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THE RHYTHMIC ORGANIZATION OF RĀGA ĀLĀPANA IN SOUTH INDIAN (KARNĀṬAK) MUSIC[1]

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.[2] 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

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[1] This article is was published earlier in a slightly different form as, "The rhythms of rāga ālāpana in south Indian music: A preliminary introduction." 121-141. *Perspectives on Korean Music: Sanjo and Issues of Improvisation in Musical Traditions of Asia*. vol 1. 2010.

[2] 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 1982–1983 and 1984–1985. Both were inheritors of the Karaikkudi *bāṇi,* 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.

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 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 *radīf* 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.[1] One learns the

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[1] The structure of melody also differs. For instance, typical *svara*s (scale positions combined with integral ornaments, called *gamaka*) used to start phrases in *ālāpana*s 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 *śankarabharaṇam* (Viswanathan, 1977: 29).

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 "syllable" 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. In Azerbaijan, for example, readers might relate the rhythmic elasticity of *ālāpana* to that of *mugham* singing styles; in Iran, *ālāpana* could be compare to the singing of *āvāz* (as opposed to *tasnīf* or other metric compositions and forms). Although performers of *āvāz* use the syllables of poetic texts to create rhythmic interest and *ālāpana* is not, strictly speaking, sung with text, the origin of the term itself invokes the rhythms of speech. In Sanskrit, *ālāpana* refers (originally) not to music but to "speaking to or with." *Ālāpana* fulfills an introductory role to a song in the way that the instrumental *dargilik* introduces a *falak* in Wakhi (this *dargilik* is not to be confused with the sung genre of the same name in Shughanī)

*Rāga ālāpana*s 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. In south Asia a variety of genres exhibit

a similar kind of musically interesting interplay. Some kinds of *ālāp* (*bol 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 *ṭhekā*, 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 orderliness of the *ṭhekā*. 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 web page associated with this article (follow link from http://www.music.fas.harvard.edu/faculty/rwolf.html), Burushaski-speaking, Ismaili musicians from the village of Nazim-abad in Gilgit district of the Northern Areas of Pakistan perform the drum pattern and melody called *ajolī*. It is not immediately obvious how the double-reed, *surnāī* melody fits the percussion ostinato, although the stylistically typical abrupt stops on the *surnāī* 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 south 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 *dhrupad* 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.[1] 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 Judit Frigyesi, a more general "feeling of underlying regular motion"

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[1] Notation appears as an explicit concern in the work of Viswanathan (1975: 13) and Widdess (1995: 79), for example. Frigyesi argues that the problems of understanding so-called free rhythm are not created by the attempt to render certain styles of music in Western notation, but are rather inherent in the rhythm itself and in the tension that exists between the written representation and the oral experience: "La difficulté ne residé pas dans le fait que nous appliquions à d'autres musiques une méthode developpée 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).

(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. Judit 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 *ālāpana*s 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 *kīrwānī* (the north Indian version of *kīravāṇi* 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).[1] 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 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 ālāpana* 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

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[1] Consult Khan 1996 for a more extensive *ālāp* in *kīrwānī* performed by Ali Akbar Khan.

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 *rāga*s 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 *ālāpana* 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*); *svara*s 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 ālāpana* (Viswanathan, 1975, 1977). He, like others, located the problem of discussing rhythm in this genre as one arising from the effort to notate it:

"The one aspect of *rāga ālāpana* 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 *ālāpana*, 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 *kālapramāṇam* (sense of tempo), *viśrānti* (silence between *sancāra*s 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 *ālāpana* 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 *kālapramāṇam*, or sense of tempo, for instance, presupposes that one can actually reckon time in the *ālāpana*. 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 *kālapramāṇam* – 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 *ālāpana* 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 article I wish to make the following preliminary suggestions: 1) *rāga ālāpana* 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 *rāga*s, 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 ālāpana*

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 *tāḷam* string (occasionally others), punctuating phrases of *ālāpana* on the *vīṇā*.

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 "ã," "balē," or "shābāsh."

J. Occasional drum strokes or patterns by *tavil* drummers accompanying *nāgasvaram* players.

K. Actual articulations of pulsations by gestures of listeners

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

A. Pulsation

1. Most *rāga ālāpana* in south India can be heard clearly as pulsed

2. Pulsation provides a baseline or point of departure for examining the rhythm of *ālāpana* 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 *ālāpana*.[1]

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[1] 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.

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 *ālāpana*. This would suggest the internalization of some common denominator, a subjective pulse, even if it is not consciously manifested

B. Local theorization of Karnatak music

1. The whole "theory" (*lakṣaṇa*) or "science" (*śāstra*) of defining *rāga*s (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 *rāga*s is recognized in Karnatak music, but only by implication in the concept of melodic phrase (*prayōgam*) 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 *ālāpana*

C. *Rāga* character and definition

1. Microrhythms, such as the speed, accentuation, decay, and successive durations of oscillations (kinds of *gamaka*s), sometimes distinguish one *rāga* from another.

2. *Rāga*s 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 *rāga*s 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 *ālāpana* 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 *ālāp* 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 *ālāp* to "coincide with

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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 *mukhṛā* in
at least one section was carried on by the other brother and
maintained until the next *mukhṛā* (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 *dhrupad*
singers, such as Hafeez Khan in Lahore (Widdess, 1995). Since only
some *dhrupad* 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.[1]

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 *ālāp*s 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
*ālāp*s *appear* to be unmetered and unpulsed. He analyzes a
performance of the *sarod* player Amjad 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 rhythmic organization built up in the melodic
episodes is dissipated" (2000:102).[2]

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[1] 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.

[2] 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.

The pulsed rhythmic character of south Indian *ālāpana* 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 ālāpana* has nothing important to do with rhythm. On the accompanying web page (Example 3) is a recording of *śankarābharaṇam rāga* performed by the late Voletti Venkateswaralu, a widely acclaimed Karnatak 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 ālāpana*, 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.[1] Others, such as Firmino *et al*. (2009) and Moelants

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[1] 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 commence et quand finit la note est déjà influencé par notre perception préconçue de la périodicité à l'intérieur d'un style particulier (Frigyesi, 1999: 61).

and van Noorden (2005), have shown that pitch itself has an impact on the perception of musical duration.

In attempting to feel *ālāpana* in terms of a pulse, one is required to make adjustments constantly.[1] 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 Karnatak music as well. Anyone who has been entrusted to keep *tāla* (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 throughout. The late Ramnad Raghavan, who gave me lessons on the *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 Karnatak 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 suggested she put on any recording of a particularly classically oriented Karnatak musican so I could show her what I 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 *ālāpana*s that can consistently be heard as pulsed (this

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[1] 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).

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 Voletti Venkateswaralu. She listened quietly and began to smile. After turning off the tape recorder I asked her what she thought. Still smiling she said *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 *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 *rāga ālāpana*. She said T.M.Thyagarajan would never speak about the process of executing *rāga ālāpana* in this manner; rather he would talk about building the *prayōgam*s, 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 *ālāpana* 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 *manodharmam* – a term that refers to the broad category of Karnatak 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 *rāga ālāpana* 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 Karnatak 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 Karnatak 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, Karaikkudi Sambasiva Iyer (see Wolf, 1991), who disdained speech about music.

I raised the subject, in Tamil, of how she organizes her *ālāpana* temporally. She resisted the notion, at first, that anything like a common rhythm helped hold *ālāpana* 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 synch 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" *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 *ālāpana* was not something fixed, like a composition. *Tānam*, the more clearly pulsed form of improvisation that sometimes follows *ālāpana*, 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

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seemed to be what Mali later brought up as a problem–the idea that *ālāpana* 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 *ālāpana* 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 *rāga*s that actually distinguish one *rāga* from another, the details of which I will present in a future publication.

When *ālāpana* 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 Namagiripettai Krishnan and party (Krishnan, 2007) and published on DVD by David Nelson, an elaborate cadential pattern on the *tavil* is followed by an *ālāpana* in the *rāga ābōgi* 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, Rajarattinam. I first asked them to play whatever they liked, but to include an extensive *ālāpana*. Afterward, with the

recording in hand, I asked Murugavel how he figures the timing of *ālāpana*. The noun in Tamil that I used, *kaṇakku*, 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 *ālāpana*, he said, "there is no *kaṇakku* in *ālāpana*," 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, *saraḷi varisai*, which are practiced at many speeds. This gets internalized to such an extent that, when playing *ālāpana*, 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*."[1]

Several other kinds of articulations in a performance, listed in Table 1, may be linked directly to the *kālapramaṇam* of *ālāpana*. 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.[2] 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.

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[1] 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 *rāga*s.

[2] 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.

At this point I hope I have established at the very least that the notion of a pulse in *ālāpana* 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 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 *kālapramāṇam* 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 *rāga*s performed by one person varies, and so forth. My sense is that, yes, there are differences in the way *kālapramāṇam* is handled in these cases and that sustained inquiry can provide us perspective on matters of style, called *bāṇi*, 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 kīravāṇi*, 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 *rāga*s in south India.

Turning back to the larger comparative implications of this study, I hope that scholars who work with traditions, such as *falak*, 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.

Acknowledgments

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Examples on accompanying website (follow link from http://www.music.fas.harvard.edu/faculty/rwolf.html)

Example 1. *ajolī*. A *harīp* (piece) for ritual of departure of bride; Burusho of the Hunza region in the Northern Areas of Pakistan. Haji Bek (*surnāī*), Mehboob Ali (*ḍāmal*), Haidar Bek (*ḍaḍang*), Mushtaq, Sadiq, and Guro (*jarkin*), Alaudin (*tutuk*). Recorded by Richard Wolf. 4 July 1997, Sust, Pakistan.

Example 2. *paṭgac koḷ* (flat-metal-offering-pasting tune). Performed by Kannan and one other man on double reed *koḷ*, with other Kota men on *tabaṭk* (frame drum), *dobar* and *kiṇvar* (cylindrical drums), and *jālrāv* (cymbals), during the annual god ceremony (*devr*) in Kolmel village, 9 January 2001. Recorded by Richard Wolf.

Example 3. Voletti Venkateswaralu performing *ālāpana* in *śankarābharaṇam rāga*, *Rāgapriya* Chamber Music Club, Pandian Hotel, Madurai, 19 March 1983, recorded by Richard Wolf.

Example 4. Richard Wolf superimposing finger snaps indicating one interpretation of pulse in performance of Voletti Venkateswaralu (*ālāpana* in *śankarābharaṇam rāga*, *Rāgapriya* 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).