# Phonological and Semantic Analysis of Malayalam Astrological Terms

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#### Abstract

The present paper entitled 'Phonological and Semantic analysis of Malayalam Astrological terms' discussed the Phonological and Semantic aspects of astrological terms in Malayalam. Astrological terms are linguistic signs representing a concept as well as an image. Majority of the technical terms are derived from Sanskrit. All terms have diverse linguistic and cultural origin. So this leads the researcher to take this aspect in terms of Linguistics, because linguistics is a science and through this scientific study of language, language of astrology can be studied. Aim and Objectives of this study is the collection and the phonological and semantic analysis of commonly used astrological terms in Malayalam.

Keywords: Malayalam astrological terms, phonological, semantic analysis,

Attam, Avittam, Baadha Raasi, Bharani,Borrowing,Devaguru, Dhanavaan,, Karthika, Kumbham, Lagnadhipan, Loan words, Meedam, Raasi, Ravidasha, Tadbhava words, Tatsama terms, Tithi, Trikonaraashi.

#### **1.0 Introduction**

There are thousands of words that are common to both Malayalam and Sanskrit with some minor differences. It is customary in such cases for many scholars and common people to assume that these words are Sanskrit in origin and are borrowed in Malayalam. This paper describes the phonological and semantic analysis of astrological terms in Malayalam in detail. It is customary in such cases for many scholars and common people to assume that these words are Sanskrit in origin and are borrowed in Malayalam. In this study may helps to prove that most of the 'Malayalam Astrological Terms' are borrowed from Sanskrit. Astrological terms are divided in to two types for convenient to understand. They are Pure astrological terms and other astrological terms. Pure astrological terms may be classified in to two. They are Nakshathra (Star) and Raasi (Zodiac). They are abbreviated as 'NK', 'RS' and

'OT'. Nakshathras (Stars), Raasi and the other Astrological terms are listed below. Here, two types of classification under astrological terms are to be done. They are

#### **Phonological Classification** 1.

#### 2. Semantic Classification

#### 2.0 Phonological Classifications

#### 2.1 Pure Astrological Terms

The word 'Term' is defined by denoting an idea or a concept. A single word may be embodying many terms. (Raveendran, Meena -2008)

Astrological terms are linguistic signs representing a concept as well as an image.

#### 2.1.1 Nakshathras (Stars)

It is derived from the root 'naksh' meaning 'to approach'. The 'thra' means 'instrument'. Thus nakshathra is a means of connecting with the cosmic power and extending the human mind to the cosmic mind. In general this word means star. Nakshatra or star is the shining object which serves as a distinguishing and demarking point of the side boundaries of the orbit of the planet while constellation is the zone of 13 degrees and 20 minutes demarcated by the star and through which the planet move . (N, E. Muthuswamy. -2006)

In this way there are 27 constellations in the zodiac of 360 degrees. But at times an additional constellations /abijit/ is considered as 28<sup>th</sup> constellations. The concept of star in the Indian system of astrology are called constellation. (Muthuswami, N. E. - 1998). The List of Nakshathra is given bellow:

#### 2.1.1.1. Names of Stars

No	Malayalam Name	Sanskrit Name
1	/aśvati/	/aśvi <u>n</u> i/
2	/bharaṇi/	/bharaṇi/
3	/kārttika/	/kṛttika/

4	/rōhiņi /	/rōhiṇi/		
5	/makayiram/ or	/mŗgaśiirṣā/		
	/makīram/			
6	/ tiruvātira /	/ārdram/		
7	/puṇartam/	/puņarvasu/		
8	/pūyam/	/pūsya/		
9	/āyilyam/	/āślēṣa/		
10	/makam/	/makha/		
11	/pūram/	/pūrvaphalguņi/		
12	/uttRam/	/uttarphalguņi/		
13	/attam/	/hasta/		
14	/cittira/	/citRa/		
15	/cōti/	/svāti/		
16	/viśākham/	/viśākha/		
17	/anilam/	/anurādha/		
18	/tŗkkēțţa/	/jyēsta/		
19	/mūlam/	/mūla/		
20	/pūrāțam/	/pūrvāṣāḍha/		
21	/utRāṭam/	/uttarāṣāḍha/		
22	/tiruvōṇam/	/sRāvaņa/		
23	/avițțam/	/danista/		
24	/catayam/	/śataka/		
25	/pūrurutțāti/	/purvabhadrapāda/		
26	/uttŗtṭāti/	/uttarabhadrapāda/		
27	/rēvati/	/rēvati/		
28	/ abhijit/	/ abhijit/		

#### Table 1.

# 2.1.1.2 Phonology of Astrological Terms

Phonology of Astrological Terms consists of Phonology of Nakshathras and Raasis.

# 2.1.1.3 Phonology of Nakshatharas

Here, separate charts of Vowels and Consonants are given below.

# 2.1.1.4 Vowels

	Front	Central	Back
High	i, ī		u, ū
Mid	ē		ō
Low		a ā	

# Table. 2

# 2.1.1.5 Consonants

		Bilabial	Labio	Denta	Alveolar	Retrofle	Palatal	Velar	Glott
			dentals	1		х			al
Plosiv	vl	Р		t		ţ	c	k	
e /stop	VI							kh	
/stop	as								
	р								
	vd						j		
	Vd	Bh							
	as								
	р								

Fricative						Ś	h	
Trills				R				
Flap				r				
Nasal	Μ		n		ņ			
Lateral				L				
Approxima				l				
nt Semi		V				y		
vowel						-		

Table.3

# 2.1.2 Raasi

Signs (zodiacal signs) or Raasis are the most important components of astrology. There are 12 Raasis (signs) in the astrological parlance. The zodiac of 360 degrees is divided into 12 signs. So each sign measure 30 degrees. Every point in each sign has numerous characteristics which express themselves in the natives born on each signs. So also when a planet during its transit, touches a point in these signs its characteristics find way in the native. [N, E. Muthuswamy. -2006]

# 2.1.2.1 Names of Raasi or Months

Malayalam	Sanskrit	English
/mēțam/	/mēṣa/	Aries
/iṭavam/	/vŗṣabha/	Taurus
/mithuṟam/	/midhu <u>n</u> a/	Gemini

/karkkiṭakam/	/karkkiţaka/	cancer
/cińńam/	/simha/	Leo
/ka <u>nn</u> i/	/ka <u>n</u> ya/	Virgo
/tulām/	/tulā/	Libra
/vŗścikam/	/vŗścika/	Scorpio
/dhanu/	/dhanus/	Sagittarius
/makaram/	/makara/	Capricorn
/kumbham/	/kumbha/	Aquarius
/miinam/	/miina/	Pisces

# Table. 4

# 2.1.2.2 Phonology of Raasi

Phonology of Astrological terms consists of Phonology of Nakshathras and Raasis. Here, separate charts of Vowels and Consonants are given bellow.

# 2.1.2.3 Vowels

Front	Central	Back

High	i, ī		u
Mid	ē		
Low		a, ā	

Table. 5

# 2.1.2.4 Consonants

		Bilabi	Labioden	Dental	Alveola	Retrofl	Palata	Velar	Glotta
		al	tal		r	ex	1		1
Plosiv	vl			t		ţ	c	k	
e/									
stop	Vl			th					
	as								
	р								
	vd								
	Vd	Bh		dh					
	as								
	р								
Fricativ	e						Ś		

Trill					ŗ		
Flap				r			
Nasal	m		ņ			ń	
				_			
Lateral				L			
Appro- ximant							
Semi vowel		v					



## 2.2 Other Astrological Terms

Other Astrological Terms are those terms which are used in astrology and having meaning in other situations. Here, terms collected are simple and compound respectively.

#### 2.2.1 Names of Other Astrological Terms

Names of other astrological terms are given bellow.

# 2.2.1.1 Loan Words (Tatsama Terms)

/ā dirajj ū /	/rāhudaśa/
/ā gnēyarāśi/	/rajju /
/ādiguru/	/rajōguṟarāśi /
/ādilaghu/	/rāśiraśmi/
/antardaśa/	/ravidaśa/

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/bādhārāśi/	/rōgarāśi /
/bādhakarāśi/	/sātwikarāśi /
/bhāvātbhāvam/	/samadaśa/
/bhagavān/	/samhārarāśi/
/bhūmirāśi/	/śanidaśa/
/bhūmitatwarāśi/	/śanihōra/
/bhūtarāśi/	/sankhāyōgam/
/cakRadasākālam /	/santanatitthi/
/cakRapōja/	/śarabhayōgam/
/candradaśa/	/śaradāyōgam/
/candragati /	/śaśayōgam/
/candrahōra/	/śaśimangalayōgam/
/candrarāśi/	/śatRupīḍāyōgam/
/caradaśa/	/śītaraśmiyōgam/
/cararāśi /	/simharāśi /
/caturdaśi /	/śirōrajjū/
/caturtthī /	/śiṣṭadaśa/
/dagdhātithi/	/stthirarāśi/
/dagdharāśi/	/stthitirāśi /
/danḍāntadōṣaśānti /	/stirarāśi /
/daśa/	/śūdRarāśi/
/daśāsandhi/	/śūladaśa /
/dēvaguru/	/śūṟyarāśi/
/dhanavān/	/śūŋyatithi /
/dwāparayugarāśi/	/tāmbūlarāśi/
/dwārāśi/	/tāradēvata/
/dwitīyarajjudōṣam /	/tāmasarāśi /
/dwitīyarajju/	/tiryangmukharāśi /
/grahāyus/	/tithi/
/grahadaśa /	/tithidēvata/
/grahapati /	/trikōṇadaśa/
/grahapīda /	/trikōṇarāśi /

/gurudaśa/	/trisphutadaśa/
/guruhōra/	/trisphuṭadaśa/
/indrāgni/	/tritīyarajju /
/indraguru/	/tyājyatithi/
/kālamrityu/	/tyājyarāśi /
/kastarāśi /	/ūrdhwamukharāṣi /
/kēndrātipati/	/ubhayarāśi/
/kēndradaśa/	/ubhayōdayarāśi/
/kētu/	/uccarāśi /
/kētudaśa/	/udakarāśi/
/kharayō <u>n</u> i /	/ulkādaśa /
/klībārāśi/	/variyatithi/
/kujadaśa/	/varṣadaśa /
/lagnādhipati /	/varṣagrahasiddhi/
/lagnacandrika/	/vāstupurusasayanastthiti/
/lagnadaśa /	/vāyutatthwarāsi /
/lagnasuddhi /	/vișamarāśi /
/madhyamarajju/	/vrddhitithi/
/madhyarāśi/	/vṛṣayōṇi /
/madhyāyus /	/yōginidaśā/
/māndi/	/yugarāśi /
/mārakadaśa/	/yugatithi/
/ <u>n</u> akşatRadaśa/	/yugmarāśi/
/ <u>n</u> akşatRadīrata/	/parāśarahōra/

/n̪akṣatRayōn̪i /	/parīgha/
/navamī /	/phaladīpika/
/mīlarāśi/	/pralayarāśi/
/ <u>n</u> irjalarasi	/praś <u>n</u> akRiya/
/pādarajju/	/puruṣarāśi/
/pakṣiyōnirāśi/	/pancabhōtarāśi/

# Table. 7

# 2.2.1.2 Phonology of Other Astrological Terms

Phonology of other Astrological terms consists of Phonology of Nakshathras and Raasis. Here, separate charts of Vowels and Consonants are given bellow.

#### 2.2.1.3 Vowels

	Front	Central	Back
High	i, ī		u, ū
Mid	ē		ō
Low		a, ā	

# Table. 8

# 2.2.1.4 Consonants

		Bilabial	Labiodent	Dental	Alveola	Retrofle	Palata	Velar	Glotta
			al		r	x	1		1
Plosi	vl	р		t		ţ	c	k	
ve/st									
ор	Vl	ph		th					
	as								
	р								
	V	b		d		ģ	j	g	
	d								
	V	bh		dh				gh	
	d								
	as								
	р								
Fricat	ive				S	ş	Ś	h	
Trill					R				
Flap					r				
- mp									
Nasal		m		n	n	ņ			
Latera	al								
					1				
Appro	xi								
Mant									
Semi							У		
Vowel			v						

Table. 9

# 3.0 Distribution of the Vowel Phonemes in Nakshathras, Raasis and Other Astrological Terms

Five vowel phonemes /a/, /e/, /i/, /o/, and /u/ have been found in the Astrological terminology. All Astrological terms are divided in to three types for convenient to understand. They are Pure astrological terms and other astrological terms. Pure astrological terms are terms which are included in the daily process of astrological interpretations and other astrological terms are terms which are terms which are related with astrology which are not frequently used and are technical terms in the astrology. All these three categories of astrology terms are interpreted separately and vowels and consonant lists, of all the three type were given in separate tables. The short vowel phonemes found in the Nakshathra are /i/, /u/, and /a/. For Rasi /i/,/u/, and /a/.

And for Other Astrological terms are /i/, /u/ and /a/. Long vowel phonemes present for Nakshathra are / $\bar{n}$ /, / $\bar{a}$ /, / $\bar{u}$ /, / $\bar{o}$ / and / $\bar{e}$ /. For Raasi / $\bar{n}$ /, / $\bar{e}$ / and / $\bar{a}$ /. And for other Astrological Terms are / $\bar{n}$ /, / $\bar{u}$ /, / $\bar{o}$ /, / $\bar{e}$ / and / $\bar{a}$ / respectively. But in the vowel phoneme description some short and long vowel sounds are missing in the pure astrological terms such as stars and Raasis. After the complete analysis of stars, Raasis and other astrological terms it is observed that the short vowel phonemes /o/ and /e/ are missing in all of the three main terminological categories. Stars and other astrological terms have all the long vowel phonemes / $\bar{n}$ /, / $\bar{e}$ /, / $\bar{a}$ /, / $\bar{u}$ / and / $\bar{o}$ / are present. And in Raasis, the long vowel phonemes present are / $\bar{n}$ /, / $\bar{e}$ / and / $\bar{a}$ /. Here, the long vowel phonemes / $\bar{o}$ / and / $\bar{u}$ / are absent respectively

Here, pure astrological terms are abbreviated as 'PT', Nakshathras are abbreviates as 'NK', Raasis are abbreviated as 'RS' and other astrological terms as 'OT' respectively. Following are the descriptions of the various vowel phonemes along with their occurrences at the various positions in all the three main astrological terms.

4.0 Short and Long Vowel Phoneme List of Nakshathras ('NK'), Raasis ('RS'), andOther Astrological Terms ('OT')Pure Astrological Terms ('PT')Nakshathras ('NK')Short vowels list $\rightarrow$ [i, a, u]Long vowel list $\rightarrow$ [ā, ū, ō, ē, ī]

Rasis ('RS')		
Short vowels list	$\rightarrow$	[i, a, u]
Long vowel list	$\rightarrow$	[ī, ā, ē]

Other Astrological Term	s ('OT')		
Short vowels list	$\rightarrow$	[i, a,	u]
Long vowel list		$\rightarrow$	[ā, ē, ū, ō, ī]

#### 4.1 Vowels

Vowels are sounds in which there are no obstruction to flow of air as it passes from larynx to lips.

#### 4.1.1 Short Vowels

There are only three short vowels. They are [i, a, u]

### **4.1.1.1 Word Initial Position**

Here, Nakshathra has no front high vowel sound /i/ in the word initial position.

/nakṣatra/	[a, u]
/rāśi/	[i, a, u]

Other astrological terms ('OT') [i, a, u]

/ i /	Nil	(NK)
	/iṭavam/	(RS)
	/indrāgni/	(OT)
/ a /	/aśvati/	(NK)
	Nil	(RS)
	/antardaśa/	(OT)
/ u /	/uttRam/	(NK)
	Nil	(RS)
	/uccarāśi /	(OT)

**4.1.1.2 Word Medial Position** 

/nakṣatra/	[i, a, u]
/rāśi/	[i, a, u]
Other astrological terms ('OT')	[i, a, u]

/i/	/āyilyam/	(NK)
	/karkkiṭakam/	(RS)
	/rāśiraśmi/	(OT)
/a/	/puṇartam/	(NK)
	/mēțam/	(RS)
	/grahadaśa /	(OT)
/u/	/ tiruvātira /	(NK)
	/kumbham/	(RS)
	/guruhōra/	(OT)

# **4.1.1.3 Word Final Position**

Here, Nakshathra has no back high vowel sound /u/ and Raasi has no central low vowel sound /a/ in the word final positions.

/ <u>n</u> akṣatra/		[i, a]
/rāśi/		[i, u]
Other astrolo	ogical terms ('OT')	[i, a, u]
/i/	/rōhiņi /	(NK)
	/ka <u>nn</u> i/	(RS)
	/daśāsandhi/	(OT)
/a/	/tṛkkēṭṭa/	(NK)
	Nil	(RS)
	/kētudaśa/	(OT)

/u/	Nil	(NK)
	/dhanu/	(RS)
	/indraguru/	(OT)

#### 4.1.2 Long Vowels

### 4.1.2.1 Word Initial Position

For Raasis the long vowel sound  $\bar{a}$  and for Nakshathras the long vowel sound  $\bar{u}$  and for all three categories as Nakshathra, Raasis and other Astrological Terms the long vowel sounds  $\bar{\nu}$ ,  $\bar{e}$  and  $\bar{o}$  sounds are absent in the initial position.

/nakṣatra/		[ā]
/rāśi/		Nil
Other astrological terms ('OT')		[ā, ū]
/aa/	/āyilyam/	(NK)
	Nil	(RS)
	/āg <u>n</u> ēyarāśi/	(OT)
/uu/	Nil	(NK)
		(RS)
	/ūrdhwamukharāṣi /	(OT)

#### 4.1.2.2 Word Medial Position

Here, for Raasis the long vowel sounds  $/\bar{u}/$  and  $/\bar{o}/$  in the word medial positions are absent.

/nakṣatra/	[ā, ū, ī, ē, ō]
/rāśi/	[ā, ī, ē]
Other Astrological Terms ('OT')	[ā, ū, ī, ē, ō]

/aa/	/uttRātam/	(NK)
------	------------	------

	/tulām/		(RS)
	/bhāvātbhāvam/		(OT)
/uu/	/pūrāṭam/		(NK)
			(RS)
	/bhūtarāśi/	(OT)	
/ii/	/makīram/		(NK)
	/mīnam		(RS)
	/dwitī yarajjū/	(OT)	
/ee/	/rēvati/		(NK)
	/mēțam/		(RS)
	/kēndrātipati/		(OT)
/00/	/tiruvōṇam/		(NK)
			(RS)
	/danḍāntadōṣaśānti /		(OT)

#### 4.1.2.3 Word Final Position

For Nakshathra and Rasi, there are no long vowel sounds in the word final position and for Other Astrological Terms the long vowel sounds  $/\bar{a}/$ ,  $/\bar{u}/$  and  $/\bar{i}/$  are present in the above stated positions. The long vowel which are absent in the all Nakshathra, Rasi and Other Astrological Terms are  $/\bar{o}/$  and  $/\bar{e}/$ . And that for Nakshthra and Rasi are  $/\bar{\nu}/$ ,  $/\bar{u}/$  and  $/\bar{a}/$ respectively.

/ṉakṣatra/ /rāśi/ Other Astrological Terms ('OT')		[Nil]	
		[Nil ]	
		[ā, ū, ī]	
/aa/	Nil	(NK)	
	Nil	(RS)	
	/grahapīdā /	(OT)	

/uu/	Nil		(NK)
			(RS)
	/ā dirajjū /	(OT)	
/ ii/	Nil		(NK)
	Nil		(RS)
	/caturdaśi /	(OT)	
/ee/	Nil		(NK)
	Nil		(RS)
	Nil	(OT)	)
/00/	Nil		(NK)
			(RS)
	Nil		(OT)

## 4.2 Consonants

Consonants are speech sounds during the articulation of which there is an obstruction. It also occurs in word initial, medial and final positions.

# Pure Astrological Terms

# Nakshathra

#### Stops

There are ten stops sounds. They are	[/P/, /bh, / t/, / d/, / t/, / c/, / j/,	
	/k/, and the aspirated /bh/, /kh/	
Fricatives		
There are four Fricativessounds. They are	[/ h/, / ś/]	
Flap		
There is only one Flap sound. It is	[/r/]	
Trill		
There is trill sound	[/ <b>R</b> /]	
Nasal		

There are four Nasal sounds. They are	[/m/, / <u>n</u> /, and /n़/]		
Lateral			
There are two Lateral sounds. They are	[/]/, ]		
Approximant			
There is only one Approximant sound	[/]]/]		
Semivowel			
There are two Semivowel sounds. They are	[/v/, /y/]		
/rāśi/			
Stops			
There are eight stops sounds. They are	[/bh/, / k/, /ț/, / c/, /th/, /t/,		
	/dh/]		
Fricatives			
There are four Fricativessounds. They are	[/ś/ ]		
Trill			
There is trill sound	[/ŗ/]		
Flap			
There is only one Flap sound	/ <b>r</b> /		
Lateral			
There is only one Lateral sound	Λ/		
Nasal			
There are four Nasal sounds. They are	[/m/, / <u>n</u> /, /ń/, ]		
Approximant			
Nil			
Semivowel			
There are two Semivowel sounds. They are	[/v/]		
4.3 Other Astrological Terms ('OT')			
Stops	<b></b>		
There are eleven stops sounds	[/p/, /ph/,/b/, /bh/, /t/, /th/, /d/,		
	/dh/ /ț/, /ḍ/, /c/, /j/, /k/, /g/ /gh/]		
Fricatives			

There are four Fricativessounds. They are	[/s/, /ś/, /ṣ/, /h/]
Trill	
There is trill sound	[/ <b>R</b> /]
Flap	
There is only one Flap sound.	[/ <b>r</b> /]
Lateral	
There is only one Lateral sound.	/1/
Nasal	
There are four Nasal sounds. They are	[/m/, / <u>n</u> /, /n/, /ņ/]
Approximant	
	Nil
Semivowels	
There are two Semivowel sounds. They are	[/v/,/y/]

#### 4.3.1 Word Initial Position

The consonants present in all Nakshathra, Raasi and Other Astrological Terms are /t/, /c/, /k/, /v/ and /m/. The consonants absent in all Nakshathra, Raasi and Other Astrological Terms are /n/, /n/, /l/, / h/, /s/, / j/, / t/ and /R/. The consonants which are absent in Nakshathras and Raasis are /g/, /s/, / s/, /y/, /l/, and /l/. The consonant sounds which are absent in the Raasis only are /r/, /b/ and /p/ and that for Nakshathra is /d/ sound respectively.

Nakshathra	[/P/, /b/, / t/, / c /, /k/, /r/, /v/ and /m/]
/rāśi/	[/m/, /k/, /c/, /t/,/v/, /dh/]
Other astrological terms	[/b/, /c/, /d/, /g/, /k/, /l/, /m/, /ṉ/, /p/, /r/, /ś/,
	/s/, /t/, /v/, /y/]

/ <b>P</b> /	/puṇartam/	(NK)
		(RS)
	/pakșiyōnirāśi/	(OT)
/b/	/bharaṇi/	(NK)
		(RS)
	/bādhārāśi/	(OT)

/ t/	/ tiruvātira/	(NK)
	/tulām/	(RS)
	/tyājyarāśi /	(OT)
/ d/		(NK)
	/dha <u>n</u> u/	(RS)
	/dagdharāśi/	(OT)
/ c/	/cittira/	(NK)
	/cińńam/	(RS)
	/cakRadasa /	(OT)
/k/	/kārttika/	(NK)
	/karkkiṭakam/	(RS)
	/kētudaśa/	(OT)
/ g/		(NK)
		(RS)
	/guruhōra/	(OT)
/s/		(NK)
		(RS)
	/sātwikarāśi /	(OT)
/ ś/		(NK)
		(RS)
	/śaśayōgam/	(OT)
/r/	/rōhiņi /	(NK)
		(RS)
	/rāśiraśmi/	(OT)
/v	/viśākham/	(NK)
	/vŗścikam/	(RS)
	/vāyutatthwarāsi /	(OT)
/y/		(NK)
		(RS)
	/yugmarāśi/	(OT)

/1/		(NK)
		(RS)
	/lagnādhipati/	(OT)
/]/		(NK)
		(RS)
/m/	/makam/	(NK)
	/mēțam/	(RS)
	/madhyamarajju/	(OT)
/ <u>n</u> /		(NK)
		(RS)
	/ <u>n</u> akṣatRadaśa/	(OT)

#### 4.3.2 Word Medial Position

The consonants which are present in all the Nakshathras, Raasis and Other Astrological Terms are /b/, /t/, /R/, /k/, /n/, r/, /V, /v/, and/ś/. The consonant which are absent in the Nakshathras and Raasis are /n/, /g/, /p/, /s/, /V, /s/and /d/. The consonant sound which is absent in Nakshathras only is /c/ and the same that of Raasis are /y/, /n/, /j/, /d/, /m/ and /n/. And consonant sounds which are absent in Raasi and other astrological terms and Nakshathra and other astrological terms are / $\eta$ /, /l/ respectively.

/ <u>n</u> akṣatRa/	(NK)	[/b/, / t/, / R/,/ ț/ , / j/, /k/,
		/h/, / ś/, /r/, /v/, /y/, /l/,
		/l/, / n/, and /n/]
/rāśi/	( <b>RS</b> )	[/t/, /v/, / <u>n</u> /, /k/, /m/, /r/,
	/0	c/, /ț/, /ń/, g/,/l/,
	/ś/,/	/bh/ /dh/,]
Other Astrological Terms	('OT')	[/p/, /bh/,/b/, /t/, /d/,/dh/,
		/ <b>R</b> /, /ț/, /ḍ/, /c/, /j/,
		/k/,/kh/ /g/,/gh/,/s/, /ś/, /ṣ/,
		/h/, /r/, /l//v/,/y/, /m/, /n/, /n/, /n/]
/p/		(NK)

		(RS)
	/cakRapōja/	(OT)
/bh/	/ abhijit/	(NK)
	/kumbham/	(RS)
	/klībārāśi/	(OT)
/ t/	/cōti/	(NK)
	/karkkiṭakam/	(RS)
	/bhūmitatwarāśi/	(OT)
/ <b>R</b> /	/uttRam/	(NK)
	/vŗścikam/	(RS)
	/śūdRarāśi/	(OT)
,/ ț/	/ avițțam	(NK)
	/mēțam/	(RS)
/śiṣṭadaśa/		(OT)
/m/		(NK)
	/kumbham/	(RS)
	/bhūmirāśi/	(OT)
/dh/		(NK)
	/midhu <u>n</u> am/	(RS)
	/ādilaghu/	(OT)
/ḍ/		(NK)
		(RS)
	/śatRupīḍāyōgam/	(OT)
/ j/	/ abhijit/	(NK)
		(RS)
	/śirōrajjū/	(OT)

/k	/makayiram/	(NK)
	/karkkiṭakam/	(RS)
	/bādhakarāśi /	(OT)
/g/		(NK)
		(RS)
	/ādiguru/	(OT)
/c/		(NK)
	/vŗścikam/	(RS)
	/uccarāśi /	(OT)
/ h/	/rōhiṇi /	(NK)
		(RS)
	/candrahōra/	(OT)
/s/		(NK)
		(RS)
	/daśāsandhi/	(OT)
/ṣ/		(NK)
		(RS)
	/dandāntadōṣaśānti/	(OT)
/ ś/	/aśvati/	(NK)
	/vŗścikam/	(RS)
	/śaśimangalayōgam/	(OT)
/r/,	/kārttika/	(NK)
	/karkkiṭakam/	(RS)
	/caradaśa/	(OT)
/v/	/tiruvātira/	(NK)
	/iṭavam/	(RS)
	/dēvaguru/	(OT)
/y/	/āyilyam/	(NK)
		(RS)
	/āgnēyarāśi/	(OT)
/1/	/mūlam/	(NK)
	/tulām/	(RS)
	/ādilaghu/	(OT)

/]/		(NK)
		(RS)
	/śaśimangalayōgam/	(OT)
/ <u>I</u> /	/a <u>nil</u> am /	(NK)
		(RS)
		(OT)
/ <u>n</u> /	/anilam/	(NK)
	/ka <u>nn</u> i/	(RS)
	/indrāgni/	(OT)
/n/		(NK)
		(RS)
/sankhāyōgam	(OT)	

/ <u>ņ</u> /	puṇartam/	(NK)
		(RS)
	/rajōguṟarāśi /	(OT)
/ń/		(NK)
	/cińńam/	(RS)
	Nil	(OT)

# 4.3.3 Word Final Position

The consonant /t/ has no terms for rasis and Other Astrological terms.

/ <u>n</u> akṣatF	Ra/	(NK)	[/m/, /t/]
/rāśi/		(RS)	[/m/]
Other Astrological Terms		('OT')	[/m/]
/m/	/catayam/	(NK)	
	/mēṭam/	(RS)	

/itavam/		(RS)	
	/śaśimangalayōgam/	(OT)	
	/śaśayōgam/	(OT)	
	/śītaraśmiyōgam/	(OT)	
/t/	/ abhijit/	(NK)	
		(RS)	
		(OT)	

#### **5.0 Gemination**

Gemination is nothing but the long consonants. The long consonants occur only medial position.

[tt, kk, țț	[tt, kk, țț, dd, <u>nn</u> , jj, cc, ḍḍ, yy ]				
/ <u>n</u> akṣatR	a/	(NK)	[tt, kk, țț]		
/rāśi/		( <b>RS</b> )	[ <u>nn</u> , kk]		
Other As	trological Terms	( <b>'OT'</b> )	[tt, dd, jj,		
			cc, kk, țț, dd, yy]		
/tt/	/attam/	(NK)			
		(RS)			
	/vaśyaporuttam /	(OT)			
/kk/	/tṛkkēṭṭa/	(NK)			
	/ka <u>nn</u> i/	(RS)			
	/jalacaradrē kkāṇam/	(OT)			
/ <b>țț</b> /	/uttRațțāti/	(NK)			
		(RS)			
	/pratisttarāśi/	(OT)			
/dd/		(NK)			
		(RS)			
	/lagnasuddhi /	(OT)			

/ <u>nn</u> /		(NK)
	/karkkiṭakam/	(RS)
		(OT)
/jj/		(NK)
		(RS)
	/dwitīyarajju /	(OT)
/ cc/		(NK)
		(RS)
	/uccarāśi /	(OT)
/ḋḋ/		(NK)
		(RS)
	/guruśukramouḍḍyyam/	(OT)
/yy/		(NK)
		(RS)
	/tyājyyarāśi /	(OT)

# 6.0 Consonant cluster

When two or more consonants occur together, they are called a consonant cluster. "Cluster" means "group."

# 6.1 Clusters of Two Consonants

6.1.1 Consonant Clusters Occurring Initially (-C1-C2)

/tr/	/tṛkkēṭṭa/	(NK)	18 <sup>th</sup> Star
/vR/	/vŗścikam/	(RS)	8 <sup>th</sup> Raasi
/gr/	/grahabalam/	(OT)	'Planet strength'

# 6.1.2 Consonant Clusters Occurring Medially (-C1-C2)

/śv/	/aśvati/	(NK)		'1 <sup>st</sup> Star'
/rk/	/karkkiṭakam/		(RS)	'4 <sup>th</sup> Raasi'
/gr/	/bādhāgraham/		(OT)	'Planet of obstruction'

#### 6.1.3 Consonant Clusters Occurring Finally (-C1-C2)

Nil	(NK)
Nil	(RS)

Nil (OT)

#### 7.0 Syllable

In a linguistic system the smallest distinctive sound unit is the phoneme. Phonemes combine to form the next higher unit of expression called syllable. A syllable consists of one or more phonemes and a word is made up of one or more syllables.

A syllable is a unit consisting of one vowel or syllabic consonants, which may be preceded or followed by a consonant or consonants. Syllables generally classified in to Open Syllable and Closed Syllable.

#### 7.1 Open Syllables

If a syllable ends in a vowel, it is known as Open syllable.

/cōti/	(NK)	15 <sup>th</sup> Star
/ka <u>n</u> ni/	(RS)	Raasi
/ubhayarāśi/	(OT)	pair, couple, common
	signs	

# 7.2 Closed Syllable

If a syllable ends in a consonant, it is known as closed syllable.

/m/	/uttRātam/	(NK)	star
/m/	/āyilyam/	(NK)	star
/m/	/mithunam/	(RS)	star
/m/	/mēṭam/	(RS)	star
/m/	/gowrīyōgam/	(OT) 'A configuration	in which Moon is

posited in exaltation, own house, angles or trines with the aspect of Jupiter.'

/n/ /ādityan/ (OT) 'Sun'

#### 8.0 Syllabic Structure

After analyzing the data collected from various source, it has been identified that Malayalam astrological terms have monosyllabic, disyllabic, and trisyllabic and poly syllabic types of words. The structure of a syllable can be shown by mentioning the vowels and consonants that constitute it. The nucleus (vowel) is represented by the symbol 'V' and the marginal element (consonant) is represented by the letter 'C'

#### 8.1 Monosyllabic

	Nil		(NK)	
	Nil		(RS)	
	VVC /oam/		(OT)	'The beginning sound of mantras'
8.2 Di	syllabic			of mantras
	CVCVC	/makam/	(NK)	10 <sup>th</sup> Srar
	CVCV	/dhanu/	(RS)	9 <sup>th</sup> Raasi
	CVCV	/śani /	(OT)	'Synonym for Saturn'
	CVCV	/titthi/	(OT)	-
8.3 Trisyllabic				
	VCCVCV	/aśvati/	(NK)	star

VCVCVC /iṭavan	<b>h</b> /	(RS)	Raasi
CVVCV/kētu/		(OT)	Flag, Southern node, aShadow planet. In English it is called
8.4 Polysyllabic			ragon's tail'
CVCVCVVCVCV	/tiruvātira/	(NF	$(5) 6^{th} Star$
CVVCVCVCCVCV	/pūruruțtati/	(NF	$X) 25^{th} Star$
CVCCCVCVCVC	/karkkiṭakam/	(RS	S) 4 <sup>th</sup> Raasi
CCVCCVCVC	/vŗścikam/	(RS	S) 8 <sup>th</sup> Raasi
CVCCCVCVVCV	/candrarāśi/	(0'	Γ) 'Signs related to Moon'
VCVCVCVCCVC	/udayalag <u>n</u> am	/ (OT)	'Rising sign'
CVVCVCCVCVC	/tāragraham/	(0)	<ul><li>Γ) 'Planets other than sun and moon'</li></ul>
CVCVCVVCVCVVCVCVC/dhanamālikāyōgam/			
'A configuration in which all the seven planets occurry 2 to 8 houses"			

'A configuration in which allthe seven planets occupy 2 to 8 houses."

# 9 Semantic Classifications

# 9.1 Classification of Pure Astrological Terms Based on Meaning

Based on meaning of specifics, Pure Astrological terms are classified in to five.

# 1) Terms Beginning with Personal Names

# 1. Male Name

# 2. Female Name

2)	Terms	Beginning	with	Names of Objects
3)	Terms	Beginning	with	Names of Animals and Birds
4)	Terms	Beginning	with	Names of Colour
5)	Terms	Beginning	with	Names of Planets
6)	Terms	Beginning	with	Names of Nature
7)	Terms	beginning	with	Names of Body Parts
8)	Terms	beginning	with	Numerals
9)	Miscell	aneous		

## 9.1.1 Personal Names

# 9.1.1.1 Female Names

/aśvati/ /kārttika/ /rōhiņi / /rēvati/

# 9.1.1.2 Male Names

/ abhijit/

# 9.1.2 Names of Objects

/bharaṇi/

/kumbham/

/dhanu/

## 9.1.3 Names Beginning with Numerals

Nil

# 9.1.4 Names of Festivals

/attam/ /tiruvōṇam/ /pūram/

#### 9.1.5 Miscellaneous

/makayiram/ /tiruvātira / /punartam/ /pūyam/ /āyilyam/ /makam/ /uttRam/ /cittira/ /cōti/ /viśākham/ /anilam/ /mūlam/ /pūrāțam/ /uttRātam/ /avittam/ /catayam/ /pūrurutțāti/ /uttRattāti/ /mēțam/ /itavam/ /mithunam/

/karkkiţakam/ /cińńam/ /kaŋŋi/ /tulām/ /vṛścikam/ /makaram/ /miinam/

10 Classification of Loan Words (Tatsama Terms) in Other Astrological Terms Based on Meaning

Based on meaning of specifics, Other Astrological terms are classified in to nine.

#### 10.1 Terms Beginning with Personal Names

# 10.1.1 Male Names

/dēvaguru/ /indrāgni/ /indraguru/ /parāśarahōra/ /puruṣarāśi/ /ravidaśa/ /śaśimangaḷayō gam/

#### 10.1.2 Female Names

/śaradāyōgam/ /śītaraśmiyōgam/ /tāradēvata/

#### 10.2 Terms Beginning with Names of Objects

/cakRadasāKālam/

#### /cakRapōja/

#### 10.3 Terms Beginning with Name of Animals and birds

/pakṣiyōnirāśi/ /simharāśi /

# 10. 4 Terms Beginning with Name of colour

/mīlarāśi/

#### 10.5 Terms Beginning with Name of Planets

/bhūmirāśi/ /bhūmitatwarāśi/ /candradaśa/ /candragati / /candrahōra/ /candrarāśi/ /kētu/ /kētudaśa/ /rāhudaśa/ /śanidaśa/ /śanihōra/

# 10.6 Terms Beginning with Name of Nature

/āgnēyarāśi/ /bhūtarāśi/ /pralayarāśi/ /vāyutatthwarāsi /

#### 10.7 Terms Beginning with Names of Body Parts

/śirōrajju/

#### 10.8 Terms Beginning with Numerals

10.8.1 /ādi-/ 'One' / 'First'

/ādirajju / /ādiguru/ /ādilaghu/

10.8.2 /dwit-/ 'Two'/ 'Second' /dwitīyarajjuyōgam / /dwitīyarajju/

10.8.3 /tri-/ 'three' / 'Third'

/trikōṇadaśa/ /trikōṇarāśi / /trisphuṭadaśa/ /trisphuṭadaśa/ /tritīyarajju /

10. 8. 4 /catur-/ 'Four' / 'Fourth'

/caturdaśi / /caturtthi/

10. 8. 5 /paňca-/ 'Five' / 'Fifth' /pancabhōtarāśi/

10. 8. 6 /nava-/ 'Nine' / 'Nineth' /navamī /

#### 10.9 Miscellaneous

/antarrdaśa/ /bādhakarāśi/ /bādhārāśi/ /bhagavān/ /bhāvātbhāvam/ /caradaśa/ /cararāśi / /dagdharāśi/ /dagdhātithi/ /dandāntadōşaśānti / /daśa/ /daśāsandhi/ /dhanavān/ /dwāparayugarāśi/ /dwārāśi/ /grahadaśa/ /grahapati/ /grahapīḍa/ /grahāyus/ /kālamrtyu/ /kastarāśi / /kēndradaśa/ /kēndrātipati/ /kharayōni / /klībārāśi/ /lagnacandrika/ /lagnadaśa / /lagnādhipati / /lagnasuddhi / /madhyamarajju/ /madhyarāśi/ /madhyāyus / /māndi/

/mārakadaśa/ /naksatRadaśa/ /naksatRadīrata/ /nakṣatRayōni / /<u>n</u>irjalarasi /pādarajju/ /parīgha/ /phaladīpika/ /praśnakRiya/ /rajju / /rajōgunarāśi / /rāśiraśmi/ /rōgarāśi / /samadaśa/ /samhārarāśi/ /sankhāyōgam/ /santānatitthi/ /śarabhayōgam/ /śaśayōgam/ /śatRupīdāyōgam/ /sātwikarāśi / /śistadaśa/ /strīrāśi / /stthirarāśi/ /stthitirāśi / /śūdRarāśi/ /śūladaśa / /śūnyarāśi/ /śūŋyatithi / /tāmasarāśi / /tāmbūlarāśi/ /tiryangmukharāśi / /tithi/

/tyājyarāśi / /tyājyatithi/ /ubhayarāśi/ /ubhayōdayarāśi/ /uccarāśi / /udakarāśi/ /ulkādaśa / /ūrdhwamukharāşi / /variyatithi/ /varșadașa / /varsagrahasiddhi/ /vāstupurusaśayanastthiti/ /vishamarāśi / /vriddhitithi/ /vrisayōni / /yōginidaśā/ /yugarāśi / /yugatithi/ /yugmarāśi/

# 11. Phonological Changes in Tatsama Loans

Analytical studies of Astrological terms in Tatsama and Tatbhava, we can formulate some of the following rules.

### **11.1 Nominal Stems**

Nominal Stems undergo certain changes before the Malayalam Suffixes are added.Since Malayalam doesnot follow the Sanskrit gender system, but follows the natural gender, words of masculine gender in Sanskrit, which are only neuter gender naturally, take the suffix, /-m/ [Nambudiri, -1972]

Examples are given bellow.

/viśākham/	<	/viśākha/
/makaram/	<	/makara/

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/tulām/		<	/tulā/
/uccakendram/	<		/uccakendra/
/uccanīcam/	<		/uccanīca/
/udararōgam/		<	/udararōga/
/ēkādhipatyam/	<		/ēkādhipatya/
/ <u>n</u> akshtRathithibalam/	<		/nakshtRathithibala/

11.2 Masculine Sanskrit Nouns with a word stem ending in a short /a/ take the ending /an/ in the nominative singular in Malayalam. Examples are given bellow.

/bhāvādipan/ /bhāvādipa/ < /gulikan/ < /gulika/ /ādityan/ /āditya/ < /indran / /indra / < /kālapurushan / /kālapurusha / < /kujan/ /kuja/ < /lagnēśan/ </lagnēśa/ /mātRukārakan/ /mātRukāraka/ < /vyayādhipan/ /vyayādhipa/ < /naksatRadhipan/ /naksatRadhipa/ <

#### 12 Phonological Changes in Tadbhava Loans

(a) /s/ > /c/

/simha/ > /cińńam/ /svāti/ > /cōti/

(b) /s/ > /t/

/śri/ > /siri/ > /tiri/ or /tiru/

/sRāvaņa/ > /tiruvōņam/

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(c) /s/ is dropped in words in the beginning and middle, and in the beginning of conjuct consonants.

Eg:	/danistta/	>	/avițțam/
	/hasta/	>	/attam/

(d) Indo-Aryan dh > t (Godavarma, K. – 1946)

/ŗṣabha/ > /iṭavam/

(f) **d>** t

/uttaraprōsthapadā/ > /uttrttāti

(g) **bh>** v

/ŗṣabha/ > /iṭavam/

(h)  $S \rightarrow Y$ /āsilisa/ > /āyiliyam/

(a) /s/ > /c/

/śataka/ > /catayam/

(b)  $/\underline{s}/ > /\underline{t}/$ 

/mēṣa/		>	/mēṭam/
/vṛṣabha/	>	/iṭavan	n⁄

(c)  $\dot{\mathbf{d}} > \dot{\mathbf{l}}$ 

/gudika/ > /gulikan/

 $(\mathbf{d}) \quad \mathbf{g} > \mathbf{k}$ 

/mṛgasira/ > /makayiram

## (e) Va > $\bar{o}$

pkt. /śāvaṇa/ > /ōṇam/

# 13 Dropping

(f) /ś/

/śravaņa/ > /āvaņa/ >/ōņa/ /śravista/ > /avittam/

(g) /h/

/hasta/ > /attam/

(h) /y/ /kanya/ > /kanni/

## 14 Elision of Vowel

# (a) I

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/āyiliyam/ > /āyilyam/ **(b)** j > С /jyēsta/ >/cēţta/ (c) vā > ō /svāti/ > /cōti/ **(d)** st > tt /hasta/ /attam/ >(e) kh > k/makha/ > /makam/ **(f)** d > l /vyā<u>l</u>am/ /vyāḍa/ >

## **15** Assimilation

Nasal + Stop > Nasal + Nasal ńg> ńń

Sińgha > cińńam

Sanskrit compounds are borrowed directly into Malayalam as in the case of 'Candrakkala', or both members are borrowed separately and combined, in which case the Malayalam Sandhi will prevail as in 'candrakkala'.(P, M. Joseph. -1979)

Some of the Sanskrit Loan words in Malayalam have come through Prakrit. (Godavarma,K.-1946)

Sanskrit	Parakrit	Malayalam
/simha/	/singha/	/cińńam/
/mṛgaśiras/	/magasira/	/makayiram/
/śrī/	/siri/	/tiri/ or /tiru/ , /tự/
/āśleṣa/	/āsilisa/	/āyilyam/

As per as Dr. Godaverma's assumption, a few examples are given bellow.

#### Table. 11

## Conclusion

The present study on 'Phonological and Semantic analysis of Malayalam Astrological terms' is an attempt to collect all the Malayalam terms in Astrology and study all these words in linguistic perspectives such as phonological and semantic. There were no such studies of this kind published yet. Lots of studies were done by scholars in different universities all over the world on Astrological terms, and it is meant for only astrological interpretation of the corresponding words. All these studies emphasized only the astrological concepts. And of course lots of linguistic studies are done by different scholars in the world on word levels, place names, toponomy, terms, etc. So there was no such study on astrological terms in linguistic perspectives.

In data collection procedures all the primary and secondary data are collected from different astrological texts, various encyclopedias, lexicon, dictionaries, some personal interviews and internet. At first, the data are arranged in English alphabetical order in order to avoid confusion.

Total astrological words selected were two thousand three hundred and sixty four. So it was clear that a Malayalee astrologer may use these words during their astrological predictions. But no astrologer can use these words frequently. So another task is to find out frequently used astrological words from these total astrological words. Field study is essential for that aspect. So for this purpose, Carried out extensive field study and took certain recordings of some of the astrologers work in tapes and interviews.

For this study, two thousand one hundred and ten frequently used terms were taken into consideration. It was found that some terms are strictly used only in Astrology and some terms related to astrology are used in different areas. So strictly used astrological terms are named as 'Pure Astrological Terms' and this category consists of 'Nakshathras' and 'Rasis'. Second one was named as 'Other Astrological Terms'. And the third category was 'Astrology Related Terms'. This was used in astrology and other social situations as well. Here, in this study the analysis of Pure Astrological Terms and Other Astrological Terms.

For example, the constellations such as Nakshatram or /naksatram/ 'stars'

/kārttika/	3 <sup>rd</sup> Naskshathram
/rōhiņi /	4rth Nakshathram

Raasis or /rāśi/ 'Zodiac'

/kumbham/	11 <sup>th</sup> Raasi
/makaram/	10 <sup>th</sup> Raasi

#### **Other Astrological Terms**

/bādhārāśi/	/bādha/	'torment' or possession by
	spirits'	
	/ rāśi/	'multitude' or 'heap' or 'zodiac'
/rāhudaśa/	/rāhu/	'Period of shadow planet
/rāśiyādipa/	/rāśyadipan/	'Lord of rasi'

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#### **Astrology Related Terms**

/ākāśasōtRam/	'One type of link between /ārōḍa/ and
	Ascendant'.
/āmātyakārakan/	'The planet with the second highest
	degree in the birth charts'.
/grahapīḍha/	'The difficulties caused by
	planet'.
/yōgam/	'Combination of planets'
/tithi/	'Name of day'

The following terms are astrology related terms which are frequently used in other situations.

/niicam/	'Cruel'
/nidrāvastha/	'Sleeping state'
/kāvu/	'Small wood of trees
	attached to a house'
/sarpakkāvu/	'Small wood of trees

attached to a house deity as Snake'

/kāvu/ and /sarpakkāvu/ are terms used in temple customized situations, which are related to worshipping Snakes as God. These words are not pure astrological terms these words were related to astrology and frequently used in some other circumstances. But most of the terms have strictly their Sanskrit origin and some Malayalam terms were identified during the study. Those words are,

/olivu/ 'Remedy'

Here, the term /olivu/ is a Malayalam noun having different contextual meaning as 'holiday', 'leisure', 'leaving', 'method and 'remedy'. Astrologically, /olivu/ means 'remedy'. Astrologers are frequently using this word for 'Pariharam' (remedy) in their predictions. But

the terms /kāvu/ (Small wood of trees attached to a house), /sarpakkāvu/ (Small wood of trees attached to a house were deity as snake), /kalari/ 'Training ground for martial arts', /kalarippayattu/ 'the training of martial art and Kalarimoorthi /kalari mortti/ 'The deities of kalari' are not pure astrological words, these words are somehow related to astrology and most probably related to other circumstances and situations.

After the preliminary study of these words, selected linguistic principles were applied. Linguistic analysis of all these words includes studies in Phonological and Semantic levels. The phonological level analysis of astrological terms includes descriptions and distributions and of the vowels consonant sounds, syllabic structure and cluster formation. (Prabodhachandran Nair, V. R. – 1972)

In semantic analysis, astrological terms such as terms beginning with Personal Names which include Male and Female Names, and the terms which begin with Names of objects, Names of Animals and birds, Names of colours, Names of Planets, Names of Nature, Names of body parts, numerals and miscellaneous items are given.

Those words which are in Sanskrit language have been transliterated to Malayalam. The original Sanskrit word in Devanagari scripts is translated to English and then transliterated. While transliterating Sanskrit words into Malayalam, at times two spellings for the same word have become inevitable such as muhurtha and muhoortha.

The Malayalam Tatbhava and Tatsama terms are emphasized in the linguistic analysis. This is intended to help everybody to be familiar with the correct pronunciation of the word. However the structures of overall alphabetization of the words have been based on the standard Phonological principles. In this study, the word analyses were done in a comparative manner.

A scientific research into the genesis of Indian astrological thoughts would convince us that our seers of yore must have keenly observed the human experiences over thousands of years. They must have analyzed them incisively to unearth the laws of nature shaping them. That effort could have enabled them to find some common factors influencing those human experiences. It was easy for them to conclude, then, that such underlying forces influencing and determining human experiences could not be due to some terrestrial factors alone. They could infer that forces acting from somewhere beyond had a definite say on matters and manners of the earth. They concluded that the forces that regulate the movement and cycles of heavenly bodies must have much influence over these terrestrial affairs. The planets were the catalysts of this extra earthly principle; they codified these causes and effects. Astrological science is the sum total of these codified causes and effects. It is the result of meditative intelligence and extra sensorial experience of great seers, unattainable and unimaginable to the contemporary elite, advocating a materialistic base for the study of this science and treating astrology as a system of mere fortune telling. Time has no conceivable beginning and end, like space. It is the space which regulates the idea of time. (N, E. Muthuswamy. -2006)

Majority of the technical terms are derived from Sanskrit. All the terms have diverse linguistic and cultural origin. This study investigated the structure of Malayalam astrological terms and the proliferation of Sanskrit and other languages' influence in the formation of Malayalam astrological terminology. (Raja, Kunjunni. K. -1992)

The study deals with the adoption of the different structural forms for the pattern of Malayalam astrological words have been put under. Most of the astrological works are done during the Aryan era. So the majority of the words are from Sanskrit. Here, the researcher studied and analyzed the Malayalam astrological terms and, the changes and influence between Sanskrit and Malayalam terms.

At first the basic and pure frequently used Astrological terms are selected for linguistic analysis. That is, the Nakshathras and Raasis. Analysis is done in the phonological and semantic levels. There are total of twenty eight stars and twelve Raasi's are there. After the detailed analysis of all the twenty eight Nakshathras, / abhijit/, /rōhiņi/, /rēvati/ and /bharaņi/ Nakshathras has no linguistic change in the above told analytical levels. Nakshathras like /aśvati/ in Malayalam has /aśvini/ in Sanskrit Language is concern. And like ways /attam/in Malayalam has /hasta/ for Sanskrit language and same as Malayalam Nakshathram /cōti/ has /svāti/ in Sanskrit language as well.

In the Phonological analysis, discussed the distribution of the vowels and consonants in the collected astrological terms. In Nakshathras terminology, three are three short vowel phonemes /a/, /i/ and /u/. The long vowel phonemes / $\bar{a}$ /, / $\bar{e}$ /, / $\bar{n}$ /, / $\bar{a}$  / and / $\bar{u}$ / are found. And in the case of consonants, following are the distributions of the various consonant phonemes in the various positions found in the astrological terms under present study. They are /bh/, /c/, /h/, /j/, /k/, /kh/, / $\underline{l}$ //V, /m/, / $\underline{n}$ /, / $\underline{n}$ /

For Raasi, the long and short vowels are /a/, / $\bar{a}$ /, / $\bar{e}$ , /i/, /ii, /u/. And consonants are /bh/, /c/, /dh/, /k/, /l/, /m/, /n/, /n/, /r/, /r/, /s/, /t/, /t/, /t/, /n/, /i/. Short vowels in the medial positions are /a/, /i/, /u/ and final positions are /i/ and /u/ and in word initial position only /i/. Long vowels are / $\bar{a}$ /, / $\bar{e}$ / and /ii/ which occure word medial positions only. And for consonants in the initial positions are /m/, /k/, /c/, /t/, /v/, /dh/, medial and final positions are /th/, /v/, /n/, /k/, /m/, /r/, /c/, /t/, /h/, /v/, /h/, /v/, /n/, /h/, /v/, /n/, /v/, /n/, /v/, /n/, /v/, /n/, /v/, /n/, /v/, /h/, /v/, /h/, /v/, /h/, /v/, /n/, /v/, /n/, /v/, /n/, /v/, /n/, /v/, /n/, /v/, /h/, /v/, /h/, /v/, /h/, /v/, /n/, /v/, /v/, /n/, /v/, /v//, /

And for Other Astrological Terms the long and short Vowels are /a/,  $/\bar{a}/,/\bar{e}/, /i/, /i/, /u/$ . /u/. And Consonants are /b/, /bh/, /c/, /d/, /d/, /dh/, /g/, /gh/, /h/, /j/, /k/, /l/, /m/, /n/, /n/, /n/, /p/, /ph/, /r/, /R/, /s/, /s/, /s/, /t/, /t/, /t/, /u/ and /y/.

The long and short vowels in the initial, medial and final positions of Other Astrological Terms are  $|\bar{a}|$ ,  $|\bar{u}|$ ],  $[/\bar{a}|/\bar{n}|$  and  $/\bar{e}|$ ,  $/\bar{a}|$ ,  $/\bar{u}|$  and  $/\bar{n}|$  and for short vowels /i/, /a/ and /u/, /i/, /a/ and /u/ and for final position /i/, /a/ and /u/ respectively. For consonants in the initial, medial and final positions are /b/, /c/, /d/, /g/, /k/, /l/, /m/, /p/, /r/, /s/, /s/, /t/, /v/ and /y/, /p/, /bh/, /b/, /t/, /d/, /R/, /t/, /d/, /c/, /j/, /k/, /k/, /l/, /m/, /s/, /s/, /s/, /h/, /r/, /l/v/, /y/, /m/, /m/,

The Gemination of Consonants or the long consonants occur only medial position. Consonant Clusters are /tt/,/ dd/, /pp/,/ jj/, /vv/, /nn/, /cc/, /nn/,, /kk/,/ ss/, /yy/,/ tt/, /dd/, /ll/. Then the clusters and then the syllabic structures of mono, disyllabic, trisyllabic and poly syllabic words were discussed in detail.

The Tatbhava and Tatsana word list and examples are given. And the rules for the combinations in the Tatbhava and Tatsama terms are emphasized. Malayalam has appropriated a large number of Sanskrit words as Dravidianized derivative ie, Tadbhavas in the early period, and directly as Tatsamas without much change during the middle and later periods. Tadbhava forms predominate in the early literature, later Tatsama forms became numerous.

For Semantic Classification, the analyses are done on the basis of meaning of specifics, they are of Personal Names, Names of Objects, and Name begins with Numerals, Name of Festivals and Miscellaneous. Personal Names are classified in to Male names and Female names. Four female Personal names are noticed. They are /ɑśvati/, /kārttika/, / rōhiņi / and /rēvati/. Only one male Personal name was identified /abhijit/. Names of Objects noticed are three; they are /bharani/, /kumbham/ and /dhanu/.

Terms begin with Numerals are identified. They are for the numerals of three /trikōṇadaśa/, /trikōṇarāśi /, /trisphuṭadaśa/, /tritīyarajju/, and for the Numeral two, /dwitīyarajju/. Name of Festivals are /attam/, /tiruvōṇam/ and /pūram/. Some terms are included in the miscellaneous category such as /makayiram/, / tiruvātira /, /puṇartam/, /pūyam/, /āyilyam/, /makam/, /uttRam/, /cittira/, /cōti/, /viśākham/, /anilam/, etc.

Studies on Raasi reveals that 7 Sanskrit Loan words with minor changes, they are, /mithun̪am/, / karkkitakam// tulām/, /vRiścikam/, /makaram/ , /kumbham/ and /miin̪am / are there. As per Kunjunni Raja's suggestion, it was clear that, the minor changes in the form of Tatsama Loan words, since Malayalam does not follow the Sanskrit gender system, but follows the natural gender, words of Masculine gender in Sanskrit , which are only neuter gender naturally takes the suffix /-m/ (Kunjunni Raja, K. -1958). Derived from Sanskrit words of Raasi consists of 5 numbers, they are /mētam/, /it̪avam//cińńam/, /kanni / and /dhanu /. After the classification, a detailed description of the Derived Terms is done with examples and etymological assistance.

These studies are done in the Tatsama terms in Other Astrological Terms. Other Astrological Terms are the third category under Analysis. The total Other Astrological Terms are listed around 134. Based on meaning of specifics, Other Astrological Terms are classified in to 9. They are , terms begins with Personal Names of Male and Female are 10 in number, Terms begins with Names of Objects are 2, Name of Animals and Birds are two, Term begins with Name of Colour is only One. Terms begins with Names of Planets are of 11 number, Terms begins with Names of Nature are of 4, Terms begins with Name of Body part is only 1, Terms begins with Numerals are 6 in numbers and the last classification is Miscellaneous, and they are 85. Simple Loan words in other Astrological Terms are 9 in number.

In Phonological changes, Tatsama Loans are given after the analytical studies of Astrological Terms in Tatsama and Tatbhava and some rules were derived from this study. First rule is about Nominal Stems before Malayalam Suffixes are added because, Malayalam does not follow the Sanskrit gender system, because they take only neuter gender naturally by adding the suffix /-m/

/am/ < /a/.

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Example: /viśakham/ </viśakha/
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Second Rule is Masculine Sanskrit Nouns ending in a short /a/ take the ending /an/ in the Nominative Singular in Malayalam.

|an| < |a|.

Example: /gulikan/ < /gulika/

After this, Phonological changes in Tadbhava Loans are given, they are, /s/ > /c/, /s/ > /t/, Indo Aryan /dh/ > /t/, /d/ > /t/, /bh/ > /v/.

$ {\rm \acute{s}} >/{\rm c} $	/śataka/	>	/catayam/
$ { m s}/>/{ m t}/$	/mēṣa/	>	/mēțam/

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₫ > 1	/guḍika/ >	/ gulikan/
g > k	/mŗgasira/ >	/makayiram And
j > c	/jyēsta/ > /cētta/	
vā > ō	/svāti/ > /cōti/	
st > tt	/hasta/ > /attam/	

kh > k /makha/ > /makam/

And for Dropping, the following sounds are present.

/ś/	/śravista/	>	/aviţţam/
/h/	/hasta/	>	/attam/
/y/	/kanya/	>	/kanni/
/I/	/āyiliyam/	>	/āyilyam/

## In Assimilation

Nasal + stop > nasal+ nasal (Subramoniam, V. I. – 1972) ńg> ńń Sińgha > cińńam

With the spread of education and expansion of communication the contents and types of various studies have undergone a vast change. In this age of specialization specialists are contributing every day, funds of new information to their specialized studies. This is the age of science and scientific knowledge and it has progressed by leaps and bounds. Indian astrology is a neglected subject. It is vast, deep, rich, and useful to mankind like any other

Language in India www.languageinindia.com ISSN 1930-2940 16:10 October 2016 Dr. Syam S.K., M.A., M.Phil., Ph.D. Phonological and Semantic Analysis of Malayalam Astrological Terms 240 subject and when it is related to any other kind of subject it will be a tremendous source of knowledge treasure.

## References

Godavarma, K. (1946) Indo- Aryan Loan words in Malayalam, Trivandrum: A. R. V. Press.

Kunjunni Raja, K. (1958) Contribution of Kerala to Sanskrit Madras: Literature, Madras University.

Subramoniam, V. I. (1972) Rules of Nasal Assimilation in Malayalam, Trivandrum: IJDL. Nambudiri, P. E. D. (1972) A Note on Gundert's Malayalam Trivandrum: Grammar, DLA.

P, M. Joseph. (1979) Prakrit Loan Words in Malayalam. A Study based on Inscriptions and Literary works from 9<sup>th</sup> Century to 15<sup>th</sup> Century A.D, Trivandrum: Department of Linguistics, University of Kerala.

Prabodhachandran Nair, V. R. (1972) Malayalam Verbal Forms, Trivandrum :DLA.

Raja, Kunjunni. K. (1992) Sanskrit Influence on Malayalam, Trivandrum: IJDL.

Raveendran, Meena. (2008) A Linguistic Study on Technical Terms of Science,

Trivandrum: Department of Linguistics, University of Kerala.

Muthuswami, N. E. (1998) A course in Indian Astrology, Nagarcoil, India: CBH Publications.

N. E. Muthuswamy. (2006) A Comphrehensive Encyclopedia of Indian Astrology, Trivandrum: Bhagya Publication.



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