

**Appreciating Hindustani Music**  
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**Lecture- 9**  
**Entering the World of Raga- Raga and Swara**

So, a quick recap, the basic material, the constitutive material of melody in Hindustani music is the 7 swaras and their variants which are 5 in number. This is the 12 tone system found in many musical traditions. Now, is the spacing of these notes equal? So, this is an interesting question and in quickly we can say that in the context of Indian music in general, no the spacing of the notes is not equal.

Um And this will actually take us into the realm of the physics of sound which I am not going to do. Those of you who are interested, I mean, you can look up this topic of equal tempered scale and just or the natural scale. Now, equal tempered scale is when the steps are equal. So, every note is separated from the next by by the same ratio and in the tuning of instruments like the piano or even the standard harmoniums or keyboards right. These are all tuned in the equally tempered scale.

Now, one might say that Indian music we use the natural or the just tempered scale. Especially when as I said in the initial exercises when you initiate a student into this music, we do use the natural or the just tempered scale. But then again since, as I have repeated, swaras are not standardized across ragas, that is it is not as if there is only one pitch that is the Shuddha Rishabh or Komal Rishabh you know there are subtle variations which is the shruti .

So, therefore, it is a little more complex. You cannot even say that we use the natural scale. So, anyway in any case those of you are interested can go down this rabbit hole of equal and just tempered scales or tuning. So, besides the 12 swaras we have shruti or micro tones, a theoretical tradition.

The shastra says there are 22, while practice or prayoga is not concerned with the number of shrutis though it is absolutely committed to microtonal variations. And how we speak of it in practice is that we have either, you know, say in this raga in a particular raga, the Komal Rishabh is slightly lowered or slightly higher; that is how we speak of microtonal nuances.

How slightly or how much, that is a matter for practice. Though there is a consensus. You know you know when you hear it you know it is alright or not. So, for instance Marwa you can say chaddhaa hua Rishabh chaddhaa hua Komal Rishabh the flatter, second flat Ri flat Re is slightly higher than the standard flat Re.

So, swara with microtonal nuancing is a basic tonal material, for, that is used in ragas and at a most basic level raga is identified through its swaras . And it is important that you notice that, I have said at a very basic level right because there is much much more to raga than the swaras So, we speak of swaras as the skeleton of a raga .

So, in this lesson we will be looking at this as a skeleton, no, and how we have various varieties of ragas, just in terms of the kind of swaras and the combinations that they have. So, you see when you ask a musician what is raag yeah yeah, what is raga Yaman or what is raga Jhinjhoti, how is it or what is raga Bhatiyar, the most natural thing for a musician would be to actually perform a few phrases of the raga, but if you had to talk about the raga we would the the most basic way to do it in terms of the swaras.

And we do it in ascendant in, as arranged, the swaras are arranged in an ascent and a descent, the ascending scale and the descending scale which are called the Aroha and Avaroha. So, this is one of the very basic ways in which we talk about any raga. Now, there are some basic expectations about a raga with regard to the swaras. The first is that a raga should have a minimum of five swaras, any fewer than that you for it to be when viable you know.

If you have only 3 swaras and which was the case which says the Saman music there were only 3 pitches. So, not much is possible right . What can you do with 3 swaras ? So, it is generally expected and in fact, most ragas have a minimum have at least five swaras and we do have a few, very few, ragas which have 4 swaras. But even there we have you know fleeting presences of at least 1 other swara. So, that is the first requirement that at least you have at least 5 pitches.

And the other expectation is that every raga should either have the Madhyam the Ma or the Pa. There are hardly any raga which skips both the Madhyam and the Pancham. So, these are a couple basic expectations about every raga with regard to the swaras. So, a raga is, at a very fundamental level, determined by the swaras that occur on it. So, we have for instance the raga Bhoopali which is associated with a scale that is very commonly found in many traditions of the world.

The Bhoopali has five swaras; it is an audava raga [Music] [Music]. In Hindustani music we say we say Re instead of Ri. Original abbreviation of Rishabha is Ri. But we typically say Re in Hindustani music, but I switch between both because of my training in Carnatic music. In Carnatic music we always say Ri [Music].

This is the- these are the notes. And Bhoopali as I said is basically its identity is constituted in at a very fundamental level by the fact that these swaras occur in it and not other swaras. So, if I were to vary even 1 swara in it right [Music]. Is a different raag, not very common in classical in Khayal, but it is very common in light music, so it is called Prateeksha. But so, in this case what I did- I varied a Dha Bhoopali has a Shuddha Dha. Bhoopali all the swaras are Shuddha Ri Ga Gha, Sa Re Ga Pa Dha Sa and Pa are of course they have no variant, but Ri Ga and Dha are Shuddha.

So, in Prateeksha the next second raag that I demonstrated the Dha is Komal. Now suppose I [Music] [Music]. So, this raag is called Vibhas [Music]. So, just the change of one swara itself will completely alter the mood of the raag, so this was Shivaranjani. Now [Music] this is the raag called Bhupal Todi in which, Ri Ga Dha are all Komal. Means suppose we have [Music] in this Ri and Ga are Komal Dha is Shuddha. It is a viable scale but there is no raga . I am not aware of anybody who has used this as a raag.

So, the point is that just because you have a set of notes and it seems viable, it does not mean that

there, is we have a raag with that kind of, with those swaras. The raag is something that evolves in a community, that is given life by the by the musicians, by performers and by the community in general.

I will just play a short clip of Bhupal Todi which I demonstrated. This is sung by Shrimati Malini Rajurkar. YouTube link is there below and I would urge you to listen to the entire thing. So, this as I said is [Music]. So, Re Ga Dha are all Komal, where you have Bhoop there is Bhoopali is just [Music], this is the scale [Music] this is Bhoop the major pentatonic scale Bhoopali Bhupal Todi [Music].

So, when a raga has five notes in the Aroha and Avaroha each then it is called an Audava raga. These are again ancient these are concepts categories that are found in our medieval texts too. So, Audava is when you have five swaras, Bhoop as I said is one of them Bhupal Todi was another, Shivanjani , Vibhas we have also ragas like Durga, Madhmad Sarang many many important major ragas in Hindustani music are Audava it is their pentatonic.

So, Durga for instance is the Re Ma Pa Dha these are the notes [Music]. This is just a scale though, when you actually sing Durga with very crooked raag you do not have linear movements. [Music]. This is Durga again another pentatonic raga or pentatonic scale it is another raga, that is associated with the pentatonic scale; that may be in a preferred, preferable way it is said.

Madhmad Sarang [Music]. So, the difference between Durga and Madhmad Sarang is just that Durga has Shuddha Dhaivata and Madhmad Sarang has Komal Nishad, but the ragas there is a world of difference between them . We also have ragas which have six which have the scales that have only that have six swaras and these are called Shadava.

So, you have five notes- Audava raga. And if you have scales with six notes- Shadava ragas. And then you have scales with seven notes you have that is called Sampurna. Now many major ragas again Shadava ragas are relatively fewer, but we have important very very major ragas which are which have only six swaras. And again Sampurna raga many important ragas like Yaman which is associated with the Lydian scale right [Music].

So, only the Ma is augmented, the Teevra Madhyam, the rest are Shuddha swaras. And we have huge variety of such scales in a for instance [Music] this is Ahir Bhairav. [Music]. This is the scale- the Aroha Avaroha. The scale is just a skeleton. It is hard for me, for instance, to just stick to a scale and try to talk about a raga, but I have to pin myself down. Because the raga is never performed by just going up and down the scale.

So, there is an interesting observation made by Kallinatha, a 15th century commentator on this great Sangita Ratnakara of Sarngadeva. Sangita Ratnakara is a landmark treatise of the twelfth 12th-13th century and Kallinatha wrote commentary upon it as uh. You know we have a commentatorial tradition there is we have basic text and then we have commentaries upon, commentaries upon, commentaries and that is how the textual tradition has evolved not just in music, but in also other fields.

Ah. So, he says swaranam swata eva ranjakatve api tatsandharbhasya kadaacid-aranjakatvam bhavati. That is, swaras are pleasing by themselves right, that is the definition of swara as we saw swameva rajate. But he says an arrangement of these swaras can sometimes be not so pleasing.

And in fact, this Aroha Avaroha that I was just demonstrating, these are one such arrangement. Again you know beginners exercises that we have what we call Alankaras, they are not meant to be pleasing. These are just tools and exercises. Aroha Avaroha is such a tool.

The scale that we talk about is just a tool- pedagogical tool or a tool that we use to discourse about music. The Aroha Avaroha in itself is not music, it is not in itself a raga. So, we have other complex, we have a variety of scales, we have a variety of, with very complexity of the scales themselves.

Every raga is complex, every raga is much much more than just a scale and as I said it is never just traversing up and down the scale and there are other considerations too. But there are ragas whose scales are themselves complex. So, for instance [Music]. So, we have something like Brindavani Sarang where you know you have the Aroha you have one variety of Nishad and all Avaroha you have another variety. So, [Music] there is a Shuddha Nishad [Music] there is a Komal Nishad.

So, in this this is a beautiful raag because of the play of these two Nishads. Again you have a raga like Jog with [Music] both the varieties of Gandhara of Ga [Music]. So, the scale would be [Music], Miyan Malhar is a very major raag which has a very intense use of both the Nishads [Music]. And this is very typical of Miyan Malhar. So, if we were to ask for the scale of this raag, so it will difficult [Music].

This would be a rough workable scale, but it is not really captured in the scale; there are other phrases that the scale does not quite indicate. And some scales involve other complexities like crookedness [Music], this is the raga called Alhaiya Bilawal you know with [Music]. We will not go like that, the scale itself is [Music]. So, that crookedness with Vakratha [Music], see these are all really hard to capture in a scale also [Music] this is a raga Bhatiyar. [Music]. And the Aroha Avaroha simply cannot capture the or give an idea of what are the various phrases that constitute this raga.

We have already seen raag Nand which is also another very complex raga [Music]. It is almost impossible to give an adequate Aroha Avaroha for such ragas [Music]. So, in terms of Aroha Avaroha in the scale we have a large variety. We have scales with 5 or 6 or 7 swaras. We have combinations of these also you know we have ragas in which Aroha may have five Avaroha will have seven.

So, it will be Audava Sampurna. That kind of- those are also a very important category of ragas, many ragas do that you know. The number of swaras that are used in the Aroha and Avaroha are different. So, there will be some swaras that cannot be used in the Aroha, but have to be used in the Avaroha.

So, Bihag for instance is a very important raag which is like this [Music]. In fact, it uses both the Madhyams also. So, there are many ragas like that . So, we have other kinds of complexities complications with the the scale and ragas which are almost impossible to capture in a scale, even in a rudimentary way.

Any scale is only a rudimentary capturing of the ragas; it gives you a very very rudimentary introduction to the raga, but some ragas defy even that hm. So, a scale itself cannot give the raga.

So, what does it really mean to say that Re is there in the Aroha? It really means that Re Ga after Re you can go to the next to another higher note.

That is all it means. What? How? Which is the other note? how does it go? What phrases? What ornament? All these are left undefined by the scale. So, it could be [Music]. So, [Music] this is also Arohi right [Music]. Let us listen to a very short performance of the Vakra raag, this is called Vakra you know when you have a crooked ascent and descent.

Like [Music] this is a very important raga again Gaud Sarang which is just so crooked even the scale itself is Vakra [Music], you do not [Music] no. So, if you want to go to Re then you cannot go [Music] no [Music]. This is one way of showing the- this is one way of capturing Gaud Sarang in a scale. It is full of twists [Music] Gaud Sarang.

[Music].