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CHAPTER TEN

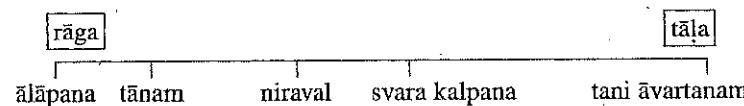
Melodic Improvisation in Karnātak Music: The Manifestations of Rāga

T. VISWANATHAN AND JODY CORMACK

Rāga is the foundation of melodic composition and improvisation in South Indian music. Yet attempts to describe or define it often fall short. Some fall back on the near romantic quality of historical classification relating rāga to time of day, emotion, and so on. Others rely on the dense scholarship of Indian music theory and its weighty terminology. Furthermore, because different rāgas can share melodic material, definitions which exclude knowledge gained through practical experience can leave both the trained and the average listener mystified.

Unfortunately there is no shortcut to understanding rāga. Theory tells us that rāga is made up of pitch and microtones, scale, and specific ornaments. Tradition tells us that rāga phrases emerge from composition and performance practice. Analysis tells us that although a musician adheres to these basic "rules" of rāga in performance, there is yet another level of rules dictated by context. That is, every rāga changes slightly depending on the form in which it is performed. For the listener to decipher the intricacies of rāga, or for the performer to comprehend what is fixed within what is flexible, an awareness must be developed from persistent listening and practice. By using analysis as a vehicle we can get some sense of the subtle effects of form on rāga. What must eventually come through a process of absorption for the listener and performer can thus be illustrated by examining rāga in more than one environment—in this case, two Karnātak (South Indian) improvisatory forms from the art music tradition.¹

Ālāpana and svara kalpana are two among five improvisatory forms performed in Karnātak music.² Ālāpana can be described as melodic improvisation in free rhythm, using syllables of no meaningful significance, set within the framework of a single rāga (melody type). Svara kalpana is the improvisation of melodic/rhythmic passages using svaras (sol-fa syllables), taking place within the tāla (metrical cycle) of a composition.³ Both of these can be visualized on a continuum where, in the context of the other improvisatory forms of the system,⁴ they range from those which least involve tāla to those which involve it the most. Ālāpana would thus fall in the former category, and svara kalpana closest to the latter.



Insofar as each improvisatory form has a structure that is uniquely its own, and formulas and procedures for its performance that are equally individual, it is logical that something as elemental as *rāga* would in turn behave according to its context. From this viewpoint we can discuss *rāga* in *ālāpana* and *svara kalpana*.

Rāga

Powers's work on *rāga* is arguably the most succinct and thorough to date. In part, he defines *rāga* as both a "particularized scale" and a "generalized melody." Regarding this he says: "A *rāga* is more specific than a scale, for any number of *rāgas* can share a single collection of pitches. Yet a *rāga* is less specific than a tune, for any number of tunes can share the same *rāgas*" (1984, 328).

Another way of looking at *rāga* is as "a ready-made 'system' of formulas," a "total melodic 'tool-kit' which contains all of the pitch materials . . . the performer will use" (Reck 1983, 91–92). This system of formulas distinguishes the melodic character of a *rāga* from any other, and is traditionally defined as *laksana*—the grammar or "theory" particular to a *rāga*. It includes scale, the treatment of individual tones (how they may be ornamented, stressed or not, elongated, shortened, and so forth), phrases, and shape (*svarūpa* or "gestalt" of the *rāga* as a whole). A music student learns most aspects of the *rāga laksana* and masters the techniques of improvisatory forms through an extended process of musical absorption. Ultimately, this process translates into an instinctive understanding of the architecture and the rules of each form. For *ālāpana* and *svara kalpana*, these are roughly presented as follows.

ĀLĀPANA

Ālāpana precedes the composition and is therefore performed without drum accompaniment. An *ālāpana* can be very short (one or two minutes), long (fifteen minutes to half an hour), or any length in between. Several factors influence the musician's choice of length, such as the pacing of the concert, the scope a particular *rāga* may have for development, the composition about to follow, the singer's mood and vocal condition, and the response of the audience. Every *ālāpana* follows a common contour and may be broken down into a series of broad developmental sections. The average *ālāpana* begins by exploring the *rāga* around the tonic (*sa*). It systematically rises through the middle octave (*madhya sthāyi*), stressing the important *svaras* of the *rāga* along the way, then gradually builds up to the octave tonic (*tāra sthāyi sa*). There,

a. Section 1: (Approach to the higher octave -- *tara sa*)
 Section 2: (Development above *tara sa*)
 Section 3: (Fast passages in any range)
 Section 4: (Approach to and including conclusion at the tonic -- *madhya sa*)

b. Ramnad Krishnan



K.V. Narayanaswamy



T.M. Thyagarajan



Figure 10.1. a, *Ālāpana* sections; b, three *ālāpana* performances.

higher octave development takes place. Once this has occurred, the *rāga* may continue its development over a span of approximately two octaves in fast passages called *brikka*. A rapid descent back toward the tonic *sa* follows where, in a relaxed and slower tempo, the *ālāpana* resolves on the tonic. The sections may be distinguished as shown in figure 10.1a.

There is no fixed rule or standard to determine the relative length of each of these sections, and certainly there is no formal indication of transition from one section to another—no sudden break in the rate of notes or melodic development. Graphic representations of *ālāpana* performances by three eminent musicians shown in figure 10.1b conform to this proposed four-section format, albeit with variations in proportion and sequence (see Viswanathan 1974, 188).

SVARA KALPANA

Svara kalpana assumes not only the intricacies of *rāga*, but adds many of the complexities of the *tāla* tradition as well. It is the "forming" or "fashioning" (*kalpana*) of solfege syllables or notes (*svaras*) which are either sung or articulated instrumentally at a chosen point within a composition. Alternated between a solo performer and a melodic accompanist, each completed turn (or "round") of *kalpana svaras* ends on a particular pitch (*svara*) in the *rāga* and at a specific place (*idam*) in the *tāla* cycle. The *idam* is where a phrase from

a line of text in the composition begins. Sung or played instrumentally, the phrase acts as a refrain.

Unlike *ālāpana*, which may be described as a form in which rāga builds stepwise to peak at and above the octave and then quickly descends to conclude on the tonic, *svara kalpana* builds by the gradual lengthening of successive rounds. It also builds by a change of speed (where it is doubled or quadrupled), by the expansion of range (within the pitch limitations of the rāga scale), and by a buildup of rhythmic activity, and often complexity, as it nears conclusion. Any of these elements may be used depending on the type of composition within which the *svara kalpana* is set, its placement in the program, the *tāla*, the restrictions of the rāga, and the performance habits, mood, and abilities of the artist.

The sequence of events possible for a *svara kalpana*, as well as a delineation of the major structural options available, is shown in figure 10.2.⁵ At the top of the figure is an abstracted *tāla* cycle with an arrow connecting the beginning (which is the first *tāla* count or *sama*) to the end (also *sama*). The slow tempo (*vilambita kāla*) and fast tempo (*madhyama kāla*) sections start as short rounds near the end of the cycle, and gravitate outward to the left as the rounds lengthen, where they finally span the whole cycle as extended rounds. The beginning of each round is marked with a number, the end with an asterisk (indicating a return to the refrain line, or *eduppu*).⁶ The lines shown here are merely representative of the many rounds of *svaras* possible in a performance. A *korappu* (represented here by an upside-down staircase configuration) is the gradual reduction (by halves) of *kalpana* (improvised) *svaras*, normally in a statement-and-response exchange between the soloist and melodic accompanist. The fermatas represent briefly held *svaras* which signal the end of the soloist's (or accompanist's) turn. The final cadence marks the climax of the entire *svara kalpana* performance, which resolves with a last restatement of the refrain phrase. This is represented in figure 10.2 as contrasting lines, since cadential patterns vary so greatly in size, shape, and content.

A clear distinction between *ālāpana* and *svara kalpana* is evident from these brief and general descriptions. Many details of the consistencies and the variables in each have not been discussed. Nonetheless obvious differences between the two forms can be seen. In large part this is due to the metered environment of the one and the absence of meter in the other. Closer examination will show several of the ways basic rāga principles can be expressed.

Scale

At its most basic level, a rāga is defined by its scale. *Kāmbhōji* is one of the oldest rāgas still in use in Karnātak music,⁷ and continues to be among the most popular. Musicians today consider it a *rakti rāga*, or a rāga which has a particular "feeling" or "emotion" (*bhāva*) attached to it. Such rāgas generally predate the nineteenth century and, having so established themselves in com-

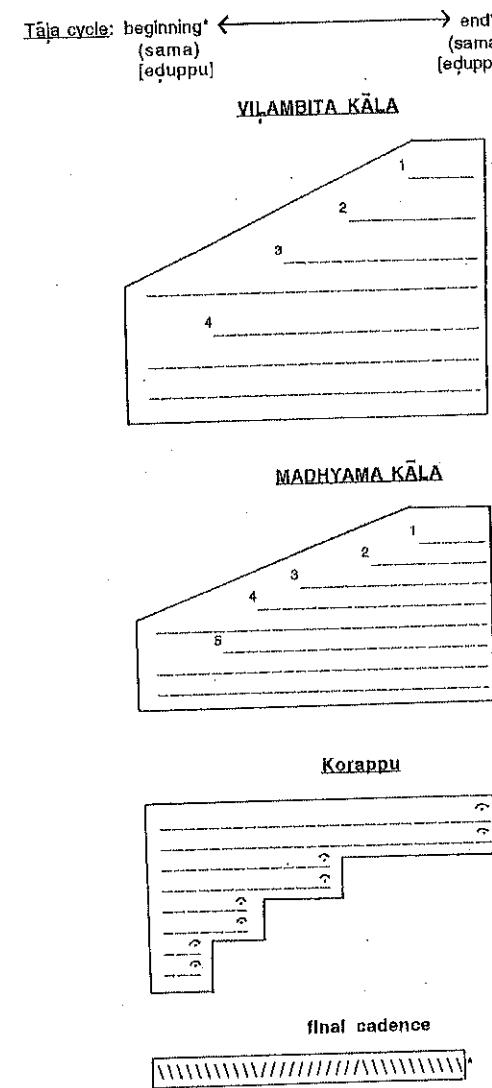


Figure 10.2. *Svara kalpana* sequence.

positions over a long historical period, rely more on characteristic phrases and ornamentation than the more scalar and less phrase-dependent rāgas of recent times. *Kāmbhōji* is thus an accessible and appropriate choice for analysis and discussion. *Kāmbhōji* is made up of the following pitches:

C D E F G A C' – C' Bb A G F E D C'

The corresponding *svara* (solfege) syllable for each note would be:

sa ri ga ma pa dha ū - ū ni^b dha pa ma ga ri ū¹⁰

Svara (Pitch)

Every *rāga* has certain pitches that have specific functions. At the *svara* level, these function tones are a *rāga*'s second most fundamental identifying features.

Reck observes, "Each composition, each composer, each performing tradition, and each performing musician (perhaps on different occasions) may present a slightly different picture of the characteristics of [a] *rāga*" (1983, 210)—and indeed this testifies to the dynamic life of performed *rāga*. The frequent occurrence of certain function tones relates to the inherent rules of the *rāga*. These tones can also reflect the structure of the forms (that is, *ālāpana* and *svara kalpana*) within which they occur, as well as the performer's own musical habits.

The primary function tones of a *rāga* are its *amsa svaras* or "predominant tones" (equated with *jīva svaras* or "soul tones"), *graha svaras* ("initial tones" of composed sections or improvised phrases and sections), *nyasa svaras* ("final tones" of phrases and sections of a composition or improvisation), and *dīrgha svaras* ("elongated" or "sustained" tones).

For each category of function tones discussed in *ālāpana* and *svara kalpana*, example 10.1 shows the four most prominent *svaras*, presented left to right, in order of their appearance. The differences (and the similarities) in relation to the employment of function tones in *ālāpana* and *svara kalpana* were gathered from a broad assortment of improvisations in both forms.¹¹ *Svaras* were individually added, averaged, and compared. It is important to remember that the conclusions reached cannot be taken as absolute, since there is always room for individual expression and creativity. In *svara kalpana*, for example, a musician may opt for a refrain line starting on the octave tonic ū instead of the fifth

a. Amsa Svaras for Kambhoji Alapana



b. Amsa Svaras for Kambhoji Svara Kalpana



Example 10.1. *Amsa svaras*.

degree *pa* ordinarily taken. The result is greater emphasis on notes performed in the middle and higher octaves. The predominance of certain function tones is thus influenced by the beginning pitch of the refrain line (the *eduppu svara*) and its location in the octave.

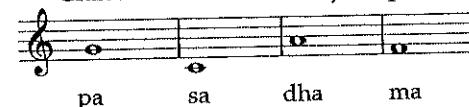
The slight difference between the two improvisatory forms regarding predominant tones (involving ū in *ālāpana* and *ni* in *svara kalpana*) can best be explained from the viewpoint of performance convention. As *ālāpana* phrases approach the higher octave, they either weave around, sustain, begin with, or end on the octave tonic ū. Vocalists particularly make use of this *svara* since it is in a strong area of their vocal range. In *kāmbhōji svara kalpana*, musicians often prefer certain phrases beginning with or stressing *ni*. Some common examples are *ni-dha-pa-dha-ma* and versions of it, such as those shown in example 10.2. Musicians also consider these phrases "emotional" (*rakti*) phrases.

The initial tone or *graha svara* of an improvised phrase is more easily identified in *ālāpana*, where each phrase or group of phrases is marked by a pause, than it is in *svara kalpana*, where pulsed melodic phrases tend to blend. *Graha svara* in *svara kalpana* describes more accurately the opening pitch of a section, specifically the tone beginning a round of *svaras*. The preference for the fifth degree *pa* as an initial tone in *ālāpana* (see ex. 10.3) reflects the ease with which one tunes to the fifth degree expressed by the drone. *Dha* is preferred in *kāmbhōji svara kalpana* because it is considered an important "soul tone" of the *rāga*, and as such communicates the emotional aspect of the *rāga* at the outset of a round.



Example 10.2. Common phrases in *kāmbhōji svara kalpana*.

Graha Svaras for Kambhoji Alapana



Graha Svaras for Kambhoji Svara Kalpana



Example 10.3. *Graha svaras*.

Ending tones or *nyāsa svaras* in *ālāpana* and *svara kalpana* must be looked at other than by statistical comparison. Although individual phrases will end on a variety of *svaras* in *ālāpana*, the improvisation as a whole ends on the tonic (*sa*). Ending tones in *svara kalpana* phrases are generally determined by the first note of the refrain line. Each round of improvised *svaras* then ends on the note above or below that pitch.

Dīrgha svaras (shown in ex. 10.4) are sustained notes that by definition emphasize a *svara*'s importance. The fifth degree *pa* and tonic/octave-tonic *sa* are *dīrgha svaras* in any performance of *kāmbhōji* *ālāpana*, since they are traditional settling points for resting and tuning with the drone. In *kāmbhōji*, *dha* is a prominent sustained tone for both improvisatory forms. In *svara kalpana* especially, it provides a break from the constant pulse of *tāla*.

Gamaka (Ornamentation)

Although *svaras* constitute the basic unit of musical meaning within the vocabulary of *ālāpana* and *svara kalpana*, they derive their color and individuality from *gamaka* or "ornamentation." A *svara* can be properly defined only when the ornament traditionally associated with it is considered. For example, the *svara ga* (E) in *kāmbhōji* is treated very differently from *ga* in *kalyāni rāga*,¹² as example 10.5 shows. The *kāmbhōji* *gas* are ornamented with a momentary flick to a higher tone at the end of the principal tone (*ga* to *ma* [F]). In *kalyāni rāga*, the sustained *ga* has an ornament that is successively stressed from above. Each *ma* (not the sharped *ma* of the *rāga* scale) comes down to a prolonged *ga*.

The characteristics of an ornament can vary according to tempo, duration of the note being ornamented, and improvisatory form. In *ālāpana* and *svara kalpana*, *gamakas* are particularly sensitive to tempo.

Kampita ("oscillating" *gamaka*) is an ornament that is often found in the slower tempos of *ālāpana* and *svara kalpana*. Because it is an oscillation, a sustained *kampita* is used less often in a faster tempo, since it is awkward to

Dirgha Svaras for Kambhoji Alapana

pa dha sa sa

Dirgha Svaras for Kambhoji Svara Kalpana

dha ma pa ni

Example 10.4. *Dirgha svaras*.

g g g r s (kāmbhōji)

g , , (kalyāni)

Example 10.5. *Gamaka*.

r , , d p d p m g m g r s (kāmbhōji)

Example 10.6. *Kampita*.

r , d p d p m g m g r s (kalyāni)

Example 10.7. *Kampita* in faster tempo.

perform. Example 10.6 shows a sustained, oscillated *ri* as part of a characteristic *kāmbhōji* phrase.

Ri is treated differently in faster-tempo *svara kalpana*, since sustained *ris* (as they might be expressed in the *rāga* phrase in ex. 10.6) are generally considered ineffective in the pulsed environment of the form. By shortening the oscillation, the phrase in example 10.7 would be a more likely candidate for a faster-tempo *svara kalpana*.

Other ornaments common to both forms are likewise sensitive to tempo. *Odukkal* (stressed from below on successive, non-repeated notes; ex. 10.8) ornaments only faster-tempo notes in *ālāpana* and *svara kalpana*.

Ullāsita, the "sliding" *gamaka*, is most effectively used as an ascending ornament for *ni* in *ālāpana* and *svara kalpana* (ex. 10.9), though the power of the phrase is best realized at a slower tempo.

Finally, some ornaments will more typically occur in one improvisational form than in another, regardless of the *rāga*. The combination of tempo and rhythmic framework can be a factor in the frequent presence of an ornament

Example 10.8. *Odukkal*.Example 10.9. *Ullasita*.Example 10.10. *Sphurita*.

like *sphurita* (stressed from below on the second of successively repeated notes, ex. 10.10), which is very common in *svara kalpana*.

Sāncāra (Phrase)

Regardless of how essential they are, *svaras* and *gamakas* do not in themselves define a rāga; they become musically meaningful only in the larger context of phrases which, when strung together, constitute the *svarūpa*—the “totality” or “gestalt” of the rāga.

Generally, each rāga has its own characteristic phrases (*rāga-chāya sañcāras*) which can appear regularly in compositions, and which produce instant recognition in an audience.¹³ There are also phrases which have become “characteristic” because of their pervasive use in improvisation, though they are not necessarily used in compositions. These phrases may be found in either *ālāpana* or *svara kalpana* (an example in *kāmbhōji* would be *ni-dha-pa*), or they may be especially typical of one rāga form (as mentioned previously with the *kāmbhōji* phrase *ni-dha-pa-dha-ma* or any variation on it).

At the outset of an *ālāpana*, every musician will draw upon certain characteristic phrases which clearly identify the rāga. In *kāmbhōji*, these might include the four phrases shown in example 10.11.

However, meter in *svara kalpana* will usually direct rāga away from the frequent employment of identifying phrases that are typical in *ālāpana*. As a result, there is a difference in the kinds of opening phrases a musician may use.¹⁴ The phrases shown in example 10.11 would not therefore successfully

Example 10.11. Four characteristic phrases in *rāga kāmbhōji*.

initiate a *svara kalpana*. Since the first note of the refrain influences both the general pitch area of the *kalpana svaras* preceding it and the direction in which those *svaras* move, phrases concluding on the octave tonic or tonic *sa* could not accommodate a midrange refrain note such as *pa* or *dha*. *Svara kalpana* is more likely to open with an appropriate scalar phrase, like the three shown in example 10.12.

Meter in *svara kalpana* can also affect rāga-identifying phrases. Such phrases must either be reinterpreted to fit into the rhythmic context, or omitted altogether and replaced with phrases more suited to the staccato-like demands of the form. In either case, certain ornaments would be abbreviated or left out. An illustration of this can be seen in examples 10.13–14, the first of which shows a characteristic phrase with ornaments that could appear in *ālāpana* or slow-tempo *svara kalpana*.

When that same phrase is performed in faster-tempo *svara kalpana*, it changes. One could conceive it as an entirely different phrase, or as a variation. Hence, the original *ālāpana* phrase is abbreviated to the point where it includes simple ornaments on one or two notes (ex. 10.14).

Meter can also alter a phrase's emotional meaning (*bhāva*). The highly orna-

Example 10.12. Opening phrases in *svara kalpana*.

Example 10.12. Opening phrases in *svara kalpana*.

Example 10.13. Characteristic phrase with ornaments.

Example 10.13. Characteristic phrase with ornaments.

Example 10.14. Related phrase with simplified ornaments.

Example 10.14. Related phrase with simplified ornaments.

mented, prolonged *ri* (D) in the characteristic *kāmbhōji* phrase in example 10.15 gives that phrase its "soul" (*jīva*).

If the same characteristic phrase is used in *svara kalpana*, the musician ignores the emotional aspect of that phrase and converts it by filling the prolonged *ri* in with *ga* (E) and *ma* (F), as example 10.16 shows.

Example 10.15. Ornamented *ri* in characteristic *kāmbhōji* phrase.

Example 10.16. Ornamented *ri* in *kāmbhōji svara kalpana*.

The articulation of the notes in this way creates a different feeling from the original *ālāpana* phrase. Because of the extent to which a characteristic (or *rāga*-identifying) phrase can change, some *rāgas* are thus considered more appropriate for *ālāpana* than for *svara kalpana*. This is especially true when *rāgas* are identified by a predominance of slow phrases with many elongated tones.

Thus, the canonical elements of *kāmbhōji rāga*—from the basic *svara* level, to ornamentation, to phrase—have been examined as they behave in *ālāpana* and *svara kalpana*. *Rāga*, as one of the primary elements of a Karnātak musician's improvisation, can change in different contexts. Here, meter has figured largely in the subtle but distinctive expression of the *rāga* and its treatment in each form. When musicians perform an *ālāpana*, *svara kalpana*, or any of the other melodic improvisatory forms in the system, they exhibit sensitivity to both the consistencies and the differences that describe *rāga*. For them, there is no mystery involved—this is a skill that is learned over many years. A broad system of rules has been absorbed and used like a blueprint for molding the edifice of each improvisatory form. The ability to be conversant and creative with *rāga*, then, is ultimately what defines the Karnātak musician's art.

Notes

1. The Karnātak musical system is one which is confined geographically to the regions of South India including Andhra Pradesh, Karnātaka, Kerala, and Tamil Nadu. The Hindustāni music system dominates the rest of the states to the north.

2. The idea of improvisation in Karnātak (and Hindustāni) music can be put in historical context where a distinction is made between the free elaboration of a *rāga* (melody) independent of a composition (*anibaddha*), and the elaboration of a *rāga* confined within the limits of *tāla* (metrical cycle) being attached to a composition (*nibaddha*). *Anibaddha* and *nibaddha* ultimately come from the concept of *ālāpti*, which can be interpreted as "that which is elaborated" (i.e., improvised). *Ālāpti* is discussed at length in the thirteenth-century treatise *Saṅgīta-Ratnākara* by Sārṅgadeva.

3. Brown defines *tāla* very concisely as "a metrical cycle of given length (*āvarta*), consisting of a number of durational units of equal size (*akṣara* or *akṣarākāla*), which

are grouped into one or more subdivisional sections of variable size (*anga*)” (1965, 6–7).

4. *Tānam* is pulsed rhythmic improvisation characterized by a stereotyped series of rhythmic permutations of twos and threes. *Niraval* is essentially extempore melodic variation on a line of text from a given composition, where each word of the text generally remains fixed within its original place in the *tāla* cycle. Like *svara kalpana*, *niraval* returns to a refrain, in this case a simple restatement of the beginning of the line selected for elaboration. *Tani āvartanam* is the solo percussion improvisation occurring after the main composition of the concert.

5. For a comprehensive look at both the major and minor structural possibilities of *svara kalpana*, see Cormack 1992 (195–220).

6. The *eduppu* is the point where music “takes off” in the *tāla* cycle. It is essentially the same as *īdam*, but is the more vernacular of the two.

7. *Kāmbhōjī rāga* first appeared as *pañ takkēśi* in the South Indian *tevaram* hymns of the seventh to ninth centuries (Viswanathan 1974, 76).

8. The pitch frequency used for the tonic will vary according to the performer’s vocal range or instrument (for example C for men, G for women, D-sharp for violin, G for a small flute). Once the tonic pitch is established, it will remain the same for every item rendered in performance—what Powers calls the “system tonic” (1980, 429–30). Here, C has been taken as the tonic to simplify the reader’s understanding of the scale.

9. Musical examples presented in the traditional Indian system of *svara* (solfege) notation are indicated in Roman script. This is a form in which they appear as often as they might in Hindi, Bengali, Tamil, or Telegu. Each *svara* syllable respectively corresponds to the tonic through the seventh degree of the scale. In the musical examples, they are abbreviated as *s r g m p d n*. Dots above the *svaras* indicate the higher octave, and dots below, the lower octave.

In addition to the *svara* syllables, commas mark each pulse or inner time unit of the note. Single or double horizontal lines above a *svara* represent halving or quartering of the inner time unit. Melodic ornaments (*gamakas*) related to any *svara* assume these same time values.

10. This data was obtained from performances of distinguished Karnātak musicians. Included are K. V. Narayanaswamy, T. M. Thyagarajan, Ramnad Krishnan, T. Brinda, M. L. Vasanta Kumari for *ālāpana*, and K. V. Narayanaswamy, Voleti Venkatesvarulu, T. N. Krishnan, N. Ramani, G. N. Balasubramaniam, and T. Viswanathan for *svara kalpana*.

11. *Kalyāni rāga*: C D E F G A B C–C B A G F E D C.

12. The exception to *rāgas* that are identified by *rāga-chāya saṅcāra* are those which have been in existence only for the last fifty to one hundred years. These *rāgas* were created on the basis of scale and not phrase.

13. Also, initial establishment of the *rāga* is not as critical in *svara kalpana*, since that would already have been accomplished in the *ālāpana* and composition.

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