

There is the **big and small note system** : simple and very similar to minor and major of western interval naming.

Then there is a **system of overlapping intervals**. This gives more combination options naturally, when forming scales. This also allows naming chromatic notes without repeating a swara in the solfege.

Let us get familiar with them for practical reasons.

Big and small

Raga Shankarabharanam (carnatic) has the same notes as the Major scale (Ionian).

Major scale when written in interval names looks like this :

Root - Major2nd - Major3rd - perfect4th - 5th - Major6th - Major7th - Root

In the **big/small system**, this will be : **Sa, big Ri, big Ga, small Ma, Pa, big Dha, big Ni, Sa**

The 2nd, 3rd, 6th and 7th are major variation of the note positions and they have been referred to as '**big**' when using Indian notation.

(By Note position we mean the 2nd which is Ri or 3rd - Ga or 6th etc...)

The 4th note in major scale is perfect 4th and is called the small Ma, being the lower note in the 4th note position. #4th is called the big ma, being the higher note possible in the 4th note position.

Raga Shanmughapriya (carnatic) has the following intervals :

Root - major 2nd - minor 3rd - sharp 4th - 5th - minor 6th - minor 7th - Root

This will be : **Sa, big ri, small ga, big ma, pa, small dha, small ni, Sa**

Again, **all the majors have been referred to as big** (including sharp 4th) and all the **minors have been referred to as small**.

So in the big/small system of Indian solfege or Music Notation:

1. All **major** variations of a note position and sharp fourth are referred to as **big**. Major 2nd, major 3rd, sharp 4th, major 6th, major 7th - Big
2. All the minors and perfect 4th are called **small**. Minor 2nd, minor 3rd, perfect 4th, minor 6th, minor 7th - Small

System with three note possibilities - minor major and one more

Following are the swaras (notes) from Carnatic / South Indian classical music.

The last column shows the interval name from western music, that we will go for practically, when playing the music on a western instrument.

Position	Swara	Short name	Notation	Mnemonic	Interval Name
1	Shadja	Sa	S	sa	Root
2	Shuddha Rishabha	Ri	R1	ra	minor 2nd
3	Chathusruthi Rishabha	Ri	R2	ri	Major 2nd
3	Shuddha Gandhara	Ga	G1	ga	major 2nd
4	Shatsruthi Rishabha	Ri	R3	ru	minor 3rd

4	Sadharana Gandhara	Ga	G2	gi	minor 3rd
5	Anthara Gandhara	Ga	G3	gu	Major 3rd
6	Shuddha Madhyama	Ma	M1	ma	perfect 4th
7	Prati Madhyama	Ma	M2	mi	sharp 4th / flat fifth
8	Panchama	Pa	P	pa	fifth
9	Shuddha Dhaivatha	Dha	D1	dha	minor 6th
10	Chathusruthi Dhaivatha	Dha	D2	dhi	major 6th
10	Shuddha Nishadha	Ni	N1	na	major 6th
11	Shatsruthi Dhaivatha	Dha	D3	dhu	minor 7th

11	Kaisiki Nishadha	Ni	N2	ni	minor 7th
12	Kakali Nishadha	Ni	N3	nu	major 7th

Thanks : [Wikipedia](https://en.wikipedia.org/wiki/Indian_music_notation)

Two swaras lead to the same note - It's Useful

Have a look at the table above, see the interval name row. Look for an interval name repeated, and you will find two different Indian swaras pointing to the same note practically.

Shuddha Gandhara and Shatshruthi Rishabha practically represents the same note when trying to identify a raga from the Carnatic swara notation: Minor 3rd.

Similarly minor 7th can be called a Shatshruthi Dhaivatha or a Kaisiki Nishadha.

Note: Here we are talking about how the swaras can be interpreted when trying to identify and form scales from them. The details and implications of Carnatic theory is a lifelong study by itself. Here we are being the practical musician who found oneself in an overlap between the West and India.

Why is it useful when forming scales and singing

This system has a Ri (2nd note position) which points to a minor 3rd, Dha (6th note position) pointing to a minor 7th etc.

- This system of notation gives more number of scales on combining possible notes.
- Each of these scales can still be sung without repeating any of the solfege/ notation.

That is, after the root, we can have a minor 3rd as the second note and Major 3rd as the third note. We can call the **minor 3rd a Ri (R3)** and the major 3rd a Ga (G2).

This way, though the scale has two third notes, we still get to sing it without repeating Ga.

With the three note options instead of two (big and small)

- there are more permutations/combinations possible
- and the scales can still be sung without repeating any of the solfege/notation

This gives us some **beautiful scales with chromatic notes** which are formed by natural combination of available notes. Thanks to the **overlapping system of**

notations these chromatic clusters can be sung without repeating the swara name.

Here is an example of a charming scale with **two clusters of three close by notes**.

When minor 3rd is the second note in a Raga

Consider the Raga [Chalanata](#)

S R₃ G₃ M₁ P D₃ N₃ S'

(the apostrophe on the last Sa denotes Sa an octave higher)

- 36th Melakarta raga (chart of permutations for Carnatic Ragas)

S R₃ G₃ M₁ P D₃ N₃ S' equates to

Root - minor 3rd - major 3rd - perfect 4th - fifth - minor 7th - major 7th - root.

There are two sets of three consecutive notes in this raga

1. minor 3rd, major 3rd and perfect 4th
2. minor 7th, major 7th and root

Though there are two consecutive 3rds in the first set,

- the minor 3rd is a Ri (the second note, though it is a minor **3rd**)
- Major 3rd is a Ga.

In the second set,

- minor 7th is a Dha (the 6th note, though it is a minor **7th**)
- major 7th is a Ni

Thanks to the overlapping naming system, the raga can still be understood, the notes named and sung without making any exceptions.

While if we were to use 'big and small naming', we would be singing Ri for both minor 2nd and major 2nd, Ni for both minor 7th and major 7th.

And to begin with, if we were using only 'big and small' versions for each note position, we would not get this scale as a **natural combination of available options**.

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