

Greek, Tamil, Hebrew, Latin and Sanskrit: ναῦς (naûs), Navis and Navay Related with Navy and Ship in Classical Literatures

Πορθμίς, Πεντηκοντέρων, Σκάφει, Πλοῖον, and ναῦς are the words used to denote ship in ancient Greek literatures. Among these the word 'ναῦς' has different forms like νᾶες, ναῶν, νέας, νεῶς, νήιον, νῆσον and νήιον etc. Among these the word form 'ναῦς' become standardized. This word is also seen in many ship related words like ναύδετ (Ship's cable), ναυπηγίαν (Ship building place), ναύλοχοι (Harbour), ναύτας (Mariners), ναυβάτης (Sailors), 'ναυκλήρω' (Captain), 'ναυκληρίας' (Expedition) and ναυβάτας (Army) ναυσίκλυτοι (Men famed for their ships) and ναυσίπομπον (breeze that guides the ships). It shows the dominance of this word which is used to represent a particular ship over the other words that are used to denote other types of ships. Resemblance of this word is also seen in the classical literatures such as Latin, Tamil, Sanskrit and Hebrew. Among these the classical literatures of Tamil language explains the root meaning of 'Navay' as metaphorically 'the ship is like a tongue in the mouth'. Further, the ancient literary sources of both Greek and Tamil ensures that the Greek ships voyaged up to Tamil Nadu and so the word ναῦς used to represent ship has dominance over all the other words that are related to ship.

Keywords: Greek, Latin, Navay, Navy, Sanskrit, Tamil

Introduction

Ship is a mark of development. It is a mark of scientific and sea trade development. Ancient Literature provides information on the ancient knowledge and life of ancient societies. There are different levels of knowledge about any particular object. For example everybody knows about a ship. The knowledge of a sailor differs from the knowledge of a lay man. The knowledge of a naval architect differs from the knowledge of a sailor. Also, the knowledge of an experienced sailor is more than the knowledge of a new sailor. So, literature is a tool that highlights the level of knowledge acquired in a particular field. In this way, ancient advancement of the Greeks on ships need to be studied

Scientific Approach – Ship in Greek Literature

Walking on the water is a dream of mankind. In the same way, floating on water, flying in air were the dreams of mankind. Today, invention of aviation and navigation has fulfilled this dream. The dream of flying in the air was fulfilled only in later times. The ship came into existence in Greece from the pre-historic era. It is difficult to pinpoint on the inventor of the ship and so the justification given by people of different countries appears very much true

1 from their perspective. The description available in the ancient literary sources
2 of Greek, ensures the scientific way of building of a ship.
3

ὅσσον τίς τ' ἔδαφος νηὸς τορνώσεται ἀνὴρ
250. φορτίδος εὐρείης, ἐν εἰδῶς τεκτοσυνάων,
τόσσον ἔπ' εὐρεῖαν σχεδίην ποιήσατ' Ὀδυσσεύς.
ἴκρια δὲ στήσας, ἀραρῶν θαμέσι σταμίνεσσι,
ποίει· ἀτὰρ μακρῆσιν ἐπηγκενίδεσσι τελεύτα.
ἐν δ' ἰστὸν ποίει καὶ ἐπίκριον ἄρμενον αὐτῷ:
255. πρὸς δ' ἄρα πηδάλιον ποιήσατο, ὄφρ' ἰθύνοι.
φράξε δέ μιν ῥίπεσσι διαμπερὲς οἰσύνῃσι κύματος εἴλαρ ἔμεν· πολλὴν δ' ἐπεχεύατο ὕλην.
τόφρα δὲ φάρε' ἔνεικε Καλυψώ, δῖα θεάων,
ἰστίᾳ ποιήσασθαι· ὁ δ' εὖ τεχνήσατο καὶ τά.
260. ἐν δ' ὑπέρας τε κάλους τε πόδας τ' ἐνέδησεν ἐν αὐτῇ,
μοχλοῖσιν δ' ἄρα τήν γε κατεΐρυσεν εἰς ἄλλα δῖαν.
Ody. Bk.

Wide as a man well-skilled in carpentry marks out the curve of the hull of a freight-ship, (250) broad of beam, even so wide did Odysseus make his raft. And he set up the deck-beams, bolting them to the close-set ribs, and laboured on; and he finished the raft with long gunwales. In it he set a mast and a yard-arm, fitted to it, (255) and furthermore made him a steering-oar, wherewith to steer. Then he fenced in the whole from stem to stern with willow withes to be a defence against the wave, and strewed much brush thereon.¹ Meanwhile Calypso, the beautiful goddess, brought him cloth to make him a sail, and he fashioned that too with skill. (260) And he made fast in the raft braces and halyards and sheets, and then with levers forced it down into the bright sea.
(Murray 1919)

4
5 Here the making of sailing ship is described in the same manner as that of
6 present day sailing ship. This ensures the strong practical knowledge of the
7 ancient Greeks in the field of ship building which is not an easy task. The
8 building of a ship varies according to the purpose it is made. Hence the
9 building of a war ship is different from that of a merchant ship or a passenger
10 ship. To understand the development of the Greeks in the various types of ship
11 building, there is a need to view the several names that are used for ships in
12 ancient Greek language.
13
14

15 Names to Denote Ship

16
17 There are many words used to denote the ship in ancient Greek literatures.
18 Πορθμῖς
19 Πορθμῖς is the word used to denote a ship.

ὃ λευκόπτερε Κρησία
πορθμῖς, ἃ διὰ πόντιον
Eur. Hipp.

O Cretan **vessel** with wing of
white canvas, that ferried over
the loud-sounding wave of the
sea [755]
(Kovacs)

1
2 Further in this reference the ship is mentioned as belonging to Κρησία –
3 Cretan.
4 πλοῖον
5 πλοῖον is a another word used to denote a ship.

ἐπεῖτε γὰρ σφέων εἴλε χώματι τὸ τεῖχος ἄρπαγος, ἐσβάντες πάντες ἐς τὰ **πλοῖα** οἴχοντο πλέοντες ἐπὶ τῆς Θρηίκης,
Herodotus, Histories 1.168

‘when Harpagus had taken their
walled city by building an
earthwork, they all embarked
aboard **ship** and sailed away for
Thrace.’(Godley 1920)

6
7 Here this word used for ship is related to places such as Harpagus and
8 Thrace.
9 Πεντηκοντέρων
10 Πεντηκοντέρων is another word used to denote a ship.

διέκπλοον δὲ ὑπόφασιν κατέλιπον τῶν **πεντηκοντέρων** καὶ τριηρέων,
Herodotus, Histories 7.36

‘They left a narrow opening to
sail through in the line of **fifty-
oared ships** and triremes
(Godley 1920)

11
12 Here the reason for this name is related with the number of oars it has.
13 Σκάφει
14 Σκάφει is an another word used to denote a ship.

Μενελέως
1067. τοῦτ’ αὖ κατορθοῖς· εἴτ’ ἐγὼ συμπλεύσομαι
καὶ συγκαθήσω κόσμον ἐν ταύτῳ **σκάφει**.
Eur. Hel.

Menelaos
You are setting this right, too; then I will
sail with you, and help let down the
funeral offerings, in the same **ship**
(Coleridge 1938)

15 Already it is known that the Greek word, Πεντηκοντέρων has been derived
16 from the number of oars it has, that is fifty . Further, the word Σκάφει has been
17 derived from the word used for digging, that is the ship having a specific shape
18 to meet this purpose. Thus Πορθμῖς, πλοῖον, Πεντηκοντέρων and Σκάφει are
19 the words used to denote the ships in ancient Greek literatures as shown in the
20 Figure 1.

1 **Figure 1. Greek words for Ships**



2
3
4 Among the words present in the figure 1 for ship, the word ν*** has to be
5 researched.

6 ν***

7 It is a form where the word starts with the letter 'ν' and the following
8 letters vary. Thus there are many words to denote a ship.

9 νᾶες

10 νᾶες is another word used to denote a ship in ancient Greek literature.

Χορός

243. Ἀργείων δὲ ταῖσδ' ἰσήμετοι

νᾶες ἔστασαν πέλας;

Eur. I. A.

Chorus

Near these were moored the Argive
ships in equal numbers, (Coleridge
1891)

11 ναῦν and ναῦς

12 ναῦν is the word used to denote ship in ancient Greek literature.

κἄν τῷδε — δεινὸς γὰρ κλύδων ὥκειλε And now an immense swelling
ναῦν wave ran the **ship** aground,
1380 πρὸς γῆν, φόβος δ' ἦν παρθένῳ [1380]
τέγξαι πόδα — (Potter 1938)
Eur. I. T.

13

14 Here this word is in singular form. Look at the word highlighted below
15 and compare it with above mentioned word. If the letter 'ς' is used instead of
16 'ν' in the suffix, then it becomes plural.

Ἀθίδας δ' ἄγων

ἑξήκοντα **ναῦς** ὁ Θησέως

παῖς ἑξῆς ἐναυλόχει, θεὰν

250. Παλλάδ' ἐν μονύχοις ἔχων περὶ-

τοῖσιν ἄρμασιν θετόν,

εὖσημόν γε φάσμα ναυβάταις.

(Murray 1913)

Theseus' son was stationed at the
head of sixty **ships** from Attica,
having the goddess [250] Pallas set
in a winged chariot drawn by
steeds with solid hoof, a lucky
sight for mariners.
(Coleridge 1891)

17

18 Hence the word form ναῦς is used to denote the ship in plural form. This
19 word structure ensures the singular form has the letter 'ν' and plural form has
20 the letter 'ς' in its suffixes.

1 ναῶν

2 The word ναῶν is the another form seen to be used in ancient Greek literatures
3 used to denote ship.

358. Ἕλληνες οὐ μενοῖεν, ἀλλὰ the Hellenes would not remain in place,
σέλμασιν but, springing upon the rowing benches
ναῶν ἐπανθορόντες ἄλλος ἄλλοσε of their *ships*, would seek, some here,
Aesch. Pers. some there...
(Smyth 1926)

4

5 νάιον

6 Also, the word νάιον is used to denote ship in ancient Greek literature.

Χορός Chorus
1. Ζεὺς μὲν ἀφίκτωρ ἐπίδοι προφρόνως May Zeus who guards suppliants
στόλον ἡμέτερον *νάιον* ἀρθέντ' look graciously upon our company,
ἀπὸ προστομίων λεπτοψαμάθων which boarded a *ship* and put to
Νείλου. sea from the outlets of the fine
Aesch. Supp. sand of the Nile.
(Smyth 1926)

7 νέας

8 νέας is the another form seen in ancient Greek literature to denote ship.

153. ἦῶθεν δ' οἱ μὲν *νέας* ἔλκομεν εἰς but in the morning some of us launched
ἅλα διὰν our *ships* upon the bright sea, and put
κτήματά τ' ἐντιθέμεσθα βαθυζώνους τε on board our goods and the low-girdled
γυναῖκας. women.
Ody. Bk. 3. (Murray 1919)

9

10 νεῶς

11 νεῶς is the another form seen in ancient Greek literature to denote ship.

Ἑλένη Helen
1074. σὲ χρή βραβεύειν πάντα: πόμπιμοι You must direct everything; only let
μόνον there be winds in our sails to guide us,
λαίφει πνοαὶ γένοιτο καὶ *νεῶς* δρόμος. and a speedy *ship*.
Eur. Hel. (Coleridge 1938)

12

13 νεῶν

14 The word νεῶν is yet another word to denote ship.

πόσον δὲ πλῆθος ἦν *νεῶν* Ἑλληνίδων, how great was the number of the
335 ὥστ' ἀξιῶσαι Περσικῶ στρατεύματι Greek *ships* which gave them
μάχην συνάψαι ναῖοισιν ἐμβολαῖς; confidence enough to go into battle
Aesch. Pers. with their armed prows against the
Persian army?
(Smyth 1926)

15

1 νῆες

2 νῆες is the another word which is used to denote ship.

Χορός

πάτερ, φοβοῦμαι, **νῆες** ὥς ὠκύπτεροι
735 ἤκουσι: μήκος δ' οὐδὲν ἐν μέσῳ
χρόνου.

Aesch. Supp. 710

Chorus

Father, I am afraid. With what swift
wings the **ships** [735] approach! There
is not much time left.

(Smyth 1926)

3

4 νηῶν and νηυσί

5 νηῶν is the word which is used to denote ship.

‘685 ὧς Αἴας ἐπὶ πολλὰ θοάων ἵκρια
νηῶν
φοῖτα μακρὰ βιβάζ, φωνὴ δέ οἱ αἰθέρ’
ἵκανε,
Hom. Il. Bk.15.

[685] even so Aias kept ranging with
long strides over the many decks of the
swift **ships**, and his voice went up to
heaven,

6 νηυσὶ

7 νηυσὶ is the word which is used to denote ship which is in plural form..

381. ἄλλ’ ἔπε’, ὄφρ’ ἐπὶ **νηυσὶ** συνώμεθα
ποντοπόροισιν
ἀμφὶ γάμῳ, ἐπεὶ οὗτοι ἐδνωταὶ κακοὶ εἰμεν.
Hom. Il. Bk.13.

Nay, follow with us, that at the
seafaring **ships** we may make
agreement about the marriage,
for thou mayest be sure we deal
not hardly in exacting gifts of
wooing.”

(Murray 1924)

8

9 νήεσσιν

10 νήεσσιν is the another word which is used to denote ship in plural form.

346. ἄλλ’ Ὀδυσσεῦ σὺν σοὶ τε καὶ
ἄλλοισιν βασιλεῦσι
φραζέσθω **νήεσσιν** ἀλεξέμεναι δῆϊον
πῦρ.
Hom. Il. Bk. 9.

Nay, Odysseus, together with thee
and the other princes let him take
thought to ward from the **ships**
consuming fire.

(Murray 1924)

11

12 νέεσσι

13 The word νέεσσι is yet another form which is used to denote ship in plural
14 form.

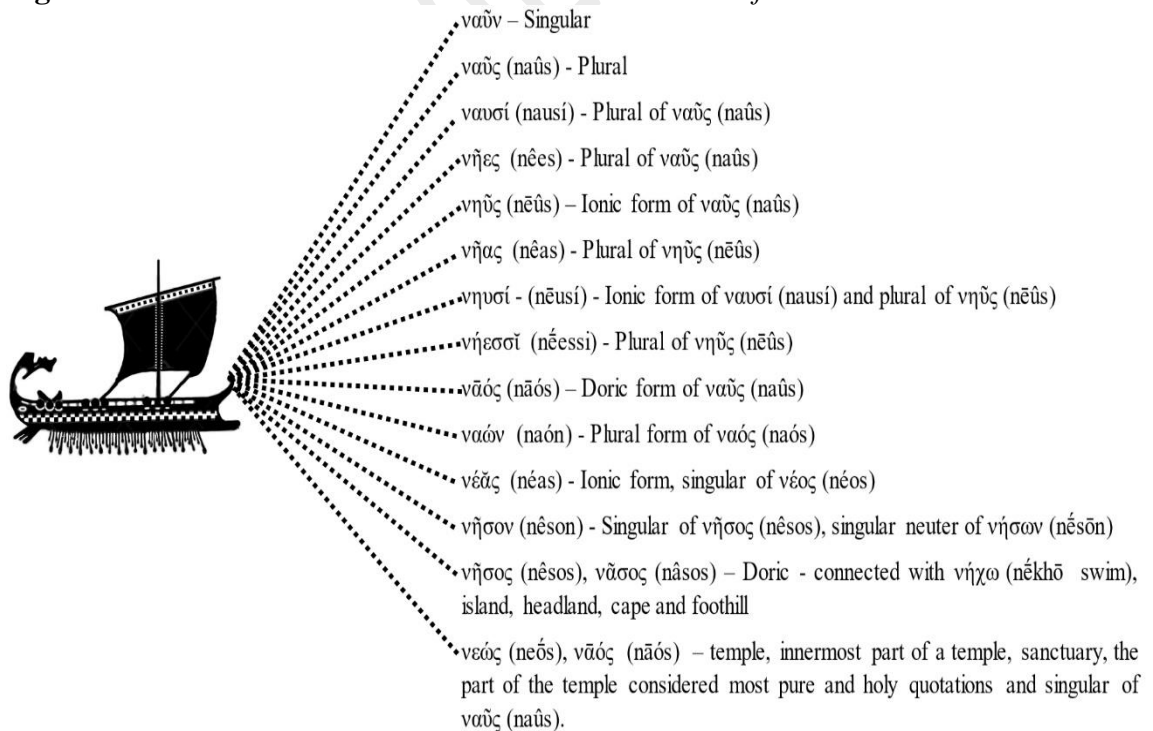
46. ἥ τοιόσδε ἐὼν ἐν ποντοπόροισι **νέεσσι** Was it in such strength as this that
 πόντον ἐπιπλώσας, ἐτάρους ἐρίηρας thou didst sail over the main in thy
 ἀγείρας, gathered thy trusty comrades, and, seafaring **ships**, when thou hadst
 μιχθεὶς ἄλλοδαποῖσι γυναῖκ' εὐειδέ' coming to an alien folk, didst bring
 ἀνῆγες back a comely woman from a
 ἐξ ἀπίης γαίης νυὸν ἀνδρῶν αἰχμητῶν distant land, even a daughter of
 50 warriors who wield the spear, [50]
 Hom. II. Bk. 3. (Murray 1924)

1
 2 νῆσον
 3 One more word νέεσσι is used to denote ship in plural form.

ἐκπλους φυλάσσειν καὶ πόρους to bar the exits and the sounding
 ἀλιρρόθους, straits, and station other **ships** in a
 ἄλλας δὲ κύκλῳ **νῆσον** Αἴαντος πέριξ: circle around the island of Ajax.
 Aesch. Pers. (Smyth 1926)

4
 5 Here, a question arises whether these variant forms denote the same ship
 6 or different ships. It is hard to fully understand the mind of the ancient authors
 7 who have used these different variant words. With the help of Grammar it is
 8 tried to relate some of these variant words as shown in the Figure 2.

9
 10 **Figure 2. Grammatical Relations within the 'n***' word forms**



These explanations do not fully help in the understanding of these variant words. So the present day translators faces difficulty when translating these variant words.

Ambiguity in Translation

There are ambiguity seen in the translation of these words among different authors and by the same author.

νεὸς - young

The standard lexicographical work of Liddell–Scott–Jones or LSJ mentioned ‘νέος’ as to represent young, youthful and so on and ‘νεός’ means adjective singular masculine noun or adjective singular feminine noun in attic (Liddell 1940). And there is no meaning in this word to be related with ship. But the word ‘νεός’ has the meaning of ship in the translation of Iliad.

693. ὧς Ἴηκτωρ ἴθυσεν	<i>νεὸς</i>	even so Hector made for a dark-prowed
κυανοπρώροιο		<i>ship</i> ...
ἀντίος ἄϊξας:		(Murray 1924)
Hom. Il. Bk.15.		

νεὸς – Boat, Ship

The Greek play writer Aeschylus used the words ‘ναῦς, νεὸς and νεῶν’ in his play ‘Persians’. The reasons for the author using different words to denote ship is not detectible. In one place the word νεὸς is translated as boat.

καὶ μὴν παρ’ ἡμῶν Περσίδος γλώσσης	Then from our side arose in response
ρόθος	the mingled clamor of Persian speech,
ὑπηγνίαζε, κούκέτ’ ἦν μέλλειν ἀκμή.	and straightaway the ships dashed
εὐθὺς δὲ ναῦς ἐν νηὶ χαλκίῃ στόλον	together their bronze prows. It was a
ἔπαισεν: ἦρξε δ’ ἐμβολῆς Ἑλληνικῇ	ship of Hellas [410] that began the
410 ναῦς , κάποθραύει πάντα	charge and chopped off in its entirety
Φοινίσσης νεὸς	the curved stern of a Phoenician boat .
κόρυμβ’, ἐπ’ ἄλλην δ’ ἄλλος ἤϋθυνεν	Each captain drove his ship straight
δόρυ.	against some other ship. At first the
τὰ πρῶτα μὲν νυν ῥεῦμα Περσικοῦ	stream of the Persian army held its own.
στρατοῦ	When, however, the mass of our ships
ἀντεῖχεν: ὥς δὲ πλῆθος ἐν στενῷ νεῶν	had been crowded in the narrows, and
ἦθροιστ’ ἀρωγὴ δ’ οὐτις ἀλλήλοισ	none could render another aid, [415]
παρῆν,	(Smyth 1926)
415	
Aesch. Pers.	

Here the word ‘νεὸς’ is translated as ‘boat’ but in another place the same word is translated as ship.

305. πῆδημα κοῦφον ἐκ <i>νεὸς</i> ἀφίλατο:	with a nimble bound from his <i>ship</i> .
Aesch. Pers.	(Smyth 1926)

- 1 Also, in the same play the same word ‘νεώς’ is translated by the same
2 translator as ‘ship’ whereas in some other places it is translated as ‘temple’.

810 ἡδοῦντο συλᾶν οὐδὲ πιμπρᾶναι [810] restrained by no religious awe,
νεώς: they ravaged the images of the gods
Aesch. Pers and set fire to their **temples**.
(Smyth 1926)

- 3
4 This creates confusion in understanding the meaning of this word.
5 *νηυσὶ - Seafaring Ships/ Swiftships/ Ships*
6 The word νηυσὶ is translated as seafaring ships.

381. ἄλλ’ ἔπε’, ὄφρ’ ἐπὶ **νηυσὶ** συνώμεθα Nay, follow with us, that at the
ποντοπόροιςιν **seafaring ships** we may make
ἀμφὶ γάμῳ, ἐπεὶ οὗτοι ἐδνῶνται κακοὶ εἰμεν. agreement about the marriage,
Hom. Il. Bk.13. for thou mayest be sure we deal
not hardly in exacting gifts of
wooing.”
(Murray 1924)

- 7
8 In the same text, a translator translates this word differently in different places.

332. ὁ δ’ ὀπισθε μένων παρὰ **νηυσὶ** but he staying behind, even beside his
θοῇσι **swiftships**, would take and apportion
δεξάμενος διὰ παῦρα δασάσκετο, πολλὰ some small part, but keep the most.
δ’ ἔχεσκεν. (Murray 1924)
Hom. Il. Bk.9.

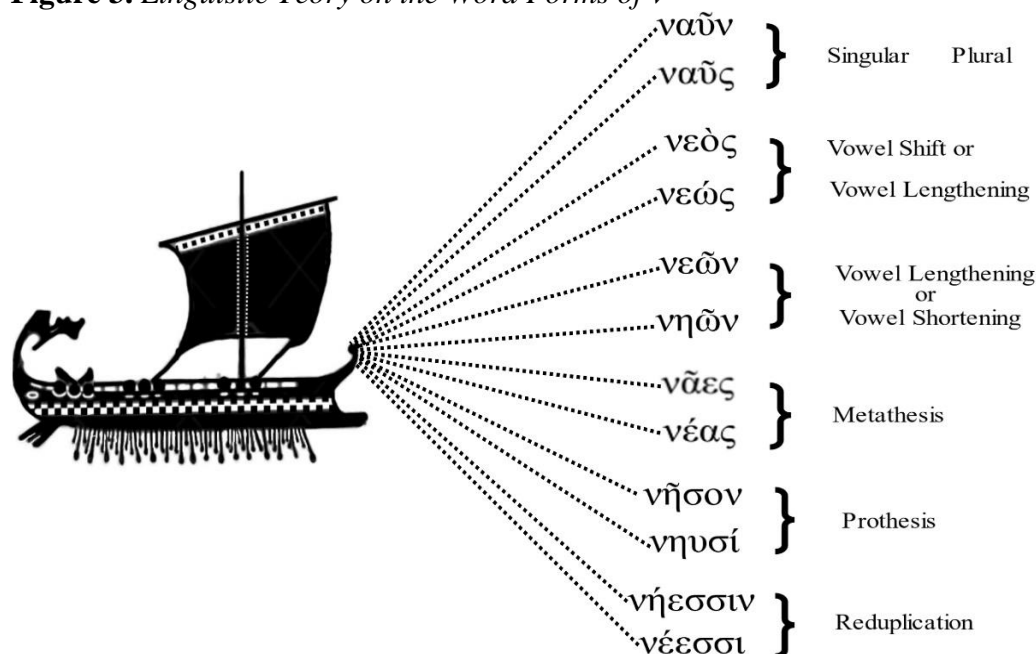
- 9 Here νηυσὶ is translated as swiftships but when other word forms occur
10 with this word, it is seen to be translated without adjective.

‘685 ὧς Αἴας ἐπὶ πολλὰ θοάων ἵκρια [685] even so Aias kept ranging with
νηῶν long strides over the many decks of the
φοῖτα μακρὰ βιβάζ, φωνὴ δὲ οἱ αἰθέρ’ **swift ships**, and his voice went up to
ἵκανε, heaven, as ever with terrible cries he
αἰεὶ δὲ σμερνόνων βοόων Δαναοῖσι called to the Danaans to defend their
κέλευε **ships** and huts.
νηυσὶ τε καὶ κλισίησιν ἀμυνέμεν. (Murray 1924)
Hom. Il. Bk.15.

- 11 Here νηῶν is translated as swift ships and νηυσὶ is translated as ships. So
12 there arises a confusion in the meaning of the word νηυσὶ as whether it is a
13 ship or swift ship or seafaring ship. Here linguistics gives light among these
14 variant forms, ambiguity in singular – plural suffix and differentiation of
15 meaning.
16
17

Linguistic Theory on Loan Words

Figure 3. *Linguistic Teory on the Word Forms of ν****



According to the linguistic theory, when a word is borrowed from languages belonging to different families then it gives rise to variant forms in the borrowed language (Cannon 1999)¹. In ancient Greek language this can be seen in the word form of 'ν***' which is related with ship. In this word form except the first letter all the other letters have changed according to the linguistic theory on Loan words. Vowel alternations² or vowel metathesis³ between 'α' and 'ε', vowel lengthening⁴ or vowel shortening⁵ between 'ε' and 'ῆ', 'ο' and 'ω', prothesis⁶ of 'σ' and reduplication⁷ between 'έε' and 'σσ' (Crystal 2003) are shown in Figure 3.

¹The pronunciation of words where the process of assimilation is phonetically incomplete will often vary, as in [ˌfoieɪ] or [ˌfwaje] for foyer and [ˌbuːlvaː] [ˌbuːhvaː] [ˌbuːlevaː] [ˌbuːlvaːd] for boulevard

²owel alternations is a linguistic term where two vowels come together creating various types of coalescence by assimilating or deleting other vowels.

³Metathesis – is the transposition of sounds or syllables in a word or of words in a sentence like foliage > foilage, anemone > anenome, cavalry > calvary.

Vowel shift – is a sound change in a pronunciation of the vowel sounds

Softened pronunciation of consonants

⁴Vowel lengthening is a linguistic term where a short vowel become long.

⁵Vowel shortening is a linguistic term where a long vowel become short vowel.

⁶Prothesis is the insertion of an extra sound or sounds in a word. This can be seen in some lexical items of borrowed language.

⁷Reduplication is a process of repetition whereby the form of a prefix / suffix reflects certain phonological characteristics of the root.

So according to the linguistic theory on loan words, the Greek word form ‘*n****’ related with ship are not denoting various types of ships instead it is seen that at times the translators himself confuses one by using various form of words for a ship. Among these variants one word can be standardized. In linguistics it is called as standardization of spelling and standard orthography (Gove 1961)⁸.

Standardization of Spelling - ναῦς

There are many word forms seen to be related with ‘*n****’. Among these the form ‘*ναῦς*’ has dominance over other forms in the coinage of words related to ship. In this way, let us observe the word used to name of the cable of a ship.

810. πῶλων, Σιμόεντι δ’ ἐπ’ εὐρείῃ (810) for the steeds, 1 and at the fair
πλάταν stream of Simois he stayed his *sea-borne*
ἔσχασε ποντοπόρον καὶ *ναύδετ’* ἀνήψατο *ship and fastened cables* to the stern, and
πρυμνᾶν forth from the ship he took the bow his
καὶ χερὸς εὐστοχίαν ἐξεῖλε ναῶν, hand could deftly shoot, to be the doom
Λαομέδοντι φόνον: κανόνων δὲ τυκίσματα of Laomedon; and with the ruddy breath
Φοίβου of fire.
Eur. Tro. (Coleridge 1891)

Here the ship's cable is denoted with the word *ναύδετ*. Thus the word form ‘*ναῦς*’ has dominance over other variants of ‘*n****’. This is also seen in situations of ship building.

460 *ναυπηγίαν* δ’ ὥσει τις ἄρμόζων ἀνὴρ (460) And just as a *ship's joiner* whirls his
διπλοῖν χαλινοῖν τρύπανον κωπηλατεῖ, auger with a pair of thongs, so I shall drill
οὕτω κυκλώσω δαλὸν ἐν φασφόρῳ the brand into the Cyclops' orb of vision
Κύκλωπος ὄψει καὶ συναυανῶ κόρας. and burn out his eyeball. (Kovacs 1994)
Eur. Cycl.

Here the place of building a ship is called as ‘*ναυπηγίαν*’. Also the word *ναῦς* has been used. This is the reason for the standardization of *ναῦς* among ‘*n****’ word forms. More than that the word *ναυπηγίαν* is used not only in places where a special type of ship represented by the word *ναῦς* was build, instead it is seen to be used in all types of ship building. So the word *ναῦς* is not only standardized among the ‘*n****’ form words, but also has secured dominance over the other words that are used to denote other type of ships in ancient Greek. It is also seen to denote harbour in some place.

⁸Standardization of spelling is concerned with unifying underlying linguistic diversity in order to make the standard language. Standard orthography is the chosen spelling of a word out of the competing variants.

1 *Harbour – ναύλοχοι*

2

845 μεσσηγὺς Ἰθάκης τε Σάμοιό τε (845) midway between Ithaca and rugged
 παιπαλοέσσης, Samos, Asteris, of no great size, but
 Ἀστερίς, οὐ μεγάλη: λιμένες δ' ἔνι therein is a **harbor** where ships may lie,
 ναύλοχοι αὐτῇ with an entrance on either side. There it
 ἀμφίδυμοι: τῇ τόν γε μένον λοχόωντες was that the Achaeans tarried, lying in
 Ἀχαιοί. wait for Telemachus.
 Od. Bk.4.

3 This reference shows that harbours are denoted as ναύλοχοι using the word
 4 'ναῦς'. Thus the harbour which is a resting place for all types of ships is
 5 denoted only with the word 'ναῦς'. This shows the dominance of this word
 6 over other words used to denote different type of ships.

7

λιπὼν δὲ λίμνην Δηλίαν τε χοιράδα, Leaving the lake and ridge of Delos, he
 10 κέλσας ἐπ' Ἀκτὰς ναυπόρους τὰς landed on Pallas' **ship-frequented**
 Παλλάδος, shores, (Smyth 1926)
 Aesch. Eum.

8 Here as that of the word ναύλοχοι used to represent harbour, the ship-
 9 frequented shores are also called as ναυπόρους with the word 'ναῦς'.
 10 In the same way the officials related with ship travel are also named using this
 11 word ναύ.

12

κυάνεον δ' ὄμμασι λεύσσων With eyes flashing with the dark glare of
 φονίου δέργμα δράκοντος, a deadly dragon, attended by soldiers and
 πολύχειρ καὶ πολυναύτας, **mariners** in great numbers, and speeding
 Σύριόν θ' ἄρμα διώκων, his Syrian chariot
 (Smyth 1926) (Smyth 1926)

13 Here the mariners are denoted by the word πολυναύτας which has the root
 14 ναύ. Even the particular officials are also named with this root word.
 15 *Sailor*

375. δεῖπνόν τ' ἐπορσύνοντο, ναυβάτης τ' (375) prepared their evening meal, while
 ἀνὴρ each **sailor** looped his oar about its thole-
 τροποῦτο κώπην σκαλμὸν ἀμφ' pin so that it fitted well. (Smyth 1926)
 εὐήρετμον.
 Aesch. Pers.

16 Here the sailors are denoted with the word 'ναυβάτης'. In the same way,
 17 the head of sailors are also named with 'ναῦς'.
 18

1 *Captain, Commander*

Δαναός

Danaus

182. παῖδες, φρονεῖν χρή: ξὺν φρονοῦντι δ' ἦκετε

My children, you must be prudent. A prudent *captain* of your voyage was your reliable old father here with whom you came. (Smyth 1926)πιστῷ γέροντι τῷ δε *ναυκλήρῳ* πατρί.
Aesch. Supp.

2 Here the captain is denoted as 'ναυκλήρῳ'. These usages show the
3 dominance of the word ναύ in naming the officials. It is also seen to be
4 reflected in the word used for wind energy.

5

6 *Knowledge of Wind Energy*

7

8 Before the invention of electric motors the movement of the ships were
9 made in two ways as pulling and sailing. Long distance voyage by hand
10 pulling, using oars is an exhausted work but the knowledge of wind or breeze
11 make it easy.

Ἀντιγόνη

Antigone

1710 ἴθ' ἐς φυγὰν τάλαιναν: ὄρεγε χέρα
φίλαν,
πάτερ γεραίέ, πομπίμαν
ἔχων ἔμ' ὥστε *ναυσίπομπον* αὔραν.
Eur. Phoen.(1710) Go to unhappy exile; stretch forth
your dear hand, my old father, taking me
to guide you, like a *breeze that guides
the ships*. (Coleridge 1938)

12 Here the breeze that guides the ships is called as ναυσίπομπον with the
13 word ναῦς.

14

15 *Expedition*525 τὴν σὴν στόμαργον, ὧ γύναι,
γλωσσαλγίαν.
ἐγὼ δ', ἐπειδὴ καὶ λίαν πυργοῖς χάριν,
Κύπριν νομίζω τῆς ἐμῆς *ναυκληρίας*
σώτειραν εἶναι θεῶν τε κἀνθρώπων μόνην.
Eur. Med. 527[525] of your wearisome prattling.
Since you so exaggerate your kindness
to me, I for my part think that
Aphrodite alone of gods and mortals
was the savior of my *expedition*.
(Kovacs 1994)

16 Here expedition is denoted by the word 'ναυκληρίας' with the word 'ναύ'.
17 Also it is seen in words used for naval armies.

18

19 *Shipborn Army*

20

985 ψαμμί' ἀκτᾶς παρή-
μησεν, εὐθ' ὑπ' Ἴλιον
ῶρτο *ναυβάτας* στρατός.[985] when the *shipborn army* sped
forth for Ilium (Smyth 1926)

Aesch. Ag. 987

21

1 *Army of Fleets*

2

405 **ναυβάτας** θ' ὀπλισμούς,
 ἄγουσά τ' ἀντίφερνον Ἰλίου φθορὰν
 βέβακεν ῥίμφα διὰ
 πύλᾱν ἄτλητα τλᾶσα: πολλὰ δ' ἔστενον
 τόδ' ἐννέποντες δόμων προφῆται:

Aesch. Ag. 405

[405] But she, bequeathing to her people the clang of shield and spear and **army of fleets**, and bringing to Ilium destruction in place of dowry, with light step she passed through the gates—daring a deed undareable. (Smyth 1926)

3 *Fleet*

4

Ἦμιχόριον Α
 160 κινεῖται κωπῆρης χεῖρ;
 οἱ ἐγὼ, τί θέλουσ', ἦ ποῦ μ' ἤδη
ναυσθλώσουσιν πατρίας ἐκ γᾶς;
 Eur. Tro.

First Semi-Chorus
 [160] The rower's hand is busy?
 Ah, woe is me! what is their intent? Will they really carry me away from my country in their **fleet**? (Coleridge 1891)

5 These references ensures the dominance of the word ναῦς on not only in
 6 war ships, but also for passenger ships.

7

112. ἀλλ' οὐδὲ **ναυκληρίαν**
 ἔσθ' ὅποι τις αἶας
 στείλας, ἦ Λυκίαν
 Eur. Alc.

There is no shrine on earth where one might send even by **ship**, either Lycia (Kovacs 1994)

8 Here the word ναυκληρίαν refers the passenger ship by using the word
 9 ναῦς. In the same way when the persons are portrayed for their ships the word
 10 ναῦς is seen to have occurred.

11 Phaeacians

12

τὸν δ' ἄρα **Φαίηκες ναυσικλυτοὶ** οὐκ ἐνόησαν
 40 ἐρχόμενον κατὰ ἄστρ' ἀστυ διὰ σφέας: οὐ γὰρ Ἀθήνη
 εἶα ἐνπλόκαμος, δεινὴ θεός, ἥ ῥα οἱ ἀχλὺν
 θεσπεσίην κατέχευε φίλα φρονέουσ' ἐνὶ θυμῷ.
 Od. Bk.7.

(40) And as he went through the city in the midst of them, the **Phaeacians, famed for their ships**, took no heed of him, for fair-tressed Athena, the dread goddess, would not suffer it, but shed about him a wondrous mist, for her heart was kind toward him.

13 In this reference the Phaeacians are portrayed for their ship as ναυσικλυτοὶ
 14 which has the word ναῦς.

15 Phoenicians

415. ἔνθα δὲ Φοῖνικες **ναυσίκλυτοι** ἦλθον (415) “Thither came *Phoenicians, men*
 ἄνδρες, *famed for their ships*, greedy knaves,
 τρῶκται, μυρί’ ἄγοντες ἀθύρματα νηὶ bringing countless trinkets in their black
 μελαίνῃ. ship.
 Od. Bk.15.

1 In this reference when the Phoenicians are portrayed for their ship the
 2 word ναῦς is found to be used.

3

4 Daughter of Dymas

20 ἡ δ’ ἀνέμου ὥς πνοὴ ἐπέσσυτο δέμνια (20) But like a breath of air the
 κόρης, goddess sped to the couch of the
 στῆ δ’ ἄρ’ ὑπὲρ κεφαλῆς, καὶ μιν πρὸς μῦθον maiden, and stood above her head, and
 ἔειπεν, spoke to her, taking the form of the
 εἰδομένη κόρη **ναυσικλειτοῖο** Δύμαντος, daughter of Dymas, *famed for his*
 ἥ οἱ ὁμηλικὴ μὲν ἦν, κεχάριστο δὲ θυμῷ. *ships*, a girl who was of like age with
 Od. Bk. 6. Nausicaa, and was dear to her heart.

5 In this reference when the daughter of Dymas is portrayed for their ship
 6 with the word ναῦς.

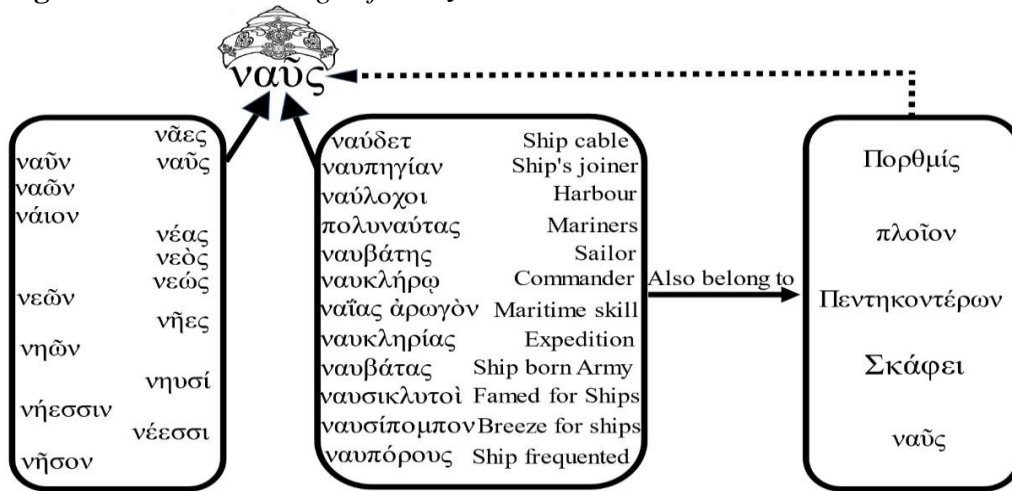
7 Thus in ship's cable - ναύδετ, sailor - ναυβάτης, captain, commander -
 8 ναυκλήρῳ, army of ships - ναυβάτας, harbour – ναύλοχοι and shipbuilding –
 9 ναυπηγίαν and in all these occurrences the form ‘ναῦς’ has dominance over the
 10 other words. This shows the standardization (Richard 1985)⁹ of the word
 11 ‘ναῦς’. As mentioned earlier it is not to be meant that the ropes, the harbours
 12 and the sailors belong only to ναῦς type of ship, but also to any type of ships
 13 like Πορθμίς, πλοῖον, Πεντηκοντέρων and Σκάφει, even though they are
 14 mentioned only with the word ‘ναῦς’. It shows that the dominance (Clark
 15 1987)¹⁰ of this word ναῦς is not only over the word forms of ‘n***’, but also to
 16 the other words which denote ship in ancient Greek language as shown in
 17 Figure 4.

18

⁹ Standardization as: “the process of making some aspects of language usage conform to a standard variety.

¹⁰ Pre-emption by synonymy: If a potential innovative word-form would be precisely synonymous with a well-established word, the innovative word is pre-empted by the well-established word, and is therefore considered unacceptable.

1 **Figure 4.** Dominant usage of ‘ναῦς’



2
3
4 Here the dotted line denotes the possibility of the other types of ships like
5 Πορθμίς, πλοῖον, Πεντηκοντέρων, Σκάφει also may be denoted in the name of
6 ‘ναῦς’. Thus the word ‘ναῦς’ has a broadened and dominant usage in the Greek
7 language related with ship. Further, the reason for this domination also needs to
8 be investigated. This dominance of the word ‘ναῦς’ is not only seen within
9 Greeks, but is also seen to be extended beyond Greeks.

11 ‘ναῦς’ in Other Languages

12
13 There are some words which has resemblance with the Greek word ‘ναῦς’
14 that can be seen in the classical literatures of other languages. Here it is noted
15 that the foreign contact made through sea is found to be very hard task when
16 compared with land. Without the development in the marine technology, it is
17 not possible to maintain contact through sea. So with the word ναῦς, it is
18 necessary to search the development of the society in the field of sea voyage.

21 Hebrew

22
23 Biblical Hebrew mentions many words for ship. Strong Hebrew No. 591.
24 oniyah נִיָּיָה is the word used many times in Hebrew Bible to denote ship.

25
26 Zebulun shall dwell at the haven of the sea and he shall be for an haven of ships
27 (נִיָּיָה- ’o-nî-yō-wt) and his border shall be unto Zidon
28 Genesis 49:13 Hebrew Study Bible, KJV with Strong's
29 (James 2017)

30 Apart from this there are some other words used sparingly and so that
31 word may be derived from Hebrew No. 6716. tsiy צִי ,

32
33 And ships (צִי- wə-šîm) shall come from the coast of Chittim and shall afflict
34 Asshur and shall afflict Eber and he also shall perish for ever
35 Numbers 24:24 Hebrew Study Bible, KJV with Strong's

1 (James 2017)

2

3 These words do not have any resemblances with the Greek word 'ναῦς',
4 except one word which is the strong Hebrew No. 5600 sephinah סִפִּינָה .

5

6 Then the mariners were afraid and cried every man unto his god and cast forth the
7 wares that were in the ship (סִפִּינָה- bā-'o-nî-yāh) into the sea to lighten it of them
8 But Jonah was gone down into the sides of the ship (סִפִּינָה- has-sə-pî-nāh) and
9 he lay and was fast asleep

10 Jonah 1:5 Hebrew Study Bible, KJV with Strong's

11 (James 2017)

12

13 In this the Hebrew 'nāh' has resemblance with the Greek word 'ναῦς'
14 which is related with ship. This is the only one place of its occurrence in the
15 Hebrew Bible. But there are more occurrences in Greek. This ensures that this
16 word is borrowed from the Greeks by the Hebrews.

17

18

19 Latin

20

21 Latin literature began in 240 BC with the relationship of the Greeks. So it
22 is normal that the Greek words enter in the classical literature of Latin
23 language. Marcus Tullius Cicero who belonged to 106 BC - 43 BC used the
24 word 'navis' to denote ship (Miller 1913).

"Si tabulam de **naufragio** stultus arripuerit, "Suppose that a foolish man has seized
extorquebitne earn sapiens, si potuerit?" hold of a plank from a sinking **ship**,

Negat, quia sit iniurium.

shall a wise man wrest it away from him
if he can?"

"Quid? dominus **navis** eripietne suum?"

"No," says Hecaton; "for that would be
unjust."

"Minime, non plus quam **navigantem** in
alto eicere de **navi** velit, quia sua sit. "But how about the owner of the **ship**?
Quoad enim perventum est eo, quo sumpta Shall he take the plank away because it
navis est, non domini est navis, sed belongs to him?"
navigantium."

"Not at all; no more than he would be
willing when far out at sea to throw a
passenger overboard on the ground that
the **ship** was his. For until they reach the
place for which the **ship** is chartered, she
belongs to the **passengers**, not to the
owner."

Cic. Off. 3.89. 23.

M. Tullius Cicero, De Officiis

25 Here the ship is mentioned as navi and the other forms are nāvis, navem
26 and navim. Thus the Greek word 'ναῦς' has entered into the classical
27 literatures of Hebrew and Latin. It is not only related with the word, but it also
28 shows that the 'ναῦς' - ships travelled to these countries from the Greek land.
29 These places are very near to the Greek land. There are chances of the ship
30 'ναῦς' which could have travelled to far of countries. So there is a need to

1 search in classical literatures of far of countries. One such classical literature is
2 Sanskrit.

3

4

5 **Sanskrit**

6

7 Sanskrit is one of the classical languages having vast literary heritage. The
8 earliest literature in Sanskrit language is the Rig Veda. This literature mentions
9 about the ship.

10

11 *nāva*

12

13 The word ‘nāva’ is used to denote the ship in Sanskrit.

dviṣo no viśvatomukhāti nāveva pāraya	7 O thou whose face looks every way,
apa ...	bear us past foes as in a ship .
sa naḥ sindhumiva nāvayāti parṣā svastaye	May his light chase our sin away.
	8 As in a ship , convey thou us for our
apa ...	advantage o’er the flood.
Rig Veda Book 1 Hymn 97.7,8.	May his light chase our sin away. (Griffith 1896)

14 Here the ‘nāva’ is metaphorically mentioned. In another place it is related
15 with the strength of the chariot-pole.

16

viśveṣu hi tvā savaneṣu tuñjate	2 In all libations men with hero spirit urge
samānamekaṃ vṛṣamaṇyavaḥ pṛthak svaḥ	the Universal One, each seeking several
saniṣyavaḥ pṛthak taṃ tvā nāvaṃ na	light, each fain to win the light apart.
parṣaṇiṃ śūṣasya dhuri dhīmahi	Thee, furthering like a ship , will we set to
indram na yajñaiścitayanta āyava	the chariot-pole of strength,
stomebhirindramāyavaḥ	As men who win with sacrifices Indra's
Rig Veda Book 1 Hymn 131.2	thought, men who win Indra with their lauds. (Griffith 1896)

17

nāveva naḥ pārayataṃ yugheva nabhyeva	4 Bear us across the rivers like two
na upadhīva pradhīva	vessels , save us as ye were yokes, naves,
śvāneva no ariṣaṇyā tanūnāṃ khṛghaleva	spokes and fellies. (Griffith 1896)
visrasaḥ pātamaśmān	
Rig Veda Book 2 Hymn 39. 4	

18

imāṃ dhiyaṃ śikṣamāṇasya deva kratuṃ	3 Sharpen this song of him who strives
dakṣaṃ varuṇa saṃ śīśādhi	his utmost, sharpen, God Varuṇa, his
yayāti viśvā duritā tarema sutarmāṇamadhi	strength and insight;
nāvaṃ ruhema	May we ascend the ship that bears us
Rig Veda Book 8 Hymn 42	safely, whereby we may pass over all misfortune. (Griffith 1896)

19

1 The nature of the river is also denoted with ‘nāv’.

2

anu svadhāmakṣarannāpo asyāvardhata 11 The waters flowed according to
madhya ā **nāvyānām** | their nature; he raid the **navigable**
sadrhīcīnena manasā tamindra ojiṣṭhena streams waxed mighty. (Griffith 1896)
hanmanāhannabhi dyūn ||
Rig Veda Book 1 Hymn 33.11

3 Here the navigable streams is mentioned as ‘nāvyānām’.

4

tvam sūro harito rāmayo nṛṇ 13 The strong Bay Horses of the Sun
bharaccakrametaśo nāyamindra | thou stayedst: this Etaśa drew not the
prāśya pāraṇ **navatiṃ** nāvyānāmapī wheel, O Indra.
kartamavartayo'yajyūn || Casting them forth beyond the ninety
Rig Veda Book 1 Hymn 121 **rivers** thou dravest down into the pit
the godless. (Griffith 1896)

5

6 Thus the occurrence of ‘nāva’ in the Rig Veda is mainly related with
7 metaphoric senses. Except these references no other references are available in
8 the foremost literature called Rig Veda of Sanskrit. The available references
9 also seen at a level of knowledge about the ship, but not at the level of own
10 experience or developments in a way it was not their own posteriori
11 knowledge¹¹. They might have acquired it from other people. The people using
12 Sanskrit have relation with Tamil people¹². So there is a need to move to the
13 classical literatures of Tamil.

14

¹¹APosteriori knowledge is knowledge that we get directly from our own personal experiences. Domain or Expert Knowledge - is deep knowledge about a particular domain or discipline. We might also call it expert knowledge. A person with domain knowledge is incredibly knowledgeable within their discipline but may just have general knowledge about everything else.

¹² **tami**lata prathamam yajñasādham viśa ārāhutam ṛñjasānam | ūrjah putram bharatam
sṛpradānum devā ...

(Rig Veda 1.96.3) Praise him, ye **Tamil** तमीळ folk, as chief performer of sacrifice adored and ever toiling,

Well-tended, Son of Strength, the Constant Giver. The Gods possessed the wealth bestowing Agni. (Griffith 1896)

Tamil

The foremost ancient literature of the Tamil language called Sangam literature¹³ (Pugazhendhi 2021) highlights the advancement in the field of marine technology and organization of sea trade.

Marine Technology

Ships, light houses and structures of the harbour are some of them that are related with marine technology.

Light House

Light house is an important structure in the sea trade. It makes it easy for the navigator to identify the harbour or the shore. The Tamil Sangam literatures mentions about a structure of a light house in ancient Tamil Nadu coastal area.

346. After leaving the port behind, where there is a
tall lighthouse with an unwoven roof that appears
like a prop that supports the sky, a building
appearing to be difficult to scale with ladders,
with a bright flame that is lit at night that
351. invites plying ships to the shore...

Perumpānātruppadaï,
Poet - Kadiyalur Uruthran Kannanar
King – Thodaiman Ilanthiraiyan
(Tamil Virtual University 1995)

These lines pictures the ancient light house of Tamil Nadu (Schoff 1917)¹⁴. This light house invites many ships. The other structure which has resemblance with this light house is called as 'Neer peartrue' means passing water symbols like present day buoys and beacons structured along the coastal shores at equal distance throughout the sea routes. The captain moved the ship by seeing its light.

fear-causing ship that moves as though
....., as the ship's captain looks
at the bright flames on the lights on
the tall sandy shores and figures distances.

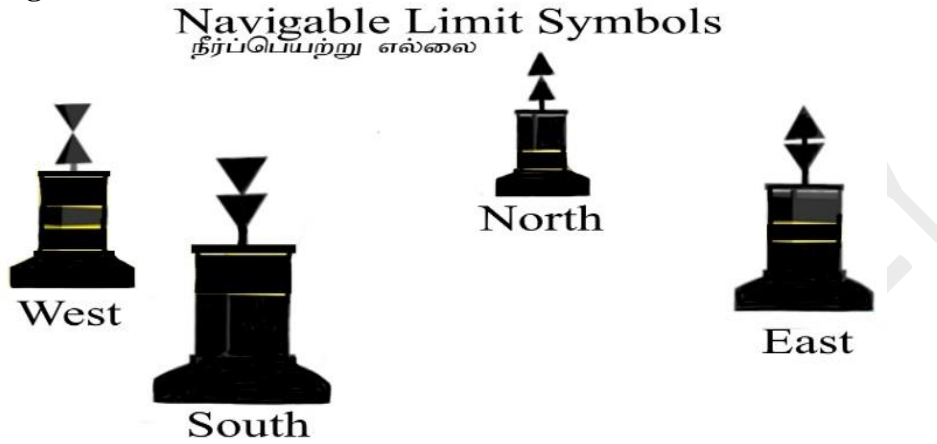
Akanānūru 255,
Mathurai Maruthan Ilanākanār
(Tamil Virtual University 1995)

¹³The first available literature called Sangam literature contains some poems that belonged to 1200 BC

¹⁴There were lighthouses built of brick and mortar which exhibited flashing lights at night to guide ships to port.

This type of structure was also placed inside the harbour. After the identification of the harbour by the light house the ships approached the harbour or land. Near the harbour, the areas may be either shallow or sandy or rocky. So the safe navigable passage and the resting place of the ship should be indicated within the harbour. The symbols of the present day navigable limits are shown in the Figure 5.

Figure 5.



In the same way the indicators were made for the navigable passage and to indicate a navigable passage for a particular foreign ship to the parking area in the harbour.

315. a fire post called Vealvi where the person called Anthanar perform fires. It appears like the lamps called Othima lamp¹⁵ of Yavanars the foreigners that are on masts, that are like sky fish which denote the limits of navigable area to pass the ship.

Perumpanarrutpadai
(Tamil Virtual University 1995)

This structure is figurized in the Figure 6.

¹⁵Othi means instruct in Tamil, as the light instruct the sea way it is called as Othima lamp. (The hair is also called as 'Othi' because it instruct the age of a person.)

1 **Figure 6.** *Ancient Structure of the Light House and Beacons*



2
3
4 Here on the top, the lamp of the particular foreign country was placed to
5 indicate their passage way into the harbour. This particular structure is called
6 as Neer peartru means transfer of water limits. In the night time the officials
7 called Anthanar lighted fire at the bottom of that structure. These references
8 shows the organized structure of the harbours for the safety of the foreign ships
9 (Warmington 1928)¹⁶ (Schoff 1917)¹⁷.

12 **Types of Ships**

14 Various types of ships are another milestone of development in that field.
15 The Tamil Sangam literature mentioned many types of ships.
16

¹⁶literature tells us that traders in coral and pearls frequented Kaviripaddinam of the Chola. Kingdom, and this town contained resident Greek merchants; similarly, a poet who visited Uraiyur, the ancient Chola. capital, speaks of coral and pearls together, with rare gems also, and as is shewn by the passage in the "Toy cart," jewellers' shopsregularly sold coral

¹⁷The Tamil poem Paddinappalai gives us a vivid description of a busy port of the Chola Kingdom, Kaviripaddinam,... The goods were stamped with the royal tiger stamp after payment of customs duty and then released to the merchants. Close by were settlements of the Yavana merchants, which name included not only Ionians or Greeks, but Graeco-Bactrians and Parthians.

1 *Kalam*

2

3 This is one type of ship.

4

5 You are lord of the land where precious things come
 6 by sea through ships which enter ports without
 7 lowering their masts or sails and lightening their
 8 cargo (Kalam) that untrained men unload on the wide paths.

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This reference highlights that this type of ship was related with cargo or merchant ships.

Vangam

This is another type of ship as that of Kalam.

after leaving to earn wealth on a
 fear-causing ship (Vangam) that moves as though
 the earth rises, splitting the stinking
 waves, sailing days and nights, swayed
 by fast winds, as the ship's captain looks
 at the bright flames on the lighthouse on
 the tall sandy shores and figures distances.

Akanānūru 255,
 Mathurai Maruthan Ilanākanār
 (Tamil Virtual University 1995)

From these lines it may be inferred that this type of ship was related with cargo or merchant ships like Kalam, but comparatively bigger than any other ship and it looked like a moving big piece of land.

Navay

Another type of ship was called as Navay.

320...horses that were brought in splendid ships (Navay)
 by sea, navigated by captains, and fine goods
 that are to be sent to huge countries – all these
 are seen every morning again and again, and
 they bring prosperity to the seashore land.

Mathuraikkānji
 (Tamil Virtual University 1995)

This type of ship known as Navay were used mainly for import and export of war related substances.

Thimil

Yet another ship was called as Thimil.

.....and veers toward rows of small ships (Thimil),
used to greatly praise the beauty of our
shores with groves...

Akanānūru 210, Ulōchanār
(Tamil Virtual University 1995)

Thus this type of small ship or boat was related with fishing.

Ambi

Another small type of ship was called as Ambi.
a small ship (Ambi) in the ocean
that heartless fishermen ride, leaving from the shore
with dew, to hunt for sharks with sword like mouths.

Akanānūru 187, Māmoolanār
(Tamil Virtual University 1995)

Like the amphibians it can come to sea shore land areas. So it was called
as Ambi.

Thoni

Thoni type of ships were like Ambi.

Musiri of Kuttuvan with a gold garland,
where the ocean roars like drums, paddy traded for
fish is heaped on small ship or boats (Ambi) making houses and boats look
the same, and black pepper sacks heaped in houses make
them appear like the uproarious ocean shores, gold wares
from ships (Kalam) are brought to the shore by small ship or boats (Thoni)
through
backwaters, and the king gives precious things from
the mountain and ocean to those who come,....

Puranānūru 343, Poet: Parānar
(Tamil Virtual University 1995)

This type of small ships or boats were used to bring the goods from the big
ships which cannot come near the shore due to its heaviness.

Thus the characteristic of the each type of vessel is shown in the following
Table 1.

1 **Table 1. Types and character**

S. No.	Ship or Boat	Characteristic
1.	Kalam	Big ships, Merchant ships, Long distance travel
2.	Vangam	Big ships, Merchant ships, Long distance travel
3.	Navay	Merchant and war ships
4.	Thimil	Small ship or boat used by fisher men
5.	Ambi	Small ship or boat to carry the goods from the big ships to the shore as big ships cannot touch the shore
6.	Thoni	A small boat for carrying the goods from the big ships to the shore

2
3 Thus these ships are mentioned in the Tamil Sangam literature. Along with
4 this the mastery over the movement of the wind was also mentioned.

5
6 O heir of a mighty man who mastered the movement
7 of the wind and had his ships sail on the huge, full
8 ocean!

9 Puranānūru 66, Poet VennikKuyathiyār
10 sang to Chōlan Karikāl Peruvalathān (Karikālan),
11 (Tamil Virtual University 1995)

12 Thus the development made in the harbor makes it easy for the foreign
13 ships to reach these harbours.

14
15 320. ships bring horses with white manes and
16 wealth from the north to its shores..

17 Perumpanarrutpadai
18 (Tamil Virtual University 1995)

19
20 185. Swift horses with lifted heads arrive on ships
21 from abroad, sacks of black pepper arrive
22 from inland by wagons, gold comes from
23 northern mountains, sandalwood and akil
24 wood come from the western mountains,
25 and materials come from the Ganges.
26 Pearls come from the southern ocean and
27 coral comes from the eastern ocean.
28 The yields of river Kāviri, things from
29 Eelam, products made in Burma, and many
30 rare and big things are piled up together on
31 193. the wide streets, bending the land under.

32 Pattinappālai, Kadiyalur uruthiran Kannanar,
33 King – Thiruma valavan (Karikalan)
34 (Tamil Virtual University 1995)

35 For the import and export of goods, taxes were collected and seals
36 acknowledging the payment of taxes were stamped on the goods.

1
2 131. limitless goods
3 for export come from inland and
4 imported goods arrive in ships.
5 Fierce, powerful tax collectors are
6 at the warehouses collecting taxes and
7 stamping the Chōla tiger symbols on
8 goods that are to be exported.
9 Warehouses are filled with unlimited
10 expensive items packed in sacks. They
11 137. lay heaped in the front yard.
12 Pattinappālai, Kadiyalur uruthiran Kannanar,
13 King – Thiruma valavan (Karikalan)
14 (Tamil Virtual University 1995)
15

16 Due to the technological development and organized structure, peoples of
17 different languages from far away countries came by ship and lived near the
18 sea shore of Tamil Nadu.
19

20 213. People from many nations with various
21 languages living together sweetly is like
22 the festivals of an ancient city, celebrated
23 together by enlightened people who have
24 lived with many groups of people and
25 have visited other faultless countries.
26 Kāvrippoompattinam is a place with
27 220. perfection and greatness.
28 Pattinappālai, Kadiyalur uruthiran Kannanar,
29 King – Thiruma valavan (Karikalan)
30 (Tamil Virtual University 1995)
31

32 The visitation of foreign ships which included the Greek ships to the Coast
33 of the Tamil land is seen in this poem of the Sangam Era.
34
35

36 **Greeks Ships**

37
38 One type of a seafaring vessel is called as ναῦς – naûs in the Greek
39 language. In the Tamil language one particular type of ship is called as Navay.
40

41 ‘ply where Chēran brings gold by ships (Navay).’
42 Puranānūru 126,
43 Poet Mārōkkathu Nappasalaiyār
44 (Tamil Virtual University 1995)

45 Thus these ships were related with import.
46

47 320. go and rest in that seashore town, where,
48 ships (Navay) bring horses with white manes and
49 wealth from the north to its shores..

1
2 Perumpānātruppadai
(Tamil Virtual University 1995)
3 Here it is mentioned that the Navay type ship brought horses from the
4 foreign countries.

5
6 75. ‘You captured the esteemed Sālioor town
7 named for fine paddy, with the deep ocean
8 as its moat,
9 where swaying ships (Navay), surrounded by the ocean,
10 with tall masts with flags on them, bring goods
11 that bring great wealth and can be enjoyed by
12 85. its citizens, looking like mountains surrounded’

13 Mathuraikkānji
14 (Tamil Virtual University 1995)
15 Here it is mentioned that the Navay type ships had masts and flags.

16
17 172. In the sweet Puhār harbor, desirable
18 flags are hoisted on masts of ships (Navay)
19 gently swaying on the waves, anchored
20 and appearing like male elephants that
21 175. sway their sturdy posts.’

22 Pattinappālai
23 (Tamil Virtual University 1995)
24 Here it is mentioned that the Navay type ships had masts and flags and
25 their size were as big as huge elephants.

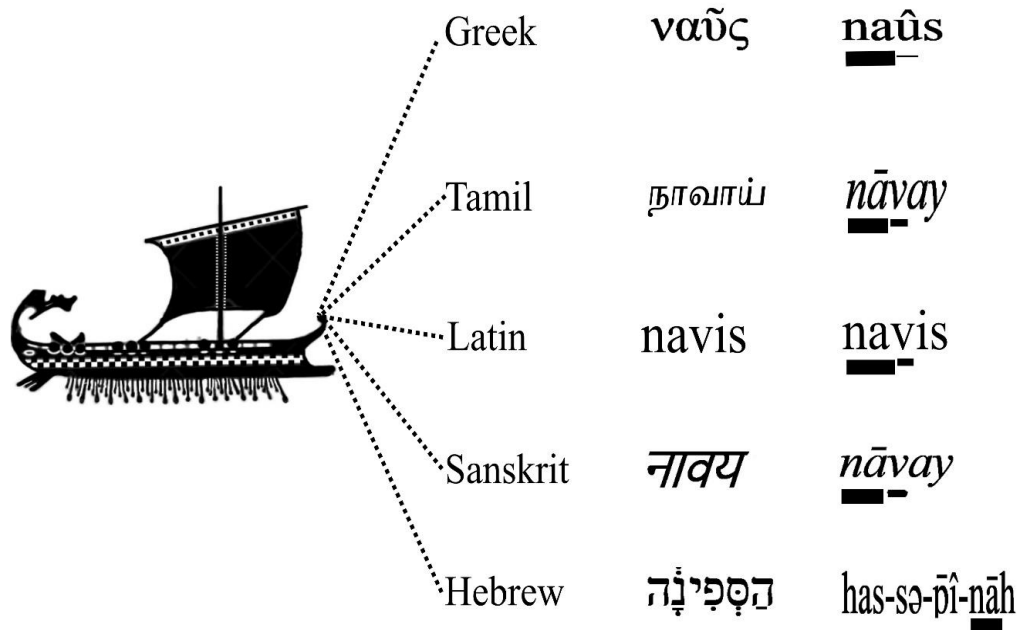
26
27 ‘O heir of a mighty man who mastered the movement
28 of the wind and had his ships (Navay) sail on the huge, full
29 ocean!’

30 Puranānūru 66,
31 Poet VennikKuyathiyār
32 (Tamil Virtual University 1995)
33

34 Here it is mentioned that the Navay type ships operated using sails and
35 wind energy. Thus the ships from foreign countries were called as navay in
36 Tamil. Moreover it is also related with masts and wind energy as that of ναῦς –
37 naūs in Greeks. It ensures that Navay type of ships are nothing but the ναῦς –
38 naūs of Greeks. It also ensures ancient sea trade of the Greeks with Tamil Nadu
39 (Pugazhendhi 2020, 2021b).

40 Thus the Greek word ‘ναῦς’ is seen in the classical literatures of Tamil,
41 Latin, Sanskrit and Hebrew as shown in the Figure 7.

42
43

1 **Figure 7.** 'ναῦς' in Classical Languages

2
3
4 Here 'na' is seen in all the languages and the 'v' is seen in Tamil, Latin
5 and Sanskrit languages. The English word Navy has similarity with Navay of
6 Tamil and Sanskrit. It ensures the Greek word 'ναῦς' is derived from the word
7 'Navay'. In other words 'ναῦς' is the loan shift¹⁸ of the 'Navay' and a
8 apocope¹⁹ has taken place in navay while borrowing.. the new entry of this
9 word in ancient Greek made many word forms in 'n***'. At the same time the
10 word 'ναῦς' retains its dominance among these 'n***' forms. More than that
11 this dominance is extended on other words used for ship in Greek. For
12 example the 'πλοῖοις' type of ship also named as 'ναῦς'.

¹⁸When foreign loans appear in a language as changes in the usage of native words, such changes are called shifts. As the borrower does not accept the donor's words and the new cultural item, he adapts material in his own language,

¹⁹Apocope is a linguistic term which refers the deletion of the final element in a borrowed word.

Βασιλείας δ' ἐστὶν ἡ μὲν Τύνδης Κηπροβότρου, κώμη παραθαλάσσιος ἔνσημος· ἡ δὲ **Μουζιρίς** βασιλείας μὲν τῆς αὐτῆς, ἀκμάζουσα δὲ τοῖς ἀπὸ τῆς Ἀριακῆς εἰς αὐτὴν ἐρχομένοις πλοίοις καὶ τοῖς **Ἑλληνικοῖς**· κεῖται δὲ παρὰ ποταμὸν, ἀπέχουσα ἀπὸ μὲν Τύνδεως διὰ τοῦ ποταμοῦ καὶ διὰ θαλάσσης σταδίους πεντακοσίους, ἀπὸ δὲ τοῦ κατ' αὐτὴν εἴκοσι. Ἡ δὲ Νέλκυνδα σταδίου μὲν ἀπὸ Μουζιρέως ἀπέχει σχεδὸν πεντακοσίους, ὁμοίως διὰ τε ποταμοῦ (καὶ πεζῇ) καὶ διὰ θαλάσσης, **βασιλείας** δὲ ἐστὶν ἑτέρας, τῆς **Πανδίωνος**· κεῖται δὲ καὶ αὐτὴ παρὰ ποταμὸν, ὥσει ἀπὸ σταδίων ἑκατὸν εἴκοσι τῆς θαλάσσης.

— παράγραφοι 53-54,

Περίπλους της Ερυθράς Θαλάσσης

Tyndis is of the Kingdom of Cerobothra; it is a village in plain sight by the sea. **Muziris**, of the same Kingdom, abounds in ships sent there with **cargoes from Arabia, and by the Greeks**; it is located on a river, distant from Tyndis by river and sea five hundred stadia, and up the river from the shore twenty stadia. Nelcynda is distant from Muziris by river and sea about five hundred stadia, and is of another **Kingdom, the Pandion**. This place also is situated on a river, about one hundred and twenty stadia from the sea.

Periplus of the Eritherian Sea
(Wilfred 1912)

Here it is mentioned that 'πλοίοις' type of Greek ships had travelled to the Μουζιρίς –Muziris²⁰ (Aubert 2015)²¹ harbour of Tamil Nadu. This is also ensured by the ancient Tamil literature.

'belonging to the victorious Pāndiyan king with many tall, fine elephants, who surrounded with uproar the wealthy Musiri town of Chēran, where, causing the huge, beautiful Sulli river's white foam to become muddied, the fine ships of the foreigners come with gold and leave with pepper'

Akanānūru 149,
Erukkāttūr Thāyankannanār
(Tamil Virtual University 1995)

In this ancient Tamil text it is mentioned about Musiri (Μουζιρίς) the sea port town of Chēran (Κηπροβότρου) and Pāndiyan (Πανδίωνος) as referred to in the Greek text. Thus the passage in Tamil literature corroborates the Greek text. More than that the Greek text mentions that the word 'πλοίοις' used to represent the type of ships were anchored in Musiri (Μουζιρίς) of Tamil Nadu.

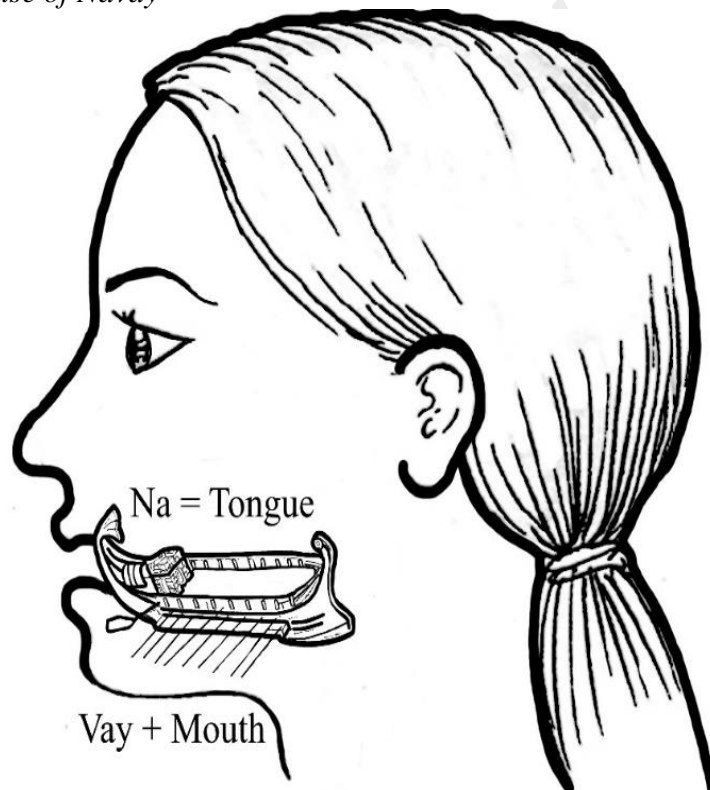
²⁰The most significant among the new evidence is the Muziris Papyrus, a Roman document discovered in 1985, which records a loan agreement drawn in Muziris by a 2nd century Alexandrian creditor with a transmarine trader, signed by the main merchant, the financier and a third person, the goods manager, probably a Greek stationed at Muziris across seasons. The document containing a wide variety of information regarding the Mediterranean overseas trade with the West Coast, particularly with Muziris, the major port to which ships from Berenike had sailed, mentions a ship namely, 'Hermapollon' engaged in mercantile circuits between Berenike and Muziris during mid 2nd century.

²¹The Muziris papyrus contains on one side the terms of a financial arrangement between a trader and a businessman for the transport by camels of luxury goods from an unspecified Red Sea port, be it Myos Hormos, Leukos Limen, Berenice, or any other one, to Coptos:

This word for ship is not seen in the classical literature of Greek. Instead Navay or ναῦς only seen to be mentioned in Tamil literature. This ensures the dominance of the word 'ναῦς' over all the other words to denote a ship as mentioned in Figure 4, including the dotted line. Here the 'πλοίοις' type of ships are mentioned as Navay or ναῦς in Tamil is a semantic broadening (Akidah 2013)²² of this word in foreign language. More than that Tamil also highlights the meaning of the Greek word 'ναῦς'. In Tamil 'na' means 'tongue' and 'vay' means mouth. 'Na + Vay = Navay' means like a tongue in the mouth which denotes the ship metaphorically as in the Figure 8.

Figure 8. *Metaphoric use of Navay*

Like a Tongue
in a Mouth
= Navay
= Ship



The root meaning of 'Navay or ναῦς' as seen in the ancient literature of Tamil language and the development of organized marine trade and technology as seen in the ancient Tamil literature ensures the donor competence of the Tamil language connected with ship. The various word forms of 'n***' in ancient Greek, ensures that this word is a loan word in Greek and ensures that this word is borrowed from Tamil language.

²²Semantic change refers to semantic shift or semantic progression and involves changes in the usage of words to the point where its current meaning radically differs from its original meaning. Such change may take place over a period of time. For instance, the Greek word 'demagogue' originally meant 'a popular leader' but now refers to a 'politician who panders to emotions and prejudice'.

The word 'ναῦς' is borrowed from Tamil Nadu which is very far away from Greek land. So it is not merely a foreign word but a mark of vast voyage to the other end of the world as mentioned in the ancient Greek work 'The Periplus of the Erythraean sea' (Wilfred 1912) shown in the Figure 9.

Figure 9. Vast Sea Voyage from Greek Land to Tamil Nadu



Thus the Greek word 'ναῦς' has become a symbol of pride and represents the vast sea voyage to the other end of the world in the pre-historic era. This is the reason for the word 'ναῦς' to have acquired dominance over all other words related with ship in ancient Greek as mentioned in Figure 4.

Conclusion

There are many words like Πορθμῖς, πλοῖον, Πεντηκοντέρων, Σκάφει and ναῦς in ancient Greek to denote ship. Among these 'ναῦς' has grown into varied word forms also. It ensures that this word is a borrowed in ancient Greek. Apart from this all the ship related words are derived from the word 'ναῦς'. The foreigners denote all type of Greek ships only in the name of 'ναῦς'. Thus this word is seen in Latin, Tamil, Sanskrit and Hebrew. It is not merely a word relation, but the proof for trade relation, that the Greek ships travelled to these far of places from Greek land. The Tamil language has the derived meaning of the Greek word 'ναῦς' as 'the tongue in the mouth' denoting the ship metaphorically. It can be derived that this word is borrowed from Tamil to Greek and that the word 'ναῦς' prevails over all other words in ancient Greek as a mark of vast sea voyage.

References

- Akidah MA (2013) Phonological and semantic change in language borrowing. *International Journal of Education and Research* 1(4): 1–20.
- Aubert Jean-Jacques (2015) Trajan's Canal: River Navigation from the Nile to the Red Sea?, Across the Ocean: Nine Essays on Indo-Mediterranean Trade. *Columbia Studies in the Classical Tradition*, Brill, Leiden, Boston, Volume 41.
- Cannon G (1999) Problems in studying loans. *Proceedings of the annual meeting of the Berkley Linguistics Society* 25, Berkley: Berkley Linguistics Society.
- Clark Eve V (1987) *The Principle of Contrast: A constraint on language acquisition*. In Brian Mac Whinney (Ed.), *Mechanisms of language acquisition*, (pp. 1-34). Hillsdale, NJ: Lawrence Erlbaum.
- Coleridge E P (1891a) *Euripides's The Trojan Women*. London: George Bell and Sons.
- Coleridge E P (1891b) *Euripides's Iphigenia in Aulis*. London: George Bell and Sons.
- Coleridge E P (1938a) *Euripides's Hecuba*. New York: Random House.
- Coleridge E P (1938b) *Euripides's Helen*. New York: Random House.
- Coleridge E P (1938c) *Euripides's Phoenissae*. New York: Random House.
- Crystal David (2003) *A Dictionary of linguistic and phonetics*. Cornwall: Blackwell Publishers.
- Godley A D (1920) *Herodotus's History*. Cambridge: Harvard University Press.
- Gove P B (1961) *Webster's Third New International Dictionary of the English Language*. G Bell/Springfield, Mass, London: G & C Merriam.
- Griffith Ralph T H (1896) *The Rig Veda*. Sacred-text.com.
- James Strong King (2017) *King James Strong's OT Study Bible*. Pure Cambridge: TruthBeTold Ministry.
- Jebb Sir Richard (1893) *Sophocles's Ajax*. Cambridge: Cambridge University Press.
- Jowett Benjamin (1881) *Thucydides*. Oxford: Clarendon Press.
- Kovacs David (1994a) *Euripides's Alcestis*. Cambridge: Harvard University Press.
- Kovacs David (1994b) *Euripides's Cyclops*. Cambridge: Harvard University Press.
- Kovacs David (1994c) *Euripides's Medea*. Cambridge: Harvard University Press.
- Kovacs David () *Euripides's Eur. Hipp.*. Cambridge: Harvard University Press.
- Liddell Henry George, Robert Scott (1940) *A Greek-English Lexicon*. Oxford: Clarendon Press.
- Miller Walter (1913) *M Tullius Cicero's De Officiis*. Cambridge, London, England: Harvard University Press.
- Murray A T (1919) *Homer's The Odyssey*. Cambridge, Harvard University Press, London: William Heinemann, Ltd.
- Murray A T (1924) *Homer's The Iliad*. Cambridge, Harvard University Press, London: William Heinemann, Ltd.
- Murray Gilbert (1913) *Euripides's Eur. I. A*. Oxford: Clarendon Press.
- Potter Robert (1938) *Euripides's Iphigenia in Tauris*. New York: Random House.
- Pugazhendhi D (2020) The Greek root word 'Kos' and the trade of ancient Greek with Tamil Nadu, India. *International Journal of Humanities and Social Sciences. World Academy of Science, Engineering and Technology* 14(3): 185–192.
- Pugazhendhi D (2021a) Greek, Tamil and Sanskrit: Comparison between the Myths of Herakles (related with Iole and Deianira) and Rama in Hinduism. *Athens Journal of Philology* 8(1): 9–36.

- 1 Pugazhendhi D (2021b) Tamil, Greek, Hebrew and Sanskrit: Sandalwood (Σανταλόξυλο)
- 2 and its Semantics in Classical Literatures. *Athens Journal of Philology* 8(2): 9–
- 3 33.
- 4 Richard J Schmidt R (1985) *Longman Dictionary of Applied Linguistics*. Harlow,
- 5 Essex, England: Longman.
- 6 Schoff Wilfred H (1917) Navigation to the Far East under the Roman Empire.
- 7 *Journal of the American Oriental Society*, Vol 37, pp 240-249
- 8 Smyth Herbert Weir (1926a) *Aeschylus's Agamemnon*. Cambridge: Harvard
- 9 University Press.
- 10 Smyth Herbert Weir (1926b) *Aeschylus's Eumenides*. Cambridge: Harvard University
- 11 Press.
- 12 Smyth Herbert Weir (1926c) *Aeschylus's Persians*. William Heinemann Ltd,
- 13 Cambridge, London: Harvard University Press.
- 14 Smyth Herbert Weir (1926a) *Aeschylus's Seven Against Thebes*. Cambridge: Harvard
- 15 University Press.
- 16 Smyth Herbert Weir (1926b) *Aeschylus's Suppliant Women*. Cambridge: Harvard
- 17 University Press.
- 18 Storr Francis (1913) *Sophocles Ajax*. The Loeb classical library, 21, William
- 19 Heinemann Ltd., London, New York: The Macmillan Company.
- 20 Tamil Virtual University (1995) *Sangam literature*. Tamil Nadu, India: Government
- 21 of Tamil Nadu.
- 22 Warmington E H (1928) *The Commerce Between The Roman Empire and India*.
- 23 Cambridge: Cambridge University Press.
- 24 Wilfred H (1912) *The periplus of the Erythraean sea*. New York: Longmans.