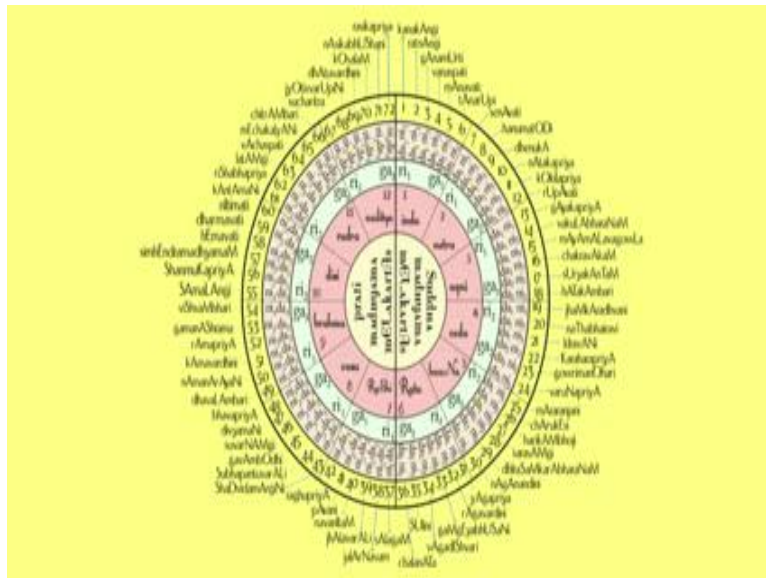


Appreciating Carnatic Music
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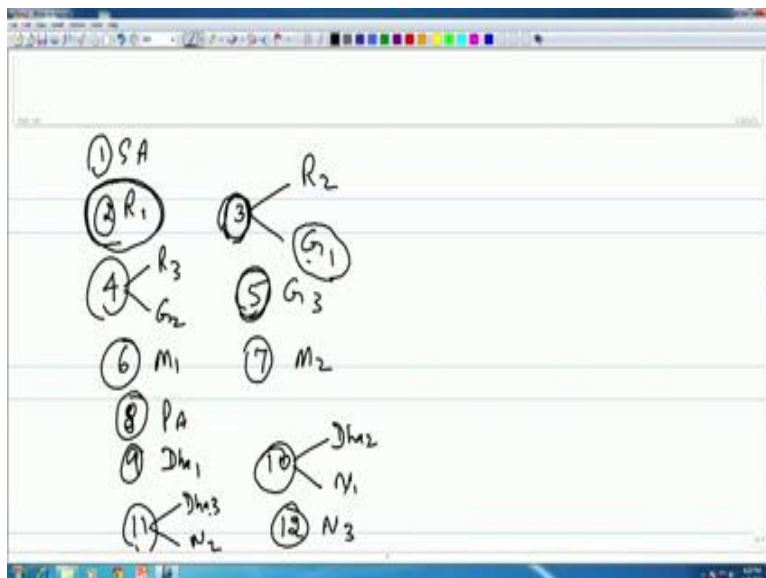
Lecture - 27
Katapayadi – Naming the 72 melas

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Now, it is important that to bear in mind, that melakartha or mela, it is only a scale of the raga. It is just a combination of notes, it is certain combination of all the swaras, that is what the mela is.

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The name of the most prominent raga, that can be classified under it. So, that is the name that is given it to the melakartha, and as long as, the attempt was only to take care of the existing ragas, not just worry about the number of permutations possible.

So, long as musicologist addressed only the ragas, that are only prevalent. The issue of naming these melakartha was fairly simple. They just followed this, they just gave it the name of the most prominent raga, that could be classified under that mela.

Now, when the idea of the trying to propound, the number of melakartha possible, even when there was no raga classified under it. There was no raga that is prevalent, which could be classified under some of these melakarthas.

Then the issue of naming these melakarthas had to be addressed. In fact, Venkatamakhin himself, did not name all the seventy-two melakarthas, he only named about nineteen of them.

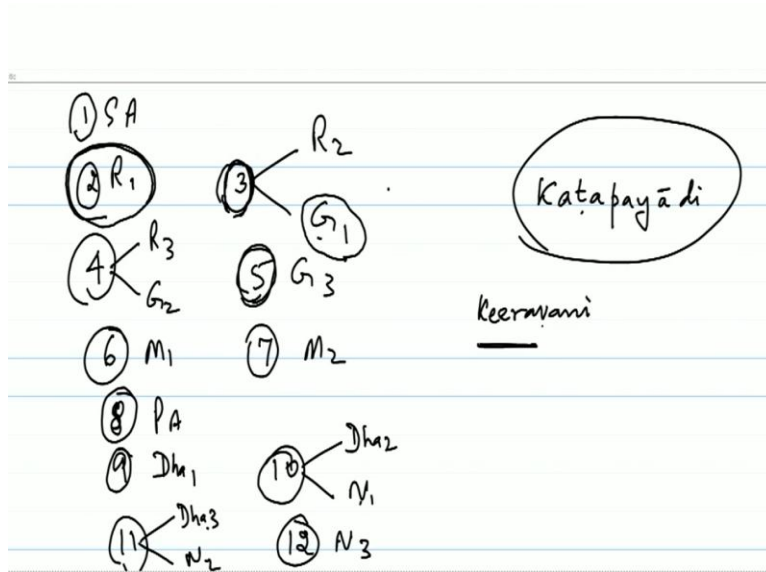
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Venkatamakhin's 19 mela-s.

1. Shubhan	2. Saravari	3. Bhupala	4. Hara
5. Vasantabharani	6. Kalyani	7. Bhairavi	8. Kalyani
9. Sriraga	10. Kambhoji	11. Sarkarabharati	12. Samant
13. Duddhi	14. Nali	15. Sudharmani	16. Samant
17. Sudharmanikriya	18. Samant	19. Kalyani	

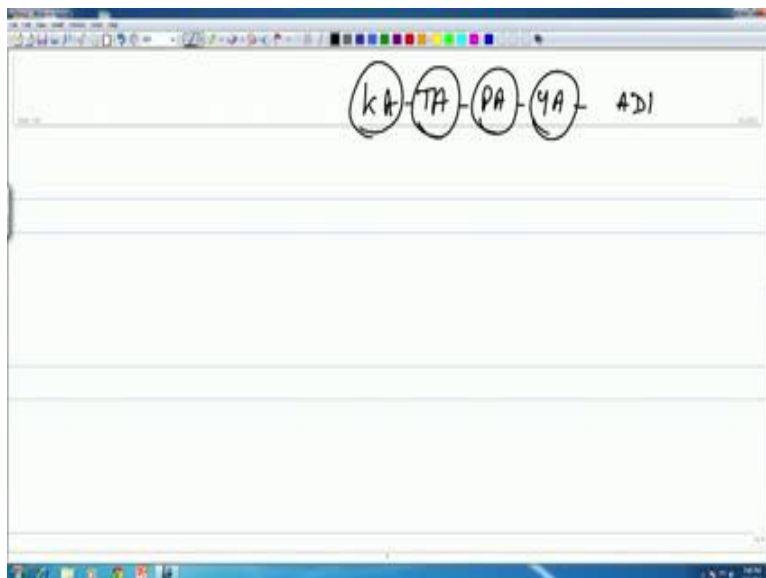
These are names, that he gave and later on, other musicologist came and they completed the picture by giving names to all the melakarthas. And in fact, Govinda Dikshitar his work, he applied the Katapayadi system.

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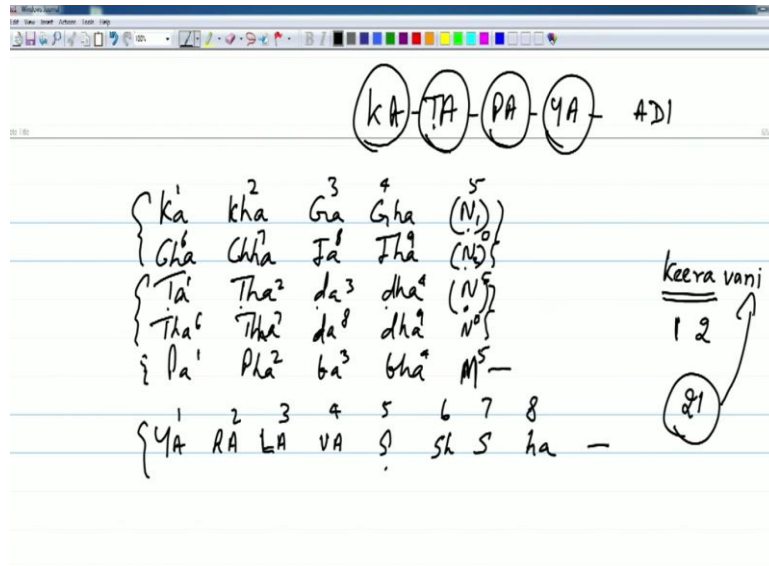
And katapayadi system of naming the melakarthas, this is actually an ancient system of mapping names to numbers. But because of the scheme, if he have the name of the melakartha, any melakartha. For instance, let us say Keeravani, we can figure out the number of the melakartha.

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So let me explain this katapayadi, it refer to, groups of alphabets in devanagiri, Sanskrit. KA TA, PA, YA, these refer to four group of alphabets, this is one way of grouping the alphabets precisely, for the purpose of this is, mapping name to numbers.

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Now, those of you, were familiar with devanagiri, would have no difficulty. But devanagiri alphabets for you Ka Kha Ga Gha Na, let me just write it as. But this is the sound, that we find in words like kankana or ghungroo the nasal that is before any of these alphabets has the sound.

These are the first five alphabets and the next five are Cha Chha Ja Jha Na, again this is nasal which is un pronounceable. But this is the sound, you hear in chanchala or jaanjh and so on the nasal that precedes any of these letters is this. Then you have Ta Tha Da Dha Na this one this two na like for instances, thanda in hindi na or kantha in Sanskrit. There is na here, then you have Tha Thaa this is ta, this is Tha Thaa Da Dha as you can see it is difficult to write in English.

These are the various sounds that Sanskrit alphabet recognizes, this is Tha Thaa Da Dha Na this is the regular Na the sound of n. Then you have Pa Pha Ba Bha Ma, again Ma is straight forward ma. Then you have Ya Ra La Va and three varieties of ish sa sa and then you have Sha S and ha

Now Ka, verger's Ka Kha Ga Gha Na, Cha verger's Cha Chha Ja Jha Na and so on. But for this katapayadi scheme we group these two together and these two together and this is separate group and this is a separate group and so this group starts with ka this is the ka group.

This group starts with, Ta, so Ka Ta these two form a group, and they are given numbers one two three four five six seven eight nine and tenth is the zero, please remember, we are trying to map names to numbers, and again ta will starts with one two three four five six seven eight nine again zero

And pa, will have one two three four five, so we have taken ka ta pa from these group. From these three group is taken care of. Now Ya, one two three four five six seven eight, these are how the alphabets are numbered for purpose of this the scheme Katapayadi.

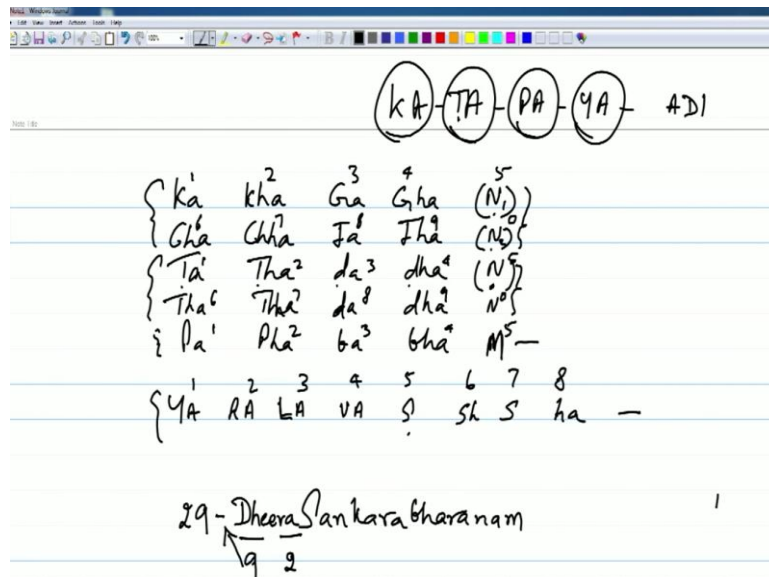
Now let us take the name of any melakartha, that is say we just saw Keeravani for mapping of this name to number, only the first two syllables are relevant. So, in this case it does not matter Ki or Ka or Ku, whatever the matter it just the sound, the basic consonants that is relevant.

Here it is Ka and Ra, and let us look at the numbers for Ka. Ka is one and Ra is two. Once we have these two numbers, we have to reverse the digits. So, we have twelve, you actually have twenty-one would be the number of Keeravani, you look at the number of the melakartha scheme twenty first melakartha will be Keeravani.

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Now this system, Katapayadi system, is actually been used in other discipline such as astrology. And it is a very convenient way of remembering, it is mnemonic device, is more than anything and it has a interest in its own write.

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Now the interesting aspects, of this is that, the melakartha scheme is that, suppose we look at the twenty-ninth. That is actually Sankarabharanam scale, now it is sa and ka, sa is six and ka is one. You absolutely not get twenty-nine, you cannot get twenty-nine.

So, for the purpose of this, Katapayadi scheme twenty-ninth scale though it is Sankarabharanam scale is called Dheera Sankarabharanam. So you have a prefix, so that the katapayadi scheme is taken care off.

Let us look at how this works, Dha and Ra. Dha is, Ta Tha Da Dha, nine and Ra is two, ninety-two, and you reverse it, will become twenty-nine. There are few other ragas melakarths, which has taken on the kind of prefix in order to accommodate the Katapayadi scheme.

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KA TA PA YA ADI

$\left\{ \begin{array}{l} ka^1 \quad kha^2 \quad Ga^3 \quad Gha^4 \quad (Ni)^5 \\ \textcircled{Cha} \quad Chha^2 \quad Ja^3 \quad Jha^4 \quad (Na)^5 \\ \left\{ \begin{array}{l} Ta^1 \quad Tha^2 \quad da^3 \quad dha^4 \quad (N^5) \\ Tha^6 \quad Tha^7 \quad da^8 \quad dha^9 \quad (N^5) \\ Pa^1 \quad Pha^2 \quad ba^3 \quad bha^4 \quad M^5 - \end{array} \right. \end{array} \right.$

$\left\{ \begin{array}{l} YA \quad RA \quad LA \quad VA \quad SA \quad SH \quad S \quad HA - \end{array} \right.$

65 - Mecha Kalyani

Notably, Mecha Kalyani, Kalyani is the sixty-fifth melakartha, sixty-fifth melakartha in other words sixty-fifth melakartha is, actually the swaras of Kalyani, is a major raga.

So, the melakartha could be given that name, but if you say Kalyani Ka is one Ya is one so you cannot get sixty-five. So, sixty-fifth melakartha is called Mecha kalyani, look at what is Ma, Ma is five and Cha is six, fifty-six, if you reverse, it will become sixty-five.

Now the question is, why we have to reverse the digits? where is the need to reverse the digit? what is the point of that, the answer is very simple, otherwise, we cannot accommodate both dual digit and single digit numbers.

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KA TA PA YA ADI

$\left\{ \begin{array}{l} ka^1 \quad kha^2 \quad Ga^3 \quad Gha^4 \quad (Ni)^5 \\ \textcircled{Cha} \quad Chha^2 \quad Ja^3 \quad Jha^4 \quad (Na)^5 \\ \left\{ \begin{array}{l} Ta^1 \quad Tha^2 \quad da^3 \quad dha^4 \quad (N^5) \\ Tha^6 \quad Tha^7 \quad da^8 \quad dha^9 \quad (N^5) \\ Pa^1 \quad Pha^2 \quad ba^3 \quad bha^4 \quad M^5 - \end{array} \right. \end{array} \right.$

$\left\{ \begin{array}{l} YA \quad RA \quad LA \quad VA \quad SA \quad SH \quad S \quad HA - \end{array} \right.$

03 Ganamurti

So, if you have a raga like, melakartha like, say Ganamurti. This is the third melakartha, Ga is three and Na is zero. This Na zero and if you reverse it, it will become zero three, unless you have this tech of reversing the digits, you cannot accommodate both dual digit and single digit numbers of the melakartha. So, that is the Katapayadi scheme.