



Music Theory

Year I - Carnatic Music

2009

Technical Terms

Sangeetham is an Indian term for Music. A group of musical sounds, which are called swaras that give melody and pleasant feelings to the ears, is called Sangeetham. Ancient writers hold the view that vocal music, instrumental music and dance together constituted sangeetham. Later, dance was separated from the first two.

Shruthi is an audible sound which can be heard distinctly. It is a musical sound which a well trained human ear is capable of distinguishing. It is the Key note or Adhara Shadjam, based on which all other Swaras are derived.

Swara is a musical note which is pleasing to the ears. There are seven basic swaras, known as **Saptha Swaras**. They are -

1. Shadjam (shortly - Sa)
2. Rishabham (Ri)
3. Ghandaram (Ga)
4. Madhyamam (Ma)
5. Panchamam (Pa)
6. Dhaivatham (Dha)
7. Nishadham (Ni)

Dwadasa Swarasthanas

Out of the seven swaras, Shadjam (Sa) and Panchamam (Pa) are constant. They are called Achala Swaras. The remaining five swaras admit varieties and they are called Chala Swaras. In combination, both Achala and Chala swaras yield 12 different musical notes and they are called Dwadhasa Swarasthanas.

The Dwadasa Swarasthanas are -

1. Shadjam.....Sa
2. Suddha Rishabam.....Su Ri
3. Chatusruthi Rishabam.....Cha Ri
4. Sadharana Gandharam.....Sa Ga
5. Anthara Ghandaram.....An Ga
6. Suddha Madhyamam.....Su Ma
7. Prathi Madhyamam.....Pra Ma
8. Panchamam.....Pa
9. Suddha Dhaivatham.....Su Dha
10. Chatusruthi Dhaivatham.....Cha Dha
11. Kaisiki Nishadham.....Kai Ni
12. Kakali Nishadham.....Ka Ni²

Arohana - Series of Swaras in the ascending order of pitch.

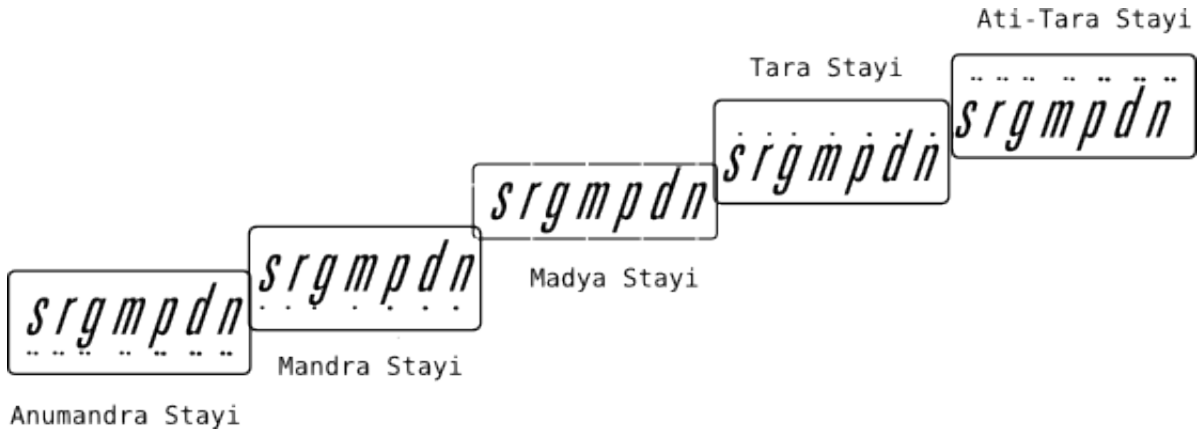
Avarohana - Series of swaras in the descending order of pitch.

Moorchana - Arohana and Avarohana together, is called Moorchana

Sthayi – A series of swaras, beginning with Sa and ending with Ni, is called Sthayi.

There are Five Sthayis.

1. Anumandra Sthayi
2. Mandra Sthayi
3. Madhya Sthayi
4. Tara Sthayi
5. Ati-Tara Sthayi



The Sthayi in which we normally sing is the madhya sthayi. The swaras following the upper Shadjam of madhya sthayi are in Tara Sthayi, and the swaras following upper shadjam of tara sthayi are in Ati-Tara Sthayi. The Sthayi preceding Madhya sthayi is the Mandra sthayi, and the swaras preceding the Mandra Sthayi Shadjam are in Anumandra sthayi.

Purvanga – The group of first four swaras of the Saptha Swaras – Sa, Ri, Ga, Ma – is known as the Purvanga.

Uttharanga – The group of last three notes – Pa Dha Ni – is known as Uttharanga.

Dhathu – The swara part of the musical composition is known as Dhathu.

Mathu – The sahitya part of a musical composition is known as Mathu.

Akshara Kala – Unit time in music is called Akshara Kala.

Thrikaala – Kala is refers to the speed of the musical piece. There are Three Kalas,

1. *Prathama Kala* – First degree of speed. One note is sung in one Akshara Kala.
2. *Dwitiya Kala* – Second degree of speed, twice faster than Prathama kala. Two notes are sung in one Akshara Kala.
3. *Tritiya Kala* – Third degree of speed, twice faster than Dwitiya Kala. Four notes are sung in one Akshara Kala.

Thourya Trikam - Vocal Music, Instrumental Music and Dance, all the three combined together is referred to as Thouryathrikam.

Tala – Musical time or measure.

Avartha – It is the completion of a tala angas or time measure.

Angas, Shadangas – In order to facilitate easy and accurate method of reckoning musical time, six angas have been devised. They are known as Shadangas or six angas. They are

	Name of the Anga	Sign	Number of Aksharas
1.	Laghu		3/4/5/7/9
2.	Drutham	O	2
3.	Anudrutam	U	1
4.	Guru	8	8
5.	Plutam	 8	12
6.	Kakapadam	+	16

Of the Thalngas, only 3 are widely in use. They are called *Principle Thalngas*. Here is the list of Principle Thalngas along with their way of counting

1. Anudrutam (U) – One Beat of the Palm on the lap
2. Drutam (O) – One beat + One wave (usi/visarjitam)
3. Laghu (I) – One beat + Count of the fingers

Jaati – Of the Shadangas, only laghu has variations in number of kriyas. It is called Laghu Jaati bedha. There are 5 Jaatis.

1. Trisra Jaati – 3 Kriyas
2. Chaturasra Jaati – 4 Kriyas
3. Kanda Jaati – 5 Kriyas
4. Misra Jaati – 7 Kriyas
5. Sankeerna Jaati – 9 Kriyas

Sapta Talas – There are seven principle Talas, they are called Sapta Talas. They are -

	Name of the Tala	Sign	Akshara Kala
1.	Dhruva Tala	IOII	14
2.	Matya Tala	IOI	10
3.	Rupaka Tala	OI	6
4.	Jampa Tala	I ₇ UO	10
5.	Triputa Tala	I ₃ OO	7
6.	Ata Tala	I ₅ I ₅ OO	14
7.	Eka Tala	I	4

The System of 35 Thalass

There are Seven basic Thalass. All these Seven thalass are made of Three basic Angas

- | | |
|----------------|---|
| 1. Laghu | I |
| 2. Drutham | O |
| 3. Anu-Drutham | U |

Here's the Sapta Thalass with their symbol denoting their respective angas

- | | |
|-------------------|------|
| 1. Druva Thalam | IOII |
| 2. Matya Thalam | IOI |
| 3. Rupaka Thalam | OI |
| 4. Jampa Thalam | IUO |
| 5. Tripata Thalam | IOO |
| 6. Ata Thalam | IIOO |
| 7. Eka Thalam | I |

Among the three angas, Drutham and Anu-Drutham are fixed. They have fixed number of Aksharas (Drutham - 2 Aksharas, Anu-Drutham - 1 Aksharam)

However, Laghu varies in the number of aksharas depending upon it's Jaati. There are 5 Jaathis of Laghu with their corresponding akshara kalas here -

- | | | | |
|---------------------------|---|------------|-------------------------|
| 1. Trisra Jaati Laghu | - | 3 aksharas | (Symbol) I ₃ |
| 2. Chaturasra Jaati Laghu | - | 4 aksharas | I ₄ |
| 3. Kanda Jaati Laghu | - | 5 aksharas | I ₅ |
| 4. Misra Jaati Laghu | - | 7 aksharas | I ₇ |
| 5. Sankeerana Jaati Laghu | - | 9 aksharas | I ₉ |

Because of this Jaati Bedam of Laghu, each of the Sapta Thalass give 5 Thalass, by varying the Jaathi of the laghu present.

Ex:

- | | | | |
|-----------------------------------|---|-----------------|--|
| 1. Trisra Jaati Rupaka Thalam | - | OI ₃ | |
| 1. Chaturasra Jaati Rupaka Thalam | - | OI ₄ | |
| 2. Kanda Jaati Rupaka Thalam | - | OI ₅ | |
| 3. Misra Jaati Rupaka Thalam | - | OI ₇ | |
| 4. Sankeerna Jaati Rupaka Thalam | - | OI ₉ | |

In a similar manner Seven Thalass of 5 Jaati each yield 7x5=35 Thalass.

Note: If more than one laghu is present in the thala, all the laghus have the same jaati.

Thala	Symbol	Jaati				
		Trisram	Chaturasram	Kandam	Misram	Sankeeranam
Druva	IOII	11	14	17	24	29
Matya	IOI	8	10	12	16	20
Rupaka	OI	5	6	7	9	11
Jampa	IUO	6	7	8	10	12
Tripata	IOO	7	8	9	11	13
Ata	IIOO	10	12	14	18	22
Eka	I	3	4	5	7	9

Table of 35 Thalass with their respective Akshara Kalas

Lakshana of Sanchari Geetha

Geetha generally means a song. The union of Dhatu and Matu is known as Geetha, i.e., the union of music and words (swara and sahitya) is said by the learned to constitute a geetha. Geethas are the simplest of melodies. The term geetha literally means a song. But in music it signifies a particular type of composition.

The music of the geetha is simple melodic extension of the raga in which it is composed. Its tempo is uniform. It is a continuous composition without the sections pallavi, anupallavi and charanam. The geetha is sung without repetition from the beginning to end. Some geethas have two sections (Khandikas) and some have three. Some geethas are concluded by repeating a portion of the opening part.

Geethas are learnt after a course in the preliminary swara exercises and alankaras. There are geethas in all the sapta talas and their varieties. Geethas are of two kinds. They are -

1. Samanya geetha (Sanchari / Sadharana / Lakshya geetha)
2. Lakshana geetha

Samanya Geethas (Sanchari Geethas) are usually in praise of God, Musical luminaries and Acharyas. Ex: The *Sapta Tala Geetha* in *Nata Raga "Gana Vidya Durandara"* in praise of Venkata Subbaya by Pydala Gurumurthy Sastry.

Geethas are set in medium tempo. There are no sangatis or variations and the flow of music is natural. Neither intricate combinations nor terse sancharis are found in its music. The swarupa is well brought out in each case. For each note of the Dhatu there is usually a syllable in the Sahitya.

Sometimes meaningless phrases are found interspersed in it. They are called Matrika Padas or Geethalankara phrases. Ex: *aa yiya yiya* in *Arabi Geetham "Rere Sri Rama"*. These phrases lend a characteristic beauty to the sahitya of geethas. They are introduced for ornamentation only. These syllables remind one of similar syllables occurring in samaganam. There are instances of famous Sanskrit slokas which have been cleverly introduced as sahityas for sanchari

geethas. The geetha in Bhairavi Raga “*Sri Ramachandra*” and the geetha in Nata Raga “*Amari Kimari*” are well known examples.

In a geetha the number of swaras present in an avartha is equal to the number of aksharas forming the avartha. The deerga swara being reckoned as two swaras will have two aksharas in the sahitya or a deerga three also this being so, a geetha in Chaturasra Jaati Dhruva Tala should not be taken as Tisra Jaati Tripura Tala considering two swaras for each count. Likewise a geetha in Chaturasra Jaati Rupaka Tala should not be taken as Tisra Jaati Eka Tala with two swaras for each count and so on. This will not be in keeping with the rhythmical construction of the composition.

Geethas are compositions in Ati Chitra Tama Marga. They are in Ekakshara Kalam (One Swara for each count). Purandara Dasa's introductory geethas in praise of Vigneswara, Maheswara and Vishnu are sometimes referred to as Pillari Geethas. The significant introduction of vowels in the very first geetha is noteworthy and justifies the genius of the composer. *Pydala Gurumurthy Sastry* was a prolific composer of geethas after Purandara Dasa. He is referred to as 'Veyyi Geethala' *Pydala Gurumurthy Sastry*. After him no noteworthy composer has attempted to compose Sanchari Geethas.

Ganakrama - Order of Singing a Geetha

Geethas are sung from the beginning to the end without repeating the avarthas. If a geetha consists of two sections (Kandikas) as in Kalyani “*Kamala Jaadala*”, the second section is sung after the first.

There are different categories of Sadharana Geetha

1. **Pillari Geetha:** Geethas written in praise of God like Vigneswara, Maheswara, Mahavishnu etc are called Pillari Geetha. Ex: Sri Gananadha in Malahari Ragam, Rupaka Thalam.
2. **Gana Raga Geetha:** Geethas written in Gana Ragas like Nata, Gowla, Arabi, Sri Ragam, Varaali are called Gana Raga Geethas. Ex: Re Re Sri Rama in Arabi Ragam, Tripura Thalam
3. **Rakthi Raga Geetha:** Geethas set to Rakthi ragas like Mohana and Kalyani are called Rakthi Raga Geethas. Ex: Vara Veena in Mohana Ragam. Rupaka Thalam.
4. **Raga Malika Geetha:** In a same geetha, if more than one raga is used, it's called Raga Malika Geetha. This type of Geethas are not in use today.

Notable composers who wrote Geethas:

- Purandara Dasa
- Paidala Gurumurthy Sastry
- Govindhacharya
- Venkata Makhi
- Rama Mathya

Lakshna Geetha

In a Lakshana Geetha, Sahityam will describe the lakshna of the Raga in which the Geetha is set to. There will be a small Deiva Stuthi too.

Lakshna Geethas describe the following lakshanas of the ragas:

1. Melam/Janyam: Is the Ragam a Mela Kartha ragam or a derivative ragam (Janya Ragam) based on a Melam.
2. Bashanga or Ubhanga Ragam
3. Whether the raga is Audava, Shadava or Sampoorna Raga.
4. Arohana and Avarohana of the Ragam
5. Vakram/Varjam - If there's any vakram or varjam in Arohana/Avarohana of the Ragam
6. Jiva, Nyasa (Ending Note) and Graha (Starting) swaras of the raga.

In many ragas Lakshna geethas are available.

Swara Pallavi or Jathi Swaram

A *Swara Pallavi* (also known as *Jathi Swaram*) is a kind of composition which has only the Dhathu part (Swaras) with no Sahitya. These are learnt after learning Geethas and before Varanas. These are scholarly compositions and their Dhathu has the Raga Bhavam. Usually Swara Pallavis are set to Madhyama Kalam (Medium Tempo) and set to Adhi or Chaapu Thalas.

Swara pallavis can have 2 or 3 parts in the following manner:

1. Pallavi - Anu pallavi - Charanam
2. Pallavi - Charanam

In some charanams Mrudanga Jatis are heard, hence the name "Jathi Swaram".

Swara pallavis usually have 4 to 8 charanams.

Compositional structure of a Swara Pallavi is same as that of Swara jati. The only difference is, a Swarajati has the Maathu part (Sahityam) too where Swara Pallavi lacks the Sahitya part.

Ganakrama (Order of Singing) of a Swara Pallavi

First Pallavi is sung. Then Charanas are sung. At the end of each Charanam, pallavi is sung again. So the order of singing is like this

Pallavi
Charanam 1 - Pallavi
Charanam 2 - Pallavi
etc.

Notable composers who wrote Swara Pallavis include

- Srimaan. Sri. Ramacharyulu
- Swathi Thirunaal
- Ponnaiah Pillai

Biography of Purandara Dhasa (1486 - 1564)

Purandara Dhasa was a composer lived in the 15th -16th (1486-1564) century. He was the first person to systematize the learning of Carnatic music. He composed Saralis, Jantas, Alankaras, Geethas and Devar Namas. So he is known as "Adhi Guru" and "Karnataka Sangeetha Pithamaha".

Purandara Dasa was born in a brahmin family, as the only son of Varadhappa Naik, a diamond merchant, and Kamala Bai. He was born in Purandaragudda near Hampi in Bellary district, Karnataka. His original name was Srinivasa and he was fondly called as Sinappa. He was brought up with all comforts and great care. He was a scholar in Sanskrit and literature. He married Saraswathi Bai at the age of 16. He lost his parents at the age of 20. He took over the responsibility of his father's business. He was very successful and he became very wealthy in a short period of time. He came to be known as Navkoti Narayan.

As his wealth grew up, he became merciless. But his wife was just the opposite. Once a brahmin came to Dasa and asked for some money to perform the thread ceremony for this son. When he refused to help, the brahmin went to Dasa's wife and sought her help. She gave him her nose ring and the brahmin took it to Dasa's shop to sell it. Dasa realized that the ring was similar to that of his wife's. He rushed back home and demanded his wife to show the ring.

Saraswathi Bai didn't have the ring any more and she couldn't tell the truth to her husband. With a troubled mind, she decided to kill herself by drinking poison. Surprisingly, the ring was there in the bowl where poison was supposed to be there. She gave it to Purandara Dasa and told him the whole story.

Amazed to hear the story, Dasa sent his servants to find the brahmin. The servants couldn't find him anywhere. It was at this time that Dasa composed his first song "Mosa Poyidhe" (Kannada) in Atana Raga

This incident changed him completely. He went on a pilgrimage from the Himalayas to Kanyakumari three times. He gave up all his wealth in charity. He taught Vedas and Upanishads to people. Vyasarayana Pitathipathi Swamiji Satyadharma Tirtha gave him the name Purandaradasa.

Purandara Dasa composed Sarali, Janta, Alankaras and Pillari Geethas to facilitate the learning of Carnatic music in a systematic way. He was the root cause in introducing Mayamalava Gowla ragam in all these 15 Abyasa Ganas. He has also composed Thana Varnas and Padha Varnas. More over he has composed over 47,500 Devar Namas in Kannada. He was the first person to compose in Kannada. His mudra is *Purandara Vitala*.

Biography of Paidala Gurumurthy Sastry

Paidala Gurumurthy Sastry belonged to the 18th century. He lived in a village called 'Kayattaru' in Tirunelveli district. He was a Telugu Brahmin belonging to the Murikinati sect.

He was well versed in the four Vedas and was an expert in music and literature. He was a contemporary to Ramaswamy Dikshitar and a deciple of Sri Sonti Venkata Subbiar. He was a great scholar in both Lakshya & Lakshana (Theory & Practice) in music. He has composed many Geethas, Lakshana Geethas, Prabhandas and Kirthanas. He has composed 1000 geethas and is known as "Veyyi Geetha Paidala Gurumurthy Sastry". He was the most notable composer to compose Geethas after Purandara Dasa. His Mudra is *Gurumurthy*. He was honoured by Manali Chinnaiah Mudaliar many times in Madras for his scholarship in music and literature.

He composed the Saptageetha in Nata Raga "Gana Vidya Durandhara" in praise of Venkata Swamy. All his compositions are in Sanskrit. The Sahityas are in praise of God. Hi Keerthana 'Neeraja nayana' in Dhanyasi Raga, 'Sadapathim' in Mohana Raga and the Lakshana Geetha "Kamsasura" in Shahana raga are very popular among his compositions. Among his deciples is Kanchipuram Gudala Seshayya Sastry who wrote many well-known Keerthanas and Swarajatis.