

The *Nava Gana* System for Classification of Contemporary *Talas*

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[The author of this paper has developed a ‘Generative Theory of Indian Music’ (GTIM). Following information is based on the excerpts from this theory.]

Nava Gana* Classification of Contemporary *Talas

The *Nava Gana* system is developed because it is difficult to properly classify the contemporary *Talas* as per the traditional norms. The major issue arises due to three or four different traditions of *Talas* that are prevalent currently in India such as the North Indian *Talas*, *Suladi Sapta Talas*, and the *Chapu Talas* of Carnatic music and the ancient *Talas* described in treatises. The *Nava Gana* system accommodates all the existing *Talas* including ancient, medieval and the contemporary *Talas*. It synthesizes the traditional *Anga* system prevalent in Carnatic music with the *Vibhaga* system of North Indian music seamlessly. The new vocabulary of *Tala Bols* taking *Tabla Bols* as the basic units to represent percussion strokes brings in a kind of uniformity across diverse *Tala* systems prevalent today. This does justice to the temporal aesthetics of *Tala* as well as the psycho-acoustic aesthetics of *Tala*.

Following description uses a particular way of representing and describing all the *Talas* including North Indian and Carnatic *Talas*. It uses a sophisticated system developed in Carnatic music for showing *Anga* structure of a *Tala*. For showing the *Anga* structure symbols like ‘I’, ‘O’, and ‘U’ are used. To show *Suladi Sapta Talas* this system is used traditionally. Accordingly, ‘I’ represents the *Anga* value in terms of number of *Matras* or *Aksharas* and it is variable as per the *Jati/ Gana* of the *Tala*. For instance, *Chatarashra Gana* value of ‘I’ will be 4 because the number of *Matras* in the *Anga* of a *Chatarashra Gana* is 4, while for *Tryashra Jati/ Gana* the value of ‘I’ will be 3 for the same reason. Values of ‘O’ and ‘U’ are fixed. ‘O’ and ‘U’ normally represent the parts of the *Upanga*. ‘O’ is called *Druta* and it has fixed value of 2 *Matras* or *Aksharas*. ‘U’ is called *Anudruta* and it has fixed value of 1 *Matra* or *Akshara*. The *Suladi Sapta Talas* are represented in the traditions as follows and this representation is smoothly accommodated in the *Nava Gana* system. *Sapta Talas* are as follows: *Dhruva Tala*- IOII, *Matya Tala*- IOI, *Roopaka Tala* (Carnatic)- OI, *Jhampa Tala*- IUO, *Tripata Tala*- IOO, *Ata Tala*- IIOO, and *Eka Tala* (Carnatic) - I. Same system is adopted to describe a *Tala* under every *Gana* in the following descriptions.

After this information some more specific information about the *Talas* is also provided. It includes the information about the total number of *Matras* in a *Tala*, number of *Vibhagas*, number of *Angas*, number of *Pratyangas*, and number of *Upangas* if any. This is the bare minimum information that is provided about all the *Talas* classified under the *Nava Gana* system. Apart from this information some more additional information about North Indian *Talas* is provided. It covers the structure of the signature *Anga* of a specific *Tala* along with the *Krama* type of the *Pratyangas* and the *Tala Bols*. This information is provided only for North Indian *Talas*. For Carnatic *Talas* this information is not provided because it was felt that

some more research needs to be done in this regard. For the same reason information is not provided about the *Chapu Talas*, *72 Melakarta Talas* and ancient *Talas*.

Tryashra Gana

North Indian Talas

Tala Name	<i>Khanda</i>	<i>Ma tra</i>	<i>Vib ha ga</i>	<i>A n g a</i>	<i>Pr aty an ga</i>	<i>Up an ga</i>	<i>Krama</i>	Signature <i>Anga</i>
<i>Dadara</i>	II (3-3)	6	2	2	1	0	<i>Sarala</i> [3]	[[Sam], [Dha, Dhi, Na]]

Tryashra Gana

Suladi Sapta Talas

Name	<i>Khanda</i>	<i>Matra</i>	<i>Vibhaga</i>	<i>Angas</i>	<i>Pratyanga</i>	<i>Upanga</i>
<i>Dhruva Tala</i>	IOII (3-2-3-3)	12	3	3	1	1
<i>Matya Tala</i>	IOI (3-2-3)	8	2	2	1	1
<i>Roopaka Tala</i> (Carnatic)	OI (2-3)	5	1	1	1	1
<i>Jhampa Tala</i>	IUO (3-1-2)	6	1	1	1	2
<i>Triputa Tala</i>	IOO (3-2-2)	7	1	1	1	2
<i>Ata Tala</i>	IIOO (3-3-2-2)	10	2	2	1	2
<i>Eka Tala</i> (Carnatic)	I (3)	3	1	1	1	0

Chatarashra Gana

North Indian Talas

Tala Name	<i>Khanda</i>	<i>Ma tra</i>	<i>Vib ha ga</i>	<i>A n g a</i>	<i>Pr aty an ga</i>	<i>Up an ga</i>	<i>Krama</i>	Signature <i>Anga</i>
<i>Adda</i>	II (4-4)	8	2	2	1	0	<i>Sarala</i> [4]	[[Sam], [Dha, Dhi, Dhagi, Dhin]]
<i>Dhumali</i>	II (4-4)	8	2	2	2	0	<i>Sarala</i> [2, 2]	[[Sam], [Dhin, Dhin, Dha, Dhin]]
<i>Ekatala</i>	III (4-4-4)	12	3	3	2	0	<i>Sarala</i> [2, 2]	[[Sam], [Dha, Tirkit, Dhin, Dhin]]

<i>Kerava</i>	II (4-4)	8	2	2	1	0	<i>Sarala</i> [4]	[[Sam], [Dha, Gi, Na, Ti]]
<i>Tilwada</i> (Type 1)	IIII (4-4-4-4)	16	2	4	1	0	<i>Sarala</i> [4]	[[Sam], [Dha, Dhin, Dhin, Dha]]
<i>Trital or Teena Tala</i>	IIII (4-4-4-4)	16	2	4	1	0	<i>Sarala</i> [4]	[[Sam], [Dha, Dhin, Dhin, Dha]]

Chatarashra Gana

Suladi Sapta Talas

Name	<i>Khanda</i>	<i>Matra</i>	<i>Vibhaga</i>	<i>Angas</i>	<i>Pratyanga</i>	<i>Upanga</i>
<i>Dhruva Tala</i>	IOII (4-2-4-4)	14	3	3	1	1
<i>Matya Tala</i>	IOI (4-2-4)	10	2	2	1	1
<i>Roopaka Tala</i> (Carnatic)	OI (2-4)	6	1	1	1	1
<i>Jhampa Tala</i>	IUO (4-1-2)	7	1	1	1	2
<i>Tripata Tala</i>	IOO (4-2-2)	8	1	1	1	2
<i>Ata Tala</i>	IIOO (4-4-2-2)	12	2	2	1	2
<i>Eka Tala</i> (Carnatic)	I (4)	4	1	1	1	0

Khanda Gana

North Indian Talas

Tala Name	<i>Khanda</i>	<i>Matra</i>	<i>Vibhaga</i>	<i>Anga</i>	<i>Pratyanga</i>	<i>Upanga</i>	<i>Krama</i>	Signature Anga
<i>Jhampa</i>	II (5-5)	10	2	2	2	0	<i>Anuloma</i> [2, 3]	[[Sam], [Dhi, Na], [Dhi, Dhi, Na]]
<i>Jhapatala</i>	II (5-5)	10	2	2	2	0	<i>Anuloma</i> [2, 3]	[[Sam], [Dhi, Na], [Dhi, Dhi, Na]]

Khanda Gana

Suladi Sapta Talas

Name	<i>Khanda</i>	<i>Matra</i>	<i>Vibhaga</i>	<i>Angas</i>	<i>Pratyanga</i>	<i>Upanga</i>
<i>Dhruva Tala</i>	IOII (5-2-5-5)	17	3	3	1	1
<i>Matya Tala</i>	IOI (5-2-5)	12	2	2	1	1
<i>Roopaka Tala</i>	OI (2-5)	7	1	1	1	1

(Carnatic)						
<i>Jhampa Tala</i>	IUO (5-1-2)	8	1	1	1	2
<i>Tripata Tala</i>	IOO (5-2-2)	9	1	1	1	2
<i>Ata Tala</i>	IIOO (5-5-2-2)	14	2	2	1	2
<i>Eka Tala</i> (Carnatic)	I (5)	5	1	1	1	0

Tryashra Guru Gana

No North Indian *Talas* for this *Gana*

Tryashra Guru Gana

Suladi Sapta Talas

Name	<i>Khanda</i>	<i>Matra</i>	<i>Vibhaga</i>	<i>Angas</i>	<i>Pratyanga</i>	<i>Upanga</i>
<i>Dhruva Tala</i>	IOII (6-2-6-6)	20	3	3	1	1
<i>Matya Tala</i>	IOI (6-2-6)	14	2	2	1	1
<i>Roopaka Tala</i> (Carnatic)	OI (2-6)	8	1	1	1	1
<i>Jhampa Tala</i>	IUO (6-1-2)	9	1	1	1	2
<i>Tripata Tala</i>	IOO (6-2-2)	10	1	1	1	2
<i>Ata Tala</i>	IIOO (6-6-2-2)	16	2	2	1	2
<i>Eka Tala</i> (Carnatic)	I (6)	6	1	1	1	0

Mishra Gana

North Indian *Talas*

Tala Name	<i>Khanda</i>	<i>Ma tra</i>	<i>Vib ha ga</i>	<i>A n g a</i>	<i>Pr aty an ga</i>	<i>Up an ga</i>	<i>Krama</i>	Signature <i>Anga</i>
<i>Dipachandi</i>	I (7)	14	2	2	2	0	<i>Anuloma</i> [3, 4]	[[Sam], [[Dha, Dhin, Avagraha], [Dha, Dha, Dhin, Avagraha]]]
<i>Jhumara</i>	II (7-7)	14	2	2	2	0	<i>Anuloma</i> [3, 4]	[[Sam], [Dha, Dha, Tirkit, Dhin, Dhin, Dhagi, Tirkit]]

Mishra Gana

Suladi Sapta Talas

Name	<i>Khanda</i>	<i>Matra</i>	<i>Vibhaga</i>	<i>Angas</i>	<i>Pratyanga</i>	<i>Upanga</i>
<i>Dhruva Tala</i>	IOII (7-2-7-7)	23	3	3	2	1
<i>Matya Tala</i>	IOI (7-2-7)	16	2	2	2	1
<i>Roopaka Tala</i> (Carnatic)	OI (2-7)	9	1	1	2	1
<i>Jhampa Tala</i>	IUO (7-1-2)	10	1	1	2	2
<i>Tripura Tala</i>	IOO (7-2-2)	11	1	1	2	2
<i>Ata Tala</i>	IIOO (7-7-2-2)	18	2	2	2	2
<i>Eka Tala</i> (Carnatic)	I (7)	7	1	1	2	0

Chatarashra Guru Gana

North Indian *Talas*

Tala Name	<i>Khanda</i>	<i>Ma tra</i>	<i>Vib ha ga</i>	<i>A n g a</i>	<i>Pr aty an ga</i>	<i>Up an ga</i>	<i>Krama</i>	Signature <i>Anga</i>
<i>Tilwada</i> (Type 2)	II (8-8)	16	2	2	3	0	<i>Anuloma</i> [1,3,4]	[[Sam], [Dha], [Tirkit, Dhin, Dhin], [Dha, Dha, Dhin, Dhin]]

Chatarashra Guru Gana

Suladi Sapta Talas

Name	<i>Khanda</i>	<i>Matra</i>	<i>Vibhaga</i>	<i>Angas</i>	<i>Pratyanga</i>	<i>Upanga</i>
<i>Dhruva Tala</i>	IOII (8-2-8-8)	26	3	3	3	1
<i>Matya Tala</i>	IOI (8-2-8)	18	2	2	3	1
<i>Roopaka Tala</i> (Carnatic)	OI (2-8)	10	1	1	3	1
<i>Jhampa Tala</i>	IUO (8-1-2)	11	1	1	3	2
<i>Tripura Tala</i>	IOO (8-2-2)	12	1	1	3	2
<i>Ata Tala</i>	IIOO (8-8-2-2)	20	2	2	3	2
<i>Eka Tala</i> (Carnatic)	I (8)	8	1	1	3	0

Sankirna Gana

No North Indian *Talas* for this *Gana*

Sankirna Gana

Suladi Sapta Talas

Name	<i>Khanda</i>	<i>Matra</i>	<i>Vibhaga</i>	<i>Angas</i>	<i>Pratyanga</i>	<i>Upanga</i>
<i>Dhruva Tala</i>	IOII (9-2-9-9)	29	3	3	3	1
<i>Matya Tala</i>	IOI (9-2-9)	20	2	2	3	1
<i>Roopaka Tala</i> (Carnatic)	OI (2-9)	11	1	1	3	1
<i>Jhampa Tala</i>	IUO (9-1-2)	12	1	1	3	2
<i>Tripata Tala</i>	IOO (9-2-2)	13	1	1	3	2
<i>Ata Tala</i>	IIOO (9-9-2-2)	22	2	2	3	2
<i>Eka Tala</i> (Carnatic)	I (9)	9	1	1	3	0

Khanda Guru Gana

No North Indian *Talas* for this *Gana*

Khanda Guru Gana

Suladi Sapta Talas

Name	<i>Khanda</i>	<i>Matra</i>	<i>Vibhaga</i>	<i>Angas</i>	<i>Pratyanga</i>	<i>Upanga</i>
<i>Dhruva Tala</i>	IOII (10-2-10-10)	32	3	3	3	1
<i>Matya Tala</i>	IOI (10-2-10)	22	2	2	3	1
<i>Roopaka Tala</i> (Carnatic)	OI (2-10)	12	1	1	3	1
<i>Jhampa Tala</i>	IUO (10-1-2)	13	1	1	3	2
<i>Tripata Tala</i>	IOO (10-2-2)	14	1	1	3	2
<i>Ata Tala</i>	IIOO (10-10-2-2)	24	2	2	3	2
<i>Eka Tala</i> (Carnatic)	I (10)	10	1	1	3	0

Prakirna Gana

North Indian Talas

Tala Name	<i>Khanda</i>	<i>Ma tra</i>	<i>Vib ha ga</i>	<i>A n g a</i>	<i>Pr aty an ga</i>	<i>Up an ga</i>	<i>Krama</i>	Signature <i>Anga</i>

<i>Roopaka</i>	I (7)	7	1	1	3	0	<i>Viloma</i>	[[Sam], [Dha, Dhi, Na], [Ti, [3, 2, 2] Na], [Dhi, Na]]
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Prakirna Gana

No *Suladi Sapta Talas* in the *Prakirna Gana*