Front Pages

Athens Journal of Philology

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The *Athens Journal of Philology (AJP)* is an Open Access quarterly double-blind peer reviewed journal and considers papers from all areas of sports and related sciences. Many of the papers in this journal have been presented at the various conferences sponsored by the Languages & Linguistics Unit and the Literature Unit of the Athens Institute for Education and Research (ATINER). All papers are subject to ATINER's Publication Ethical Policy and Statement.

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The current issue is the third of the eighth volume of the *Athens Journal of Philology (AJP)*, published by the published by the Languages & Linguistics Unit and the Literature Unit of ATINER

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Gregory T. Papanikos
President
ATINER

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Athens Institute for Education and Research
A World Association of Academics and Researchers

15th Annual International Conference on Languages & Linguistics
4-7 July 2022, Athens, Greece

The Languages and Linguistics Unit of ATINER, will hold its **15th Annual International Conference on Languages & Linguistics, 4-7 July 2022, Athens, Greece** sponsored by the Athens Journal of Philology. The conference is soliciting papers (in English only) from all areas of languages, linguistics and other related disciplines. You may participate as stream organizer, presenter of one paper, chair a session or observer. Please submit a proposal using the form available (https://www.atiner.gr/2022/FORM-LNG.doc).

Academic Members Responsible for the Conference

- **Dr. Valia Spiliotopoulos,** Head, Languages & Linguistics Unit, ATINER and Associate Professor of Professional Practice & Academic Director Centre for English Language Learning, Teaching, and Research (CELLTR), Faculty of Education, Simon Fraser University, Canada

Important Dates

- Abstract Submission: **6 December 2021**
- Acceptance of Abstract: **4 Weeks after Submission**
- Submission of Paper: **6 June 2022**

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Athens Institute for Education and Research
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15th Annual International Conference on Literature
30-31 May & 1-2 June 2022, Athens, Greece

The Literature Unit of ATINER is organizing its **15th Annual International Conference on Literature, 30-31 May & 1-2 June 2022, Athens, Greece** sponsored by the Athens Journal of Philology. The aim of the conference is to bring together academics and researchers from all areas of literature and other related disciplines. You may participate as stream leader, presenter of one paper, chair of a session or observer. Please submit a proposal using the form available (https://www.atiner.gr/2022/FORM-LIT.doc).

Academic Member Responsible for the Conference

- **Dr. Stamos Metzidakis**, Head, Literature Research Unit, ATINER & Emeritus Professor of French and Comparative Literature, Washington University in Saint Louis, USA.

Important Dates

- Abstract Submission: **1 November 2021**
- Acceptance of Abstract: **4 Weeks after Submission**
- Submission of Paper: **2 May 2022**

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Greek, Tamil and Sanskrit: Comparison between the Myths of Prometheus, Sembian and Sibi

By D Pugazhendhi[*]

The Prometheus myth in Greek literature deals primarily with the theft of fire. The mythological story unwinds such events as the sacrificial thigh bone, God's corporal punishment, and the eating of flesh by an eagle. A link with the Oceanus race and with the continent of Asia is also seen. Interestingly resemblances with this myth can be seen in some ancient literary sources from Tamil and Sanskrit languages. The Tamil myth of 'Sembian' and the Sanskrit myth of 'Sibi' also have resemblances with the Greek myth of Prometheus. The parallels seen between these myths are examined here.

Keywords: *comparative study, Indian, myth, Prometheus, Sanskrit, Sembian, Sibi, Tamil*

Introduction

Myths can be considered to be the ancient sources of information on ancient history and culture. Some myths, even though arising in different corners of the world (and in different languages), strangely reflect one another. The similarities in mythologies may indicate parallels and influences of one another. If the similarities are occasional they may be seen as parallels. If the similarities are made by personal contact, they may be seen as influences. The Greek myth of Prometheus has similarities with the Tamil myth of Sembian and the Sanskrit myth of Sibi. The reason for these similarities shall be searched in the mythological theories of parallels and influences.

Prometheus

There are many myths related to Prometheus; among those myths, noteworthy mentions are as follows:

1. Maker of Mankind and Philanthropism
2. Sacrificial thigh bone
3. Related with fire (Theft of fire)
4. God's corporal punishment
5. Flesh-eating by an eagle
6. Oceanus Race and
7. Prometheus' connection with Asia

The myths related with these topics are discussed in detail below.

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Maker of Mankind and Philanthropist

Man being a social animal depends upon the help of another. The society, or a person in the society, needs the help of the other. In this scenario a hand that is ready to help is considered to be a special character of a super human or as God himself, which is made very obvious in the myth of Prometheus (Jones 1918).

λίθοι κεῖνταί σφισιν ἐπὶ τῇ χαράδρᾳ, μέγεθος μὲν ἑκάτερος ὡς φόρτον ἀποχρῶντα ἁμάξης εἶναι, χρῶμα δέ ἐστι πηλοῦ σφισιν, οὐ γεώδους ἀλλ᾽ οἷος ἂν χαράδρας γένοιτο ἢ χειμάρρου ψαμμώδους, παρέχονται δὲ καὶ ὀσμὴν ἐγγύτατα χρωτὶ ἀνθρώπου: ταῦτα ἔτι λείπεσθαι τοῦ πηλοῦ λέγουσιν ἐξ οὗ καὶ ἅπαν ὑπὸ τοῦ Προμηθέως τὸ γένος πλασθῆναι τῶν ἀνθρώπων.

At the ravine there lie two stones, each of which is big enough to fill a cart. They have the color of clay, not earthy clay, but such as would be found in a ravine or sandy torrent, and they smell very like the skin of a man. They say that these are remains of the clay out of which the whole race of mankind was fashioned by Prometheus. Paus. 10.4.4.
Pausanias, Description of Greece, Greek travelogue, C 2nd A.D

Thus it is described that Prometheus created humans, and after that he also gave mankind the much needed fire. This reveals that he was not only the creator, he was also a benefactor, and for this noble act he even goes to the extent of deceiving God.

Sacrificial Thigh Bone

Sacrificing animals as an offering to the Gods has been one of the important rituals in ancient times. At the end of the event the flesh of the sacrificial animal is offered to God—it is also a mark of respect given to God. Deception is not permitted in this ritual. Here there is a need to look at the situation in the myth of Prometheus (Smyth 1926, Evelyn White 1914).

495χολή, λοβοῦ τε ποικίλην εὐμορφίαν. κνίσῃ τε κῶλα συγκαλυπτὰ καὶ μακρὰν ὀσφῦν πυρώσας δυστέκμαρτον ἐς τέχνην ὥδωσα θνητούς, καὶ φλογωπὰ σήματα ἐξωμμάτωσα, πρόσθεν ὄντ᾽ ἐπάργεμα.

[495] the gods, also the speckled symmetry of the liver-lobe; and the thigh-bones, wrapped in fat, and the long chine I burned and initiated mankind into an occult art. Also I cleared their vision to discern signs from flames, which were obscure before this. [500]
Aesch. PB
Aeschylus's Prometheus Bound, Greek tragedy C.5th BC

535καὶ γὰρ ὅτ᾽ ἐκρίνοντο θεοὶ θνητοί τ᾽ ἄνθρωποι
Μηκώνη, τότ᾽ ἔπειτα μέγαν βοῦν πρόφρονι θυμῷ
δασσάμενος προέθηκε, Διὸς νόον ἐξαπαφίσκων.
τοῖς μὲν γὰρ σάρκας τε καὶ ἔγκατα πίονα δημῷ
ἐν ῥινῷ κατέθηκε καλύψας γαστρὶ βοείη,
540τῷ δ᾽ αὖτ᾽ ὀστέα λευκὰ βοὸς δολίῃ ἐπὶ τέχνῃ
εὐθετίσας κατέθηκε καλύψας ἀργέτι δημῷ.
δὴ τότε μιν προσέειπε πατὴρ ἀνδρῶν τε θεῶν τε:
Ἰαπετιονίδη, πάντων ἀριδείκετ᾽ ἀνάκτων,
ὦ πέπον, ὡς ἑτεροζήλως διεδάσσαο μοίρας.

[535] For when the gods and mortal men had a dispute at Mecone, even then Prometheus was forward to cut up a great ox and set portions before them, trying to deceive the mind of Zeus. Before the rest he set flesh and inner parts thick with fat upon the hide, covering them with an ox paunch; [540] but for Zeus he put the white bones dressed up with cunning art and covered with shining fat. Then the father of men and of gods said to him: "Son of Iapetus, most glorious of all lords, good sir, how unfairly you have divided the portions!"
Hes. Th.
Hesiod's Theogony,
Greek epic, C.8th BC

To help mankind, Prometheus tricks the God Zeus as found in the Greek tragedy C 5th B.C. Food and meat were obviously a scarcity at the time of the myth, and people were suffering from want and were thus unable to fulfill the sacrificial needs of God Zeus. Seeing this Prometheus had no other way to solve this problem other than taking the dry bones of animals and covering them with the fat of sacrifice instead of the real meat and offering them to the God Zeus. He staged this deceptive act for the benefit of mankind knowing full well that he might incur the wrath of Zeus.

Related with Fire (Theft of Fire)

Fire is one of the main sources of energy. The use of fire is one of the remarkable milestones in the development of mankind. It has helped man to not only cook his food and make agricultural implements, but also to create weapons of war with hard metals like bronze, copper and iron. Fire is an important source of energy and has an important place in modern industry and war. Hence, the value of fire is revealed in the myth of Prometheus (Lamb 1967) who was the bringer of fire and civilization to the mortals. He was the giver of all arts and sciences, as well as the means of sustenance.

ἀπορίᾳ οὖν σχόμενος ὁ Προμηθεὺς ἥντινα σωτηρίαν τῷ ἀνθρώπῳ εὕροι, κλέπτει Ἡφαίστου καὶ Ἀθηνᾶς τὴν ἔντεχνον

Then Prometheus, in his perplexity as to what preservation he could devise for man, stole from Hephaestus and Athena wisdom in the arts
Plat. Prot. 321c

[321δ] σοφίαν σὺν πυρί—ἀμήχανον γὰρ ἦν ἄνευ πυρὸς αὐτὴν κτητήν τῳ ἢ χρησίμην γενέσθαι—καὶ οὕτω δὴ δωρεῖται ἀνθρώπῳ. τὴν μὲν οὖν περὶ τὸν βίον σοφίαν ἄνθρωπος ταύτῃ ἔσχεν, τὴν δὲ πολιτικὴν οὐκ εἶχεν: ἦν γὰρ παρὰ τῷ Διί. τῷ δὲ Προμηθεῖ εἰς μὲν τὴν ἀκρόπολιν τὴν τοῦ Διὸς οἴκησιν οὐκέτι ἐνεχώρει εἰσελθεῖν—πρὸς δὲ καὶ αἱ Διὸς φυλακαὶ φοβεραὶ ἦσαν—εἰς δὲ τὸ τῆς Ἀθηνᾶς καὶ Ἡφαίστου οἴκημα τὸ κοινόν, ἐν ᾧ

[321d] together with fire—since by no means without fire could it be acquired or helpfully used by any—and he handed it there and then as a gift to man. Now although man acquired in this way the wisdom of daily life, civic wisdom he had not, since this was in the possession of Zeus; Prometheus could not make so free as to enter the citadel which is the dwelling-place of Zeus, and moreover the guards of Zeus were terrible: but he entered unobserved the building shared by Athena and Hephaestus
Plat. Prot. 321d
Plato's Protagoras, C.4th BC

In this episode the mortals created by Prometheus seem to be at a low state when compared to that of other living creatures. To uplift the mortals he stole the fire from God Zeus without being concerned about the consequences of doing such a defying act. His only motive was to somehow help mankind. Because of this selfless characteristic, Prometheus has a very special place in this myth, however, this action incurs the wrath of Zeus.

God's Corporal Punishment

Punishment is the infliction of pain for wrong doing. The aim of punishment may vary. Punishments differ in their degree of severity and may include sanctions such as reprimands, deprivations of privileges or liberty, fines, incarcerations, ostracism, the infliction of pain, amputation and even the penalty of death—these punishments are accorded mainly to rectify wrong doings. Sometimes punishments are very hard; bodily punishments belong to this category. This is also seen in the myth of Prometheus (Evelyn White 1914).

520ταύτην γάρ οἱ μοῖραν ἐδάσσατο μητίετα Ζεύς.
δῆσε δ᾽ ἀλυκτοπέδῃσι Προμηθέα ποικιλόβουλον
δεσμοῖς ἀργαλέοισι μέσον διὰ κίον᾽ ἐλάσσας:

[520] for this lot wise Zeus assigned to him. And ready-witted Prometheus he bound with inextricable bonds, cruel chains, and drove a shaft through his middle,
Hes. Th.
Hesiod's Theogony,
Greek epic, C.8th BC

God Zeus was very angry when Prometheus stole the fire from him, so he punished him physically by cruelly nailing him to a mountain in the Caucasus and driving a shaft through his middle. He also sent an eagle to eat his immortal liver which constantly replenished itself. Prometheus underwent the punishment of God Zeus and bore all the physical sufferings solely for the benefit of mankind.

Body Flesh Eaten by Bird

Bodily punishments are intended to inflict pain. Flogging, branding and even mutilation was practiced in most civilizations in ancient times. The punishment received by Prometheus for the theft of fire from the god is indeed very sympathetic (Evelyn White 1914).

καί οἱ ἐπ᾽ αἰετὸν ὦρσε τανύπτερον· αὐτὰρ ὅ γ᾽ ἧπαρ ἤσθιεν ἀθάνατον, τὸ δ᾽ ἀέξετο ἶσον ἀπάντη 525νυκτός ὅσον πρόπαν ἦμαρ ἔδοι τανυσίπτερος ὄρνις.	and set on him a long-winged eagle, which used to eat his immortal liver; but by night the liver grew [525] as much again everyway as the long-winged bird devoured in the whole day. Hes. Th. Hesiod's Theogony, Greek epic, C.8th BC

Unable to bear the suffering of the mortals, Prometheus had no other alternative than to steal the fire from Zeus, for which he had to undergo the punishment given by Zeus who set on him a giant eagle to eat the liver of Prometheus.

Oceanus Race

There are some myths especially related to the sea. The peoples belonging to fishing communities and sea traders are related with these types of myths. Prometheus is also related to this type of myth (Evelyn White 1914).

κούρην δ᾽ Ἰαπετὸς καλλίσφυρον Ὠκεανίνην ἠγάγετο Κλυμένην καὶ ὁμὸν λέχος εἰσανέβαινεν. ἣ δέ οἱ Ἄτλαντα κρατερόφρονα γείνατο παῖδα· 510τίκτε δ᾽ ὑπερκύδαντα Μενοίτιον ἠδὲ Προμηθέα	Now Iapetus took to wife the neat-ankled maid Clymene, daughter of Ocean, and went up with her into one bed. And she bore him a stout-hearted son, Atlas: [510] also she bore very glorious Menoetius and clever Prometheus,.. Hes. Th. Hesiod's Theogony, Greek epic, C.8th BC

The mother of the Prometheus was associated with the sea. All other relatives of Prometheus were also related with the sea. According to Aeschylus, the wife of Prometheus was also connected with the sea (Smyth 1926).

Χορός
ἔμαθον τάδε σὰς προσιδοῦσ᾽ ὀλο-
ὰς τύχας, Προμηθεῦ.
τὸ διαμφίδιον δέ μοι μέλος προσέπτα
555τόδ᾽ ἐκεῖνό θ᾽, ὅ τ᾽ ἀμφὶ λουτρὰ
καὶ λέχος σὸν ὑμεναίουν
ἰότατι γάμων, ὅτε τὰν ὁμοπάτριον ἕδνοις
560ἄγαγες Ἡσιόναν πείθὼν δάμαρτα
κοινόλεκτρον.

Chorus
I have learned this lesson from observing the luck, Prometheus, that has brought about your ruin. And the difference in the song stole into my thought [555] —this song and that, which, about your bridal bed and bath, I (the chorus of Oceanids) raised to grace your marriage, when you wooed with gifts [560] and won my (the Oceanid) sister Hesione to be your wedded wife.
Aesch. PB
Aeschylus's Prometheus Bound,
Greek tragedy C.5th BC

In these myths it is shown clearly that Prometheus belonged to a race closely linked with the sea.

Prometheus connection with Asia

Prometheus was also connected with Asia (Godley 1920).

[3] ἤδη γὰρ Λιβύη μὲν ἐπὶ Λιβύης λέγεται ὑπὸ τῶν πολλῶν Ἑλλήνων ἔχειν τὸ οὔνομα γυναικὸς αὐτόχθονος, ἡ δὲ Ἀσίη ἐπὶ τῆς Προμηθέος γυναικὸς τὴν ἐπωνυμίην.

[3] For Libya is said by most Greeks to be named after a native woman of that name, and Asia after the wife of Prometheus;
Hdt. 4.45.3
Herodotus's Histories, C.5th BC

In this myth Herodotus says that the continent of Asia was named after the wife of Prometheus. In this aspect we see the connection of Prometheus with the Asian continent. Thus Prometheus was related with the myths of 1)Philanthropic or giving mind, 2) Sacrificial thigh bone, 3) Related with fire (Theft of fire), 4) God's physical punishment, 5) flesh-eating bird, 6) Oceanus race and 7) Connection with Asia. In connecting these myths, it can be said that Prometheus who belongs to the sea and Asia, faced bodily wounds by the bird related with fire. This is visualized in Figure 1.

Figure 1. *Prometheus Bound*

Prometheus belongs to the Oceanus Race. Some sea myths may also be related with him. Here it is to be known about an instance which is not directly related to Prometheus, but related with the sea in Greek literature (Mooney 1912).

540 Ὣς φάτο: τοῖσι δὲ σῆμα θεοὶ δόσαν εὐμενέοντες.
τρηρὼν μὲν φεύγουσα βίην κίρκοιο πελειὰς
ὑψόθεν Αἰσονίδεω πεφοβημένη ἔμπεσε κόλποις:
κίρκος δ' ἀφλάστῳ περικάππεσεν. ὦκα δὲ Μόψος
 τοῖον ἔπος μετὰ πᾶσι θεοπροπέων ἀγόρευσεν:
Ὕμμι, φίλοι, τόδε σῆμα θεῶν ἰότητι τέτυκται:
οὐδέ τῃ ἄλλως ἐστὶν ὑποκρίνασθαι ἄρειον,
παρθενικὴν δ' ἐπέεσσι μετελθέμεν ἀμφιέποντας
μήτι παντοίῃ. δοκέω δέ μιν οὐκ ἀθερίζειν,
εἰ ἐτεὸν Φινεύς γε θεᾷ ἐνὶ Κύπριδι νόστον
πέφραδεν ἔσσεσθαι. κείνης δ' ὅγε μείλιχος ὄρνις
πότμον ὑπεξήλυξε: κέαρ δέ μοι ὡς ἐνὶ θυμῷ
τόνδε κατ' οἰωνὸν προτιόσσεται, ὣς δὲ πέλοιτο.
ἀλλά, φίλοι, Κυθέρειαν ἐπικλείοντες ἀμύνειν,
554 ἤδη νῦν Ἄργοιο παραιφασίῃσι πίθεσθε."

(3.540-544) Thus he spake, and the gods in their goodwill gave them a sign. A trembling dove in her flight from a mighty hawk fell from on high, terrified, into the lap of Aeson's son, and the hawk fell impaled on the stern-ornament. And quickly Mopsus with prophetic words spake among them all:

(3.545-554) "For you, friends, this sign has been wrought by the will of heaven; in no other way is it possible to interpret its meaning better, than to seek out the maiden and entreat her with manifold skill. And I think she will not reject our prayer, if in truth Phineus said that our return should be with the help of the Cyprian Goddess. It was her gentle bird that escaped death; and as my heart within me foresees according to this omen, so may it prove! But, my friends, let us call on Cytherea to aid us, and now at once obey the counsels of Argus. Argonautica

The above scene is present in the Greek epic called *Argonautica* which was written by Apollonius Rhodius in the third century B.C.; it is an epic related with sea journey. In this incident a soft bird (dove), frightened by a stronger bird (hawk), fell onto the lap of a human. It is an incident in the myth related to life in the sea. Thus, the above said myths related with Prometheus and the sea can be pictured according to their similar relationships in Figure 2.

Figure 2. *Structure of the Myth - Prometheus*
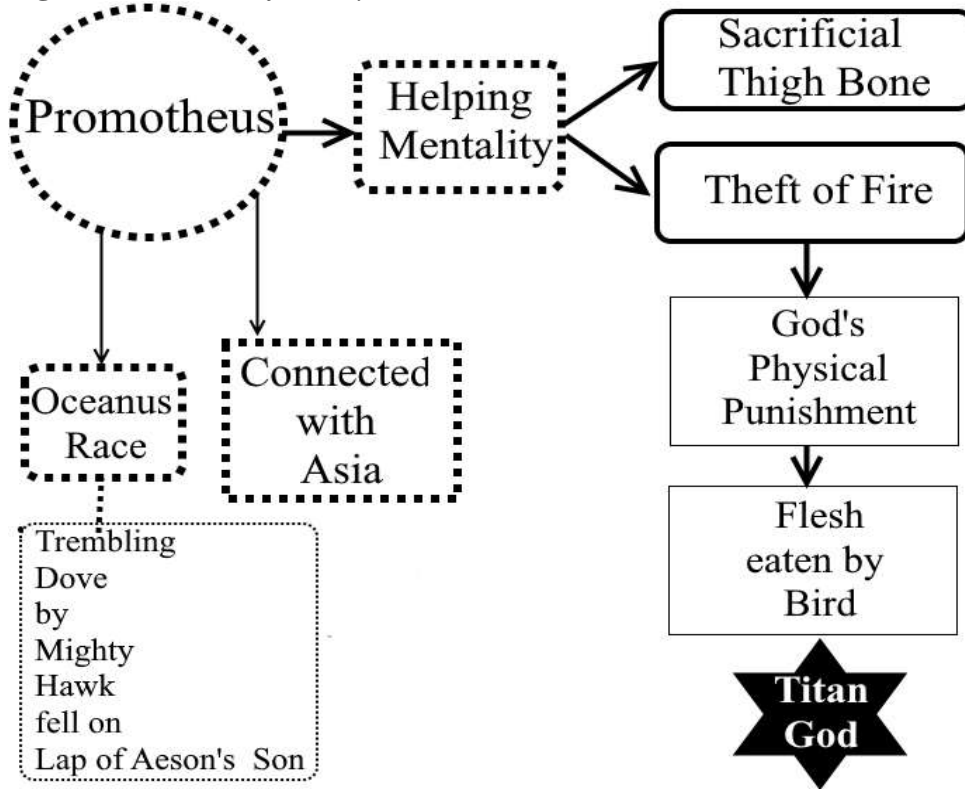
The Myth of Sembian-Sibi

Tamil is one of the ancient classical languages of the world, having ancient literatures like that of the Greek language. The oldest available literature in Tamil is called the Sangam literature. Many historical events and myths are found in this literature. One among them is the myth of Sembian - Sibi. Sembian belonged to the Chozha dynasty. The Chozha kings had contact with Greeks and Romans in the west (Schoff 1917)[1] and China in the east (Schoff 1917,[2] Warmington 1928).[3]

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[1]The Tamil poem Paddinappalai gives us a vivid description of a busy port of the Chola Kingdom, Kaviripaddinam, which was built on the northern bank of the Kaviri River, then a broad and deep stream into which heavily laden ships entered from the sea without slackening sail. At the beach were raised platforms and warehouses where cargoes were stored. 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. Here were quartered foreign traders from other lands beyond the seas, and precious cargoes of many kinds were brought from all direction.

[2]The author of the Periplus mentions the three kingdoms of southern India: Chera, with its port of Muziris, the Muchiri of the Tamil ports; Pandya, the capital of which, Madura, Pliny reports as Modiera; and the coast country, that is, Chola, with its capital called Argaru, that is Uragapura, Uraiyitr, the modern Trichinopoly on the Kaviri, while the port of Kaviripaddinacm he mentions as Camara, and says that there were in that port not only the large single-masted vessels peculiar to the Malabar coast, but others very much larger which made the voyage to Chryse and the Ganges. He mentions Chryse as an island opposite the Ganges and under the rising sun and tells us that beyond Chryse the sea comes to an end, and that to the north was a land called 'This' with an inland

In the poem number 37, Mārōkkathu Nappasalaiyār, Puranānūru, Sanga Ilakkiam (Tamil Virtual University 1995), Sembian is praised for his kindness shown towards a dove in safeguarding it from a hawk.

> "O heir of **Sembean** who removed the anguish of a
> dove and owned a rage-filled army with bright spears!
> You attacked like roaring thunder which entered with
> flashing fire that rose in the sky, into a cave with
> green vines, and chopped a five-headed poisonous
> snake with white fangs."
>
> 37, Mārōkkathu Nappasalaiyār,
> Puranānūru, Sanga Ilakkiam.

Here Sembian is also related with flashing fire. In Tamil, 'Si' and 'Sem' are interchangeable. For example, the word 'Sivappu' denotes red colour. When it denotes the red colour of the eye, it becomes 'Semkan'. In the same way, 'Sembian' becomes 'Sibi'. In Japanese language 'bi' becomes 'vi'. So 'Sibi' becomes 'Sivi' in Japanese. This myth is mentioned in the epic *Mahabharat* in the form of a story.

Mahabharat

This is one of the oldest epics in India written by Krishna-Dwaipayana Vyasa in Sanskrit. It includes many myths and events. One among them is the myth of Sembian-Sibi-Sivi (Ganguli 1896).

> "Markandeya said, 'One day it was resolved by the gods that they should descend on the earth and try the goodness and virtue of king Sivi the son of Usinara. And addressing each other well -Agni and Indra came to the earth. And Agni took the form of a pigeon flying away from Indra who pursued him in the form of a hawk, and that pigeon fell upon the lap of king Sivi who was seated on an excellent seat. And the priest thereupon addressing the king said, 'Afraid of the hawk and desirous of saving its life, this pigeon hath come to thee for safety. The learned have said that the falling of a pigeon upon one's body forebodeth a great danger. Let the king that understands omens give away wealth for saving himself from the danger indicated.' And the pigeon also addressed the king and said, 'Afraid of the hawk and desirous of saving my life I have come to thee for protection. I am a Muni. Having assumed the

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city called Thinae (China) from which silk was brought overland through Bactria to the Gulf of Cambay and by way of the Ganges to the ports of Damirica, that is, Tamil Land, the Tamilakam of their ports (Peripl. Mar. Erythr. 63, 64).

[3]Woven silk destined to be dyed for wear, and unwoven silk destined to be worked up in Egypt, Syria, and Galilee could be sent conveniently byway of the Persian Gulf or the Red Sea, and this cheaper route avoiding Parthia would be encouraged by the Romans….. silk sellers frequented Kaviripaddinam in the Chola Kingdom….. Rome, who encouraged such developments for the purpose of eliminating the Parthians and the expensive land-route, and we ultimately hear of Indian silks besides Chinese, Parthian, and Median robes. But the Indians became intermediaries in two ways-for though part of the silk sent by them to the Romans was diverted from the land-route for that purpose, part of it was the result of India's own trade in Chinese silk. A fort in Pakistan named Sembian - Sibi is a proof to the spread of his fame.

form of a pigeon, I come to thee as a seeker of thy protection. Indeed, I seek thee as my life…… I am not a pigeon. Oh, do not yield me up to the hawk….. And after the pigeon said so, the hawk addressed the king, and said, … It is not proper for thee, O king, to interfere with my food by protecting this pigeon …………... And at this appeal of the king, the hawk said, 'O king, if thou givest me as much flesh as would be equal to the weight of the pigeon, cutting it off thy right thigh; then can the pigeon be properly saved by thee; …But the pigeon still weighed heavier, and then the king himself ascended the scale!"

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The Mahabharata

In this myth a soft bird (pigeon), frightened by the strong bird (hawk), falls onto the lap of the human, Sibi. In this mythology the Agni denotes a fire God which comes in the form of a pigeon, and the God Indra is in the form of a hawk. It is mentioned here that the hawk which belong to the eagle's family hunts the pigeon which belong to dove's family. Indra is the King of all Gods and head of heaven like the God Zeus in the Greek myth. Sembian-Sivi hides or saves the fire (which is in the form of pigeon) from the King of all Gods (which is in the form of hawk). For that Sembian-Sivi gives his flesh from his thigh. The above thoughts are visualized in Figure 3.

Figure 3. *Myth of Sembian*
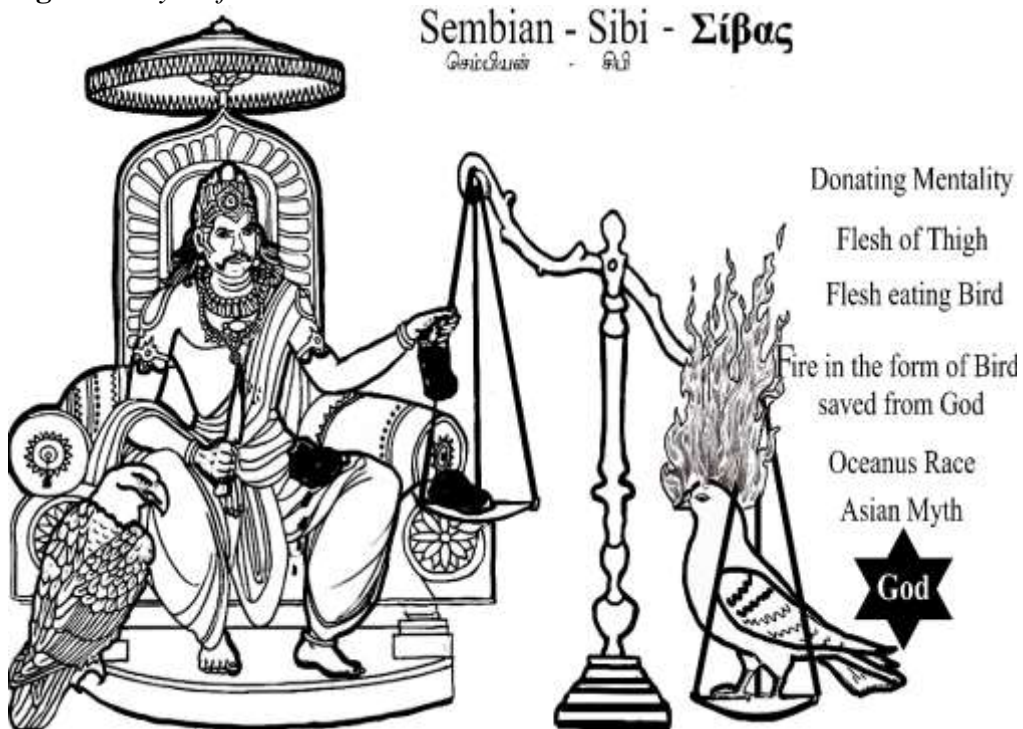
In view of this enormous sacrificial mind of Sembian for the sake of a bird, he is portrayed as a noble soul and is accorded a special place in the Hindu religious beliefs.

Buddhism

Buddhism (Beckwith 2015)[4] is the world's fourth-largest religion with over 520 million followers, about 7% of the global population are Buddhists. It originated in ancient India, sometime between the 6th and 4th centuries BCE, spreading in throughout most of Asia. Later, China and Japan followed Buddhism. Many Buddhist monks from China travelled to India and collected books and ideas that are related to Buddhism. The Buddhist monk and traveler Fa-Hien was among them.

The Journey of Fa-Hien to India

Between 399 and 414 CE, the Chinese Buddhist monk Fahien (Fa-Hsien, Fa Hien) undertook a trip to India via Central Asia. His mission was to collect books and teachings of Buddhism. After a long journey done mostly on foot and a stay of about 15 years, he returned to China to compile a book on his findings that he had gathered during his journey. We find that he was mentioned in the myth of Sembian or Sibi (Legge 1886).

> "In that country also Buddhism is flourishing. There is in it the place where Sakra, Ruler of Devas, in a former age, tried the Bodhisattva, by producing a hawk (in pursuit of a) dove, when (the Bodhisattva) cut off a piece of his own flesh, and (with it) ransomed the dove. After Buddha had attained to perfect wisdom, and in travelling about with his disciples (arrived at this spot), he informed them that this was the place where he ransomed the dove with a piece of his own flesh. In this way the people of the country became aware of the fact, and on the spot reared a tope, adorned with layers of gold and silver plates."

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Chapter IX - Soo-ho-to
The travels of FA-HIEN,
A.D. 399-414

</div>

These statements reflect a connection between the myths of Sembian-Sibi and Buddhism. It is to be noted that based on this myth many stone carvings were made in the ancient Buddhist temples called Borobudur.

Borobudur Buddhist Temples

Borobudur or Barabudur is a 9th century Mahayana Buddhist temple in Central Java, Indonesia. It is the world's largest Buddhist temple. The temple consists of nine stacked platforms, six square and three circular, topped by a central dome. It is decorated with 2,672 relief panels and 504 Buddha statues. The central dome is surrounded by 72 Buddha statues, each seated inside a perforated stupa (Raffles 1817). The location of the place and the stone carvings of Sembian-Sibi are visualized in Figures 4-5.

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[4]Greek Buddha

Figure 4. *Borobudur*
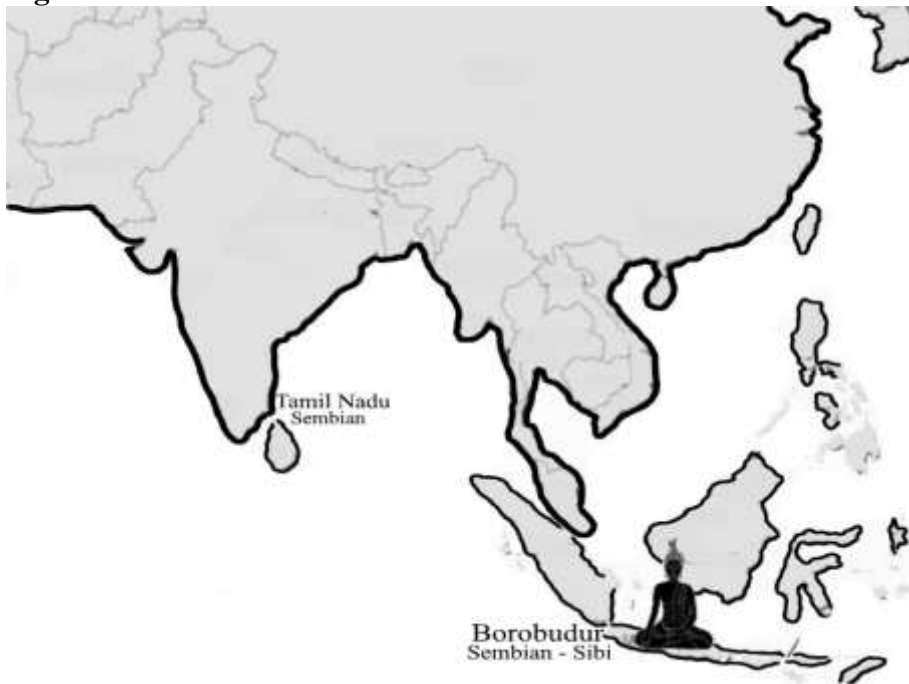
Figure 5. *Stone Carvings of Sembian*
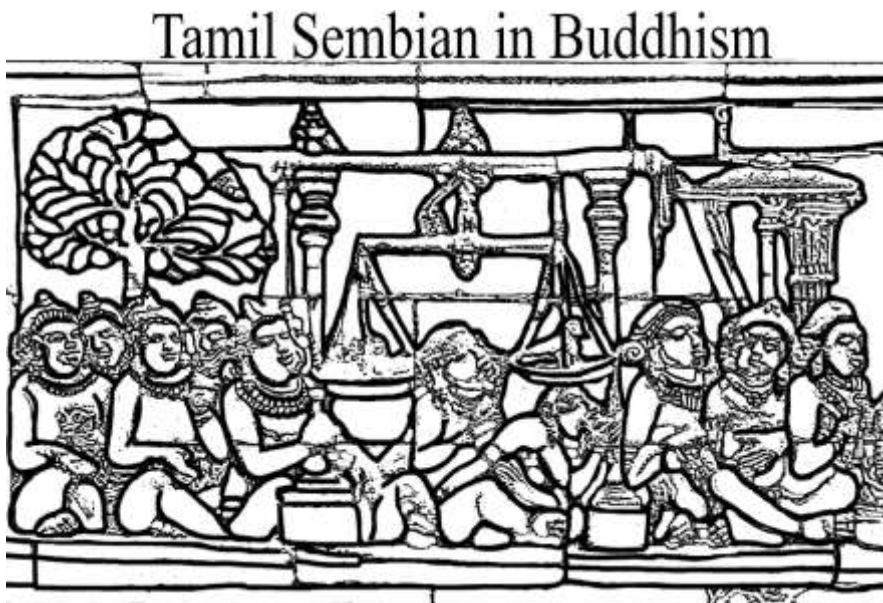
On the right side, one can see Buddha sitting with his followers. On the left side we see some people sitting with a balance (Raffles 1817). The next picture illustrates the scene very clearly— here, in one of the pans of the balance, a pigeon is placed. On the other pan a piece of flesh is taken from the thigh of the king is placed, this scene is visualized in Figure 6.

Figure 6. *Myth of Sembian*

In this picture, it can be seen that a man is cutting out a portion of the flesh of the king from his thigh. The pigeon is postured near the King. A person is seen holding a balance, pieces of flesh are seen to be placed on one of the pans of the balance. The myths of Sembian-Sibi are seen carved into the Buddhist temples. On the myth of Sembian-Sibi are found represented not only in the form of stone carvings, but also found to be represented in the form of paintings, which can be seen in the ancient Buddhist temples called Caves of the Thousand Buddhas.

Caves of Thousand Buddhas

The Mogao Caves, also known as the Thousand Buddha Grottoes or Caves of the Thousand Buddhas, form a system of 492 temples 25 km (16 mi) south-east of the center of Dunhuang, an oasis located at a religious and cultural crossroads on the Silk Road in Gansu province, China. The caves are also known as the Dunhuang Caves. The first caves were dug out in 366 CE as places of Buddhist meditation and worship. In these caves there are many paintings related with the Buddhas. Those of whom who followed the teachings of Buddhism found a place in the paintings. In this light Sembian-Sibi is a person with the great quality of nobleness and has also secured a place among the Thousand Buddhas. It is visualized in Figure 7.

Figure 7. *Cave Drawings - Sembian*

In this Buddhist temple many carvings and paintings were made. On the side of the big statue a painting related with Sembian-Sibi myths can be seen. The following Figure 8 shows it very clearly.

Figure 8. *Sembian*

Several paintings related with the myths were shown. In this Sembian-Sibi myth was highlighted here in Figure 9.

Figure 9. *Sembian*

Here the person is cutting the thigh part of the Sembian-Sibi. In the other caves there are also many paintings related with this myth. One among the caves is cave no. 254 (Abe 1989). The above thoughts are visualized in Figure 10.

Figure 10. *Sembian*
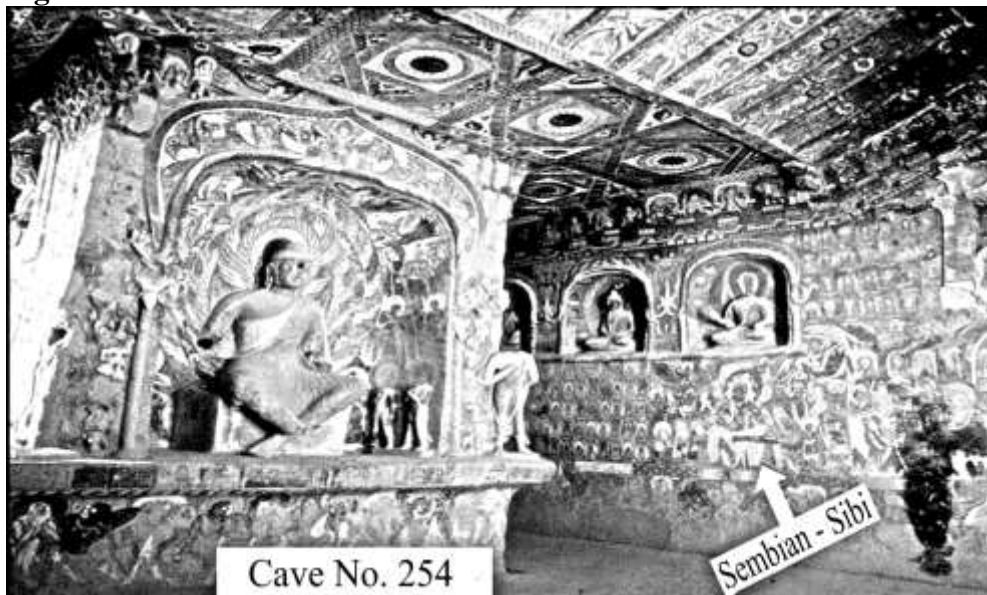
In this picture near the Buddhist statue many paintings are seen; one among them is related with the myth of Sembian-Sibi as visualized in Figure 11.

Figure 11. *Sembian with Black Complexion*[5]
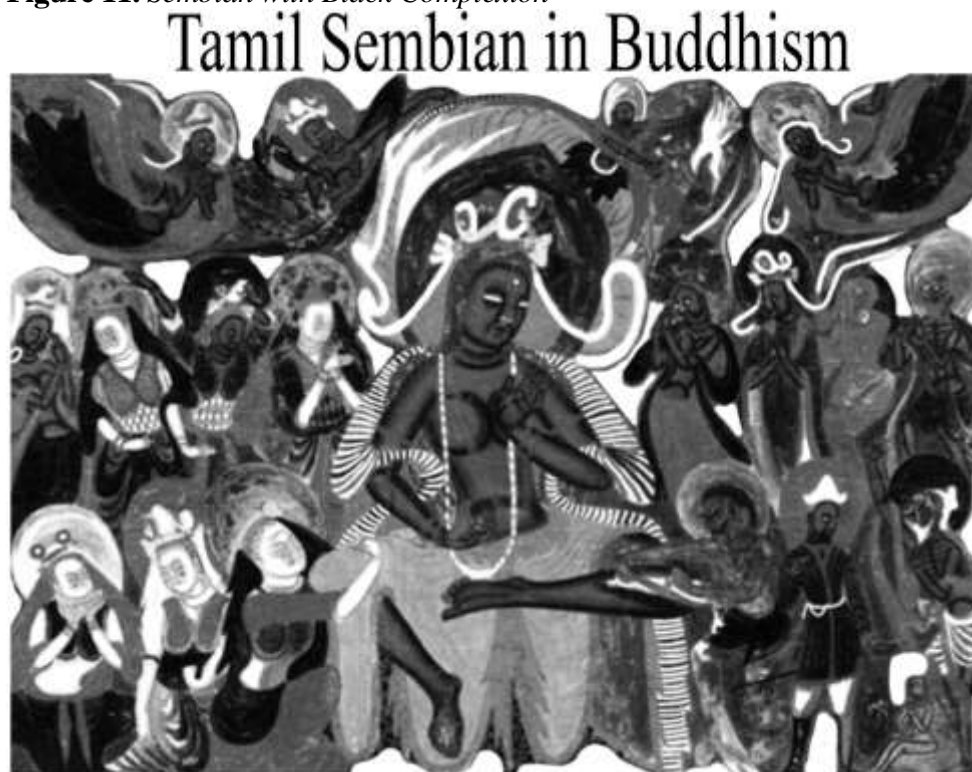
Here a man is seen cutting the thigh of the Sembian-Sibi to extract the flesh. These caves of the Thousand Buddhas are located along the Silk Road in Dunhuang,

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[5] Black is the complexion of the Tamilians.

China. The Silk Road was a network of trade routes which connected the East and West, and was central to the economic, cultural, political, and religious interactions between these regions from the 2nd century BCE. This silk route starts from Greece and ends in China (Hohensee 1989) as portrayed in Figure 12.

Figure 12. *Silk Route and Sea Route*

Thus the myth of Sembian-Sibi related with fire and flesh eating bird are seen in the literatures of Tamil and Sanskrit and has also found a way in the religious thoughts of these two religions. At the same time, this myth has many similarities with the myth of Prometheus.

Comparison

Readiness in Giving

Sembian-Sibi in Tamil literature is noted for his noble qualities. He has a readiness to give away everything and anything to persons who are in need. In the myth of Sembian-Sibi, the God himself wants to test Sibi's noble qualities and his readiness to give. We find a parallel of the same feature in the myth of Prometheus as well.

Sacrificial Thigh Bone

In the myth of Sembian-Sibi the thigh bone plays a very important role. Sibi cuts his thigh to extract flesh in order to save the pigeon. In the myth of Prometheus, he deceives God Zeus with a thigh bone for protecting mankind. The thigh bone in Prometheus is turned into the thigh-flesh in the Sibi myth.

Related with Fire

In the myth of Sembian-Sibi the god of fire called Agni takes the form of a pigeon and seeks refuge in the hands of the King Sibi and begs him to be saved from the pursuit of the wild hawk. Here Sembian saves the pigeon which is indeed the fire God. In the Prometheus myth Prometheus steals the fire. In this way fire is linked in both the myths.

God's Bodily Treatment

In the myth of Sembian-Sibi, Indra, the chief of the Devas asks for a portion of the flesh to be extracted from the thigh of King Sibi as a ransom for the life of the pigeon. It is mentioned as a means to test the nobleness of the king Sibi by Indra. In the myth of Prometheus, the chief of the Gods, Zeus, ties the body of Prometheus and gives bodily punishments. In both the myths the king of the Gods tests them in the same manner that is through physical punishments.

Body Flesh Eaten by Eagle

In the myth of Sembian-Sibi, the eagle which is actually Indra, the king of the Gods, demands the thigh flesh of Sibi. Here, the eagle represents the king of Gods. In the myth of Prometheus, the flesh of Prometheus is eaten by the eagle which is the symbolic bird to represent the king of the Gods, Zeus. Both the myths have the presence of the king of Gods—their representative bird (the eagle), and the incident of eagle eating the human body flesh. The variation is in the myth of Prometheus the liver was eaten by the bird, whereas in the Sembian myth thigh flesh was demanded by the bird. In both the myths the bird demands flesh of the human body for the fire. Thus, both the myths have resemblance.

Oceanus Race

In Sanskrit Rig Veda (Griffith 1896) and Mahabharata epic, Sembian-Sibi is represented as belonging to Nara race. Their family members are called by names, Usi Nara and Sibi Nara.

> Drive forward thou the wagon-ox, O Indra, which brought Usinarani's wagon hither.
> May Heaven and Earth uproot and sweep iniquity and shame away: nor sin nor sorrow trouble thee.
>
> Rig 10.59.10

The Mahabharata epic explains the meaning of Nara (Ganguli 1896).

"In ancient times I called the waters by the name of Nara; and because the waters have ever been my ayana or home, therefore have I been called Narayana (the water-homed)."

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3 & 4, Chapter 187, Book 3,
The Mahabharata

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In Tamil literature Sembian is related with Neer, that means any water body or sea. This 'Nara, Neer were also related with sea in Greek myths (Mooney 1912).

"But to them appeared Glaucus from the depths of the sea, the wise interpreter of divine Nereus [Νηρῆος],"

<div align="right">

Line. 1311. Book 1,
Argonautica

</div>

Thus the race Nara is related with sea and the Greek Prometheus is also related with sea. In this way, both the myths are related with sea. The base of the Sembian myth is to safe guard a soft bird (pigeon or dove) frightened by the strong bird (hawk) which fell on the lap of the King Sibi. Even though it is not present in the Prometheus myth, but in the sea myth of the Greeks. In Greek it is related with the augury of the bird. The bird related with augury is called as 'ὄρνις' in Greek. In Tamil the augury of the bird itself is called 'Orthal' which is the same as in the Greek language (Pugazhendhi 2018).

aNagkuTai mun'n'Ir paran'ta ceRuvin uNagku tiRam peyarn'ta veN kal amiztam kuTa pula marugkin uymmAr, puL ***Orttup*** paTai amaittu ezun'ta peruj cey ATavar	Men of great action listen to ***bird omens***, and go with protective groups, …..
	Akanānūru 207, Mathurai Eluthālan Chēnthampoothanār, Sanga Ilakkiam (Tamil Virtual University 1995)

It ensures the transfer of this myth between Greek and Tamil. Thus the Greek myth of Prometheus and the Tamil myth of Sembian are very closely related. All the above said aspects are compared in Table 1.

Table 1. *Comparison of Myths*

S/No	Myths	Prometheus	Sembean or Sibi or Sivi or Sibae
1.	Donating mentality	Punished by God	Tested by God
2.	Fire	Steal the Fire	Hide the Fire God as in the form of pigeon
3.	Flesh eating bird	Eagle eat the liver for the theft of fire	Hawk demanded the flesh for the fire God
4.	Thigh	Cheating thigh-bones for the part of Zeus	Thigh flesh was demanded
5.	Race	Belongs to the oceanus race	Belongs to the oceanus race In some myth he belongs to nara (Sibinara, Usinara) family. Nara means water or sea as in Nereus in Greek.
6.	God	Titan God	God Buddha

Difference

In the Greek myth, Prometheus steals the fire from Zeus; in the Indian myth, the fire God Agni is saved by Sembian from the eagle. This is the main difference between these two myths. Hence, there is a need to find the uniqueness in this difference.

Uniqueness in the Difference

In the ***Greek myth***, Zeus God is related with eagle.
So the sentence ….
1. Prometheus stole the fire from the ***Zeus God*** = Prometheus stole the fire from the ***eagle God***.
2. Prometheus ***stole*** the fire from the eagle God = Prometheus ***taken*** the fire from the eagle God.
3. Finally it means **Prometheus taken the fire from the eagle God.**
In the ***Indian myth*** Sembian saved the pigeon from the hawk (eagle family) means …
1. Sembian save the pigeon from the ***eagle*** = Sembian save the pigeon from the ***eagle God***. [Since the God is only in the form of eagle] [And the same God is also the king of Gods, like Zeus]
2. Sembian saves the ***pigeon*** from the eagle God = Sembian save the ***fire God*** [Because the fire god is only in the form of pigeon in Indian myth.] from the eagle God.
3. Sembian ***save*** the fire from the eagle God = Sembian ***take*** the fire from the eagle God.
3. Finally it means ***Sembian take the fire from the eagle God.***

In this way, the Greek Prometheus stole the fire from the Zeus God, and in the Tamil myth, Sembian saved the pigeon from the eagle are both one and the same.

Here it is required to finalize whether the similarities seen between these two myths are occasionally parallels or influenced by one another.

Influence between Tamil and Greek Myths

Greeks and Tamilians had trade relations from the pre-historic era (Pugazhendhi 2020). Owing to these trade relations, some myths were transformed within these societies (Pugazhendhi 2021). So the similarities seen between Sembian and Prometheus are not only occasionally parallels, but might be influenced by one another. In Greek Sembian-Sibi-Sivi is mentioned as Sibae. The Greek Geographer, Strabo, gives his views saying that some ancient people who lived during 1 BCE were related to both Greek Prometheus and Tamil Sibae (Jones 1924).

Ἄορνον δέ τινα πέτραν, ἧς τὰϛρίζας ὁ Ἰνδὸς ὑπορρεῖ πλησίον τῶν πηγῶν, Ἀλεξάνδρου κατὰ μίαν προσβολὴν ἑλόντος, σεμνύνοντες ἔφασαν τὸν Ἡρακλέα τρὶς μὲν προσβαλεῖν τῇ πέτρᾳ ταύτῃ τρὶς δ᾽ἀποκρουσθῆναι. τῶν δὲ κοινωνησάντων αὐτῷ τῆς στρατείας ἀπογόνους εἶναι τοὺς **Σίβας**, σύμβολα τοῦ γένους σώζοντας τό τε δορὰς ἀμπέχεσθαι, καθάπερ τὸν Ἡρακλέα, καὶ τὸϛκυταληφορεῖν καὶ ἐπικεκαῦσθαι βουσὶ καὶ ἡμιόνοις ϛόπαλον. βεβαιοῦνται δὲ τὸν μῦθοντοῦτον καὶ ἐκ τῶν περὶ τὸν Καύκασον καὶ τὸν Προμηθέα:	When Alexander, at one assault, took Aornus, a rock at the foot of which, near its sources, the Indus River flows, his exalters said that Heracles thrice attacked this rock and thrice was repulsed; and that the **Sibae** were descendants of those who shared with Heracles in the expedition, and that they retained badges of their descent, in that they wore skins like Heracles, carried clubs, and branded their cattle and mules with the mark of a club. And they further confirm this myth by the stories of the Caucasus and Prometheus, 15.8, Greek Geography, Strabo , 1 B.C.

This reference related with the three characters such as the Heracles, Prometheus and Sibae lived in India. It is mentioned that the Sibae embraced the costume of the Heracles. The connection between Prometheus and Sibae is not mentioned in this Greek reference. The Tamil myth highlights the link between Prometheus and Sibae and relates with fire and a flesh-eating bird. The myth related with the terrifying pigeon by the hawk which fell upon the lap of king Sembian has a main place in this myth which is not directly related with the myth of Prometheus, but is present in the sea related myth. Thus the myth related with Sembian seems to be a trans-placement myth of Prometheus as in Figure 13 and Figure 14 and are formed as Sembian myths as in Figure 15.

Figure 13. *Trans Placement of Prometheus Myths*
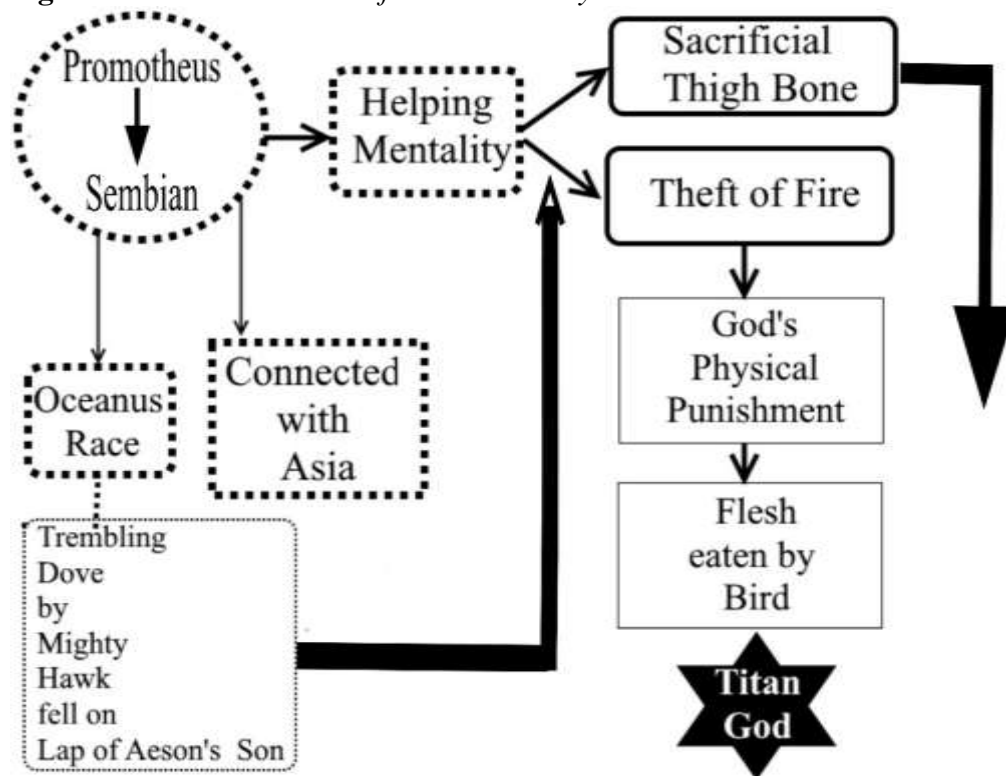
Figure 14. *Promotheus Myth to Sembian Myth*
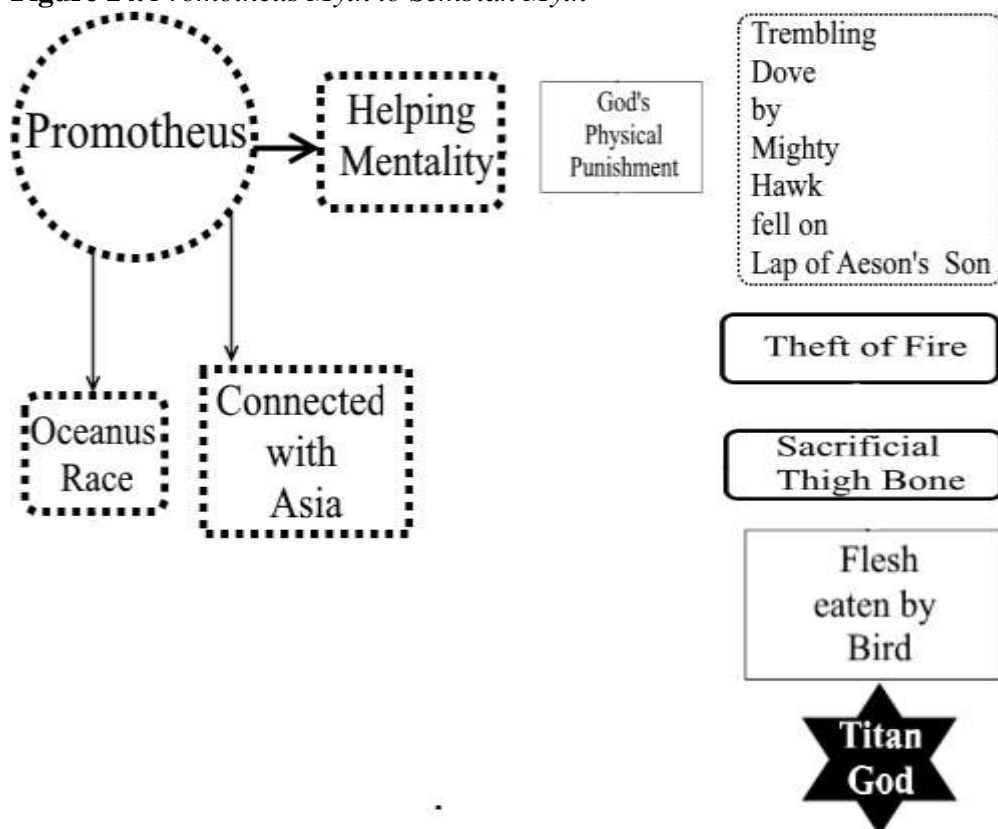
Figure 15. *Structure of Sembian Myth Related with Promotheus Myth*
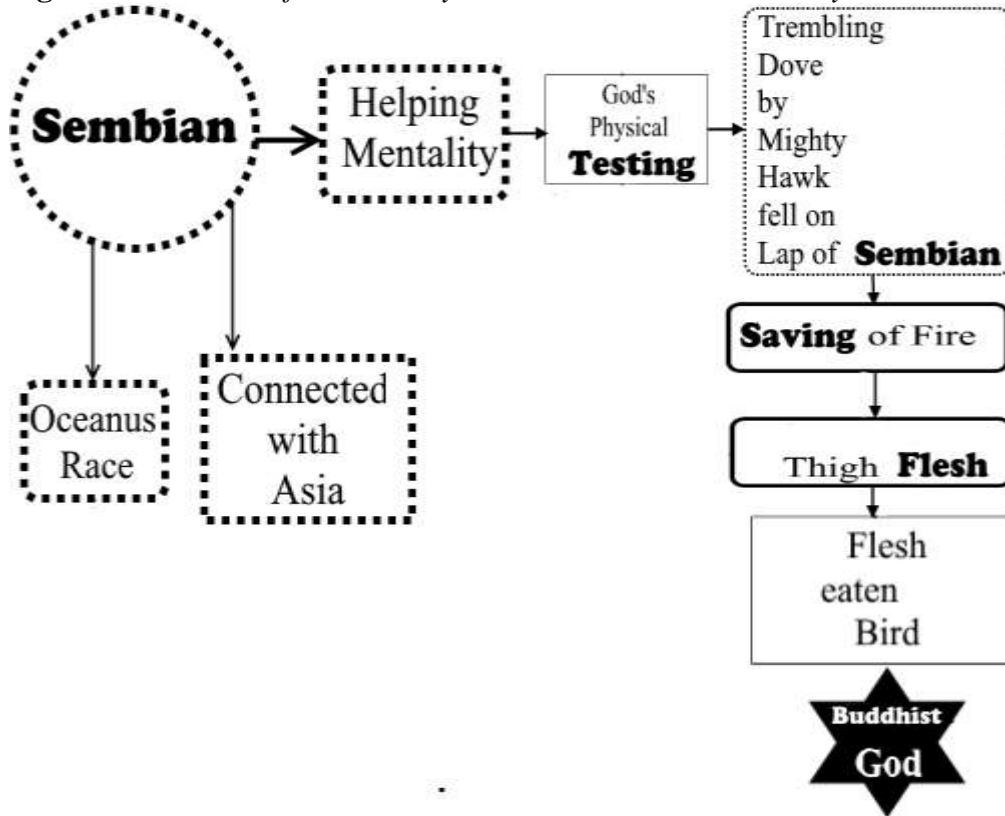
Conclusion

According to the mythological theory, the resemblance of myths seen in two different societies can be looked upon as parallels and influences. The resemblance is owed to the contact of these societies which had influence on one another. There are some resemblances seen between the myths of Promotheus and Sembian-Sibi. Among these resemblances are some seen to have direct relation with them, while others are related through the sea myths which are common to both. In Greek, Promotheus claims to belong to the oceanic race. In Sanskrit Sembian-Sibi-Sivi is mentioned as belonging to 'nara' tradition meaning water. In Tamil, Sembia-Sibi is a historical king belonging to Chozha or Chola dynasty. This dynasty had sea trade contact with Greeks and Romans in the west, China in the east and Ganges in the north of India from the pre-historic era. Some paintings in China clearly depict the black complexion of Sembian-Sibi which is the skin tone of the Chozha or Chola kings of Tamil Nadu. The sea trade among these countries transforms these myths amidst the Greek land, Tamil Nadu and China more than it could have been through land trade route called the Silk Road. So the resemblances seen between these two myths are not only parallels, but are influences.

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Compositional and Verbal Aspect in Greek: The Aorist Imperfect Distinction and the Article-Aspect Interplay

By Desislava Dimitrova[*] & Krasimir Kabakčiev[±]

According to an aspectological model proposed by Kabakčiev in 1984, later developed and sophisticated, languages differ according to whether they mark aspect (perfectivity and imperfectivity) on verbs, as in the Slavic languages – among others, or through nouns/NPs featuring (non-)boundedness which is transferred onto verbs, as in the Germanic languages – among others. In this model of compositional aspect (CA), Bulgarian is a borderline case with a perfective-imperfective and an aorist-imperfect distinction and a definite article only (no indefinite), and the model is used to analyze Greek, a language exhibiting identical features. NP referents play a major role for the compositional explication of aspect. The study finds that Greek is of the same borderline/hybrid type of language as Bulgarian, featuring verbal aspect (VA) predominantly, but also peripherally CA. The aorist/imperfect distinction exists both in Greek and Bulgarian to offset the structural impact of the definite article. Analyzed are some conditions for the explication of CA in Greek and they are found similar to those in Bulgarian. However, there are specificites and differences between the two languages that must be further studied and identified.

Keywords: *verbal aspect, compositional aspect, definite article, article-aspect interplay, aorist-imperfect contrast*

General Theoretical Background - An Overview of Compositional Aspect

This study takes as an approach to the language data that it aims to analyze, mainly from Modern Greek, the theory of CA, as represented in certain publications – some recent (Bulatović 2013, 2019, 2020, Kabakčiev 2019), others long-established (Vendler 1957, Verkuyl 1972, 1993, Kabakčiev 1984, 2000). CA has been known in linguistics as a fundamental and supposedly universal phenomenon for half a century since Verkuyl (1972), but in spite of its widely recognized significance it has also generated serious theoretical controversies (Kabakčiev 2019). Among the goals of this paper is the description of certain features of Greek related to the interdependence between the definite article and aspect in general, on the one hand, and the aspecto-temporal aorist-imperfect distinction, on the other, the interdependence proposed a long time ago for Bulgarian but generally ignored in the literature. Initially pursuing the article-imperfect interdependence, we came upon features of Greek related either to the

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explication of Vendlerian situational values or to their forcing from other aspectual values, which additionally engaged our attention. Concealed in the aorist-imperfect distinction in Greek, we found the interesting and systematic phenomenon of aspect coercion – outlined in the paper and considered as subject to further research.

In an intricate model of aspect, launched 37 years ago and later developed (Kabakčiev 1984, 2000), the major function across languages of grammatical aspect, including the aorist-imperfect distinction, is the quantification in temporal terms of participants in situations.[1] Kabakčiev's idea of an all-embracing article-aspect interplay is primarily based on Verkuyl's (1972) model of CA, and Verkuyl's model was inspired by Vendler's classification of situations: types of occurrences whose effectuation is made possible by verbs and accompanying elements such as objects and adverbials. The difference between Vendler's (1957) model and Verkuyl's is that while Vendler's is restricted to what separate verbs and verbs with their accompanying elements (objects, adverbials) can do for explicating aspect, in Verkuyl's (1972) the phenomenon of CA is entirely, with no exception at all, grounded in the whole sentence.

Kabakčiev's version of the CA theory that we will employ is based on Verkuyl's (1972) model but departs in some key respects from Verkuyl's (1993) later atemporal version and encompasses four major theses: (i) the temporality of situation participants (Kabakčiev 2000; 2019, pp. 207 –210);[2] (ii) the mechanism of mapping temporal values in the sentence from nominal referents onto the verb referent – as is generally the case in the Germanic languages, and vice versa, from the verb referent onto the nominal referents – as in the Slavic languages (Kabakčiev 2000, pp. 123 –151); (iii) the recognition of two different types of aspect structurally and in cross-language terms (but not semantically) – compositional and verbal. CA is typical of the Germanic languages and located in the sentence; VA is found in the verb and typical of the Slavic languages (Kabakčiev 2019, pp. 212 –214).[3] But VA is also represented in English, by the progressive (discussed below). VA is either a "ready lexical item", perfective or imperfective, as in Greek and the Slavic languages, or is syntactically realized with the relevant value, as in the English progressive and the aorist/imperfect as in Greek or Bulgarian; (iv) the article (definite and indefinite) in the present model and within the perfective Verkuylian schema (Verkuyl 1972, 1993) is a covert marker of boundedness – on those nominal components that are situation participants, while the zero article is a marker of non-boundedness. The article (*a/the*) is a quantifier in Verkuyl's (1972, 1993) CA model, whether the definite one is used with singular or plural nouns. The zero article, regardless of whether it is with count or mass nouns, is treated as

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[1]Participants in situations, also called verb arguments (Verkuyl 1972, 1993), was introduced as a term in Kabakčiev (1984: 670), for being better suited to aspectological research (Kabakčiev 2019, p. 201). Not every NP in a simple sentence is a situation participant/verb argument.
[2]Verkuyl's (1993) aspectual model is atemporal in that it ascribes temporality to referents of verbs only, not to noun/NP referents.
[3]The crucial difference between VA-CA is in the effectuation of perfectivity. Languages that prototypically feature VA (Slavic, Greek) have perfective verbs as lexical entries. Languages that prototypically feature CA (Germanic, Romance, Finnish) lack perfective verbs and depend on CA for the effectuation of perfectivity.

an entity de-quantifying the relevant NP.[4] In Kabakčiev's model, the article is likewise treated as a quantifier and the zero article as an entity de-quantifying the NP, but with the difference that the article is also understood as a covert marker of temporal boundedness of NP referents, and the zero article as a marker of temporal non-boundedness of NP referents (Kabakčiev 1984, 2000, 2019).

Compositional Explication of Aspect and the Progressive as an Instantiation of VA

The compositional explication of perfectivity in English (and other languages) – in both Verkuyl's and Kabakčiev's models, takes place at the level of the sentence, through Verkuyl's perfective schema, as in (1a) below. The subject and the object are quantified by an article (definite or indefinite) and their referents are bounded.[5] In Kabakčiev's (1984; 2000) model they constitute temporally bounded entities, not atemporal as in Verkuyl (1993); the lexical nature of the verb (telic) in (1a) allows the explication of perfectivity. Conversely, imperfectivity in (1b) is not explicated compositionally but is directly expressed by the progressive – an instantiation not of CA but of VA:[6]

(1)   a. The boy threw a stone
        b. The boy was throwing a stone – when I saw him from the fast moving train

A major tenet in Verkuyl's (1993) aspectual model is that perfectivity is realized in sentences such as (1a) because there is no leak in any aspect-related component: no leak in the verb and in the NPs that are situation participants. A leak can be represented by a non-quantified NP (2a, c) or by a verb with an atelic lexical meaning disallowing perfectivity, (2b). Sentences (2a, b, c) vs (1a) demonstrate how Verkuylian leaks trigger imperfectivity:[7]

(2)   a. The boy threw stones$_{LEAK}$

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[4]"Zero article" is standardly taken to mean that the relevant NP contains no other quantifier. In English many nominal modifiers are quantifiers (*some*, *any*, *all*, *many*, *my*, *this/these*), markers of what Verkuyl (1972) calls specified quantity. However, the only marker of non-specified quantity and hence non-boundedness is the zero article. An NP with an article is, hence, quantified and its referent bounded; a bare NP is de-quantified and its referent non-bounded. But (non-)boundedness depends on other factors too.

[5]An NP referent can be bounded without a superficial marker: *John* and *he* are bounded with a covert article; *John* means "*the* person named John", *he* means "*the* person referred to as 'he'".

[6]Grammatical imperfectivity, again verbal (not compositional), is also systematically present in English, realized by the progressive and by the *would*+inf and *used to*+inf constructions – which should be called imperfectivity markers (in its habituality variant), not "habituality markers" as is done in English grammars. The presence of verbal imperfectivity in English does not make it a VA language – because English does not feature perfective verbs, in contrast to the Slavic languages, Greek, Old English, etc.

[7]The leaks are called Verkuylian in honor of their finder (Kabakčiev 2019, p. 204).

b. The boy carried$_{LEAK}$ a stone

c. Boys$_{LEAK}$ threw a stone, playing with it around the garden

Sentences such as (1a) demonstrate Verkuyl's (1993, pp. 328 –349) perfective schema, (2a, b, c) – the imperfective one. In the latter, at least one leak is obligatorily present.[8]

Given that sentences such as (1a) are perfective – not always but as a default (Kabakčiev 2019, pp. 205 –207), sentences such as (1b), imperfectivized by the progressive, contain such situation participants that could not in any way be temporally bounded as in (1a), despite the subject and the object still being accompanied by an article. The elimination of the temporal boundedness of subject- and object-NP referents in sentences like (1b) and in similar ones containing progressives is effectuated through the mapping mechanism, as part of the model in which CA is "an all-pervading and perpetual process of mapping temporal features between elements of the sentence, especially between referents of verbs and of nominals that are participants in situations" (Kabakčiev 2019, p. 212). This generalization corresponds to data from languages that are well-studied – Germanic and Slavic,[9] and has stood the test of time.

Also non-bounded temporally are subject and object referents in sentences such as (2a, c) because of the de-quantification of subject or object, triggering a leak. Important questions arise here. If the object in sentences such as (2a) is non-quantified, hence non-bounded – spatially as in Verkuyl's model or temporally as in Kabakčiev's, must the referent of the subject, remaining quantified by an article, be treated as bounded? Analogously, in sentences such as (2c), where the subject is non-quantified, hence non-bounded, must the referent of the object, remaining quantified by an article, be treated as bounded – or as non-bounded? Verkuyl does not propose answers to such questions. His concern is the aspectual interpretation a sentence receives because of the presence/absence of a leak. Kabakčiev's (2000, 2019) position is different because of his temporal model, in which all situation participants are temporal entities. When a non-quantified subject makes a perfective sentence imperfective, as in (1a)>(2c), the referent of the object also undergoes a change, becoming temporally non-bounded, despite remaining superficially quantified. Analogously, when a non-quantified object makes a perfective sentence imperfective, (1a)>(2a), the referent of the subject becomes temporally non-bounded, despite remaining superficially quantified (Kabakčiev 2019).[10]

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[8]The perfective schema also demonstrates Verkuyl's (1993, pp. 5 –32) so-called plus-principle. All sentence components must have plus-values (quantified situation-participant NPs, telic verbs).

[9]Finnish, a language structurally completely different from most European languages, entirely falls within the described paradigm, belonging to CA languages, with "nominal aspect" (Kabakčiev 2019, p. 218). Finnish features no VA and no articles but its markers of boundedness are also located on nouns. The encoding of boundedness is executed by the nominative/accusative case. While non-boundedness in languages like English is encoded using the zero article, in Finnish and similar languages this job is done by the partitive case.

[10]This solution is impossible to achieve in a model with atemporal situation participants. Cf. Krifka's (1992, p. 44) observation that there may be a correspondence between a book and its reading to the end, but there is no correspondence between parts of the person reading and the

An Overview and Critique of the Literature on Greek Aspect vs Germanic/ Slavic Aspect

Greek and Bulgarian belong to different groups (Hellenic and Slavic) of the Indo-European ancestry. But, located in the Balkansprachbund, they share many common features: phonological, lexical, grammatical, etc., due to the centuries of physical proximity of the two nations and the unavoidable mutual influence. Unfortunately, although considerable research has been done on the Balkansprachbund and on Greek and Bulgarian separately, many of their characteristics remain understudied. VA, the aorist-imperfect distinction and the definite article are among them, in the sense that these features are, of course, well-known but their interdependence remains unconfirmed. With this study we aim to correct the deficiency.[11] We did our best to check the literature on Greek aspect – mainly in English, and we found the following.

Greek has VA just like the Slavic languages, and Slavic aspectology has a huge tradition but publications on Greek aspect in Slavicist terms are rare (Tarpomanova 2013, Marku 2019, Dimitrova 2019a, 2019b, 2019c); some offer mixed approaches, Germanic-Slavic (Bielecki and Trąba 2018, Trąba 2019). Most publications do not take a clear stand on whether Greek, being unquestionably a VA language, should be analyzed through a VA approach (Slavic-like) or this could be done successfully in CA terms too. Also, unfortunately, despite the widely acknowledged thesis that CA is not VP-based but sentence-based (Verkuyl 1972, 1993, Dowty 1979, p. 64, Kabakčiev 2000, Bulatović 2019, 2020), the idea that CA lies within the VP continues, surprisingly, to hold sway in many studies. Common assertions are that aspect represents "conceptual properties of situation types denoted by whole VPs" (Horrocks and Stavrou 2007, p. 637) and that it is expressed "by the predicate" (Andreou and Tsimpli 2017, p. 307). Extreme views are even upheld: "-*ed* designates perfectivity" (Dosi 2017, p. 215) – which means that English CA is not even VP-based but verb-based. Dosi et al. (2017, p. 77) argue that sentences with non-quantified objects such as *Mary ate apples* denote perfectivity. This is in contradiction to Vendler's aspect – which the authors call lexical (Dosi et al. 2017, p. 79). Vendler's model rests on the idea that *eat an apple/the apple* are perfective phrases, and *ate apples* an imperfective one. How *ate apples* can be perfective and why Vendler's aspect is called lexical remains unclear.[12] Some authors blend VA and CA into one: "aspectual composition occurs when grammatical aspect […] and eventuality types […] carried by the

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reading event. In a temporal model with situation participants as temporal entities (Kabakčiev 2019, pp. 214-215) such a problem simply does not exist.

[11]The problem of the historical development of the definite article in Bulgarian and Greek will not be handled here because of the insufficiency of research and historical evidence. For example, the emergence of the Bulgarian article is hypothesized to have taken place somewhere between the 10th and the 17th century.

[12]Vendler's aspect could be called lexical when separate verbs are discussed: *arrive* (an accomplishment), *hate* (a state). When differences between *eat an apple* (accomplishment) and *eat apples* (state/activity) are at issue, for Vendler's aspect to be called lexical is tantamount to claiming that what changes the accomplishment *ate an apple* into a state/activity in *ate apples* is the lexical meaning of *apples*.

verb along with its arguments combine" (Flouraki 2006).[13] Georgakopoulos et al. (2019) rightly assume that Greek is a VA language while English and German are not, yet the latter are capable of explicating perfectivity – but no explanation is offered on how this is achieved. Sioupi (2005) claims a Germanic-Slavic approach to Greek aspect, naming Russian as a point of contrast. But no Slavic analysis is undertaken, not a single Slavic example is given. The approach is, therefore, purely Germanic, not a problem in itself. But, unfortunately, the sentence-level nature of CA is bypassed.

As for the view that the English preterit is perfective (Dosi 2017), considered obsolete today, it can, indeed, still be found – in isolated papers and in English grammars. The reason is that English grammars have been lagging behind modern aspectological research for decades. Bulatović (2020) has just poured some harsh yet fully justified criticism on almost all English grammars for their total failure to describe the article-aspect interplay and CA in general. English grammars have, indeed, been changing lately, but very slowly. A decade or two ago some grammarians started to admit that perfectivity is found systematically in English (Huddleston and Pullum 2002, pp. 118–125; Declerck et al. 2006, pp. 28–34). Others included Vendler's classes in their descriptions (Downing and Locke 2006) or mentioned in passing the existence of perfectivity (Fenn 2010, pp. 279–280).[14] But the necessary radical restructuring of the aspecto-temporal sphere in English grammars is obviously a long way ahead.

We feel confident to make the generalization that publications on Greek claiming to use CA as an analytical tool systematically sidestep the role played by all referents of situation-participant NPs in a sentence. A certain exception is Trąba (2019, p. 42), who mentions the contribution of subject NPs for aspectual composition but restricts himself to "quantitative properties", bypassing the issue of how exactly arguments explicate aspect. Another publication discussing the impact of both subject and object in aspectual construal is Tsimpli and Papadopoulou (2006, p. 1596) – but it, too, does not explain how their features interact to produce an aspectual value. Kaltsa (2012, p. xiv) declares aspect to be sentence-based, but the contribution of subject NPs to aspect is ignored in this dissertation – aiming to describe Greek VA through a mixed approach, verbal-compositional. In our view, endeavors blending VA and CA are doomed to fail when no principled distinction is made between these two types of aspect.[15]

This overview of research on Greek aspect shows that its general line is incompatible with our approach, mainly because: (i) VA and CA are two distinct phenomena – structurally and in cross-language terms; (ii) CA is a sentence-level phenomenon, with no exception at all; (iii) situation participants are temporal entities playing a crucial role in CA.

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[13]Although CA and VA are mirror images of each other (Kabakčiev 2000, pp. 158–161), structurally they are different phenomena that must be kept apart for a true understanding of the universal nature of aspect (Kabakčiev 2019, pp. 212–214).

[14]According to three reviews (Bulatović 2018, 2020, Dimitrova 2019d), the only English grammar providing an exhaustive description of CA is Kabakčiev (2017).

[15]Blending VA and CA is a mistake made by Borer (2005) and Borik (2006), see Kabakčiev (2019, pp. 212–214).

CA, Biaspectuality and Disambiguation: Initially on Bulgarian Data

Biaspectuality is a well-known Slavic phenomenon, also present in Greek. It amounts to a verb lexically encoding neither perfectivity, nor imperfectivity but realized as perfective or imperfective. The standard explanation is that aspect is "realized in context" but it is a vacuous one. If something in a context changes the aspectual interpretation of a verb, that something must be identifiable. We find it appropriate to start with sentences manifesting a similar Bulgarian phenomenon, verbs used with the opposite aspectual meaning:

(3)   a. Shte piya$_{IMPFV}$ edno kafe i shte trygna$_{PFV}$
        'I will drink a coffee and leave'
        b. Kak se pribira Ivan vkashti piyan? – Padne$_{PFV}$, stane$_{PFV}$
        'How does Ivan go home drunk?' 'Falls, rises'

The first verb in (3a) is imperfective and this ought to be an instance of VA. But it is not, as the verb is used with a perfective meaning. The object-NP *edno kafe* 'a coffee' is quantified/bounded, the covert subject *I* is also bounded, the verb *piya* 'drink' is telic, and the two NP-referents map their boundedness simultaneously onto the verb referent, despite the verb's imperfectivity. Therefore, on the one hand, this is a case of CA effectuation, within Verkuyl's perfective schema, but, on the other, it could also be interpreted as aspect coercion (see below). In (3b), conversely, *padne* 'falls' and *stane* 'rises' are perfective verbs but they signal imperfectivity.[16] Greek will also be shown below to manifest this phenomenon of coercing (imposing/forcing) different or opposite aspectual/ situational values onto verbs.

How Bulgarian biaspectuality is disambiguated in CA terms was revealed in Kabakčiev (1984). Compare the perfective (4a) and the imperfective (4b, c, d), these sentences demonstrating an interplay between biaspectuality and the article (Kabakčiev 1984, p. 649):

(4)   a. Mehanitsite remontiraha$_{BIASPAOR/IMP}$ kolata
        'The mechanics repaired the car'
        b. Mehanitsite remontiraha$_{BIASPAOR/IMP}$ koli$_{LEAK}$
        'The mechanics repaired cars'
        c. Mehanitsi$_{LEAK}$ remontiraha$_{BIASPAOR/IMP}$ kolata
        'Mechanics repaired the car'
        d. Mehanitsi$_{LEAK}$ remontiraha$_{BIASPAOR/IMP}$ koli$_{LEAK}$
        'Mechanics repaired cars'

Sentence (4a) is perfective – as a default, like its English equivalent. The definite article in the two NPs triggers temporal boundedness, transferred from both onto the verb. This is possible because the verb is ambivalent between perfectivity-imperfectivity, being simultaneously biaspectual and unmarked for

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[16]The reasons are not discussed, for lack of space.

aorist/imperfect. In a non-default reading (4a) could explicate imperfectivity in some contexts (*Mehanitsite remontiraha kolata, sobstvenikat speshe* 'The mechanics were repairing the car, the owner was sleeping'). Also, sentence (4c) appears imperfective in CA terms with the de-quantified subject but in real-world terms it is ambiguous between perfectivity/imperfectivity – and can be perfective if by *mehanitsi* 'mechanics' "some mechanics" is meant, as in English. The ambiguity of (4c), i.e., the breaking of CA rules, is due to the "knowledge of the world" factor.[17] In principle, a Verkuylian leak triggers imperfectivity, see (4b, c); in (4d) the leaks are two. CA effectuation of perfectivity and imperfectivity with biaspectual verbs ought to be possible in Greek too. But it is not possible in the past, where biaspectual verbs receive aspectual marking (see below).

Among the opportunities in Bulgarian for CA explication is the use of *imam* 'have' as a light verb, often considered imperfective. However, *imam* explicates perfectivity when combined with nominals signifying boundedness: *imam uspeh/ uslozhnenie/neblagorazumieto* 'have success/a complication/the imprudence'.[18] The nominal transfers its lexical boundedness onto the verb – which shows that *imam* is biaspectual. In Greek, aspect can also be explicated in this way, in CA terms, using *écho* 'I have' – even in the preterit, *eícha* 'I had'. As Holton et al. (1997, p. 132) put it, *écho* 'I have' has no perfective forms. Hence, if found to explicate perfectivity, it is biaspectual. Consider the phenomenon in Bulgarian, Greek and English – (5) are translation equivalents, those in (6) too:

(5)   a. Sled dvuboya mezhdu dvamata grosmaystori trima mladi shahmatisti imaha_{BIASP} vazmozhnostta da pogovoryat_{PFV} s tyah (Bulgarian)
b. Metá to paichnídi metaxý ton dýo nkranmaítr, treis néoi paíktes skakioú eíchan_{BIASP} tin efkairía na milísoun_{PFV} mazí tous (Greek)
c. After the game between the two grandmasters, three young chess players had the opportunity to talk to them

(6)   a. Sled vseki dvuboy mezhdu dvamata grosmaystori mladi shahmatisti imaha_{BIASP} vazmozhnostta da razgovaryat_{IMPFV} s tyah (Bulgarian)
b. Metá apó káthe paichnídi metaxý ton dýo nkranmaítr, treis néoi paíktes skakioú eíchan_{BIASP} tin efkairía na milísoun_{PFV} mazí tous (Greek)
c. After each game between the two grandmasters, young chess players had the opportunity to talk to them

This case is interesting because *opportunity* is ambivalent. It can signal both boundedness and non-boundedness, and so can the phrase *had the opportunity*. Although *have* in Bulgarian and Greek is usually considered an imperfective verb (in English a stative verb), the sentences in (5) differ from those in (6). The aspectual value of the *have*-phrase is perfective in the three languages in (5); in (6) it is imperfective. Why? In (5) it is perfective because: (i) the adverbial *after the game* indicates that what follows is a single completed event; (ii) the *have*-phrase

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[17]Pragmatic factors often impact aspectual construal (Kabakčiev 2000, pp. 323 –324).
[18]A light verb is one with a reduced semantic content, such as *do* or *make* in *do/make a jump* or *have* in *have a fall*, where it is actually the noun, not the verb, that denotes the event/situation.

allows the explication of perfectivity despite the alleged imperfective/stative nature of *have*; (iii) the NP *three young chess players* is quantified, hence temporally bounded, capable of mapping its boundedness onto the verb. Conversely, (6) are imperfective sentences, because: (i) the adverbial *after every game* indicates that what follows is a non-bounded iterative situation; (ii) *had the opportunity* allows the explication of imperfectivity; (iii) *young chess players* is a non-quantified/bare NP, hence temporally non-bounded, indicating re-occurrence of chess players, hence non-boundedness is mapped onto the *have*-phrase.

Interestingly, in Greek (5b) the verb *milísoun* 'talk' is marked by the perfective stem *milís-o*. But while *eíchan*_{BIASP} *tin efkairía* is perfective in (5b), obtained compositionally in Verkuyl's perfective schema, and the grammatically perfective *milísoun* 'talk' corresponds to this compositionally obtained perfectivity, conversely, *milísoun* 'talk' in (6b) signals imperfectivity (non-bounded iterativity) despite being grammatically perfective. Thus (6b) illustrates how in Greek a grammatically marked aspectual value can be coerced into the opposite one by a compositionally derived aspectual value. Such Greek cases of aspect coercion, even more systematic, will be discussed below, but the generalization that follows from (5)-(6) is that Greek and Bulgarian feature similarities even in specific domains such as biaspectuality disambiguation.

CA in Greek: Biaspectuality, Disambiguation

Just like all the Slavic languages, Greek features VA. The aspectual contrast is signalled by the presence/absence of an -*s*- morpheme (sigmatic/asigmatic), the imperfective stem being the default one (Xydopoulos 1996, p. 127), and in the huge majority of cases aspect is directly expressed by the verb (Holton et al. 1997, p. 130ff, Kitis and Tsangalidis 2005, pp. 144 –145, Tarpomanova 2013, Babiniotis and Chleris 2015, p. 190, Dimitrova 2019a, 2019b, p. 185). However, as Xydopoulos (1996, p. 127) argues, the pattern is not fully systematic and the opposition "is often obtained by idiosyncratic morphophonemic changes with or without the -*s* morpheme", and aspect is contextually distinguished. For example, "due to the nasal assimilation of the perfective suffix -*s* there is no way to distinguish *krineí*_{PFV} 'he will judge' from *krineí*_{IMPFV} 'he is judging/judges'" (Aubrey 2014, p. 201). But if aspectual values in Greek are sometimes distinguished contextually, this means that aspectual disambiguation is realized compositionally, just like in English (and partly Bulgarian).

Let us again begin with a phenomenon resembling biaspectuality – an aspectually marked verb used with an opposite value. Such cases are discussed by Kitis and Tsangalidis (2005, pp. 146–153). Perfective events can be described using verbs marked for imperfectivity as in their example (7a), similar to Bulgarian (7b):

(7)   a. Ótan ton skótosa_{PFV} péthena_{IMPFV} mazí tou
        'When I killed him I died with him'
        b. Ubivam_{IMPFV} go, i njama da mi migne_{PFV} okoto

'(lit.) I kill him and my eye won't blink'

However, in (7a), as noted by the authors themselves, the phenomenon is a stylistic effect rather than aspect coercion; also in (7b). Therefore, let us now consider some entities that can truly impact CA explication: nominals. A detailed description of English nominals denoting abstract entities and their effect on CA effectuation is made in Kabakčiev (2000, pp. 211–239). We can safely maintain here that the lexical nature of nominals standing for temporal entities is not only near-identical in Bulgarian and Greek, it is similar to the one observed in English. Compare the tables below with nominals outside sentences in the three languages. In Table 1 they denote bounded situations (accomplishments/achievements). Such nominals are typically accompanied by the indefinite article in English – which explicates specified quantity in Verkuyl's (1972) model and temporal boundedness in Kabakčiev's (1984, 2000, 2019). In Greek and Bulgarian, an indefinite numeral (Greek *éna párti* 'one party', Bulgarian *edna sreshta* 'one meeting') is sometimes needed to strengthen the lexical temporal boundedness (the issue is skipped here for lack of space).

Table 1. *Nominals as Lexical Entries Signifying Bounded Situations (Accomplishments/Achievements)*

English	Bulgarian	Greek
a fall	*padane* 'a fall'	*ptósi* 'a fall'
a surgery/an operation	*operatsiya* 'a surgery'	*epémvasi* 'a surgery'
a talk/a conversation	*razgovor* 'a talk'	*syzítisi* 'a talk'
a meeting	*sreshta* 'a meeting'	*synántisi* 'a meeting'
a party	*parti* 'a party'	*párti* 'a party'

The nominals in Table 2, conversely, signify non-boundedness (states/activities) as lexical entries. In English they are typically used without an indefinite article.

Table 2. *Nominals as Lexical Entries Signifying Non-Bounded Situations (States/Activities)*

English	Bulgarian	Greek
imagination	*vaobrazhenie* 'imagination'	*fantasía* 'imagination'
understanding	*razbirane* 'understanding'	*katanóisi* 'understanding'
pressure	*natisk* 'pressure'	*píesi* 'pressure'
belief	*vyara* 'belief'	*písti* 'belief'
love/hate	*lyubov/omraza* 'love/hate'	*agápi/mísos* 'love/hate'

The tables demonstrate how remarkably similar English, Bulgarian and Greek are in this area. Examples with biaspectual (aspectually ambivalent) *have/had* + a temporally bounded/non-bounded nominal nicely manifest the mechanism of mapping situational values from a nominal onto a verb in all the three languages. In (8), sentences from the Internet, the relevant nominals in Greek and in the English translations map their temporal boundedness onto the verb *échei/have*,

whereby the *échei/have* forms acquire perfectivity (but see below about a possible opposite subject-NP impact). Note the absence in Greek of an indefinite numeral in the *échei*+N phrases in (8), e.g., *échei ptósi* 'have fall', unlike in English where such phrases require an indefinite article (*have a fall*):

(8)   a. Kai den íthele se kamía períptosi na échei$_{BIASP}$ ptósi me énan kainoúrio kinitíra
         Gloss: And [he] did not want in any case to have fall with one new engine
         'And he wanted under no circumstance to have a fall with a new engine'
         b. Kalýtera min kánete kápoia kínisi, ísos kai na échei$_{BIASP}$ apotychía
         Gloss: Better not make any move maybe it have failure
         'Better not make any move, it may have a failure'
         c. Boreí na échei$_{BIASP}$ epistrofí apo Santoríni apeftheías
         Gloss: [It] may have return from Santorini directly
         'It may have a return from Santorini directly'
         d. O Jacques proévi se diávima pros ton Morel, prokeiménou na échei$_{BIASP}$ syzítisi me ton teleftaío
         Gloss: The Jacques proceeded towards the Morel in order to have discussion with the latter
         'Jacques took a step towards Morel, in order to have a discussion with the latter'
         e. O Karypídis anaménetai na échei$_{BIASP}$ synántisi me ton Mántzio
         Gloss: The Karypídis [is] expected to have meeting with the Mántzio
         'Karypidis is expected to have a meeting with Mantzio'[19]

To the two groups in Tables 1 and 2, a third one must, however, be added – nominals whose lexical meaning accommodates both perfectivity and imperfectivity: English *opportunity*, Bulgarian *vazmozhnost*, Greek *efkairía*, see (5)-(6) above. These could provisionally be called "biaspectual nouns".[20]

Conversely, the *have*-forms in (9) in both Greek and English acquire imperfectivity after the lexical non-boundedness of an object-NP is mapped from the nominal onto the verb:

(9)   a. O Tzon eíche$_{BIASP}$ fantasía
         a'. John had imagination
         b. O Tzon eíche$_{BIASP}$ písti stin anthropótita
         b'. John had belief in humanity
         c. O Tzon eíche$_{BIASP}$ píesi stin koiliá tou
         c'. John had pressure in his abdomen
         d. As échoume$_{BIASP}$ katanóisi gia tous állous
         d'. Let us have understanding for others

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[19]ome of the glosses reveal a specific feature of Greek, use of the article with proper names (people's), but whether this may be relevant or not (in some way) to the article-aspect interplay is beyond the goals of the study.

[20]See Kabakčiev (2000, pp. 218–222) for a detailed description of them.

As already mentioned, non-bounded nominals as lexical entries do not require the use of an indefinite article in English or an indefinite numeral in Greek. Conversely, bounded nominals as lexical entries do require, in most cases, the use of the indefinite article in English (see Table 1). The boundedness of the relevant nominal (*a fall*, *a refund*, *a talk*, *a party*) resides in the lexical meaning but the indefinite article is still needed to explicate temporal boundedness (Kabakčiev 2000, p. 211ff).[21] Of course, a temporally bounded or non-bounded nominal in all the three languages can combine not only with *have* but with other verbs too: *receive a refund* instead of *have a refund*, *feel pressure* instead of *have pressure*, etc. But other verbs besides *have* (light or not) are not discussed here because in the Greek preterit they are marked for aspect and we are interested in biaspectuality only.

Analyzing (8), one might adopt the idea that it is solely the lexical temporal boundedness in the nominal that triggers perfectivity in the relevant aspectually unmarked *have*-form. This is not the case, for the following reasons. First, subjects such as personal pronouns or proper names are temporally bounded by default. They contain a covert definite article (see footnote 5) and temporal boundedness is mapped from them onto the (referent of the) *have*-verb. Second, let us construct some English sentences with bare-NP subjects and objects and analyze their Greek correspondences. English (10a) equals Greek (10a'), English (10b) equals Greek (10b'):

(10)   a. In this study patients had an operation that restricted food intake
        a'. Se aftí ti meléti, astheneís eíchan mia epémvasi pou periórize tin próslipsi trofís
        b. Customers had an immediate refund for defective devices
        b'. Pelátes eíchan ámesi epistrofí chrimáton gia elattomatikés syskevés

Here imperfectivity is explicated in the *have*-phrases in English and Greek – and the Greek sentences are perfect examples of the functionality of Verkuyl's imperfective schema in Greek, otherwise a VA language. Note that when used independently or with a bounded subject as in (8), the *have*-phrases are perfective – temporal boundedness is explicated by the nominal and mapped onto the referent of the aspectually unmarked *have*-form. What happens in (10) is that imperfectivity in the *have*-phrases is explicated through Verkuyl's imperfective schema in the following way. The temporal non-boundedness of the (referents of the) relevant bare-NPs (*patients*, *food intake*, *customers*, *defective devices*, *astheneís* 'patients', *epémvasi* 'surgery') is mapped onto the (referents of the) verbs in the *have*-phrases. The boundedness of the relevant NPs (*an operation*, *a refund*, *epémvasi* 'operation', *epistrofí* 'return') is thus canceled, and an indefinitely iterativized entity is produced, despite the presence in English of an indefinite article (an indefinite quantifier in Greek – *mia epémvasi* 'an operation').

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[21]Due to their structural significance, the English collocations of the *have a fall/swim* type are now covered in the *World Lexicon of Grammaticalization* (Kouteva et al. 2019, p. 343), where the explanation of their perfectivity is based on Kabakčiev's (2000, p. 212) concept of NP-V mapping.

Let us now have Greek sentences with a prototypically biaspectual verb and not two but three situation-participant NPs, each of which can change the aspect of the initial perfective sentence, rendering it imperfective. Such sentences are rare, difficult to encounter or construct, hence valuable.[22] But as Greek biaspectual verbs in the preterit receive aspectual marking, other conditions are needed for a biaspectual verb to be aspectually ambivalent. Meeting this requirement are future tense forms (among others). The aspectual values in (11), constructed sentences, are obtained through Verkuyl's schemata, according to the general CA mechanism:

(11)   a. O valé tha parkárei$_{BIASP}$ to aftokínitó mas ston kontinó chóro státhmefsis
        'The valet will park our car in the parking lot nearby'
        b. O valé tha parkárei$_{BIASP}$ aftokínita$_{LEAK}$ ston kontinó chóro státhmefsis
        'The valet will park cars in the parking lot nearby'
        c. O valé tha parkárei$_{BIASP}$ to aftokínitó mas se kontinoús chórous státhmefsis$_{LEAK}$
        'The valet will park our car in nearby parking lots'
        d. Valédes$_{LEAK}$ tha parkároun$_{BIASP}$ to aftokínitó mas ston kontinó chóro státhmefsis
        'Valets will park our car in the nearby parking lot'

If we add here the Bulgarian correspondences of Greek (11a-d) with the biaspectual verb *parkiram* 'park', it will be seen immediately that formally and semantically they are precisely identical, so we need not waste space for this. More importantly, the generalization that befits this cross-language and obviously universal picture obtained is: albeit peripherally, Greek and Bulgarian, VA languages, also feature CA. This generalization corroborates a statement put forward long ago (Kabakčiev 1984, 2000) and reiterated recently: "Verkuyl's theory [of CA] is a gigantic breakthrough in linguistics and its explanatory power is enormous" (Kabakčiev 2019, p. 213).

In a recent study of non-past *na*-clauses in Greek, Fiotaki and Lekakou (2018) argue that while most verbs (including *na thélo* 'to want') allow the effectuation of perfectivity in the *na*-clause, there are some (e.g., *vlepo* 'see', *akuo* 'hear', *arxizo* 'start', *stamato* 'stop') that do not. The authors emphasize that this problem field, aspect in *na*-clauses, is rather unexplored. Let us extend our observations to it and add a CA analysis:

(12)   a. Thélo na parkáro$_{BIASP}$ to aftokínito
        a'. I want to park the car
        b. Thélo na parkáro$_{BIASP}$ aftokínita
        b'. I want to park cars
        c. Paidiá théloun na parkároun$_{BIASP}$ to aftokínito
        c'. Children want to park the car

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[22]As shown in Kabakčiev (forthcoming), these sentences demonstrate how each NP referent triggers imperfectivization and how its temporal status changes along with the other two NPs.

The compositional buildup works superbly in (12) – as previously in (11). Suppose there is a car near the garage that must be parked. Someone around can say (12a) in Greek or (12a') in English. The situation, in both languages, is perfective. But if the same person is an applicant for a valet job, he can say (12b) in Greek or (12b') in English. This situation is imperfective, indefinitely iterative, due to the non-boundedness of the referent of the object-NP. Note that English *park the car* and Greek *parkároun to aftokínito* are perfective phrases in isolation. But if near the garage there is a car that must be parked every evening and if there are children around who like to park cars, the garage attendant can now say (12c) in Greek or (12c') in English. The situation referred to is now imperfective, indefinitely iterative, and this is solely due to the non-boundedness of the (referent of the) subject-NP. This, again, corroborates Verkuyl's fundamental tenet that CA is unquestionably a sentence-level mechanism and that the impact of subject-NPs on aspect must never be overlooked. The Bulgarian equivalents of (12) are again fully identical formally and semantically, so the conclusions are valid for them too.

If an aspectually regular verb is to replace the biaspectual *parkáro*, it will be perfective in (13a)-(13a'), *stathméfso*, and imperfective in (13b)-(13c), *stathmévoun* (similar substitution is possible in Bulgarian). The grammatically encoded aspect matches the perfective schema in (13a)-(13a') with the boundedness of the subject- and object-NP, and the imperfective one in (13b)-(13c) with the non-boundedness of the object- or subject-NP:

(13)   a. Thélo na stathméfso$_{PFV}$ to aftokínito
        a'. I want to park the car
        b. Thélo na stathmévo$_{IMPFV}$ aftokínita
        b'. I want to park cars
        c. Paidiá théloun na stathmévoun$_{IMPFV}$ aftokínita
        c'. Children want to park cars

After Vendler's (1957) insight that an object-NP changes the aspectual reading of a verb through the object-NP quantified/non-quantified alteration, it was Verkuyl's (1972) epochal discovery of CA that ultimately established that aspect cannot be properly understood without recognizing the impact of **all** sentence components, including the subject, as in the examples above. The grandeur of Verkuyl's discovery now becomes even more manifest, after the realization that CA also exists in VA languages like Greek and Bulgarian.

On the Interdependence between Article, Aspect and the Aorist-Imperfect Distinction in a Cross-Language Perspective: Synchronic and Diachronic

If the thesis about the article (definite and indefinite) as a marker of temporal boundedness on nouns is valid, it ought to be valid not only for Bulgarian as a borderline/hybrid language – with VA, an aorist-imperfect distinction and a definite article, but also for Greek, a language with precisely the same features. Kabakčiev failed to mention Greek as a borderline language in his initial

publications, but has done it recently (Kabakčiev 2019, p. 218). Below we will analyze the relevant data to check if Greek behaves in the same way as Bulgarian. And if it does, it would have to be classified in future descriptions as belonging to the same structural cross-language paradigm and treated as a borderline/hybrid language: between the Germanic languages, on the one hand, using articles for explicating aspect (*a*/*the* for perfectivity, zero article for imperfectivity) and featuring no VA of the Slavic/Greek type, and the Slavic languages, on the other hand, employing VA (including perfective verbs) and having no articles (save Bulgarian). But let us first place the article-aspect interplay in Greek and Bulgarian found so far into a larger cross-language perspective, as well as diachronically.

The idea of an article-imperfect interdependence in Bulgarian, launched in Kabakčiev (1984), was later complemented with a similar explanation of the English progressive (Kabakčiev 2000, pp. 163–180). The progressive is described, for the first time in linguistics, as "an expedient for eliminating the temporal boundedness of referents of subject- and object-NPs in sentences belonging to a particular (previously defined) major semantico-syntactic pattern" (Kabakčiev 2000, p. 180). Thus the raison d'être of the English past progressive partly coincides with that of the Bulgarian/Greek imperfect. This is logical, as the Bulgarian/Greek imperfect and the English past progressive, though not precisely identical grammemes, have a common value, viz., progressivity (Vendlerian activity), a subtype of imperfectivity. The difference is that while Bulgarian/Greek imperfects encode situations that are imperfective and are Vendlerian states or activities, the English past progressive also encodes situations that are imperfective but are only activities.

If the article and the aorist-imperfect distinction in languages from separate branches of the Indo-European genealogical tree such as Greek and Bulgarian are found to be structurally interrelated, it is worth exploring data from other languages, structurally different. Three recent publications, Bulatović (2019, 2020), Abraham (2020, p. 5) endorse Verkuyl-Kabakčiev's conception of Germanic aspect as mainly compositional and involving an interplay between verbal and nominal elements, including an article-aspect interplay – vis-à-vis Slavic aspect, predominantly verbal. In a truly revolutionary paper, Bulatović (2020) argues that CA and the article-aspect interplay as part of it are phenomena that are not simply and ordinarily valid, they are so hugely important that they must be taught to all learners of English (not only Slavic) and included in all English grammars to become part of the fundamental knowledge of native speakers. We fully endorse Bulatović's suggestions and we find that, apart from English and similar CA languages, they must also be applied to hybrid languages like Bulgarian and Greek – that manifest primarily VA but peripherally CA too.

But cross-language systematicity does not end here. In the year of publication of Kabakčiev's (2000) monograph on aspect revealing an article-aspect interplay in English and classifying Bulgarian as a hybrid language with CA and a definite article, another monograph appeared, Leiss' (2000), containing similar diachronic descriptions of three Proto-Germanic languages with a dying VA system and an emerging definite article – Old Icelandic, Gothic, Old High German. Leiss discovered an interplay in each of these languages between the disappearance of

perfective verbs and the emergence of a definite article in nominals associated with formerly perfective verbs. In other words, two authors independently of one another launched the thesis that articles and aspect are interrelated, corroborating the idea of an all-embracing article-aspect interplay synchronically and diachronically: across languages different in their grammatical structures and across millennia. The two approaches complement each other, something mutually recognized by the authors (Abraham and Leiss 2012, p. 326; Kabakčiev 2018, 2019, p. 216). Thus Leiss' generalizations about the fall of perfectivity and rise of the article in three Proto-Germanic languages structurally different from Greek and Bulgarian, and Bulatović's paper on CA and the article-aspect interplay in Modern English – structurally different from Old English, forcibly corroborate the idea of a momentous cross-language, synchronic-diachronic and truly universal article-aspect interdependence.

Aorists and Imperfects Viewed as Vendlerian Situations

Both Greek and Bulgarian feature an aorist-imperfect contrast, a mixed one, aspecto-temporal, in which the imperfect covers Vendler's imperfective situations states and activities, while accomplishments and achievements are covered by the Greek aorist and the Bulgarian perfective aorist. The aspectual value of the Bulgarian imperfective aorist thus remains outside Vendler's classification and for this reason a new Vendlerian situation was introduced in Kabakčiev (2000, pp. 279–307), termed "episode" – exemplified in (14a,b,c), morphologically realized by the imperfective aorist:

(14)   a. Alexander tsaruva$_{IMPFVAOR}$ 12 godini
           a'. Alexander reigned for 12 years
           b. Spah$_{IMPFVAOR}$ edin chas
           b'. I slept for an hour
           c. Deteto igra$_{IMPFVAOR}$ v parka tazi sutrin
           c'. The child played in the park this morning'

Actually the episode has a significantly larger representation both in Bulgarian and in cross-language terms. It covers all Slavic delimitative verbs, apart from Greek and Bulgarian it is also found in the Romance languages in certain uses of aorist forms, and in English it is fully systematically represented by *for*-time and similar adverbials, see (14a', b', c').[23]

The episode stands between Vendlerian imperfectives (states and activities) and true perfectives (accomplishments and achievements). Episodes are temporally bounded just like perfectives but lack the pragmatically interpretable feature "brought to a natural end" (achieved telos) and could therefore be called quasi-

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[23]The episode appears to pose a problem to some linguists who regard it as unnecessary, a "pragmatic inference" (Ziegeler 2006, pp. 14–16). As already argued (Kabakčiev 2019, pp. 286–307), the episode is a situation widely found across languages in different grammatical and semantico-syntactic disguises.

perfectives. Note that sentences such as (14) represent a major pattern. There are many thousands of such sentences in Bulgarian and English, explicating not true perfectivity but episodes. We need, therefore, to ask what the Greek correspondences of Bulgarian/English sentences like (14), representing an episode, would be. An answer, given by Vlachos' (2015, p. 13), is found in his example (15a) with a *for*-time adverbial, as well as in some sentences that we constructed, with temporal adverbials explicating specific situational meanings:[24]

(15)   a. O Geórgios vasílepse$_{AOR}$ gia 60 chrónia
        'George reigned for 60 years'
        b. Koimíthika gia$_{AOR}$ mia óra
        'I slept for an hour'
        c. Épaixa$_{AOR}$ ténis símera to proí
        'I played tennis this morning'
        d. Épaixa$_{AOR}$ éna paichnídi ténis símera to proí
        'I played a game of tennis this morning'
        e. Épaixa$_{AOR}$ éna paichnídi ténis gia mia olókliri óra símera to proí
        'I played a game of tennis for a whole hour this morning'

Here *vasílepse* 'reigned', *koimíthika* 'slept' and *épaixa* 'played' are aorists formed from perfective lexemes (Dimitrova 2019a, p. 188) and manifesting different kinds of aspect coercion. In (15a) the state verb *vasílepso* 'reign', is coerced from its immanent imperfectivity (lexical) into an episode simultaneously by the aorist and the phrase *gia 60 chrónia* 'for sixty years'. In (15b, c) *koimíthika* 'slept' and *épaixa* 'played' are initially activities coerced from their immanent (lexical) imperfectivity into episodes by the aorist and by the adverbials *gia mia óra* 'for an hour' and *símera to proí* 'this morning'. In (15d) there is no coercion, as the accomplishment *épaixa éna paichnídi ténis* 'played a game of tennis' explicates true perfectivity (achieved telos) just like *épaixa* 'played' does. In (15e) there is again coercion – of the accomplishment *épaixa éna paichnídi ténis* 'played a game of tennis' from perfectivity (boundedness and achieved telos) into an episode, effectuated by the adverbial *gia mia olókliri óra* 'for a whole hour'. All this shows that the aorist in Greek engulfs lexical aspect, even defacing it, and temporal adverbials play a crucial part, coercing aspectual verb forms into one or another situational meaning. In Bulgarian almost no such coercion is observed. Temporal adverbials simply match the aspectual/situational meanings of the verb forms. Cf. (14a) above, where the imperfective aorist *tsaruva* 'reigned' and *12 godini* 'for 12 years' are a faultless match, just like the episode meaning of imperfective aorists coincides with the limited-duration adverbials in (14b, c).

However, aspect coercion, i.e., forcing the aspectual/situational value of a grammatical form into a different aspectual/situational value through mapping as in (15a, b, c), *can* sometimes be observed in Bulgarian. See (3a) above, cf. also (16) from Kabakčiev (2000, p. 52), but these cases are rare:

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[24]An anonymous reviewer argues that adverbials such as *this morning* or *yesterday* are different from durational adverbials. See our position in this section below.

(16)   Vrataryat imashe_{IMPFVIMP} otlichna proyava i uspya da spasi duzpata
         'The goalkeeper had an excellent feat and managed to save the penalty'

In (16), the boundedness of *proyava* 'feat' is mapped onto the verb *imashe* 'had', grammatically marked as imperfective by the imperfect.

It is remarkable that aspect coercion in Greek is also observed with imperfect verb forms, opposite to the one in (15) from true perfectivity (aorist) into an episode. In (17a) coercion is effectuated by the *for*-time adverbial *gia misí óra* 'for half an hour' – from an activity (encoded by the imperfect) into an episode:

(17)   a. I Eléni akouge_{IMP} mousikí gia misí óra
         b. Elena slusha_{IMPFVAOR} muzika polovin chas
         c. Eleni listened to music for half an hour

But the result of the coercion in (15) and (17a) is ultimately the same: an episode. Discussing this issue, Vlachos (2015, p. 19) emphasizes that in such cases the two aspectually different verb forms manifest "the same duration in the past". Note that in the Bulgarian sentence (17b), equivalent to Greek (17a), there is no aspect coercion. The adverbial *polovin chas* 'for half an hour' matches the episode meaning encoded by the imperfective aorist *slusha* 'listened'. In the equivalent English sentence (17c) the adverbial *for half an hour* maps its episode meaning onto the verb *listened*, which is aspectually unmarked and manifests compatibility with three situations: state/activity/episode. Hence, here too, there is no aspect coercion, only mapping.

Some issues concerning adverbials need further clarification. First, *for*-time phrases are often said to be "durational adverbials" because they typically complement imperfective SV/VO/SVO patterns. In our understanding, *for*-time phrases are not durational adverbials. They are adverbials of limited duration (temporal boundedness) with two opposite functions. In English they usually combine with compositionally derived imperfective expressions, turning them into episodes – (17c). But *for*-time phrases also complement perfective phrases – cf. *read the book* in *X read the book for 2 hours*, where, conversely, a perfective expression is turned into an episode. The specific Greek phenomenon is similar, in the sense that *for*-time phrases turn both perfectives and imperfectives into episodes – through aspect coercion. Second, in the three languages analyzed here (Greek, Bulgarian, English) there are thousands of adverbials that, strictly speaking, are not *for*-time phrases: *yesterday*, *this morning*, *last month*, etc. But they tend to explicate episodes just like *for*-time adverbials, and they do imply (if not exactly signify) limited duration. English (18a) naturally translates into Bulgarian (18a') with an imperfective aorist (an imperfective imperfect sounds deviant), which means that sentences with such adverbials prototypically explicate episodes:

(18)   a. Yesterday/this morning/last month I played tennis
         a'. Vchera/tazi sutrin/minaliya mesets igrah_{IMPFVAOR} (*?igraeh_{IMPFVIMP}) tenis

Third, as both aorists (15a, b, c) and imperfects (17a) in Greek are coerced into episodes by *for*-time adverbials and adverbials like *yesterday*, this clearly increases the prevalence of the phenomenon. But certainly all these issues are in need of future research.

The Article-Imperfect Interdependence in Bulgarian

This interdependence, described in Kabakčiev (1984), answers the question what would happen if Bulgarian had only one preterit verb form (like the other Slavic languages) in SVO patterns with bounded participants. Below are two Bulgarian sentences to exemplify the issue (from Kabakčiev 1984, p. 655) – impossible to translate, hence only glossed:

(19)   a. Mehanikat popravya/popravyashe$_{IMPFV*AOR/IMP}$ kolata
         Mechanic-the repaired car-the
         b. Vojnikat presicha/presichashe$_{IMPFV*AOR/IMP}$ ulitsata
         Soldier-the crossed street-the

These are not real sentences but constructs containing a hypothetical single imperfective verb form common for aorist/imperfect. They resemble the preterit in English – which allows the explication of *any* aspectual value: the preterit is "an empty bag" capable of accommodating various aspectological meanings arising in sentences/contexts (Kabakčiev 2017, p. 232). If the verbs in hypothetical Bulgarian sentences such as (19a, b) are unmarked for aorist/imperfect – because they represent constructs common for the two grammemes, there will be a tendency for such SVO sentences with definite articles, containing temporally bounded participants, to signal perfectivity, i.e., temporal boundedness. The conclusion, made 37 years ago (Kabakčiev 1984) and unchallenged, is that the Bulgarian imperfect exists to eliminate the temporal boundedness that would be triggered in the relevant nominal(s) in such sentences in the absence of other compensatory devices. In case of a no imperfect grammeme in Bulgarian, the temporal boundedness of such NP referents would be transferred onto the verb referent, triggerng perfectivity in it; while in many cases the intention of the speaker would be to present it as imperfective.

As for the aorist, it can firmly be maintained that it remains necessary for the system. All languages must be able to encode situations in the past as perfective/ imperfective with additional subtypes such as state/activity, true perfectivity/ episode, etc. Note that the hypothetical constructs in (19) belong to an important semantico-syntactic pattern (SVO) widely found across languages. The subject is an entity executing an action directed at another entity and triggering a pragmatic result. The cross-language existence of the pattern and its appropriateness for analyzing aspect is a key concept in both Verkuyl's and Kabakčiev's models, and the sidestepping of its significance and prevalence has recently been criticized by Bulatović (2020, p. 391): "the strong focus on internal arguments has overshadowed the role of external arguments in the calculation of aspect". The significance of this

pattern underlies the existence in Bulgarian of two pairs of aspect markers: perfectivity-imperfectivity in the lexical verb, on the one hand, and a slightly different perfectivity-imperfectivity contrast (an aorist-imperfect distinction) in the verb as a syntactic entity. Bulgarian features four morphologically distinguished aspectual entities in the past: perfective aorist (*izchisti* 'cleaned completely'); imperfective aorist (*chisti* 'cleaned *for some time*'); perfective imperfect (*izchisteshe* 'cleaned indefinitely iteratively – *whenever X cleaned*); imperfective imperfect (*chisteshe* 'cleaned habitually/was cleaning'). In Greek only two forms exist: *kathárise* 'cleaned' (aorist); *katharízei* 'was cleaning/cleaned habitually' (imperfect). This comparison raises the question: how would the four morphologically distinguished Bulgarian aspectual values be rendered in Greek? (see below).

On the Article-Imperfect Interdependence in Greek

If we compare the Bulgarian hypothetical constructs in (19) against similar Greek material to check similarity with Bulgarian, it becomes clear that these Bulgarian constructs are not possible in Greek – because Greek features no imperfective aorist. Greek has two preterite forms: aorist, covering the Vendlerian situations accomplishment and achievement, and imperfect, covering states and activities:

(20)   O michanikós episkevástike$_{AOR}$/episkévaze$_{IMP}$ to aftokínito
         'The mechanic repaired entirely/was repairing (repaired habitually) the car'

The system for effectuating perfectivity/imperfectivity in Greek, as exemplified in (20), is also different from the English one, where the preterit (indefinite/simple past) is unmarked aspectually, allowing subject- and object-NPs to signal temporal boundedness through the article (or other quantifiers) and map it onto the verb to achieve perfectivity. Imperfectivity as a Vendlerian state is achieved in English through a de-quantified participant, activities through progressive forms. In Greek, imperfectivity is effectuated directly by the verb – by the imperfect, just like in the Bulgarian imperfective imperfect. How can the Bulgarian-Greek difference – four versus two aspectual/situational forms in the preterit, be explained? The rich Bulgarian aspecto-temporal system allows certain elements in it to be found mimicking the Greek system:

(21)   a. Detsa byagaha$_{IMP}$ v maratona
         'Childran ran/were running in the marathon'
         b. Detsata byagaha$_{IMP}$ v maratona
         'The childran ran in the marathon'

Byagaha 'ran' is an imperfective preterit form unmarked for aorist/imperfect, which can be disambiguated in CA terms. In (21a) it is imperfective by default due

to the non-bounded subject; in (21b) an episode is explicated through the bounded subject. Semantically *byagaha* 'ran' equals the two Greek verb forms in (15b) and (17a) together, an aorist and an imperfect – nominally different but both effectuating episodes. Bulgarian *byagaha*$_{IMP}$ 'ran' can be called a biaspectual in the past: an imperfective verb common for aorist/imperfect. Note, however, that this ambivalent status is not maintained in the singular, where the imperfect comes into play and imperfectivity is realized:

(22)   a. Deteto byaga$_{IMPFVAOR}$ v maratona
         'The child ran [*for X time*] in the marathon'
         b. Deteto byagashe$_{IMPFVIMP}$ v maratona
         'The child was running/ran habitually in the marathon'

This is not surprising, as the plural in (21) allows disambiguation in CA terms between a state/activity and an episode through the bounded-nonbounded contrast in *detsa* 'children' vs *detsata* 'the children', while the singular does not. In Greek the aorist *étrexe* 'ran' and the adverbial *ston marathónio* 'in the marathon' render the Greek sentence (23a) semantically equal to the Bulgarian sentence (22a). But note that while in Bulgarian (22a) *byaga*$_{IMPFVAOR}$ 'ran' is an episode in itself, directly encoded by the imperfective aorist, Greek *étrexe*$_{AOR}$ 'ran' in (23a) is coerced into an episode from pure perfectivity by *ston marathónio* 'in the marathon'. If we want to say that the child did the whole of the marathon, we will say (23b). If imperfectivity must be signified, this is done in (23c) by the imperfect *étreche* 'was running/ran habitually':

(23)   a. To paidí étrexe$_{AOR}$ ston marathónio
         'The child ran [*for X time*] in the marathon'
         b. To paidí étrexe$_{AOR}$ ton marathónio
         'The child ran the marathon'
         c. To paidí étreche$_{IMP}$ ston marathónio
         'The child was running/ran habitually in the marathon'

These issues are clearly in need of further research. But we can now hypothesize that, due to the systematic opportunity in Greek, and actually a necessity, to coerce perfective and imperfective verb forms into episodes using *for*-time and similar adverbials, the imperfective verbs have lost some of their imperfective potential and are perceived as truly imperfective in the past only by default, when unaccompanied by *for*-time or similar adverbials. The presence of a definite article in Greek capable of bounding temporally situation-participant NPs is probably another contributing factor – as in English, where it underlies the raison d'être of the progressive (Kabakčiev 2000, pp. 163–180).

But what about the Greek/Bulgarian aorist? If the raison d'être of the imperfect is to eliminate temporal boundedness in NP referents in certain sentences and thus prevent the transfer of temporal boundedness onto the verb referent, it is logically clear that the remaining member of the opposition, the aorist, cannot have an imperfective value – as this value is already occupied. On

the other hand, in Bulgarian it would be illogical for the aorist to feature only the perfective value of lexical verbs, because the aorist would then simply equal VA perfectivity and would thus practically not exist – and the imperfect would then have no partner. The solution to the problem, triggered by the collective human brain governing the development of language, appears to have been to build such a contrast in Bulgarian in which the aorist enters no foreign territory and has a specific meaning of its own. Recall again that the Bulgarian aorist features true perfectivity – perfective aorist, or quasi-perfectivity, imperfective aorist, the latter encoding an episode. In Greek, the episode meaning is generated by *for*-time and similar adverbials, which systematically force the episode semantics onto either aorist or imperfect verb forms.

Conclusion

The analysis confirmed our preliminary conjecture that Greek is fairly similar to Bulgarian in structural and functional terms. It is a borderline/hybrid language featuring VA in verbs as lexical entries and specifically perfectivity (unlike CA languages like English that lack perfective verbs), an aorist-imperfect contrast, a definite article only (no regular pattern of an indefinite article). Greek, just like Bulgarian, also displays CA, including the article-aspect interplay, in certain peripheral conditions, especially when the aspectual meaning of the verb is not firmly fixed and hence susceptible to other situational values. An inseparable part of our approach was the understanding that situation-participant NPs are temporal entities. The investigation on Greek data here proved it once again to be completely valid, as was to be expected. A fruitful analysis of CA regularities without viewing situation-participant NPs as temporal entities is deemed impossible.

It is not surprising that two languages belonging to the Balkansprachbund, Bulgarian and Greek, share a considerable number of features related to CA. What is surprising and also somewhat difficult to analyze, is that they manifest specificities in the way CA values are explicated in verbs that are either biaspectual or changeable/coercible into aspectual values different from the ones they nominally express. As this study is an early attempt at exploring CA-VA values in Modern Greek, these specificities ought to be explored and described in future contrastive investigations of Greek and Bulgarian using the CA theory – possibly along with other languages, whether closely related or not.

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more than happy to be able to offer to the linguistic community our thoughts on the study of the most important language in the history of the Western world.

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Tamil, Greek, Hebrew and Sanskrit: Sandalwood (Σανταλόξυλο) and its Semantics in Classical Literatures

By D Pugazhendhi[*]

The Greek and Tamil people did sea trade from the pre-historic times. Sandalwood is seen only in Tamil land and surrounding places. It is also one of the items included in the trade. The Greek word 'σανταλίνων' is first mentioned in the ancient Greek works around the middle of the first century CE. The fact that the word is related to Tamil, but the etymologist did not acknowledge the same, rather they relate it to other languages. As far as its uses are concerned, it is not found in the ancient Greek literatures. One another type of wood 'κέδρου' cedar is also mentioned in the ancient Greek literature with the medicinal properties similar to 'σανταλίνων'. In the same way the use of the Hebrew Biblical word 'Almuggim -אַלְמֻגִּים' which is the word used for sandalwood, also denotes teak wood. This shows that in these words, there are possibilities of some semantic changes such as semantic shift or broadening.

Keywords: *biblical word, Greek, Hebrew, Sandalwood, Tamil*

Introduction

Every word has its meaning. The semanticism of a word is not permanent. Changes may have occurred during different periods of time. If the time period is of longer duration and in the case of people's movement from different places the changes will be more. The semantic change of a word depends upon its mobility to different places. One such word is sandalwood. Grammatically this word is a noun. It is also exported from Tamil land to foreign countries along with teak and cedar woods. From the pre-historic era, the word sandalwood is also used in Greek and Hebrew languages because of the sea trade with the Tamil land.

Sea Trade between Greeks and Tamilians

Ancient Tamilians had sea trade relation with many foreign countries (Pugazhendhi 2020a, 2020b).

καὶ τάδε δὲ μετεξέτεροι Ἰνδῶν περὶ Ἡρακλέος λέγουσιν, ἐπελθόντα αὐτὸν πᾶσαν γῆν καὶ θάλασσαν καὶ καθήραντα ὅ τι περ κακόν, καινὸν εἶδος ἐξευρεῖν ἐν τῇ θαλάσσῃ κόσμου γυναικηίου,
ὅντινα καὶ ἐς τοῦτο ἔτι οἵ τε ἐξ Ἰνδῶν τῆς

Certain of the Indians tell the following story about Heracles, that when he had passed over every land and sea and had rid them of every evil beast, he found in the sea a woman's ornament, such as up to the present day those who bring wares

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χώρης τὰ ἀγώγιμα παρ᾽ ἡμέας ἀγινέοντες σπουδῇ ὠνεόμενοι ἐκκομίζουσι,
καὶ Ἑλλήνων δὲ πάλαι καὶ Ῥωμαίων νῦν ὅσοι πολυκτέανοι καὶ εὐδαίμονες μέζονι ἔτι σπουδῇ ὠνέονται τὸν μαργαρίτην δὴ τὰν θαλάσσιον οὕτω τῇ Ἰνδῶν γλώσσῃ καλεόμενον. τὸν γὰρ Ἡρακλέα, ὡς καλόν οἱ ἐφάνη τὸ φόρημα, ἐκ πάσης θαλάσσης ἐς τὴν Ἰνδῶν δυναγινέειν τὸν μαργαρίτην δὴ τοῦτον, τῇ θυγατρὶ τῇ ἑωυτοῦ εἶναι κόσμον.

from India to us still buy with zeal and carry away. In former times the Greeks and now the Romans who are fortunate and wealthy with still greater zeal buy what is called in the Indian tongue the marine pearl. The ornament seemed so fine to Heracles that he collected pearls like this from all the sea and brought them to India to be an adornment for his daughter. "
8–10, Chapter viii, Indica, Arrian (Eberhard 1885)

Thus the ancient Greek author Arrian mentioned about the sea trade of pearls between Greeks and Indians. He also gave a hint about the name of the place related with the pearl.

καὶ τούτῳ ἄρσενας μὲν παῖδας πολλοὺς κάρτα γενέσθαι ἐν τῇ Ἰνδῶν γῇ — πολλῇσι γὰρ δὴ γυναιξὶν ἐς γάμον ἐλθεῖν καὶ τοῦτον τὸν Ἡρακλέα —, θυγατέρα δὲ μουνογενέην. οὔνομα δὲ εἶναι τῇ παιδὶ *Πανδαίην*, καὶ τὴν χώρην.

[Heracles has] Many male children, but only one daughter was born to him in India, for he married many women. The daughter's name was Pandaea, and the land where she was born, and over which Heracles placed her as ruler, was named Pandaea after her."
Chapter viii, Indica, Arrian (Eberhard 1885)

Thus the name of the place had resemblance with Pandaea which is well known for export of pearls. The ancient Greek work called 'Periplus of the Eritheranian Sea' around the middle of the first century CE confirmed that particular place as Pandion kingdom, which is famous for pearls and highlighted that it belonged to Tamil Nadu.

59. Ἀπὸ δὲ τοῦ Κομαρεὶ ἐκτείνουσα (πρὸς τὸν νότον) χώρα μέχρι Κόλχων, ἐν ᾗ κολύμβησις τοῦ πινικοῦ ἐστίν· ἀπὸ δὲ κατακρισίμων κατεργάζεται· ὑπὸ τὸν βασιλέα Πανδίονά ἐστι. Μετὰ δὲ Κόλχους ἐκδέχεται πρότερος * αἰγιαλὸς ἐν κόλπῳ κείμενος, ἔχων χῶρον μεσόγειον, λεγόμενον Ἀργάλου· ἐν ἑνὶ τόπῳ * τερονεῖται τὸ παρ᾽ αὐτὴν τὴν Ἠπιοδώρου [νῆσον] συλλεγόμενον πινικόν· φέρονται γὰρ ἐξ αὐτῆς σινδόνες, * ἐβαργαρείτιδες λεγόμεναι.

59.From Comari toward the south this region extends to Colchi, where the pearl-fisheries are; and it belongs to the Pandian Kingdom. Beyond Colchi there follows another district called the Coast Country, which lies on a bay, and has a region inland called Argaru. At this place, and nowhere else, are bought the pearls gathered on the coast thereabouts; and from there are exported muslins, those called Argaritic.

Περίπλους της Ερυθράς Θαλάσσης

Periplus of the Eritheranian Sea (Wilfred 1912)

This work also confirms the voyage of the ship from Greece in that particular location.

Βασιλείας δ´ ἐστὶν ἡ μὲν Τύνδις Κηπροβότρου, κώμη παραθαλάσσιος ἔνσημος· ἡ δὲ Μουζιρὶς βασιλείας μὲν τῆς αὐτῆς, ἀκμάζουσα δὲ τοῖς ἀπὸ τῆς Ἀριακῆς εἰς αὐτὴν ἐρχομένοις πλοίοις καὶ τοῖς Ἑλληνικοῖς· κεῖται δὲ παρὰ ποταμόν, ἀπέχουσα ἀπὸ μὲν Τύνδεως διὰ τοῦ ποταμοῦ καὶ διὰ θαλάσσης σταδίους πεντακοσίους, ἀπὸ δὲ τοῦ κατ´ αὐτὴν εἴκοσι. Ἡ δὲ Νέλκυνδα σταδίους μὲν ἀπὸ Μουζιρέως ἀπέχει σχεδὸν πεντακοσίους, ὁμοίως διά τε ποταμοῦ (καὶ πεζῇ) καὶ διὰ θαλάσσης, **βασιλείας** δέ ἐστιν ἑτέρας, τῆς **Πανδίονος**· κεῖται δὲ καὶ αὐτὴ παρὰ ποταμόν, ὡσεὶ 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 Eritheranian Sea (Wilfred 1912)

This is shown in Figure 1.

Figure 1. *Greek and Tamil Nadu*
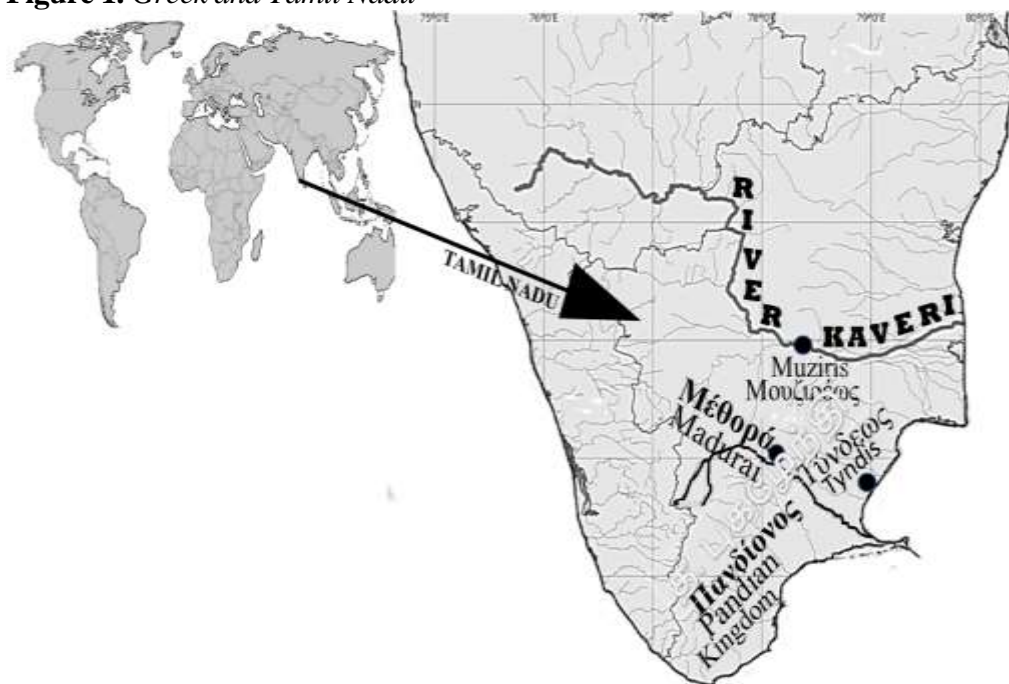
In this way, the ancient Greek works ensure the sea trade between Greeks and Tamilians. There are many items that were imported and exported in this trade. The ancient Tamil literature mentions the possibility of timber trade.

Timber Trade

Ancient Tamil literature picturizes the wood that was brought to the harbour from the mountaineous forest, through the river for the sake of exporting.

> ……..…..wood
> pieces of punnai and sandal *[agil]*
> come down the rivers and become
> floats for women playing in the ports
> 116–121, Sirupānātruppadai, Sanga Ilakkiam (Tamil Virtual University 1995)

This is picturized and shown in the Figure 2.

Figure 2. *Sandalwood and River*


These woods were arranged along the port.

> 'Seashore town of Eyirpattinam
> you reach a Eyirpattinam
> with walls and cold-water ponds.
> When you reach there…
> the wood brought and heaped on
> the shore by the swollen waves, and
> appearing like tall, sleeping camels'.
> 152–155, Sirupānātruppadai, Sanga Ilakkiam (Tamil Virtual University 1995)

This is picturised and shown in Figure 3.

Figure 3. *Sandalwood and Port*
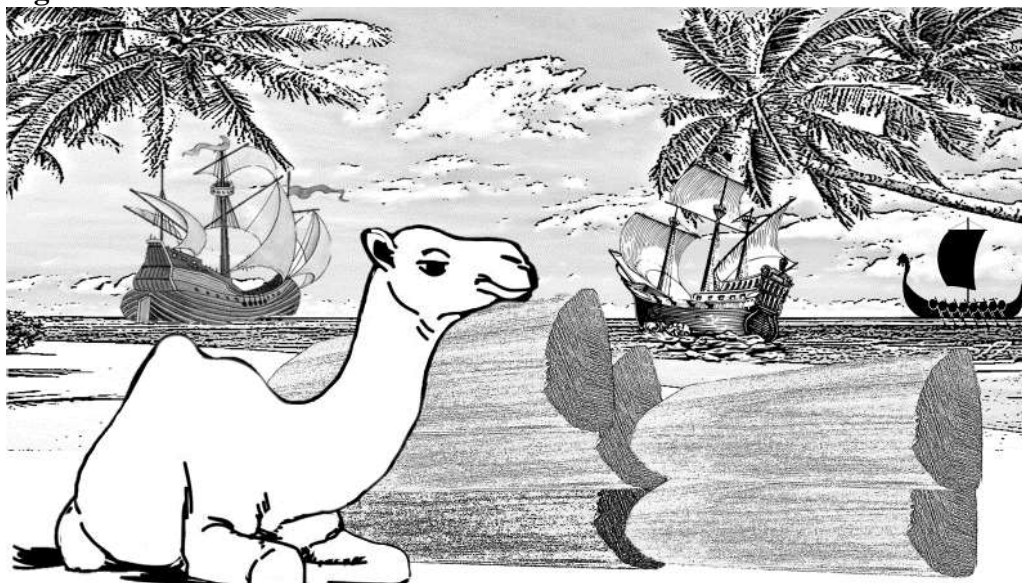
The Greek and Hebrew literatures also confirm the occurence of timber trade through sea.

Greek reference:

36. Παραπλεύσαντι δὲ τοῦτο τὸ στόμα τοῦ κόλπου μετὰ δρόμους ἓξ ἕτερον ἐμπόριόν ἐστι τῆς Περσίδος, τὰ λεγόμενα Ὄμανα. Ἐξαρτίζεται δὲ εἰς αὐτὴν συνήθως, ἀπὸ μὲν Βαρυγάζων εἰς ἀμφότερα ταῦτα τῆς Περσίδος ἐμπόρια πλοῖα μεγάλα χαλκοῦ καὶ ξύλων **σανταλίνων** καὶ **δοκῶν** καὶ **κεράτων** καὶ φαλάγγων σασαμίνων καὶ ἐβενίνων,

Περίπλους της Ερυθράς Θαλάσσης

36. Sailing through the mouth of the Gulf, after a six-days' course there is another market-town of Persia called Ommana. To both of these market-towns large vessels are regularly sent from Barygaza, loaded with copper and **sandalwood** and timbers of teakwood and logs of blackwood and ebony.

Periplus of the Eritheranian Sea (Wilfred 1912)

Hebrew reference:

And the servants also of Huram and the servants of Solomon which brought gold from Ophir brought *almug* trees and precious stones.
2 Chronicles 9:10 (Briggs 2006)

The mannar they carried the wood is picturized and shown in Figure 4.

Figure 4. *Wood and Sea*

Here the Greek reference mentions there were three types of woods that were used in the trade namely, '**σανταλίνων** καὶ **δοκῶν** καὶ **κεράτων**'. In this the word σανταλίνων meaning sandalwood grows only in places surrounding Tamil Nadu. The word δοκῶν which denotes teakwood grows in and around Tamil Nadu and South East Asia. The other word κεράτων also represents a type of wood that grows in different places including Tamil Nadu. Thus these three woods were used in the ancient sea trade. Among these the wood σανταλίνων has medicinal value and is also used as perfume, κεράτων is related to perfume and δοκῶν is incompatible with others and is used for making furniture and doors. The benefits of one type of wood also suit other types. Hence, the usage of these words is synonymous and in the same sense it seems to have got transferred to other languages. In linguistics it is called as semantic shift (Bloomfield 1933)[1] or semantic change (Akidah 2013, Campbell 2004)[2]. Ancient Greek literature has many references of these different types of woods.

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[1]Semantic shift may be of the following nine types: (1) narrowing, (2) widening, (3) metaphor, (4) metonymy (where meanings are near each other in space or time), (5) synecdoche (where meanings are related as whole and part), (6) hyperbole, (7) litotes, (8) degeneration, and (9) elevation.

[2]1. Semantic 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'. Semantic change may be classified into various types. A widely accepted form of classification is the one proposed by Bloomfield (1933) that involves semantic narrowing, semantic widening, metaphor, metonymy, synecdoche, hyperbole, meiosis, degeneration and elevation.

2. The four most common changes when it comes to semantic change are the following:
- Broadening, the restrictions associated with the word are lost, the meaning hence goes from a more concrete to a more abstract sense and the meaning of the word increases, becoming less specific.
- Narrowing, the meaning goes from a more abstract to a more concrete sense hence becoming more restricted and specific in its use.
- Metaphor, when a word extends its meaning and keeps a semantic similarity or connection with both the original sense and the new sense. The new sense of the word gets put in a new sphere but there is still a connection to the original sense of the word.
- Metonym, the meaning increases its senses by including closely associated senses very near to its original meaning.

Semantic loans are another type of semantic change and refer to when a word broadens its meanings as a consequence of association with a meaning of a similar word in a different

Teak Wood

The word 'δοκῶν' means teakwood which is called as 'thekku' in Tamil (Kay 1995)[3].

> where the beauty of the forest is ruined,
> ……….the sun's harsh rays have dried
> ……….the tall tree branches of teak trees
> ……….growing dense on the mountains,
> Akanānūru 143, Ālampēri Sāthanār
> Sanga Ilakkiam
> (Tamil Virtual University 1995)

This Tamil word when written in English as 'teak' has homographs but not homophones. The letters which are placed in the middle, 'e' and 'a' are pronounced as second letter 'e' in the telephone and second letter 'a' in the 'take' in Tamil language. In English it is pronounced as fourth and second letter 'e' as that used in the word telephone and third letter 'a' as that pronounced in the word 'tea'. The above details are picturized and shown in Figure 5.

Figure 5. *Teak Wood*

The suffix 'ku' is a coinage of some of the South Asian languages (Kay 1995)[4]. This teak wood is light weight, smooth and durable. So the Greeks imported this wood from Tamil Nadu and made for bearing-beam, main beam, especially used as roof or floor of a house.

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language. The two terms might be historically related or similar to each other, it is therefore difficult to establish whether it is a coincidental semantic development or a semantic borrowing.

[3]Speakers of one language often have difficulty in reproducing the sounds of another language which do not exist in their own. The borrowing of lexical items containing such sounds usually entails adaptation of their pronunciation.

[4]**English**   **Japanese**
  teacup   tikappu
  disk   disuku
  fax   fakkusu

175σειρὴν δὲ πλεκτὴν ἐξ αὐτοῦ πειρήναντε κίον᾽ ἀν᾽ ὑψηλὴν ἐρύσαι πελάσαι τε **δοκοῖσιν**, Od. 22. 176	(175) then make fast to his body a twisted rope, and hoist him up the tall pillar, till you bring him near the roof-beams, that he may keep alive long,.. (Murray 1919)
190εὖ μάλ᾽ ἀποστρέψαντε διαμπερές, ὡς ἐκέλευσεν υἱὸς Λαέρταο, πολύτλας δῖος Ὀδυσσεύς: σειρὴν δὲ πλεκτὴν ἐξ αὐτοῦ πειρήναντε κίον᾽ ἀν᾽ ὑψηλὴν ἔρυσαν πέλασάν τε **δοκοῖσι**. Od. 22.	[190] binding them firmly behind his back, as the son of Laertes bade them, the much enduring, goodly Odysseus; and they made fast to his body a twisted rope, and hoisted him up the tall pillar, till they brought him near the roof-beams. (Murray 1919)
οἳ δ᾽ ὥς θ᾽ ἡμίονοι κρατερὸν μένος ἀμφιβαλόντες ἕλκωσ᾽ ἐξ ὄρεος κατὰ παιπαλόεσσαν ἀταρπὸν ἢ **δοκὸν** ἠὲ δόρυ μέγα νήϊον: ἐν δέ τε θυμὸς 745τείρεθ᾽ ὁμοῦ καμάτῳ τε καὶ ἱδρῷ σπευδόντεσσιν: Il. 17. 744	But as mules that, putting forth on either side their great strength, drag forth from the mountain down a rugged path a beam haply, or a great ship-timber, and within them their hearts (Murray 1924)

Thus the teak wood was used for making pillar as mentioned in the ancient Greek literature. The other wood which was mentioned along with this teak wood in the sea trade was sandalwood.

Sandalwood

The Greek name for sandalwood is 'σανταλίνων' and the root of this word is believed to have been obtained from the Old French sandale or medieval Latin sandalum or Late Greek santalon, ultimately from Sanskrit *čandana-m* 'the sandalwood tree'. Perhaps literally this wood is used for burning incense, related to *candrah* 'shining, glowing,' and cognate with Latin candere 'to shine, glow' (Skeat 2005). Its scientific name is Santalum album. Thus the root of this word is related to Sanskrit language. There is one translation of the Greek epic Odyssey which has mentioned the use of sandalwood.

πῦρ μὲν ἐπ᾽ ἐσχαρόφιν μέγα καίετο, τηλόσε δ᾽ ὀδμὴ 60 κέδρου τ᾽ εὐκεάτοιο θύου τ᾽ ἀνὰ νῆσον ὀδώδει δαιομένων: ἡ δ᾽ ἔνδον ἀοιδιάουσ᾽ ὀπὶ καλῇ ἱστὸν ἐποιχομένη χρυσείῃ κερκίδ᾽ ὕφαινεν. Od.5.2.60	A great fire was burning on the hearth, and from afar over the isle there was a fragrance [60] of cleft cedar and juniper, as they burned; (Murray 1919)	There was a large fire burning on the hearth, and one could smell from far the fragrant reek of burning **cedar and sandal wood**. (Butler 1900)

Thus there are two translations - 'cedar and juniper', and 'cedar and sandalwood'. Here the translation as 'sandalwood' is more questionable. It can be

said that before the 'Periplus of the Eritheranian Sea' of the first century CE, there was no reference about sandalwood in ancient Greek literature. At the same time there are references to teak wood which was imported along with the sandalwood. There is a probability that the sandalwood is referred by other names in ancient Greek literatures. So there is a need to know the use of sandalwood in other literatures. The literatures of Hebrew and Tamil have some references to sandalwood.

'Almuggim -אַלְמֻגִּים' in Hebrew

Hebrew Bible (Waugh and Mason 1832) mentioned a wood called 'Almuggim -אַלְמֻגִּים'. There is difference of opinions[5] among the scholars in identifing this wood due to its foreign origin. The scholars suggested more than ten different woods for the meaning of the word almug as given in Table 1.

Table 1. *Different Ways of Understanding Almug*

S. No.	Almug Tree	Use	Place	Scholar
1.	Juniper			
2.	Wrought wood			
3.	Gummy wood		Arabic and Persian	Dr. Lee Hiller
4.	Unknown wood			Michaelis
5.	Cypress tree	For violins, harpsichords, and other stringed instruments.	Italy and other places	Dr. Shaw
6.	Thyiuaa wood (Thuya artictdata)	Used it for doors of temples, tables	North of Africa, and is not found in Asia	
7.	Cedar			Dr. Hooker
8.	Arabic albaccam, bukhum wood	Of a deep red color, used in dyeing		Rabbins
9.	Pine - fig-tree, but were whiter and more shining			Josephua

Besides the above a few scholars suggest this wood as sandalwood that was imported from India.

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[5]The same author enumerates not fewer than fifteen different trees, each one of which has been supposed to have a claim to represent the algum or almug-tree of Scripture (Hackett 1872, p. 65).

'And it is quite impossible to arrive at any conclusion in the attempt to identify the *almug or almug-tree*. The arguments, however, are more in favour of the red *sandal-wood* than of any other tree' (Smith 1872).

Thus the scholars finally arrived at a temporary conclusion about this almug as sandalwood and also attested that this wood probably might be imported from India. Here it is noted that there is no reference about the import of teak wood in Hebrew.

Indian Usage

Though there are varied opinions in the identification of the almug wood, majority of the scholars momentarily accepted that the almug wood be sandalwood belongs to India. The European scholars Lassen and Max Miller have done research in Sanskrit language and arrived at some hypothesis.

Lassen tried to support the translation almug with Sanskrit valgu or valguka (Ritter, Erdkunde, Indische Alterthumskunde). Max Miller argued that Sanskrit valgu(m) was corrupted first to almug and then to almug (Muller 1861).

Thus Lassen and Max Miller have seen some resemblance between the Hebrew almug and Sanskrit valgu. But this hypothesis was denied by the other scholar named Walter Eugene Clark.

'The Sanskrit word valgu means 'beautiful,' and it is never applied to sandalwood. As a noun [and that only in late lexicons] the only meaning the word has is goat. The derivative valguka beautiful is given the meaning sandalwood only in late Lexicons (Clark 1920, p. 107).

And he continued to underestand the relationship between the Sanskrit people and the sandalwood.

'The earliest Sanskrit word for sandalwood is candana, found first in Yaska's Nirukta which belongs to the later years and Sandalwood is unknown to the people of Rig Veda (Ralph 1896, Clark 1920, p. 107).

Thus, there is no availability of resources about sandalwood or Hebrew almug wood in the Indian classical language Sanskrit. So there is need to shift over to another classical language Tamil.

The Usage of Sandalwood in Tamil

There are many references to sandalwood in the classical language Tamil especially in Sangam literature (Pugazhendhi 2020a, p. 188).[6]

The mountain dwellers *[Kuraver]* who wear
hemp fiber clothes have peeled the
the barks of *agil* sandal trees in
ignorance, wilting and ruining them
Natrinai 64, Ulōchanār, Sangam literature (Tamil Virtual University 1995)

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[6]According to a research on ancient Greek literature which is related with Atti and Cybilie, the era of the Tamil Sangam literature goes up to 1200 BC.

Here the Tamil word 'agil'[7] means sandalwood. This has total resemblance with the Hebrew word almug. So it proves the hypothesis that the Hebrew almug is sandalwood (Mateer 1871). Further there are references in Tamil to show the much availability of sandalwood. It is also used even for cooking.

> and cooks and eats meat on a fire lit with agil sandalwood!
> Akanānūru 172, Mathurai Pālāsiriyar Nappālanār
> Sangam literature
> (Tamil Virtual University 1995)

This ensures the import of agil or almug from Tamil land to Hebrew land.

Use of Agil Wood

The classical literatures of Tamil show the two ways of using agil wood.

1. Burning
2. Pasting

Burning

Agil wood is used for its fragrance and medicinal value. It is used for drying the hair by burning.

> Women do not decorate their hair with
> fresh flower strands.
> To wear a few flowers on their thick, dark
> hair, they started fires with cool, fragrant
> thakaram twigs and burned dense, black
> akil wood along with candied sugar.
> 53-56, Nedunalvādai, Sangam literature (Tamil Virtual University 1995)

This reference is picturized and shown in Figure 6.

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[7]Therefore we have brought an offering for Yahweh every man what found of ornaments of gold armlets and bracelets and signet rings and earrings ['ā-ḡîl - עֲגִיל] and necklaces to make atonement for ourselves. The borders of the city with great fame before Yahweh Numbers 31:50 (Briggs 2006). So it is possible the Hebrew might made the earrings with the sandalwood and named as its original name as Agil [עֲגִיל].

Figure 6. *Sandalwood and Hair Dryer*

Thus, the agil wood was used as a source of fragrance and also used for drying the long hair of Tamil women. Here it is used not only for the drying needs, but also for fragrance and medicinal value. The smoke of the sandalwood kills the lie and other small insects in the long thick hair. Besides it has the antiseptic property. It dries the hair and makes the body cool. For these multiple purposes the Tamil women use the sandalwood that is mentioned in the classical literature of Tamil. Burning the sandalwood is one time use. As this wood was brought from Tamil Nadu to Hebrew after a very long sea voyage (once in three years), rules out the possibility of it being used for burning. So it leads us to understand the other way of using the agil sandalwood.

Pasting

Even today a paste is made with the agil sandalwood in Tamil Nadu. It was also attested in the classical literatures of Tamil. By rubbing the sandalwood with the same wood or stone, an agil sandalwood paste will be ready. The method of preparing the paste is picturized in Figure 7.

Figure 7. *Sandalwood Paste*

Traditional way of preparing Sandalwood Paste

The body of the ancient Tamil people who participated in the war were anointed with this paste as antiseptic cream.

> Many elephants died attacked by arrows, unable to perform
> their war duties! Many fine horses of renown have died
> along with warriors of martial courage. All the wise warriors
> who came in chariots have died, shields covering their eyes.
> The respected drums of kings, tied tightly with straps,
> hair on the eyes, lay abandoned with no one to carry them.
> *Chests of kings smeared with sandal paste* have been pierced
> by long spears as they fought and died in the battlefield.
> Puranam 63, Poet Paranar sang for Chēramān Kudakkō Nedunchēralāthan and Chōlan Verpahratakkai Peruviral Killi, Sangam literature (Tamil Virtual University 1995)

> ………….The spear
> thrown by the great king in rage pierced the *sandal-smeared*
> *chest* of my lord, who plucked the weapon, lifted and threw
> it back, the elephants of his enemies showed their
> backs and ran away, and their naive females with sparse hair
> on their heads were ashamed.
> Puranānūru 308, Poet: Kōvūr Kilār. Sangam literature (Tamil Virtual University 1995)

This paste is called as sāndhu or sāntham in Tamil. The persons who were anointed with this sāndhu were liked by the Tamil ladies as it was the symbol of bravery.

> Mother, may you live long!
> I am requesting you to listen!
> Your daughter with sorrow
> does not drink milk.
> You asked me why she is pale.
> I don't understand the reason
> clearly.
> The other day, when we went with
> our friends to pluck vēngai flowers
> on tree branches with clusters,
> in the slopes dense with flowers
> we heard loud words, "tiger, tiger."
> A man came wearing a garland with
> bright red waterlilies that resemble
> the eyes of women, strung with a needle,
> a strand of vetchi flowers on one side
> of his head, and red sandal paste that
> attracts young women to his chest,
> holding a decorated bow and arrow
> and appeared to be skilled.
> "Did you see a tiger come this way?"

he asked.
On seeing him, we stood behind each other
hiding our bodies in shyness.
"O naïve young women with five-part braids,
pretty foreheads and dark, oiled hair!
Would your mouths utter lies?" he asked.
His eyes met your daughter's kohl-lined
eyes as he looked at her many times after they
exchanged looks. Then he left,
the lord of the mountain, who had stopped the
swift horses hitched to his chariot. It was
twilight time when the sun went down, and
she looked at the direction that he disappeared,
and said, "He is a fine man, my friend."
Only those who have intelligence
can understand the principle of this event!
Akanānūru 48, Thankāl Mudakotranār, Sanga Ilakkiam (Tamil Virtual University 1995)

This reference is picturized and shown in Figure 8.

Figure 8. *Paste of the Sandalwood*

Thus, the classical literature of Tamil arrives at three important notions.

1. The agil sandalwood was used in the form of paste.
2. It was called as sāndhu or sāntham.
3. It was anointed by the soldiers who took part in the war.
4. They were liked by the women as a symbol of bravery.

The same use of the wood as in Tamil should be seen in Greek literatures.

The Usage of Wood in Greek

Ancient Greek literature does not mention about the use of sandalwood. The Greek literatures mentioned the use of the word κεράτων that is similar to the use of the wood resembling sandalwood the same is mentioned in Tamil literature.

Κεράτων

This wood is translated and understood as cedar wood (tree of genus Cedrus or Juniperus). Ancient Greek literature mentions about the use of this wood.

Fragrant

'κέδρινον' was used as fragrant.

190ὁπλίσαι ἠνώγει, πείρινθα δὲ δῆσαι ἐπ᾽ αὐτῆς. αὐτὸς δ᾽ ἐς θάλαμον κατεβήσετο κηώεντα **κέδρινον** ὑψόροφον, ὃς γλήνεα πολλὰ κεχάνδει: ἐς δ᾽ ἄλοχον Ἑκάβην ἐκαλέσσατο φώνησέν τε: Il. 24. 192	And himself he went down to the vaulted treasure-chamber, fragrant of cedar wood and high of roof, that held jewels full many: and he called to him Hecabe his wife, and spake (Murray 1924)

In the same way it is mentioned in other places.

ἤκουσαν, ὕδασι ποταμίοις λευκὸν χρόα 160ἐλούσατ᾽, ἐκ δ᾽ ἑλοῦσα **κεδρίνων** δόμων ἐσθῆτα κόσμον τ᾽ εὐπρεπῶς ἠσκήσατο, καὶ στᾶσα πρόσθεν Ἑστίας κατηύξατο: Eur. Alc. 160	When she learned that the fated day had come, she bathed her pale skin in flowing water, (160) and taking her finery from its chambers of cedar she dressed herself becomingly (Kovacs 1994)

Wood for Burial

This wood was used for buring the body.

365ἐν ταῖσιν αὐταῖς γάρ μ᾽ ἐπισκήψω **κέδροις** σοὶ τούσδε θεῖναι πλευρά τ᾽ ἐκτεῖναι πέλας Eur. Alc. 365	(365) For I shall command my children here to bury me in the same coffin with you and to lay out my body next to yours. (Kovacs 1994)

In the same way it is seen in other places.

1140μήτηρ νεκροῦ τοῦδ᾽ Ἀνδρομάχη, λύπας ὁρᾶν, ἀλλ᾽ ἀντὶ **κέδρου** περιβόλων τε λαΐνων ἐν τῇδε θάψαι παῖδα: σὰς δ᾽ ἐς ὠλένας δοῦναι, Eur. Tro. 1141	(1140) the mother of this corpse, would be wed, a bitter sight to her, but let her bury the child in it instead of in a coffin of **cedar** or a tomb of stone,… (Coleridge 1891)

Medicinal Oil

It also used for the preservation of the dead body.

οὕτω μὲν τοὺς τὰ πολυτελέστατα σκευάζουσι νεκρούς, τοὺς δὲ τὰ μέσα βουλομένους τὴν δὲ πολυτελείην φεύγοντας σκευάζουσι ὧδε:
[2] ἐπεὰν τοὺς κλυστῆρας πλήσωνται τοῦ ἀπὸ **κέδρου** ἀλείφατος γινομένου, ἐν ὧν ἔπλησαν τοῦ νεκροῦ τὴν κοιλίην, οὔτε ἀναταμόντες αὐτὸν οὔτε ἐξελόντες τὴν νηδύν, κατὰ δὲ τὴν ἔδρην ἐσηθήσαντες καὶ ἐπιλαβόντες τὸ κλύσμα τῆς ὀπίσω ὁδοῦ ταριχεύουσι τὰς προκειμένας ἡμέρας, τῇ δὲ τελευταίῃ ἐξιεῖσι ἐκ τῆς κοιλίης τὴν **κεδρίην** τὴν ἐσῆκαν πρότερον.
Hdt.2.87

That is how they prepare the dead in the most costly way;1 those who want the middle way and shun the costly, they prepare as follows. (2) The embalmers charge their syringes with cedar oil and fill the belly of the dead man with it, without making a cut or removing the intestines, but injecting the fluid through the anus and preventing it from running out; then they embalm the body for the appointed days; on the last day they drain the belly of the **cedar oil** which they put in before. (Godley 1920)

These references show that the word κέδρου that means cedar was used as fragrance, burning the dead body and as medicinal oil. Thus the word 'σανταλίνων' is mentioned for the first time in the middle of the first century CE. But Greeks might have used the same even before the middle of the first century CE. They might have used the word cedar – κέδρου to refer sandalwood. In ancient Tamil literature, it is important to see the use of the wood κέδρου - cedar.

Kadampam

The ancient Tamil literature mentioned a tree called Kadampam. This wood is famous for its fragrant flowers.

like the colorful, fragrant Kadampam flowers
- Line 203, Perumpānātruppadai
Sanga Ilakkiam
(Tamil Virtual University 1995)

Like garlands that are tied
around a thick Kadampam tree
- Line 176-77, Kurinjippāttu
Sanga Ilakkiam
(Tamil Virtual University 1995)

who wore a rainy season's fragrant Kadampam
flower garland
- Natrinai 34, Piramasāri
Sanga Ilakkiam
(Tamil Virtual University 1995)

Like the warriors of Murukan who killed
Soor, who wear garlands with green kadampam leaves with
the fragrance of the monsoon
Sanga Ilakkiam
(Tamil Virtual University 1995)

This tree has an important role in the war.

Oh King filled with great rage! Your soldiers with swords
slay those who oppose you, seize the lands of their kith and
kin, cut down their sacred kadampam trees, and cause
enemy kings in all four directions
- Pathitruppathu 12, Poet: Kumattūr Kannanār
Sanga Ilakkiam
(Tamil Virtual University 1995)

This Kadampam has played an important role especially in the sea war.

who rode the seas and chopped the sacred
Kadampam tree of his enemy
- Akanānūru 127, Māmoolanār
Sanga Ilakkiam
(Tamil Virtual University 1995)

that king Chēralāthan
………. with a very huge army made after
……….cutting down the sacred kadampam
……….tree of his enemy, riding into the
………. ocean
- Akanānūru 347, Māmoolanār
Sanga Ilakkiam
(Tamil Virtual University 1995)

If you ask me who my king is, I can tell you that he is the brave
Nedunchēralāthan who goes with rage to islands in the wide
ocean and cuts down the sacred kadampam trees of his enemies.
- Pathitruppathu 20, Kumattūr Kannanār
Sanga Ilakkiam
(Tamil Virtual University 1995)

It was also used to make war drums.

You sailed the oceans with swaying waves and fine sprays,
won victories over your enemy king, cut down his sacred
kadampam tree and made a huge, victorious battle drum.
- Pathitruppathu 17, Kumattūr Kannanār
Sanga Ilakkiam
(Tamil Virtual University 1995)
who sent warriors who cut

down totally your enemy's flower-filled sacred kadampam
tree, the one honored and protected by many, and made a
roaring battle drum with its wood.
- Pathitruppathu 11, Kumattūr Kannanār
Sanga Ilakkiam
(Tamil Virtual University 1995)

Thus the fragrance of the tree and its place in the sea war are mentioned in
Tamil literature. Besides, it was also used to make musical instruments for war.

Almug Wood Hebrew Biblical

The Hebrew Biblical sources explain usage of the almug wood.

And the king made of the *almug trees [מִסְעָד mis·'āḏ]* for the house of the LORD and
for the king's house harps also and psalteries for singers there came no such almug
trees nor were seen unto this day.
1 Kings 10:12 (Briggs 2006)

Thus, an object named [מִסְעָד mis·'āḏ] was made by almug (Briggs 2006).
There is difference of opinions in understanding this object given in Table 2.

Table 2. *Timber and its Use*

S. No.	מִסְעָד (mis·'āḏ) translation	Translator	Notes
1.	supports for the temple	New International Version, International Standard Version, NET Bible, God's Word Translation	
2.	supports for the house	English Standard Version, New American Standard Bible Young's Literal Translation	
3.	railings for the Temple	New Living Translation, Douay-Rheims Bible	
4.	railings in the Temple	Good News Translation	
5.	steps for the house	Berean Study Bible, New King James Version, Christian Standard Bible, Holman Christian Standard Bible	
6.	pillars for the house	King James Bible, New Heart English Bible, JPS Tanakh 1917, King James 2000 Bible, American King James Version, American Standard Version, English Revised Version, Webster's Bible Translation, World English Bible	
7.	buttresses of the house	Brenton Septuagint Translation	
8.	balustrade	Darby Bible Translation	

Thus the object is understood as the one that gives support to the building or steps for the building. It is also continued in 2 Chronicles 9:11 (Briggs 2006).

> The king made the almug [hā·'al·gūm·mîm הָאַלְגּוּמִּים] wood into [mə·sil·lō·wṯ מְסִלּוֹת] for the house of the LORD and for the king's palace, and into lyres [wə·ḵin·nō·rō·wṯ וְכִנֹּרוֹת] and harps [ū·nə·ḇā·lîm וּנְבָלִים] for the singers. Never before had anything like them been seen in the land of Judah. 2 Chronicles 9:11(Briggs 2006)

Thus, in Hebrew the properties of the Teak wood and kadampam κέδροις wood are marked in the name of sandalwood. There is no medicinal use of sandalwood marked in Hebrew in the same name. So there is a need to research on the medicinal thoughts mentioned in Hebrew literature.

sam [סַם]

In Hebrew a type of oil or spices are called as sam [סַם]. It is also related to blood for antiseptic.

> Then washed I thee with water yea I thoroughly washed away thy blood from thee and I anointed thee with oil [baš-šā-men. - בַּשָּׁמֶן:]
> Ezekiel 16:9 (Briggs 2006)

> From the sole of the foot even unto the head there is no soundness in it but wounds and bruises and putrefying sores they have not been closed neither bound up neither mollified with ointment [baš-šā-men - בַּשָּׁמֶן:]
> Isaiah 1:6 (Briggs 2006)

This oil is portrayed in the Hebrew community.

> And Hezekiah hearkened unto them and shewed them all the house of his precious things the silver and the gold and the spices [hab-bə-śā-mîm - הַבְּשָׂמִים] and the precious ointment [še-men - שֶׁמֶן] and all the house of his armour and all that was found in his treasures there was nothing in his house nor in all his dominion that Hezekiah shewed them not
> 2 Kings 20:13 (Briggs 2006)

The persons who were anointed with this were liked by ladies.

> Because of the savour of thy good ointments thy name is as ointment [še-men - שֶׁמֶן] poured forth therefore do the virgins love thee
> Song of Solomon 1:3 (Briggs 2006)

Thus, the Tamil agil sandalwood called sāndhu or sāntham is related to sam [סַם] of Hebrew. This is the root of the Greek word Σανταλόξυλο (santalóxylo) means sandalwood. These references belong to ancient era where the people of Sanskrit do not know about sandalwood. So it clearly shows the name sandalwood is derived only from Tamil language and not from Sanskrit language as the present etymologists think.

There were three woods - 'σανταλίνων καὶ δοκῶν καὶ κεράτων' were in the sea trade. They have different properties. There were some semantic shifts that have taken place between these three woods due to the long journey of the sea trade made by people in groups. The time factor and distance factor are reasons for the semantic shift (Boukhaled et al. 2019, Kim 2014)[8]. It is according to the linguistic law of parallel change (Stern 1921, Lehrer 1985)[9]. Here it is noted that the Hebrew Biblical word almug wood was used for making pillar, path way and musical instruments. In Greek, teak wood was used for making pillar, path way and in Tamil the kadampam cedar wood used for making musical instruments. In Hebrew Bible there is no reference about teak and cedar wood. For this reason Dr. Hooker related the almug wood with cedar wood and not with sandalwood. So these upscurity shows the possibility of Hebrew Bible word almug had a semantic broadening (Eyal 2009, Bybee 2007, Deligiorgi 2015)[10] in Hebrew language that includes teak, cedar and sandalwood, imported in group[11]. This is a type of Trinary change (Cheng 1981)[12] that achieves semantic stability (Raffelsiefen 1998)[13].

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[8]From a technical point of view, one can computationally examine the degree of semantic change using two different measures. The first one, known as the global measure, simply consists in computing the cosine distance between a given words vectors from two consecutive decades and the bigger the distance, the higher the semantic change.

[9]1. The second law is the law of parallel change, which proposes that words with related meanings tend to change in similar ways over time

2. the law of differentiation, which dictates that synonyms tend to differentiate in meaning over time; the law of parallel change, which observes that related words tend to undergo parallel changes; the law of innovation, which holds that polysemous words tend to have higher rates of semantic change; and the law of conformity, which prescribes an inverse power-law relationship between word frequency and rate of semantic change.

3. Colexification can be described as "the capacity, for two senses, to be lexified by the same lexeme in synchrony" and "a given language is said to colexify two functionally distinct senses if, and only if, it can associate them with the same lexical form".

[10]1. This is a process where the meaning of a word becomes more general or more inclusive than its historically earlier form. It is also known as generalization, widening or extension where the word increases its range of meaning over time. For instance in English, the word 'horn' initially referred to 'a protrusion on the heads of certain animal's', but its meaning then broadened to include a 'musical instrument', then 'drinking vessel of a shape like a horn'. The process of semantic broadening also takes place during the process of borrowing L1 language words into L2 language words, where certain L2 loans take on extra meanings that were not in the original L1 word.

2. Broadening (generalization, extension, borrowing): A restricted meaning becomes less restricted (e.g.. Late Old English docga `a (specific) powerful breed of dog" > dog `any member of the species Canis familiaris"

3. girl originally used to denote a child of either sex, but since the 15th century only refers to a young female

4. the conditioned relations are the ones which are found during the semantic origin in the formation of the semantic units, i.e. in the circle of the polysemous words, as well as the semantic relations among the words into one word-formation network, etc…..B. The conditioned relations are also interesting in the semantic relations of the Greek borrowings into Albanian, which are found in two main unit groups. Generally, the words are borrowed in one meaning, in the main or the first one. During the lifespan of the respective word, through the syntagmatic relations, some new meanings are created which are connected directly or indirectly semantically with the first meaning of the borrowed word……

[11]**Metonym** - This refers to a word that is used in sense other than its actual meaning, but it has only one actual meaning and the employment of such a word in other senses in due to the fact

Thus the uses and the names get transformed among these three woods - 'σανταλίνων καὶ δοκῶν καὶ κεράτων' as they were imported together (Liebesman 2018, Valera 2017)[14]. Apart from its semantic shifts and semantic broadening, the Greek word 'σανταλίνων' or English word 'sandalwood' and the Hebrew Biblical word 'almug' and 'sam' are maintaining their roots with 'Agil' and 'Santhu' of Tamil language. The above thoughts are picturized and shown in Figures 9 and 10.

Figure 9. *Timber and Words*

Figure 10. *Timber and Meanings*
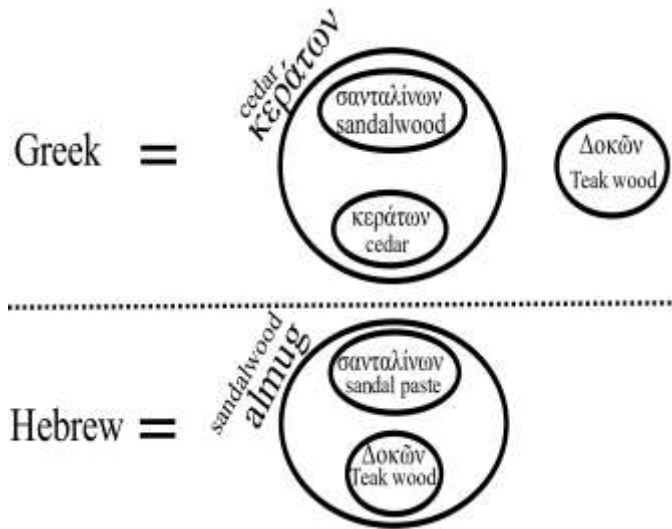
Conclusion

The three woods σανταλίνων, δοκῶν and κεράτων have been transported through sea trade from the Tamil land to the Greek and Hebrew lands. The pronunciation and the forms of these words might have changed because of the geographical distance between the places of migration and the nature of the imported languages. The word sandalwood is denoted by σανταλίνων might be mentioned with the use of κεράτων in Greek and the use of δοκῶν and κεράτων mentioned with the word almug (σανταλίνων) in Hebrew. Thus the words for sandalwood in Greek and Hebrew languages have semantic shift and broadening. The solid (wood) form of σανταλίνων is called as 'agil' in Tamil and is mentioned as 'almug' in Hebrew. The paste form of Sandal is called as 'sandhu' in Tamil and is mentioned as 'σαντα' in Greek and 'sam [סם]' in Hebrew. Thus it is seen that the Tamil word for sandalwood has been borrowed into both the languages, Greek and Hebrew and these languages could possibly have more words whose roots are derived from Tamil language.

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Organic Archetypal Patterns in Literature: Origin, Meanings, Interpretations

By Natalya Davidko[*]

The article studies the role and functions of organic archetypal patterns based on the concept of the Tree in literary texts, to which it brings a rich variety of emotive and cultural associations. Being ontologically and epistemologically grounded in the surrounding ecosystems, organic archetypal patterns as a mode of figural modeling run through genres of different epochs and inform their content with a naturalized view of themes, motifs, and situations, which make up the fabric of a work of fiction. Literary figures of this type have their roots in mythological consciousness that at a certain level of human development was instrumental in the categorization of the world and construction of cultural codes as objectivized forms of sensory perception, as pre-discursive human cognitive activity; they have retained till today the symbolic potency of those mythic structures and religious conceptions, often hidden from an uneducated mind. We hypothesize that archetypal patterns forming meaningful connections of language with myth, religion, and art, are used by authors to ensure an integrated understanding of a particular literary piece or its part.

Keywords: *archetypal pattern, mythological consciousness, ecosystem, cultural code*

Introduction

Very often literary texts contain imagery whose message is difficult to understand for students of literature and which is completely lost on the casual reader; that is imagery in which the archetypal substratum plays a major role. Pierre Bourdieu claims: "A work of art has meaning and interest only for someone who possesses the cultural competence, that is, the code, into which it is encoded" (Bourdieu 1984, p. 2). The key to understanding cultural codes lies in unearthing archetypal latent layers and implications as far and as deep as our knowledge will go. Archetypes, being constructions through which mankind has expressed its experience of cosmos, nature, society, and history to formulate an intelligible view of the world, are an inexhaustible source for imagery which like a wellspring comes from unfathomable depth of human conscience, history and culture to acquire a configuration which meets the needs of a particular fictional situation in the works by past or modern authors. The aim of the article is to analyze organic archetypal patterns based on the concept of the Tree which has been part of our environment since year One and has been perceived as a life giving and life preserving object. The analysis of archetypal patterns can demonstrate how primeval people made sense of our biological environment and transferred environmental factors to cultural codes and how these codes have been made use of in literature and art.

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Theoretical Background

The methodology employed in the current research is Archetypal literary criticism (ALC) complemented by elements borrowed from a new paradigm of linguistic research – Ecolinguistics. ALC postulates that archetypes attach a specific form to literary content involving themes, motifs, characters, and situations and shape a unique figural style which draws on archetypes as patterns for creating literary meaning and special emotional significance. By archetypal patterns we understand "themes having a particular form or pattern" which persist amid variation from age to age (Bodkin 1934, p. 4) and become discernible when embodied in cultural material, whether it is literature or visual arts.

The notion of *Archetype* (etymologically, a compound of *arche* + *typos* signifying 'first impress') appears as a term in Frazer's social anthropology (Fraser 1890), Jungian psychology of the unconscious (Jung 1964), Frye's archetypal literary criticism (Frye 1957), Goethe's metamorphosis of plants (Goethe 2009), modern neuroaesthetics of visual arts (Mukhopadhyay 2014), political sciences and sociology (Larson 2004). Scientists define *archetypes* from different perspectives: Frazer regarded them as material artifacts; Jung as ideal elements of the "collective unconscious," a universal psyche that the humankind inherits; Frye as a few basic grammatical elements of literary expression, an organizational structural element of literature; Goethe as the primeval form of the plant to be found in the *leaf*; in sociology, archetypes are equated to cultural models or cultural canon (Neumann 1995).

The ALC theory emerged in the 1930s as a fusion of Jungian psychology and Frazer's social anthropology; it was developed and modified by the Canadian mythologist Northrop Frye with regard to literature in purely literary terms and was first applied to the analysis of literary works by Maud Bodkin in her ground-breaking book of 1934 in which she gives a sweeping picture of archetypal patterns in drama and poetry from Vigil and Dante to Shakespeare to Blake to D.H. Lawrence and V. Woolf in the vein of Jungian psychology; she comes to a conclusion that particular culture patterns through their universal elements relate to the most general conceptions of philosophical interpretations of the world (Bodkin 1934, p. 315). Due to their universality, archetypes have preserved evocative power and continue to stir emotional response in readers (Bodkin 1934, p. 8). Later, Frye applied his archetypal theory to the analysis of The Bible delineating in its text a few "species of myth" (Frye 1982), which have become the basis for recurrent imagery in literature, an underlying deep structure discernible in various narratives. According to Frye, archetypal patterns establish inter-textual connections of works removed from each other in time owing to conventional, well-established associations that have remained unchanged and recognizable throughout centuries, if not millennia. He cites such archetypes as myths of creation, of fall, of the destruction of the human race, of redemption, crucifixion, etc.

An archetype is a cognitive tool of a specific kind and a unit of mediation in communication based on archetypal references. As articulated by C. Yung, archetypes as deep-seated pre-conceptual, pre-categorial images imprinted in the "collective unconscious" provide instantaneous comprehension without resorting

to logic. They are archaic patterns that form a "nebulous dynamic substratum" of the surface structure of a literary text and act as a source for figurative thought providing a myriad of images that get specific expression in a culture in the form of archetypal events, figures/characters, and motifs (Jung 1964). It is very close to Locke's definition of signs, "which the mind makes use of for the understanding of things, or conveying its knowledge to others" (Locke 1965, p. 309). In our understanding, archetypal patterns are multidimensional, dynamic, complex entities incorporating multiple associations and significative values. The literary design and specificity of any literary work involve modification and extension of an archetypal pattern depending on the genre, the time of creation, an author's aesthetic preferences, and overarching cultural paradigm.

Since the subject matter of the current research involves natural phenomena, ALC is complemented by methodologies of Ecolinguistics, an interdisciplinary field of linguistics and environmental studies, especially from those sections which concern eco-phenomenology, studies of the relationship between ecosystems and the phenomenal world (Brown and Toadvine 2003) and expose the connections between natural elements and the mechanisms of conceptualizations and meaning-making in language, which lead to the integration of nature and culture resulting in specific cultural codes among which organic archetypes and archetypal patterns are of primary significance. Conceptualized natural elements belong to the phenomenal world, but have their roots in reality: our task is to investigate how nature is interpreted within a respective culture.

Among various forms of consciousness, mythopoeic perception of the outer world (thinking mythically) characteristic of the minds of peoples at a time when they began constructing the "meaning about the world" played a major role in apprehension of the natural and social environments and understanding of the self. It is a mode of thinking symbolically, which is opposed to the modern way of thinking based on empiricism, scientific reasoning and rationalism. As Cassirer put it, "Before man thinks in terms of logical concepts, he holds his experiences by means of clear, separate, mythical images" (Cassirer 1946, p. 37). Kantian (Kant 1988) distinction between 'phenomena', things as they appear or are represented, from 'noumena', things as they are *per se*, is not relevant for mythic consciousness as it is characterized by a holistic perception of the world and one's self in it. Mythology is considered to be the "first attempt at a knowledge of the world," (Cassirer 1946, p. 23) and myths are representations of fundamental concepts, which cannot yet be understood in the abstract but should be concretized. The human mind created a mythic reality and inhabited it with gods and supernatural beings as aesthetic configurations of elemental forces and materializations of abstract concepts, e.g., Zeus (thunder and authority), Poseidon (sea) Gaia (Earth), Aphrodite (love and beauty). The legacy of this period is rich imagery reified in multiple patterns which became a truly formative force of literary figurality and offer templates for authors who look for novel aesthetic ways to express concepts, characters, or events.

Material

The research proposes to explore the conception and evolution of archetypal patterns within the framework of human – nature relationships. Literature is the milieu in which the processes of meaning-making are made explicit, so we handled the selection of research material very seriously and included literary pieces in which archetypal patterns perform various functions and are indispensible for comprehension. The material under consideration covers a vast range of heterogeneous poetic and prosaic pieces of renown authors: Poetic Edda believed to be reaching into the Viking Age; Euripides, a classical tragedian of 5th century BC Athens; mythological writings by Ovid, a Roman poet of the 1st century BC; Guillaume de Deguileville (1295–1358), a French Cistercian and writer, the author of three Pilgrimages; Leo Tolstoy (1828–1910), the great Russian writer; John. Galsworthy (1867–1933), an English novelist and playwright, the Nobel Prize laureate; Harold B. Wright (1872–1944), a pastor at the Christian Church and an American novelist; Erich M. Remarque (1898–1970), a German novelist, creator of a new genre of war veterans writing; Elizabeth Bowen (1899–1973), an Irish-British novelist and short story writer; Daphne du Maurier (1907–1989), an English author and playwright; William Golding (1911–1993), a British novelist, playwright, and poet, the Nobel Prize winner. Virginia Woolf (1882–1941), of the most important modernist writers of the 20th century; Katherine Mansfield (1888–1923), a prominent modernist writer. Also, important sources were the Bible and Qur'an.

'Tree' Archetypes and its Patterns

Tree

The Tree is a natural object that was translated into an archetype by mythology, pagan religion and lore in the early days of human civilization because people have always felt a strong affinity with and dependence on it. A source of shelter and food, the tree symbolism informed cults existing in many countries. In cosmogony of many primitive peoples, mystic powers were assigned to trees which were reflected in their metaphoric descriptions: Cosmic Tree, World Tree, World Axis, Tree of life, Tree of Wisdom, Tree of Knowledge, Wish-fulfilling tree, trees as abodes of spirits and saints, etc. Summing up the significance of the tree culture, Juan Cirlot, a Spanish poet, art critic, mythologist and compiler of a most comprehensive dictionary of symbols, wrote: "In its most general sense the symbolism of the tree denotes the life of the cosmos, its consistence, growth, proliferation, generative and regenerative processes. … The tree becomes a symbol of absolute reality, that is of the center of the world" (Cirlot 1971, p. 347).

Certain trees were revered as sacred (the oak was sacramental to the Celts; the ash sacrosanct to the Scandinavian peoples; the sycamore to Egyptians). In Greek mythology, the highest gods Zeus and his wife Hera were known as the oak god and goddess. Laurel tree was the symbol of Apollo, who wore a laurel wreath, and

the Olive tree was the symbol of Athena.

Researchers consider that the association of god/goddess with a certain tree may be purely accidental, arising from a very ancient connexion of the worship of the tree and the worship of a deity. For example, the cults of Aphrodite and the apple-tree might have been practiced in the same locality, and a contiguity was established in the course of time, a sacred character being ascribed to the tree as an emblem of Aphrodite (Foster 1899, p. 55).

The arbour culture of Ancient Egypt was rather complicated and geographically split. The sycamore was one of the most important trees, but there were also the persea, the date palm and the acacia related to different locations. The word 'sycamore' also had the meaning 'refuge' which developed the sense 'dwellings of gods.' "Hail thou Sycamore of the eastern sky who protects the god and on whose branches the gods are" (Buhl 1947, p. 88). Another sacred tree was the acacia, a tree in which life and death were contained (Buhl 1947, p. 86). Goddesses played a great part in the tree cult. Sycamore was identified with Nut or Hathor: "Hail thou sycamore of Nut, give to me of the water and of the air which are in thee" (Buhl 1947, p. 91). Goddesses were often depicted standing among the branches of the tree (sycamore or date palm) with feet hidden in the trunk laden with fruit and covered with thick foliage.

The relationship between Man and Nature is characterized by anthropomorphism– humanization of non-human objects. Fanciful thinking created dryads (tree nymphs or tree spirits) who lived inside trees and could take the form of beautiful young women. Dryads could arouse life energy even within dead wood. The most famous myth about dryads is that of Eurydice, an oak dryad, and Orpheus, a legendary poet and musician, who, when his wife died bitten by a venomous snake, descended to the Underworld and tried to bring her back to the light, but violated the admonition, looked back, and his wife remained forever in the Underground realm.

Early religious writings also endowed trees with human features and behavior. "When Christ's fate was known, in the forest the trees held council and resolved not to lend their wood for the execution. Every tree that the ax-men tried to cut, splintered and broke, or dulled the tool with knots" (Skinner 1911, p. 193). Throughout the Bible, saints and true believers are referred to as trees. "Blessed is the man who walks not in the counsel of the wicked… He is like a tree planted by streams of water, which yields its fruit in season and whose leaf does not wither— whatever they do prospers" (NIV 1984, Psalm 1, p. 383).

Trees may be turned into people and people into trees as Ovid described in his Metamorphoses and Antonio del Pollaiuolo (1429–1498), an Italian painter and sculptor represented in his oil-on-panel painting, created between 1470 and 1480 (Figure 1). The beautiful naiad Daphne is chased by Apollo and, as she implores to be spared, her father, a river god, turns her into a Laurel tree:

> Scarce had she finish'd, when her feet she found
> Benumb'd with cold, and fasten'd to the ground:
> A filmy rind about her body grows;
> Her hair to leaves, her arms extend to boughs:

The nymph is all into a laurel gone (Ovid 1826, p. 21).

Figure 1. *Antonio del Pollaiuolo. Apollo and Daphne*

Source: Wikipedia.

Cassirer sees the ultimate roots of this myth in the depth of unrecorded time. The word Daphne signifying 'laurel' in Greek can be traced back to a Sanskrit *ahana* meaning 'the redness of dawn', thus the content of the myth becomes Apollo, the Sun god, is pursuing his bride, the dawn, who takes refuge in the bosom of her mother, the earth. An interesting turn in the interpretation of the myth based on word meanings and etymology! This is how Cassirer interprets the myth. "The story is a description of what one may observe every day: first, the appearance of the dawn light in the eastern sky, then the rising of the sun-god who hastens after his bride, then the gradual fading of the red dawn at the touch of the fiery rays" (Cassirer 1946, p. 4).

Trees are believed to be the 'progenitors of human race'. In Norse mythology, the great tree destroyed the old gods (Odin, Thor, Freyr, Loki) and the old world, but out of the trunk of the tree a man and a woman appeared, the seeds a new race. The Ancient Greeks thought that at the beginning of time *cloud-ash* was produced spawning small 'melia', which came together and created men of the Bronze Age. Meliae became nymphs of the ash tree and before women were created men married the nymphs and from them all of mankind was descended (MacPherson 2015).

In the Middle ages, in the genre-setting work *The Pilgrimage of the Life of Man* by Guillaume de Deguileville (1295–1358), we find a rare symbolic representation of the Tree as a wheel of Fortune (Figure 2), which, however, did not take root in the prospective literature, so we can classify it as an 'episodic' meaning; nevertheless, it should not be overlooked by researches as it is illustrative of how archetypal content is enriched in the hit or miss process. The

Pilgrimage is unique in many aspects: though it is expressly a religious writing, an explication of the Christian doctrine, it contains multiple allusions to the Greek mythology not characteristic of such literature.

Figure 2. *The Tree of Fortune*

Source: Guillaume de Deguileville. The Pilgrimage of Man.

In the narrative, the pilgrim travels to Jerusalem and on his way encounters many dangers, baits, personalities who happen to be deadly sins, and strange things. At the end of his journey, trying to swim across a tempestuous sea, he sees a large tree; when he approaches it, he finds himself upon a wheel, which he had not noticed before. This wheel turns with great force round the tree which is full of birds' nests placed on different branches. The tree is hollow and has a hole at the top, through which a hand with a hooked stick appears from time to time to push some nests down. At the foot, there is another hole and in it are many people, who extend their hands thriving to climb up. By the tree he meets a double-colored (half-black, half-white) woman whose name is *Fortune,* who explains to him that the nests on branches represent the great fortunes of kings, of princes, and of prelates whom *Evil Fortune* may drag down to be trampled on; *Good Fortune* may assist those who are below to mount. The wheel is one of the perils of the sea named after the Greek "*Charybdis*[1], which absorbs many by its whirl" (Deguileville 1859, p. 52). The whirling movement is *tertium comparationis* for the mythological sea whirlpool and a religious idea of punishment represented in Deguileville's story by a turning wheel.

The mythical worldview gradually developed into specifically religious consciousness. "The two are so interwoven that they can nowhere be definitely

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[1]A sea monster in Greek mythology, which dwelt in the Strait of Messina. It was later conceptualized as a whirlpool.

separated and set off from each other" (Cassirer 1955, p. 239). With the development of the leading religions, the religious deification of nature ensued. The richness of tree symbolism was absorbed by religion, especially Christianity. Parallelisms with myths are striking, however, religious tree symbolism is a system *per se*. The functions of life and knowledge are divided between two different paradisiacal trees. In the Garden of Eden, God planted The Tree of Life and the Tree of The Knowledge of Good and Evil (NIV 1984, <u>Genesis 2:9</u>, p. 2).The tree of life does not give immortality to man: he must eat constantly "of the tree of life, and live forever" (ibid., <u>Genesis 3:22</u>, p. 3). The mythological vision of the tree as a pillar supporting heaven is transferred to Christianity as the Cross of redemption, a new axis of the world based on true faith. The relationship between the Cross and the Tree of Life forms a unity between life and death: "the life and death connotations of the tree symbol, which in primitive myth had been mere polarities, are unified anagogically through Christ's Cross, the true *Lignum Vitae*[2],which is also seen as a cosmic cross, as a new world-supporting and unifying tree" (Ladner 1979, p. 238). In religious symbolism, the transgression of God' s law by the first people had made the Tree of Life bare and dry, however it was made green again by the Cross (Ladner 1979, p. 237). In Christian iconography, the canonical Tree of Life is always in bloom, the Tree of Knowledge is dry (Cirlot1971, p. 349).

Tree and Water Landscape

Most frequently, the Tree archetype is combined with another primordial archetype – Water. The combination of the two life-giving natural objects produced a complex 'Landscape' archetype informed with diverse meanings. .

The associative power of imagination tied the notion of the 'center of the world' with 'a source of all life' in the oldest archetypal pattern of a 'tree and a stream of water' running from or below its roots. The analysis of myths of the primeval periods and early religious writings of peoples living geographically far apart that excludes any cultural exchanges exposes remarkable points of similarity. The oldest myths make reference to a mysterious tree at the center of the world and a nearby stream of water which divides into four rivers flowing into the four cardinal directions (Haynes 2009). It is repeated almost word for word in the Bible: "And a river watering the garden flowed from Eden; and from thence it was separated into four headwaters" (NIV 1984, Genesis 2:10, p. 2). Mythological representations of an ordinary landscape are transformed into a religious configuration of Eden.

The juxtaposition of "the two elements of the original creation" (Frye 1982, p. 137) forms a pattern which acquires new significative and aesthetic values observed in ancient and modern religious and literary writings. Thus, the Egyptian sacred tree stands on a sort of aquarium, symbolical of the Nile. From the upper part of the tree the goddess *Nepte/Nephthys*, a river goddess and the protector of the dead, pours streams of life-giving water from a vase (Warwick 1890, p. 5). In Scandinavian mythology, the three great roots of the world tree *Yggdrasill*

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[2]Tree of life (Lat.)

"descend into the underworld realm of gods where they gather every day by the sacred spring of Fate, the *Well of Urd*, to resolve disputes. At the base of the tree is the Spring of Mirmir (Remembrance), three goddesses of Fate water the roots of the great tree night and day and on the cosmic shuttle weave the fates of men and the world" (Cook 1974, p. 12). The underground landscape is poetized in *Edda*.

> An ash I know, | Yggdrasil its name,
> With water white | is the great tree wet;
> Thence come the dews | that fall in the dales,
> Green by Urth's well |does it ever grow (Bellows 2004, Völuspá, p. 9).

The mythological pattern was translated into a religious image of Paradise combining the Tree of Life (a symbol of revival and rebirth) and a stream of clear water cleansing wickedness and sins emblematic of true faith which is carried to all parts of the world. Frye called this landscape "the oasis imagery of trees and water" (Frye 1982, p. 142).The Bible begins and ends with the description of the river and the tree: "Then the angel showed me a river of the water of life, as clear as crystal, flowing from the throne of God and of the Lamb, down the middle of the great street of the city. On each side of the river stood the tree of life, bearing twelve crops of fruit, yielding its fruit every month. And the leaves of the tree are for the healing of the nations" (NIV 1984, Revelation 22: 12, p. 879).

In the apocryphal Gospel of Pseudo-Matthew, we also find a scene, in which the tree is complemented by a stream of water. Baby Jesus asks a palm tree to give his mother some fruit. He also asks God to "open from the roots a vein of water which has been hid in the earth, and immediately, here began to come forth a spring of water exceedingly clear and cool and sparkling" (Schaff 1886, p. 622). The same scene is depicted in The Qur'an: Mary was in labors when the babe Jesus or Gabriel cried to her from below her, saying: 'Grieve not: your Lord has provided a water stream under you. And shake the trunk of the date-palm towards you, it will let fall fresh ripe dates upon you, so eat and drink and be glad!" (The Qur'an 2015, surah 19, verses 24-26, p. 344).

Archetypal Patterns in Literature

The Oasis Imagery of Trees and Water

As the textual and contextual evidence of the literary pieces analyzed suggests, the use of the pattern 'Tree and Water' forms a mythical-religious framework for narrative figuration, which may vary among literary works by different authors displaying a particular subjectivity in providing highly nuanced representations. It immerses the reader into emotional and psychological worlds of characters. Erich Maria Remarque introduces the apparition of 'poplars by a stream' in his anti-war novel *All Quiet on the Western Front* as an oasis amid the horror and the terror of war, shelling and gas attacks, squalor and hunger, blood and death, a phantom, a most cherished memory of Paul Baumer (the narrator)

about his childhood in the pre-war time. The vision from the peaceful past acquires almost Biblical significance of Paradise unattainable in war time and condemns war.

> "Between the meadows behind our town there stands a line of old poplars by a stream. They were visible from a great distance, and although they grew on one bank only, we called them the poplar avenue. ... We sat beneath them on the bank of the stream and let our feet hang in the bright, swift waters. The pure fragrance of the water and the melody of the wind in the poplars held our fancies. We loved them dearly, and the image of those days still makes my heart pause in its beating" (Remarque 1975, p. 120).

Harold Wright, once a top-selling American author, in *Their Yesterdays* gives a different dimension to the archetype informing it with the meaning of fall and redemption, to be expected from the author with a professional theological education and experience. A little brook surrounded by greenery is a recurring image throughout the narrative with a plentitude of meanings: sweet reminiscences of the childhood, ingenuousness and chasteness, moral fall and rebirth, purification etc.

The characters of the novel used to play by the brook when they were innocent little children:

> "It was only a little brook, but beautifully clear and fresh, for it had come only a short distance from its birth place in a glen under the hill. In some places, the long meadow grass almost touched above, making a cool, green, cradle arch through which the pure waters flowed with soft whispers. In other stretches, the green willows bent far over to dip their long, slim, fingers in the slow current that crept so lazily through the flickering light and shade that it seemed scarce to move at all" (Wright 1912, p. 133).

The introductory description of the brook is a metaphorical extension of the Biblical river of life and is evocative of Psalm 23, "He [the Lord – N.D.] makes me lie down in green pastures, he leads me beside quiet waters, he refreshes my soul" (NIV 1984, Psalm 23, p. 392). Life was harsh on both of them, they went through hardships, squalor, despair, and the author describes it in the following allegorical manner:

> "The little brook was a safe stream for the boy and the girl to play beside. Nor did they know, then, that their streamlet flowed on and on until it joined the river; and that the river, in its course, led it past great cities that poured into it the poisons and the filth of their sewers, fouling its bright waters, until it was unfit for children to play beside" (Wright 1912, p. 135).

In the end, the Man and the Woman meet again by the brook and reunite now forever.

> "It was in the afternoon and they were together down by the little brook, in the shade of the willows, where the stream, running lazily under the patches of light and shade, murmured drowsily seeming more than half asleep" (Wright 1912, p. 304).

The analysis of these three excerpts reveals a U-shaped narrative structure typical of religious and homiletic writings. The first one being a real landscape outside a small town, evokes paradisiacal scenery of peace and harmony; the second one allegorically describes descent into a life of sin and ordeals using the image of polluted water; the last one implicates return to pristine chastity, redemption, and ascent to absolution.

Four Apple Trees

Archetypal patterns are an operant force for plot construction and development. In English literature there are four well-known stories of the same title – *The Apple Tree*: one by John Galsworthy, another by Daphne du Maurier, still another by Elizabeth Bowen, and the other by Katherine Mansfield – all based on different archetypal patterns.

Of all kinds of trees, the Apple tree received special significance both in mythology and religion. There are two famous apple trees: the tree bearing golden apples in the Garden of Hesperides (Hera's garden) and the Forbidden Fruit from the Garden of Eden – Christian tradition holds that it was an apple tree, which got the name of the Tree of Knowledge of Good and Evil. As a result, the apple tree acquired a special status and took on symbolic significance forming a rich paradigm of meanings: beauty, love, knowledge, temptation, transgression, death, etc. All in all, Foster described forty four facets of meaning (Foster 1899).

The Tree of Aphrodite

The Apple Tree by Galsworthy is a love story: a tragic love on the part of Megan, a simple, pretty country girl, and a fleeting "rush of passion" on the part of Ashurst, a university graduate. The setting for their love is "The pool, formed by the damming of a rock, and the big apple tree," nearby (Galsworthy 1918, p. 195). The tree was "nearly twice the height and size of any other, and leaning out towards the open meadow and the stream" (Galsworthy 1918, p. 220). Nature was in blossom when their love was conceived: "apple blossoms covering the orchard as with a rose and white quilt" (Galsworthy 1918, p. 213).

The story is based on two opposing planes: one of a mythopoeic perception of the surrounding world, in which there is no distinction "between the world of dream and the world of objective reality" (Cassirer 1955, p. 36); the other is the real world of logical thinking and rationalism, in which the self is distinct from the perceived environment. The two *topoi* meet and clash at crossroads by "a suicide's grave" of a girl Ashurst knew and was infatuated with a quarter of a century ago. Megan seemed to Ashurst "the living unearthly beauty of the apple blossom" (Galsworthy 1918, p. 224). But when he left the village, everything – even Megan – became unreal. "Had he really made love to her—really promised to take her away to live with him? He must have been bewitched by the spring, the night, the apple blossom!" (Galsworthy 1918, p. 241). He never came back, and Megan drowned herself in the shallow pool close to the big apple tree, in which it was impossible to be drowned as the ancient poet articulated it, "to lose the Love and

the Pain forever" (Euripides 1902, p. 40); it was June then, but she had found a sprig of apple-blossom left over somewhere, and stuck it in her hair (Galsworthy 1918, p. 256).

The story is saturated with imagery creating a highly emotional reading. A conceptual focus of the narrative is the Apple Tree, the tree of Aphrodite emblematizing not only beauty and love but also discord and death (Littlewood 1968). The tree belongs both to the imaginary and real worlds and evokes symbolic resonance with Grecian myths and poetry. The meetings under the Apple tree take place in the nebulous light of the Moon. This nebulosity is emphasized by Ashurst's imagination and his infatuation with Grecian mythology. He constructed an imaginary world around himself relying on ancient Greek symbols. The orchard looks to him like the garden of the Hesperides surrounded by Assyrian-looking masses of the rocks. "In such a spot as this, fauns and dryads surely lived; nymphs, white as the crab-apple blossom, retired within those trees; fauns, brown as the dead bracken, with pointed ears, lay in wait for them" (Galsworthy 1918, p. 219) "All was unearthly here, fit for no earthly lovers; fit only for god and goddess, faun and nymph not for him and this little country girl" (Galsworthy 1918, p. 221) "And sometimes spring will come alive, and, like a mysterious Presence stand, encircling lovers with its arms, laying on them the fingers of enchantment" (Galsworthy 1918, p. 222). To him, Megan was all simple Nature and beauty, as much a part of this spring night as was the living apple blossom.

Water is an ever present element in the story marking landmark events in the plot development. It starts with the pool of clear water with a sandy bottom where Ashurst bathed on his arrival, the scene alluding to baptism by water, a spiritual bath for a person to be cleansed of all superficial and be brought back to his natural self; the pool that turned into the water of death for Megan. Besides, other sources of water are mentioned: little streams which were "very bright and full of burbling and whispering in spring" (Galsworthy 1918, p. 220); a pool in the cave at the edge of which he saw Stella (his future wife) and was infatuated by her looks; the sea water in whose depth Ashurst's friend was nearly drowned.

The most potent symbolic image arousing many associative links and echoes is the Apple tree sung by Euripides in *Hippolytus* and used by Galsworthy as a device providing coherence and comprehension for the narration. The story bookends with the line from Euripides: "The Apple-tree, the singing and the gold." The line refers to the Garden of the Hesperides (Daughters of Sunset), which marked the utmost limit to which man might travel; beyond it there is nothingness.

> Yea, beyond that Pillar of the End
> That Atlas guardeth, would I wend
> Where a voice of living waters never ceaseth
> In God's quiet garden by the sea (Euripides 1902, p. 39).

In Euripides' tragedy the line is pronounced by a chorus as Phaedra, a Cretan princess and the wife of Theseus, is about to kill herself after being rejected by her stepson Hippolytus with whom she has fallen in love. Parallelism is obvious: forgotten by Ashurst, Megan reached her limit. Caught in "a noose of death," she carries out her desperate plan.

Ashurst's guilty conscience is seeking justification and finds it in the numinous: the vengeful goddess of Love is simply taking her toll. The motif of impossibility to escape from tragic love is emphatically pronounced in *Hippolytus*:

> All life that is wild and young
> In mountain and wave and stream,
> All that of earth is sprung,
> Or breathes in the red sunbeam
> Yea, and Mankind. O'er all a royal throne,
> Cyprian, Cyprian, is thine alone! (Euripides 1902, p. 66).

This wishful thinking has nothing to do with reality with which Ashurst cannot come to grips; the famous words reveal the harsh truth of the ruined life and love lost. "All his life he felt that there was something wanting, he longed for something he knew not what, there was always a hankering, and sense of waste" (Galsworthy 1918, p. 188). The final resolution of this tension comes via the symbol of the garden with the apple tree: the mythical garden of Hesperides turns into paradisiacal Eden lost for Ashurst. "There could be no garden of his choosing, of 'the Apple-tree, the singing, and the gold,' no achievable Elysium in life, or lasting haven of happiness. ... And a sudden ache beset his heart; he had stumbled on just one of those past moments in his life, whose beauty and rapture he had failed to arrest, whose wings had fluttered away into the unknown; he had stumbled on a buried memory, a wild sweet time, swiftly choked and ended" (Galsworthy 1918, pp. 189−190). He understood what was lacking in his life – sincerity, emotional bond, and true love.

The writer creates his fictional world by blending the real world and natural environment with metaphorically represented, long gone world of Greek myths existing now at the level of symbols and archetypes, revived by the author, who makes skillful use of the archetypal pattern and establishes intertextual links with the ancient poem where the apple tree is one of the motives.

Tree as Abode of Souls

Quite a different pattern with a touch of the supernatural underlies and directs the plot of *The Apple Tree* by Daphne du Maurier. It draws on old beliefs that human souls can transmigrate after death into trees. At the beginning of the story, one morning, three months after his wife's death, the main character Buzz sees a tree which has always been there and unconsciously connects the old, crooked apple tree with his late wife Midge; in the shape of the tree he sees Midge's usual posture. "It was a trick of the light perhaps. … the likeness was unmistakable. That martyred bent position, the stooping top, the weary branches, the few withered leaves like wispy hair; all of it protested soundlessly to the owner of the garden" (du Maurier 2004, p. 114). There is a young tree growing to the right of the old one, standing straight and firm, the lithe young branches lifted to the sky; in his imagination, this tree is associated with a farm girl he once kissed, whose skin felt "like a very young apple" (du Maurier 2004, p. 122). He projects the images of his

wife and the farm girl onto the trees and hates the old one, wants to cut it down in order make space for the young tree.

Strange metamorphoses begin to happen to the old tree. Having been barren for years and "more than half dead," the tree begins to sprout buds and then bursts into rich blossom as if somebody had breathed new life into it. Later the tree bears fruit. Never in his life has Buzz seen a tree so laden with fruit. However, Buzz is disgusted at the sight of the tree in flower and the tree thickly hung with apples. "There was something monstrous in the sight, something distasteful; yet it was pitiful too that the months had brought this agony upon the tree, for agony it was, there could be no other word for it. The tree was tortured by fruit, groaning under the weight of it, and the frightful part about it was that not one of the fruit was eatable. Every apple was rotten through and through. Filthy tasting things. Stringy, beastly…" (du Maurier 2004, p. 144).The sight, the smell, the taste make Buzz sick. The flowers look pallid and sickly white; the smell of burning apple logs seems "sickly rancid" (du Maurier 2004, p. 128); the taste of apple jam nauseates him.

He is obsessed with the idea of destroying the tree; finally, at the beginning of winter, he cuts the tree down and gets rid of it. "Now the young one stood alone, above the steps, dwarfed no longer; and with her branches spread, glistening white, she belonged to the spirit world, a world of fantasy and ghosts. He wanted to stand beside the little tree and touch the branches, to make certain she was still alive, that the snow had not harmed her, so that in the spring she would blossom once again" (du Maurier 2004, p. 158). It looks pitiful and testifies to mental disorder because the country girl had been long dead, killed in a road accident. On the way to the young tree, he falls and his foot is trapped in the split stump of the old apple-tree. "'Let me go,' he shouted, 'let me go', as though the thing that held him there in its mercy had the power to release him" (du Maurier 2004, p. 159). There is nobody to help him, and sinking deeper, ever deeper into the snow, he feels as if "a hand, hesitant and timid, was feeling its way towards him in the darkness" (du Maurier 2004, p. 159).

In this story, the fantasy of the apple tree as abode of spirits or human souls is used by the author to describe the liminal state of the protagonist. With each description of Buzz' perception of the tree, we feel that he is plunging in insanity. Psychological state of guilt of which he is probably not aware pushes him into a psychic distress which ends up in his death.

Tree as the Cross

Most prominently the arborous theme in its relation to death on the Cross, redemption of sin and repentance is represented in Elizabeth Bowen's story, in which the old apple tree in the school garden turns into the tree of death and accursedness. For it is written in the Scriptures, "Cursed is everyone who is hung on a tree" (NIV 1984, Galatians 3:13, p. 824). It is a metaphorical extension of The Apple Tree of the Garden of Eden to the Cross of Christ's Crucifixion and new *Lignum Vitae*. In Christianity, it is the most enigmatic archetypal pattern – the relationship between the Tree and the Cross and the mystery of the Cross as the

Tree of life. Frye (1982) emphasizes the dual nature of the Cross as an instrument of death and salvation. It is believed that the cross put out young green sprouts during Chris's passion. The essence is that after Christ's death, a Tree of Redemption was conceived – the Cross. "The tree of Paradise is only a prefiguration of the cross and this cross is the center of the world. It towers from Golgotha to heaven, gathering the whole world together … the ever-green tree of life" (Rahner 1971, p. 62).

This motif in numerous variations is present in medieval iconography, where Christ is often depicted crucified not on the cross but on a tree either dry or with exuberant foliage, sometimes on an "inverted tree" hanged upside down. This fact is confirmed in some versions, especially early ones, of the Bible. They speak about Jesus "whom they [Jews] did slay, having hanged upon a tree" (Young 1862, <u>Acts 10:39</u>, p. 2412). In Greek mythology, the apple tree is also connected with hanging. It is a story of Melus, as told by Servius[3]. He relates that Melus, priest of Aphrodite, and foster-father of Adonis, hanged himself on a tree at the latter's early death. Aphrodite then turned him into an apple-tree, which was named *μηλιά*[4] (Foster 1899, p. 44).

Bowen tells a story of two orphan girls Myra and Doria, both about 10, not pretty, always getting into some kind of trouble, who are rejected by other girls, are despised and laughed at. They stick together, but their relationship cannot be called friendship, it is a kind of "dependence on one another" of two outcasts. In their isolation, the "only happy part" of their lives was "the games we played and the stories we told in a lonely part of the garden with one beautiful old apple tree. Nobody else ever came there" (Bowen 1989, p. 469). It was something of their own, something which made them feel happy and dignified. Later, Myra makes friends with a "very pretty and clever" girl who had a family and a home, and is accepted by other girls. For the sake of this new friendship and out of fear to become an outcast again, she betrays Doria, who is left all by herself. Doria takes it the hard way. Myra says, "She never wept; she used to walk about by herself. It was as though everything I got free of had fallen on her, too: she was left with my wretchedness" (Bowen 1989, p. 469). One day the girls go to the apple tree, and Myra says "terrible things to her. And wished she was dead" (Bowen 1989, p. 469). That night Doria hanged herself in the apple tree. Myra, who went looking for Doria, saw her feet just above her head. It was September – two or three apples fell down. After the traumatic experience, Myra got very ill: "I thought the leaves would choke me. Whenever I moved in bed, an apple fell down" (Bowen 1989, p. 469).

The tree was cut down, the place was filled with new turf as if there had never been an apple tree at all. But the tree remained with Myra, suppressed remorse taking the form of being haunted by the tree. "There is always the apple tree. Its roots are in me. It takes all my strength," (Bowen 1989, p. 470) explains Myra,

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[3]Maurus Servius Honoratus was a late fourth-century and early fifth-century grammarian, with the contemporary reputation of being the most learned man of his generation in Italy.

[4]The classical Greek word μῆλον (mēlon), meant any fruit, but was borrowed into Latin in the meaning 'apple'. The similarity of this word to Latin mălum meaning 'evil' may also have influenced the apple becoming interpreted as the 'forbidden fruit'.

who is now married, lives in a comfortable, solid Victorian house and whose husband tries to rid her of this nightmare. The tree is driving Myra mad as if it were requital for sin. "If I stay here, the tree grows in the room. If I go out, I find it darker than all the others against the sky" (Bowen 1989, p. 470). The atmosphere imbued with horror is imparted on other characters. Lancelot, a guest of the house, hears "a thud-thud-thud – three times like apples falling" (Bowen 1989, p. 465). This idea of apples falling from the "leafy height" in the shut-up room reshapes "an innocent pastoral image" now seen black through a dark transparency (Bowen 1989, p. 465). Mrs. Bettersley, a sensible, no-nonsense lady, succumbed to the horrifying atmosphere, too. She admits, "It's impossible. One can't get past ... it's like an apple tree" (Bowen 1989, p. 466).

The cross as a symbol of death becomes a symbol of redemption. When Jesus was crucified, he took upon himself the curse for humanity's wrongdoing. In the story, Doria becomes a scapegoat, who took upon herself all injustice and the burden of rejection from which her friend was suffering. But this suicide proved too much for Myra: guilty conscience turned out to be a heavier burden than the childish fear of losing her acceptance by the school girls; for years, it was destroying her personality. The apple tree was exorcized and a new Myra emerged at Christmas; however, the author leaves the reader in the dark as to whether redeeming suffering brought about a resurgence of the ego.

William Golding uses this symbol in his famous novel *The Spire* (1964). Dean Jocelin obsessed with the idea of building a high spire on the tower of the Cathedral, sacrifices to his ambition people, his faith, his soul, his health and finally life. However, before he dies, the vision of the Spire is replaced by the image of the tree. While his soul is "flying through the panicshot darkness like a bluebird over water," he "leaves behind the words of magic and incomprehension — *It's like the apple tree!*" (Golding 1964, p. 215).

Forbidden Fruit

A very short story by K. Mansfield also called *the Apple Tree* is based on the Biblical story of the forbidden tree in the Garden of Eden from which Adam and Eve ate an apple, but written with a touch of elegant irony and humor. The setting is a house looking out on two orchards. One, that the family called the "wild" orchard, lay beyond the vegetable garden, where for some reason, the boys never played. But the other orchard, lay far away and was hidden from the house. "One year the orchard had its Forbidden Tree. It was an apple-tree discovered by Father and a friend during an after-dinner prowl on Sunday afternoon." The friend assures the Father that the apple tree is rare, very rare. "Hardly ever see 'em in England nowadays" (Mansfield 1915, p. 2). The father believes it and forbids anyone, even his two sons to touch the apples. Every Sunday the Father went there to admire his precious tree and watch the apples ripe. At last the day came when Father took his sons to the apple tree to taste the apples. The ceremony was very solemn: "Very slowly and very carefully he picked two apples growing on a bough. He laid one apple down, opened the pearl-pen knife and neatly and beautifully cut the other in half" (Mansfield 1915, p. 3) all the while continuing to admire the apple.

Together, the boys took a bite, their mouths were filled with a disgusting stuff – "a horrible taste of something dry." Not wanting to disappoint The Father, they lied that it was delicious. When the Father tasted his apple, he spat it out and never went near the apple-tree again.

The pattern underlying the story is easily recognizable: it is a story of Adam and Eve's fall and the apple as the symbol of their sin and transgression. There is comparison of the tree from the boys' garden to the tree of Eden: "The apple-tree – like the Virgin Mary[5] – seemed to have been miraculously warned of its high honor, standing apart from its fellows, bending a little under its rich clusters, fluttering its polished leaves, important and exquisite before Father's eye" (Mansfield 1915, p. 2). Other characters from the paradisiacal garden are recognizable, too. The friend acts as the Serpent tempting the Father to think that the unnamed apple is very rare and marvelous. The words ring so sweet to him – his purchase is worth more than he paid for it. He immediately acts like God forbidding his children to touch the apples. K. Mansfield follows the Biblical story up to minute details. The scene of the boys tasting the fruit resembles that of Adam nearly choking on the forbidden fruit which stuck in his throat. However, the story has an unexpected twist at the end. The boys are obedient and do not touch the apples, but their reward is the disgusting taste of the fruit. The Father is disappointed, too: no promised benefits from being the owner of a rare tree. Things are not what they look.

Green Tree – Dry Tree Pattern

Religious worldview generated one more archetypal pattern "the Green Tree – the Dry Tree," which is embodied both in religious mythos and literary works. The symbol of the Dry tree is related to Jesus' crucifixion or the Tree of Knowledge, which became dry on the day of Christ's crucifixion. In poetry, the famous lines by Goethe turned this antithesis into proverbial wisdom: "Grau, teurer Freund, ist alle Theorie/Und grim des Lebens goldner Baum." [All theory is gray, my friend, But forever green is the tree of life] (Goethe 1973, p. 509).

The pattern of 'Dry Tree' stimulated the iconography of an Early Netherlandish artist Peter Christus' painting *Madonna of the Dry Tree* (about 1465) (Figure 3). The Virgin and the Child are set against the black background on a dead tree trunk within a dried crown of thorns, a unique visualization of the motif. The only source of radiance is the Virgin's face and the Child emanating light, complemented by small sparks of the letter 'A' among the dead branches meaning 'Ave'. The dry tree is supposed to be the Tree of Knowledge. It was also believed that the Virgin brought the tree back to life. Here is how it is described by Guillaume de Deguileville. The pilgrim and his guiding angel see souls playing with an apple between two trees, one green and one dry. The angel explains that the souls are playing with the apple that grew on the green tree, which is the Virgin, and the apple is Christ; the apple was transferred to the barren tree to restore it to life for mankind's salvation. The verdant tree complains that the apple is taken from her,

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[5]The apple tree is considered to be the Virgin Mary's tree.

but the dry tree explains that only Christ can pay the price of redemption and be the Savior (Baert 2004).

Figure 3. *Peter Christus (1410–1475) Madonna of the Dry Tree*

Source: Pinterest.ru.

Christ's crucifixion turned many leafy trees into bare ones. Mandeville[6] describes the Mount of Mambre, on which an oak grew from whom grief sapped all life and made it dry. "And there is a tree of Oke, the which men clepen the Dry Tree. And theyesaye that it hath ben this sithe the beginnynge of the World; and was sumtymegrene and bare Leves unto the Tyme that Oure Lord dyede on the Cross; and thanne it dryede; and so dydenalle the Trees that werenthanne in the World. " [And there is an Oak tree, which people call the Dry Tree. And they say that it has been there since the beginning of the World; and was at one time green and bore leaves up to the time that Our Lord died on the Cross; and then it dried; and so did all the trees that were there in the World] (Mandeville 2002, p. 25).

The pattern 'Dry Tree – Green Tree' is instantiated in several forms. One motif is related to magic transmutations through the grace of God. A dry tree may be brought back to life as a sign that a sinner has received absolution from his past sins. In *Canterville Ghost*, Oscar Wilde uses this archetypal pattern as a token of God's forgiveness of the sinner who has suffered martyrdom and for whose soul an innocent virgin has prayed. The "old withered almond-tree has blossomed" and its flowers were seen in the moonlight. "God has forgiven him," said Virginia gravely, as she rose to her feet, and a beautiful light seemed to illumine her face" (Wilde 2007, p. 209).

Another motif is related to the natural cycle of the tree life: autumnal death – winter sleep – spring awakening and summer flourish. This archetypal pattern is

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[6]Sir John Mandeville is the supposed author of a collection of travelers' tales from around the world, first circulated between 1357 and 1371.

used by Leo Tolstoy in *War and Peace* to show Prince Andrew's spiritual renascence and re-emergence from the past pain, desolation, and emotional withdrawal. The two descriptions are in tune with the character's emotional states. The first one is of the old oak tree which has not yet come into leaf.

> "At the edge of the road stood an oak. It was an enormous tree. With its huge ungainly limbs sprawling unsymmetrically, and its gnarled hands and fingers, it stood an aged, stern, and scornful monster among the smiling birch trees. ...and this oak, refused to yield to the charm of spring or notice either the spring or the sunshine.
> "Spring, love, happiness!" this oak seemed to say. "Are you not weary of that stupid, meaningless, constantly repeated fraud?...There is no spring, no sun, no happiness!... so I stand, and I do not believe in your hopes and your lies" (Tolstoy 1952, p. 235).

A few days later Prince Andrew was going through the same forest and did not recognize the oak.

> "The old oak, quite transfigured, spreading out a canopy of sappy dark-green foliage, stood rapt and slightly trembling in the rays of the evening sun. Neither gnarled fingers nor old scars nor old doubts and sorrows were any of them in evidence now. Through the hard century-old bark, even where there were no twigs, leaves had sprouted such as one could hardly believe the old veteran could have produced.
> "Yes, it is the same oak," thought Prince Andrew, and all at once he was seized by an unreasoning springtime feeling of joy and renewal. All the best moments of his life suddenly rose to his memory" (Tolstoy 1952, p. 236).

It is of interest to note that Virginia Woolf uses the same archetypal pattern in her phantasmagoric novel *Orlando*. The situation is similar to that described by Leo Tolstoy. At the age of thirty (Prince Andrew was thirty one) Orlando was going through the worst crisis in his life. A rejected lover and ridiculed poet, he retreated to his mansion, lead a life of a recluse and sought consolation in the oak tree that grew on top of the mountain "whence on fine days half of England with a slice of Wales and Scotland thrown in could be seen" (Woolf 2003, p. 47). He came to the oak tree every day to find peace with himself and protection from the world.

> "... he flung himself under his favorite oak tree and felt … he might make out what years remained to him in tolerable content. Here he came then, day after day, week after week, month after month, year after year. He saw how the oak tree had put forth its leaves and shaken them to the ground a dozen times in the process" (Woolf 2003, p. 47).

The fact that writers as different as L. Tolstoy and V. Woolf chose the same archetypal pattern and even the same species of tree in their construction of similar situations serves as a proof of universality intuitively felt by writers belonging to different cultures and age.

Conclusion

Organic archetypal patterns based on cognitive awareness of ecological surroundings establish a relation of literary imagery to the natural world as a specific way of representation of themes, motifs, characters' emotions, and plots and illustrate the role of imagination in creating meaning.

The roots of organic archetypes go back to the primordial, pre-conceptual period when all abstractions were to be reified by the human mind. In contact with the environment the naive consciousness gave prominence to certain phenomena and imbued them with meaningful content. The perception of the ambient world was selective – not all properties of an outer object were impressed upon the human mind, but only those which appeared relevant at the moment and suited the process of representing abstract ideas as tangible things or living beings (e.g., an apple symbolized sin and transgression and also Jesus Christ).

Initially, a limited number of features were picked out, but with the passing of time, new facets were added. The consequent transformations of an archetype via particular extensions involved the perception of the environment as influenced by the state of knowledge, changing forms of consciousness, contemporary ideologies, religion, etc., that is successive cultural paradigms in which patterns were reinterpreted and overlaid with new meanings. Thus, the famous Greek myth about Apollo and Daphne is a "remake" of an older myth about the Sun and his bride Dawn.

Epistemologically, organic archetypes are a product of the cognizing mind which at the mythical stage of human development invented a special kind of representation of accumulated knowledge in the form of mythical and later religious patterns. By establishing permanent connections between a natural object and mental spaces (topoi), it prepared a platform of future logical concepts and transition from mythico-religious to rational thinking. However, the old intuitive patterns did not disappear; instead, they remained in phylogenetic memory of humankind as vestiges of our ancestral history (phylogenesis), were translated into a system of cultural codes within which archetypes developed a pattern-setting capacity amply used by writers of different epochs and genres.

To become an archetype, a pattern must acquire a certain degree of universality. Episodic representations, no matter how picturesque they may be, are filtered out by the "collective unconscious". Due to this universality and inter textual connections, patterns still carry a strong sense-bearing potential and are capable of triggering emotional responses in the reader. Imaginative use of archetypal patterns helps writers create fictional lifeworlds including settings, situations, events, emotional state of characters, etc. and also employ them as a plot-constructive force underlying the surface structure of a literary text. As we tried to show in the article, the same archetype (the apple tree) produces four different scenarios for narratives exteriorizing its different facets (the forbidden fruit, abode of souls, or the tree of redemption).

Archetypal patterns are complex cultural phenomena deeply embedded in our cultural memory involving in its sphere literature, myth, religion and – art. The knowledge, at least partial, of archetypal patterns determines better comprehension and adequate interpretation of literary works.

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