēļiri. nimage sarva kāladalliyū mangalavāgali. bharatakumāranu sakalavāda

tanna sēneyoḍagūḍi gangā nadhiyannu dāṭalu apēkṣisuttāne.

adudarinda sainya sametanāda ātanannīgangā nadiyinda

dāţinsoṇa. doṇigaļannu tegedukoṇḍu baruvavarāgiri" endanu.

Val. 8.10

"Having heard these words of Bharata, Guha came to his town and made the following announcement to his people. "Oh, my friends! Listen carefully! Good wishes to you. Now Bharata wants to cross the Ganges river along with all of his army men. So, let us help him as well as his army men to cross the river. You all bring your boats".

3. ābaļika odeyanānatiyante aidunūru donigalannānisāderu

rēvinolakke tegedukondu bandaru. allade dodda gantegalannu dharisiruvurū sarvõttamavaduvīt nälku mülegalü

nālku bāgilugaļū uļļavū maneyantiruvuvū anukūla vāvuvinindodagūdiduvū svastikagalendu prasidda vaduvū ada

matte kela dönigalannu tegedukondu bandaru.

Val. 10.11. "According to their chief's order, the fishermen brought their boats which were more than 500 in number. Those boats were brought into the jetty. In addition to these boats, a few luxurious boats with various decorations were also brought. These boats had big bells. They had four entrances on all the four sides and they were as big as houses. Those boats were popularly known as Swastik boats".

ābalika kirāta rājanāda guhanu svastikavendu 4. tiliyatakkadū biligambaligalinda hodisiruvudu bahalavada āhādavannuntumā duva gantegala dhuvaniyulludu mankalakaravadudu ada naveyannu tegedukondu bandanu.

Val. 11.12.

"After that, the king of those hunters brought a boat which was finely decorated. The boat was lined with woolen carpet. There were many bells which produced pleasant sound. the boat had a majestic and auspicious look".

 āga mahā pratāpa śāligaļāda bharatasatrughnaribbarū ā

ทีลงeyanneridaru. a mele kausalya sumitreyarนี innน itararนี

rāja bhāryeyarū purōhitarū vasistādigurugaļū innū itara

vipröttamarlı rathan, gaja, turaga, sakata padätigaļlı avavarige vyögyavāda nāvegaļannēridavarādaru

Val. 12.13

"Then Bharata and Statrughna, the two known for their valour, boarded that boat. Later, Kausalya and Sumitra and others and other royal ladies, priests, Vasista and other teachers, other important personalities, and the four army men boarded the boats which were decorated according to their status".

 āga vināsa sthahagaļannu prakāsagoļļuvante māduvavarū rēvugaļalli tiruguttiruvavarū tamma tamma sādhanagaļannu sajjegolisuttiruvavarū āda mānavara dhvaniyu svargalōkada vareeū vvāpisitu.

Val. 13.15

"At that time, the sound produced by various peoples such as those who hold the lights, those who wonder about in the port, those who keep their bags and baggages in the port was very loud and it reached even the Heaven".

 alladeyā samayadalli dhvajagaļindoḍagūḍida nāvegaļamēle bestara sahāyadinda anēkaru hattidavarādaru.

Val. 15.16

"Moreover, at that time, many people boarded the boats which were decorated with flags, with the help of those fishermen".

 āga jaļļeya prayāņa yõgyavada väyuvu bīsidudarinda nāvikarinda nadeyisadēyē ānāvegaļellavu bēgane munde sāgidavu.

Val. 16.17

"At that time, the wind favourable for the movement of the boats blew and consequently the boats moved without being rowed by the paddlers. The boats sailed fast by the favourable wind force".

 ā nāvegaļalli kelavu striyarinda tumbiddavu. kelavu kuduregalinda pūrņavādduvu, innū kelavu bahu belobāļuva

ettugaļe modalāduvugaļinda nibidi tavādduvu.

Val. 17.18

"Of those boats, a few were loaded fully with women; a few other boats were loaded completely with horses; yet other boats were loaded with such animals as ox, etc., which were of high quality".

 intaha nāvegaļella bahuvēgavāgi ācina dadakke hāduvu.

āgalēnāvikarellarū nāvegaļalliddavarellarannū tīradalli-

ļisidaru. hīge janaranniļisi hindiruge baruva bestarindoḍagū ḍida nāvegaļa āgamanavu bahu citrakara vāgidduvu.

Val. 18.20

"All these boats sailed very fast towards the other bank of the river. After that, the steersmen helped the persons on board the boat to alight from the boat and reach the bank. In this way the boats, after helping those people to cross the river, were returning merrily and their return was very beautiful to look at".

11. T prakāravāgi ā bharatana sēneyu ā bestarinda dāṭisalpaṭṭu

maitravemba subha muhürtadalli prayagavanavannu kuritu

taralitu. mahātmanāda bharatanā samayadalli bharatvãia

muniyannu nodalosuga rutuvikkugalodane horatu nana vidhagalāda vruksagalinda sobhisuttiruva ātana āśramavannu

kandavanādanu.

Val. 20.23

"In this way, the army of Bharata crossed the Ganges river with the help of those fishermen and started towards wanted to meet Bharatvaj Rishi and hence he want to his ashrama which was surrounded by many kinds of trees and plants".

2. DESCRIPTION ABOUT THE PARTS OF BOATS AND SHIPS

2.1. MAST

1. kūve kū kīīva

kūpa

kūpaka

KKED

"The mast of a vessel; a tree or post to which a boat is moored".

paṭastambha 2. "A mast"

KKED

kambu

"A mast"

KKED

kupastambha " 4. "The mast of a vessel"

KKED

5. kūvakamba

kūkamba

"The mast of a vessel"

KKED

kūvara, kūbara

"The pole of a carriage"

KKED

kūpaka 7.

"The mast of a vessel"

KKED

8. hadagina kambha

"A ship's mast"

Reeve. Dict.

9. patastambha

"A mast"

KKED, B.117 My.

10. kūpastambha (kűvakambha)

Sabda, 342

"The mast of a vessel"

11. kalagadol kuvakambha dantire nindam (buddhikettu mătillade maiyariyade kălagada kanadalli kuvakambha (hadagina madhyadalliruva dodda kambha) dante niścalanagi

nintubittanu)

DMM, 13,160

"(He) having become senseless, having lost the speech. stood still in the war field wihout any motion just like the mast in a ship".

12. kūpangalāgi

"Having become the mast"

S.C. 4.23

13. gunavruksaka

"The mast of a vessel"

S.C.4.23

 ārucira vananidhiyoļitta vasumatiyemba cāru nāveya kūvakambamenteseva mēruvinguttarāseyoļu kappulivante lēsāki kīsi kadida.

Siddha. 1.14

"The Himalayas appeared like the mast of the beautiful boat Vasumati (the word)".

15. ī saziyanī bisiloļayyanīnode degedu susuvāyāsamam bidu sāku nāvīpra dēsadoļu kereyāgi toreyāgi doņeyagi vāpi kūpangaļāgi.
S.C. 4.23

"In this place where there are a plenty of water storage places like lakes, rivers, etc....".

16. māvinamaravu vanavemba samudradalliruva hadaginante kangoļisuttidditu madhyada ettaravāda kombeyu hadagina kambadandidditu.

Sabara, 2.45

"The mango tree appeared like a ship in the ocean of forest. The trunk of the tree standing in the middle looked like the mast of a ship".

17. T birugāļiya jotege mūru siņilugaļu namma hadagannu appalisiduvu. modala siņilu hadagina munkūvege hodeyitu. ā siņila baņitakke kūve udduddavāgi sīlihovitu.

Pravasi, 5.369

"In addition to the stormy wind, three lightnings attacked our ship. The first lightning fell on the foremast of our ship. Because of the lightning the mast was shattered into pieces".

18. mukhya kuveya bali iddevu

Pravasi. 5.269

"(We) were at the vicinity of the main mast".

2.2. RUDDER

cukkaņa
 cukkāņi
 "The helm of a ship"

KKED

2. kēnipātaka
"The helm; the rudder"

KKED

3. karņa "Rudder"

Std. Dict.

2.3. ANCHOR

1. nangal langar "An anchor"

KKED

 nangal sthāpya "An anchor"

KKED, Mr. 407

3. langar nangal langaru "An anchor"

KKED, Mr.Si.85 M.

 illi (honnāvaralli) langarugaļu, hadagina adi kaţţegaļu mattu hadagina itara bhāgagaļu nodabahudu.

Pravasi. 4.44

"At Honnavar anchors, the hulls of ships, and other parts of ships may be seen".

 alli nāvu langaru biţţevu. eradu kāvalu hadagugalu nammannu kānalu bandavu.

Pravasi. 4.63

"We anchored there. Two galleys came to see us".

 kannanūrinalli langaru hāki donigaļannu kareyalu gundu hārisidevu. namma karege ogottu beļaku harida mūru gantegalamēle nālku donigaļu banduvu.

Pravasi. 4.72

"We anchored at Cannanore and in order to call the boats from the shore, we fired. Three hours later, four boats came towards us".

 svalpa dūra hōgi honnāvara bande emba bande mareyalli langaru hākidevu.

Pravasi. 4.212

"After going a small distance, we anchored near a rock known as Honnavar rock".

2.4. SAIL

paṭa
 "A sail"

KKED

2. paţa
hāhe
"A sail"

KKED, Mr. 408 KKED, B.3.117

3. hāy hāyi "A sail"

KKED

4. tere
"A ship's sail"

Reeve Dict.

5. nāvikara krupeyinda bigiyāgi biccalu āgadidda hāyigaļa haggavannu īga kattarisi"

Pravasi, 4,260

"We cut the shreds of the sails which were very strong with the help of the sailors".

2.5. PADDLE

puţţu huţţu

"A paddle"

KKED

dārahasta
 "A paddle"

-

Smd.210

3. uttu
huttu
"A paddle"

KKED

4. kāntiyemba huṭṭannu hākuttā kappumōḍavemba harigōlannēri

ākāśavemba samudradalli prayāņa beļesuttiruvante kangesedalu.

Sabra, 1,44

"She appeared as though she were paddling with the oars of lustre on the boat of clouds in the ocean of space".

 naukādandu naudandu

"An oar"

KKED

6. tudupu
"An oar"

KKED

7. kṣēpaṇi
"An oar"

KKED

8. maragey
"A paddle"

KKED, Sm. 38 KKED, Abh.p.13.66

of S	South India	231
	nīrūţţu "A paddle" "da kōlu "A waterman's pole"	KKED, V.37.36 Reeve Dict.
	jalle gaņe muṭṭu daṇḍa huṭṭugōlu "A paddle"	Sid Dict.
2.6.	MISCELLANEOUS	
1.	kūpaka "A tree or post to which a boat is moore	ed". .KED
2.	pulinga "The hold of a ship" manga, nāveya basuru "The hull"	Ha. K KED
3.	yānamukha "The forepart of a carriage"	KKED
4.	manga "The head of a ship; the sides of a ship	KKED
5.	gōre gōri "A shovel for cleaning the boat"	KKED
6.	balinka "A part of a ship"	
	V hare or a much	WWED

KKED

7. pulinga

"The hold of a ship"

KKED

8. balinga
"A part of a ship"

Mr. 408.KKED

9. potte
"The cavity of body of a ship"

KKED

hadaginalli yajamānarugaļu hudugaru yuvakaru ivarellā hadagina attakke bandu......

Pravasi, 4,192

"The bosses, boys, youths and all others in the ship came to the deck of the ship".

 adu hadagina ondu koneyinda innondu koneyavarege sāgi ibbarannu badiyitu.

Pravasi, 5,369

"It (lightning) attacked from one end of the ship to the other. The stem to stem attack on the ship resulted in the assault on two persons".

 hāyigaļa hagga "The shreds".

Pravasi, 4,260

3. DESCRIPTION ABOUT THE NAVIGATION PERSONNEL

3.1. PILOT

1. karņadhāra

" A sailor: a mariner"

KKED

2. odagara

" A ferryman"

Reeve Dict.

3. nāvikanu
"A boatman"

Basa, Satsthala vacana, 3.6

4. nāvādiga

" A boatman: a helms man"

B.5, KKED B.164.227

 niryāmaka niyāmaka niryāma karņadāra

"A helms man" (tudiya kuvakambhadavanu)

Mr. 407, KKED

6. põtavāha

"A boatman: a sailor: a steersman"

KKED

7. navarohanu hodanu
The boatman went"

Kaivalya

8. karnadāra nāvika

"The helms man"

Gangadara Madi., KKED

9. niryāma

"A sailor: a pilot: a helms man"

KKED

10. tandal

"The master of a boat"

KKED

11. kūvakambiga kūkumhakāra

"A naval pilot"

KKED

12. malima

"A ship's officer, master"

KKED

13. tāraka

Kavy, 111.3, KKED, B.84, KKED

"One who causes or enables to pass or crossover; a pilot".

14. Kūvakambiga kūkumbakāra niryāma karņadhāra "A pilot"

Hla., KKED

15. mālīma

"A ship's officer"

B.5.164, KKED Mhr. 4, KKED

dőniyéruvavan

"A boatman"

Manga, Nighantu

17. āgā ātana vistāravāda sāmrājyavemba haḍagige Karnadāranantiruvavan

Santi.2.66 va.

"At that time he who rules the country prosperously as a pilot steers his ship carefully.....".

 adari mēlērida kogileyu nāvikana rītiyalli kangoļisuttidditu.

Sabara, 2.45

"The cuckoo bird which had climbed on the (tree) appeared like a sailor".

 döni nadesuvavarannu läskar endū döniya raksane mäduva sipäyigalannu luskär endü kareyuttäre. döniya yajamänanannu näkhunda endū döni nadesuvavara yajamänanannu tindäl (Tindal-Tandal = tandada näyaka) endū kareyuttäre.

Pravasi. 7.174-5

Luskar, the owner of the boats as Nakuda, and the chief of the boatman as Tindal".

20. dőni sagisuvavarannu laskar endu kareyuttáre. ivarannu navikarendu kareyalu nacikeyaguttade.

Pravasi, 7,151

"The boatsmen are called as Laskar. But they are useless boatsmen and they are unfit to be called as boatsmen".

21. naukādhipati

"Pilot"

Pravasi, 7,386

22. Pradhāna daņḍanāyaka "Chief of the pilots"

Pravasi, 7, 406

23. hadagina pradhāna daņdanāyaka

Pravasi, 7,418

"Chief Pilot"

24. hadagu padeya dandanayaka

Pravasi, 7,411

"Commander"

25. nakkuda "Super cargo owner"

Pravasi. 7.431

3.2. PASSENGER / BOAT-MAN

1. navika

KKED

"A passenger on board ship; a navigator: a sailor: the steersman: a pilot".

nāvārōha

KKED

"A passenger on board ship; a sailor".

3. Kabbeya

KKED

4. Kabbaliga Kabbiniga "A boatman"

KKED

5. põtavāha

"A boatman: a sailor: a steersman

KKED

6. potavānii

"A sea-trader"

KKED

7. nīr nīrkuţika

"A boatman"

KKED

8. tore

"A boat-man"

Reeve.Dict.

9. navika

droniyeruvava

"A passenger on board a boat"

Mr.247., KKED

10. hadaginallidda ippattu mūvattu nāvikaru

Pravasi, 4,191

"Some twenty to thirty sailors who were in the ship".

11. nāvikara krupeyinda bigiyāgi biccalu āgadidda hayigala haggavannu Iga Kattarisiddarinda hayigalu teredukonduvu, samudra santavagittu, navikaru samudrakke dumuki tolusaktiyinda hadagannu tiradinda samudrakke eledaru, ulida ratriyannu aliyeyalli kaledevu alli langaru hakikondu bere bere hadagugalalliddavarige horage baralu Kūguttiddevu. Pravasi, 4.26

"With the help of the sailors we cut the shreds that were very strong and let the sails loose. The sea also became calm. The sailors fell into the ocean and pulled the ship from the shore to the ocean using their physical strength. We spent the rest of the night in the

mouth of the river. We anchored our ship there and shouted the other persons in different ships to come out".

 i ūrinalli (Kyālikaṭṭinalli) Kēvala ondu divasa iddu haḍagina nāvikarodane angaḍi mumgaṭṭugalannū rājara aramaneyannū nōdikondu bande.

Pravasi. 4.284

"I stayed in Calicut for only one day. I visited the bazaar and palace of the King along with the sailors".

 ivaru (sūdraru) bēsāya, mīnugārike, dōninadesuvudu, andeļegaļannu horuvudu muntāda kīļtarada kasabugaļannu māduttāre.

Pravasi. 7.116

"These Sudras take to the low class professions such as agriculture, fishing, boating, carrying the palanquins and so on".

3.3. SAILOR

 ambiga ambigāra

KKED

"A sailor: a man who rows a boat: a boat-man".

 āru terua nodambiga adu mīri barutalide ambiga yārindalāgadu ambiga adani varisi dāţiso ambiga.

Pur. 86.3

"You boat-man, please see the river. The river is in floods. It is impossible for any one to cross it. You please help me to cross the river".

 holeya bhāra nodambiga adake selevu ghanavayya ambiga suliyoļu muļugide ambiga enna seledukondoyoo nīnambiga. "Oh! You boat-man, you please see the floods in the river. The water current is high and I am caught in a whirl. You please pull me out and save me you boat-man".

 ambiga nāninna nambida jagadambāramaņa ninna nambide tumbida harigolambiga ada kombattu chadranoḍambiga sambhrama dinda nīnambiga ada rimbu noḍi naḍesambiga.

Pur. 86.1

"OH! boatman, I believe in you. I believe you, the husband of the creator of this world. The boat is full of load and it has got nine umbrellas, you see the boatman. You please paddle the boat with pleasure and delight".

 utsāhadinda kūdi tērannu nadesu ennuvanu ambiga.

Parishat Bharata. 12,94

"He who says to run the chariot with enthusiasm is the boats-man".

- ninage ambigaravanalli višēsa ruņa sambandha vāyitu.
 Parishat Bharata. 13.26
 "You are specially indebted to the boats-man".
- Satvapathadoļambiga para bhakti huţţanu hāki ambiga mukti dāyaka namma purandara viţhalana muktimanţapakkoyyō ambiga.

Pur. 86.5

"Oh! You boatman, please take me to the feet of Purandara Vittal paddling with oar of devotion".

8. hottu höyitu nödambiga alli mattaiva rervaru ambiga

otti nadesu nõdambiga enna satya lõkake oyyo ambiga.

Pur.86.4

"The time is gone see, you, the boatman. Five others will board the boat. Please row the boat fast and take me to the world of Truth".

9. nīrkuṭika "A boat-man"

Sabdasara, 11.5

10. ambiganu nadesida oda

Basavapur. 20.22

"The boat that was rowed by the boatman".

11. hole dāṭidamēle ambigara miņda

Prov.

"The sailor becomes foe after crossing the river".

12. donidatida mele ambigaranu minda

Prov.

"The sailor becomes a foe after the boat has crossed the river".

4. DESCRIPTION ABOUT SEA, OCEAN AND OTHER ITEMS

1. ale

"A wave: a billow"

KKED

2. Kaḍal Kadalu

"The sea: an ocean"

KKED

kūpāra
 "The ocean"

KKED

4. jalaprānta

"A bank: a shore"

KKED

KKED

5.	taranga	
	"A wave"	KKED
6.	tere	ILLED
	"A wave: a billow"	
7.		KKED
7.	telu	
	"A small wave"	
_		KKED
8.	tōyanidhi "The ocean"	
	The ocean	KKED
9.	daṇḍi	111000
	toți	
	dande "A bank: a shore"	
	A bank: a shore	KKED
10.	nīradhi	
	"The ocean"	
11	pāthōdhi	KKED
	pāthōnidhi	
	"The ocean"	
12		KKED
12.	pokkuļi porkuļi	
	"A wave"	
	-	KKED
13.	pratīra "A shore: a bank"	
	A Shore, a bank	KKED
14.	bandaru	
	"A port: a port-town, a landing place on a coast	or
	in an inlet".	KKED
15.	bambal tere	VVED
	"A multitude of waves"	

of South India		241
	bharata "The flux of ocean; high tide; flow and ebb". makarākara	KKED
	makarālaya "The ocean"	KKED
	mahāvārdhi "The ocean" mahāshaya	KKED
	"The ocean" mahōdadhi	KKED
21.	"The great ocean: a great sea" yadahpati "The ocean: the sea"	KKED
22.	rathākara "The ocean"	KKED
23 .	rodhas "A bank: a dam: a shore"	KKED
24.	lavaṇōda lavaṇōdaka lavaṇōdadhi "The ocean"	KKED
25.	lahari lahaņi "A large wave: a billow"	

KKED

KKED

MTH -16

26. vätye
"A whirl wind: a gale"

DMM.1,44

27	varinatha	
~	"The ocean"	
	The count	KKED
28.	vāridhi	
	vārinidhi	
	vārudhi	
	vārdhi	
	"The ocean"	
		KKED
29.	vārivridhi	
	"Flood-tide"	
2.0		KKED
30.	vici	
	"A wave: a small wave"	
	. 71 •	KKED
31.	saranidhi	
	"The ocean"	משש
32	samudra	KKED
J2.	"The ocean: the sea: a a collection of water:	
	and docum, the sou, a a concention of water.	KKED
33.	samudra taṭa	
	samudrānta	
	"The sea-shore"	
		KKED
34.	saripati	
	saripat	
	"The ocean"	
	-	KKED
35.	sarodhi	
	"The ocean"	
26		KKED
30.	sagara "The ocean"	
	The ocean	Total Pro-
		KKED
37	7. Kappe tāni kaṇḍu tiḷiyada samudravannu haḷiyuttade.	
٠,,	ādare adarinda samudrakke nastawe? apamānave?	
	Da	DF 1 44

"A frog, which had not seen the ocean, criticises the ocean. Is it a loss to the ocean? Is it a shame on the part of the ocean?".

38. samudradante gambhiranum

DMM-1.218

"(He) is as majestic as the ocean".

39. samudrada ghōśadantha dhvaniyalli hīgendanu
DMM-2.72
"He told thus in the roaring voice as of a ocean".

40. vicāramādi nodidare nadigaļa sihinīru samudrada nīra samparkada deseyinda tanna ruciyannu kaļedu kondu uppāguva hāge, yārādarū keṭṭavara sahavāsadinda kedadē iruvarē?

DMM.2.77

"The sweet taste of the water in the rivers is spoiled by the ocean when they confluence in it; similarly, is there any one who is not spoiled by the company of bad people"?.

41. teregalinda samudravu kangolisitu

DMM.3.206

"The ocean was glittering with the waves".

- 42. I pattanavannu samudradante ugravāgi muttige hāki
 DMM. 4.247
 "Having sieged this town just like a ocean which very vehemently sieges the earth".
- 43. tore kere bāvigaļa nīrellā kālakramadalli hõgi samudradalli sēruvante alpapuņayarādavara vastugaļū hõgi mahāpuņyasāligaļalli nelasuvuvu.

DMM.6.128

"Just as the water in the river, well, etc. go and mingle with the ocean in due time, the wealth of the alpa punyas goes to the mahapunyas.

44. samudrada nirannu nadigaļu dharisa balluve? toregaļa nirannu keregaļu dharisalu sādhyave? DMM.6.134

"Can the rivers contain all the water in the ocean?"

45. candrodaya kalada samudrada hage ubbiralu vatsalya ratnakaranu

DMM.8.184

"Just as the ocean which has high tide at the time of moon rise".

alanghya guṇaśāliyāda sūrya apara samudrakke ilidanu

DMM.10.269

"The sun, which does not allow any one to come near, went down towards the opposite side".

 vengi mandalavē modalāda samudrasuttugaţţiruva bhūmandalavellavannū svikarisi.

DMM.11.97

"Having won the Vengi region and other regions that were engulfed by the ocean".

 karadedakke havaļada pardakkegaļa dhvanigaļu bhorgareva sabdavu samudrada gambhīra sabdavannu hoļuttiralu.

DMM.13.19

"The sounds produced were like those produced by the roaring ocean".

49. adhika balavantanāda naļanu sāvirāru kulaparvatagaļannu sērici nirmisida sētuveyindalū ati ramanīyavāda dakṣiṇa samudrada tīra pradēsvannu.

Parishat Bharata. 4.19.

"The coastal region of the southern ocean offered a beautiful look. The bridge constructed by Nala, who is known for his valour, connecting thousands of coastal region".

mountains added to the beauty of the coastal region".

 Kadalpatta nīruļļadīl āda samudravannu guņārnavanāda arjunanu truptiyinda nodidanu.

Parishat Bharata. 4.26

"Arjuna, known for his good qualities, sighted at the ocean whose waters were turbid".

- avana satru sēnā samudravannu nānu jayisi
 Parishat Bharata. 8.97
 "I conquered his enimies who were as large as ocean".
- 52. ā samudra tīrada vanagaļu kempa cigurannu Jaga. 4.14
 "The tender leaves of the plants in the forests of the
- malegālada modavu samudradallidda nīrannu tandu suridu hoyitu.

Jaga. 4.68 "The Winter clouds fetched the water from the ocean and poured it and then disappeared".

54. uņtāguva gāļiyinda samudrada alegaļa samuhavannu heccisutta.

Jaga. 8.80

"The wind thus set in motion, increased the number of waves in the ocean".

55. samudrada alegalante visalavada samudrada ubbaravilitadante kūdiruva yasovantannu

Santi. 1.84

"He was a stout built man and he was full of stamina like the ocean".

56. nadi pravāhavu samavasaraņavemba samudravannu kuritu hõguvante.

Santi. 1.84

 uttamavāda ratņa samūhavu samudradalliruttadeyē vinaha uļida nīrinalli iruttadeye.

Santi, 2.6

"High quality precious stones are found only in the oceans and not in any other water sources".

58. samudrada ubbaradante.

Santi, 2, 22, va.

"Just like the high tide of the ocean".

 lavana samudrakkū, āladalli kālōdaka sāgarakkū, nīrina tiļivinalli ksīrasamudrakkū

Santi.3.5

"In taste (he) is like the salty water of the ocean: in depth (he) is like the ocean of Kalodaka and in clarity (he) is like the sea of milk".

- 60. Itanodane kudikondu ninu samudra tiradalli vihārisutta dvipāntaragaļinda tanda lavanga puspagala mēlu

 Santi. 5.235

 "You go about in this coastal region along with him
 - "You go about in this coastal region along with him and have a look at the goods brought from many countries".
- 61. hādiya daņivannārisikoļļalu samudra tīrada elā hāgu lavali baļligaļa vanadalli visramisidaļu

Santi. 8.55

"In order to refresh herself during the journey, she took rest in the forest found on the coastal area where several plants and creepers were seen".

- 62. samudra madhyadalli bāļemīnu kaigettuka ballude?
 Santi.8.97
 - "Can a fish in the ocean be caught with bare hand?"
- havala, sankha, hāgū teregala sālugaļannojagonda samudravannū sundaravāda simhāsanavannū ambike kanasinalli kandaļu

Santi. 9. 206

"Pearl, conch and the ocean which is full of glittering waves, and beautiful throne were seen by the Goddess in her dream".

 nīralli aidaneya samudrada nīrē pavitravādudu endu koņļu dēvēndranu ā samudrada nīrannu taralu vidhisidanu

Snati. 10.38

"Indra thought that the water in the fifth ocean is pure and sacred and hence he ordered it to be fetched".

65. samudragaļu allakallolavāduvu

Santi.10.124

"The oceans became turbulent".

66. (Sainyavannu) nadesikondu hõgi samudratatadalli cakravartiyu bidubittanu.

Santi 10.136

"The Emperor marched along the coast with his army and camped near the ocean".

67. samudradalli nanna kaige serida vastugaļu eşţidduvõ astellavannū

Santi.10.177

"All the things that I collected from the ocean".

68. cakravarti dakşina samudradatta digvijayakke horațanu

Santi. 10.185

"The Emperor started towards the southern ocean for war".

69. Kelavu diga payaṇamāḍi mahāsāgarada baļige cakrive mahā sainyavu banditu

Santi. 11.1.va.

"After the travel of a few days, the voluminous army of Cakri came near the ocean".

 āga avarannu tanna ājnege oļapadisi kāvēri nadiyannu dāti munde baralāgi

Santi.11.3 va.

"At that time (he) put them under his control and crossed the river cauvery and proceeded further".

71. carkravartiyu vaijayantiyemba samudra dvārakke abhimukhavāgi bidubiṭṭu ōlagavannu nadesiruvāga Santi.11.6 va.

"When the Emperor was camping in front of the sea port called vaijayanti and was holding his court

72. śāntīsvaranu tanna vijaya sainyavannu samudra dvārakke idirāgi bīdubidisi

Santi. 11.19 va.

"Santiswara camped in front of the sea-port along with his army men".

73. eradu kaitumba srēstavāda sāgarada ratnagaļannu tumbikondu

Santi, 11.7

"Having taken hand-fulls of very fine and high quality stones that were taken from the sea.....".

sēnapatiyu pūrva mlēccha khandavannu geddu vasapadisikondubandu

Santi.11.71 va.

"The General of the army returned after winning and taking over the foreign western countries".

 lauhityavemba mahānadiyannu cakravartiyu dāţi baralāgi, adara tiradallidda rājaru ānegaļannu kaţţida kālāguru vrukkṣagaļoḍane bhūmige bāgidaru

Santi.11.78

"When the Emperor crossed the big river Lauhitya, the kings and chieftains who were waiting on the banks of the river bowed to the trees as a mark of respect".

76. samudrada gambhīrateyannu adaviya ondu sanna halla apēksisuvante

V.C.1.34

"Just like a small pond in a forest which desires to possess the magnanimity of the big ocean".

5. DESCRIPTION ABOUT MISCELLANEOUS **ITEMS**

1. ane padegala sētuveyinda nadiyannu dati utkala rājarinda mārga daršanavannu padeyuttā kalinga dēsadatta nadedanu

Santi. 10.161 va.

"He started towards the Kalinga country after crossing the river by making use of the elephants as bridge and after getting guidance from the king of Utkal".

nīrininda payanakke tadeyuntumādida ā eradu 2. toregalannu kandu cakravartiya sthapatiyu setuvevannu nirmisidanu, nadeyuva giridurgadante gajasainya sahitavāgi cakravartiyu sētu mārgadinda dātindanu.

Santi.11.50 va.

"The architect of the Emperor saw those two rivers which hindered the onward journey and constructed two bridges. The Emperor crossed the river through the bridge followed by his army which included very big elephants, the movement of which appeared as though mountains were walking".

sānka 3. sānku

KKED

"A bridge or float of rude and hasty construction"

4. sankrāma sankrama "A bridge or float of rude and hasty constuction".

 sanka muridallē snāna grahacāra hididalle dāna

Prov.

"Bath at the time of the wreck of the bridge and charity at the time of ill-fate".

6. bandar

bandaru

H.Mhr. KKED B.3.116, KKED

"A port: a port town: a landing place on a coast or in an inlet".

7. bandaru

KKED

"Name of Masulipatnam"

8. Kõņe

"Tatbhava of kona point of the compass"

KKED

9. yõntu

"A point of the compass"

KKED

10. digmüle

" A corner or point of the compass"

My., KKED

11. digvadhu

"A point of the compass considered as a woman"

12. tenku

tekku

tēku

tēlu

"To be a float"

KKED

13. telisu

"To make float"

KKED

14. tarisu tariyisu

KKED

"To pass across or over: to cross over: to float: to swim".

15. kade kede gede "To sink"

KKED

16. haru paru "Floating"

KKED

17. addu ajju eddu "To dip: to immerse"

KKED

18. ardu ardu "To plunge: to dive"

KKED

19. angar "To sink in water: to be immersed: to dive".

KKED

 ādarū konege sthaladurga haladurgagaļeradū kaibiṭṭudarinda īṭanu saranāga bēkāyitu
 Santi. 5.140
"Yet, at last, he had to surrender since the forts became useless".

 Kuļļirda lāla, gaula, cēļa, kērala, pāndya, pallava magadha, mālava, vanga, kalinga, bangāla, telunga, gurjara, hammīranēpālar modelāda.
 Giri, 3,105 va.

"The Kings of Lala, Gaula, Cola, Kerala, Pandya,

Pallava, Magadha, Malava, Vanga, Kalinga, Bengal, Telugu and Gujarat regions who were seated".

samudra vānni
 "Submarine fire"

KKED

23. vāri vriddhi
"Flood tide"

KKED

24. vatye
"A whirlwind: a gale"

KKED

25. yādar

"Any animal living in water: any large aquatic animal, a sea-monster".

KKED

26. majjana

KKED

"Sinking under water: diving: immersion".

27. makara

"A kind of sea-monster"

KKED

28. plava

"Swimming, floating"

KKED

29. pluta

KKED

"Floated: floating: swimming: bathed in: submerged: wet".

30. nautáry

"Navigable"

KKED

31. nelku

nekku

"To sink"

KKED

32. avanu holeyalli muluguttā teluttā

B.4.38, KKED

"He was floating and drowning in the river'.

33. Kappura niriginta haguravagiruvudarinda niramele teluttade.

B.4.71, KKED

"Since camphor is lighter than water, it floats on the water".

34. vicipince pince

"A wave: a small wave"

Ct. 1.18, KKED

35. taranga

"A wave"

KKED

36. bhanga "A wave"

KKED

37. Kirudere
"A small wave"

KKED

38. nīratere
"Wave of the water"

Nn. 5.107.164, KKED

39. tarapanya

KKED

"Ferriage: freight: the price or fare paid at a ferry".

40. sikata

KKED

"A sand bank: an island with sandy shores".

41. naukā baladinda sannaddarāda trivamsarannu ā sēnāniyu ummūlagoļisi gangānadhiya ubhaya tīragaļalliyū jayestambhagaļannu nillisidanu.

Santi, 10,160

"The General of the army erected victory pillors on

the banks of the Ganges river after winning the Trivamsu with the help of the navy".

42. naukānayana
"Ship-leading or building"

KKED

43. naukanayana
"Ship building"

B.5.194, KKED

 gangā dēsadoļu paricāravasuvembarasam muktāvatiyemba toreyol viśramisirdoģe kolāhalamemba

P.B. 1.68 va.

"In the Gangetic plains a king by name Paricaravasu was taking rest at the river Muktavati".

45. madamba pattana dronāmukhagaļembavaroļellam (haļļinagara, kheda, kharvata, adamba, dronāmukha, pattanagaļallellelliyum samcarisutta kelavu dinagaļu kaleda balika)

DMM.6.42

"After spending a few days in visiting such places as Hallinagara, Kheda, Kharvata, Adamba, Dronamukha and other cities".

 patiya jalastambhada parinati dalidalla doqe jalapatham sthalapatham tati sugama mugadene paridu toya.

Ado. 12.59

"Like a ship which was anchored in the sea...".

47. pērgadalali gaņļalam muridu taļarcadikkuvudu (dodda samudradalli gaņļalannu tiruci allādadante iri suvudu ivādarū lēsu)

DMM.10.49

"It is easy not to fall into the ocean and get the neck cut ".

 kanarīs nādinalli anjadvīpadinda ārambhisi mangalūru varege sikkuva bandarugaļu yāvuvendarē mirjān, honnāvar,

bhaṭkal, basrūru, bairavēru, uḍupi, mattumangaļūr.

Pravasi. 4.46

"In the Karnataka region, starting from the Anjadvipa upto Mangalore the following are the sea ports, Mirjan, Honnavar, Bhatkal. Basrur, Bairavera, Udupi and Mangalore".

49. gōvā mattu cāl biţţare bhaţkal bahu mukhyavāda bandaru. bahalavyāpāra nadeyuttade; olanādinalli beleyuva atyuttamavāda jirsāl, mattu campasāl endu kareyalpaduva akki illinda ravāneyāguttade.

Pravasi, 4.46

"If Goa and Cal are omitted, Bhatkal is the most important port. A lot of trade activities is carried out here. Very fine quality rice varieties such as jirsal and campasal which were grown in the innerland were exported from here".

50. bairavērā, bārkūru, udupi mattu mangaļūru bandarugaļige hadagugaļu baruttave. vartakaru illinda sarakugaļannu ravānisuttāre i bandarugaļalli ganyarāda bandaru nāyakarugaļu sainya samēta iddāre.

Pravasi, 4.47

"Ships come to such ports as Bairavera, Barkur, Udupi and Mangalore. Sea traders export their goods from here to Kambe, Goa, Deccan, and Oramas in these ports there are sincere chiefs of ports who are assisted by army".

51. gövege tanda sāmānugaļige sēkada 8 rastu sunka kodabēku. göve biduva sāmānugaligū aste kodabēku .. bērelliyū adaramēle sunkavill. "The goods brought to Goa are levied at the port and 8% duty is collected. Those articles which leave from Goa are also subjected to the same amount of duty. The goods are not taxed any further in the inland".

52. Turu (Garsopa - Gerusappa) ondu kāladalli hesarānta nagaravāgittu. idannu obba rāņi tanna rājyada kāja dhāniyannagi māḍikoṇḍiddaļu. indiyāda samudra tīrada T

rājyadailli āgāgge hengasarade rājya bhāra, indiyāda samudra tīrada anēka nādugaļalliruvente.

Pravasi. 4.

"Once this town (Garsopa) was a famous city. A Queen had made this city as her capital. In this coastal region, most of the countries were ruled by Queens only and this practice is quite prevalent in most of the coastal regions of India".

 honnāvarinda illige (Garsopa) mādida mūru haridāri prāyanadantah ānandakaravāda prayānavannu nānu nanna

idi jivamānadalli mādilla. nadiya ikkela bahu remaņiyavāgide.

Pravasi, 4,128

"I did not have such a pleasant and merry journey in the whole of my life as the one which I had during my travel from Honnavar to Garsopa. Both the sides of the river offered a panoramic view"

54. mangaļūru bandaru eradu nadigaļu samudrakke sēruva munna uņīdda dodda bandarāgide. Samudrada nīru bandarinoļakke haridu nīrannu uppu māduttade.

Pravasi, 4,260

"The Mangalore port is a very big port and it is situated near the river mouth where two rivers confluence with the ocean. The sea water enters into the

port area and adds salty taste to the water in the port".

55. naukā pade "Navy"

Pravais, 7,385

56. itticege nadeda naukā yuddhadalli
Pravasi. 7-408
"In the naval-war which took place recently"

57. ōdakuli
"The hire for ferrying"

Reeve Dict.

58. odagāra "A ferry man"

Reeve Dict.

59. hadagada rēvu "A harbour; place where ships come to anchor" Reeve Dict.

60. hadaga nadisu "To steer a vessel"

Reeve Dict.

61. naukāvidye "Navigation"

Std. Dict.

62. divige mane dipada gruha dipada mane belaku mane "Light house"

Std. Dict.

63. plavana sīlate "Buoyancy"

Std. Dict.

64. tēlu burude tēluve Tju burude "Buoy"

Std. Dict.

65. samudragāmi "Mariner"

Std. Dict.

66. uttarmukhi "A compass"

Std. Dict.

67. dikcakra
"A compass"

Std. Dict.

68. khāri "A lagoon"

Std. Dict.

69. samudragaļļa kadalugaļļa "A pirate"

Std. Dict.

TELUGU LITERATURE

1. Traditional Boats and Ships

There are nearly 27 words, both native and foreign or exotic collected from Telugu literary works which denote boats and ships. The various types of boats and ships convey many types of transport on the sea. From these references, certain inferences regarding the usage of different types of boats for different purposes can be drawn. Besides these 27 words for boats and ships, nearly 60 words have been collected regarding the various parts of boats and ships which throw more light on the usage of Navigation in Andra Pradesh from olden days.

1.1. oda

 ambujamukhi yakkanya priyambonaraga matsyagandhi yangō dharma rthambuga tanatandri viyogambuna nayyamuna

noda gapapucununden.
(Andhramahabharatham. 3 canto Poem 34)

"Oh lotus faced woman that girl who is called as matsyagandi, after the death of her father is living on boating".

The oda is a derived word from Sanskrit into Telugu. It has an equivalent in Tamil as odam. Nannaya is the author of this poem who is the first poet in Telugu literature. He belongs to Nelloor. The word 'oda' which he used conveys the small boat which is used to carry one or two persons from one bank to another bank. This 'oda' is derived from Prakrit vēdo which is from Sanskrit hodaha".

 gatamadamatsarundu, trigaganvirnutundu vasista pantrudu nnatamati sakti putrudaghunāsasana ghora tapodhanundu Su vrutudayi tirthayatra carnuvādu parasarudanmunīdruda yyativa talodarin ganiye nayyamu nā nadi yoda revunan

The Vasistha muni's grandson parasara muni on his visits to sacred places saw a girl on the boat which is on the seashore.

(Andhramahabharatam - 3 Canto poem 36)

- iiēkatamba eka vastrayai yoda nekkavaccu vādri nirīkshincu cunna Satyavatin juci (Andhra Mahabharatam 3 Canto. poem 37) Having seen Satyavati who is looking for a traveller in the boat.
- neṭṭana ḍharma nanḍanudu ninnavalambamuSesi
 yoḍato
 gaṭṭina
 yoḍavole gata gauravudai kadudule
 (Andhramahabharatamu. Sabha. 2-40)
 The King Dharmaraja when he tied you with the boat,
 you were drowned with dignity just like a boat.
- 5. Suryuni veluturul Sakunandāka odatal jendalu adunandaka (Andhravali - Janmabhumi p.21) Till the sunlight (spreads) Till the flags on the boats flatters.
 - odalu bandlunu vaccunu
 odalu na bandea mida noppuga vaccun
 odalu bandlunu valene

vadambadu galini lemi vasudhanu Sumati

(Sumathi Satakam).

Here the boat is used as a simily. The boats may be carried in carts and vice-versa. In the same way, the rich may become poor and the poor may become rich.

7. guhudu pettina yoda komaroppa nekki (S.R.R. - Aranyakandamu).

'Rama having stepped in the boat arranged by Guha'.

8. guhuni ganci yatani gustarinci tadaya koda betti datimpu manavudu

(M.R. A.K.31)

'Having seen Guha and requested him to carry Rama to the other bank without any hesitation '

 nitani padarenu viyyeda vadi noda soka Nidi yemaguno

(M.R. A.K.32)

- tellani rangaina yoda telucu merayan 'White coloured boat floating with glitters'
- odanu jaripe muccaţa ganarē
 'Please look the style of moving the boat'
- puruhutadula karudaina odalo
 In the boat which is very rare to Indra and other gods.
- 13. odalo randhramu galige
 'A hoe formed in the boat'
- bharamu taladu oda lopalan
 'The boat cannot withstand the load'
 (Nankacaritram Thyagga).
- oḍa nava yananga noppu cuṇḍu darani
 (Andhra Bharatamu 1.157)
 'oda is also called as 'nava' in this earth'

1.2 nauka

This is Sanskrit word freely used in Telugu for boat.
(K.K.Part - I page.29)

- 1. balamu nantayu nauka painamuljēsi (K.K.Part- I page.29)
 'Having brought the defence forces through the boats .
- karnadharula bilci kadupadi naukala siddhamu ceyinci

(S.D.S.R. A.K.215)

Ordering the boatman to be prepared with the boats.

- Naukā radhramulo jalambu coragā . . .
 (Tyagarja kirtanams)
 'When water entered the ship through the hole in it....'
- nannu daţimpanga nencitiva taliruţaku nauka paina
 (Si. naa. re geyalu)

'You have thought that you can make me to cross on the ship made out of the tender leaf'

- Swapna naukala tēle korkulu
 (Satapatra Sundari; meelukulupu)
 'The wishes float on the boats of dreams.'
- nānā vidēsa naukā nīke vipulāsryambaina
 (Andhravali Sukti)
 'Having become the very vast place for many foreign boats.'
- 7. nissāra samsāra nīrakarāmu dāṭa naukā gaveshanamme kanshagā (Nagarjunasagasagavam)

'Expecting a ship to cross the sea of life which is full of pains'.

1.3. **JOGU**

 mārthandundu konka prakkanjikki kadali moga yakkalindagulu vadi cikkina jogunun pole neduru nadava maralan parava leka

(Kasi Khandamu - 2.98)

'The sun having caught by the side of the hill just like a boat caught in the tidy waves in the sea'.

 nunu gaprampuṭananṭi vippu borayan jogekki madhvimahā vanadhim buppoḍi divikin madhuka vyaparuleteora da (Vasu Caritramu - 3.142)

'With loads of camphor in the boat when the businessmen entered the Island'

 'mahila, lāvaņya Vārdhilō madanu dekku Kappurapu Jōgu Kanţimi Kanţimanucu',

(Srungaranaishadhamu - 3.101)

"Oh! woman, we have seen the god of love boarding the camphor like boat on the sea of youth".

In this connection, we find lot of words in Sanskrit dictionary with 'nau' as prefix.

a) naukamadhra : The boatman

b) naukarmamu : The profession of boating

c) naukādanda

d) naucara : The person who roams

in a ship

e) naujīvika : The person who lives

with the profession

of boating.

f) naudanda :

g) nautarya : Crossing through the boat h) nauvāhaka : One who drives the boat

i) nauvaroha : One who travels in the boat

j) nāvika : 1) one who travels in the boat

2) one who drives the boat

By the above words found in the Sanskrit dictionary, one can derive that even in Sanskrit Literature, the navigational terminology can be found in abundance.

1.4. Kappali

 Ceppedi demika nokoco depperamagu nukkujinu diga vaicina cennappunagadalaka yundedi kappali vidhamunanu deru kadalaka nilacen (Suka - Canto:2)

'what can I say any more. The chariot is not able to move and stood like a boat which was tied with very strong iron log' (the anchor).

 Virahamburāsi dāţi radhāngamulu joragila nidda pasidi kappali yanaga

(para. Canto. 3)

'Having crossed the ocean of love it looks like a chariot without any movement just like a golden boat tightened in the sea'.

 tarunāsirita vāyi govaramaņā Sthanamlan candanā garu karpūra himāmbu kunkuma rajah kasturikā dravyamul

Saradhin gappali jogulan virivigā sāmānla deppincune rpari yow vaisyakulottamundavaci tippan dalpude immahin

(Haravilasamu - Foreword- 28)

'A person by name Avaci Tippaya do you think is an ordinary person? He is a great businessman who transports the scented articles like sandle, camphor, saffron, musk, etc., in the ships'.

1.5. Yanapatra

pandu vadhilli rāqādi paṭṭaṇamula yadhipatulu mouļi dālcu ratnānkurambu lavacitra purāntakāniita yānappātra simhaļa dwīpa mandita kshetrajamulu

(Haravilasamu-Foreword-29)

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'The diamonds for engraving in the crowns of monarches were brought by ships from the Simhala Island'.

1.6. teppa

- Vālina vedukan maruttabhupālunicē mahīsurulu Sudakshinalandi teppalandēli yadhecca goncaruga (Jaimini Bharatam 1-66)
 'After accepting the presents by the king Maruthi, they travelled by boats with freedom.'
- kāvvuna dīrambu lēni viraha bhara pārāvārambuna munugan parucunna nākun teppagā virinci ninnu galpincinādu

(Srungaaranaishadham-1-35)

- 'That is why, when I am just floating on the sea of separation, the Lord has sent you just like a boat to save me from sinking'.
- 3. ana vini devaki tanayu datani kitlanu ceppinanta kan tenu migulanga jeyudu gadindi magandavu ninnu deppagā goni

 (Bharatam-Udyogaparvam 3-91)
 - 'After hearing the son of Devaki telling that I shall do more than what I said, taking you as a boat (a base).

 anjānāputruḍan, balu teppan goni gāde dātiti Vipatpādhodhi

(Uttara raamayanam 5.87)

'I am the son of Anjana; I could cross the ocean of difficulties with a strong boat'

- Vinirmagna deppavai nanu jerpu tiramunaku
 (Srungaaranaishadhamu 2.77)
 'Being a boat without sinking please take me to the banks'.
- ninnu teppagā goni
 (Bharatam Udyogaparyamu 3.68)
 'After taking you as a boat'.
- Kadidi pagalu ne deppage gadavanga nida dalancu
 (Bharatam-Udyogaparvamu-4.65)
 'I wish to float just like a boat in the sea throughout the day'.
- jagamulu deppalu vole dulanga (Panditaradhya caritramu)
 'The worlds are floating like boats'.
- 10. Kopamu Samharimpu yadukunjara pandavakoti kellanun depavu gade nivu.

 (Bharatam Bhismaparvamu 1 Canto)

 'Please kill the anger. You are just like a boat (Saviour) to all the Pandavas. Is not it?'
- tēpa nā deppa nā deṭika yanaganu plavanāmadhēyambu paragu cunḍu
 (Bharatamu - 1.152)

'The boat in Telugu is named as 'tepa', 'teppa', 'tetika', 'plavam'.

- tandri i dukha vardhi madhyamuna deppa koyyavale
 (Ramayana Kalpa vrukshamu)
 'Oh father! in this sea of sorrows just like a boat'.
- 13. Yokadu teppanu droyucu negudence
 (Ramayana Kalpa vrukshamu)
 'One person came with pushing a boat'
- maname teppanu nirmincukovalenani 'We ourselves must built up a boat'.

(R.K.V)

1.7. Putti

It is just like a basket which is covered with a skin on the rear portion and used for transport in the sea.

- lõnu drudhambu gani perulõbhini nammi yasadhya karyamul kanaka punune natadu grakkuna gulunu nõti puţṭipai manavu delkipova nokamaṭu puṭukkuna mumpakudune tanoka lotunan gedasi dani darimpaga leka bhaskarā!
 - 'Believing a miser will it be good to undertake major projects. No it is not possible. Can a human being travel in a sea comfortably without fear in a boat where there is a hole? No, not at all. It will sink definitely'.
- idu koyyalu teppalu nidukādu ladara larigoļļu padavalu tarulu putļu cepadava ladigā celagunaţţi yambu taraņambulaku nella nadhipudatadu (Hamsa. 4.72)

'He is the king of the logs used for swimming, teppalu, padavalu, putlu, (boats) oda-(Ship) etc., in the sea'.

3. puttivani nokkaruni da bondu cesi-

(Hamsa)

'Employing a boatman for the purpose'.

1.8. nava

5.

1. oda nāva yananga noppu cundu daraņi.

(Bharatam-1.152)

'In this earth 'oda' is also called as 'nava'

 ghana soudhāļi viyaddhu nī jaladhi vikannavalai nīda dopa

(Amuktamalyada - 1.12)

'The shades of big buildings in the sea are looking like the ships'.

3. nāva nīve gādā celiyā! nāva nīve nadapave celiyā!

(Vennela reeyi P.172)

'You are the boat. You please drive the boat my dear darling!'

4. Cinna doyi na hrudaya nava

(P.26)

'Oh! dear! my heart is a small boat'

Cūḍavoyi nāva loki nīru porādoyi
(v. 241)

'You see! the water should not enter the boat'.

6. nava nadupumu nilona!

(P.281)

'Please drive the boat in yourself'

Cokkapu nāvanu goni rammani
 (Ramayana kalpa vrukshamu - P.138)
'Ordered to bring a good boat'.

8. nī nāva nīvarohimumu

(R.K.V. - P.144).

'You please get in this boat'.

9. tanu navapai nekki

'She saw the boat'.

(R.K.V. - P.145)

'Having entered the boat'.

bhadra sāmajamum bole gamince nāva
 (R.K.V. -154)
 'The boat is moving just like an elephant'.

- atlu nava yamuna nadinitinunnappudu
 'Like that when the boat is in the middle of the sea'.
- 12. nāvanu cūcindi (Seshejyotana-aa roozu)
- 13. Sāgarnāllo nāvala teracāpalai pondi (Seshajyotsna andaala atidhulu) 'Become the screens to the boats in the sea'.
- okka gatini nā nāvaku dikku telupu
 (Andhravali janmabhumi)
 'Please show the right path for my boat'.
- tadanantaramba guhundu karnadharunduga nāva yekki Sita Sametambugā (Bhaskara Ramayanamu - P.90)
 'Afterwards Guha having boarded the boat along with Sita etc..

1.9. padava

- padava yancanaga nalpa tarani dagu
 (Andhra Bharatamu 1.153)
 'padava' (boat) means a small 'tarani' (big boat)'
- padava yamaramulace jilcabadina niru
 (R.K.V. P.153)
 'The water which pierced through by the Iron pillars of a boat'.
- manasulona edo toci pasavanu vadilanu
 (Satapatrasundari Hrudayanaava)
 'Thinking something in the heart, I made the boat go.'
- gangamidanu pasava yekkina
 (Satakaalu giitaalu P.58)
 'When the boat boarded on the river Ganges'.
- Sukha vishādapu taragalai sudiyu cūdu padavanai gaṭṭu certuwu patini gruhiṇi
 - 'When the whirlpool of both happiness and sorrow is sorrounded then oh! House-wife, you will become a boat and save and bring the man to the banks'.
- Sande gāliki padava Sāgi poyindanţa
 (Yenki paaTalu P.40)

'The boat is moving due to the pleasant air in the evening'.

9. āpa lene yenki ī padava isuru

(Yenki PaaTalu)

'Dear Yenki! I cannot stop the axle of the boat'.

 Kadali kerajanu taka vadaki poyedu ciruta padava vale

(Nagarjuna Sagaram - P.68)

'Just like a small boat which was shaken due to a big sea wave'.

1.10. droņi

 dhūļi yadagina mari minta doce sampa jaladhara droņi mannu parjanyu detti

(Amuktamalyada 4-110)

'After the rainfall the land is very wet and still the lightening is seen in the sky, the Lord Indra having taken the pollen of the land in a boat "

1.11. dőni

 paţikambu doula paragu gojjenga puniţi baljakkaral dāţi dāţi

(Rasika2-81)

'Transporting the scent and other scented items in the white boats'.

1.12. done

1. telimabbu teralalo nelavanka donelo

(Satapatra Sundari P.179)

'In the curtains of white clouds and the boat of half moon'.

1.13. dunga

1. tosāru dunganu nīti loki

(yerra piDikili - Acalam)

'They used the boat in the waters'.

1.14. tarani

padava yan canaga nalpa tarani dagu (Andhrabharatamu - 1.158) 'padava means a small boat (tarani) also.'

2. PARTS OF BOATS

- 2. teddu 'an oar'
- 2.1. Kavi Kavitābdhilona mukhagahvara modayu jihva treddu, hru tpavanudu pilikādu, mrudu bhashalu rathamulu.

 (Sivaraa. 1.9)
 'In the sea of poetry, a poets face is a ship, his

'In the sea of poetry, a poets face is a ship, his tongue is an oar, the air in the heart is a boatman, soft words are like diamonds'.

2.2. teddulu visaruvādu KrushnuDu.

(KaLikalu - P.78)

'one who employs the oars is Krishna'

- 2.3. cukkānu or cukkāni 'A rudder'
- 2.4. nīţilo jivukaka nilici krummaru punki, Kathina karparapu jukkānu biguwu.

(Panddurangamahatmyamu-2-66)

'Without sinking in the waters, moving in the waters, with a strong hold of a rudder'

2.5. Cukkāni iwi nāwi kāvu.

(Satapatra Sundari)

'The rudder is not in my hands'.

2.6. terachāapa

'A ship's sail, or screen'.

2.7. teracāpala cimpukoni

(KaLikalu)

'Having torned the screen of a ship'.

2.8. teracapa, cukkani tippu malini ganawu.

(Satapatrasundari - naavikaa)

'You cannot find a person who can turn the ships sail and the rudder'.

- 2.9. langaru
 - 'Anchor'

2.10. dincu langaru dirgha yuddham

(Gurajada Rachanalu P.68)

'Put the anchor and bid farewell to the long war'.

2.11. marakādu - boatman mairāvaņundanu marakādu Canudenci yora paina māyala yoda nekki

(Mairavana Caritra: 2.51)

'The boatman by name Mairavana, having come, claimbed the beautiful ship'.

3. PROVERBS IN TELUGU WITH THE WORDS Padava, putti, oda, etc.

- Padava oddu cēritē padava vānni mīdi oka soddu.
 'If the boat reaches the shore then they comment on the boatman'.
- oddu cērēdāka oda mallayya,
 oddu cērāka bodi mallayya.
 'Till the boat reaches the shore, the boatman is considered as a gentleman. Once it reaches, he is a useless person'.
- asalu dēvudu mūlabaditē, hanumanta
 rāyaniki teppa tirunallata.
 'When the main diety is dethroned, the people
 Celebrate boating to Lord Hanuman (the secondary
 diety).'
- gangatoni odaru nammite bhasagaru mida vaccuna?
 Will it be possible to swim the ocean of life by relying upon the boat in the river Ganges'.
- 5. ē gāli kā cāpa ettinaţļu.

 'Turning the sail of a boat according to the air.

 (Be non-committed)
- ēru dāṭi teppa tagulabeṭṭinaṭṭu.
 'Burning the boat after crossing the lake'.
 (Causing inconvenience to others)
- ofi teppanu nammukoni etlo diginatlu.
 'Travelling in the lake relying upon the boat with a hole in it'.
- 8. rendu padavalalo kallu pettinatlu. 'Stretching legs in two boats'.

gattu cēerina veruka puţţi vanito poţļadi naţļu.
 'Just like quarelling with a boatman after reaching the shore'.

- odalu bandlavaccu, bandlu odalavaccu.
 Boats may become carts and the carts may become boats'
- Debbu ivvani vādu padava mundara ekkunu.
 'He who will not pay will first board the boat'
- Kaļāsi bratuku gāli vānato sari
 'The boatman's life will end with air & rain'.

TECHNICAL TERMS

TAMIL WORKS

L NAMES OF BOATS AND SHIPS

- ampi
 1. small boat. (Cilap. 13:176)
 parimuka vampiyum
 karimuka vampiyum
 - 2. Raft, float (kalit. 103:37) turaiyampi yürvân
- 2. ampaṭalam Boat

(Aka. Ni)

3. arimukavampi
Canoe with a lion figure head

(Cilap. 13:177)

arimukavampiyum......iyankum perunturai

4. äficelkai Raft

(.T.L.)

5. äţu Raft

(W)

- 6. āṇam
 - 1. Raft, float

(Tiva.)

2. Ship, vessel, boat

(Tiva.)

7. utupam Raft, float

(W)

8. Etal

vessel, ship

(T.L.) 9. otiyar patavu Boat broken on the gunwale or edge. (W) 10. onkal 1. Tree Ceruttiyun cenpaka vonkalum (Cilap. 13.153) 2. Bamboo (Tiva) 3. Boat, vessel (Aka.Ni.) 4. Elephant (Aka. Ni.) 11. ōtam 1. Boat, ferry boat (Tiva.) 2. Raft, float, vessel of any kind (W) 12. Kattut tõni Surf boat, boat of which the seams are sewn together. (T.L.) 13. Kattup pataku See Kattut tõni. 14. Kattup panai Float or raft constructed on inverted pots. (W) 15. Kattuppunai See Kattumaram (Cilap. 13:179) 16. Kattumaram Catamaran, used for deep sea fishing, raft made of logs of wood lashed or joined together. (T.L.) 17. katattu Boat (Loc)

(T.L.)

(W)

(Cilap. 13:176 urai)

Raft, float, as a means of crossing water

18. Katavu maram

10	Kappal
17.	Ship, sailing vessel Kappal pilaittuk karaikanum
	(Oļivī. Cattini.22)
20.	Karimukavampi
	Boat with a figure of an elephant's head at the prow. (Cilap.13:176)
21	•
21.	Karuppanéppam
	Raft made of wild sugar-cane reeds.
	(Patirrup, Urai.84:4)
22.	Karaivalai tõņi
	Boat for fishing with the dragnet
	(W)
23.	Kalap parrut toni
	Caulked boat, surf-boat, the seams of which are
	formed by joining planks without lapping.
	(W)
24	Kalam Ship, Boat
۵٦.	Kalankavil makkalai
	Mani. 16: 120
25	Kallak kappal
25.	
	Vessel of pirates
	(W)
26.	Kaļļat toņi
	Kallappataku - A piratical vessel engaged in plunder
	as those plying from Pr. calimere to rob pearl-
	fisheries.
	(T.L.)
27.	Kāvar kappal

Guard-Ship, reconnoitering vessel.

Boat with a horse-shaped prow

28. Kutiraimuka võtam

(J)

29.	Kuntirāt toni Canoe in the Maldives constructed wholly from coconut tree.	
20		W)
30.	Kullā	
	1. out-rigger of a boat	(J)
	2. Boat or dhony with an out-rigger.	
	William State Control of the Control	W)
31.	Kūttup pataku	
	Boats provided with movable tops, to carry about passengers or cargo varying from 3 to 7 tons.	10
	(M.M.9	15)
32.	Kaipparicu	-
	Small raft	
	Kaiparucukārar polarivāņa	
	vankamun kaiviṭṭu (Tayu.Tec	. 2)
33.	. Kotikkappal	1.2)
	Galley or crusier flying a pendent	
	(lo	oc)
24	(Local usa . <i>Kōkkāmaram</i>	ige)
34.	A kind of raft or Catamaran	
	•	loc)
35.	. Kõţik karaiyān tōṇi	,
	Vessel at Köţikkarai.	
	See. Kallattōṇi. Piratical vessel.	~
36.	. Kōl	(1)
	1. Raft, float	
	2. Jujube tree	
24	(C	ūţa)
3/	. Kölam Raft	
	Rait	(W)
38	3. Cankatam	(**)
	Ferry, boat or two canoes with a platform thereon	

(Yāl. aka.)

51.	ta <u>n</u> nu vattai See ta <u>n</u> nu tõni	arti de la
52	+ Try a sist Trui	(Yāl. aka.)
32.	tāvaṭittōṇi Boat going near the shore to cut of enemy.	out the vessels of any
53.	timil	
	1. Catamaran, small boat	
		(T.L.)
	2. Vessel, ship	, ,
	tintimil vanparatavar	
		(Puram.24)
54.	turaittõņi	,
	Ferry boat	
	•	(T.L.)
55.	teppak kattai	, ,
	1. Raft, logs of a raft	
	. •	(T.L.)
56.	teppam	• • •
	Raft, float	
		(Tiva.)
57.	Teppal	,,
	See teppam	
		(Vul.)
58.	Teppai	(- =,
	See teppam	
		(Meruman. 1201 urai)
59.	taile maram	(
	A kind of Catamaran	
		(loc)
60.	totuvai vallam	(100)
	Boat attached to a dhoney	
		(W)
61.	toļļam	(11)
	Float, raft	
		(tivā)
62.	toļļai	(uvo)
	Sailing vessel	
	-	(tivā.)
		(uva.)

63.	tōṇi 1. boat, dhoney	
	2. Ship	(Civaka. 967)
	Kaṭanmanṭu tōṇiyil	(Pugam. 299:3)
	3. Float, raft, canoe.	(Piňk.)
64.	nataiccalanku Small boat	(Yā <u>l</u> , aka.)
65.	navāṭā Boat, dhoney	, -
66.	nāvāy 1. Vessel, Ship	(W)
	Munnir va <u>l</u> anku navay polavum	(Puram.13)
	2. Drum used in Neytal trace	(Ilak. vi. 392 urai)
67.	<i>nāvi</i> See nāvāy Vanka nāviyināta <u>n</u> vaţakkilintu	(Mani. 26, 85)
68.	nērm puṇai Light raft	
	niraņimāta vāvi nērmpuņai niraittu	(Civaka. 2654)
69.	nau Boat, ship	(OTIE)
70.	naukā See nau	(Cuțā.)
71.	pakri	(T.L.)
	Coracle; boat Nellotu vanta valvāyp pakri	(Pattinap.30)

2. Ship, Vessel

(Cūtā.)

72. pankilam Raft

(Yāl. aka.)

73. pataku

1. Small boat

(T.L.)

2. Dhoney, large boat

(W)

74. patavu

Small boat

(Patavatēri tiruvāca. 43.3)

75. pataikkappal Pataik kappal

Man of war, frigate

(T.L.)

76. pattēmāri

A small vessel fitted with one or two sails for carrying goods over the sea.

(Năń.)

77. Parimukavampi

A boat having the figure head of a horse.

(Cilap. 13, 176)

"parimukavampiyum karimukavampiyum"

78. Pallayotam
A kind of boat

(Koyilo. 16)

79. Palliyotam
A kind of boat

(Cilap. 14, 74 urai)

80. pācāņam Boat

(Tiv. tiruccan. 100)

pattiyana pacanam

81. pattimar

A moplah vessel often 76 ft. long 21 ft. broad, 11 ft. 9 inch in depth and about 200 tons, burden.

(W)

82. pārati

Saiting vessel

(Tiva.)

83. pāru

Ship, Sailing vessel

(Tiva.)

84. pukaik kappal

Steamer, Steamboat

(T.L.)

85. punai

1. Float, raft

(Kural, 1134)

2. Boat, vessel, ship

(Cutā)

3. Support, help aram punaiyākalumunīv

(Kali, 144)

4. Bamboo

(Aka. Ni.)

86. punaikkattai

Catamaran

(loc)

87. periyamaram

A large catamaran

(loc)

88. marakkalam

Ship, vessel, boat

(Pu.Ve.8,31 urai)

'marakkalam pilakkun katalituttu'.

89. marak kōvai

Boat, ship

mucciye marakkovai muyarcciyar

kaiccitātu katalcelun kallanum

(Civa. terr pava. 81)

(Yāļ. aka.)

90.	maḷḷu Rafter	
	Raiter	(W)
91.	mitavai	, ,
	Float	
	Veņkiţai mitavaiyar	(Paring 625)
92.	Mitappu	(Paripā. 6,35)
	Boat, Ship, raft, as floating	_
00	~11.11.1	(i̇́tu.5:8)
93.	mülkik kappal Submarine	
	Submarine	(Mod.)
94.	mēṅka	
	A kind of catamaran	<i>a</i>
95	yāta <u>n</u> am	(loc)
,,,	1. boat, 2. raft	
		(Catu.; Yāļ. aka.)
96	yā <u>n</u> a pāttiram	
70.	Boat	
		(Yāļ. aka.)
97.	yānai mukavõtam	
	Boat with an elephant-shaped prow	(Cilap. 13, 176 urai)
		(Chap. 15, 170 utar)
98.	vankam	
	1. Ship, as moving swiftly	
	vālitai etutta vaļitaru vankam	(Maturaile 526)
		(Maturaik. 536)
99.	Vaļļam	
	Boat made of the trunk of a tree, ca	anoe
	Vallappattanamakarakatalena	(kampa ataaku 20)
100).vāri ratam	(kampa. atcaku.28)
	Boat, Raft as in a floating festival	

II. NAMES OF PARTS OF BOATS AND SHIPS

1.	akkal The fore part of a ship	
2.	akkal piccal pāyakal	(M.Navi. 174)
2	Fore-and-aft sails	(M.Navi. 83)
э.	ankaryāri Cat tackle for drawing up an anchor	
4.	aṭimaram Lower mast	
5.	ațivaikkum alāttu	(M.Navi.81)
	Foot rope	(M.Navi. 86)
6.	aņiyam 1. Forepart of a Vessel, stem aņiyanttilē ki <u>l</u> intālum ki <u>li</u> ntatu	
~	amarattile kilintālum kilintatu	(T.L.)
7.	aniyattukattai Cutwater of a ship	(T.L.)
8.	aniyap pāymarap parumal See aniyap pāymarap pāy	(1.2.)
9.	aniyap paymarap pay	(T.L.)
	Canvas of the prow of a vessel	(Pond.)
10.	aparam Stem of a ship	
11.	ammār	(T.L.)
	Ship's cable	

(T.L.)

12.	1. Stern or hinder part of a vessel opposite to	aniyam (T.L.)
	2. Oar used to steer a boat	
13.	amar 1. Ship's Cable See ammār.	(T.L.)
14.	amukki:maram 1. Supermost plank in the side of a boat	(T.L.)
15.	alcā Rudder	(R)
16.	alīcā Oar	(loc)
17.	avatityā Strong post of wood or iron to which fastened	(W)
18.	añcan1. Halyard, rope for hoisting a sail	(T.L.)
	2. Hawser, rope for pully, tow. rope by which is drawn	(T.L.) h a boat
19.	āńcānparri Beam across the stern of a boat to which this tied	
20.	āncā <u>n</u> kayi <u>r</u> u Halyard	(W)
21.	āliya kaṭal vilutu Deep sea lead line	M.Navi.86
22.	. nin	M.Navi.71
	Oar, boatman's pole	(Pin.)

23.	<i>uppar kāvi</i> Upper topsail	(M.Navi.83)
24	Uppar cavar	(1/11/11/11/05)
27.	Upper top-gallant sail	(M.Navi.83)
25.	<u>Uruppā</u>	
	At tree, the timber of which is used inste ship-building Hoped decandra.	stead of teak in (Mu. a.)
26	wkal	(1414. 4.)
20.	unkal Limestone	(R)
27	itai	,
	1. Sail of a ship	
	•	(Maturaik. 79)
28.	ērā	
	Keel of a ship	(T)
20	ērā maram	(J)
2 9 .	See ērā palakai	
	tice ora parametri	
30.	ērāp palakai	
	Keel of a ship	
		(1)
31.	aintu pal nankūram	
	Grapnel anchor, having five flukes or p	rongs. (T.L.)
22	Ōtakkōl	(1.1.,)
92.	Boatman's pole	
	Dominan v poso	(Cilap. 13, 176)
33.	<i>ī ōrāyam</i>	
	1. The leeward or leaning side of a boa	t or other
	vessel	(W)
	2. The close joining of two boards	,
34	katappā	
J7.	Sail of a catamaran	
		(loc) (Cank. aka.)

35.	kațicai	
20.	LANGE FOR THE	,

Plank that supports the mast of the boat

(Cank. aka.)

36. Katiyal

Seam set across a small sailing boat so as to extend to either side of the vessel, in order that a temporary stay for the mast or any other rope, might be attached thereto.

37. Kaţaiyāl

See kataical

Stern of a vessel

(W)

(J)

38. kaţaicāl

Stern of a vessel

(J)

39. kappar căstiram
Science of Navigation

(T.L.)

40. kappar pāy
Sail made of canvas

(T.L.)

(J)

41. kampa<u>rr</u>u Leakage in a ship

(Yāļ. aka.)

42. karicanku

Temporary roof of coconut leaves put up in an Indian raft for protection against inclemencies, of weather

43. kalimi maram mizzen mast

(M.Navi.80)

44. kalimik kevimaram Mizzen top-mast

(M.Navi.81)

45. Kalimi cavar maram Mizzen top gallant mast

(M.Navi.81)

46.	Kalimi ţavar paruvā <u>n</u> Mizzen royalyard	
		(M.Navi.82)
47.	kāmāp palakai Top board around the side of boat	(W)
48.	kāyī Guy	
49.	kāvi	(M.Navi.84)
50.	Topsail kāvippāy	(T.L.)
	Topsail	(M.Navi.83)
51.	kāvip paruvān Topsail-yard	(T.L.)
52.	kāvip camaram Top mast	(1.2.)
<i>5</i> 3.	kāviyā See Kāviyāk kattai	(M.Navi.81)
54.	kāviyāk kaṭṭai Wooden beam of an anchor	
55.	kān	(T.L.)
	Cabin in a ship, hold	(T.L.)
56.	Kittān pañcu Tow, oakum for caulking ships	an
<i>5</i> 7.	Kittān pāy Canvas sail	(W)
£0		(W)
Jō.	Kilppaval The lower spar of a dhoney, the top of wh	ich is at-
	tached to the sail to keep it to the wind	(W)

59. Kilp puram The leeward or the leaning side of vessel.	(W)
ou. Kuńkiyā istińki Clew lines	,
61. Kuvar Sky-Sail	.86)
62. Kustūr Seam between the planks of a boat	.84)
63. Kūmpu	Г.L.)
 Mast of a vessel; Kumpu mutanmuriya vinkupini yavilntu 	
(Maņi. 4, 64. <i>Kūrvai</i>	30)
Transom, beam across the stern post of a ship 65. Kūraippāy	r.L.)
Canvas Sail (T	r.L.)
66. Kevin palukka Companion door	. T .
67. Kevin vācal Companion way, staircase	Γ.L.)
leading to the cabin.	Γ.L.)
68. Kērru Light anchor used in warping	
69. Kai vilutu Hand lead-line, used for sounding small depths in	f.L.) the
sea M.Navi	
70. Kompās Mariner's Compass (T	.L.)

71.	Kompāskūļu Binacle, box for a ship's Compass
72.	Kompāspeţţi See kompās kūţu (T.L.)
73.	Kōcu Lower front rope of the sail of a boat, clew line (W)
74.	Kōcu Windward side of a ship (F. and.)
75.	Kōcup pāy Spanker, after sail in a barque (T.L.)
76.	Kōcu mantil Gaff lift, the spar upon which the upper edge of a fore and aft sail is extended
<i>1</i> 7.	(T.L.) Kōs Fore-sail or mainsail
78,	Kõs paruvā <u>n</u> Gaff
79.	(M.Navi. 82) Kōtāļai Limber hole, mouth of conduit on either side of the keelson to afford a passage for water to the pumpwell. (T.L.)
80.	Cankilikkāran Hawse-hole
81.	Catiňki Clew-line
82.	(T.L.) Capta <u>r</u> ā Bowsprit

(M.Navi.81)

83.	Capta <u>r</u> ā cerpa <u>r</u> uvā <u>n</u> Sprit-sail gaff	(M.Navi.82)
84.	Captarā pōyipantu	(W1.14aV1.02)
	Bowsprit gammoning	
0.5		(M.Navi.85)
85.	capta <u>r</u> ā lavurā <u>n</u> Bowsprit shrouds	
	Bowspitt sinouus	(M.Navi. 85)
86.	Calippalakai	
	Head-board	(TI)
87.	Cavarkkuntā	(TL.)
	Top-gallant mast	
00	C - 11 - C - T - 15	(T.L.)
88.	Cavarkkuntā pāncirā Cross-trees at the head of the top-gallant	maet
	Closs-tices at the head of the top-ganant	(T.L.)
89.	Cavarp paruvā <u>n</u>	
	Top-gallant yard	/m * \
90.	Cavar pay	(T.L.)
20.	Top-gallant sail	
	-	(M.Navi.83)
91.	Cavarp pulōti	
	Top-gallant back stay	(T.L.)
92.	Cavarmaram	(1.2.)
	Gallant mast	_
93	Cavar-lavalān	(M.Navi.81)
75.	Top-gallant rigging	
		(T.L.)
94.	Cavāy	
	Stay rope supporting mast	OT I
95.	Cavutālip paruvān	(T.L.)
	Whisker boom	
		(T.L.)

96	Cavutāliyā Bowsprit	(T.L.)
97	Cālurinkin	(1.1.,
<i>)</i>	Running rigging	
	2 20 2	(M.Navi.86)
98.	Citai	
	Sail teyvaniru mainteluttume	
	citaikala <u>n</u> āka	(Tiruvilai, tirunakara.88)
99.	Cippucavāy	(1111,111, 1111,1111,111)
	Jib-stay	
	_	(T.L.)
100	.С їрротри	
	Jib-boom	(T.L.)
101	.Cīlā	()
	A basket or bag for baling ou	t bilgewater from a boat (W)
102.	.Ci <u>n</u> ikkayi <u>r</u> u	
	Cable of wooden anchor	41.0
100	Cultiva	(W)
103.	Cukkāṇ Rudder, helm	
	Rudder, Hemi	(T.L.)
104.	Cukkān kūţu	
	Rudder truck	
	a.i.=	(T.L.)
	Cukkān carukki Rudder wheel	
	Rudder wheel	(T.L.)
106.	Cunkān	(
	See Cukkan	
		(loc.)
107	Cinima narri	
10/.	Cuvay-p-parri Cross beams in the bow of a	dhoney for fastening the
	forestay	

(M.Navi,83)

108. Cuvāri Back riggings of a ship (Yal. aka.) 109. Cērcavāy Stay-sail (M.Navi.82) 110. Cerppu Wharf (Pond) 111. Cekparuvan Cross-jack yard (M.Navi.82) 112. Coli Latrine in a boat (W) 113. тарри Log, an instrument for ascertaining the speed of a ship (M.Navi.66) 114. tappuk kayiru Rope passing through the holes at the extremities of a ₄og (M.Navi.66) 115. tappup palakai The piece of wood, quadrant in shape, which is used in the log. (M.Navi.67) 116. tavar maram Royal mast (M.Navi.81) 117. tavar kuntā Royal mast (T.L.) 118. tavar paruvān Royal yard (T.L.) 119. tastūr

Studding sail

of South India	301
120. tol Belaying pin	
121. tol mēcai Belaying rail	(T.L.)
122. tavarai muttan Anchor-chain	(T.L.)
123. tavarai vāri Handle of a capstain	(T.L.)
124. tarunal Vang, rope to steady the peak of a gaff.	(T.L.)
125. tānki Water-tank, as of a ship	(T.L.)
126. tāriku kōl Punt pole	(loc)
127. tămani Sheet in boat tackle	(loc)
128. tāmān Lower back rope of a dhoney sail back clew 1	(T.L.)
129. tāmān pāļ Sheet	(T.L.)
130. tāļa	(T.L.)
Paddle for Catamaran 131. ticaiyari karuvi	(loc)
132. tirihköttu pāymaram	1.Navi.44)
Foremast	(TI.)

133. tirunka <u>rr</u> u	
Foremast	(M.Navi.80)
134. tirunkarrukkāviccavāy	(111.11411.00)
Fore top mast stay	(M.Navi.83)
135. tirunkarrukkāvic cercavāy Fore top mast stay sail	•
	(M.Navi.83)
136. tiruñka <u>rr</u> u kāvip pa <u>r</u> uvā <u>n</u> Fore top yard	
	(M.Navi.81)
137. tirunka <u>rr</u> uk kāvimaram Fore top mast	
Pole top mast	(M.Navi.81)
138. tirunkarruc cavar maram	
Fore top gallant mast	(M.Navi.81)
139. tirunka <u>rr</u> u tavar maram	
Fore royal mast;	(M.Navi.81)
140. tirunka <u>rr</u> up paruvā <u>n</u>	(1/2/2 / 18 / 18/0 2 /
Fore-yard	(M.Navi.81)
	(141.14441.01)
141. ti <u>r</u> āval Spanker	
	M.Navi.251)
142. tuvāratai	
A contrivance in a boat	
	(T.L.)
marakkalamum atanakkattut cukkanum tuvarataiyum piravum amaintiruppinum	
	ccayam 150)
143. tērikāyttattu	
Poop deck	
-	(T.L.)

144.	nańkūram	
	See nańkuram	
	nankurattir kattiya kayiru karralarru	(Civaka. 2231 urai)
145.	nañkūram	
	Anchor	
	marakkalattirkku nankuram vilavittäi	põla (Tiv.tirumalai 38)
146.	nankūrappal	
	Fluke of an anchor	
		(W)
147.	narampuk kayiru	1 -1-42
	Cords sewed into the seams of a sai	1-cloin (T.L.)
140	u=. 5 a. a!	(1.1.,
146.	nāvāypparai Drum used in neytal tract;	
	Dium used in neytar nact,	(Irai.1 page, 17)
149.	nikkatastūr	
	Foresail	
		(T.L.)
150.	nīccal kāvi	
	Lower top-sail	O F NT! 000
	T	(M.Navi.83)
151.	niccal cavar	
	Lower top-gallant sail	(M.Navi.83)
152	pakkappalakai	(11111111111111111111111111111111111111
1,52.	Side-plank	
	D.30 p-1111	(loc
153.	paṭṭaṅkiccār	
	Futtock rigging iron shrowds connect the main mast with that of the topma	

154. pattatai

Frame of timbers to place under a dhoney when ashore, to keep it from the ground.

(T.L.)

155. paţukkai straw or olas or boards placed in a boat to protect goods from the bilge-water.
(W)
156. paţukkai maram Boards laid loosely under the cargo of a boat. (W)
157. pankayiru Hardboard stay-rope of a dhoney (W)
158. payi <u>r</u> pa <u>nn</u> ā Forecastle
(T.L.)
159. parvān Yard, cross-beam on a mast for spreading square sails (T.L.)
160. parumal Yard-arm in a vessel or dhonye (W)
161. parumar kayiru Rope to hoist a sail; the main brace
(W) 162. paruvān
Yard, the support of a square sail
(T.L.) 163. palakai nākku Blade of an oar
(loc)
164. <i>palaň jip kāyi</i> Flying jib guys
(M.Navi.) 165. palan jip mattān kāyi Flying martingal
(M.Navi.) 166. palāri
Clew-garnets
(M.Navi.) 167. palāń jūppu
Sail tied to the flying-jib (M.Navi.)

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168. palān jippūm Flying jib-boom (M.Navi.) 169. palāni Jippum See palan iippum (M.Navi.) 170: palukkā Hatch (T.L.) 171. parrak cār Futtock shrouds (M.Navi.) 172. paruvān Yard, the support of a square sail (T.L.) 173. paruvān kacilinku Yard-sling (M.Navi.) 174. pay Sail 'Kumpotu mippay kalaiyatu' (Puram. 30) 175. pāymaram Mast 'Pāymarak kotipola' (Maturaik.16) 176. paymarak kayiru Cable (Pond:) 177. paymarak kümpu Knob or Conical top of a mast (T.L.) 178. päymara vanku Orifice in the rib of a dhoney through which the mast passes (T.L.) 179. pāymara virutcam

Indian mast, tree. nettilinkam Polyalthia longifolia.

100	
180. pavustě Bob-stays	
Doo-stays	(M.Navi.)
181. <i>pā<u>r</u>li</i>	
Bunt, lines;	(M Novi)
182. piccal	(M.Navi.)
Back-part of a ship	
100 - 171	(M.Navi.)
183. pirāntal Back-stays;	
Dack-stays,	(M.Navi.)
184. pirpāy	
After-sail, as on the mizzen mast and its	
185. pirakattukkattai	(M.Navi.)
Stem post	
	(T.L.)
186. pinnaniyam Stem of a vessel	
Stem of a vesser	(T.L.)
187. puţastūrpāy	()
Studding sail	
188. puṭastūrpōm	(T.L.)
Studding sail boom	
_	(T.L.)
189. Pullin Bowline	
Bowline	(T.L.)
190. <i>Puli<u>n</u></i>	(1.2.)
Bowline	
191: Pūmmaram	(M.Navi.)
Boom	
	(M.Navi.)
192. matavi	
Oar, paddle	(W)
	(W)

193. mattā <u>n</u> kāyi Martingale	(M.Navi
104	(141.11441)
Lift, rope from the mast-head to the extrem yard below, used for raising or suporting the yard.	he end o
	(T.L.
195. marakkalappāy Sail of a Ship	(Tivã.
196. marakkōl	
Boatman's Pole	(T.L.
197. mitappukkaṭṭai	
Buoy	(Mod.
198. muntațiu	
Deck across the bow of a vessel	
	(T.L.
199. munnaniyam	
Bow of a ship	
20.1. 02 11 022-1	(M.Navi.
200. mēntalai	V -1-1-1-1-1
Windward side of a vessel	
Williaward side of a vesser	(W
201	(11
201. mērpuram Windward side of a vessel	
windward side of a vesser	(W
202	(44
202. mērraļam	
Upper deck of a ship	(W
000 - 71-1	(w
203. menralai	
The helm of a ship	/V21 -1 -
ào.	(Yāļ. aka.
204. mońki <u>n</u>	
Horizontal wooden block to which the fore sail in fastened	-tack of

(T.R.)

Rigging (M.Navi.) 206. rīptānkal Reef-band (T.L.) 207. rōmpulukkā Main hatch cover (T.L.) 208. rōmpuvācal Main hatchway (T.L.) 209. lankar Anchor (T.L.) 210. latu 1.Fairlead, thimble or cringle to guide a rope 2. Plunnet (T.L.) 211. lavurān Shrouds in a sail 212. lācuparuvān Yard arm (T.L.) 213. vankakkal Kunker 214. Vankam Vilaiyun Kal White Kunker 225. Vanku Space between the beams or ribs of a boat socket for a mast Wooden ribs of a ship	205.	rinki <u>n</u> kayi <u>r</u> u	
206. rīptānkal Reef-band 207. rōmpulukkā Main hatch cover 208. rōmpuvācal Main hatchway 209. lankar Anchor 210. latu 1.Fairlead, thimble or cringle to guide a rope 2. Plunnet 211. lavurān Shrouds in a sail 212. lācuparuvān Yard arm 213. vankakkal Kunker 214. Vankam Vilaiyun Kal White Kunker 215. Vanku Space between the beams or ribs of a boat socket for a mast (T.L.)			(M.Novi)
207. rōmpulukkā Main hatch cover 208. rōmpuvācal Main hatchway 209. laṅkar Anchor 210. laṭu 1.Fairlead, thimble or cringle to guide a rope 2. Plunnet 211. lavurān Shrouds in a sail 212. lācuparuvān Yard arm 213. vaṅkakal Kunker 214. Vaṅkam Vilaiyun Kal White Kunker 215. Vaṅku Space between the beams or ribs of a boat socket for a mast (T.L.)	206.		(MI.Navi.)
Main hatch cover 208. rōmpuvācal Main hatchway 209. laṅkar Anchor 210. laṭu 1.Fairlead, thimble or cringle to guide a rope 2. Plunnet 211. lavurān Shrouds in a sail 212. lācuparuvān Yard arm 213. vaṅkakal Kunker 214. Vaṅkam Vilaiyun Kal White Kunker 215. Vaṅku Space between the beams or ribs of a boat socket for a mast (T.L.)		Reet-band	(T.L.)
208. rōmpuvācal Main hatchway 209. laṅkar Anchor 210. laṭu 1.Fairlead, thimble or cringle to guide a rope 2. Plunnet 211. lavurān Shrouds in a sail 212. lācuparuvān Yard arm 213. vaṅkakkal Kunker 214. Vaṅkam Vilaiyun Kal White Kunker 215. Vaṅku Space between the beams or ribs of a boat socket for a mast (T.L.)	207.		
Main hatchway 209. lankar Anchor 210. latu 1.Fairlead, thimble or cringle to guide a rope 2. Plunnet 211. lavurān Shrouds in a sail 212. lācuparuvān Yard arm 213. vankakkal Kunker 214. Vankam Vilaiyun Kal White Kunker 215. Vanku Space between the beams or ribs of a boat socket for a mast (T.L.)	200		(T.L.)
209. lankar Anchor 210. lanu 1.Fairlead, thimble or cringle to guide a rope 2. Plunnet 211. lavurān Shrouds in a sail 212. lācuparuvān Yard arm 213. vankakkal Kunker 214. Vankam Vilaiyun Kal White Kunker 215. Vanku Space between the beams or ribs of a boat socket for a mast (T.L.)	200.		
210. latu 1.Fairlead, thimble or cringle to guide a rope 2. Plunnet 211. lavurān Shrouds in a sail 212. lācuparuvān Yard arm 213. vankakkal Kunker 214. Vankam Vilaiyun Kal White Kunker 215. Vanku Space between the beams or ribs of a boat socket for a mast (T.L.)	209.	lankar	(T.L.)
210. latu 1. Fairlead, thimble or cringle to guide a rope 2. Plunnet 21. lavurān Shrouds in a sail 212. lācuparuvān Yard arm 213. vankakal Kunker 214. Vankam Vilaiyun Kal White Kunker 215. Vanku Space between the beams or ribs of a boat socket for a mast (T.L.)		Anchor	σί\
2. Plunnet 2. Plunnet (T.L.) 211. lavurān Shrouds in a sail (M.P. vi.) 212. lācuparuvān Yard arm (T.L.) 213. vankakkal Kunker 214. Vankam Vilaiyun Kal White Kunker (Yāļ. aka.) 215. Vanku Space between the beams or ribs of a boat socket for a mast (W)	210.		
211. lavurān Shrouds in a sail 212. lācuparuvān Yard arm (T.L.) 213. vankakkal Kunker 214. Vankam Vilaiyun Kal White Kunker (Yāl. aka.) 215. Vanku Space between the beams or ribs of a boat socket for a mast			
Shrouds in a sail 212. lācuparuvān Yard arm (T.L.) 213. vankakkal Kunker 214. Vankam Vilaiyun Kal White Kunker (Yāl. aka.) 215. Vanku Space between the beams or ribs of a boat socket for a mast (W)			(T.L.)
212. lācuparuvān Yard arm (T.L.) 213. vankakkal Kunker 214. Vankam Vilaiyun Kal White Kunker (Yāl. aka.) 215. Vanku Space between the beams or ribs of a boat socket for a mast	211.		
Yard arm (T.L.) 213. vankakkal Kunker (Yal. aka.) 214. Vankam Vilaiyun Kal White Kunker (Al. al.) 215. Vanku Space between the beams or ribs of a boat socket for a mast (W)	212		(M.N vi.)
213. vankakal Kunker 214. Vankam Vilaiyun Kal White Kunker 215. Vanku Space between the beams or ribs of a boat socket for a mast (W)	2.2.		
214. Vankam Vilaiyun Kal White Kunker (Tal. aka.) 215. Vanku Space between the beams or ribs of a boat socket for a mast	213.		(T.L.)
214. Vankam Vilaiyun Kal White Kunker (Kunker	(Yāl aka)
() () () () () () () () () ()	214.	Vankam Vilaiyun Kal White Kunker	(Luj. um.)
Space between the beams or ribs of a boat socket for a mast		White Edition	(
a mast	215.	X Marian	•
Wooden ribs of a ship		Space between the beams or ribs of a mast	boat socket for
TOOLER HUS OF A SIND		Wooden ribe of a ship	(W)
(Parav.)		ooden nos or a simp	(Parav.)

216. varkukkartai See Varkukkāl	
217. Vankukkāl	(Yäļ. aka.)
The rib of a vessel; the timber to which planks are nailed	the side
-	(W)
218. Vatastińki Main clew-garnet; purchase consisting blocks and a fall, by which the lowe square main sail is hauled up to the yard	r comer of a
219. vaṭa kāvicēr	(M1.148A1.)
Main top-sail	
000 Mars havi santa	(M.Navi.)
220. Vata kāvi tastūr Main top mast studding sail	
Man wp mass states & tas	(M. Navi.)
221. Vața Kāvi maram	
Main top mast	(M.Navi.)
222. Vaṭa cavar cavāy	(
Main top gallant stay	(M.Navi.)
223. Vața Cavar Cer	
Main top-gallant sail 224. Vata Cavar tastūr	(M.Navi.)
Main top-gallant studding sail;	
	(M.Navi.)
225. Vata cavar paruvān Main top gallant yard	
Main top ganant yard	(M.Navi.)
226. Vatacavar Pirāntal	•
See Vațacavar per paroți	(M Nei \
227. Vața Cavar Per Parôți	(M.Navi.)
Main top gallant backstays	
	(M.Navi.)

228.	Vaṭa Cavar maram Main top gallant mast	
229.	Vața Cavar levurā <u>n</u>	(M.Navi.)
220	Main top gallant shrouds Vajacavar cer	(M.Navi.)
230.	Main royal sail	(M.Navi.)
231.	Vaṭa Cavar maram Main royal mast	(17111 14 711)
232.	Vața Cēr Main sail	(M.Navi.)
233.	Vata maram	(M.Navi.)
	Main mast	(M.Navi.)
234.	Vallimaram Main mast	
235.	Vāvuttā <u>n</u> Prow of vessel	(T.L.)
236.	Vārkoti	(W)
225	Pennantfor the mizzen mast	(W)
237.	Vārā <u>n</u> Small stay to the leeward of the sail to place	
238.	Vi <u>l</u> utukkayiru Sounding line	(W)
239.	Vi <u>l</u> ācu	(T.L.)
0.46	Brace	(M.Navi.86)
240.	Virus See Virācu	·

(M Navi.232)

241. Virāskappi Back block, pulley through which the brace is served at the end of a vard. (T.L.) 242. Virunal Scupper hole (T.L.) 243. Vettākkukkūţu Binnacle (T.L.) 244. Jäturinkin Standing rugging (M.Navi.207) 245. Jīti Gangway ladder (M.Navi.207) 246. Jip Triangular sail set on the Jib-stay (M.Navi.214) 247. Jīp cavāy Jib stay (M.Navi.215) 248. Jip tāmān Jib sheet (M.Navi.215) 249. Jippu See Jip 250. Jippum Jib-boom, the spar extending beyond the bow-sprit. (M.Navi. 214) 251. Jippumkāyi Jib-boom guy, wire ropes for supporting the jib boom side ways. (M.Navi.209) 252. Jöli Parbuckle

253. hāk

Hank ring of iron rope etc. for fixing the staysails to stays.

(M.Navi.232)

254. hāńcā

Halyards ropes for hoisting or lowering sails, flags, etc.

(M.Navi.210)

255. hētti

Leach of square sails

(M.Navi.217)

256. hettiyalattu

Leach-lines, ropes attached to the back of a sail to hoist it

(M.Navi.87)

III. NAVIGATION AND SHIP BUILDING AND CREW

1. akkappātu

1. Diaster at sea

(W)

2. Loss of Cargo

(W)

 akkaraip paţuttutal To ferry over

Serunn Sugar

(T.L.)

3. <u>ārruppāycci</u>

River Navigator

(Insc.)

4. ärukäțți
Guide, pilot.

(W)

5. irankutal

To disembark, to be unloaded

6.	Nañcurriyōțal Sailing round the eastern side of Ceylon.	(W)
7.	игирра	(**)
7.	A tree, the timber of which is used instead of to ship-building, Hopea decandra	ak in
	Simp-building, Hopea accandra	(Mu.a)
8.	uluttal	, ,
	To be worm-eater, as wood, to be eaten out by insects, as grain, as seeds	
		(T.L.)
9.	etir nāļ Nakstra whose influence has respect to moveme and interests in the different points of the comp	
10.	etir nõkku naṭcattiram	
-	See etimāļ	
		(W)
11.	A word that occurs again and again in songs suboatmen or others while pulling or lifting together	ing by
	Coautien of outers white pulling of many washing	(T.L.)
12.	era vitutal 1. To keep off from the shore, as a vessel	
	-	(W)
	2. To sail close to the wind	(W)
	3. To turn towards the shore, as a vessel	(w)
	5. 10 tuin towards are shore, as a vesser	(W)
13.		,
	Sailor	
	(Cilap: arun	n 5,27)
14.	One who drives, that which drives, instrument o	f
	driving	(T.L.)
15	ōtakkāran.	()
	Boatman, ferryman	
		(T.L.)

ı	1	ľ	a	l
,		١.	•	•

16 Õtāvi

Maritime History

10.	1. Shipwright, boat builder	
	2. Carpenter	(W)
17.	•	(T.L.)
18.	<i>Kaṭalōṭi</i> Mariner, Seaman	(T.L.)
19.	Kaṭalōṭu To go on a voyage by sea.	(Cilap:arum 2,2)
20.		(Ko <u>nr</u> ai Vēn.)
21.	Katar payeci Sailor, mariner,	(W)
22.	300 · · · · · · · · · · · · · · · · · ·	(Insc.)
	2. Captain, Chief Sailor	(T.L.)
23.	Kappal õṭṭu Sailing of a ship	(T.L.)
24.	Kappal offutal To sail a ship, steer a vessel.	(T.L.)
25.	Kappal otutal 1. To sail, as a ship	
	2. To carry on trade by sea	(T.L.)
	'Kappalōṭip paṭṭa kaṭan'	(T.L.)

(Cilap: 11, 127)

26.	Kappal vaittal To engage a ship	(W)
27.	Kappa <u>r</u> Kāra <u>n</u> 1. Master of a ship, shipholder	(T.L.)
	 Mariner, shipman. 'munnēran kapparkāran; pinnēram piccaikkān 	
28.	kappittān Captain of a ship	(Loc)
29.	Kampatiu Gamote, Leakage in a ship	(T.L.)
30.	Kampatup pārttal To stop a ships leak.	(w)
31.	Kampa <u>rr</u> u Leakage in a ship	(Yāļ. aka.)
32.	Kappar castiram Science of Navigation	(T.L.)
33.	Kappar cētam Ship wreck	(T.L.)
34.	Kamma kārar Sailors, mariners	(T.L.)
35.	Karai taṭṭutal To be stranded, as a ship. 'Kappal muvāyiramun karai taṭṭip ponatināl' (Kovala.	(1.1., katai.1.67)
36.	Karaippaţuttutal 1. To convey to the shore Karaipaţut tānkuk peyarum	kāṇṇāṇ

37.	Karaippatutal To get to the shore, as a vessel	(T.L.)
38.	Karaipiţittal To arrive at a port.	(1.2.)
39.	Karaipiṭi:ōṭuṭal To sail along the coast	(W)
40.	Karaiyöttu	(T.L.)
-	Sailing along the coast	(Yāļ.aka.)
41.	Kalluttukkütal To weigh anchor	(W)
42.	Kalapparru Caulking of a boat	
43.	Kalapparrați See Kalapparrupparttal	(1)
44.	Kalapparruttōņi Caulked boat, surf-boat, the reams of formed by joining planks without lopping.	
45.	Kalappa <u>rr</u> uppärttal To caulk a boat	(W)
46.	Kalappa <u>rr</u> ukkāra <u>n</u>	(T.L.)
	One whose occupation is the caulking of etc. caulker	f ships, boats
47.	Kalap parruli	(T.L.)
48.	Caulking-iron Kalācukkāran	(T.L.)
	Indian Seamen	(Loc)

49.	Kalācukka <u>ran</u> Lascar	
	Wind Town	(Loc.)
50.	Kittān pancu Tow. Oakum for caulking ships.	
	7711 6	(W)
51.	Kilācu Lascar Indian Sailor	
		(T.L.)
52.	Ki <u>lā</u> cukkāra <u>n</u> Lascar	
		(C.E.M.)
53 .	Kōcilē piţittu vātal To manage the rudder so as to sail close	to the wind.
		(W)
54.	cavaļakkārar Ferryman	
	renyman	(T.L.)
55.	cāyappiṭi To steer a vessel windward	
	10 steer a vesser whitewart	(J)
56.	cirānku Boatswain, skipper of a small vessel, chie	f of a laccar
	crew.	I OI a Iascai
		(T.L.)
57.	<i>cukkāņi</i> Helmsman	
		(W)
58.	cukkāņ kiri Helmsman, one who steers a vessel.	
		(W)
59 .	cukkā <u>n</u> tiruppu See cukkan piti	
60.	cukkān piți	
	To steer a vessel	(W)
61.		(#)
	To go on a fishing trip for a few days.	(J)

62.	tankutōnikkup pōtal tankukatalukkup pō	ഗ
63.	taraittaṭṭutal To run a ground, as ship; 'tarai taṭṭiṇa kappal pola'	(3)
64.	tannutal 1. To take a little by little, as from a heap a vessel a little at a time.	o; to unload
	a vosgot a fittle at a time.	(W)
	2. To move a vessel by degrees.	(W)
65.	tāmāṇilēvātal '	
	To let a vessel drive before the wind	(T.L.)
66.	tiņtēl	
	Boatswain, mate	mr I.)
67	tulavaitotuttal	(T.L.)
ur.	To paddle a raft or boat	
	•	(W)
68.	tu <u>r</u> aiyatukkap pitittal	
	1. To sail toward port,	
	2. To anchor in or near the harbour	
69.	tükkutal	(J)
09.	To weigh anchor	
	10 Weight William	(W)
70.	· -	
	Boatman	(T.L.)
71.	tõni taļļu	(1.4.,)
	To launch a boat	
-	.T	(W)
72.	<i>tōṇi tāṅku</i> To punt a boat	
	To punt a toat	(T.L.)

of S	South India	319
73.	nakutā Captain of a ship	(T.L.)
74.	nahkūrah kottiviţu To cut or slip the cable	(T.L.)
75.	nanküran tükkutal 1. To weigh anchor	(#)
	2. To set sail.	(Colloq.)
76.	nankūram vali See Nankūram tūkku	(0004)
77.	nattār vaittal To warp a vessel	(1)
78.	nākutā Captain of a ship	(W)
79 .	<i>nāvikan</i> Mariner	
80.		(Can. aka.)
	Captain of a ship	(W)
81.	niyān Captain of a ship; steersi niyān põla	nan pauvat tarunkala miyakku
02	netunkatalōtutal	(Perun. uncaik. 49,10)
04.	Sail along the coast	(W)
83.	patakukk a ran Boat owner	
84.	patakuvalittal	(W)

(W)

84. patakuvalittal To row a boat

(Tiva. Maturaik. urai)

		•
85.	patakõtti Boat-man	ON O
86.	patava <u>n</u> Boatman	(W)
87.	paṭiyappāytal To sink, as a ship	(Tiruppo.can. piḷḷait. mut.11)
88.	<i>pāyi<u>l</u>u</i> See p ā yvali	(W)
89.	pāyi <u>r</u> akku To let down sail	
90.	päypöräkkutal To spread sail	(T.L.)
91.	<i>pāymārutal</i> To shift, sail tack a ship	(T.L.)
92.	pāyvali To hoist sail	(T.L.)
93.	<i>pāyviri</i> To spread sail	(T.L.)
94.	mālpaņļāri Clerk of a ship owner	(T.L.)
95.	mālimi See mālumi	(T.L.)
96.	malumi Pilot, Captain of a vessel, 1	(Yal. aka.)
97.	mikāma <u>n</u>	(Pin.)

Pilot, Captain of a vessel

(Loc.)

98.	<i>mīkā<u>n</u></i> See mīkāma <u>n</u>	(Taṇṭi. urai 37 uta)
99.	mīvā <u>n</u> See mīkāma <u>n</u>	(Nāmatipa. 172)
100.	lankarați To cast anchor	, , ,
101.	lankar paytal To be moored; to be at anchor	(T.L.)
102.	vātaiyil ōṭutal	(T.L.)
102	To Sail with the northwind	(W)
103.	vāṭaiyālōṭu See Vāṭaiyilōṭutal	(W).
IV.	SEA SHORE AND PORTS IN LEXICON AND DICTIONAR	TAMIL IES
1.	akkarai Farther shore, opposite bank	(Kantaran. 10)
2.	aruvi River's mouth	(Pin.)
3.	atōmukam Mouth of a river, confluence of a ri	
4.	alai tānki Breakwater	
_	-1-4-Tarkhanai	(C.G.)

5.

alaiväykkarai Seashore

522 Maritime fishery	322
6. <i>aṭai kaṭal</i> Sea coast	6.
(Tol. Col. 419 urai)	
7. ali Place where the lagoon joins the sea (Nan.)	7.
8. alivay Sand bank at the mouth of a river or harbour (Loc.)	8.
9. alivi Inlet to backwater, mouth of a river. 'Kalimukamalivingakantal' (Kurun. 340)	9.
10. āyacāvaţi Customs Office (W)	10.
11. all 1. Sea, as the deep (Pin.)	11.
2. Seashore (Piň.)	
'Perunkatar kalianaiyan' (Puram 330)	
12. i <u>r</u> anku To disembark, to be unloaded (T.L.)	12.
13. irankutu <u>r</u> ai Landing place (T.L.	13.
14. irankutu <u>r</u> ai Place of discharging cargo	14.

15.	irakkumati
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- 1. Importing
- 2. Imports

(T.L.)

16. uppaļāru

Soil containing clay and sand impregnated with alkaline matters, generally found along the coasts.

(M.M.)

(1)

17. uppanāru

Backwater, regarded as a river of sautwater

(Acuvaca, 147)

18. uppahkali

- 1. Backwater
- 2. Salt-pan

(T.L.) (W)

19. uppalam

1. Salt-pans

2. Saline land

(Pin.)

20. *uppukka<u>l</u>i* See uppanka<u>li</u>

(T.L.) (W)

21. ulku

Toll, custom, duty. 'Uruporuļu mulku poruļum' (Kural, 756)

22. ulku ceytal

To levy a duty

(Patti. 125)

23. uvari

Brackish water; 'Malaicārntu muppīņţu vari pirattalāl'

(Nalati. 245)

2. Sea. 'Ulakucu luvari' (Kamparā. ūrtē. 15) 24. Erru turai Place or embarcation (W) 25 errumati 1. Export 2. Exported cargo (T.L.) 26. errumutal Cargo exported in boats etc. (Can. aka.) 27. errumaticcițiu Manifest. (M,Navi,123) 28. otukkukkatal Bay, Gulf, Natural harbour (T.L.) 29. kattam Ghat, landing place (Yal. aka.) kaţal vāykkāl Lagoon (Pond.) 31. katarkarai Sea shore: beach (Tiva.) 32. katar kotu Sea coast 'malkutiraiya katarkottiruppinum' (Nalati. 263) 33. katar carpu Land adjoining the sea Maritime tract. (T.L.)34. katarpuzam un-opened bar of a river; sand land that totally closes

many an Indian rivers mouth during the dry weather.

35. katarrurai Harbour

(T.L.)

36. kappalerru

To transport, To punish with transportation as to the Andamans

(Loc.)

37. kayayari River mouth

(Nāmatīpa.)

38. kayavu River mouth

40. karaiturai

(Yāl. aka.)

kayavāy
 Estuary
 (Kaṭaṇman ṭaluvattuk kayavāy kaṭuppa*

(Malaipaţu. 528)

Landing place; End.

(W) (T.L.)

41. karaituraik kāvarkāran Tide-waiter; master attendant

(W)

42. kalimukam River mouth

(Tiva.)

- 43. kallatturai
 Port where export and import are carried on stealthily
 (W)
- 44. Käyal
 - 1. Stretch of salt water close to the coast and separated from the sea by sand spits, backwater lagoon.

(Cūţā.)

2. Mouth of an ebbing steam

(Pin.)

45. Kāvirippum paţtinam

Ancient sea port and Capital of the Chola Kingdom, the Khaberis of Ptolemy

(T.L.)

46. Kānal

1. Seashore

(T.L.)

2. grove or forest on the seashore.

'Kanalun katalun karaiyun tervuli'

(Mani. 25, 196)

47. Külam Sea shore

(Tiva.)

48. Korkai

An ancient port formerly at the mouth of the Tamiraparani in the Pandya Kingdom.,

'Korkkaik Koman';

'Korkaiyam perunturai'

(Aink. 188)

Kötikkarai

Sacred Seabathing ghat at Calimare Dhanushkoti etc.

49. Cankamukam River mouth

(Cilap. 9, 57 urai)

50. Carakkupartital

To unload Cargo

Carakkup parittarkuk katalin ninra marakkalankal

(Maturaik, 85 urai)

51. Calankukkaran

Pearl diver

(L.C.)

52. Calankupari

To unload a boat

(W)

53. Calacanti Strail

(nod.)

(Loc.)

54.	Sankamukam Mouth of a river	(T.L.)
55	Cukkai	(1.2.)
<i>J</i> J.	Passage money; freight	(Paṇi. 116-125)
56.	Cerppu	
	Seashore, coast	(T.L.)
57.	tankuturai	
	Port of call	(J)
58.	tāvu .	
	Harbour	(W)
50	tirumukattu <u>r</u> ai	()
57.	Mouth of the Cauvery river.	(Cilap. 10.33 urai)
60.	tiruvanaikkarai	
	Danuskody	(-1 70 mai)
-1		(aka. 70 urai)
01.	tu <u>r</u> aimukam Harbour, seaport	
	'Kalankal acaikinra	
	katarruraimukankalil'	
	•	(Cilap. 6.154 urai)
62.	tonikkatamai	
	A tax on boats	(Insc.)
63.	tõņikkuttakai	
	Contract for a whole toni without	reference to the
	number of trips or weight of cargo.	(Loc.)
4	tōṇittu <u>l</u> ai	(1.00.,
04.	Port, harbour	
	- Vary	(Loc.)
65.	toni yuluntu	oot.
		f 1341

66. pattanam

1. Coastal town

2. Kavirippümpattinam

(T.L.)

67. pattinam

1. Maritime town 'Pattinam patarin'

(Cirupan, 153)

Kāvirippūm paţţinam

'Muttac cirappin pattinam perinum'

(Patti. 85-194)

68. payana uttaravuccittu
Port clearance

(M.Navi.)

69. paravaram Sea shore

(Pin.)

70. pāguvaittal
To load a dhoney with cargo

71. pukar

1. Mouth of a river

(Puram.30)

The town of Kavirippiimpattinam as situated at the mouth of the River Cauvery.

(Cilap.)

'Pukarp pukunta Perunkalam'

72. Peruntugai

Large seaport

'Perunturai marunkin peyaratu

(Cilap. 13, 176)

73. maruvürppākkam

A part of Kavirippümpattinam

'Maruvinri vilankum maruvurppakkamum'

(Cilap. 5, 39)

74. Mukattuvāram

A mouth of a firth or river.

(Colloq.)

75. Muciri Muziris, an ancient seaport near Cranganore 'Mulankukatan mulavin muciriyanna' (Puram, 149:9-11) 76. Mülaikkutā Corner of a bay, harbour, etc. (T.L.)77. Melaikkarai

Western bank of coast

(T.L.)

78. Vēvu

1. Landing place; fort; port; harbour

(C.G.)

2. Custom house

(Mod.)

79. Vallak katavu Jetty

(Năñ.)

80. vāykarai Ghat, ford, landing place 'Niccap pukku vaikaraiyile teppamilappārai pola'

(Tiv. tirukkurun. 10. vva)

81. viliturai

1. Shore, bank, fore

2. Ghat, ford

(T.L.)

82. Katarpatai Naval force.

(Irai. 39, uta 241)

V. SEA, WIND, CLOUD, RAIN IN TAMIL LEXICON AND DICTIONARIES:

1. akattiyā Unfathamable abyss.

(TL)

Ocean

2.	akātam		
	1. Great depth	(astap. alakaran.15)	
	2. Water of swimming depth	(Pin.)	
3.	ațikārru Very powerful wind, cyclone, Strong gale, tempest	Ø	
4.	appu Sea	(T.L.)	
5.	ani Sea	(1,1,)	
6.	'Katal attiku vittanaiyum'	(astap. tiruven.33)	
0.	appurakkaial appurakkaialun cuvaiyarrana	(Kambarā.603)	
7.	ampu 1. Bamboo	(di)	
	2. Water	(tiva)	
	3. Sea	(T.L.)	
	4. World, as surrounded by water	(T.L.)	
	5. Cloud	(Civaka. 2332)	
8.	amputi Ocean as the receptacle of waters	(Aka. ni)	
9.	ampuniti	(Kantapu. tevakiri.5)	
10.	Ocean as the receptacle of waters ampōtanam 1. Cloud	(Cintã. ni.205)	
		(T.L.)	

2. Ocean (Takkayakap. 606 urai) 11. amutakam 1. Sea of milk (T.L.) 12. *ari* 1. Sea 13. arunavam Foaming sea, Ocean (Pin.) 14. alai 1. Wave, billow, ripple (Pin.) Sea 'alaivanam peritenko' (Naitatanattu. 22) 15. alai kārru Force wind, tempest (K) 16. alai yeru 1. Dashing of the waves 'alaiyerrile kontu poy' (Îţu. 7. 22) 17. alai viricla Curling wave (W) 18. alakkar Sea, ocean 'ankan mā nalan culum alakkar' (Kantapu. arru. 36) 19. annavam Sea (Cuta) 20. anilam Air, wind (Pin.)

āṭikkārru
High winds, such as those characteristics of āṭi.

(Ci.Ci. pa. ulōka.)

22.	ārkali Sea	
	Flood	(Tiruvāca. 18,2)
23.	ālam 1. Water	(Netunal.)
	2. Sea, ocean	(T.L.)
	3. Rain	(Pi ň .)
24.	ziji 1. Rain drops	(aka. ni.)
	2. Hail 'ālipõl mutti <u>r</u> kum'	(Cūṭā)
	3. Opening shower of rainy season	(Civaka. 2786)
	4. Wind	(Piñ.)
25.	āļi. 1. Sea, as the deep	(aka. ni.)
	 Seashore Peruńkaţar käliyanaiyan' 	(Pin.)
26.	anittūkkam Calm prevailing of the sea in the month	(Puram. 330) of ani.
27.	uppańkārru Sea breeze	(J)
		(T.L.)
28.	unti Sea 'Unti ulakattil'	

(T.L.)

29. itcu camuttiram

30. irattinākāram

gems

Sea of sugarcane juice

		(T.L.)
	2. The popular name of that part of the Bay north of Dhanusköti near Rameswaram.	of Bengal
31.	Ilavana camuttiram 1. Sea of salt water, One of catta camuttiram.	(T.L.)
32.	iļaṅkāṛru Gentle breeze	(T.L.)
33.	i <u>l</u> ai cloud	
34.	uppuk katal 1. Ring-shaped sea of salt water one of the ēl 'ēlu katalin onru'	
	2. The salt sea; the old name for the Dead se (Vivi	(Piń.) a li. āṭi.14,3)
35.	urakatal Boisterous sea, sea generally rough.	(W)
36.	urumuk kural Noise of thunder	(T.L.)
37.	uvari 1. Brackish water	lālati. 245)
	2. Sea	
38.	(Kampara. <i>Ūtar kā<u>r</u>ru</i>	ūr. tē. 15)
20.	Cold biting wind of the dewy season	(T.L.)

1. Ocean, as the repository of innumerable precious

(T.L.)

39.	<i>ūtai</i> 1. wind, gale	\
	2. Cold wind	va.)
	'Panippularpāti ūtaiyūrtara'	
40.	(Paripā. 11, ūtaikkārru	,84)
	1. Destructive wind that prevails at the end of the world	
41	\overline{U} lik k \overline{a} ru	.L.)
41.	1. Destructive wind that prevails at the end of the world	
40	Ţ., Ţ.	.L.)
42.	Ulinir Water which prevails at the last deluge which submerges the world	
40		(W)
43.	etir kārru contrary wind	
	(T.	.L.)
44,	etir colakam Wind that blows from due south	•
45	elvali	(J)
73.	Furious wind 'elvaliyalaikkum'	
40	(akam.	77)
40.	elukațal The seven concentric seas of the terrestrial sphere, v	
	(Kantapu, anta.	12. 20)
47.	erikāl Violent wind	ĺ
		(W)
48.	ēricā	
	Boisterous of the sea	

49.	aippacik kulappam Rough weather at the setting in of the monsoon in October.	
		(J)
<i>5</i> 0.	<i>ōtukku kaṭal</i> Bay, Gulf.	(w)
51.	Otam 1. Sea 'Ōtamali nancunța vuțaiyone'	(Tinuvāca. 38,3)
	2. Wave, billow	(114,454, 50,5)
	'Katalōtafi kālalaippa'	(Tiv. Iyar.1,11)
52.	Ōtai	
	wind, Otai alaittana tariyirralli	(Kanta, pu. 8)
53.	Ötavanam	
	Sea as a great flood (Pa	rata. Arucuna. Nīr.)
54.	kaccan	
	1. Westwind	
		(J)
	2. West	(T.L.)
	L Zu h34ai	(1.1.,
<i>5</i> 5.	kaccān kōṭai South-west wind	
	20ffti-Mest Milit	(W)
56	katal	χ
50.	Sea	
	552	(Tivā.)
57.	katal kõttal	
	To rage and swell, as the sea	-
		(itu. 4,5,9)
<i>5</i> 8.	katal iraivan	
	Varuna, the God of the sea	(Vatatēca, kā, 245
5 0	h-a-lati.	(varaucca, ka. 245
39.	kataletu To over-flow or encroach as the sea	
	In OACI-IIOM OF CITCLOROIS WE THE SOM	44.

60. katal ellai

To earth, so called because it has the sea as its limit or boundary.

'Ulakam veņkuţaiyinnilal kaţalellai nilarralāl'

(Civaka, 2580)

61. Kaţal ōcai
Empty noise, as the roar of the sea; seaseless jumble
of words

(Tiv. tirunetun.21 vya)

62. katar kārru Sea breeze

(T.L.)

63. kaţar kiţanton Vishnu, in his lying posture on the sea; 'tirumal Potucerayan porukaţar Kitanton'

64. katarko

Varuna, the God or Lord of the sea. 'annavan katarkō vananki yettura'

(Upatēca.. Uruti. 230)

(Tiruva. 23, 8)

kaţar perukku
 Flood, tide

(T.L.)

66. kaţa<u>rr</u>i
Forth of the sea

(Mu: a)

67. kaţunkāl
Violent wind, tempest
'Kaţunkāl māri kallē poliya'

(Tiv. periyati. 6. 10-8)

68. katuval
Heavy gale; hurricane

(TL.)

 kaţuvali
 Boisterous wind, storm 'kaţuvali tokuppa vintiya'

(Puram. 55, 22)

(Catu)

70.	kaṭaikkāl Final tempest destructive wind that p of the world.	orevails at the end (Mināt, pil, kāppu
71.	kayam Sea 'Kayankaranturai yarakkarai'	(Upatēca. Vipūti. 20
72.	karuñkontal South east wind	(W
73.	karunkontal North West wind	(Yāļ. aka.
74.	karaikārru Land breeze	(W
75.	karaivāṭai Northwest wind	(W
76.	kalavāyōṭu See kaṭanurai	(I)
<i>9</i> 7.	kalappu Shallow part of the sea	(w
78.	kārkōļ 1. That which is absorbed by the clo 2. Sea 'Kārkōļ mukanta māmalai'	ouds
79.	kārvalayam 1. Ocean	(Tirumuguka. 7
80.	kārānai The cloud brought down to the surfa waterspout at sea.	•

81. kälam

Cloud

82.	kāļamuki A cloud which rains hail-stones; one	
.22	kārriļaval	(Tivā.)
05,		
	Gentle breeze	(VEL also)
9.4	kā <u>r</u> ru	(Yāl. aka.)
07.	Air, wind	
	'Karriyamanan vanam'	(Ti 5 (2)
95	h-Warmer Library and	(Tiruvaca. 5, 63)
. 63.	kārrukkatuval	
	Violent wind	W7 -1-1
0.0	, - , , -,	(Yāl. aka.)
80.	kārrukkālam	
	Windy weather, especially in ati.	
07	·	(T.L.)
87.	kārru malai	
	Tempest	
		(T.L.)
88.	Kārru peyartal	
	To set in, as monsoon	
		(T:L.)
89.	kā <u>rr</u> u vākku	
	Direction of the wind	
	'Karruvakkilë ningu'	_
		(Civaka. 1568 urai)
90.	kārru vāņku	
	To take an airing, enjoy breeze	
		(T.L.)
91.	kārruvāttam	
	Windward	
		(T.L.)
92.	kārrotukkam	
	Calm, Iull, subsidence of wind	
		(W)
93.	Karrotukku	1 /
	Shelter from the wind	
		Mark 1947

94.	kārrōṇam Ventilation, free circulation of air.	
	•	(T.L.)
95.	Kitankar	
	1. Moat	
		(T.L.)
	2. Ocean	(T.L.)
	'tiraikkitankarcül kuvalayam parappil'	(1.2.)
	Ulateca	kãn. Vipūti. 35)
96	Kilkārru	
70.	1. Easterly wind	
	1. Edstelly wind	(Tivã.)
07	kuṭa kārru	()
71.	Westerly wind	
	'Kutakar regittu kotinutanku marukin'	
	Kaiarai Iclius roimeimes magazai	(Cilap. 14, 70)
06	kunna vātai	(O
70.	North-east wind	
	'Kunnavātai kūttinālum kūttum;	
	kalaittalum kalaikkum	
	Kalaittaiulii kalaikkuiii	(Loc.)
00	Kuravai	(200.)
77.	Sea pavantanip paravaik kuravaiyai	
		•
	katapparital'.	Vairāk. tīpa. 18)
100		Tanan upu. 10)
100.	Kuļirkārru Cold wind	
	'Kulir kārraip porukka muṭiyavillai'	
	Knit kaiisib boingga mnitaaamsi	(T.L.)
101	Kunrāvātai	(1.2.)
101	North east wind	
	NOTHI East WING	(Loc.)
100	Kun <u>r</u> u vātai	(200.)
102	North-west wind	
	MOINT-MOST MINT	(T.L.)
102	.Kūtir	(1.12.)
105	1. Chill wind	
	2. Wind	(Piń.)

3. Autumn, the months of Aippaci and	Kärthikai (Tol. po. 6)
4. Sensation of Gold	(T.L.)
104. kaiyam Water, sea	(aka. ni.)
105. koṇṭal East wind	,
Wind	(T.L.) (Piñ.)
East	(T.L.)
'Kontan māmalai polinta tuļi'	(1.2.)
106. Kottuvānam Mackereal sky	arn.
107. Kōṭai	(W)
West wind	(Gñanā. 28, 12)
Koțai türrak küțiya vülilai	
108. Kõțai Wind Kõțai	~!!
109. Cakkira vātam	(Pin.)
Whirlwind	(Yāl. aka.)
110. Cakkarar 'The sons of Sagara, who are believed	to have dug out
	Kampară. akali. 43)
111. Cakara nīr Sea, as dug by Cakarar	Mi 10.50
112. Canta märutam	(Piramo. 13,66)
Hurricane, wind storm	(T.L.)

113. Catta camuttiram The seven concentric seas of	the terrestrial sphere. (Cūta.)
114	(Cuju.)
114. catta maruntu	
The seven kinds of wind	m:• \
	(Pin.)
115. catā kati	
Wind as being in perpetual m	otion
Catākati maintanum	
	(Pārata putpa.15)
116. catilam	
wind	
******	(cah. aka.)
117. cantarttārai	• ••••
Incessant rain; continuous dov	PRODIT
meessant ram, continuous do	(Loc.)
110 Comes comunicam	(200.)
118, Capta camuttiram	0.7045
The seven circular concentric	
	(T.L.)
119. Capta-cākaram	
The seven circular concentric	
	(T.L.)
120. Camuttira kõşam	
Cuttlefish bone	
	(W)
121. Camuttiram	
Sea: ocean	
	(Piń.)
122.Cala pravākam	Ç y
Flood	
Flood	(Colloq)
100 0-1	(Conoq)
123.Calappiralayam	
Deluge	
	(T.L.)
124. Cutta nīr kațal	
Ocean of fresh water	
'Puţkarattivai culnta attunaiya	
parapputaiyatu'	
Cuttanirkatal'	// == == 2.3 ==== 010\
A matter at training	(Ci. po. pa. 2,3 page 210)

(Peruh. naravana. 1,24)

125. Cuttōtaka camutiram Ocean of fresh water	(T.L.)
126.Curā Camuttiram	(1.2.)
Ocean of toddy	(T.L.)
127. Culāvu	()
Wind 'Culāvāki'	
128. Culai kāi	(Tēvā. 1227,3)
Whirlwind	
'temā varuntun culalkālvāra'	(nanneri)
129. Culal kārru	,
Whirl wind	(Cប៊ីឆើ.)
'Culakārrinkat pancanalir pāyntatena'	(Pramō. 30, 75)
130. Culai taṇṇir	
Eddying flood	ATD.
131. Culi	(W)
1. Whirling	
2. Whirl, vortie, eddy	
'Nircculi kankaiyin culiyir patta'	(Civaka. 1096)
132. Culikkārru	(CIVALA. 1096)
See Culalkarru	
133. Cuļimiņņal	
Forced lightning.	
'Cuyarulla minnal'	0V51 -1 N
134. Curaikkārru	(Yāl. aka.)
See Culal kārru	
	(W)
'Cūlvali cularra tālkalattaluntinān' (Peni	h. naravāna 1.24)

135	. Cūrai	
	1. Whirl wind	
	'Cirai māruttattu'	
	Curat marutattu	(m) - F - 1 - 0 10)
2000		(Tiruvācaka. 3,10)
136	Ceñcã mārutam	
	1. Violent storm,	
	Boisterous wind and rain	
	'Cencamarutam pola notikkiren'	
		(irāmanā. araņi)
137	.Colakakkaccā <u>n</u>	
137	The south west wind	
	ine south west wind	470
		(J)
138.	Colakak kontal	
	South East wind	
	Bough Bust Wind	(W)
	6-1 1	(")
139.	Cōlakam	
	South wind, wind that blows during	the south west
	monsoon	
	1110111100,11	(W)
- 40	a= = = :	(11)
140.	Condmari	
	Incessant downpour of rain	
	•	(T.L.)
1/1	Conā mēkam	(/
141.		
	Clouds incessantly pouring rain	
	'Conamekam polivatupole'	
		(Parata, 135)
1.42	Cõnā vāri	Ç,
	See Conamari	
		(J)
143	Cōnai	
	Dark mois re-laden clouds	
	'Conaivar kulalinar'	
		(Kama. 14)
	2. See Conāmari	(Pin.)
		/- a)
	12 m 1 - 90 - 12 - 12 - 12 - 12	
	'Mekańc conaipata'	
		(Kampara.)
		Kakap.20

(W)

144. Conai kattutal Darkening with moisture laden clouds as an indication of heavy shower at distance (Collog.) 145. Conai turral Drizzle (W) 146. Conai mari See conamari 147. Cönaimēkam See conāimēkam 'Corintatu conaimekam' (Parata. campava. 79) 148. taticamuttiram Ocean of curds, one of cattacamuttiram. (T.L.) 149. tayā camuttiram ocean of mercy (Krupā camuttiram) (T.L.) 150. tayirkkatal Ocean of curds, one of elu katal (Pin.) 151. taraik kärru Land breeze (T.L.) 152. tavicam Sea (Yal. aka.) 153. tāļi Sea (Yāl. aka.) 154. timikotam Sea (Yāl. aka.) 155. ticcalam

Froth of the sea

156. tīvaļi	
Tempest, whirlwind	
'tivaliyā narkā yutirlalumuņtu'	
	(Nālaṭi. 19)
157. tuttātti	
Ocean of milk	(Yāi. aka.)
158. terkattik kä <u>rr</u> u	(- 25)
See tenral	
	(Loc.)
159. tenkarru	
Balmy breeze, as blowing from the South	(T.L.)
160 am hāl	(1.2.)
160. ten käl See ten kärru	
See tell water	(tivā.)
161. tenral	
1. South wind, balmy breeze from the south	a
'vantotu pukka manavayt tenral'	(Cilap. 2,24)
2. South west monsoon in June-Sept.	(Chap. 2,24)
2. South west monston in value sepa	(T.L.)
162. tennal	
South wind	
	(T.L.)
163. tenkatal	
Sea of toddy	(T.L.)
64. tēnam	(1)
Ocean	
	(Yāļ. aka.)
165. taiyal	
Cloud	
tāṇē malai poli taiyalumāi nirkum	(tiruman.10)
166. totukatal	(en ammi 10)
Eastern ocean	
'Kunātu karaipora totukatar Kunakkum'	
	(Puram.6)

(Yāl. aka.)

167 17	
167. nataikārru	
Free current of air	
	(T.L.)
168. natātipati	
Ocean, sea, as Lord of nadas	
Coount sout as Bold of hadas	(W)
169. na <u>nn</u> īrkaṭal	(w)
109. namurkajai	
Ring-shaped ocean of fresh water; of	
	(T.L.)
170. nāraniti	
Sea, as a water-store house	
'nāranitiyinai nokki cenru'	
marantiyinan nokki cenin	(Cotumus timuma 22)
171. nilainīr	(Cetupu. tiruna.22)
Ocean	
_	(Kallā. 21.1)
172.Nintu	
Ocean	
'Nintu nittila Vitana nilalan'	
Minima Mitalia Intalaiji	(Cīvaka. 2421)
172 N	(CIVaka. 2421)
173. Nirperukku	
1. Flood	
	(T.L.)
2. Flow of the tide	
	(W)
174.Nīratam	()
Cloud as giving water	
Cloud as giving water	
105 : -	(T.L.)
175.nirūpam	
1. sky	(Yal. aka.)
2. air	(T.L.)
	(1.2.)
176. niniraviyalakam	
Sea, ocean, as the blue expanse	
155	(aiṅk.401)
·177. neṭuṅkaṭal	
The sea adjoining a shore	
'Karaiyatutta katal'	

of South India	347
178. neykkaṭal The ocean of ghee; one of elukaṭal 179. nērkārru	(Tivā.)
Favourable wind 180. nērcēlakam	(W)
Wind direct from the south	(W)
181. payötaram 1. Sea 2. Cloud, as holding water	(Yā <u>l</u> . aka.)
182. payōtikam katal nurai	(Piň.)
183. payöniti Sea	(Yā <u>l</u> . aka.)
184. parica <u>nn</u> iyam Cloud	(Yāl̯. aka.)
185. paruvak kā <u>r</u> ru The monsoon	(T.L.)
186. paruva ma <u>l</u> ai Seasonal rain	(T.L.)
187. panikkarru Cold wind in the dewy season	(T.L.)
188. panimukil	(T.L.)
See panimēkam	(Civama. 2807)

189. panimēkam Light, rainless cloud in the dewy season

(W)

190. paniyetir paruvam Season comprising the two months; markali and tai, when dew falls during the early part of the night (Tol. Poru. 7) 191. paniyotukkam The fall of heavy dew (W) 192. pārāvāram 1. Sea: Ocean 2. Sea shore (Pin.) 'Paravaram palvalam palaniya karalar canpai' (Mani. 3,28) 193. parkatal Ring-shaped ocean of milk (Civaka, 3035) 'parkatar panimanipola' 194. pirapancanan Wind (Pin.) 195. Piramam Whirlwind Culalkarru (Yal. aka.) 196. Piravatam Wind (Can. aka.) 197.pucal Storm, whirlwind; cyclone (T.L.) 198. pucarkārru Storm (T.L.) 199. puyarkārru Storm (C.G.) 200. punti

Shallow part of the sea

'titarpattak katarpakuti' (Yal. aka.) 201. Pümi munai Cape: promontory (W) 202. pūr Flood 'Puram puraci' (Parata. iraca. 116) 203. Pettaikatal Shallow sea (W) 204. peyal Raindrop (Tiva.) Cloud 'Peyaruli mukilena' (Kalit. 56) Showering 'Ollātu vānam peyal' (Kural.559) Rain 'Mannava natta peyalum vilaiyulun tokku (Kural. 545) 205. Perukku vēlai Time of the flow of tide (W) 206. Perukketuttal To flood, as a river; to ebb, as a tide (T.L.) 207. Perunkāl See Perunkarru 'Perunkaleriya' (Tirukaruvai.W) 208. Perunkārru Storm; gale (T.L.) 209 Perunir 1. Sea 'Perunir poku miriyan makkalotu

(Cilap.)

(Yāl. aka.)

210. Perumpuyal	
1. Storm	(T.L.) (Pin.)
211. Peruvāri	(1,12.) (1 111.)
1. Great flood	
'tāmaraiyi <u>r</u> ai viltta peruvāri'	(Pari, 9,4)
212. pēkam	C , ,
Cloud	(Yāl. aka.)
213,pēykkā <u>rr</u> u	(141. 484.)
Whirlwind	(T. I.)
214.pēruyir	(T.L.)
Boisterous wind	
215.pauvam	(Tailava. taila.)
Depth	
'Pauvamār kaṭal'	(Tēvā. 556,8)
216.Makari	(1014. 550,0)
Sea	(Com also)
217.Makā camuttiram	(Cañ. aka.)
Ocean	
218. Makacāyam	(Takkayakap. 140 urai)
Ocean	
219.Makānātam	(Yāl. aka.)
Cloud	
200 M 1= 5:	(T.L.)
220. Makāvātam Tempestuous wind	
'Makāvātam cengu tākkiyapolutu'	
221.makāṇṇavam	(Takkayāka, urai)
Sea	

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222. Makip piraciram

Sea as earth girt

(Yāl. aka.)

223. Makōtati

Ocean great sea; the sea 'Makotati valavum putalam'

(Kampara, tereru, 42)

224. тасаки

Deep sea, far from shore, where there is no mark for guidance

225. mataikkatal

River mouth, that part of the sea where the river joins it

226. matukkatal

Sea of spirituous liquor

(T.L.)

(Yāl. aka.)

(J)

227 maturõtakam

Sea of fresh water

(Yāl. aka.)

228. manta marutam

The southern breeze as gentle 'mantamaruta mūrvatorvator kiri'

(Kampa, patai.14)

229. mayankukāl

Cyclone 'Mayankukaletutta vankampola'

(Mani. 4,34)

230. marukkam Wind

(T.L.)

231. malaya marutam

The south wind, as blowing from the Malaya hills. 'Marunkalai malayamarutamum'

(Parata. kurukula.81)

232. malaiccaral

Cool wind from the hills

(W)

'Perumalai Caraleyti'

(Perun. ilavana. 12,141)

233. malirnirai

Full flood; copious flow of water as in a spring 'maṇalaṭu malimirai'

(aink, 15)

234. malaiyānilam

Balmy southern breeze as from the malayan hills.

235. malayirriranta ti Shell of cattlefish

(Yāl.aka.)

236. malaikāl

Dark clouds descending in columns and indicating rain (T.L.)

237. malaikkal iruttu

Dense darkness of a rainy night; 'Malaikkaliruţţinum manti kompuviţļu payatu'

'Malaikalirulan etirpatalarumaiyan'

(Tirukko. 260)

238. malaikkuri

See malaittorram

(Loc.)

239. malaikkuņam

See malait torram

(W)

240. malaikköläru

Changeable stormy weather; unfavourable to navigation

(T.L.)

241. malaiccātai

See malait torram

(Loc.)

242. malaitārai

Continuous shower of rain

(Yal. aka.)

243. ma<u>l</u>aituļi

Rain drop

(W)

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244. malai tüval See malait türal	(W)
245. malai tü <u>rr</u> al Drizzling rain	(W)
246. malaittõrram Clouded sky, as indicating rain	(W)
247. malaitumittal See malaitūral	
248. malaipaṭṭam A shower of raiπ	(W)
249. malaippukār See malaittõrram	(W)
250. malaippüńkāram See malaittērram	(J)
251. ma <u>l</u> ai peytal To rain	(Yāl. aka.)
252. malai marakkal A kind of rain gauge; unit for computing	(T.L.)
during a year 253. malai mukan kanutal	.(W).
Being enlivened by rain 254. malaiyatal	(W)
incessant rain 'Malaiyataiyile varum viruntali catturu'	
255. maļaiyēru Thunder 'Neţuntērinan malaiyērena vārttān'	
	(Kampa. 166)

256.malaiyoruttakālam Drought	
	(W)
257 malai varankūr To become rainless 'Pāntiyanātu malai varumaiyeyti'	
	(Cilap.page.30)
258. ma <u>l</u> ai v <u>īr</u> riruttal 'Paruvamalai peykai'	
Raining in season.	(611 00)
0.50	(Cilap.p.30)
259. mātiram	
Atmosphere 'valamātirattān vaļikotpa'	(Maturaik, 5)
260, māpalan	(maturaix, 5)
Air wind	(Piń.)
261. mārikkālam	(,
The monsoon, rainy season	
•	(T.L.)
262. mārimarruttal	
Want of rain; cessation of rain	and the second
	(T.L.), (W)
263.mārima <u>l</u> ai	
Rain during the summer	(Nāň.)
264.marānīr	(Nan.)
Sea; ocean 'maranir vaiyak kani'	
Sea, occan magani varyan kan	(Kural. 707)
265, mikiram	(
Wind, air, cloud	
	(T.L.)
266.mirukāṅkam	
Wind	(Yā <u>l</u> . aka.)
0.67	
267. miruvātam	
Gentle breeze	(3/711 - 1
	(Yāl̪. aka.)

268. mirutorpavam Sea (Yāl. aka.) 269. mīram Sea (Yal. aka.) 270. milam Heaven (Can. aka.) 271. mutir karru Gale strong wind (W) 272. Mutu nir See Munnir 'Cutarpatu mutuniril' (Tiv. periyati. 8,5,5) 273.Munnir Sea as having the three qualities of forming protecting, and destroying the earth, or as consisting of three waters viz; river water, spring water, and rain water. 'Munnir vilavi netiyon' (Puram. 9) 274. Muraikkārru Tradewinds Monsoon **(J)** 275. Muttan kattutal To gather as clouds (T.L.) 276. Meyppiram Cloud (Pin.) 277. menkāl Southern breeze 'Menkāl pūvalaviya teyta' (Kampara. vanampuku) 278. mēkak kūţţam

(T.L.)

See mēkacancāram

279. mēka cancāram

Passage of rain clouds

(T.L.) 280. Mēkatuvāram Sky (Yal. aka.) 281. mēkatīpam Lightening (Yal. aka.) 282. mekapanti Mass of clouds (W) 283. melkatal The Arabian sea; as the western sea; 'Melkatal vānulakatin nulaivali' (Tirukkō. 6) 284. mēlkāl See melkarru (Nāmatīpa. 91) 285. melkarru West wind 'Kotai melkarru' (Tivã.) 286, melai camuttiram Melkatal (Takkayākap. 24 urai) 287. yātapati Sea (T.L.) 288. Mavanacamuttiram Sea of salt water 'amirtu kataintatu lavana camuttirattena unarka' (Takkayakap. 284) 289. Vakati Wind (T.L.) 290. Vankanir Sea 'Vankanir varaippelam' (Cula. 104)

302. Janjā mārutam

Violent strong wind with rain

(T.L.)

303. Kṣira Camuttiram
The ocean of milk

(T.L.)

304. Kşira cākaram See Kşira camuttiram

(T.L.)

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MALAYALAM WORKS

I. NAMES OF BOATS AND SHIPS

- 1. Cannāțam
- 2. Plavam
- 3. Ulplava
- 4. Campa
- 5. Ponnu
- 6. Pāru / vāru / akattēppāru / vār
- 7. tõni
- 8. pataku / patavu
- 9. ōtam
- 10. orrattati
- 11. potam/bodham
- 12. vahitram
- 13. ārāţţi
- 14. pātti
- 15. öttulakkam
- 16. böttu
- 17. vaļļam
- 18. vanci
- 19. marakkalam
- 20. cīnu
- 21. valar
- 22. vattēl
- 23. ōti
- 24. iruttukutti
- 25. olamāri
- 26. nāvāyi
- 27. nau
- 28. pātram / yānapātram
- 29. onnal

- 30. pattamāri
- 31. tarani
- 32. cīvāţa / cīvāţi
- 33. uru / uruvu
- 34. kappal
- 35. antarvvāhini
- 36. brttāniya
- 37. emdan

II. PARTS OF BOATS AND SHIPS

1. Paddle or Oar

- a) Kalakköl / kalikköl / kalukköl
- b) kaikkõl / kaykkõl
- c) tanțu
- d) tula / tulakkol
- e) nayampu / naimpu / maimpu / nampu
- f) pahkāyam / pahkān
- g) iranköl / eranköl / oranköl / urakköl
- h) aritram
- i) cukkāņ

2. Rudder

- a) atanampu / atanaympu
- b) aritram
- c) āmakkai
- d) karnnam / kannakam
- e) Cukkān
- f) tula
- g) nayimpu / naympu
- h) pahkāyam
- i) palakanakku (rudder without the tiller)

3. Anchor

- a) ankuram
- b) nankūram
- c) lankar
- d) irimputāltti
- e) cini

4. Stem

- a) aniyam
- b) cantu

5. Mast

- a) Kampam
- b) *Кйтри*
- c) Kampu
- d) pāymaram

6. Sail

- a) ōṭupāyu
- b) kappalpāyu
- c) kārru pāyu
- d) tammān
- e) pāy

7. Keel

- a) ēra / ērāvu
- b) taimaram
- c) pānţi

8. Ribs

a) maņikkāl

- b) mallam
- c) mallu

9. Stern

amaram

10. Outriggers

Cira

- 11. Ship's Cable ammar
- 12. Half portion of a boat arddhanavam
- A rope tied to the mast anca / ancan / ancal, pakkayaru
- 14. A large cable used for tying anchor alattu
- 'A small piece of wood which connects the planks of a catamaran - irukkāvi
- 16. An arched cabin on a fisherman's boat otanci
- 17. A boats partition at the stern Katavallam
- A small beam tied across at the end of a catamaran kaṭiyāl
- A rope cable which binds the mat and bamboo in catamaran - kannatikkayar
- 20. Wooden bowl in boats kammattu
- 21. A ship's ladder kalanci / kalanni
- 22. Pieces of wood to fill up crevices in boats kututi

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- 23. Cross board in a boat tattupati
- 24. Cross-beam on dack tumpakkam
- 25. Boat cover pannakam
- 26. A cistern in ships pattāyam
- 27. The yard of a ship parimaram
- 28. The hole which receives the mast pantikkuli
- 29. The gun-wall of a boat pāmpuvari / pāmpūri
- 30. The narrow plank of the boat vankam

III. NAVIGATION PERSONNEL

1. Oarsman/Sailor/boatman

- a) aniyakkāran
- b) urukkāran
- c) Unnukkāran
- d) ottakkaran
- e) katattukāran
- f) katalāļi
- g) katalõti
- h) katavukkaran
- i) kataśśan
- i) kappalkkāran
- k) kalāši / kalāss
- 1) kalukkõlkkäran
- m) kuttukāran
- n) kõlāl
- o) tantal
- p) tanţāļar
- q) tantukār

- tantuvalikkāran
- s) tantēl
- t) tönikkaran
- u) naympukāra<u>n</u>
- v) vancikkāra<u>n</u>
- w) vappūravar
- x) vallakkāran

2. Helmsman / Steersman

- a) amarakkāran
- b) otti
- c) kappittān
- d) karnnadhāran
- e) karnnagrāhan
- f) kalamõţumavaral
- g) kalāssukāran
- h) cukkānkāran
- i) nāvika<u>n</u>
- j) niyāmaka<u>n</u>
- k) marakkān / marakkāyan
- 1) malimi / malummikkaran

3. Captain / Admiral

- a) amarāl
- b) ötti
- c) kappalttalayāļi
- d) kappittān
- e) naka
- f) suva

4. Ship builder

- a) ōtāyi
- b) ilantaccar
- c) vākaritālttār

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5. Ship owner

- a) öttakkaran
- b) vallam utamasthan

6. Fisher man

- a) arayan
- b) ā<u>n</u>āyi c) kaṭakkōṭi
- d) katalkketti
- e) maraykkān

Five kinds of fisherman in Cemmin

- a) arayan
- b) valakkaran
- c) mukkuvan
- d) maraykkun
- e) valanmar

7. Sea trader

- a) Katalkkaccavatakkaran
- 8. Freighter
- a) Kēvi / kēvukāran

KANNADA WORKS

I NAMES OF BOATS AND SHIPS

- 1. padagu
- hadagu
 pērvadagu
- 4. bhaitram
- 5. harigōl
- 6. kaphile
- 7. dōņi
- 8. jang
- jāve
- 10. teppa
- 11. parõs
- 12. ballon
- 13. sambūkhi
- 14. talpa
- 15. harugalu
- 16. kōl
- 17. jaladoni
- 18. siyampane
- 19. mancive
- 20. masūla
- 21. machuva
- 22. ambi
- 23. ōda
- 24. kōla
- 25. tari
- 26. udupa
- 27. pattemari
- 28. plava
- 29. põta
- 30. pravahana

- 31. plavāka
- 32. bagala
- 33. mangini
- 34. yānapātra
- 35. subhaitra
- 36. sangāda
- 37. sanka
- 38. manji
- 39. mangini
- 40. bēda / vēda
- 41. pindi
- 42. paru
- 43. jangāl
- 44. kõl
- 45. haru
- 46. kālagam
- 47. pattemāri
- 48, vahitram

II. NAMES OF PARTS OF BOATS AND SHIPS

1. MAST

- a) patastambha
- b) kūve
- c) kũ
- d) kūva
- e) kūpa
- f) kūpaka
- g) kambu
- h) kūpastambha
- i) kūvakambha
- j) kūvara
- k) kūbara
- hadagina kambha
- m) guņavruksaka
- n) mukhya kuva

2. RUDDER

- a) cukkaņa
- b) cukkāni
- c) kēnipātaka
- d) karŋa

3. ANCHOR

- a) nangal
- b) langar
- c) sthāpya

4. SAILS

- a) pata
- b) hähe
- c) hāyi
- d) hāy
- e) tere

5. PADDLE

- a) puttu
- b) huttu
- c) daruhasta
- d) uttu
- e) naukādaņdu
- f) naudandu
- g) tudupu
- h) ksēpani
- i) maragey
- j) nTrvuţiu
- k) ōdakōlu
- 1) jalle
- m) gani
- n) muttudanda
- o) huttugolu

III. NAVIGATION PERSONNEL

1. PILOT

- a) karņadhāra
- b) odagāra
- c) nāvādiga
- d) nāvārõha
- e) mālima
- f) tāraka
- g) naukādhipati

2. PASSENGER

- a) nāvika
- b) nāvārōha

TELUGU WORKS

I. NAMES OF BOATS AND SHIPS

- 1. oda
- 2. nauka
- 3. Jogu
- Kappali
 Yānapātra
- 6. teppa
- 7. putti
- 8. nāva
- 9. padava
- 10. droni
- 11. doni
- 12. done
- 1.3. dunga 14. tarani

II. NAMES OF PARTS OF BOATS AND SHIPS

- 1. teddu / meddu / teddu An oar Kola teddu
- 2. cukkānu / cukkāni A rudder
- 3. teracapa - A Ship's sail
- 4. langaru Anchor
- 5. tattu - Stern of nava
- 6. mokku - A big wooden log

7. balla - Sitting planks in boat

8. Vangulu - Ribs

9. baddalu - Bamboos placed above the ribs

10. māku - Stem

11. Koyya Karra - Mast

12. davānu tādu - Sail rope

13. pakka cekka - Balancing plank

14. daragu - Inside portion of a boat

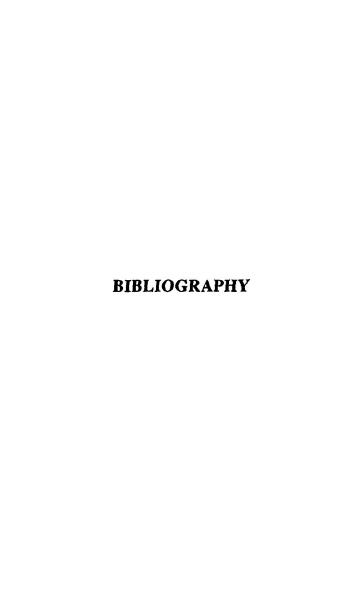
15. roda - Pulley used in boat

16. Sindulu - Outside portion of a boat

17. tanda - Reverse lower portion of a boat

18. amaram - Stem

19. motta - Stern



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