

**Appreciating Carnatic Music**  
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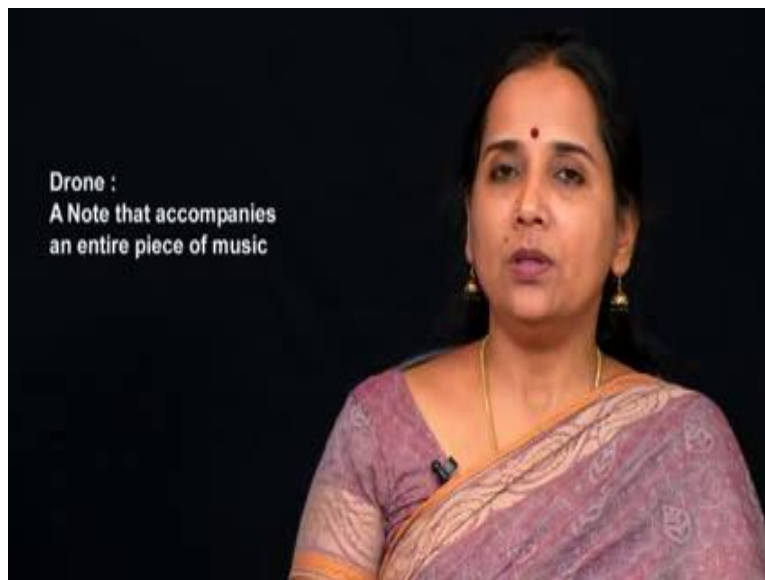
**Lecture - 13**  
**The Tambura (The Drone)**

I mentioned in the last session that the words that we used in today's carnatic music, like swara sruti, raga, tala in many other words, these words though they are found in ancient text as old as two millennia ago. Still the meanings of these words probably subtly altered across the millennia, across the centuries.

Because these words, these concepts were articulated in the context of very different kind of music. The kind of music that was there two millennia ago when natya shastra was written or nartya shiksha written, where they talk of swaras and srutis.

That music was very different, one main feature of today's music is that what we spoke of is AdhAra sadja tonic, fundamental that tonic is sounded throughout the performance as a constant reference point.

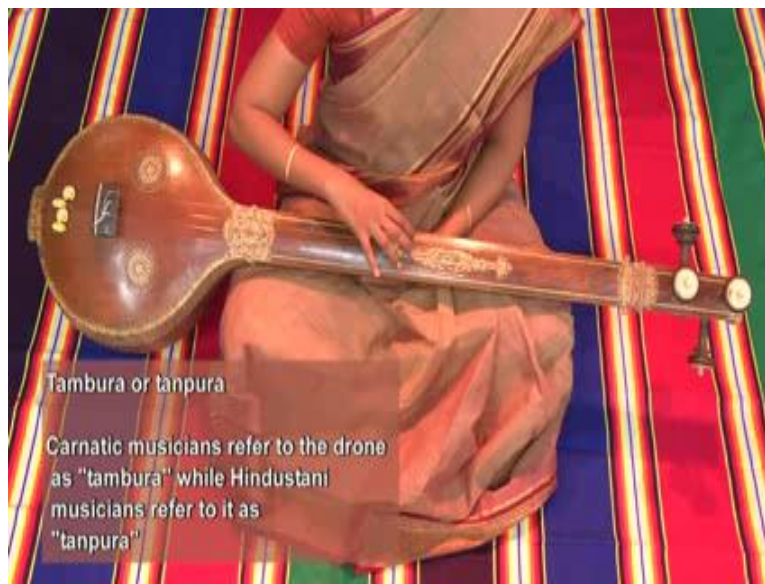
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The AdhAra sadja is heard constantly as a drone. Now as I said the tonic is important in all kinds of music not just Indian, because that this tonic which actually resolves the tensions that any

musical movement creates. For instances (Singing Starts: 02:05) (Singing Ends: 02:17) this resolves the tension as some people are absorbed tonic. The tonic is actually a psychological state anybody listening to piece of music, will know when it has written in the tonic. (Singing Starts: 02:38) (Singing Ends: 02:49) This is the tonic: (Singing Starts: 02:52) (Singing Ends: 02:57) This is the tonic.

Even a untrained ear able to make out when the musical tension get released, that get released when movement returns to the tonic. In case of Indian music tonic is constant reference point for music making even physically, not just as psychological entity and this is achieved by the drone. (Refer Slide Time: 03:50)



Now I am going to introduce you a very important character in carnatic music and that is the tambura or the tenpura. Tambura is how carnatic musicians referred to this instrument and north Indian refers to tenpura and there are difference between north Indian drone and south Indian drone.

Now what is a drone first of all? A drone you can say when the ac is emitting the constant pitch that is also a drone. (Singing Starts: 04:17) (Singing Ends: 04:22) This is a drone anything that is happening at a constant pitch or that is unchanging by metaphorical extension that is also called drone.

For instance you can say that particularly boring lecture, you can say, she is going on he was droning on and on. Because that is monotonous without any change in that in the pitch. I only hope that, I am not droning now

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So the point is, the drone is basically in the context of music drone is a note or some type of chord which accompanies the entire base of music that is called a drone. In the context of Indian music, the drone is always the AdhAra sadja. The sa and we also have the panchama that we will see. The point of the drone is to actually be give us the AdhAra sadja, physically first to hear it all the time. And this is provided by the tambura and by the extension tambura is also called drone.

Now as I said it is the AdhAra sadja, that the tambura provides. Now what is the AdhAra sadja? Just to remained ourselves, we have no absolute pitches in Indian music. There is no absolute sa or ri or ga. Once you fix the sa at any pitch at all, then the rest of the scale is fixed for you. (Singing Starts: 06:19) (Singing Ends: 06:21) This could may be sa or (Singing Starts :06:23) (Singing Ends: 02:25) this could be may sa depending on which ever I take us my AdhAra sadja AdhAra is the basic sa, rest of the music is rest of the scale is constructed.

Not only that it is on the basis of this sa that we hearing all the time that we in tone the other notes. That we try to find the right pitch for the other notes, so that is why the tambura is very important. So suppose may AdhAra sadja is let take a very very popular well known very simple beginners song composition in carnatic music vara veena mrudu paani words of composition it i raga mohanam which we just saw in last session.

So depending on the AdhAra sadja it will sound like this. (Singing Starts :07:30) This is my AdhAra sadja. (Singing Starts :07:34) (Singing Ends: 07:39) This is how it will sound this my sa. (Singing Starts:07:42) Now suppose I change the sa AdhAra sa (Singing Starts:07:46) (Singing Ends: 07:54) or it could be (Singing Starts:07:56) (Singing Ends: 08:01) the same composition only, because the AdhAra sadja just changed actual pitch, that I have used are different.

So this is the idea of AdhAra sadja it is more than just a fact that is you know. Pitches are shifted here and there it really give you the base and AdhArasa the support for you to in tone the other notes. So when I hear my AdhAra sa, I hear it I am able to in tone the other pitches that is why it is called AdhAra.

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Let us now look at the tambura. As you see, this is the tambura that is South Indian is made in the place called Thanjavur. So it is called Thanjavur tambura or Tanjore tambura. This is made

entirely of wood. You have resonating, resonated here which is hollow comdot wood. On which is mounted this long neck and this ends in these pegs on which the strings is wound.

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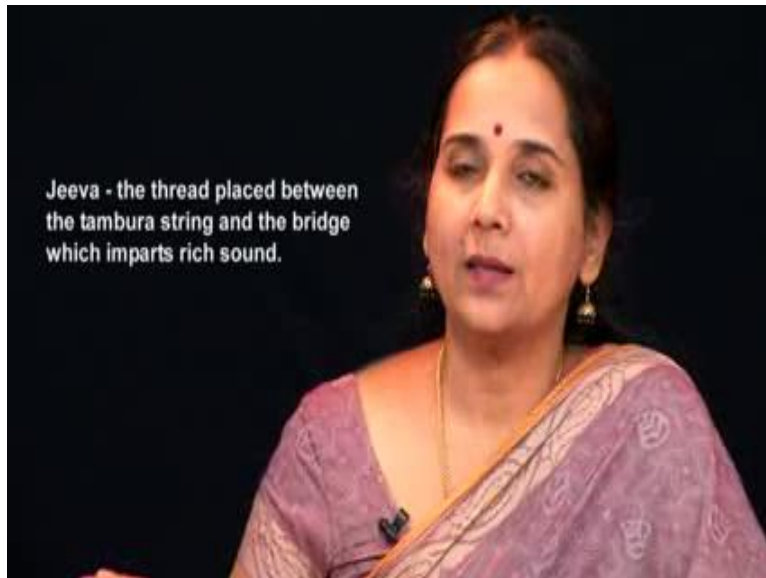


The string itself passes through two bridges on the tambura. We have four strings on the tambura and they are tuned like this, the middle two strings gives the AdhAra sadja. That is madhya sa (Singing Starts:10:00) (Singing Ends:10:01) or what ever is my pitch in k, in this I have my pitch is g for that is what this tambura will be tuned to the middle two strings are tuned to the sa madhya sa.

The third string is tuned to the mandhra sa the lower sa . And the first string first string to panchama fifth the pa and it is played like this and this is all sounds.

There is a very interesting and fascinating aspect of tambura. That is the bridge here, this bridge as you can see it has a curved surface. It is slightly curved it is not straight and it is not flat because it is curve, and string passes over the curved surface the kind of harmonic it gives out is very different. If you will just watch and see what happens what is role of this strings, that is these strings that are placed here they have a very important role.

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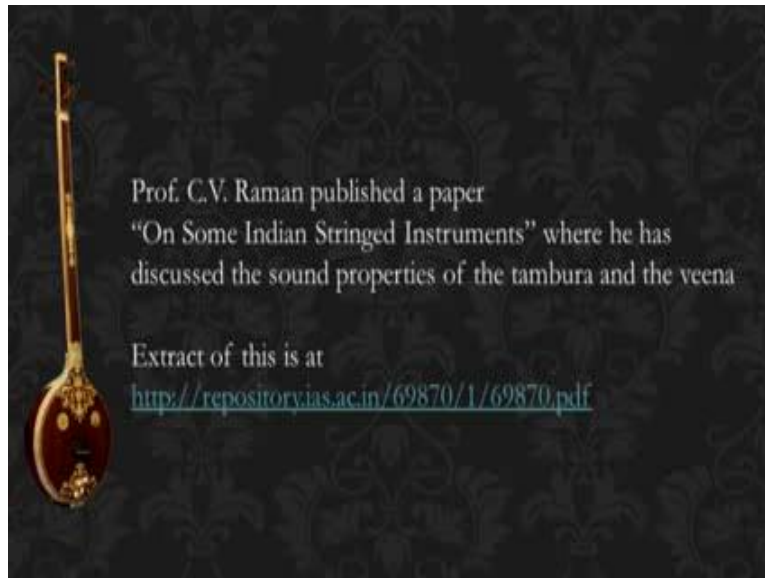
Just listen to what happens, as I drag the string across the bridge at one point the tambura will just come to life. The string the sound making from that flux string will just come sudden, many dimensions and its come alive it is called Jeeva. This position, this string that we place in a particular position on the bridge that is called Jeeva.

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Now what happens here is actually to do with physics of sound harmonics. And noble laureate C.V. Raman one of the earliest person to study this phenomenon and in fact extract from his he published a paper on this "On Some Indian String Instruments" an extract from the paper is at [this link](http://repository.ias.ac.in/69870/1/69870.pdf).

He pointed that this the curved bridge of the tambura placing of this Jeeva strings, produce certain harmonics, which are ha very interesting from the point of view of generally prevalent laws of sound.

Now these are times when gadgets are replacing with everything handmade. And definitely tambura is hand crafted, it is made by hand. Today we have many other gadgets that are certainly more convenient to you more use than the tambura, but definitely no substitute for tambura.

What I use in most these sessions, this is an application which gives me the tambura, close in a approximation of a tambura sound. And these are very useful for practice session and for short demos. This is a application actually, we also have electronic gadgets, which can give you pitches, which can give you whatever pitches you want.

Something like this either the tambura itself or some electronic or an application like this, is an invariable part of carnatic music. Whatever it be whether it is stage performance, whether it is practice session, whether it be teacher teaching his student. Carnatic music or Hindustani music for that matter it at any level of seriousness it needs this kind of drone support for it to happen.

Because I mentioned intonation of this other pitches of any pitch at all, it is this that support that, it is that nutritious makes it possible. If I know that this is my sa, I can able to hear it. (Singing Starts: 15:21) (Singing Ends: 15:53). There is mergence, that we see with the AdhAra sruti with tambura and this, is the beginning of association of Indian music with spirituality.

There is meditated quality to attempts to in tone against background of the tambura. (Singing Starts: 15:21) (Singing Ends: 17:04). This is what the tambura does. This is what the tambura is extremely important character in carnatic music. (Music Starts: 17:27) (Music Ends: 18:39)