The Rhythms of Raga Alapana in South Indian Music: A Preliminary Investigation

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The Rhythms of Rāga Ālāpana in South Indian Music: A Preliminary Investigation

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I gained insight into the phenomenon of rāga in south Indian music quite by accident one day. At home in the U.S., listening closely to a recording, I was attempting to reproduce the rāga ālāpana improvisations of my longtime guru, Ranganayaki Rajagopalan, when I found myself tapping my foot.1 My sense that there was a steady rhythm is curious because rāga ālāpana is one of those forms traditionally, if problematically, described as “free rhythmic.” As I observed my own body, I began to ponder the gap between what I had learned as a theoretical commonplace and what I was feeling as a performer. For many of us studying music and dance, forms of knowledge seem to seep into our bodies. Knowledge becomes intuitive, difficult to hold out for reflection. The philosopher Maurice Merleau-Ponty stimulated controversy in his time for positing the body as the ground for all forms of knowledge: “External perception and the perception of one’s own body vary in conjunction because they are the two facets of one and the same act” (Merleau-Ponty 1962:205). And yet this “phenomenology of perception” feels unassailable from the perspective of the practiced musician and dancer.

In other contexts—when I am sensible enough to distrust my own status as an informant—I sometimes ask myself, “Are my interpretations forced, or are they too obvious? Are they alien or do they flow logically from

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1 I have been studying with Ranganayaki Rajagopalan since my first year-long visit to India in 1982. My first teacher, Karaikkudi Lakshmi Ammal, was my primary teacher 1982-83 and 1984-5. Both were inheritors of the Karaikkudi ānūti, a south Indian vīṇā style so named after the Karaikkudi Brothers, the father and uncle of Lakshmi Ammal (see Wolf 1991; Subramanian 1986). I also owe a great deal to my studies with other vīṇā teachers, especially K. S. Subramanian (son of Lakshmi Ammal), musicologist and founder of Brhaddhvani: Research and Training in Musics of the World.
my fieldwork?” I lose perspective laboring over my arguments in a piece of writing. This ambivalence is productive inasmuch as it induces me to retrace the steps of social-cultural analysis, revisit the nuances of original interview notes or recordings, listen to now-familiar sounds with fresh ears. But not all understandings are arrived at through such painstaking, conscious exploration. This article grows from an insight of the former, bodily sort, and moves to a theoretical reflection of the latter, self-conscious sort.

In South India, one is supposed to internalize the rules of rāga by studying many metric compositions, just as in Persian music, one studies the radif and then learns to improvise an āvāz. As in Iran, after many years of study in South India, the learner who has mastered compositions and exercises is said to draw upon this knowledge to improvise. The improvisation of a rāga in the form rāga ālāpana is not exactly the same thing as the rāga itself, for rāga is also a mental construct that can be realized through more than one kind of performance—both improvisational and compositional; but the concept of rāga and the performance form, rāga ālāpana, are so nearly equivalent that musicians will refer to both playing or singing the latter as performing “rāga.” Even though compositions are said to enshrine the rules of a rāga, ālāpana is structured differently than a composition, particularly with respect to rhythm.2 One learns the flow of rāga ālāpana indirectly, after hearing many others improvise. Master musicians may deny having learned rāga ālāpana directly in the way that one learns a composition—i.e. by repeating, and memorizing, the model of the guru exactly. Yet performance contexts exist in which ālāpana knowledge is transmitted in the form of ālāpana. In live performances, supporting singers or instrumentalists shadow the phrases of the main artist; in lessons, students overhear, imitate, or perform ālāpana on their own and may be corrected.

Since, in my own career, I have alternated between learning intensely in India for one or two years at a time, and then working in total isolation in the US for several years, I have relied significantly, in the US, on tape recordings. So it was as I sat one day, working on an ālāpana, and finding that I could finally anticipate the lengths of phrases and oscillations, the onset and conclusion of gaps, and so forth, that I realized that I was tapping my foot. Since this musical form is not ordinarily discussed in terms of rhythm (laya) or common pulse (e.g. akṣara or “syllabic” in measured compositions) I wondered, to what, then, could I possibly be tapping my foot? This article is a preliminary response to that question.

The rhythmic properties of rāga ālāpana invite specific comparisons between South Indian music and many musical traditions across the continent of Asia, including sanjo, in which slow, flexible, melodic rhythms progress to more rapid, clearly articulated ones. The dassurum section of sanjo shares negative features with ālāpana, for example, in that performers and scholars represent both in terms of their lack of meter. They contrast not only in their general style, but also in their length of exposition. Rāga ālāpana may range from a few seconds to more than half an hour, depending on the rāga, the placement in a performance, and the mood of the performer. The dassurum is, like other sanjo sections, fixed in length (if present at all). The jinganjio section is somewhat comparable to rāga ālāpana, for, although it is metered, the melody’s pulse and meter are sometimes obscured by the absence of strong, regular marking. In gayageyum sanjo, for example, the gayageyum player may show the relationship of melody to the jangdan in this section only occasionally. The interplay between the seeming flexibility of melodic rhythm and the more finely articulated periodicity of the drum part changes as the performers move through the sequence of jangdans.

In South Asia a variety of genres exhibit a similar kind of musically interesting interplay. Some kinds of ālāp (boi ālāp and ākār ālāp), the so-called free rhythmic section of north Indian rāg development, are sung within the khyāl compositions of Hindustani music to the accompaniment of a thēkā, or repeating pattern played on the tabla. This produces what Charles Capwell refers to as a “tantalizing disparity between their extreme rubato and the mechanical ordinariness of the thēkā. Although the melody goes on seemingly unrelated to the meter, occasionally there is a momentary coincidence of drum pulse and vocal articulation” (Capwell 1986:784).

This kind of interplay is not limited to art music. In some Asian genres, for instance, double-reed players repeat melodies that articulate with drummed ostinato patterns with varying degrees of clarity. In example 1 on the accompanying CD, Burushaski-speaking, Ismaili musicians from the village of Nazimabad in Gilgit district of the Northern Areas of Pakistan perform the drum pattern and melody called ajošt. It is not immediately obvious how the double-reed, surnāī melody fits the percussion ostinato,

2 The structure of melody also differs. For instance, typical svaras (scale positions combined with integral ornaments, called gamaka) used to start phrases in ālāpanas may be statistically at variance with those used to start sections of compositions. In T. Viswanathan’s study, he suggests that this difference is an indication of the evolution of a rāga, in this case sāncakarabharanam (Viswanathan 1977:29).
although the stylistically typical abrupt stops on the surnāṭi may give a clue. This piece is considered mournful, in keeping with its ritual function of seeing off the new bride from her natal home.

A similarly difficult-to-perceive relationship between double reed and drum is characteristic of the style of Kota music in the Nilgiri Hills of southern India. Among the Kotas, some melodies are so flexible with respect to the drum pattern that performers focus on key points of coincidence, which I have termed anchor points, in order to ensure overall coordination between melodic and percussive cycles. Even with this strategy, however, it is not uncommon for less experienced musicians to cycle round and round, never really establishing a continuous groove, but rather articulating the melody at varying points within the drummed cycle (Example 2).

The problem of describing the play of temporally flexible melodies against an ostinato that is seen as a more rigidly periodic is a special case of the more general problem of describing rhythms that do not seem to adhere to a common pulse or meter—that is to say, music that is not tied in an obvious way to a time referent, whether that referent is articulated out loud, through movement, or internally. Ritwik Sanyal, Richard Widdess, and Martin Clayton, for instance, have explored the extent to which ālāp without drummed accompaniment (in dhūrāpād and instrumental ālāp) can be understood as moments in a continuous stream of pulses—pulses which lie just on the horizon of perceptibility, sometimes conscious in the mind of performers, sometimes not.

I agree with the view, expressed by number of scholars, that lumping all such rhythms together as instances of “free rhythm” is counterproductive. Instead of describing so-called free rhythmic genres negatively, in terms of what they lack, the challenge now is to characterize particular genres in more concrete terms and perhaps refine our understandings through more nuanced comparisons. This should not merely be construed as a problem for the analyst who, in attempting to notate such music, searches for the best approximation of note values and thereby imposes a kind of order. Rather the questions of how performers come to learn the rhythmic character of a genre, and how listeners come to identify a performance as effective and satisfying within that genre, are basic musicological ones—whether or not we investigate them using one or another form of notation.

What then are some of the ways of characterizing these genres in positive terms? In some regions, musicians may draw upon the metrical implications of their texts in creating relative durations of syllables in a melody; in some cases, the accompanying drum pattern provides a reference; in other cases there exists, in the words of Jutid Frigyesi, a more general “feeling of underlying regular motion” (1993:65); and in a number of traditions, including the āvāz of Persian music, moments of strong pulsation or metricity are interspersed with contrasting episodes that seem more elastic. Jutid Frigyesi claimed that there are at least “8-10 free flowing rhythmic types” in Jewish liturgical music alone. The rhythmic characters of genres such as these, even though they may not be easily definable, may be nevertheless essential to the identity of those genres for particular listening publics at given historical moments. Stephen Blum puts this in slightly different terms when he writes, “The degree of precision with which performers and listeners are able (or obliged) to predict the onset of a departure or return—on any of the pertinent rhythmic levels—has considerable bearing on formation and maintenance of the sets of habits and expectations associated with each genre or idiom” (Blum 2002).

North and south Indian classical ālāpanas differ in large part because of their rhythmic character. Comparing versions of what members of the two traditions view as the same rāga is a convenient way of hearing this difference. In a short demonstration for the Rāga Guide, Hari Prasad Chaurasia plays kārwānī (the north Indian version of kārwānī rāga), which borrows its scale from south India and, “has no strict performance rules” but takes the 2nd, 3rd, and 6th scale degrees as “important notes” (Bor 1999:102). A south Indian version, sung by the late D. K. Jayaraman can be heard on a DVD published by David Nelson (Jayaraman 2007). For a south Indian listener, the strongly gestural approach of D. K. Jayaraman, characterized by sharp attacks, strongly
devoloppée pour la musique occidentale, mais dans la problématique inhérente au rythme lui-même et dans la tension qui existe entre la représentation écrite et l'expérience orale.” (Frigyesi 1999:56)

3 Consult Khan 1996 for a more extensive ālāp in kārwānī performed by Ali Akbar Khan.
articulated pulses, tightly constructed phrases, and emphatic stops, conveys something not only about this rāga, but also about what makes a rāga sound “classical” in certain Karnatak styles.

The observation that two genres sound different because their rhythmic character is different should not be surprising. But in the realm of rāga ălāpāna, performance such an observation is a little bit surprising because the discourse among musicians and musicologists of Indian music associates rāga with the world of pitch and tāla with the world of rhythm. A few caveats: although South Indian musicians and musicologists do not generally define rāga in terms of rhythmic characteristics, they do describe rāgas in terms of melodic phrases, and whenever one talks about melody one is implicitly discussing rhythm as well. Typologies, moreover, of the oscillations and so forth called gamaka in South Indian music imply the recognition of rhythmic distinctions. But these discussions of rhythm are not explicit, just as the embodiment of rhythm in particular performances of ălāpāna is implied and not usually exteriorized (e.g., in the manner of tāla, which is counted with hand and finger movements). The emphasis in both practical and theoretical discussions of rāga remains on pitch and contour, or more precisely on what is termed svara and prayōga. A svara is a pitch-position combined with characteristic forms of attack, oscillation, portamento, and so forth (gamaka); svaras have names, the short forms of which serve as the Karnatak equivalent of solfège. A prayōga is a melodic phrase in a rāga. My own attempts during fieldwork to make explicit what musicians know through practice have always required getting beyond this received tradition of talking about rāga in terms of these categories.

T. Viswanathan, one of the finest performers of Karnatak music in the late 20th century and a scholar who straddled the very different fields of Indian musicology and American ethnomusicology, both acknowledged the problem of rhythm and avoided pursuing it further in his masterful studies of rāga ălāpāna (Viswanathan 1975, 1977). He, like others, located the problem of discussing rhythm in this genre as one arising from the effort to note it:

The one aspect of rāga ălāpāna most difficult to notate is rhythm. Melodic phrases are performed in free rhythm and have no prescribed rhythmic character. Nevertheless, certain traditional aesthetic principles govern the performance of ălāpāna, and provide a common understanding of broad rhythmic contour within which there is great latitude for individual freedom. Each performer balances such rhythmic details as kālapramānām (sense of tempo), viśrānti (silence between sancāras or phrases), and balanced increase of speed for brikka (fast singing passages). (Viswanathan 1975).

T. Viswanathan was known, among other things, for his extraordinary command of complex rhythmic play in the metrical framework called tāla. If he wrote that melodic phrases of ălāpāna are performed in free rhythm and have no prescribed rhythmic character, on what basis, I wondered, could I, a scholar with only modest skills as a performer on the vīṇā, argue otherwise. To begin with, in some ways, Viswanathan’s statement undermines itself. The concept of kālapramānām, or sense of tempo, for instance, presupposes that one can actually reckon time in the ălāpāna. This raises the question of what are the relevant articulations in such reckoning. Do they have to be equal? Are they felt without being made explicit? As for balancing the silences between phrases, does this mean setting up silences so that the return of phrases is temporally predictable? And finally, what he called the “balanced increase of speed” refers back to kālapramānām—that is to say, when one speeds up, one does not generally increase the tempo, but rather makes the melody more dense. What Viswanathan terms “balance” is, I suggest, an index of the fact that ălāpāna has a quite specific rhythmic profile. But it also suggests that particular rhythmic configurations can appear in many different arrangements across a flow of pulses that is not organized according to a metric hierarchy.

In this preliminary article and forthcoming in a more closely argued and detailed treatment of the subject, I wish to show: 1) rāga ălāpāna in Karnatak music can be heard as pulsed, although listeners might disagree on where that pulse lies; 2) the existence of pulse can be determined from the music itself, from the rhythms of interactions between performers, from occasional responses by other listeners, and by other things listed in table 1 below; and 3) at a micro level, some of the critical distinctions between rāgas, when pitch values are more or less held in common, depend on matters of rhythm. My main points are summarized in table 2.

**Table 1: Actions that may mark or initiate pulse sequences in rāga ălāpāna**

| A. Melodic phrases that drive toward a goal (including, but not limited to, important pitches such as the tonic or fifth scale degrees); articulations within phrases that create or support such a sense of drive. |
B. Undulations in the building of melodic ideas. The undulations themselves may mark out clear pulse sequences
C. Hand movements and other gestures often reinforce rhythmic drive of A and B
D. Onsets of phrases after a pause
E. Onsets of silence after a prolonged tone
F. Onset or accent by accompanist in response to main artist (or by main artist as she or he resumes)
G. Plucking of the highest tālam string (occasionally others), punctuating phrases of āḷāpana on the vīnā.
H. Similar kinds of plucks on the violin (needs further investigation)
I. Responses of musicians to one another, or audience members to musicians, with sounds such as “ā,” “baḷ,” or “shābāś” (comparable to Korean chāmsae)
J. Occasional drum strokes or patterns by tavil drummers accompanying nāgasvarām players.
K. Actual articulations of pulsations by gestures of listeners

Table 2. Assertions regarding rāga āḷāpana (supported in part by the arguments of this article and to be developed further in future publications)

A. Pulsation
1. Most rāga āḷāpana in south India can be heard clearly as pulsed
2. Pulsation provides a baseline or point of departure for examining the rhythm of āḷāpana more closely; it does not indicate much about what is happening musically
3. There are probably several, equally useful, tempos at which pulse might be perceived in an āḷāpana. 5
4. Listeners and musicians will likely disagree about the existence of a particular, gridlike, “pulse”; however, competent musicians maintain (and are probably well aware of maintaining) a consistent pace (kālapramāṇam) throughout an āḷāpana. This would suggest the internalization of some common denominator, a subjective pulse, even if it is not consciously manifested

5 Such tempos may or may not be related according to simple proportions. Different listeners’ perceptions, and the range of one listeners’ perceptions, need to be collected and compared to determine how wide, in fact, such perceptions might vary.

B. Local theorization of Karnatak music
1. The whole “theory” (lākṣaṇa) or “science” (śāstra) of defining rāgas (their essential character and the criteria used to distinguish one rāga from another), by musicologists and practitioners in and beyond India has focused primarily on pitch.
2. Rhythmic patterning of rāgas is recognized in Karnatak music, but only by implication in the concept of melodic phrase (pragyōgam) and integral ornament (gamakam)
3. Rhythmic patterning per se—which is well articulated and codified in written theoretical works with regard to other aspects of Karnatak music—is rarely discussed with regard to āḷāpana

C. Rāga character and definition
1. Microrhythms, such as the speed, accentuation, decay, and successive durations of oscillations (kinds of gamakas), sometimes distinguish one rāga from another.
2. Rāgas are musically empty when conceived in terms of their pitch content alone, even taking into consideration appropriate sequencing and oscillations at particular scalar positions. This is one of the reasons why rāgas transported from Karnatak music to Hindustani music lose some of their essential character—their rhythmic, gestural quality is almost always lost.

As alluded to earlier, my approach to rhythm in āḷāpana relies significantly, and in the first instance, on my own intuitions as a performer. Richard Widdess and Martin Clayton have approached questions of rhythm in north Indian āḷāp with a combination of intuitive and computer assisted procedures. Widdess, working collaboratively with the dhrupad performer and musicologist Ritwik Sanyal, established experimentally that Sanyal’s internally experienced sense of pulse when he performs is measurably observable. In a conference presentation (Widdess 2005), Widdess superimposed a series of beeps over a recording of Sanyal’s āḷāp to “coincide with those rhythmic events that the singer indicated were ‘on the beat’” (Widdess 2005). The pulse speed was consistently 1.6 seconds. Widdess also demonstrated in one recording of Aminuddin and Moinuddin Dagar that the pulse implied by the cadential mukhrā in at least one section was carried on by the other brother and maintained until the next mukhrā (a regular pulse of 1.1 seconds), although we do not have evidence of these musicians’ conscious intentions. Widdess was able to obtain a rich range of related results by
interviewing and analyzing performances of other dhārupad singers, such as Hafeez Khan in Lahore (Widdess 1995). Since only some dhārupad performers claim or acknowledge a sense of inner pulse, the implications of Widdess's work for the larger world of Hindustani music from the point of view of performers remains uncertain; but its analytical implications are tremendous.6

Martin Clayton (2000), in his finely wrought book, *Time in Indian Music*, uses a method that also involves measurement and combines it with psychological studies pertaining to attention span and mental processing, to arrive at different results: namely, even if there is an isolable pulse in the ālāps he studied, it would normally fail to be perceived. Clayton uses the psychological notion of the "perceptual present" as being about 2-3 seconds to explain why ālāps appear to be unmetred and unpulsed. He analyzes a performance of the sarod player Anjad Ali Khan using a waveform display and shows that, for example, "by separating the repeated Sa’s [tonic notes] at the ends of periods of intense melodic activity] with durations of over 3 seconds, the artist ensures that any emerging senses of pulse of rhythm organization built up in the melodic episodes is dissipated" (2000:102).7

The pulsed rhythmic character of south Indian ālāpāna is, I would argue, rather clearer to the trained ear than most of the north Indian analogues and does not require computer analysis to either prove or disprove. But it might require a shift of perspective, if one holds the view that rāga ālāpāna has nothing important to do with rhythm. On the accompanying CD (Example 3) is a recording of sāṅkarābhāraṇam rāga performed by the late Veerti Venkateswaralu, a widely acclaimed Karnataka vocalist in a rather chaste classical style. I suggest listening to this excerpt and experimenting with possible pulse rates against what you hear. In Example 4, I have snapped my fingers with the same excerpt, showing the way I hear it. Please be aware that I make no truth claims about the pulse that I locate, I only wish to claim that

the music provides a reasonable basis for hearing a common pulse because it does maintain the kālapramāṇam, or steady pace.

In my own internal reckoning of tempo in rāga ālāpāna, I rely on signals in the flow of music that take into account my own processing of melodic phrases, not the attacks and silences that might track as data points in an attempt to arrive at a notion of pulse using mechanical or statistical procedures. That is to say, I am influenced by the way I have heard particular musical gestures in different metric settings in compositions and therefore have intuitions about an implied pulse that is not necessarily established by a dynamic accent. I mention this to support my methodology, which could be reasonably critiqued for its degree of subjectivity. I have experimented a little bit with computer analytic tools, but up until now I have found direct engagement with musical performances to be more productive than trying to quantify the distances between stressed articulations. Indeed, Frigyesi goes so far as to say the notion that one can measure note durations is pure illusion because one must make fine judgments about exactly when a tone begins or ends.8 Others, such as Firmino et al. (2009) and Moelants and van Noorden (2005), have shown that pitch itself has an impact on the perception of musical duration.

In attempting to feel ālāpāna in terms of a pulse, one is required to make adjustments constantly.9 This fact should not undermine the notion that some kind of pulse, pace, kālapramāṇam, whatever we wish to call it, exists. One needs to make such adjustments in the metrical sections of Karnataka music as well. Anyone who has been entrusted to keep ālā (making the hand motions that mark out the temporal cycle) for a performer, and does so properly, learns how much it is necessary to interact. One does not simply carry out a mechanical extrapolation of a temporal cycle set up at the beginning of a section; rather one very subtly slows down and speeds up

6 Widdess usefully draws on Baily’s distinction between “operational” and “representational” knowledge (Baily 1988)—maintaining a pulse in ālāp may be an operational part of a musician’s knowledge, even if he or she does not discuss this aspect of performance verbally.

7 Videotaping Khyal performers such as Vijay Koparkar, Clayton also used computer software to analyze the recurrence of nondepictive gestures of musical process or structure, which he calls “markers,” gestures that indicate the flow of melody, which he calls “illustrators,” and symbolic gestures such as responses of praise, which he terms “emblems.” He did not, however, bring the results of this study to bear on the problem of the rhythm of ālāp in particular.

8 L’idée que l’on puisse mesurer scientifiquement la durée d’une note est une pure illusion; en réalité, la plupart des sons montrent un schéma complexe de vie interne avec des variations subtiles de leur dynamique, de leur timbre, de leur vibrato et de leur hauteur... A un niveau très subtil, le fait de décider quand commencer et quand finir la note est déjà influencé par notre perception préconçue de la périodicité à l’intérieur d’un style particulier (Frigyesi 1999:61)

9 Widdess addressed the need for just such an adjustment in his study of Wajahat Khan’s ālāp by suggesting the presence of a “highly variable pulse, a continuous rubato,” which fluctuated, phrase to phrase, between 0.2 and 0.5 seconds (Widdess 2005).
Throughout. The late Ramnad Raghavan, who gave me lessons on the \textit{mridangam} drum at Oberlin college beginning in 1980, once said to me explicitly, “we are not metronomes.” It took me years to understand the significance of that statement.

With this point in mind, I will now describe some of my encounters with other musicians in Chennai. I had carried around this intuitive sense of pulse for many years, thinking perhaps I was experiencing auditory hallucinations. Through interactions with colleagues and other musicians I learned that my perceptions were not so idiosyncratic.

The first person I approached in Chennai was Kamala Ramamurthy, a senior disciple of the late T. M. Thyagarajan. She had taught me Carnatic singing and theory intensively over a 14-month period in the mid 1980s. It seemed a natural extension of our earlier conversations when I visited her apartment and she put on any recording of a particularly classically oriented Carnatic musician so I could hear what she was hearing. I mentioned “classical” because I am not convinced that some of the more recent, experimental musicians who have been influenced by Hindustani music, perform \textit{alāpanas} that can consistently be heard as pulsed (this remains an area for further investigation). She chose to put on a recording of K. V. Narayanaswamy and I began to snap my fingers, much like I did on the CD example of Voleti Venkateswaralu. She listened quietly and began to smile. After turning off the tape recorder I asked her what she thought. Still smiling she said \textit{sarva laghu}. This term means reckoning time through a continuous stream of pulses or counts as opposed to larger units such as claps and waves of the \textit{tāla}. Normally this term is applied to measured music; this was the first time I had heard it applied otherwise.

As we began to discuss this matter further she expressed a kind of wonder at this way of listening to \textit{rāga alāpana}. She said T. M. Thyagarajan would never speak about the process of executing \textit{rāga alāpana} in this manner; rather he would talk about building the \textit{pravīgams}, that is to say, the musical phrases. They begin short and around the tonic, and as they build they become longer and extend into a higher range. As she spoke, she began to sing, gesturing with her hand outward in correspondence with each burst of energy. Like her teachers, she organized the bursts of energy in a manner consonant with the stream of pulsations set up in initial phrases. Without a doubt, the way she learned to sing \textit{alāpana} was a great deal more useful for producing music than any kind of descriptive statement about pulsation; and there was never a sense that a musician would reckon time in the way I had. She expressed no doubt to me that the pulsation I heard was there, but she was also quite convinced that it was maintained by musicians unconsciously.

Using much the same method I approached Umayalpuram Mali, a practicing concert mridangist with whom I had recently begun to rehearse and perform. I picked a random example and started snapping my fingers. When I stopped snapping, he kept snapping, and also expressed a kind of wonder and surprise. His first reaction was, this is totally unconscious on the part of performers, and if they became aware of it, it would spoil their \textit{manodhārman}—a term that refers to the broad category of Carnatic music involving improvisation. Over the last year, unbeknownst to me, Mali engaged other musicians in conversations on this topic. When I spoke with him about the project again in August, 2009, he said I would come up against resistance from many musicians on this point, were I to present it publicly. This was not because my perceptions were wrong necessarily, but because the implication that rhythmic principles of any kind guided \textit{rāga alāpana} challenged the autonomy and creativity of the melody-making artist.

Kamala Ramamurthy and Umayalpuram Mali are both fluent English speakers, which made it easy to switch back and forth between English-language descriptive terms for music and terms commonly used among Carnatic musicians in Tamil, Sanskrit, and so forth. Their education and reflectiveness made it possible for us to speak about aspects of performance that are not normally spoken of, and which, therefore, required extra care to explain. I found it more difficult to broach this subject with Ranganayaki Rajagopalan, who knows only a few words in English and learned everything she knows about Carnatic music from practical instruction, listening, and experience as a performing musician of considerable caliber. She not only never went to school to study music theory but also trained under a rather severe teacher, Kariikkudi Sambasiva Iyer (see Wolf 1991), who disdained speech about music.

I raised the subject, in Tamil, of how she organizes her \textit{alāpana} temporally. She resisted the notion, at first, that anything like a common rhythm helped hold \textit{alāpana} together. I asked her to play, and proceeded to snap my fingers where I heard the pulse. This was a questionable method, of course, because this technique could not control for mutual response. From my perspective, the snaps were basically in sync with her playing, although there was not a mathematical precision to the correspondence. After this I asked what she thought; she said it didn’t match (using the Tamil word meaning “to join” \textit{cēr}-). This is where things got tricky. The notion of
matching rhythms that I think she had in mind was a more rigid one that applies to the performance of songs and other metric parts of a performance in which cycling around to key points in the cycle needed to be executed with precision. She said the alapana was not something fixed, like a composition. Tōnam, the more clearly pulsed form of improvisation that sometimes follows alapana, was more fixed, she said—meaning here, I think, that there are more regularly recurring building blocks, such as cadences, that have a specific melodic and rhythmic structure. Part of what she was resisting seemed to be what Mali later brought up as a problem—the idea that alapana was somehow less improvised if it were suggested that a pulse underlay the whole thing.

I asked Ranganayaki both verbally and through demonstration whether there was some kind of regulating principle such that certain gestures needed to be executed more rapidly than others, more-or-less by multiplied increments—two or four times the speed—and not by a gradually increase in speed. I was referring to the earlier mentioned concept of kālapramāṇam, which means literally “time measure” or “time rule.” She concurred that alapana had a kālapramāṇam. But she was nevertheless uncomfortable with the kind of objectification of the kālapramāṇam that my, no-doubt-annoying, finger-snapping represented. In August 2009 I was also able to speak to her more about the micro-level articulations of rāgas that actually distinguish one rāga from another, the details of which I will present in a future publication.

When alapana is performed on the double reed nāgasvaram, it is usually accompanied by, or punctuated by, the tavil drum. I hadn’t been attuned to the possible relationship between the nāgasvaram melody and the percussion pattern, though I had been hearing this music for years. Moreover, as mentioned earlier, it is common in many genres involving double reeds and drums for the relationship to be rather loose. In an example performed by Namagiri Rattan Tamil and party (Krishnan 2007) and published on DVD by David Nelson, an elaborate cadential pattern on the tavil is followed by an alapana in the rāga abhūti on the nāgasvaram. To be honest, my own subjective pulse does not consistently align with the occasional articulations of the tavil. However, when I realign my own hearing to correspond with the tavil strokes, I can perceive an alternate pulse structure. This is what I mean about the idea of kālapramāṇam implying some kind of common referent, without specifying at exactly what rhythmic level or speed that common referent exists.

In August I had the opportunity to discuss the matter with the nāgasvaram player Murugavel and his brother-in-law and tavil accompanist, Rajaratnam. I first asked them to play whatever they liked, but to include an extensive alapana. Afterward, with the recording in hand, I asked Murugavel how he figures the timing of alapana. The noun in Tamil that I used, kanakku, can be used in verbal constructions to mean reckon, count, or figure, but it also means in a more specific mathematical way, to calculate numbers or do accounting. Of course when I used this term in asking Murugavel about his alapana, he said, “there is no kanakku in alapana,” only in the sections with tāla. As with my other respondents, it took quite a bit of additional discussion (and demonstration on his part) until he realized what I was talking about. At one point he said, “it all comes from the basic exercises, sarali varisai, which are practiced at many speeds. This gets internalized to such an extent that, when playing alapana, in whatever rāga, the kālapramāṇam of sarali varisai is reproduced. . . .” “As for the tavil interludes,” said Murugavel, “the tavil takes the kālapramāṇam from the nāgasvaram and plays a tripartite cadence in four count eka tāla.”

Several other kinds of articulations in a performance, listed in Table 1, may be linked directly to the kālapramāṇam of alapana. I have heard and seen, for example, articulations of pulsations by gestures of listeners (Table 1: K) in passing, but have not yet been able to compile an archive of such examples. On another occasion, in 2008 at the Music Academy of Madras, a violinist was working his way to a particularly strong concluding set of phrases and I found myself unconsciously beating my hand on my leg and noticed out of the corner of my eye an audience member on stage doing the same thing in the same way. This has inspired me to try to make videotapes of performers and audiences and see the extent to which this kind of response is common. It is essential, of course, that the participants not know what I am looking for; this is not the kind of experiment that can really be set up for the camera; there is no way to predict how much useful data any given concert might yield.

At this point I hope I have established at the very least that the notion of a pulse in alapana is not so foreign to south Indian musicians’ and listeners’ conceptions of what they are doing after all; it is simply not a matter about which much discussion has taken place. Establishing that this exists allows us

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10 This is a condensed translation from a few minutes of speaking in Tamil; he reiterated the points several times and punctuated his explanations with demonstrations in several rāgas.

11 On example X4, one of the listeners’ responses corresponded to my own perception of the pulse on an earlier hearing, but this is not evident on the present recording.
to ask comparative questions about the extent to which individual musicians maintain a pulse steadily throughout a performance, or are apt to break the continuity, whether indeed the degree of maintenance of kālāpramāṇam corresponds to south Indian conceptions of traditionalism or classicism, as my intuitions suggest, whether the pace of some performers is more rapid then others, whether the pace of rāgas performed by one person varies, and so forth. My sense is that, yes, there are differences in the way kālāpramāṇam is handled in these cases and that sustained inquiry can provide us perspective on matters of style, called bānī, in Karnatak music.

Steps Forward

The recognition of one or more possible pulses in rāga ālāpana is, at first, a surprising discovery; but this is mainly because many of us trained in Karnatak music have unwittingly accepted the modes of explanation predominant in south India as the only, or most important ones. As a Westerner with nearly 30 years’ training in Karnatak music, for me to approach south Indian theory and discourse uncritically would do a disservice to both ethnomusicology and the study of Indian music. The contemporary field of music theory associated with the Euro-American traditions thrives on new discoveries and approaches; to fail to engage in the same way in the academic tradition of another society, such as that of India, would be more an act of cultural imperialism, in my view, than would the act of engaging with others in acts of new listening, even if those acts may result from deep-seated assumptions from one’s home culture, and even if the results of those acts may be disquieting for some.

The matter of pulse in ālāpana is but the tiniest fragment of a study of rhythm in ālāpana, but it is a door-opening one. Put in the appropriate terms, an understanding of rāga in terms of rhythm is not distant but rather central to south Indian listening experiences. As suggested by the examples in rāga kāravāṇi, the identity of an improvisation as belonging to centrally to Karnatak music—that is, as classical as it has come to be known in the 20th century—depends in large part on very deliberate rhythmic gestures. This is something that anyone who knows Karnatak music feels intuitively—it is part of what distinguishes a classical treatment of a rāga from one that is considered light; and it is part of what distinguishes a Hindustani treatment of a borrowed Karnatak rāga from the original. One of the painstaking tasks that I hope a budding Karnatak musician-scholar might take up would be to compile a vocabulary of rhythmic gestures, comparable to that of svara and prayōga, that can be used to describe what unites and divides many rāgas in south India.

Turning back to the larger comparative implications of this study, I hope that scholars who work with traditions, such as sanjo, that involve elastic melodic rhythms will keep in mind the possibility of systematicity in these rhythms that is not recognized in conventional pedagogy. Experimental listening always runs the risk of producing auditory hallucinations, but in my view the risk is worth taking.
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References Cited


Examples on Accompanying CD


Example 2. patgac kol (flat-metal-offering-pasting tune). Performed by Kannan and one other man on double reed kol, with other Kota men on tabatk (frame drum), dohar and kinnar (cylindrical drums), and jatraw (cymbals), during the annual god ceremony (dev) in Kolmel village, 9 January 2001. Recorded by Richard Wolf.


Example 4. Richard Wolf superimposing finger snaps indicating one interpretation of pulse in performance of Voletti Venkateswaralu (alapana in sankarabharanam raga, Raga Priya Chamber Music Club, Pandian Hotel, Madurai, 19 March 1983, recorded by Richard Wolf). (Note at one point a vocal response from the audience corresponds with this pulse)