

KARṆĀṬIK MUSIC: SVARA, GAMAKA, PHRASEOLOGY AND RĀGA IDENTITY

T. M. Krishna
Chennai, India

tmkrishnaoffice@gmail.com

Vignesh Ishwar

Department of

Computer Science & Engineering,

IIT Madras, India

vigneshishwar@gmail.com

1. INTRODUCTION

Over the last century in *Karṇāṭik*¹ music, the method of understanding *rāga* has been to break it down into its various components, *svara*, scale, *gamaka*, and phrases. In this paper, an attempt is made to define the abstract concept of *rāga* in its entirety within the aesthetics of *Karṇāṭik* music considering the various components and their symbiotic relationship. This paper also attempts to prove that the identity of a *rāga* exists as a whole. Section 2 explains the concept of a fundamental musical note or *svara*. Section 3 illustrates the concept of *gamaka* or inflections. Section 4 delves into the concept of *rāga* in detail and then flows into Section 5 which enunciates the identity of a *rāga* in terms of *svara*, *gamaka*, and phraseology. The paper concludes in Section 6, and Section 7 gives the references.

2. SVARA

Usually, in common parlance, a musical note within the context of Indian classical music is called a *svara*. A *svara* is considered a definite pitch which relates to and gets its identity from the fixed tonic. There are seven *svaras* within an octave, *Ṣaḍja*, *Ṛṣabha*, *Gāndhāra*, *Madhyama*, *Pañcama*, *Dhaivata*, and *Niṣāda*, rendered as *Sa Ri Ga Ma Pa Dha Ni*. The *Sa* (*Ṣaḍja*) (Table 1) is the tonic *svara*. The *Pa* (*Pañcama*), its fifth, is also fixed with respect to the *Sa*. The *svaras Ri Ga Ma Dha Ni* have defined variability, meaning they could take two or three pitch positions while *Sa* and *Pa* do not. These pitch positions are collectively defined as *svarasthānas*.

2.1 Variability with respect to *svarasthāna* and Nomenclature

Every *svara* has a fixed number of manifestations which are definite pitch positions. For example, as shown in the Table 1, the *svara Ri* has three manifestations viz. *Śuddha Ṛṣabha* (*Ri1*), *Catuśruti Ṛṣabha* (*Ri2*), and *Ṣaṭchruti*

¹ The expression *Karṇāṭik* music is used in common parlance, the correct expression for this is *Karṇāṭaka* music. *Karṇāṭaka* here does not refer to the southern state in India

Symbol	Nomenclature
<i>Sa</i>	<i>Ṣaḍja</i>
<i>Ri1</i>	<i>Śuddha Ṛṣabha</i>
<i>Ri2/Ga1</i>	<i>Catuśruti Ṛṣabha/Śuddha Gāndhāra</i>
<i>Ga2/Ri3</i>	<i>Sādhāraṇa Gāndhāra/Ṣaṭchruti Ṛṣabha</i>
<i>Ga3</i>	<i>Antara Gāndhāra</i>
<i>Ma1</i>	<i>Śuddha Madhyama</i>
<i>Ma2</i>	<i>Prati Madhyama</i>
<i>Pa</i>	<i>Pañcama</i>
<i>Dha1</i>	<i>Śuddha Dhaivata</i>
<i>Dha2/Ni1</i>	<i>Catuśruti Dhaivata/Śuddha Niṣāda</i>
<i>Ni2/Dha3</i>	<i>Kaiśiki Niṣāda/Ṣaṭchruti Dhaivata</i>
<i>Ni3</i>	<i>Kākali Niṣāda</i>

Table 1. *Svarasthānas*

Ṛṣabha (*Ri3*). These pitch positions are increasing semitones within an octave. Therefore as the Table 1 shows, there are 12 possible manifestations within an octave with *Sa* and *Pa* being fixed positions. There also occur overlaps with the same pitch position being shared by two *svarasthānas*. For example, the *Ṣaṭchruti Ṛṣabha* (*Ri3*) shares the same pitch position as *Sādhāraṇa Gāndhāra* (*Ga2*). Therefore this pitch position can be interpreted only as one of these two, within a context.

Symbol	Nomenclature
<i>Ri2/Ga1</i>	<i>Catuśruti Ṛṣabha/Śuddha Gāndhāra</i>
<i>Ga2/Ri3</i>	<i>Sādhāraṇa Gāndhāra/Ṣaṭchruti Ṛṣabha</i>
<i>Dha2/Ni1</i>	<i>Catuśruti Dhaivata/Śuddha Niṣāda</i>
<i>Ni2/Dha3</i>	<i>Kaiśiki Niṣāda/Ṣaṭchruti Dhaivata</i>

Table 2. *Shared svarasthānas*

Table 2 shows just the four shared *svarasthānas*.

Another important point is that when these *svaras* are mentioned in the context of a melodic identity, the following is understood:

- The occurrence of *Ga1* must be preceded by the occurrence of *Ri1*.
- The occurrence of *Ri3* must be followed by the occurrence of *Ga3*.

- The occurrence of *Ni1* must be preceded by the occurrence of *Dha1*.
- The occurrence of *Dha3* must be followed by the occurrence of *Ni3*.

Therefore, when the following successive pitch positions *Sa Ri3/Ga2 Ma1* come together, the shared position can be only understood as *Ga2*, since *Ga3* does not occur after it. Whereas, if the following pitch positions *Sa Ri3/Ga2 Ga3 Ma1* occur together, then the shared position is understood *Ri3*. Thus, as seen in Table 1, we have 16 names given to the 12 definite pitch positions representing 12 *svarasthānas*.

2.2 Variability with respect to movement of a single svara

Even though a svara is referred to as a definite pitch position, it does not manifest itself as a contributing factor to the music unless the svara is a range rather than a point. Thus, the said svara is not perceived as a single point but as a small range of pitch values. In fact, it is in this variability that the identity of the svara lies. This does not imply that the same svara can be rendered at the different absolute pitch values comprising that range but means that the svara perceived is actually its movement within this range. This range is cognitively defined based on the melodic identity and the way in which it is rendered, and it is not governed by any specific rule. The Figure 1 is a histogram of the seven svaras in the melodic source *Kalyāṇī*. The *svarasthānas* corresponding to *Kalyāṇī* are in red. It can be seen that all the svaras are a range of pitch values.

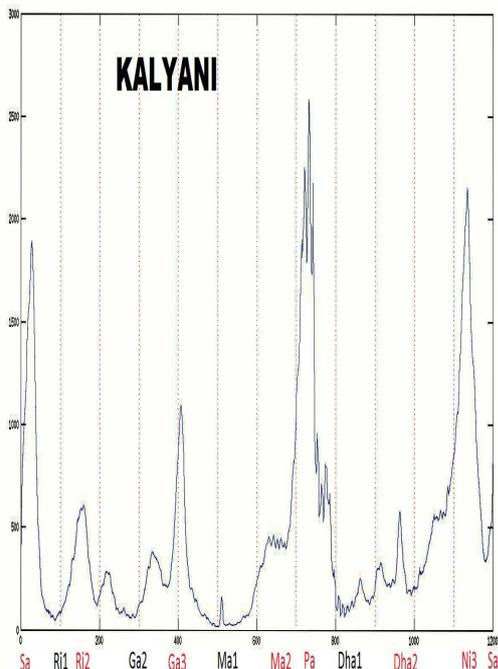


Figure 1. Illustration of svaras as a range

The permissible limit of the movement of the svara is defined in the context of other svaras and at the macrolevel, on the melodic identity that they represent in phraseology and the melody. Any movement of a svara within the permissible limit in a given context and melodic identity, cognitively refers only to one specific *svarasthāna*. For example, when the *svarasthāna Sādhāraṇa Gāndhāra* is constantly moving within a range, touching upon even other *svarasthānas*, it is still cognitively recognized as *Ga* due to its identity within the context of the phrase and melodic identity. This concept where a svara is used to create a variability of movement in relation to the phraseology and melodic identity, creating a cognitive understanding of the *svarasthāna*, is defined as a gamaka.

3. GAMAKA

Historically, the idea of gamaka is found in treatises right from the *Saṅgīta Ratnākara* by Śārṅgadeva [1] [2] (12th century) where 15 gamakas are described. One cannot be very sure - for obvious reasons - as to how these gamakas were rendered, since this relates to ancient music. There are many other treatises which discuss gamakas including *Rāga Vibodha of Somanātha*- 1609 and a much later treatise called *Mahābharata Cūḍāmaṇī*- 18th-19th c. AD [3]. The *Mahābharata Cūḍāmaṇī* mentions the concept of the *Daśavidha gamakas* (10 types of gamakas) [4]. Though this is often quoted by many musicians/musicologists, one does not see a direct connection between many of the types of gamakas described above and the gamakas in use over the last century. Many of the gamakas described in this treatise appear to be phrase movements rather than articulation on a single svara, for example, *ārohaṇa* (upward melodic movement) and *avarohaṇa* (downward melodic movement). The closest detailed descriptions of the gamakas, as rendered today, are given in the *Saṅgīta Sampradāya Pradarśini* (SSP), a treatise by *Subbarāma Dikṣita* published in 1904. [5] The gamakas described in the SSP [6] are described with respect to their rendition on the instrument *Vīṇā*. The gamakas given in the SSP are listed in the Table 3.

Though, most of the gamakas sung today are similar to the ones described in the SSP, they have evolved in form and context. Gamaka nomenclatures have also undergone a change. The Figures 2 and 3 illustrate the pitch contours for some of the gamakas in vogue today. The most important gamaka, the *Kampita* gamaka, is dealt with in isolation in this paper. Some of the gamakas in vogue today are described below.

- *Jaṅṭai*: When the same svara is rendered in succession, with a stress on the second. This leads to the touching upon of the immediately lower svara inbetween the two svaras. See Figure 2 subplot 1 (*Jaṅṭai*).
- *Jāru*: A sliding movement between two svaras is called *Jāru*. This is of two types, ascending and descending. See Figure 2 subplot 2 (*Jāru*).

Gamaka	Variations
Kampita	Līna
	Āndolīta
	Plāvīta
Sphurita	
Pratyāghāta	
Nokku	
Āhata	Ravai
	Khaṇḍippu
Vali	
Ullasita	Eṭra Jāru
	Irakka Jāru
Humpita	
Kurula	Odukkal
	Orikai
Tribhinna	
Mudrita	
Nāmita	
Miśrita	

Table 3. Gamakas in the SSP

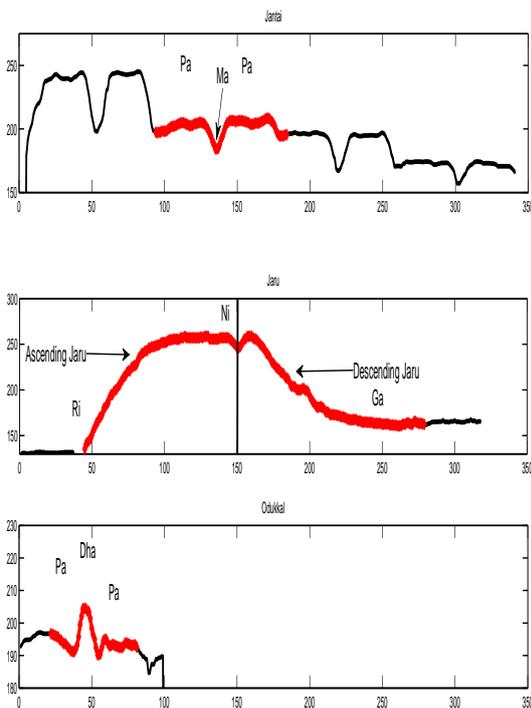


Figure 2. Illustration of Jaṅṭai, Jāru and Odukkal

- **Odukkal:** In vocal music, this gamaka is similar to a Jāru. The gamaka indicates a shift from one svāra to the next higher svāra and back. The difference between Odukkal and Jāru is in the technique of playing it on the instrument Vīṇā. In the Vīṇā, if the string is pulled over a single fret indicating a shift, it is Odukkal. For playing a Jāru, multiple frets are

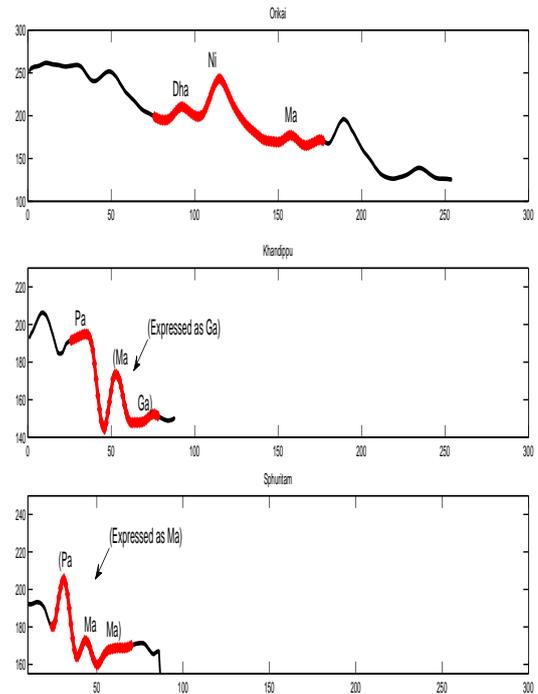


Figure 3. Illustration of Orikai, Khaṇḍippu and Sphuritam

traversed upon. See Figure 2 subplot 3 (Odukkal)

- **Orikai:** This gamaka is a movement from a svāra to the next higher svāra, and then descending below the svāra with which this movement began. See Figure 3 subplot 1 (Orikai).
- **Khaṇḍippu:** This gamaka is a descent from a svāra, briefly touching upon the next lower svāra and landing on the subsequent svāra. This movement is expressed as one svāra which is the final svāra on which this movement ends. See Figure 3 subplot 2 (Khaṇḍippu).
- **Sphuritam:** Starting on a svāra higher than its own position and quickly descending to its position which is repeated. See Figure 3 subplot 3 (Sphuritam).

All the above movements, though traversing multiple svaras, are musically expressed as only one svāra.

3.1 Kampita - The Sound of the Karṇāṭik Music Aesthetics

The gamaka which defines the sound of the Karṇāṭik music aesthetics is the *Kampita* gamaka.

This gamaka is the meandering of a svāra between the adjacent svaras, before and after the svāra with which this gamaka is expressed. The peculiarity of this gamaka is that the pitch value or frequency of the svarasthāna is not specifically sounded, but the svāra is sung as an oscillation between the notes adjacent to it, before and after the svāra [7] (See Figure 4). For example, the musician, sometimes,

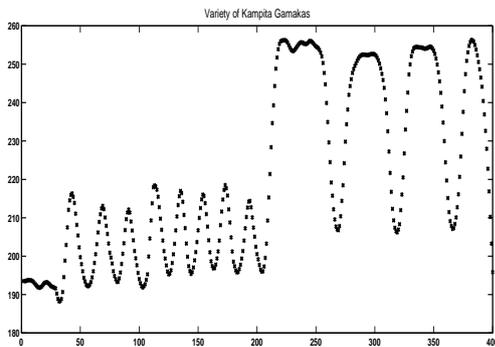


Figure 4. Illustration of the *Kampita* Gamaka

when rendering the svara *Śuddha Madhyama (Ma1)*² within a melodic context with *Kampita* gamaka does not emphasize the absolute frequency of the *svarasthāna* *Ma1* but is uttering the syllable *Ma* while at the same time singing *Ga3 Pa Ga3*. This does not mean that the svara, in itself, does not have any identity when sung with the *Kampita* gamaka because the identity of the svara itself lies in this movement, within this context. The absolute pitch position of *Śuddha Madhyama (Ma1)* is one of the frequencies that is sounded during the movement within the gamaka. Another facet of this gamaka that makes it so important for the sound of the aesthetics of *Karṇāṭik* music is that the beginning or end of this gamaka need not be on an absolute pitch position (*svarasthāna*). Yet, to the cognitive ear, it is still the svara. During many ascending melodic phrases with the *Kampita* gamaka, the next svara is touched upon before the gamaka of this svara ends on a *svarasthāna*. It is also found that the *svarasthānas* *Sādhāraṇa Gāndhāra* or *Kaiśiki Niṣāda* are almost always rendered with *Kampita* gamaka. Similarly, the *svarasthānas* *Kākali Niṣāda* and *Prati Madhyama*, are rendered with *Kampita* gamaka very close to the *Ṣaḍja* or *Pañcama* respectively. This would not be seen in melodic identities which do not have *Pañcama* or in phrases that lack *Sa* or *Pa*. When the permissible range of the *Kampita* gamaka of a svara within a phrase in a melodic identity is exceeded, it either begins to reflect another melodic identity or sounds out of tune. The *Kampita* gamaka today includes many varieties of oscillations within its spectrum. This is what makes *Karṇāṭik* music difficult for the untrained ear.

As you can see from above, the understanding of svara as only pitch positions, within the context of *Karṇāṭik* music, does not have any relevance. In fact, when asked to render the *Antara Gāndhāra (Ga3)* of the rāga *Kalyāṇī*, any student of *Karṇāṭik* music would naturally sing it with *Kampita* gamaka. Similarly, if asked to render *Kākali Niṣāda (Ni3)* of the rāga *Kalyāṇī*, they would render it very close to the position of *Sa* with another manifestation of *Kampita* gamaka. We need to differentiate between *svarasthānas*, which are technical semitonal positions within an octave

² The mention of *svarasthānas* (eg :*Ni1*, *Ga2*), are only to indicate the reference to the *svarasthāna*, but does not indicate the form of the svara as explained in section 3.1

and svara, which represents a melodic atom within *Karṇāṭik* music. Therefore, the initial definition given in this paper for svara is redefined. Even svaras that are not articulated are not necessarily sung at the exact frequency of the *svarasthāna*. Yet, to the cognitive ear, it still sounds as that svara. Though the svaras *Sa* and *Pa* are referred to in general as svaras with no gamaka variability, in reality, within the context of many melodic identities *Sa* and *Pa* are also articulated within a range.

Another very important point to note with respect to gamakas is that the articulated svaras are generally followed by a svara which is less articulated or not articulated at all. These svaras emphasize and highlight the articulated svaras. Thus, the interrelation between these two forms the basis for a melodic phrase.

4. RĀGA

A rāga is a collective melodic expression that consists of phraseology which is part of the identifiable macro-melodic movement. These phrases are collections of expressive svaras. Therefore, it would be impossible to break down the rāga into its various components. While various phrases within a rāga can be studied and understood independently for theoretical analysis, the rāga exists as a whole. A rāga is not static. Every composition and every performance of the rāga is part of its evolution.

4.1 Cognitively Inherited/Phrase-Based Rāgas

The concept of a rāga is not formulated by choosing the svaras, placing them in the required order, retrofitting the gamakas, formulating the phraseology, and defining it. A rāga has multiple identifiers. It can be identified by a single svara, a single phrase or motif, or a collection of motifs, as every movement within a rāga is an expression of the whole. Most of the older rāgas existed even before the analysis of their components was attempted. This is analogous with literature wherein it is said that the language came first, and the grammar came after. "Cognition of phraseology" is what defines the older rāgas, and this is passed on to us through the compositions in these rāgas. These rāgas are based on the cognition of the phraseologies and the recognition of the aesthetics that their forms and structures give them through compositions and renditions. These rāgas expand with newer phrases and interpretations as long as their defining aesthetics is within the realm of their identities. The aesthetics of these rāgas are largely defined by the usage of the gamakas. In general parlance, most *karṇāṭik* musicians refer to certain rāgas as heavy rāgas and certain rāgas as light rāgas. A study of rāgas that are commonly classified into these two categories reveals that all rāgas referred to as heavy have a high usage of the *Kampita* gamaka whereas the lighter rāgas have lesser usage of the *Kampita* gamaka. It is also found that most of the rāgas referred to as heavy are traditional phrase based rāgas.

4.2 Classification of Rāgas: The *Meḷa* system and its influence on perception of Rāga as we see it today

The efforts to classify rāgas in the *Meḷa* Era (16th to 19th century) play a very important role in the perception of rāgas as seen today. The idea of a *meḷa* can be traced to the *Svarameḷakalānidhi of Rāmāmātya-* 1550 though *Saṅgīta Sudhā* by Govinda Dīkṣita refers to a treatise called *Saṅgīta Sārā* by Vidyāraṇṇya having been the first treatise to refer to the idea of a *meḷa*. *Meḷa* refers to a collection of seven *svarasthānas*. Rāgas that contain a specific set of svaras are grouped in the *meḷa* that comprises that set of *svarasthānas*. The *meḷa* was named after the most popular rāga from the group. Even though the name of the *meḷa* was that of the most popular rāga, it did not imply that the other rāgas in that *meḷa* were a *janya* (derivative) of the rāga that held the title of the *meḷa*. All the rāgas in a *meḷa*, including the rāga after which the *meḷa* was named, were *janyas* of the seven *svarasthānas* that the *meḷa* comprised of. At this stage the rāga that held the title for the *meḷa* did not need to possess all the seven svaras. The intention of the *meḷa* system was to organise existing rāgas that were in practice.

During the later stages of the *Meḷa* Era, scholars began computing the maximum number of permutations and combinations possible with the *svarasthānas*. This is called *meḷa prastāra* (*meḷa* expansion). Each scholar/author computed his own number of *meḷas* depending on the number of *svarasthānas* they had theorized. One such *meḷa* system was first formulated by Venkaṭamakhin in his *Caturdaṇḍi Prakāśikā-* 1620 [8] in which he calculated the possibility of 72 *meḷas* from 12 *svarasthānas* with 16 svara names³. At this stage, only 19 *meḷas* were in existence out of which 18 already had rāgas. However, one rāga, *Simhārava*, was the brainchild of Venkaṭamakhin himself. Therefore, this seems the first time that a *meḷa* was converted artificially into a rāga. Venkaṭamakhin left open the rest of the 53 *meḷas* since there were no rāgas in that period that possessed those collections of *svarasthānas*. The *Rāgalakṣaṇa* (early 18th century) [9] attributed to Muddu Venkaṭamakhin lists artificially created *janya* rāgas using the *svarasthānas* available in each of the remaining 53 *meḷas*. It is here that the concept of *ārohaṇa* and *avarohaṇa* was used as a defining aspect of a rāga. A *meḷa* was called a *rāgāṅga* [6] rāga, and it was a rule that the rāga which held the title for the *meḷa* must contain the seven *svarasthānas* of the *meḷa*, irrespective of whether it appears completely in the *ārohaṇa*, *avarohaṇa*, or both combined. The first treatise that hints at this condition is *Saṅgīta Sudhā* by Govinda Dīkṣita- 1614. Muttusvāmi Dīkṣita followed the *rāgāṅga* rāga classification in his compositions. The later system of *meḷas* which is in vogue today was described in the *Saṅgraha Cūḍāmaṇī* [10] attributed to Govinda. No historical detail of this author is available. In this school, 72 *meḷas* were formulated with twelve *svarasthānas* and 16 names. Out of 72 *meḷas*, 6 *meḷas* were already functional since there existed old *janya* rāgas in them. 66 *meḷas* were made functional by synthetically creating rāgas that con-

tained those *svarasthānas*. This *meḷa* system uses the term *meḷādhikara* (equivalent of *rāgāṅga* rāga) and states that the *meḷādhikara*, the rāga after which the *meḷa* is named, must have all seven svaras in the *ārohaṇa* and *avarohaṇa* in linear order. Tyāgarāja is said to have given form to many of the rāgas in the *meḷa* system formulated by Govinda.⁴

4.3 Scale-Based Rāgas

The *meḷa* system opens up avenues to an entirely different type of rāgas which are defined solely by the scale which was used to formulate them. Until about the 15th century, the rāgas were mostly born out of phraseology. However, the obvious existence of defined number of *svarasthānas* and a defined number of names (these varied from treatise to treatise based on how they were described) and the possibility of creating structures within an octave with the permutations and combinations of the above started being explored. This automatically led to each author formulating many rāgas purely on the basis of *svarasthānas* and their combinations. Such rāgas are referred to as scale-based rāgas. The phraseology of these rāgas is also synthetically formulated. As a result, many phrases among these rāgas are the same, and therefore, no clear rāga cognition occurs because of phraseology. The rāga cognition occurs because of the svaras that appear in the phraseology. In contrast, in the phrase-based rāgas, the rāga cognition is a result of the identity of the phrase. Even if two rāgas share the same svaras, the distinctive phraseology is a distinguishing factor between the two rāgas. Another ramification of the later *meḷa* system and the evolution of synthetic rāgas is that the already existing phrase-based rāgas were retrofitted into this scalar structure, thus redefining their identity. This led to artificial changes in the existing rāgas of organic phraseology in the sense that some of the phrases which were inherited were removed since they did not fit in the new scale-based definition of the old rāga. An example is that of the rāga *Begaḍa*. This rāga was retrofitted to the following scale:

Ārohaṇa: Sa Ga3 Ri2 Ga3 Ma1 Pa Dha2 Pa Sa

Avarohaṇa: Sa Ni3 Dha2 Pa Ma1 Ga3 Ri2 Sa

According to the rule stated above, the *ārohaṇa* does not allow for a *Niṣāda*. But there are inherited ascending phrases of this rāga which contain the *Niṣāda*. They are today considered wrong, as they do not fit into the *ārohaṇa* and *avarohaṇa* of *Begaḍa*.

An example of phrase containing *Ni2* in the *ārohaṇa*:
Ni2 Sa Ri2 Ga3 Ri2 Sa Ni3 Dha2 Pa.

Another example is one that occurs in the *Begaḍa* varna *Inta Calamu* by Vīṇā Kuppayyar in which the phrase

Dha2 Ni2 Sa Ri3 occurs even though it does not follow the *ārohaṇa* rule imposed on the rāga.

³ There is a difference in nomenclature between the ones used in the *Caturdaṇḍi* and ones used today

⁴ Tyāgarāja, Muttusvāmi Dīkṣita and Śyāmā Śāstri were the musical trinity who lived between the 18th and 19th century.

5. RĀGA IDENTIFICATION: TONIC, SVARA, GAMAKA, PHRASEOLOGY

5.1 Tonic and Rāga

It is important to note that a rāga cannot be identified without the tonic. Therefore, the fixed tonic *Ṣaḍja* defines, at a basic level, the rāga that is rendered. Many times, when a line of music is sung without a referred tonic, two individuals would perceive it as two different rāgas based on the svara in the melody which they consider the tonic. This is completely cognitive. For example, in the phrase *Ga2 Ri2 Ni2* in the rāga *Ṣaṅmukhapriya*, if one identifies the *Sa* (*Ṣaḍja/tonic*) at *Ni2* in that phrase, one will hear *Ma1 Ga3 Sa* instead of *Ga2 Ri2 Ni2*, and *Ma1 Ga2 Sa* in this context is the rāga *Nāṭakurañji*.

5.2 Identification of a Rāga by a Svava

A svava which immediately gives away the identity of that particular rāga and occurs a maximum number of times in its exposition is called a *jīva svava* of that rāga (svava that gives life to the rāga). In some rāgas, this *jīva svava*, even when rendered without a gamaka, can bring out the identity of a rāga in its entirety. An example of a rāga being absolutely discernable by the rendition of a svava alone is *Ṣaṅkarābharaṇam*. The rāga *Ṣaṅkarābharaṇam* can be immediately identified by the elongated usage of its *Antara Gāndhāra* (*Ga3*). The Figure 5 below shows the emphasis on and the usage of its *Antara Gāndhāra* (*Ga3*). This information is completely cognitive. Phrase-

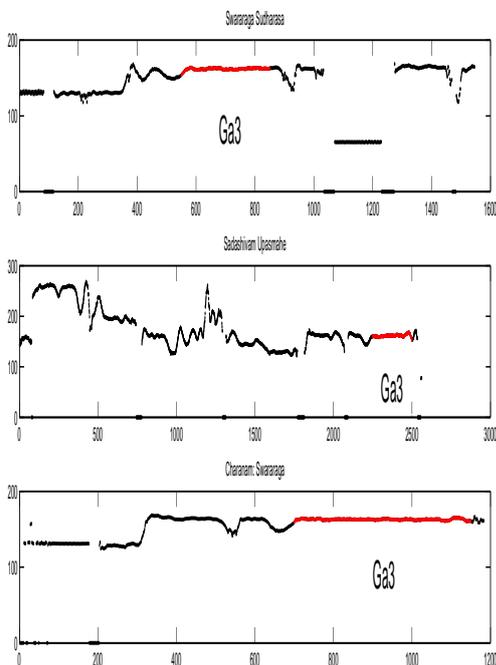


Figure 5. Illustration of the usage of *Ga3* in *Ṣaṅkarābharaṇam*

ology which encompasses such a usage of the Gāndhāra

has developed over time through different compositions and performances of *Ṣaṅkarābharaṇam*, emphasizing it.

5.3 Identification of a Rāga with a gamaka

A gamaka expression on a svava in different ways can be used as a cue for identifying rāgas. This concept underlines the fact that the expression of the gamaka in the context of the rāga gives the rāga an identity. An example is the *Kampita* gamaka which, when expressed in different ways with the *Niṣāda*, differentiates the rāgas *Toḍi* and *Dhanyāsi*. Figure 6 shows the difference in the *Kampita* gamakas of these rāgas. The *Kampita* gamaka also gives

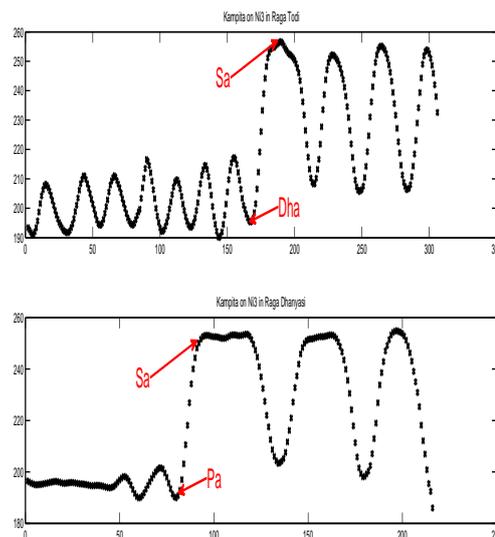


Figure 6. Illustration of the *Kampita* Gamaka in rāgas *Toḍi* and *Dhanyāsi*

multiple identities to the same svava in the context of the rāga in which it is sung. This depends on what comes before or after the phrase under consideration. The phrase *Pa Ni2 Sa* in *Madhyamāvātī* and *Pa Dha2 Sa* in *Kāmbhoji* sound exactly the same, but the *Niṣāda* in *Madhyamāvātī* gets its identity as a *Niṣāda* based on what comes before it, in the context of the rāga. The *Dhaivata* in *Kāmbhoji*, gets its identity in a similar way. Thus, in that context while rendering the phrase *Pa Dha2 Sa* or *Pa Ni2 Sa* as svaras, the utterance of the *Dha* or *Ni* gives away the identity of the rāga *Kāmbhoji* or *Madhyamāvātī* even though *Dha2* and *Ni2* are rendered exactly the same way.

This shows that identification of a rāga calls for some amount of habituated listening or learning because of the nature of the music. Thus, cognition is an unavoidable requirement for recognition of rāgas.

5.4 Identification of a Rāga with phraseology

A phrase is an interrelation between articulated and unarticulated svaras in a rāga. For organically inherited rāgas, the phraseology has already existed as an intrinsic part and has been passed on in the form of compositions. Many

compositions in a single rāga by different composers contain common phrases which are characteristic of that particular rāga. These characteristic phrases are those which have existed through the times. The identification of a rāga using these phrases requires listening to the rāga at least one time in a performance, either in the form of an improvisational piece or within a composition. It is very difficult to break phrases, and the beginning and ending of phrases, even the common ones, are based on the context of the rāga they are sung in and the context of their usage within the rāga. Every phrase is therefore closely knit with the phrases that appear before and after it, creating a seamless melodic movement.

There are many phrases which could be common between two rāgas. However, the extension before and after these phrases would define the rāga. Therefore, extrapolating only the common part of these phrases to identify the rāga would be erroneous. Also, a small change in the gamakas of these phrases can reflect a different rāga. For example, the phrase *Pa Dha1 Ni2 Dha1 Pa Ma1* with an elongated *Niṣāda* is common to rāgas *Toḍi* and *Bhairavi*, but a gamaka on the svara *Ma* changes the aesthetic of the phrase, making it sound like *Bhairavi*. The same *Ma* when sung without gamaka makes the phrase sound like that of *Toḍi*. These associations are entirely cognitive. Similarly, when two rāgas share a common gamaka for the same svara, the position of that svara and its importance within the context of the phrase and rāga determines the identity of the rāga. For example, if a musician begins with the phrase *Ni2 Ni2 Ni2* (*Kaiṣiki Niṣāda*) with a minimal *Kampita* gamaka, all cognitively aware listeners would associate it with the rāga *Surati*, though the same phrase with exactly the same gamaka can appear in the rāga *Ritigauḷa*. Therefore the relative importance and context of the same phrase in the two rāgas determines the cognitive association between the svara, phrase and the rāga.

It is also important to note that the same phrase may be sung at a slower pace at one point in a performance and at a faster pace at another point. However, some phrases cannot be sung at all speeds. If the phrase is sung at a speed beyond a certain cognitive range defined for the phrase, the identity of the rāga is lost. The primary reason for this is that an increase in speed constricts the inflection of the svaras. For example, certain phrases of the rāga *Nilāmbarī* cannot be rendered at speeds faster than permitted by the aesthetic of the rāga because the phrase, thus rendered, will sound like that of an entirely different rāga.

6. CONCLUSION

It is very clear that the traditional concept of rāga did not include a logical hierarchical sequence of its various components, rather that rāgas evolved more organically. The rāga form is dependent on svara, gamaka, and phraseology collectively. None of these components can exist in isolation within Karṇāṭik music. Therefore, the usage of any of these terms refers automatically to the collective sound that they create. This is why a rāga is identifiable from as little as a single svara, to the largest collection of phrases. A very important component of the rāga identity is also

the role of cognition. This cognition is a result of serious listening or training. For a musician, the rāga form is in its entirety, and the phrases, gamakas, and svaras are not understood in isolation. The later entry of the synthetic rāga influenced the relationship between svara, gamaka, and phraseology. Nevertheless, as seen above, the symbiotic relationship between these variables and the cultivated cognition of rāga is what gives rāga in Karṇāṭik music its form and establishes its uniqueness.

7. REFERENCES

- [1] N. Ramanathan, *Musical forms in the Sangita Ratnakara*. Chennai: Sampradaya, 1999.
- [2] Dr. R. K. Shringy and Dr. Prem Lata Sharma, *Sangita Ratnakara of Sarngadeva, Text and Translation*, India.
- [3] Vishwanatha Iyer, *Mahabharata Cudamani*, India, 1955.
- [4] Dr. R. S. Jayalakshmi, “Mahabharata Cudamani,” www.musicresearch.in.
- [5] Subbarama Diksita, *Sangita Sampradaya Pradarsini (Telugu)*, 1904.
- [6] —, *Sangita Sampradaya Pradarsini*. Chennai, India: The Music Academy Madras, 2011.
- [7] T. M. Krishna, “Bhairavam, Sahana, Kannada, Gaurivelavali, and Dhamavati, in the context of the Dikshitar Sampradaya with special reference to the Sangita Sampradaya Pradarshini,” *The Music Academy Madras*, vol. 81, pp. 79–93, December 2010.
- [8] R. Sathyanarayana, *Caturdandi Prakashika of Venkatamakhin crit. ed. and trans. with comm. and notes*. Delhi: IGNC and Motilal Banarasidass, 2002.
- [9] Hema Ramanathan, *Ragalakshana Sangraha*. Chennai, India: N. Ramanathan, 2004.
- [10] Subramanya Sastri, *Sangraha Cudamani by Govinda*. Chennai, India: Adayar Library, 1938.