

## OPEN ACCESS

Manuscript ID:  
ASH-2024-12028147

Volume: 12

Issue: 2

Month: October

Year: 2024

P-ISSN: 2321-788X

E-ISSN: 2582-0397

Received: 06.08.2024

Accepted: 20.09.2024

Published Online: 01.10.2024

## Citation:

Balaji, J., and Uma Ramakrishnan. "Porutham - Creating Varied Rhythmic Cadences with Chart Templates." *Shanlax International Journal of Arts, Science and Humanities*, vol. 12, no. 2, 2024, pp. 88–97.

## DOI:

<https://doi.org/10.34293/sijash.v12i2.8147>




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# Porutham - Creating varied Rhythmic Cadences with Chart Templates

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## Abstract

*Porutham is a Tamil word meaning 'matching'. The word has varied meanings according to the context in which it is used in Tamil language. Porutham in Astrology means 'match making between two astrological charts' at the time of marriage. Porutham also means perfectly matched partners or friends. 'Nalla Porutham' is the phrase which means 'Good Match'. It also means that it will be ideally suited for the particular object.*

*Musically 'Poruthams' can be used as part of various cadential forms like Korvai<sup>1</sup>, short ending items like Mukhtayi, theermanam, arudi etc. This can also be used in 'Jati Pallavis'<sup>2</sup>, in the Pallavi portion of Ragam, Tanam, Pallavi and in Kritis where neravals<sup>3</sup> are sung. Porutham is generally done as a rhythmic exercise, where Jatis<sup>4</sup> are employed when a percussion artiste uses Poruthams and Swaras are used when a Vocalist/instrumentalist uses them.*

*This article also covers various examples covering porutham ideas for various kritis where neravals are popularly sung. Sample kritis have been taken from different Talas like Adi Tala, Rupaka Tala and Misra Chaapu Tala. Ragam-Tanam-Pallavis and Jati Pallavis have not been covered in this article, as we propose to cover them extensively in a separate article.*

**Keywords:** Porutham, Mridangam, Laya, Tala, Karnatak Laya, Carnatic Laya, Carnatic Tala, Karnatak Tala, South Indian Percussion, South Indian Rhythm, Rhythmic Cadences, Neraval, Swaras, Swaraprastara, Ragam-Tanam-Pallavi, Jati Pallavi

## Introduction

A Porutham is a cadential form used in Karnatak Music. Porutham is a Tamil word meaning 'matching'. The word has varied meanings according to the context in which it is used. Porutham in Astrology means 'match making between two astrological charts' typically done before marriage between the prospective bride and groom. Porutham also means perfectly matched partners or friends. Porutham is also used in selection of matching apparels in various different colours. The word also means that it will be ideally suited for the particular object.

Musically 'Poruthams' can be used in various cadential forms like Korvai, short ending items like Mukhtayi, theermanam, arudi. This can also be used in 'Jati Pallavis', in the Pallavi portion of Ragam, Tanam, Pallavi, in Kritis

1 Korvai, Mukhtayi, Arudi, Teermanams are all cadential forms serving a definite purpose in musical and rhythmic expositions. Refer to Annexure 2 for 'Glossary'.

2 Jati pallavis are typically composed in the format of Ragam, Tanam and Pallavi where in Pallavi singing there are meaningful words used for a particular Tala while cognizable rhythmic phrases are used in Jati Pallavi. In pallavi and Jati Pallavi the lines are repeated continuously and expanded.

3 Neraval is an elaboration of a meaningful line taken from the composition. On the neraval line generally swaraprastaras are rendered, where the idea of poruthams can be used.

4 Rhythmic Syllable

where neravals are sung. Porutham is generally done as a rhythmic exercise, where Jatis are employed when a percussion artiste uses Poruthams and Swaras are employed when a Vocalist/instrumental is uses it as part of performance. Porutham is done where the song line itself gives scope for rhythmic ideas to be prefixed.

**Features of Porutham**

Porutham is a rhythmic expression or idea, which has to lead to a match with the rhythmic undercurrent of the kriti line, neraval line, Jati Pallavi line or the Pallavi line in RTP (Ragam-tanam-Pallavi). We have used the phrase ‘song line’ to refer to the line in a Kriti (song) which is taken up for elaboration of Neraval and exposition of Swara Prastaras (Annexure 2). Generally, the neraval and swaraprastaras are done at the same ‘song line’. In some cases, the ‘song line’ can also be the starting line of a kriti.

Poruthams are used only during swara prastaras by vocalists/instrumentalists and while doing rhythmic explorations by Percussion artistes during their solo performances. For example, if a rhythmic idea having the format of phrase (gap) phrase (gap) phrase, then, after the last phrase is rendered the value of gap (given between the first and 2nd phrase) or the phrase themselves (without the gap) should match with the rhythmic undercurrent of the particular line of the song taken up for Neraval elaboration, then it is called ‘Porutham’.

As we mentioned earlier, the value of the phrase also can match with the song line where the use of gap or kaarvai will become redundant. In such cases the phrase is rendered thrice and the fourth time it matches with the rhythmic undercurrent of the song line. Some people also render the phrase twice and match with the rhythmic undercurrent of the song line as the 3rd time matching with the phrase.

In other words, the value of the rhythmic phrase, the value of gap or the rhythmic idea of the gap, as given in Table 1 matches with the rhythmic undercurrent of the song line. In reality, porutham format becomes Phrase (gap) Phrase (gap) phrase (gap-which matches with the rhythmic idea of the starting line of the song). Without the gaps also, the rhythmic phrases themselves can lead to poruthams.

In such cases the format becomes Phrase – Phrase – Phrase and the song line or Phrase – Phrase – song line. The use of this form is left to the creativity of the artiste more than the rigidity of the idea and limitation of this article.

**Porutham Ideas - General**

Poruthams can also be used for logical development. Assume a rhythmic phrase is 5 and the value of the gap is 8 then then idea becomes 5 (8) 5 (8) 5 (after this point the rhythmic undercurrent of the song line must have a phrase containing 8 pulses). The next logical development could be 6 (8) 6 (8) 6 (Song line) and the subsequent logical idea could be 7 (8) 7 (8) 7 (song line) and so on. This way the accompanists (like the violinist and the percussion artiste/s) can quickly grasp the idea on the spot and execute to perfection during their turn. The totals for the above ideas can be taken from 3 Chart given in Annexure 1.

Another logical idea could be 5 (8) 5 5 (8) 5 5 5 (song line). The totals could be calculated using the charts (in this case 6 chart) given in Annexure I and can be extended to other numbers like 6,7,8 or 9 etc.

Yati ideas can also be used in Poruthams. For example, observe the following:- 7 (4) 7 (4 + 4) 7 (song line having a rhythmic under current of 4 + 4 + 4).

The following table gives numbers and their rhythmic expressions and kaarvai phrases. Ideally kaarvai means a gap which is just left as gap after the first syllable is rendered as /tm or ta/ etc. Assume the rhythmic phrase is 5 and the kaarvai phrase is 9 then it should be rendered as /t d g n tm/ta . . . . ./. But in Poruthm, since the song line matches with either the rhythmic phrase or the kaarvai, they are orally rendered, in order to explicitly express the ‘match’. On most of the other occasions, the kaarvai is left as a gap after giving the first syllable as /ta or tm or tham/ etc. Experts have always laid emphasis on kaarvai being suppressed during rendition, in order to assess the ‘Laya Nirnaya’<sup>5</sup> of a student or a performer.

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5 Virtuosity. Even though the word “nirnaya” has different meanings, in this context it refers to the skill level of the artist.

**Table 1 Rhythmic Phrases and Karvai**

Numbers	Rhythmic Representations	Vocalised as	Gaps or Kaarvai representations
1	Ta	Tha	.
2	Ta ka	Tha Ka	Tm .
3	Ta ki ta	Tha ki ta	Taangu or t n g
4	Ta ka di mi	Tha ka di mi	T . . .
5	Ta di gina tm	Tha di ginathom	Tm . t n g / t. tng/ t t. tm .
6	Ta ka ta ka di mi	Tha ka tha ka di mi	T n g - t n g
7	Ta ki ta ta ka di mi	Tha ki ta tha ka di mi	T . . . t n g
8	Ta ka di mi ta ka jo nu	Tha ka di mi tha ka jo nu	T . . . d . . .
9	Ta aka di mi ta di gina tm	Tha ka di mi tha di ginathom	T n g- t n g - t n g
10	Ta ki ta tm . ta di gina tm	Tha ki ta thom .tha di ginathom	Tm . t n g - Tm . t n g

The table lists commonly used phrases only. Next section gives various examples of using Porutham during swaraprastara in different talas.

### Various Examples

#### Example in Adi Tala (2 kalai)

For example, if the phrase is / t k d m t d g n tm/ and the gap is /(t . . . d . . .)/ then the format is /t k d m t d g n tm /(t . . . d . . .)/ t k d m t d g n tm /(t . . . d . . .)/ t k d m t d g n tm /(t . . . d . . .)/ where the gap for 3rd gap time has to match with the rhythmic undercurrent of the line of the song.

**Song line example taken to match with the above idea: Madura puri nilaye** (Kriti : Meenakshi memudamdehi in Purvikalyani Raga - Adi Tala - 2 kalai) (Annexure 2). The rhythmic undercurrent for the lyrics Maduis /t . d./ and ra is /t .k .t .k .d .n ./ .Generally, the starting rhythmic phrase covered by the lyric is used for porutham. It is not a rule that only the starting lyrical phrase should only be taken. The entire starting phrase consisting of the word 'madura' can also be taken which has a rhythmic value of 16 pulses with the rhythmic undercurrent as /t .d ./ (4 pulses) - /t . k .t .k .d .n ./ (12 pulses). The choice of rhythmic undercurrent to be taken up is left to the discretion of the artiste. The rendition of rhythmic undercurrent can also be changed and the porutham ideas can be modified too. For example, madura can be extended to 20 pulses even with the starting rhythmic value as 6. Since, such immense freedom is given to the artiste to explore the song line

and the rhythmic phrases, artistically and musically, quantifying them becomes a real matter of concern. Only way is to explain the concepts through such articles like this and allow the artistes to interpret them creatively, in their own individual styles.

Coming back to the example, porutham can be used for first 8 pulses alone and modify the earlier phrase of / t .d . t d g n tm (9) - (t . . . d . . .(8)) - / t .d . t d g n tm - (t . . . d . . .) - / t .d . t d g n tm - (ma .du .ra . . .). This idea is given as jatis in Table 2 and notated with swaras in Table 3.

#### Calculate the Total for any Combination of Phrases with or without Gaps for any Graha

The total for the above expression can be calculated with the '3' table given in Annexure 1. In the above example we have given the gap of 8 for the phrase value of 9, which can be seen from the table for '3' in annexure 1, as 43.

The graha (Annexure 2) (song line starting point) is 'anahata' in the above song which is 4 pulses after the beat has begun. For Adi Tala 2 kalai there are 64 pulses per cycle. Subtracting 43 gives the result of 21 as the offset and the graha of 4 pulses to be added to start the above Porutham Idea. Hence, from samam, 25 pulses have to be left to start the porutham idea or from the Graha leave 21 pulses. This is given in the following table. As the tala is 2 kalai the squares are doubled in the table, assuming that each box is containing 8 pulses.

**Table 2 Example in Adi Tala with Rhythmic Phrases**

			. t . d . t d g	n t m - t . . . d .	. . t . d . t d	g n t m t . . . d	. . . t . d . t
d g n t m / ma . du .	ra . . . . .	. . . . pu . r	. . ni . . la . .	//ye			

The same is given as swaras in the following table.

**Table 3 Example in Adi Tala with Swaras**

			. g , r , g r s	n d - s , r , g ,	, , r , s , r s	n d p - d ,	, , , s , r , s
r g m p / ma . du .	ra . . . . .	. . . . pu . ri	. . ni . . la . .	//ye		s , r	

As an extension, any pattern having 8 gaps can be explored for ‘Madura puri nilaye’ in any chart either 3 or 6 or 9 given in Annexure 1. Use of methods to calculate the starting point of the variety as mentioned above can be done and then the ideas can be executed.

**Yati Idea for Madura Puri Nilaye**

Yati idea for Madrua Puri nilaye with phrase as 7 and gaps as 4 / 4 + 4 / 4 + 4 + 4 – as rhythmic undercurrent of the song line. Total for 7 \* 3 is 21 and the gap of 12 gives us the total of 33. From the graha of the kriti leave 33 pulses or from the sama (starting point of the tala) leave 37 pulses. This is given in the following table.

**Table 4 Yati Idea with Rhythmic Phrases**

				. . . t . d . g	n t m t . . . / t .	d . g n t m t . .	. d . . . / t . d
. g n t m / ma . du .	ra . . . . .	. . . . pu . r	. . ni . . la . .	//ye			

The same is given as swaras in the following table.

**Table 5 Yati Idea with Swaras**

				. . . g , r , s	n d s , r , / r ,	s , n d p d , s	, r , , , / s , r
. g m p / ma . du .	ra . . . . .	. . . . pu . r	. . ni . . la . .	//ye			

The same song line can be sung in various different ways also. Ma .. du ..ra ..(with 3 as the rhythmic undercurrent). If it is sung this way, then the porutham ideas have to be modified suitably to have 3 as the kaarvai or 3 as the prominent rhythmic phrase.

**Porutham Idea for Adi Tala-1 Kalai**

The following porutham idea is for the song line ‘Sannutanga Sri venkatesa’ appearing in the kriti ‘Marivere Dikkevarayya Rama’ in the Raga Shanmukhapriya.

The rhythmic undercurrent is 5 for ‘sannu’ split as 2+3 and 5 for ‘taanga’ split as 3 +2. The graha of the korvai is 6 pulses after sama. In the following Korvai, instead of //6 (2+3) 6 (2+3) 6 – Song line// on all 3 occasions in Uttaranga, the korvai has been modified as given below:

- 5 (2 + 3) 5 (2 + 3) 5
- 6 (2 + 3) 6 (2 + 3) 6
- 7 (2 + 3) 7 (2 + 3) 7 - Songline

**Korvai in swara format**

*Korvai 1<sup>st</sup> Round*

- Gr,s, rs,n, sn,d,
- grs, rsn, snd,
- grs rsn snd –
- Grsnd (n,s,,) rsndp(d,n,,) sndpm

*Korvai 2<sup>nd</sup> Round*

- Gm,p, mp,d, pd,n,
- gmp, mpd, pdn,
- gmp mpd pdn –
- Gm,pdp (m,p,,) mp,dnd (p,d,,) pd,nsr

*Korvai 3<sup>rd</sup> Round*

- Gr,s, rs,n, sn,d,
- grs, rsn, snd,
- grs rsn snd -
- G,r,snd (n,s,,) r,s,ndp (d,n,,) g,m,pdn –

**Sannuthangasri Venkatesha**

The korvai idea has been developed on the popular pattern sung by various artistes. The following is the rhythm split of the above korvai.

**1<sup>st</sup> Round**

5 5 5 – 4 4 4 – 3 3 3 → Purvanga  
5 (2 + 3) 5 (2 + 3) 5 → Uttaraᅡga

**2<sup>nd</sup> Round**

5 5 5 – 4 4 4 – 3 3 3 → Purvanga  
6 (2 + 3) 6 (2 + 3) 6 → Uttaraᅡga

**3<sup>rd</sup> Round**

5 5 5 – 4 4 4 – 3 3 3 → Purvanga  
7 (2 + 3) 7 (2 + 3) 7 → San Nu (2 + 3)

The total pulses of the korvai in first round is 61, the second round is 64 and the third round is 67.

The above korvai doesn't fall on the song line offset each time as it is an averaged-out idea used in the uttaranga. Only after rendering the korvai the 3rd time, the song line offset (graha) appears. Care must be taken about this aspect while rendering the same.

**Example in Rupaka Tala<sup>6</sup>**

Song line: Veda Shastra Purana (Kriti – Ninne neranamminanura- Pantuvarali– Graha of the kriti and swara line is 2 pulses after samam).

The rhythmic under current is 5 pulses for 'veda'. So, we can have 5 pulses as the gap for the phrases to coincide with the song line. Total number of pulses for Rupaka Tala is 12. The graha of the kriti is given in the following table.

**Table 6 Kriti in Rupaka Tala**

. . ve .	Da . . sha	. s tra .
Pura	.. ..	. . na .

For the above song line, we shall have 5 (5) 77 (5) 9 9 9 (ve. da . . (5)). Total number of pulses for the rhythmic idea is 56. The graha of the song line is 2 pulses. 56 is not divisible by 12. The next higher number is 60 which is 4 pulses higher than 56. So 4 pulses plus 2 pulses for graha will give us a result of 6 and hence if the above idea is started after 6 pulses from sama, then it can be rendered.

**Table 7 Example in Rupaka Tala with Rhythmic Phrases**

. . . .	. . t d	g n tm t
. tm . .	t . d .	g n tm t
. d . g	n tm t .	tm . . t
. d . t	d g n tm	t . d .
t d g n	tm – t . d	. t d g
n tm - ve .	Da . . sha	. s tra .

**Table 8 Example in Rupaka Tala with Swaras**

. . . .	. . g r	s n d n
, s , ,	g , r ,	s n d r
, s , n	d p - d ,	n , , g
, r , g	r s n d	r , s ,
r s n d	p s , n	, s n d
p m - ve .	da . . sha	. s tra .

The above is seemingly complicated and hence we tried out a different idea in Rupaka Tala as 555 (5) 777 (5) 999 (ve. da . . shastra). The total is 9 \* 7 = 63+ 10 (2\*5 for value of gaps). So 73 is the total for the above idea. 12 is the total number of pulses for one cycle of Rupaka Tala. 73/12 gives us the remainder of 1 and hence 11 pulses should be filled up from samagraha to render the above idea from sama. Since, the graha of the song line is 2 pulses after sama we should add 2 to 11 which gives us a total of 13, which is 1 pulse more than 12 and hence leave 1 pulse from sama to render the above idea of 555 (5) 777 (5) 999 (ve. da . . shastra). This is actually the value of 9 times 7 and is available in 9 table given in Annexure 1.

The following is a much simpler example in Rupaka Tala for a different song line, to understand and appreciate the concept of poruthams. The song line taken up is 'Sudha Mayi Sudha Nidhi' in the Raga Amrutavarshini. The rhythmic undercurrent for Sudha Mayi is 2+4 and 2+4 making it 12 pulses or 1 cycle of Rupaka Tala. So, the porutham idea can be made with rhythm ideas to match with 2+4. The logic employed in the example here is

5 (2 + 4)  
5 5 (2+4; 2+4)  
5 5 5 ((2+4; 2+4; su. Dha... )  
Mgsnp (n,s,,,  
Mgsnp gsnpm (p,n,,m,p,,,  
Mgsnp gsnpm snpmg (m,p,,p,n,,,) - **Sudhamayi**

6 Rupaka Tala has a separate structure in Suladi Sapta Talas with one Druta and one Laghu. In normal practice Rupaka tala has three beats one Anudruta (1 beat) and one Druta (beat and a wave). Refer to Annexure 3 for Suladi Sapta Talas

Total value for the above idea is 60 which is divisible by 12 and hence the idea can be rendered from Sama.

Further ideas can be developed with the use of 6 chart given in Annexure 1 for 6 and 7 etc also. Exploration and experimentation yield better results than practicing notated ideas.

### Example in Misra Chaapu Tala

Song line: manasuna (Kriti – Pakkala Nilapadi – Kharaharapriya Raga– Graha of the song line is 3 pulses after samam).

3 pulses after samam in Misra Chaapu tala invariably results in the same rhythmic undercurrent of t t . // . So, any 3 or 6 or 9 gap ideas can be taken as a beginning exercise taken from the Chart Templates given in Annexure 1. Next idea can be 4 with the phrase t- t t . // or 5 gap phrase of t t .tm . // etc.

We shall take up 5 gaps here as an example. The first idea with 5 gaps can have 6 times the phrase as 7 taking the total to 42 + 10 giving the total as 52 which is not divisible by 7. The closest divisible higher number is 56 which is 4 pulses less than the arrived number of 52. The graha is already 3 places away from sama. So leave 7 (3 + 4) pulses from sama to render this idea to get this porutham. The idea is given below:

..... t . d . g n tm - t t .tm .  
 t .d . g n tm - t .d . g n tm - t t .tm .  
 t .d . g n tm - t .d . g n tm - t .d . g n tm - ma na .su  
 ... na ...//  
 ..... g , r , s n d - n s , r ,  
 g , r , s n d - r , s , n d p - d n , s ,  
 g , r , s n d - r , s , n d p - g , m , p d n - ma na . su  
 ... na ...//

The second idea uses manipulation of gaps to match with the rhythmic undercurrent of the song line. In which case the calculation has to be addition of 25 pulses to 42 which is 67 (42+25) and the nearest number divisible by 7 is 70 so leave 6 places from sama to get this idea as explained below:

..... t . d . g n tm - t t .tm .  
 t .d . g n tm - t .d . g n tm - t t .tm . t t .tm .  
 t .d . g n tm - t .d . g n tm - t .d . g n tm - t t .tm . t  
 t .tm . ma na .su ... na ...//  
 ..... g , r , s n d - n s , r ,  
 g , r , s n d - r , s , n d p - d n , s , p d , n ,

g , r , s n d - r , s , n d p - d , p , m g r - g m , p , - m  
 p , d , - ma na . su ... na ...//

If you observe the above the second and third have the same gaps in the rhythmic variety, while the third time the rhythmic undercurrent of the song line matches with the kaarvai or gap phrase. This is one of the classic examples of a Porutham.

After working out all these we came across porutham ideas and also a korvai in Misra Chaapu Tala containing porutham for the kriti ‘Bhajarerechita’ in Kalyani where the songline taken up is ‘Bhava Raga Tala Modini’. The first two phrases of ‘Bhava Raga’, are taken up here for porutham values having the rhythmic undercurrent of 3 and 3. So, we have made rhythmic ideas along these lines to have porutham with /t n g - t n g/ as the intervening phrase to match with the song line containing the words ‘Bhava Raga’.

### Short Endings in Porutham for Bhava Raga Tala Modini

The following idea is explained in numbers so that it is easier to follow the logical flow of the porutham idea, while it is being rendered in swaras.

Take off point is 13/14 and the idea is 5 5 5 (3 3) 5 5 5 (3 3) 5 5 5 (Bhava Raga)

1. .... ,grsnd rsndp sndpm (g,g m,m)  
 rsndp sndpm ndpmg (r,r g,g)  
 Sndpm ndpmg dpmgr - Bhava raga  
 Take off point for 2nd idea is 4/14 and the pattern is 6 6 6 (3 3) 6 6 6 (3 3) 6 6 6 (Bhava Raga)
2. .... ,gr, snd rs, ndp sn,dpm (g,g m,m)  
 rs,ndp sn,dpm nd,pmg (r,r g,g)  
 Sn,dpm nd,pmg dp,mgr - Bhava raga  
 Take off point for 3rd idea is 9/14 and the pattern is 7 7 7 (3 3) 7 7 7 (3 3) 7 7 7 (Bhava Raga)
3. .... ,g,r,snd r,s,ndp s,n,dpm (g,g m,m)  
 r,s,ndp s,n,dpm n,d,pmg (r,r g,g)  
 S,n,dpm n,d,pmg d,p,mgr - Bhava raga

The above logic had a progressive structure of changing from 5 to 6 and then to 7. It is also possible to have 5, 7 and 9 also. For 5 and 7 the take off point we have already seen which is 13/14 and 9/14. For rendering 9 the take off point would be 5/14. If you closely observe the difference between 5 and 7 or between 7 and 9 it is 18 pulses. So, the take-off points can be easily calculated as 18 pulses before

5 for rendering the idea for 7 and 18 pulses before 7 for rendering idea for 9. Cancelling 14 per cycle for Misra Chaapu, we are left with a balance of 4, hence, the take-off point would be 4 pulses before 5 for rendering the idea for 7 and vice versa for 9 or even 11 etc. Such ideas have to be readily had in mind for impromptu improvisations, which is possible through such logical training process.

### Korvai Idea for Misra Chaapu Tala

Any porutham ideas rendered like above can also have a matching korvai (by following the same idea) in the end to give the entire logic a complete structure and it is really fulfilling for both the artiste as well as the audience to enjoy the rhythmic varieties, as also the progression of the song. Keeping this in mind, we came up with the following Korvai idea: -

3 (4) 2+3 (4) 4 +3 (4) → Purvanga  
5 5 5 (6) 5 5 5 (6) 5 5 5  
3 (4) 2+3 (4) 4 +3 (4) → Purvanga  
5 5 5 (2 2 2) 5 5 5 (2 2 2) 5 5 5  
3 (4) 2+3 (4) 4 +3 (4) → Purvanga  
5 5 5 (3 3) 5 5 5 (3 3) 5 5 5 (Bhava Raga)

### 1<sup>st</sup> Round

Gr,s,,,dngr,s,,, mpdngr,s,,,  
Grsnd rsndp sndpm (g,,,,)  
rsndp sndpm ndpmg (m,,,,)  
sndpm ndpmg dpmgr

### 2<sup>nd</sup> Round

Gm,p,,, gr gm,p,,, pmgrgm,p,,,  
Gmpdp mpdnd pdnsn (s,n,d,)  
mpdnd pdnsn dnsrs (r,s,n,)  
pdnsn dnsrs nsndn

### 3<sup>rd</sup> Round

Gr,s,,,dngr,s,,, mpdngr,s,,,  
Grsnd rsndp sndpm (g,g m,m)  
rsndp sndpm ndpmg (r,r g,g)  
sndpm ndpmg dpmgr - **Bhava raga tala**

In the above idea Purvanga is kept constant while the kaarvai in the uttaranga is varied keeping its value constant. The gaps can thus be masked in various different ways also. In the first time all 6 were given as Kaarvai, while on the second occasion the value of 6 as kaarvai was rendered as (2 2 2), creating a suspense. During rendition of the third time the value of 6 was rendered as (3 3) thus unfolding the

suspense to match with the rhythmic undercurrent of the song line.

Thus, various ideas in Porutham can be worked out with the help of the Chart Template given in Annexure 1 and beyond that also.

Within the scope of this article, we have tried to cover many examples to show the ideas and concepts, while leaving the major chunk of creative exploration to the artistes themselves.

### Summary

In this article Porutham in Karnatic Music was explained with a few examples for Adi, Rupaka and Misra Chaapu Talas. Porutham is one of the rhythmic forms expressed musically through vocal or instruments. Poruthams are generally employed while rendering swara patterns and also while rendering Percussion solos. Poruthams not only work well with different Grahas but also work well with even samagraha. Any melodic phrase having significant rhythmic undercurrent can be made use of in poruthams. Care must be taken to avoid employment of porutham ideas if the song line is an elongated one with long pauses in them. Poruthams are not mandatory, thus, leaving the choice to the vocalist to use them judiciously.

### Conclusion

It is really very difficult to explain typically practical subjects, where theory comes much after the practice, with exhaustive examples, as the art is creative and very dynamic. Standardization is always a matter of concern and hence those examples listed in the article cover some of the popularly sung compositions and the song-lines expressed are mostly taken up for neraval and swara renditions by vocalists and instrumentalists. The topic is suggestively discussed and not exhaustively done.

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## Annexure 1

### Chart Templates

3	0	1	2	3	4	5	6	7	8	9	10
5	15	17	19	21	23	25	27	29	31	33	35
6	18	20	22	24	26	28	30	32	34	36	38
7	21	23	25	27	29	31	33	35	37	39	41
8	24	26	28	30	32	34	36	38	40	42	44
9	27	29	31	33	35	37	39	41	43	45	47
10	30	32	34	36	38	40	42	44	46	48	50

6	0	1	2	3	4	5	6	7	8	9	10
5	30	32	34	36	38	40	42	44	46	48	50
6	36	38	40	42	44	46	48	50	52	54	56
7	42	44	46	48	50	52	54	56	58	60	62
8	48	50	52	54	56	58	60	62	64	66	68
9	54	56	58	60	62	64	66	68	70	72	74
10	60	62	64	66	68	70	72	74	76	78	80

9	0	1	2	3	4	5	6	7	8	9	10
5	45	47	49	51	53	55	57	59	61	63	65
6	54	56	58	60	62	64	66	68	70	72	74
7	63	65	67	69	71	73	75	77	79	81	83
8	72	74	76	78	80	82	84	86	88	90	92
9	81	83	85	87	89	91	93	95	97	99	101
10	90	92	94	96	98	100	102	104	106	108	110

## Annexure 2

### Glossary of Technical Terms

**Akshara:** Akshara is normally construed as a Beat in a Tala.

**Arudi:** Arudi, is a cadential form, with the structure of //phrase (kaarvai) phrase (kaarvai) phrase/(ending stroke like tm or tha). Experts are of the opinion that any ending phrase that is played within 6 aksharas or 24 mastras can be termed as Arudi.

**Graha:** This is the starting point of the song which can be on the beat (sama), or after the commencement of the beat (anahata) or before the

commencement of the first beat (Atheetha). Graha is called 'Eduppu' in tamil.

#### Examples

**Sama Graha** - Saroja Dala Netri (Shankarabharanam-Adi Tala)

**Anahata Graha** - Bantu Reeti Kolu - Hamsanadham - Adi Tala - Graha of the kriti is 6 pulses after the starting beat of the Tala

**Atheetha Graha** - Chede Buddhi Maanura - Atana - Adi Tala - Graha of the kriti is 1 pulse before the starting beat of the Tala

**Jati:** Jati is rhythmic syllable or a Rhythmic Phrase. Tha is also a Jati and 'Tha ka dhi mi' is also



Jati. In tamil there are two different phrases 'sol' and 'solkattu' to differentiate between a syllable and a bunch or group of them.

**Kaarvai:** Kaarvai is a pause or a gap given between rhythmic phrases.

**Kalai:** ('l' as in 'clarity'). Kalai decides the number of sub-beats within the main beat. If it is 2 kalai then there will be 1 additional beat to the main beat. For example, in Adi Tala each of the beats will take 1 additional beat in 2 kalai making the total to 16 beats per cycle. In 4 kalai each of the beats will take 3 additional beats and the total count will be 32. The kalai can be used for any of the SuladiSapta Talas. For example, Khanda Jaati Triputa Tala 2 Kalai means 18 beats in Total (basic 9 beats with 1 additional beats for each of them giving rise to 18 beats).

**Korvai:** A structured cadential form having a definite Purvanga and Uttaranga.

**Laya:** Laya is known as Tempo. Tala is the meter or the structure while laya is the gap between beats, which decides the fitment of jatis in various different ways.

**Maatra:** Maatra is the number of syllables between two beats.

**Mohara:** Mohara is also a cadential form having rolling patterns with a definite structure, played normally for 4 cycles of a Tala. The difference between korvai/Muktayi and Mohara is that the former is repeated thrice while the latter is played 4 times with a proper ending like // t l n g (tm.)t l n g (tm.) - t l n g // (tm.)

**Muktayi:** Muktayi is a cadential form, which has two meanings viz., ending pattern and korvai. Structurally, Muktayi also resembles exactly like a 'Korvai' but played as a stand-alone idea immediately after 'Mohara'. Experts are of the opinion that when the korvai-like idea follows a Mohara then it should be termed only as Muktayi.

**Purvanga:** The first portion or the rhythmic idea of a Korvai

**Ragam or raga:** The melodic scale containing a distinctive set of musical notes

**Samam or sama:** The starting beat of the Tala is called 'Samam'.

**Swaram or swara:** The musical note like Sa, Ri, Ga, Ma, Pa, Da, Ni.

**Swaraprastaara:** The rhythmic combination of musical notes arranged for a song. The combinations follow the structure of the Raga.

**Tala:** Tala is a metric structure containing beats, finger counts and wavy actions called kriyas.

**Uttaranga:** The ending portion of a Korvai

**Yati:** Arrangement of phrases in various ways. Ascending, Descending, Descending-Ascending-Descending, Ascending-Descending-Ascending etc.

### Annexure 3

#### Suladi Sapta Talas

There are 7 talas in this scheme (sapta means 7) and each of them have clearly defined structure. The structure doesn't change throughout the rendition of each of the talas but the internal movement changes according to the Jaati variations. In Karnatak Music Talas are openly shown through hand gestures, called kriya or action. Mere actions won't really show the real cyclicity of a tala and hence the makers were smart enough to have different check points or time markers. They divided the actions further as 'anga' or parts or limbs of a tala. Parts serve the function of knowing the exact position in a tala and to mentally calculate how many beats are left to reach the starting point or sama of the next cycle. Given below are the basic structures of different talas under the Suladi scheme:

S. No	Name of Tala	Structure of tala
1	Dhruva Tala	I O I I
2	Matya Tala	I O I
3	Ata Tala	I I O O
4	Triputa Tala	I O O
5	Jhampa Tala	I U O
6	Rupaka Tala	O I
7	Eka Tala	I

'I' is used as the symbol for Laghu or finger counts having a kriya of a beat and a specified number of finger counts depending on Jaati; 'U' is used as the symbol for Anudruta having a kriya of single beat; 'O' is used as the symbol Druta having a kriya of a beat and a wave of palm facing upwards.

#### Expansion of Suladi Sapta Talas

These seven talas expand to a total number of 35 talas after applying a feature called 'Jaati Variations'.

Not only the jaatis have separate syllables and solkattus but they also impact these talas as well. Anudruta and Druta remain a constant factor (no jaati variations are applied) in these talas. On a careful observation of the structures above, it can be understood that none of the tala structures are similar and this becomes the unique factor for identification of a particular Tala.

### Laghu (Jaati) Variations applied on Suladi Sapta Talas

Laghu variation means that the finger counts vary with the number that is pre-decided for the tala. They can be Tisra (3), Catusra(4), Khanda (5), Misra (7) and Sankirna (9). The talas are clearly mentioned by these identifiers and by the following prefixes:

Laghu Jaati	Nomenclature
3	Tisra Jaati
4	Catusra Jaati
5	Khanda Jaati
7	Misra Jaati
9	Sankirna Jaati

Assume a tala is named as ‘Catusra Jaati Matya Tala’ with a structure of ‘I O I’, then both laghu (I) will have four beats each ie., a beat followed by 3 finger counts (Pinky, ring and middle). The total count for this Tala (Catusra Jaati Matya Tala) is 10 beats and represented as I4 O2I4. Jaati variations (variations based on finger counts ie., Laghu) are applied to all the 7 talas. For an easy reference the total counts are given below in the table.

Name of Tala	Tala Structure	Jaati Variations of Laghu				
		Tisra	Catusra	Khanda	Misra	Sankirna
Dhruva	I O I I	11	14	17	23	29
Matya	I O I	8	10	12	16	20
Ata	I I O O	10	12	14	18	22
Tripata	I O O	7	8	9	11	13
Jhampa	I U O	6	7	8	10	12
Rupaka	O I	5	6	7	9	11
Eka	I	3	4	5	7	9

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