

Appreciating Hindustani Music
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Lecture 8
Tanpura- The King of Overtones

In this video we will discuss a very important character in Hindustani Music, the Tanpura. We will look at the instrument and its role as a drone and its role as the basic reference for the tonic. So, drone, tonic etcetera are some of the terms that we will take a look at in this video. A Hindustani concert or a Carnatic one for that matter typically has a drone plane throughout. Now, what is a drone? Drone is a pitch or group of pitches that is sounded continuously throughout a musical piece and by extension an instrument providing this can also be called a drone. And so, the tanpura which is constantly heard in Hindustani music concerts provides the drone and by extension is itself called a drone.

Now, the drone is used in many kinds of music throughout the world, both traditional and contemporary experimental. Below are some links to music videos in which the drone is employed in different ways. Please do listen to them. The drone provides a meditative atmosphere and is frequently used in religious or spiritual music such as in the first link that is given below, the music of a particular community of Sufi musicians. Contemporary and experimental musicians such as in the other two videos use the drone for an edgy kind of effect. Now, the drone that we hear in Hindustani music has neither of these functions. The tanpura sound may have a meditative quality to it, a well tuned tanpura does have that quality, but its function is not to pull you into any kind of trance, a state of absorption yes, but not trance. The music that is performed against the background of the tanpura and which the tanpura enables is a matter for the senses and the intellect too. The tanpura plays a central role in the music making itself and in listening to it, making sense of the music. And why or how? It is because it provides the tonic. That is the primary function of the tanpura, that is, to provide the tonic.

Now, what is tonic? Again, tonic is a feature of many kinds of music except perhaps atonal music and other experimental music, but traditionally tonic is a feature of all kinds of music. And one way to understand the tonic is as the note on which the music is resolved, that is, when the music arrives at the tonic you feel that you have come home or it has come to a rest. The tonic has been described as the principal goal tone, that is the goal of the music is to attain it and when it does attain the tonic, there is a sense of coming to rest or resolution. So, for instance [Music], when you come to Sa there is a sense of resolution [Music]. The tonic in Hindustani music is the Sa or the Shadja. So, there is a very fundamental difference between the drone and the tonic. The drone is a pitch or a group of pitches that is actually heard constantly during the performance and it need not be the tonic. But attaining the tonic is a psychological resolution and can and does happen even without the external drone, such as in western music whether classical or pop.

And the drone need not be the tonic in other kinds of music it typically is not the tonic, but in Hindustani music it is always the tonic. So, as I mentioned earlier tonic and resolution on the

tonic is a feature of other kinds of music too. In western music for example, the tonic is important in music making, but it changes within a piece.

In the case of our music in Hindustani music the tonic remains constant throughout the entire performance, it does not change at all, there is no modulation. And the tonic in Hindustani music is always the Sa, the Shadja. And though the Sa which is the tonic is not necessarily the only tone on which music is resolved it is possible to end a piece, raga performance on another note though it is very rarely done.

The tonic in fact, is the beginning of all music for us because it is only when the tonic is fixed, then the rest of the notes are fixed. And so, the Sa which is the tonic is called the Adhaara swara. Adhaara means the foundational swara. And what exactly is this pitch that is determined by the performer, it might be G or G sharp or D or E or even any pitch in between in principle any pitch at all can be a tonic if the performer so determines.

The tonic depends on nothing other than the performer's comfort. The music itself does not dictate that one should choose one or the other pitch as the tonic, and the tonic does not change during the course of an entire performance. So, why is the tonic or this Sa called Adhaara swara and what is its significance, it is extremely critical. The Sa is the Adhaara in the sense of the base or the support or the foundation on which all music is built or created and this is true in a few senses.

First of all, all other swaras are defined and their positions are established with reference to the Adhaara Sa, that is once you fix your Adhaara Sa, once you fix the Sa then the rest of the saptak the other swaras get fixed. And very importantly, in another sense also Sa is Adhaara because raga performance only makes sense, when the Adhaara Shadja is recognized or perceived or heard and is identified as the Adhaara swara, as the Sa.

It is the gestalt of a set of melodic movements of any raga falls in place and becomes meaningful as that particular ragas movements only when the tonic is perceived and held in the mind as the reference point. So, it integrates the various melodic movements of a performance and confers the raga hood on that music. I will demonstrate [Music]. Now this is Raag Lalit with a Sa as [Music], this is the Sa [Music]. So, that is Lalit with two Madhyams , Komal Rishabh, no Pancham.

But, if instead of [Music] this is Sa, and if you identify this as Sa you can hear Lalit, but suppose you identify [Music], suppose we identify this as your Sa [Music], the same music, the same phrases that I sang would be this [Music]. And you will not be able to perceive, you will not be able to hear Lalit. So, in that sense the Sa and the perception of the Sa is absolutely foundational in whether to make music or to make sense of the music itself. Now, even though the actual performance of a raga may not commence with the rendition of the Sa, that is the Sa usually is not sung right at the outset, but rather a nearby swara like the lower Ni, or the Ga or the Re are sung and then the performer arrives at the Sa. But there is some element of drama there, a

building up of tension and releasing it into the Sa. But the Sa or the tonic provided by the tanpura is very much on the minds of the performers and the listeners right from the beginning and throughout the performance. It is a powerful presence, it is what drives the music, it is what nourishes it and gives it meaning.

Historically the tanpura probably became part of music performances around the 15th or 16th century, there is evidence of its use in paintings of early 17th century. And with the presence of the drone the tanpura music making and listening was fundamentally changed.

Because without the drone, without the tanpura we only have the memory of the previous tone to produce the next or to experience the next one and to give it meaning, but when we have the drone, we have a constant external reference that will then impact intonation too. In fact, practicing Hindustani musician refers constantly to the tanpura, the Adhaara Shadja while in toning the various notes. However, complex or rapid the passages and the phrases may be, not only the tanpura other instruments also provide the drone in Hindustani concerts, the harmonium or the sarangi which are melodic accompaniment in khayal.

They also provided, though not continuously like the tanpura and in performances of louder instruments like the shehnai, the tanpuras soft sound will be drowned. And so, they usually have a shehnai player playing the tonic throughout, that shehnai is dedicated as a drone shehnai, but by default the drone in Hindustani concerts is provided by the tanpura.

Let us look at what the tanpura is. [Music] This is the tanpura being tuned by Bhuvanesh Komkali in construction, it has the tumba at the base of the tanpura, which is made out of a hollowed out and dried gourd. And this is also the part which serves as the resonator. You can see it on his right side at the end of the tanpura. After that we have the bridge which is also called the ghoraj or ghodi which is a very important part of the tanpura.

Over which the strings pass along the dand. Now, the dand is a long wooden cylindrical piece mounted on the tumba. The kuntis or the pegs to tighten or loosen the strings are at the extreme end and on the other end we have the manika or the small beads for fine tuning of the strings.

Now, let us look at the tuning of the instrument. It is a highly demanding task which even seasoned musicians take considerable time to get right. The tanpura typically has 4 strings, it might also have 5 or 6, but 4 is typical. The first string is tuned to Pa or Pancham or Shuddha madhyam depending on the raga, it is by default it is Pa or Pancham.

But, if a raga without the Pancham is being performed, then it is customary to tune it to the Shuddha Madhyam. Now, if the raga does not have Shuddha madhyam also, it is neither Pa nor Shuddha Ma then it is tuned to the Shuddha Nishad . So, that is the first string. The middle strings are called jodi, they are a pair and these are tuned to the upper Sa, the higher Shadja, tara Shadja and the last string is tuned to the lower Shadja or it is called the kharaj string.

So, already we see that the tanpura provides not just the tonic or the Sa, but at least one other swara, the Pa or the Ma or the Ni. But it does more, the seasoned and sensitive musician can hear the entire saptak when it is properly tuned. And this is achieved by the second stage of tuning of the tanpura. The first stage simply consists of tuning the strings to the Sa and Pa. The next stage is more critical, which is placing the jawari threads under the strings of the tanpura as

they pass over the bridge. The jawari threads are fine threads placed between the strings and the bridge and to tune the tanpura we need to slide the jawaris thread under the string, until we arrive at a point at which the sound comes alive with a rich tonality. And this is because of the curved bridge of the tanpura, the jawari bridge. In fact, making the jawari bridge is an intricate craft and makes the tanpura unique and much more than a mere drone. Let us listen to Bhuvanesh Komkali placing the jawari strings [Music]. Now what is actually happening is that, at a critical point when the thread is placed under the strings on the bridge, a range of harmonics are emitted by the string when it is plucked.

Harmonics are secondary pitches produced from any vibrating string that is any string when strummed or when plucked will produce the pitch to which it is tuned primarily, but it also produces other pitches. The physics of sound lays down the math of what pitches are emitted as harmonics.

In fact, C. V. Raman, Nobel laureate C. V. Raman has written a paper on the harmonics produced by the tanpura which according to him defy standard laws of sound. And again according to him this is because of the curved bridge of the tanpura. Harmonics have a lovely term in the tradition Swayambhu swaras.

Because they arise on their own; that is when a string tuned to say Pa is strummed, the Re is a harmonic and it is heard, though no string tuned to Re has been strummed. And so the Re is a Swayambhu that is, it has come into being on its own. So, also the Ga or the Gandhara is heard from the last or the kharaj string when it is tuned properly to the lower Sa. Season musicians can hear many other swaras and even the entire saptak and when all four strings are tuned well and with the jawaris placed well they create a rich tonal soundscape with many harmonics emerging from the interplay of the vibrating strings. Tuning a tanpura is an intricate art and needs time and care.

Inevitably we have electronic versions of the tanpura as well and tanpura apps that offer us a wide range of choices all just a few touches of the screen away. Indeed, I have used a tanpura app in many demonstrations in this course. You have YouTube videos with tanpura, but it is not the same, it does not have the live vitality of the, what is called, acoustic tanpura. One does not develop the relationship with an app like one does with ones tanpura. A relationship that makes possible great music. Let us listen to Bhuvanesh Komkali on the importance of practicing and performing with the acoustic tanpura.

[Hindi]

The tanpura's rich tonal splendour drags the musician and the audience into the world of the raga being performed. The art of tuning the tanpura and the art of hearing it and being able to discern the overtones are interconnected and they grow together. Musicians then let their music be driven by the tanpura and its tonal richness. With the advent of electronic tanpuras and applications this art is certainly under threat.

I will end this video with this lovely bit from an interview with veteran Dhrupad exponent Ustad Sayeeduddin Dagar as he refers to the tanpura as the king of overtones and as his God. [Music] is marva. [Music] ok, this is no, in marva there is no Pa, but you have to feel the tanpura. Tanpura

is king of overtoning, the shrutis and king because we call him is a God for us. If you feel this note, he will respond for that note, if you feel this note he will respond that raga.