

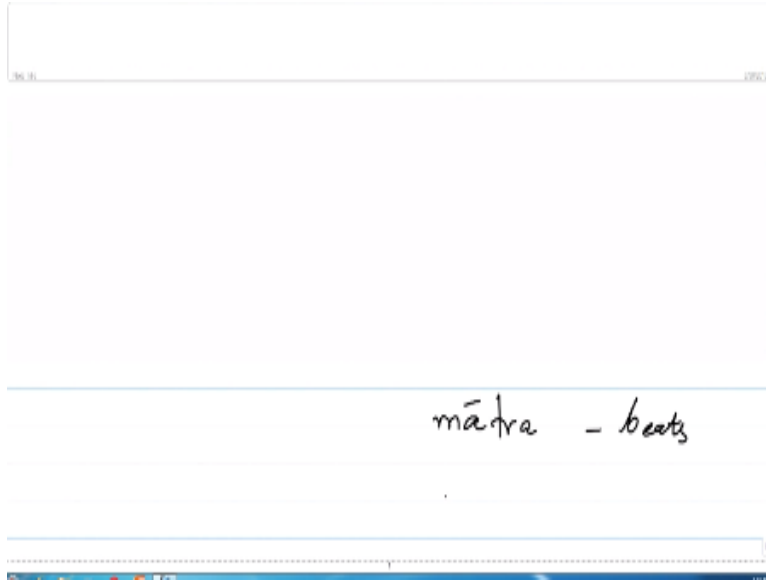
**Appreciating Carnatic Music**  
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**Lecture -36**

**Lecture title: Aspects of Tala - III**

Now we need to stop for a bit to talk about some technical terms, here a few I said an Avartana is one cycle of beats. Now what the word is for beats in carnatic music, they are called every beats called a matra. So we will say dhruva tala has 14 matras or adhi tala has 8 matras.

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Now there is another word Matra, actually there is another word called akshara. Which is also sometimes some people use the word akshara to refer to beats and the jury is still out on, what and see there are two things here. One is number of beats “1,2,3,4” and the other is how many divisions or units does each beat internally have. And this is important when we come to some kinds of compositions.

By default every beat is divided into four sub units, as it was so “1,2,3,4” “1,2,3,4” “1,2,3,4” “1,2,3,4”. But sometimes that can be “1,2,3” “1,2,3” “1,2,3” “1,2,3” this is something we will see later, it is called Nadai or Kadhi so on. We have the number of beats on one hand “1,2,3,4” and so on. And we have a certain number of sub divisions within each of these beats, “1,2,3,4” “1,2,3,4” “1,2,3,4” and so on so.

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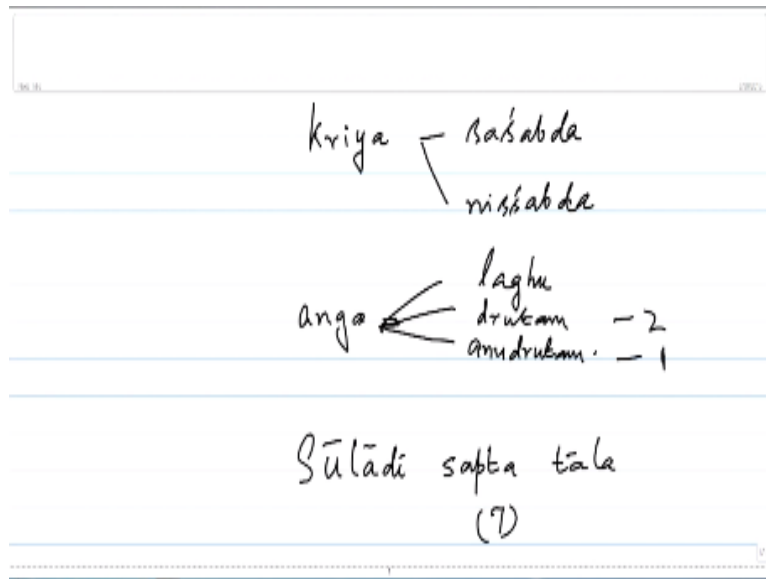
Some people prefer to use the word matra to refer to the beats and akshara to refer to the sub divisions within each beat. And there are others, who use these expressions in the reverse, with the reverse signification. In the sense akshara is used to refer to the number of beats and matra is used to refer to the number of sub divisions. But we will use the word matra to refer to the beats because the word akshara itself means that which cannot be destroyed.

So in a sense akshara is this smallest unit in the tala. If you say, “1,2,3,4” “one two three four” twos each of them is an akshara. Whereas the matra “one two” these are further subdivided into aksharas. So we have the concept of avarthana, which is a essentially cycle of matras. A certain number of matras, which is repeated cyclically and each matra internally has a further sub division into a certain number of units and those units are called akshara.

Now when I performed either an adhi tala or rupaka tala or dhruva talam, now there are only certain movements, that we perform while performing the talam “1,2,3,4,5,6,7,8”. So these 8 beats in adhi talam are perform only this way, no other hand gestures and while performing artists can vary here and there. But the adhi tala is performed like this “1,2,3,4,5,6,7,8”.

So we have one kind of action, that is beating. Beating on the thigh or beating on the hand and we have another kind of action which is throwing the palm aside, so this is this is called tala kriya. The action, what are the actions that are involved in performing a tala. So this is called kriya.

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And they are of two kinds sabda or sasabda kriya and nisab nis sabda kriya. Sasabda is that which makes sound. This is Tattu or the Ghatha this the Sasabda kriya.

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And Nissabda is when we threw the palm aside, upturned that is the Nissabda kriya. Now using these also we have counting fingers. So using all these, any tala is performed. Now it is talk of the tala anga. So the tala angas or parts of the tala or laghu. Those that are used actually Laghu Drutam andA laghu is beating the hand and counting the fingers.

It could be three or it could be counting three fingers or it could be counting four fingers. We will go to that little later but laghu is essentially beating the hand and counting the fingers drutam is beating and throwing the palm aside. So it always has a count of two anudrutam is

a simple beat. A simple beat is called anudrutam, and so it always has a value of 1. The dhruva tala that it is performed is a part of a tala system, which is at least 500 years old.

It is called suladi sapta tala. Now sapda refers to 7 suladi this is actually, suladi is actually a compositional form that originated in Karnataka and Purantaradasa in the 15th and 16th century, he is credited with incorporating the suladi sapta tala into the into carnatic music. Now what is the suladi sapta tala, we will see this just now

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Suladi Sapta tala is a tala system that is about 500 years old. The seven basic tala-s use the anga-s or parts of:

- Laghu – beating the palm followed by counting of fingers (a variable number of counts depending on the 'jati')
- Drutam – Beating followed by waving an upturned palm noiselessly with a total count of 2 beats
- Anudrutam – Only a beat, with a count of one

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**Suladi Sapta tala**

1.	Dhruva	-	1011
2.	Matya	-	101
3.	Rupaka	-	01
4.	Triputa	-	100
5.	Jhampa	-	100
6.	Aba	-	1100
7.	Eka	-	1

**Jati**

- 1 - Chaturasra
- 3 - tisra
- 5 - khanda
- 7 - Mishra
- 9 - Sankarsha

MKS = 35

lagha	-	1
druta	-	0
anudruta	-	1

In fact a beginner is very quickly introduced to this concept to this suladi sapta talas. These are dhruva, which is what you saw just now the composition, that I sang of 14 matras,

dhruva. Then you have Matya, Rupaka, Triputa, Jhampa Ata tala and Eka tala. These are the seven talas, that are referred to as suladi sapta talas.

And we just saw that the three angas or the parts of a tala are laghu druta and anudruta and these seven talas are a combination of these laghu druta and anudruta. Now laghu is usually indicated, as the symbol for laghu is one, druta is zero and anudruta is this. Now in druva tala as the structure of one laghu followed by a druta, followed by another laghu “1,2,3,4” one laghu “1,2” one drutam another laghu and yet another laghu. This is the structure or the angas of druva tala.

Matya tala is one laghu, followed by a druta and then followed by another laghu. Rupaka tala is the only tala that does not start with a laghu. Starts with the drutam, instead one drutam, followed by a laghu. Triputa tala “100” and if you think about this, this is what is adhi tala. If you count four “1,2,3,4” that is laghu, one drutam another drutam, so adhi tala is a kind of it is a form of Triputa tala.

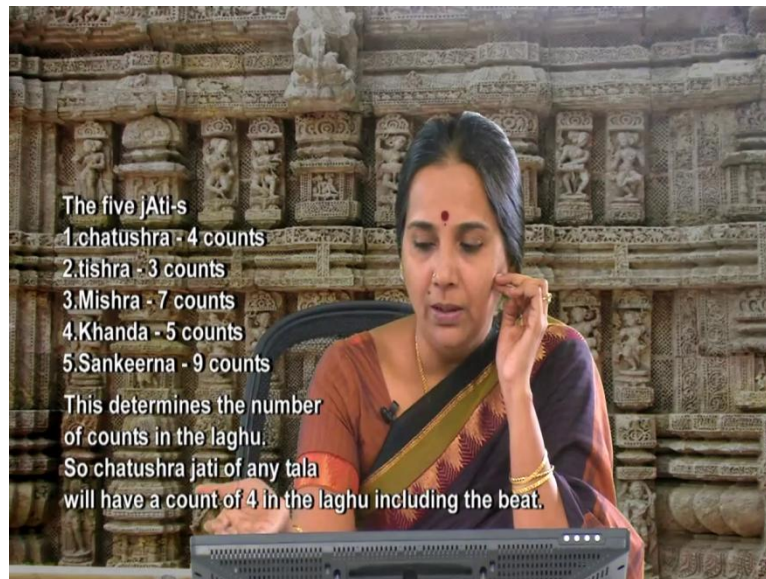
Jhampa tala is the only tala that uses the other anga, that is anudruta, that is one laghu, one anudruta and one drutam. Ata tala is “1,2” laghus, followed by two drutas, eka tala is just a laghu. So these are the sapta talas and when we speak of laghu. We say beating the hand and counting the fingers. Beginning with the little finger and how many do we count. So far I have only shown, I have only performed compositions, in which tala is such that I have counted three fingers.

So altogether it is “one two three four” including the tattu or the gatha the laghu. The laghu is a beat, followed by counting of fingers. If you beat and count 3 fingers, you have laghu, of the count of 4. We can also have “1,2,3,4,5” or you could have “1,2,3” or you could have “1,2,3,4,5,6,7” or you could have “1,2,3,4,5,6,7,8,9”. Now these are the five what are called Jathis. So a laghu could be a count of “43457 or 9”. So usually we have it always four first and then three and these are what are called Jathis.

So four when we have a count of four this is called Chatatusra Jathi. This is called Tisra Jathi, this is called Kanda Jathi, this is called Mishra Jathi, this is called Sankeerna Jathi. Now this concept of five jathis is commonly used in all performing arts, whether it is music

or dance or its percussion, these 5 jathis Chatushra, Tishra, Khanda, Mishra, Sankeerna. So depending on what Jathi you take.

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So suppose, let us take dhruva tala or an easier tala lets take Triputa tala. It is what something we are familiar with this Triputa tala is say Chatushra Jathi. So the laghu will have a value of 4 counts, so you have “1,2,3,4,5,6,7,8” this is what is adhi tala, when we have a cycle of 8 beats.

But suppose a laghu is Tishara Jathi so laghu has a count of three, so it will be “1,2,3,4,5,6,7”. We will have a count of it, will be a cycle of 7 beats. Suppose the laghu is Kanda Jathi that is, it has 5 counts, so it will be “1,2,3,4,5,6,7,8,9” it is a cycle of nine beats and so on. And Mishra Jathi will be 7+2+2 its 11, Sankeerna Jathi will be 9+2+2 that is 13.

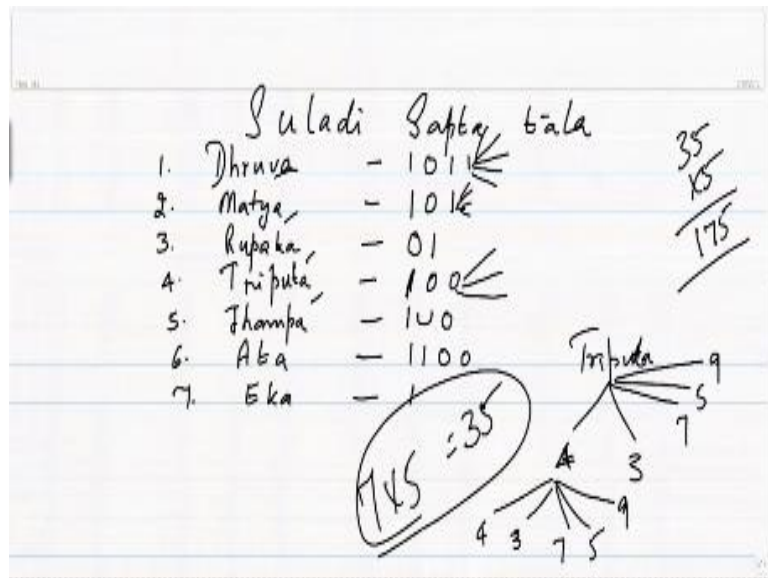
So, we have the suladi sapta tala and we have the 5 jathis, these are the jathis and each of these suladi sapta talas, Dhruva, Matya, Rupaka excerptor. Each of them can be combined with any of these jathi. So again to take Triputa tala, as i just mentioned, we can have Chatushra Jathi, Triputa tala or Tisra Jathi Triputa tala or Kanda Jathi excerptor. So also with dhruva we can 5 matya, we have 5 rupaka, jhampa and so on.

So we have  $7*5$ , 35 talas under the suladi sapta tala scale. And this is only the first level, just to give you a quick idea of what the next level is. I will refer back to something that we spoke about, some time ago, that is the concept of aksara and matra just as the laghu, which is beating and counting can be either Chatushra or Tisra or Kanda excerptor.

So also each matra each beat of the tala, whether it is a tattva or it is a counting or whether it is a vechu or its just a anudrutam or drutam. Whatever it is every beat of the tala cycle has sub divisions within it and that will always be equal number. So we will have “1,2,3,4” “1,2,3,4” “1,2,3,4” “1,2,3,4” “1,2,3,4” and so on so within a tala cycle the sub divisions of each beat will be the same the same number of sub divisions each matra of the tala cycle will have the same number of aksaras but this aksara this number again could be either four or three or seven or five or nine

So adhi talam could be “1,2,3,4” “1,2,3,4” “1,2,3,4” “1,2,3,4” exceptor or it could be “1,2,3” “1,2,3” “1,2,3” “1,2,3” “1,2,3” “1,2,3” “1,2,3” “1,2,3” or it could “1,2,3,4,5” “1,2,3,4,5” “1,2,3,4,5”.

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Now, so essentially what we are doing is each of these, let us take again Tripata tala Tripata tala there are 5 jatis, of it possible five possible jatis, Chatushra Tisra, Mishra, Kanda, Sankeerna Now within each of these 4, here means the number, the count of laghu, so it is “1,2,3,4” that is, what it means, but given that we have Chatushra Jathi, Tripata tala. we can further have a sub division of again 5, what is called Nadai or Kadhi.

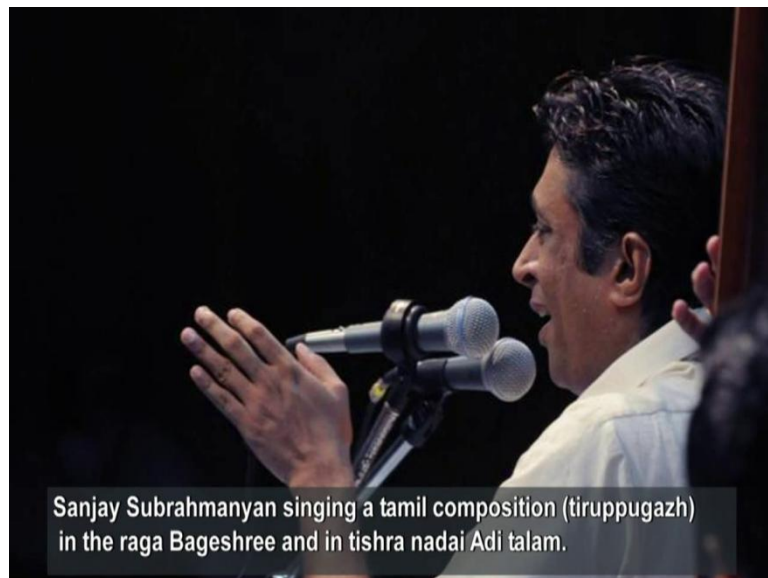
So you could have the basic Adhi tala or Chatushra Jathi Tripata tala is “1,2,3,4” “1,2,3,4” “1,2,3,4” “1,2,3,4” “1,2,3,4” “1,2,3,4” “1,2,3,4” “1,2,3,4”, so this is called Chatushra Nada or Chatushra Kathi Chatushra Jati Tripata tala. Now, we have “1,2,3” “1,2,3” “1,2,3” “1,2,3” and this is again Chatushra Jati Tripata tala, but Tisra Kathi or Tisra Nada.

Now what is the significance of all this, I mean and it can go on it will go on, for all the 5 jatis so given each Suladi Sapta Tala there are 5 Jatis possible and for each of the 5 jatis five nadais are possible so you have  $35 \times 5$ , which is 175, 175 talas are possible within the suladi sapta tala scale.

Now, what is the musical significance of this, it is not just mathematics. what is the difference, whether it is the Tisra Nadai or Chatushra Nadai the beat of the song will like that (Singing Starts: 21:13) (Singing Ends: 21:53. So here the beat is like that “1,2,3” “1,2,3” “1,2,3” “1,2,3”. (Singing Starts: 22:00) (Singing Ends: 22:15)

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Suggested reading for Tala.

1. <http://www.carnatica.net/sangeet/layanubhava1.htm>

2. A Karnatic Primer by P. Sriram, Pages 18, 19  
<http://www.ae.iitm.ac.in/~sriram/karpri.pdf>

3. Tala - A Conceptual and Structural Analysis by  
N. Ramanathan in Music Research

<http://www.musicresearch.in/categorydetails.php?imgid=115>