Different Styles and Designs of Kerala Vessels*

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The state of Kerala is situated on the south western part of India. It is bounded on the east by the Western Ghats and on the west by the Arabian Sea. Sandwiched between the tall mountains and the deep sea, Kerala is a long stretch of enchanting greenery. It extends from Manjeswaram in the north to Parasala in the south. More than forty rivers spring from the mountains. Taking a zig zag course through the hills, they join either with the backwaters or directly with the sea. In addition to the rivers, Kerala has a continuous chain of lagoons and backwaters that run parallel to the sea coast. This geographical peculiarity necessitated them the use of boats for the contact of the neighbouring places. And so in accordance with the nature of Ecology, availability of materials, varied purposes, etc the people of Kerala introduced different types of crafts.

Along the coast of Kerala one can find different types of crafts like *kattamaram, chalattadi, kambavala vallam, karamadi vallam, vallam, vanchi, toni, odam, patti, padi, paduva, paruva, uru, pattemari* and so on. These different varieties of vessels are used for various purposes like fishing, racing, transportation of cargo, ferry and such other purposes. References to different names of traditional vessels are seen in certain literary works starting from the classical Tamil works to the modern literary compilations. The names of crafts found in such literary compilations are

given in Table. 1. Interviews with the coastal fisher folk and other persons equipped us with the information that many of them are not found today. Moreover, many vessels found are new. The names of crafts collected from oral interviews are provided in Table. 2.

The geographical peculiarity of Kerala made them introduce different means of communication to maintain contact with the neighbouring areas as also for transportation and fishing. The early man might have used logs of wood for crossing the water bodies. Later, they might have learnt to hew the tree trunk to make a dug-out canoe. It can be assumed that the dug-out canoe used by the pre- historic man might have developed from a single trunk. The size and form of craft differ in accordance with the nature of water bodies and the purposes for which the craft is introduced. Different names are seen for the one which is used in rivers, lakes, sea, and also for fishing, cargo, ferry, etc. Lists of *Urus* used for sea transportation are found.¹ It is provided in Table. 3.

It is also noticed that the same vessel carries different names in different regions. Linguistic adaptability has also brought changes in the names of the vessels. The terms *Vallam / Odam / Toni*,etc. are found in the early Tamil literary works. The same are also found in the Manipravalam works and the other later Malayalam works. Perhaps, all these terms may have come from the Tamil language and when Malayalam got its separate existence and identity, those terms have been assimilated in Malayalam. The geographical peculiarities, availability of raw materials, nature of coast, provisions of manpower and wealth and also the different functions like carrying cargoes from one region to another, ferry services, feuds of *naduvazhis* of medieval Kerala, merrymaking of royal persons, consecration

¹ Velayudhan Panikkassery, *Keralacharitrapathanangal-1*, N.B.S.Trivandrum, 1980, p.21 K.R. Pisharadi, *Keraleeyarude samudraparamparyam*, Kozhikode, *1958*

ceremony of southern Kerala especially of Alleppey, Pathanamthitta, Kollam regions, chasing the pirates, tax evaders, and so on may have been reasons for the introduction of variety of crafts.

The variety kayal vallams are used for fishing in lakes. 'kayal' is 'lake' in English language. The term *Katattu vallam* is applied to all those vessels which are used for transporting passengers. Katattu is a local rendering of the English term transportation. Charakku vallam is the vessel used for transporting cargoes. To this category belongs the Kevu vallam. It is abundantly noticed in Alwaye, Kodungallur, Cochi, Kottayam and Changanassery regions. This vessel is covered by thatched roof in order to protect the cargo from rain, sun, and wind. It is called as Charakku vallam since it is used for transporting cargoes. Another type, Valiya *vallam* which means big vessels, is also found in this area. The term *Valiya* stands for big in English language. Muri vallam is another type of craft seen in this area. This craft got its name from its peculiar shape. As the back portion of the craft i.e amaram (stern of a vessel) is very broad, looking like a cut, this vessel is called *Muri vallam*. *Muri* is the local term for piece or cutting, where the outboard engine is fixed presently. Its other names are Kattu vallam or Kettu vanci and emaka vallam. It is called as Kattu vallam because of its cut at the amaram (stern). It is called Kettu vallam because it is a stitched craft. It is also known by emaka vallam because of using the Yemaha engine. The vessel Tara vanchi / Tara manchi got its name from its use of taking, collecting and transporting soil from rivers. In vernacular language Tara stands for soil. Karamadi vallam / Kambavala vallam is another variety found in the south of Varkala. It is a plank built craft, curved in shape, used for near shore fishing. *Karamadi* means near the *kara* i.e shore. It is also known by the term Kambavala vallam because the craft can move only up to the extent of the Kamba

(rope) fastened on the shore on the one end and the other on the craft. The name is given as it is used for near shore fishing by using a particular coir and net called *Kambavala. Kattamaram* is another variety and it is the oldest traditional fishing craft found along the southern part of Kerala, especially from Kollam to Thiruvananthapuram. *Kattamarams* are raft or float of logs tied side by side, keeping the longest in the middle, used for communication with shore or for short voyage and fishing.² A raft means a number of tree trunks of pieces of roughly shaped timber fastened together in order to float down the river or to serve as a boat.³ It continues to survive in the midst of modern marine developments. The reason may be due to its simple make, low constructional cost and easy manoeuvrability. Moreover,

Kattamarams are ideal ones in southern Kerala (especially from Kollam to

Thiruvananthapuram) as the sea is too rough in this part. *Kattamarams* move over the waves and thus there is less possibility for them to capsize. On the other hand, vessels like *Vallam, Vanchi, Odam, Toni*, etc. have the possibility to capsize, as the sea is too rough here and so there is little possibility for its recovery. If a person is thrown overboard due to the roughness of the sea, he could swim and reach the craft or the shore. If the logs are separated, each log will float separately enabling the fisherman to survive by clinging on to one of them. Thus *Kattamarams* are considered safer in this part than the plank- built vessels or dug-out canoes. The *Kattamarams* are vivdly called as *maram, tattumaram, ponnuttadi, tadi, chalattadi, nalukandamaram, changadam, urulattadi, chalattadi*, etc.

Kalivallangal, palliyodam, churulan vallam, Chundan vallam,

Veppu Vallam, Iruttukkutti Vallam / Odivallam, etc. are the peculiar types of crafts seen in regions from Cochi to Kollam. These crafts are seen during the time of boat

² The Concise Oxford Dictionary, 1950, Oxford, p.187

³ Hornby and Parnwell, 1969, *An English-Reader's Dictionary*, 2nd Ed. The English Language Book Society and Oxford University Press, p. 424

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race and are unique and need a very special attention. Racing is a regular phenomenon in connection with the temple festivals in Kuttanadu of Alappuzha, Pathanamthitta and Kollam districts.

Chundan vallam is the biggest among the race boats. It is the most important and costly vessel among the race boats amounting from one to twenty lakhs of rupees for its construction. Its annual maintenance is also very expensive. More than 100 rowers can row at a time in the *Chundan Vallam*.

It is learnt that this *vallam* was made for battle by the Raja of Purakkad, a minor raja⁴ of medieval Kerala. The Purakkad or Chempakasseri lay to the north of Kayamkulam which is mentioned as *'Porca'* in European accounts. It comprised the modern day Ambalapuzha and Kuttanadu taluks. It is said that this kingdom had a fine fleet which was under the command of Purakkad Arayan, and participated in several military operations of the period.⁵ References to the Purakkad Arayans and their piratical attacks have been vividly described by foreign travellers like Barbosa and Varthema.⁶ There is a popular view that the raja of Purakkad introduced this *vallam* with the purpose of subduing his rival Kayamkulam Raja.

References to the chiefs of Kayamkulam (also called Odanad) is found in the 13th, 14th and 15th centuries inscriptions and regional literary texts like *Unnunilisandesam* of the 14th century A. D. It has an extensive principality with a long sea-coast, backwaters, lakes and rivers. It is informed that the chiefs of Purakkad and Kayamkkulam engaged in constant struggle with each other for supremacy. For this purpose, it is said that the chief of Purakkad secretly ordered to introduce a device to subdue the Kayamkulam Raja. It has been known that the raja

⁴ The term 'Raja' and Kingdom used here denotes the small principality and its ruler.

⁵ A. Sreedhara Menon, A Survey of Kerala History, Kottayam, 1967, p.164

⁶ J. W. Jones and G. P. Badger, *The Travels of Ludovico Di Varthema*, London ,1967 Mansel Longworth Dames, *The Book of Durate Barbosa* Vol. II, Nendeln, Liechtenstein,1967, P.96

was pleased with the naval craft, with notable pecularities, constructed by the Koduppunna Narayanachari, a traditional carpenter. Its highly elevated *amaram* (stern of a ship or the back portion of a ship) helps to observe the advent of enemies even from very far distances. It becomes narrower and low towards the *aniyam* (ship's head or prow i.e the front part of a ship), thus enabling the people on board to watch the movement of enemies very clearly and cleverly. This narrow and low prow also helped them to enjoy the maximum speed. It also has a very special and unique portion called *vedithadi* to keep weapons secretly. Nobody owned such a peculiar vessel at that time, which was especially why the raja of Purakkad was pleased with the craft. Narayanachari was bestowed the title of Devanarayana⁷, the title of Champakasseri raja for this unique craft.

It is a dug-out extended vessel. Hornell called this vessel a semi dugout⁸ and recorded that, the stern curves resembled the galleys depicted in Roman sculpture.⁹ He also compared the bronze spur attached at the *compu* (prow) to the Roman war galleys.¹⁰ Romans carried away cargoes of pepper and spices from Kerala in the ancient period. In those days, to protect the trading fleet from piratical attacks, the local potentates of that time may have adopted the most striking and conspicuous features of the Roman galleys for designing the state barges. At the same time, we have to remember that great racing crafts manned by a crowd of rowers or paddle the outstanding features of the water festivals of Burma, Siam, China, and Japan and in the tiny atoll of Minicoy, in the northernmost part of the Maldives.

This naval craft is variously called as *Chundan Vallam, Kothumbu Vallam*, Snake Boat, *Palliyodam*, etc. It is called *Chundan Vallam* due to its highly elevated

⁷ Oral tradition collected by interviewing local people.

⁸ James Hornell, 'The Origins and Ethnological Significance of Indian Boat Design', *Memoirs of the Asiatic Society of Bengal*. Vol. II, No.3, Calcutta, 1920.

⁹ Loc.cit ¹⁰ Loc.cit

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amaram that looks like a raised lip, projecting towards the sky. *Chundu* in Malayalam means lip. It got its name of *Kothumbu Vallam* by virtue of its shape that looks like a spike (*Kothumbu*- covering of the coconut blossom). The name snake boat is derived from its similarity to a cobra hissing forward with a raised hood. It got designated as *palliyodam* when it began to associate itself with the temple activities (*Palli* + Odam = Palliyodam = Odam of Palli).

Veppu Vallams are reported to have accompanied the *Chundan Vallam* to the battle field for carrying food and other necessary items. *Veppu* means cooking in the local tongue, which caused the vessels to be called as *Veppu Vallams*.

Odi Vallam is the long, narrow and fast moving craft. It has been constructed for the purpose of chasing the pirates, the sea robbers and tax evaders. The Foreign travellers like Varthema, Barbosa, etc. took keen interest in recording the movements of the pirates and their attacks on the Purakkad area.¹¹ The regional literary texts also furnish references to the sea pirates and their attacks on the cargo vessels.¹² So the introduction of *Odi Vallam* is said to have meant for protecting the cargo vessels called *KettuVallam* from sea robbers, tax evaders, etc., who, by adjusting the oarsmen, move very fast to escape from the clutches of the law enforcing authorities. So it is necessitated the introduction of a vessel with more speed than the vessels of pirates or tax evaders. Thus was introduced the *Vali* Boat. *Odi* means to make turn towards the desired direction at the desired moment. Thus it can be surmised that the efficiency to turn suddenly and quickly at any point must have led to its present name, the *Odi Vallam*. The vessel is also termed *Iruttukkutti*, because it is said that, its speed even challenges darkness. So it is called *Iruttukkutti Vallam*. It is also observed that *Odi Vallam* maintains more speed than even machine boats. However, they can maintain

¹¹ J. W. Jones and G.P. Badger, op.cit,

Dames Mansel Longworth, op.cit,

¹² Joseph Chalikathu, *Thekkum Bhaga Samudaya Charitram*, Kottayam, 1961.

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their speed only for a short time, because the oarsmen are expected to get tired after sometime.

It is learnt that *Churulan Vallam* is a royal pleasure boat. References to the people called *Churulanmar* who used *Kalivallangal* for merriment are found in the Malayalam literary texts.¹³ One can assume the reason for naming of this *vallam* as *Churulan Vallam* because of its elaborately curved bows and sterns. Curl in Malayalam is *'churulu'*.

Churulan Vallam and *Odi Vallam* looks almost the same to a stranger, but a close scrutiny reveals the difference between the two. The *amaram* and *aniyam* of both *vallams* have the curl, but a close observation helps us to understand the difference in the nature of the curl. The curl of *Churulan Vallam* is thicker and the curl of *Odi Vallam* is thinner. Moreover, the shape of the *amaram* and *aniyam* of Odi *Vallam* have the shape of English alphabet 'L' and the curl appears only in the upper most part. There is no 'L' shape for a *Churulan Vallam*. Again, *Odi Vallam* is lengthier and narrower than the *Churulan Vallam*.

Manchi / vanchi, cheru toni, ozhukkan vallam, odam, chundan vallam,etc. are seen at Parappanangadi regions. Manchi / vanchi are commonly used. Cheru toni is used for transportation as well as for fishing. The use of Ozhukkan vallam is to catch fish with a hook. Odam is a cargo vessel. Chundan vallams of Parappanangadi regions are used for fishing with a shape like that of a curve. It is a plank- built boat and is very costly too.

Rich and vast carpentry skills are seen in the boat building of Beypore. Technical skill and the know-how and the design of the crafts built at Beypore are recognised as the best even today. All categories of crafts are built here.

¹³ Appan Tampuran, *Bhutarayar*, 1950.

^{*}Published in K.N. Ganesh (ed.), *Exercises in Modern Kerala History*, Kottayam, 8 2012, PP.32-49

Uru and *Pattemari* are the two types of traditional crafts constructed in Beypore. *Urus* are of different shapes and designs namely *Boom*, *Botil*, *Kotia*, *Kappal*, *Patava*, *Parao*, *Sambook*, *Berieck*, etc. The speciality of *Boom* is its elevated *aniyam* and *amaram*. This vessel is the favourite of Kutch people and the Arabs. Its speciality is that it tapers towards *amaram*. *Sambook* has a flat bottom as well as a flat *amaram*. It is mostly used for fishing and transportation. References to *Sambook* are found in the travel accounts of Varthema. He wrote, "As to the names of ships, some are called *Sambuchi* and these are flat bottomed".¹⁴ Fra Paulina Da San Bartolomeo also refers to *Camboca* as a broad boat, or very perfectly flat at the bottom. The *amaram* of *Berieck* was constructed both in Indian and Arabian models. The nature of the sea has a great influence on the design of the *Uru*. For example, the *Uru* which is constructed for Lakshadweep needs a flat bottom. The merit of the flat bottomed vessel is that it suits shallow waters. But, this type is not durable. When the width of the vessel increases, its speed decreases.

The crafts of north Malabar Coast are used for different purposes like fishing, transportation of cargo and passengers and also for warfare. The small type crafts like *Toni, Vanchi, Kochuvallam, Chini*, etc. as well as big varieties like *Kappal, Vallam, Marakalam, Uru, Odam* and *Pathemari* are found. *Kettu Vallangal* is another variety seen here. *Vanchi* is very small and can board only two people at a time. It is mainly used for fishing. *Vallam* is a later introduction.¹⁵ It is a plank built vessel. *Toni* is a flat bottomed craft. Flat bottomed crafts are ideal for movement in shallow waters.¹⁶ Odam is a curved type of craft. It, like vallam, is also a later introduction here.¹⁷ *Vanchi, Vallam, Odam and Toni* are used in inland waters both

¹⁴ Jones, J.W. and Badger, G.P, op.cit,

¹⁵ Field Interview

¹⁶ Field Interview

¹⁷ Field Interview

for fishing and transportation. *Kappal, Marakalam, Uru* and *Pathemari* are the plank built vessels. They are used as cargo vessels. It serves to cross the sea. *Kettu Vallangal* are stitched plank built vessels used for the transportation of cargo as well as passengers. *Kettu* means stitch. So this craft is called as *Kettu Vallangal*. *Kettu Vallangal* are not seen at present in these areas due to changes in the means of transport. Now-a-days people depend more on rail and road than on water transport.

A Raft is made up of a number of roughly shaped logs fastened together in order to float down a river or to serve as a boat. This was the earliest design of a boat to ply over rivers and lakes. This raft is made up of logs of wood tied together by ropes.

The primitive type of craft is the dug-out canoe in which a single log of wood is scooped out in the middle. The dug-out canoe was fashioned by the Stone Age man from a single tree trunk.¹⁸ This might have been the earlier *toni* referred to in Sangam literature. The word *toni* in Tamil appears to have been derived from the root *tol* which means 'to dig'. The words '*Thonduka*', '*Tholuka*',etc. are prevalent even today, which means 'scooping out' and 'taking out'. *Droni* in Sanskrit and *Doni* in Prakrit are the equivalent terms used for *toni*.¹⁹ The word *toni* is derived from *Droni*.²⁰ *Toni* is referred as *valiya vallam* and *vanchi* in *Sabdatharavali*. The word meaning of *toni* in *Malayalam Lexicon* is 'a vehicle used to cross water bodies', which is made either by scooping the log or by plying planks.²¹ Dug-out canoes are employed all over Kerala for catching fish and also for transporting passengers and cargo. The bottom of this craft is generally thicker than the sides. *Toni, Vepputtoni*,

¹⁸ Gorden Childe, Man Makes Himself, New York, 1961(1951), p.13

¹⁹ Padmanabha Pillai.G.Sreekanteswaram, Sabdatharavali, (Malayalam Dictionary), Kottayam, 2005(1931), PP.974, 1028

Gundert, Herman, Malayalam-English Dictionary, Kottayam, 1872, P.473 ²⁰ Loc. cit

²¹ Balakrishnan.B.C(editor), *Malayalam Lexicon* Vol.VI, University of Kerala, Thiruvananthapuram, 1988, P.620.

Odam, Ottattadi Vallam, Kochu Vanchi / Cheru Vanchi, Vichuttoni and Chini Vallam are the dug-out canoes seen along the Kerala coast. These names vary according to the size of the dug-out. Ottattadi Vallam is called so because it is built out of a single log. The name Chini Vallam is given for a dug-out canoe for the reason that it is built out of a timber called Chini maram (Samanea Saman). Vepputtoni is used for hook and line fishing and launching gill nets. Odam and Vanchi are other names used for dug-out canoes all along the northern coast of Kerala. The term Odam might have derived from 'Oduka'. The word meaning of 'Oduka' is found as 'to run'.²² There is a popular saying 'Chaliyante odam polai'.²³ Odam is an instrument used by weavers for weaving cloth.²⁴ Odam is referred as *cheru vallam*(small boat)²⁵, *ullasa nauka*boat used for merry making (Palliyodam) and a toni (vessel) used for ocean journey.²⁶ Vanchi is used for water transportation.²⁷ It is a Valiya Vallam(big *boat*).²⁸ It is also referred as *Manchua*.²⁹ The term '*Vallam*' is derived '*valluka*', which means 'valayuka' (bend).³⁰ The root of the terms 'Vallam' and 'valluka' are derived from 'val' which means skipping, big, growing, sharpness, etc.³¹ Vallam is a canoe, boat of one trunk, in size between *toni* and *Manchi*.³² The term *toni* is used in central Kerala, Vanchi / Manchi, Odam, etc. in north Kerala and Vallam, Odam etc. in

Madhavan Pillai, *Abhinava Malayalam Nikhandu*, D. C. Books, Kottayam, 1977, P.531. Guptan Nair. S, *Kerala Bhasha Nikhandu*, State Institute of Languages, Thiruvananthapuram, 1997, P.1263.

²² Kunjanpillai Suranad(editor),), *Malayalam Lexicon* Vol.II, University of Kerala, Thiruvananthapuram, 1970, P.1315.

 $^{^{23}}$ Loc.cit.

 $^{^{24}}$ Loc.cit.

²⁵ Madhavan Pillai, *Ibid*. P.531

²⁶ Loc.cit.

²⁷ S.K.Vasandan, *Kerala Samskara Nikhandu*, State Institute of Languages, Thiruvananthapuram, 2005, P.443.

²⁸ Guptan Nair. S, *Op. cit*, P.1263.

²⁹ Padmanabha Pillai.G.Sreekanteswaram, Op. cit, P. 1513

³⁰*Ibid*, P. 1538

³¹ Loc.cit

Gundert, Herman, Malayalam-English Dictionary, Kottayam, 1872, P.834. ³² Loc.cit

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south Kerala. It can be understood that the rafts and dug-out canoes are the earlier ones and the plank-built, nailed vessels, stitched ones, etc. as later additions.

Crafts built of planks in various designs are extensively used in Kerala. They are very huge in size, when compared to rafts and dug-out canoes. They are used for transporting cargo, ferry services, fishing and for racing. Except a few, almost all the plank built crafts are keel less, and the builders call the bottom plank of the craft as pandi, era or eravu. The plank built crafts are classified into two categories, namely, stitched plank built and nailed plank built. Patti, Kettu Vallam, Kolli Vallam, Chundan Vallam, Komban Vallam, Ottakkori Vallam, Kappalmanchi, Ottamanchi, Muri Vallam, Emaka Vallam, Valiya Vallam, Kadal manchi, Carakku Vallam, Kevu Vallam, Karamadi Vallam, Kamba vala Vallam, Katattu Vallam, Katattu Vanchi, Pattemari, etc. are the names given for stitched plank built crafts. Except Pattemari, Carakku Vallam, and Kevu Vallam all other stitched plank built crafts are keel less crafts. The stitched plank built crafts are manufactured by using coir and synthetic ropes. This type of craft is known as *Kettu Vallam* in Alleppey district by the local fisherman. It is stitched with 7 to 15 planks and coir ropes. No nail is used in the construction of a stitched plank built craft. Fra Pauline Da San Bartolomeo in his Voyages to the East Indies observes that the Indians make little use of nails or iron work when building their ships, to prevent problems due to the pull of the magnetic objects lying underneath the sea, while sailing. Sometimes it may even drag the ships to dangerous places also. To avoid all this they voluntarily give up the practice of the use of iron nails. They can indeed dispense with both the use of nails and iron work for they join the planks together with the greatest ingenuity by applying different kinds of dissolved gum and fill them up with the fine fibre of the coconut

tree, so as to be impenetrable to the water.³³ He also extends his description to the details of the gums used for applying between the planks. The *Ysohinam*, which consists of coconut oil, fresh lime burnt from mussel shells and other ingredients is principally used for these purposes.³⁴

The nailed plank built crafts are also built in two ways. Some of the dug-out canoes are extended by fixing wooden planks on both sides with the help of nails. Such types are noticed in the lakes of Punnamada *kayal* in Alleppey district. The other type is the purely plank built nailed craft used for fishing in the sea, passenger ferry services and transportation of cargo in lakes and for racing. *Champottoni, Chavam, Chamboktoni / Taramanchi, Pilavar boat, Faiferka boat and Kilnet* boat are some of the nailed plank built crafts used for fishing in the sea. *Maccuva* is also a nailed plank built craft used for ferry services and transporting cargo along lakes. *Chundan Vallam, Curulan Vallam, Iruttukkutti Vallam, Kovallam, Palliyodam, Odi Vallam,etc.* are some of the nailed plank built crafts used for racing in lakes.

This discussion enables us to understand the different types of crafts prevalent in Kerala from Thiruvananthapuram to Kasaragode. They are used for different purposes like movements from one region to another, trade and communication, transportation of passengers and cargo, fishing, merrymaking, racing, naval fight and warfare, consecration ceremony of temples and much more. It also provides us information about the different styles of construction like raft, dug-out vessels, dug-out extended plank built crafts, plank built vessels which also include the stitched variety and nailed ones. Again, some are flat bottomed, others are curved types, and some are big, yet others are small, still some are broader and others are

³³ Fra Pauline Da San Bartolomeo, *Voyages to the East Indies*, Madras Archives Collection Series No.U.2 Moo.26487, p.236

³⁴ *Ibid*. p.237

narrower and lengthier and so on. It depends more on the ecology of the coast. In some places along the straight sand-beach there are small river courses which connect the sea with the backwater. These river courses vary in length from some hundred yards to a few miles. As the sandbanks in and around the inlets are constantly moving, it is extremely difficult to dredge deep entrances in these places. Consequently only small vessels can utilise these inlets.³⁵ The backwater is also an important traffic artery, above all, for goods and transport. Big canoes are poled along this water route which has a lot of outlets eastwards. It runs from Thiruvananthapuram in the south to Tirur in the north, a distance of 220 miles.³⁶

The ship and the tools employed in its production symbolize a whole economic and social system.³⁷ The modern ship requires the assemblage, at one centre, of a variety of raw materials brought from many places, often distant; it presupposes an extensive and efficient system of communication. Its production involves the co- operation of large bodies of workers, each specialized in distinct crafts, but all acting together in accordance with a common plan and under centralised direction.³⁸ It involves a social organisation. The ship's timbers are provided by a local tree. In felling the tree, hewing it out, and dragging the result to the water, the co-operation of several workers may be necessary.³⁹ Adze is essential for cutting the tree. Implements of special types are required for hewing the log. These implements can be made and provided by skilled labourers only. The wood cutters and sawyers cut the tree and shape it into a vessel. Some managerial power is more essential for

³⁵ Field work observation

Also see Arne Martinklausen, *Kerala Fisherman and the Indo-Norwegian Pilot Project*, Scandinavian University Books, Norway, 1968 p.35

³⁶ Field work observation

Ibid.p.36

³⁷ Gorden Childe, *Op.cit.* p.13

³⁸ *Loc.cit*.

³⁹ Loc.cit.

combining the work as a whole. In short, ship building activity involves a collective attempt and united effort of different social classes.

Table.1

1.	Toni (both small	10. Odi Vallam	27. Tarani
	and big and also in	11. Vanchi	28. Chivata
	different shapes)	12. Vallam	29. Uru / Uruva
2.	Pataku / Patavu /	13. Odam	30. Kappal
	Kalla Pataku	14. Changadam	31. Avikappal
3.	Ambi	15. Plavam	32. Antarvahini
4.	Timil	16. Chamba	33. Kali Vallangal
5.	Marakkalam	17. Paru	34. Palliyodam
6.	Chonku (The big	18. Valiya Toni	35. Iruttukkutti Vallam
	ship of China)	19. Cheru Toni	36. Churulan Vallam
7.	Chambrani (The	20. Champatoni	37. Valar
	small ship of	21. Potam	38. Paruva
	China)	22. Varkas	39. Kottam
8.	Chonadan (The	23. Ottulakam	40. Koopakam
	small Pandi	24. Bottu	41. Kolam
	kappal)	25. Chini	42. Chambakam
9.	Pattemari	26. Patram	

These names are collected from the classical Tamil works like Pattupattu, Ettutogai, etc., the Manipravalam works like Champu and Sandesa kavyas, the later Malayalam works and folk songs.

Table.2

The names of vessels collected from oral tradition

1. Chalattadi	20. Katattu Vallam	40. Iruttukkutti Vallam
2. Maram	21. Charakku Vallam	41. Odi Vallam
3. Changadam	22. Kevu Vallam	42. Chavam / Tara
4. Tattumaram	23. Valiya Vallam	Manchi / Chembok
5. Kattumaram	24. Karamadi Vallam	Toni
6. Ponnuttadi	25. Kambavala Vallam	43. Patti
7. Tadi	26. Chundan Vallam	44. Padi
8. Nalu kanda maram	27. Komban Manchi	45. Emaka Vallam
9. Toni	28. Kappal Manchi	46. <i>Pilaiver</i> boat /
10. Vepputtoni	29. Ottakkori Vallam	Pilaivut boat
11. Odam / Taravanchi	30. Otta Manchi	47. Rolin net boat
12. Ottattadi Vallam	31. Vichu vala vallam	48. Faifer klas boat
13. Vanchi / Manchi	32. Chini vallam	49. Kilnet boat
14. Kochu Vanchi /	33. Machuva	50. Boat
Cheru Vanchi	34. Uru	51. Trawl net boat
15. Vallam	35. Pattemari	
16. Muri Vallam	36. Chambattoni	
17. Kattu Vallam	37. Palliyodam	
18. Kochu Vallam /	38. Churulan Vallam	
Cheru Vallam	39. Ko Vallam / Veppu	
19. Kayal Vallam	Vallam	

Table.3 Lists of *Urus* used for sea transportation

- 1. Arumas (big ship)
- 2. Anayodi (big ship)
- 3. *Odi*
- 4. Kappal (crossing the Ocean)
- 5. Kettumaram
- 6. *Kettu Vallam* (Transporting cargo)
- 7. Kevu Kappal (Transporting cargo)
- 8. Kevu Toni (The passenger vessel)
- 9. Kodi Kappal (Lengthier one)
- 10. Kodiyan (Kappal used for the journey to Ceylon)
- 11. Changadam (Kappal used for help)
- 12. Charakkumeni (cargo vessel)
- 13. Chivada (small Kappal)
- 14. Tarini / Toni / Nauri (small Kappal of Kannur)
- 15. Padaku (The small Kappal used by sea pirates)
- 16. Pathel (The speedy Kappal run across the Ocean)
- 17. Pathemari / Paruva / Paru (Run speedily with the help of mast)
- 18. Palkettu (A kind of big Kappal)
- 19. Manchi (The Uru which carried trade along the coastal regions)
- 20. Potham (The Kappal which moved across the Ocean with the help of wind)
- 21. Marakkalam (The Kappal which carried passengers)
- 22. Vanchi / Valar (The Kappal used by the people of Valarpattanam)
- 23. Veppu Vallam