

Musical Improvisation and Elegant Writing: Ālāpana in South Indian Karnatak Music Performed by U. Srinivas

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CLASSICAL music in South India is called Karnatak music.¹ In Karnatak music, melodic improvisation of rāga in free rhythm is known as *ālāpana*. The word *ālāpana* is a Sanskrit term defined as, “n. speaking to or with, conversation; a benediction” (Monier Williams 1986, 153). In Harold S. Powers’ dissertation on Karnatak music, he suggested, “...the *alapana*, which often prefaces a composition, is regarded as the highest type of improvisation [in Karnatak music]” (1958, 103).

[2] In a concert of Karnatak music, the lead vocalist or instrumentalist performs *ālāpana* in a specific rāga to preface a composition in the same rāga. Midway through the concert the lead vocalist or instrumentalist will perform an extended *ālāpana* to preface what is usually the longest composition of the concert.² The extended *ālāpana* for the main piece usually lasts for more than ten minutes.³ Commercial recordings of Karnatak music have stricter time constraints but are often loosely structured according to this concert scenario.

1. On the politics of the term “classical” in Karnatak music, see Weidman 2006: 25–110. “Karnatak” is sometimes spelled in English as “Carnatic” or “Karnatic.”

2. The long composition will be followed with two types of melodic improvisation (*niraval* and *svara kalpana*), and it will conclude with the percussion solo (*tani āvartanam*). This part of the concert— consisting of the extended *ālāpana*, the longest composition, the two types of melodic improvisation, and the percussion solo— is collectively regarded as the “main piece” of the concert. On the main piece of a Karnatak concert, see Viswanathan and Harp Allen 2004: 56–69.

3. In this article, I focus on *ālāpana* in the classical context performed for commercial recordings and live performances in concert halls. On *ālāpana* in ritual settings see Tallotte 2017 and Tallotte 2018. On physical gestures related to the performance of musical phrases in *ālāpana*, see Pearson 2013 and Pearson 2016. An anonymous reviewer astutely observed that there is an important difference between the *ālāpana* that preface shorter pieces and the extended *ālāpana* that preface the main piece. I agree that the *ālāpana* that preface shorter pieces are more compressed and thus the goal is less about expansion and more about performing the appropriate characteristic phrases. In this article, three out of the four *ālāpana* I analyzed are the extended types. I do analyze one compressed *ālāpana* in the rāga Bahudari. It lasts 4 minutes and 48 seconds. Interestingly, I found that Srinivas approached this compressed *ālāpana* in a similar way as the extended *ālāpana*. But that might be due to his own individual approach coupled with the guidance he received from his guru or father

[3] The research question I ask in this article is: what are underlying principles in the performance of Karnatak ālāpana? I argue that underlying principles of ālāpana are coherence, cohesion, and climax. When ethnomusicologists and music theorists analytically approach how musicians improvise some scholars utilize concepts drawn from linguistics as well as linguistic anthropology. In this area of scholarship, it is common for ethnomusicologists and music theorists to make comparisons between musical improvisation and forms of extemporized spoken language (see Powers 1980, 42–46; Sawyer 1996, 272, 277–80; 287–91; Berkowitz 2010, 145–49; Zadeh 2012, 11–17). One lacuna in this scholarship is connections between musical improvisation and written language. To address this gap in the knowledge I analyze one form of musical improvisation with concepts pertaining to elegant writing.⁴ Elegance in writing requires balance, symmetry, climactic emphasis, and attention to nuances of length and rhythm (Williams and Colombo 2021, 90–106).

COHERENCE, COHESION, CLIMAX

[4] In the book, *Style: The Basics of Clarity and Grace* (2012), Joseph Williams and Gregory Colomb employ the term “coherence” to refer to the way writers convey the “sense of the whole” (2012, 40). They further describe coherence in writing as, “seeing what all the sentences in a piece of writing add up to, the way all the pieces of a puzzle add up to the

when he recorded the ālāpana at the age of 17 for Oriental Records. The anonymous reviewer also correctly noted that different rāgas undergo different treatment. There are certain “heavy” or *ghana rāgas* like Tōdi and Khambōji that are considered appropriate for extended ālāpana. In contrast, other “minor” rāgas like Poornachandrika or Saraswati do not have such an extensive lexicon of characteristic phrases, and thus they are not usually performed for the extended ālāpana. That said, one must also understand that in practice so-called “minor” rāgas are also used for extended ālāpana. For example, Karnatak musicians sometimes perform extended ālāpana in the raga Chārukēśi, which is not regarded as a *ghana rāga*.

4. I started learning Karnatak vocal music in 2000 with Acharya Sharada Kumar in group lessons at the Chinmaya Mission in Ann Arbor. Between 2001 and 2006 I learned Karnatak music with vocalist and violinist Kalpana Venkat. In 2006, I completed an intensive one-month workshop with Chitravina N. Ravikiran in San Diego, California. Between 2006 and 2010 and during the 2012-13 academic year I studied Karnatak music at Wesleyan University with vocalist B. Balasubrahmaniyan as well as *solkattu* with mridangist David Nelson. I now teach Karnatak vocal music at Ohio University. I always first learned to sing, as is traditionally expected, and then I applied my understanding to my primary instruments, the electric guitar and later the Karnatak mandolin. In this article, my analyses are based on transcriptions of four ālāpana that I completed for my MA thesis, “U Shrinivas’ Mandolin Ecstasy” (2008).

picture on the box” (ibid.). Coherence is also an important principle in *ālāpana* because Karnatak musicians fashion sections to produce a portrait of the *ālāpana*’s structures.

[5] In contrast to coherence, cohesion is described by Williams and Colomb as, “pairs of sentences fitting together the way individual pieces of a jigsaw puzzle do” (2012, 40). Like a speechwriter who strives to create sentences that fit together, the Karnatak musician devotes a considerable amount of time in *ālāpana* to construct musical phrases that fit together as part of a phrase group, each with a pitch-focus. Williams and Colomb also suggest that cohesion in prose creates a sense of flow for the reader. I would argue that the same holds true with cohesion in *ālāpana*: when Karnatak musicians create cohesive musical phrases their listeners may feel a sense of “flow” (Csikszentmihalyi 1990) in the sense that they are deeply concentrating on the music to the extent of losing track of time.

[6] But good writers not only aim for coherence and cohesion. They also strive to create intensity through the skillful arrangement of successive words, phrases, clauses, or sentences, often in ascending order of importance. In rhetoric, this is called “climax.” According to Williams and Colomb, rhetorical climax is a crucial aspect of elegance. Elegance in writing, they suggest, requires balance, symmetry, climactic emphasis, and attention to nuances of length and rhythm (see Williams and Colombo 2021, 90–106). Likewise, in certain key moments of memorable *ālāpana*, the vocalist or instrumentalist subtly balances symmetry, climactic emphasis, and attention to nuances of length and rhythm to create moments of intensity.

[7] The article falls into four parts. In part 1, I examine scholarship about coherence in *ālāpana* and analyze coherence in four *ālāpana* performed by U. Srinivas (1969–2014). In part 2, I explore what has been written about cohesion in *ālāpana* and then investigate examples in Srinivas’s *ālāpana*. In part 3, I turn to the issue of climax, review how music theorists have approached this issue, and turn to three examples of climax in U. Srinivas’s *ālāpana*. In the conclusion, I suggest a variety of ways in which musical improvisation like *ālāpana* diverges from spontaneous speech and aligns with elegant written language.

[8] U. Srinivas (fig. 1) by the age of twelve had developed techniques to perform Karnatak music expertly on a new instrument, the electroacoustic Karnatak mandolin, which he modified from the Western solid-body mandolin. In an interview with R. Prasanna, the first

Karnatak guitarist, Prasanna described Srinivas's popularity and how Srinivas's musical talents enlivened the Karnatak music scene in the 1980s and 1990s:

Srinivas was a new face. Everybody knew him. Even people who had nothing to do with Karnatak music knew this kid called Srinivas...Even people who would otherwise not listen to Karnatak music would listen to Srinivas... Srinivas appealed to a huge cross section of people. As a kid this guy is playing incredible at the age of ten or twelve. And you know there is all that aura about him. But at the bottom he was good so it was not some...hype...He did have a way of reaching out to people. I don't think he did it deliberately. But even people who would not have been into Karnatak music... and there was time in the 80s, I know that every wedding had Srinivas, and even if he was not there, every wedding you'd go, it would be Srinivas music which would be played in the background...Srinivas became a household name. There is no doubt about that. It was not about Karnatak music this and that....Srinivas was a breath of fresh air. Man, finally somebody can come and shake this thing up and get out of this sticky uptight stuff. (Personal interview with author, August 2007)



Figure 1. Portrait of U. Srinivas in 1983 with his Karnatak mandolin (Raman, *Sruti* No. 1 1983).

[9] One of the reasons Srinivas was a breath of fresh air was the way he performed spellbinding ālāpana on his new instrument. Two of the ālāpana I analyzed for this presentation—in the rāgas Tōdi⁵ and Bahudari⁶—Srinivas performed in 1986 at the age of 17 for his second album *Mandolin Ecstasy* (Oriental Records). The third ālāpana, in the rāga Hēlavati,⁷ Srinivas performed for the 1992 album *Dikshitar Masterpieces Vol. 1* (Music Today). The fourth, in the rāga Kambhōji,⁸ Srinivas performed live at the Cleveland Thyagaraja Festival in 1995.

5. If you are not familiar with the notation below please skip to the “Note on Transcription” before reading footnotes 5, 6, 7, and 8.

Tōdi rāga’s ascent (ārōhaṇam) and descent (avarōhaṇam) with common *gamaka* (the idiomatic ways in which notes are connected) indicated below the *svara*:

S r g m P d n S
 SrSr r mRmR mRm PdPd dSDSD

S n d P m g r S
 PS SDSd SDSdPd PmP m mRmR MRMr

For a clear description of Tōdi rāga’s complex *gamaka*, see Pearson 2016: 290. The Tōdi ālāpana can be heard [here](#). My transcription of this ālāpana can be accessed [here](#).

6. Bahudari rāga’s ārōhaṇam and avarōhaṇam with common *gamaka* indicated below the *svara*:

S G m P D n S
 mGm DnDn

S n P m G S
 SnSn nP mGm G/S

The Bahudari ālāpana can be heard [here](#). My transcription of this ālāpana can be accessed [here](#).

7. Hēlavati rāga’s ārōhaṇam and avarōhaṇam with common *gamaka* indicated below the *svara*:

S R g M P D n S
 RgRg RMPMP DSDSD

S n D P M g R S
 P/S Snn SPMPM PRg

The Hēlavati ālāpana can be heard [here](#). My transcription of this ālāpana can be found [here](#).

8. Kambhōji rāga’s ārōhaṇam and avarōhaṇam with common *gamaka* indicated below the *svara*:

S R G M P D S
 SGRGR GPGPG PSDSD

S n D P m G R S
 PS DSN(S) Pmm GmG GR (shake the R slightly)

To hear the Kambhōji ālāpana, [click here](#). My transcription of this ālāpana can be found [here](#).

Note on Transcription

[10] In this article, I present transcriptions in *svara* notation, a method of transcription that is the most common way to write out Karnatak music.⁹ When T. Viswanathan transcribed *ālāpāna* in four different ways—Western staff, *svara* notation, melograph notation, and a type of notation that Jon Higgins developed called block notation—he concluded that *svara* notation, “appears to offer the most suitable medium for transcription. It is drawn directly from the musical culture in question and represents the very units of musical language (*svaras*) with which South Indian musicians conceive an *alāpāna*” (Viswanathan 1974a, 10).

[11] The term for note in Karnatak music is *svara*. Each *svara* has a solmization syllable: Sa, Ri, Ga, Ma, Pa, Da, Ni. In *svara* notation, these solmization syllables get abbreviated to their initial consonants. Upper case letters refer to the unaltered notes: tonic (S), natural second (R), major third (G), fifth (P), natural sixth (D), and the natural or “raised” seventh (N). Lower case letters refer to the altered notes: flat second (r), minor third (g), flat sixth (d), and flat seventh (n). There is one exception: the natural fourth (Ma) is written as “m” because its altered version is the sharp fourth, which will be represented as “M.” A dot *above* a pitch name (e.g., Ś) indicates the upper register. A dot *below* the pitch name (e.g., Ṇ) indicates the lower register. Pitch names without a dot indicate the middle register.

[12] In this article, I transcribe what Harold Powers described as the analytical level: the notes that a musician actually plays (Powers 1958, cited in Reck 1983, 200–201). I am not transcribing what Power’s termed the “overt level,” the notes a Karnatak musician would express in *svara* names (Ibid.). For example, in the *rāga* Hēmavati a Karnatak musician will actually play the *gamaka* “DŚDŚDŚDŚ” for the *svara* “n.” For this article, I write out “DŚDŚDŚ” rather than “n.”¹⁰

9. It is common to write *svara* notation with Tamil, Telugu, Malayalam, and Kannada letters. In this article, I use English letters, which is also common.

10. On these structural levels in Karnatak music, see Schacter 2015.

COHERENCE IN ĀLĀPANA

[13] In Harold Powers' 1958 dissertation "The Background of the South Indian Raga-System," he described ālāpana as consisting of a four-part ABCD structure.¹¹ The first part Powers described like this: "An *alapana* usually has several divisions. The first is called *akṣiptika*—in it, a few absolutely characteristic phrases from the *rāga* are set forth, so that there will be no doubt in the hearer's mind as to the identity of the *rāga*" (Powers 1958, 102). The *akṣiptika* is thus an introduction with signature phrases to indicate to the listener what *rāga* is being performed.¹²

[14] Powers described the B section of the ālāpana as a development of pitch-areas:

Then the artist develops various pitch areas of the *rāga*, usually starting in the lower part of the octave and working up. Such developments are based on the characteristic phrases in each pitch-area, and pivot around the standing-notes in that pitch area. (Powers 1958, 102).

There exists an older Sanskrit-language term for this section of the ālāpana—in the 1614 Sanskrit-language text *Saṅgīta Sudhā* the author employed the term *rāgavardhani*, which literally implied increasing or growing (*vardhana*) a *rāga* (Viswanathan 1974, 122). P. Sambamoorthy employed the term *rāgavardhani* to describe the "body of the ālāpana" (Sambamoorthy 1963, 10). In Hindustani music—where ālāpana-like processes are known as *ālāp*—this development is known as *vistar*.

[15] The *rāgavardhani* involves two processes: First, the musician must methodically create a series of phrase groups in which the phrases of each group highlight one important pitch of the given *rāga*. Second, each new phrase group will focus on the next important ascending (or sometimes descending) note in the *rāga*. During this process the musician must perform phrases with *rāga bhāva* (deep emotional feeling) (Viswanathan 1974a, 22). The process is akin to *vistar* on the sitar. Consider in Figure 2 Richard Widdess's graph of the *vistar* process in an extended sitar ālap by Budhaditya Mukherjee in the *rāg* Pūriyā-Kalyān (Fig. 2).

11. The terms P. Sambamoorthy employed for the structure of ālāpana were "*padhbhati*" and "procedure" (see Sambamoorthy 1963, 9–15).

12. A common term in Karnatak music for signature phrase is *rāga-chāya sancāra* (Viswanathan 1974a, 159).

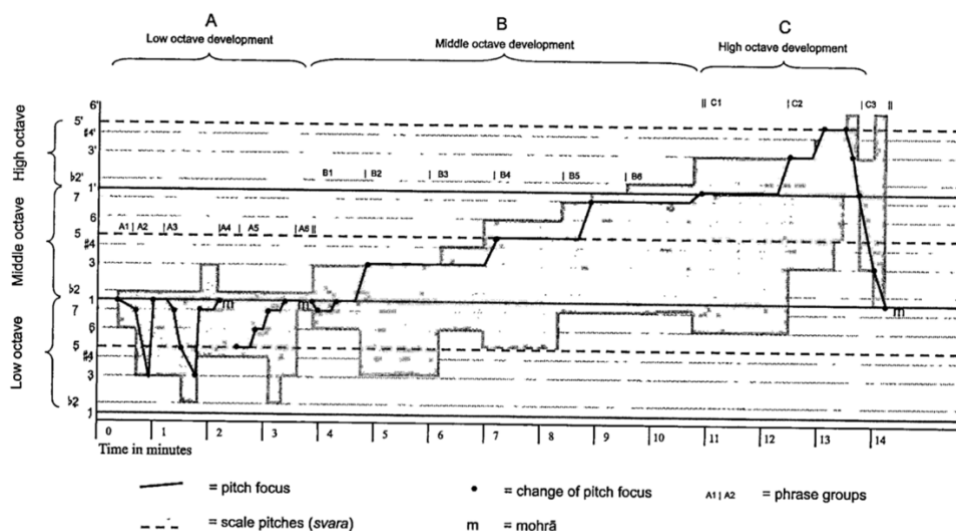
Figure 5.10. *Vistar* in *ālāp*.

Figure 2. Widdess’s graph of *vistar* in the sitar *ālāp* of Budhaditya Mukherjee (Widdess 2011, 204).

[16] Widdess’s graph serves as a heuristic for understanding how *rāgavardhani* works.¹³ Note how he plots the numerical scale degrees (1 b2 3 #4 5 6 7) of the *rāga* on the Y axis. The X axis represents the passage of time in one-minute increments. The darkened line with the dots is what Widdess calls the “pitch focus line” (Widdess 2011, 203). Each dot in Widdess’s graph represents a change of pitch focus. After each dot is a horizontal line that represents a group of phrases over time that emphasize that pitch focus. Notice how there is a slow ascent to the higher octave. The whole process takes over ten minutes. In Karnatak *ālāpana*, the same slow ascent occurs in the *rāgavardhani*.¹⁴

[17] Powers described the third and fourth stages of *ālāpana* like this: “The third stage, called *brikka*, is devoted to rapid passage work over the whole range of the artist’s voice. Finally, [in the fourth stage] the speed and intensity are relaxed, and a final resting point is reached on the tonic (Powers 1958, 102). The *brikka* (sometimes spelled *briga*) section could thus be considered a musical opposite of *rāgavardhani*. The *rāgavardhani* entails a very slow ascent that requires the musician to create phrases that focus on one pitch for a minute or more, and then another pitch for a minute or more, and then another pitch, etc., until the

13. According to my understanding, the process in *rāgavardhani* and *vistar* is the same. What differs are the idiomatic musical phrases that Karnatak or Hindustani perform during this process.

14. In Srinivas’s *ālāpana* he sometimes performed the process when *descending* into the lower range.

musician reaches the octave. The *brikka* section suddenly does away with this slow process and now the musician is free to create extremely fast cascades of sound moving up and down across all ranges.

[18] Sambamoorthy conceived of the *brikka* section not as a separate section, but rather as the last and fourth part of the *rāgavardhani*. Sambamoorthy wrote, “*Rāga vardhani: Stage IV. Murchchanā prastāra* or *sanchāras* in quick tempo (*Briga*) is the dominating feature of this part of the *ālāpana*” (Sambamoorthy 1963, 12).¹⁵

[19] To see how *brikka* contrasts with *rāgavardhani* please consider a visual transcription in Figure 3 and accompanying audio recording of part of U. Srinivas’ *brikka* section in his *ālāpana* in Bahudari rāga. The example comprises phrases 38–44 in the *ālāpana*. The X axis represents the passage of time, and the Y axis represents the notes of the *rāga* (C E F G A Bb C). The phrases are numbered. The dot at the beginning is the point at which Srinivas plucks the mandolin. When listening to the audio notice how quickly Srinivas moves up and down the *rāga*.

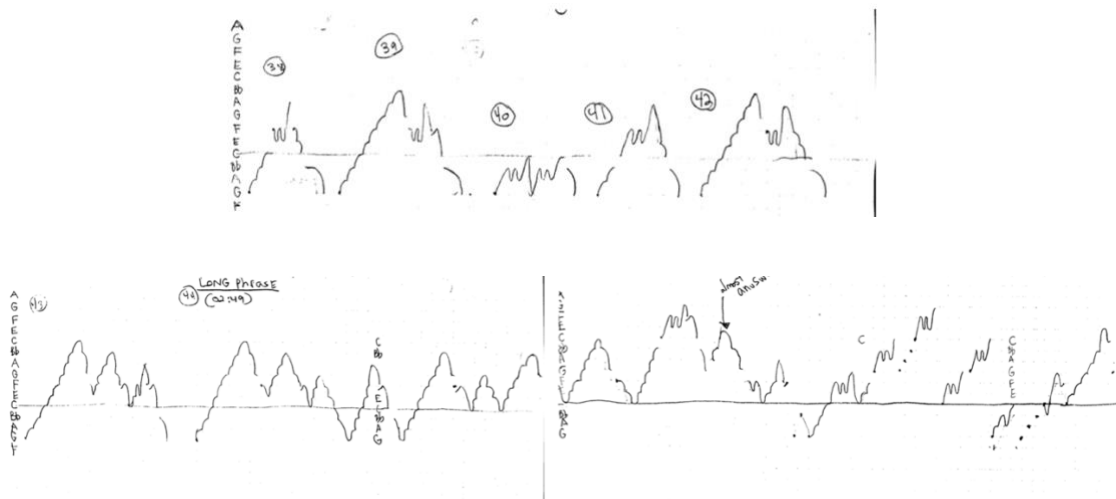


Figure 3. A visual portrayal of *brikka*. Click [here](#) to listen.

15. In *Essentials of Musicology in South Indian Music* (2008), S.R. Janakiraman, principal of Music Academy’s Teacher’s College of Music in Chennai, did not use the term *brikka*. Rather, Janakiraman wrote about *sthayi* (Janakiraman 2008, 270–271). In Karnatak music, the term *sthayi* means register. However, in the context of *ālāpana*, *sthayi* refers to fast phrases usually in descending order (B. Balasubrahmaniyan, personal communication with author, 9 November 2023).

[20] Powers thus conceived of the *ālāpāna* as moving through four sections:

(A) *akshīptika*, (B) *rāgavardhani*, (C) *brikka*, and (D) conclusion. But other scholars have conceived of *ālāpāna* in slightly different ways. For example, consider how Karnatak musician and scholar T. Viswanathan proposed to explain the structure of *ālāpāna* in his dissertation, “Raga *Ālāpāna* in South Indian Music.”

[21] Viswanathan’s observations were based on a one-of-a-kind transcription project: he recorded *ālāpāna* sung by five famous Karnatak vocalists. Viswanathan requested each vocalist to sing *ālāpāna* in the same six Karnatak ragas: Bhairavi, Kalyāni, Kambhōji, Śankarābharanam, Sāvēri, and Tōdi. He then transcribed each *ālāpāna* in four ways: Western staff, *svara* notation, melograph notation, and a type of notation that Jon Higgins developed called block notation.

[22] Based on his analysis of this large corpus of phrases Viswanathan suggested that there were four sections. The first he called “approach to *tāra sa*,” which meant *rāgavardhani* in the middle range. The second he called, “development of higher octave,” which meant *rāgavardhani* in the higher range. The third he called “fast passages in any range,” which meant *brikka*. And the fourth he referred to as, “Approach to, and including, conclusion.” He also created a visual key for understanding these four sections (fig. 4)

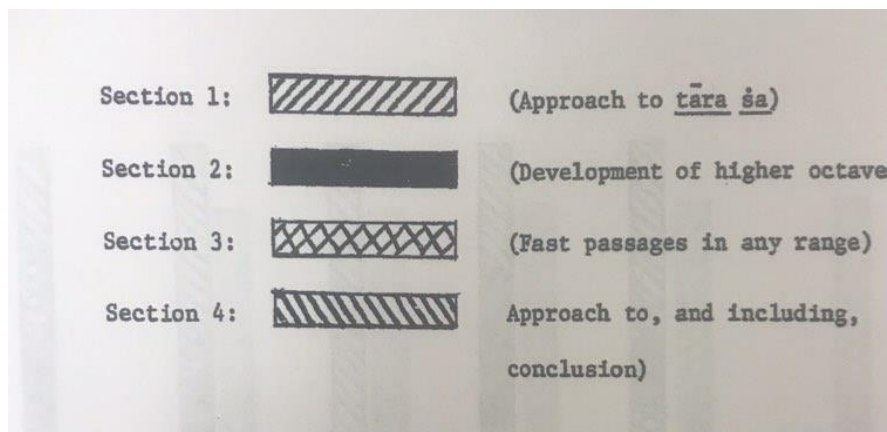


Figure 4. Viswanathan’s approach to parse the sections of the *ālāpāna* (Viswanathan 1974a, 185).

[23] Viswanathan then used the key above to create structural diagrams of the *ālāpana* performed by the five vocalists in each of the six *rāgas*. For example, consider his diagram here (fig. 5) for his transcriptions of the structure of *ālāpana* in *Kāmbhōji* *rāga* performed by the five vocalists. Here “TB” refers to T. Brinda. “RK” is Ramnad Krishnan. “KVN” is K.V. Narayanaswamy, “TMT” is T.M. Thyagarajan, and “MLV” refers to M.L. Vasanthakumari. Note how the vocalists tended to spend most time on the *rāgavardhani* in the middle range. All of the vocalists performed *brikka* after the *rāgavardhani* in the higher range. Also, all the vocalists performed the conclusion after *brikka*.

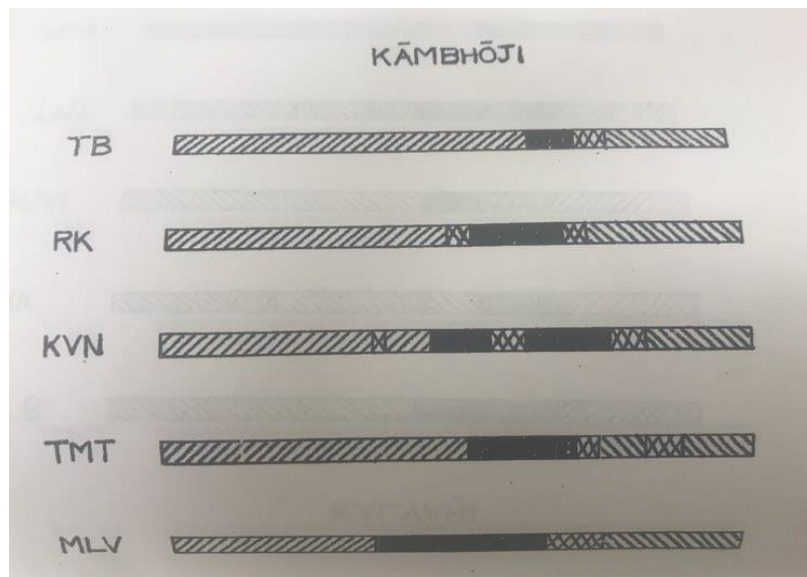


Figure 5. Viswanathan’s diagrams of *ālāpana* structures for *kāmbhōji* *rāga* as sung by the five vocalists (Viswanathan 1974a, 188).

A <i>Akshiptika</i>	B <i>Ragavardhani</i> middle range	C <i>Ragavardhani</i> higher range	D <i>Ragavardhani</i> lower range	E <i>Brikka</i>	F Conclusion
0:00–0:54	S 0:54–1:46 R 1:46–4:08 P 4:08–6:32	S 6:32–7:46 R 7:46–8:14 8:14–8:39 long phrase in higher range	P 8:39–9:26 R 9:26–9:38 S 9:38–9:45	9:45– 10:45	10:45–11:04

Figure 6. Structure of U. Srinivas’s ālāpana in Hēmavati raga.

Coherence in U. Srinivas’s Ālāpana

[24] In figure 6, I have mapped out the structure of U. Srinivas’s eleven-minute ālāpana in Hēmavati rāga.

[25] For section A, Srinivas commenced the ālāpana with seven phrases that one could consider as signature phrases (*rāga-chāya sancāra*) to indicate to the listener what rāga he was performing. These phrases had no pitch-focus. I thus categorized this introduction as the *akshiptika*. In section B, he began the *rāgavardhani* in the middle range and created one phrase group with the pitch-focus on S, another with the pitch-focus on R, and a third group with the focus on P.

[26] To initially demark the change of pitch-focus Srinivas created a phrase that sustained the new note of focus at the end of the phrase. It is quite similar to a topic sentence in prose writing. A “topic sentence” is “a sentence that states the main thought of a paragraph...and is usually placed at or near the beginning” (Merriam-Webster). In the context of *ālāpana* I call these “topic phrases.” Just as a topic sentence expresses the main idea of the paragraph, the topic phrase in ālāpana introduces the new pitch-focus for each phrase group. To emphasize the importance of the new pitch-focus the violin accompanist will often sustain the new note of focus. Consider examples of when Srinivas performed topic phrases for pitch focus S (fig. 7); R (fig. 8); and P (fig. 9) in his Hēmavati ālāpana:

8. nD nDnDnDS-----

9. S-----

Figure 7. Srinivas’s topic phrases for S (Srinivas 1992, 0:54–1:03). Click [here](#) to listen.

[27] When Srinivas marked out the pitch-focus R the violin accompanist accentuated the pitch focus by sustaining R as Srinivas played phrase 19 (fig. 8):

18. SPMPMDM Pg **R**-----
 19. SnnD DPPm PDSDSDRg **R R**

Figure 8. Srinivas's topic phrases for R (Srinivas 1992, 1:46–2:00). Click [here](#) to listen.

[28] The following are Srinivas's topic phrases for P (fig. 9) in his Hēmavati ālāpana:

37. PMDPP PG(M)R RgRgPMPMD **DPP P**----- **P**----- **P**-----
 38. **PMPgRgSnDnP** DnSRg**MP P**

 39. nDn**P/P**

Figure 9. Srinivas's topic phrases for P (Srinivas 1992, 4:08–4:36). Click [here](#) to listen.

[29] Although I am focusing on the Hēmavati ālāpana, these topic phrases are in his other three ālāpana. For example, here are the topic phrases for P (fig. 10) in an ālāpana Srinivas performed in the rāga Kambhōji.

58: G, mGmG mRG mGmGmGm **P**----- **P**-----
 59: D S n D **P P** mgm **P P**

Figure 10. Srinivas's topic phrases for P in Kambhōji (Srinivas 1995, 4:46–5:00). Click [here](#) to listen.

Todi					
A	B	C	D	E	F
Ragavardhani middle range	Ragavardhani higher range	Brikka	Ragavardhani lower range	Brikka	Conclusion
S 0:00-0:18 d 0:18-0:44 S 0:44-1:11 r 1:11-1:42 m 1:42-2:19 P 2:17-2:38 d 2:38-3:00	S 3:00-4:20 r 4:20-4:50 m 4:50-5:17 P 5:17-6:19 d 6:19-6:27 S 6:27-6:31	6:31-7:14	P 7:14-7:20 m 7:20-7:24 r 7:24-7:27 S 7:27-7:45 n 7:45-7:50 d 7:50-8:06 M 8:06-8:25 P 8:25-8:39 r 8:39-9:13 S 9:13-9:19	9:19-10:08	S 10:08-10:57

Bahudari					
A	B	C	D	E	F
Ragavardhani middle range	Ragavardhani higher range	Brikka	Ragavardhani lower range	Brikka	Conclusion
G 0:00-0:47 n 0:47-1:00 P 1:00-1:23	S 1:23-1:34 G 1:34-2:12 P 2:12	2:12-3:13	G 3:13-3:34 S 4:07	4:11-4:27	4:27-4:47

Hemavati					
A	B	C	D	E	F
Akshiptika	Ragavardhani middle range	Ragavardhani higher range	Ragavardhani lower range	Brikka	Conclusion

Kambhoji						
A	B	C	D	E	F	
Akshiptika	Ragavardhani middle range	Ragavardhani high range	Brikka	Ragavardhani high range	Brikka	Conclusion
0:00-1:46	S 1:46-3:11 G 3:11-4:51 P 4:51-7:26	S 7:26-8:21	8:21-9:00	R 9:00-9:24 G 9:22-10:34	10:34-12:00	12:00-13:43

Figure 11. Comparison of structures in U. Srinivas's ālāpanas.

[30] Figure 11 compares the structures of all four of Srinivas's ālāpana in the ragas Tōdi, Bahudari, Hēmavati, and Kambhōji. One can see how Srinivas created the same structure of ABCDCE in his Tōdi and Bahudari ālāpanas.

[31] In contrast, his ālāpanas in Hēmavati and Kambhōji both begin with an *akshiptika* section and moved into *rāgavardhani* in the middle and high range. In Hēmavati, after *rāgavardhani* in the higher range, he performed *rāgavardhani* in the lower range, *brikka*, and conclusion. In Kambhōji, after *rāgavardhani* in the higher range, Srinivas performed *brikka*, more *rāgavardhani* in the higher range, more *brikka*, and then concluded.

A Approach to octave	B Development in higher range	C Fast passages in all ranges	D Approach to conclusion	C More fast passages	E Conclusion
S 0:00–0:18 d 0:18–0:44 S 0:44–1:11 r 1:11–1:42 m 1:42–2:19 P 2:17–2:38 d 2:38–3:00	S 3:00–4:20 r 4:20–4:50 m 4:50–5:17 P 5:17–6:19 d 6:19–6:27 S 6:27–6:31	6:31–7:14	P 7:14–7:20 m 7:20–7:24 r 7:24–7:27 s 7:27–7:45 n 7:45–7:50 d 7:50–8:06 m 8:06–8:25 p 8:25–8:39 r 8:39–9:13 s 9:13–9:19	9:19–10:08	s 10:08–10:57

Figure 12: U. Srinivas’s *ālāpana* in Todi rāga according to Viswanathan’s structural model.

[32] In all four *ālāpana* Srinivas created coherence with *rāgavardhani*. For example, in Todi, section A (Figure 12), Srinivas focused on S for the first 18 seconds; d below the octave (:18 and :44); again S (:44 and 1:11); r (1:11–1:42); m (1:42–2:19); P (2:17 – 2:38); d (2:38–3:00), and then started the next section. Although I say “focus” the question is, how did he focus on notes in phrase groups? To answer this question we have to examine the issue of cohesion, to which I turn now.

COHESION IN ĀLĀPANA

[33] In his dissertation “Raga Ālāpana in South Indian Music” Viswanathan described cohesion in terms of “motif development” (see Viswanathan 1974a, 193–195),¹⁶ and he presented examples of motif development from his corpus of transcriptions. Many of Viswanathan’s examples of motif development were successive phrases that ended with the same “tag phrase” to emphasize a pitch-focus at some point in the *rāgavardhani* process. For example, as shown in figure 13, Viswanathan highlighted how R. Krishnan in the raga *śankarābharanam* created phrases that ended with a tag phrase of Ś ŚN when he sang *rāgavardhani* in the higher octave.¹⁷

16. Music theorist Brent Auerbach suggests that motives must, “be short enough to fit in memory, be distinct enough from its surroundings to be perceived as a whole, and exhibit sufficient character to compel listener’s attention” (Auerbach 2021, 7). I conjecture that this is close to how Viswanathan was thinking of motives.

17. In Viswanathan’s dissertation, he represented the *svaras* with only lower case letters because he provided the intervallic structure of the six rāgas at the beginning of the transcription. The horizontal lines above *svaras*

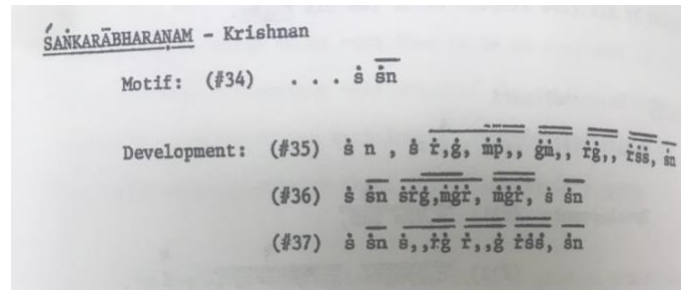


Figure 13. Viswanathan 1974a, 194, see also Viswanathan 1974b, 96–100 for the full transcription.

[34] A similar observation about tag phrases was made by Chloe Zadeh in her analysis of how Hindustani musicians improvise with melodic formulas in the genre of *thumri*. Zadeh describes this as the “end-rhyme strategy.” She writes that in this strategy, “a singer sings a number of successive phrases, all of which end with the same musical material” (Zadeh 2012, 34). Zadeh points out that in the end-rhyme strategy the end of the phrase is kept the same while the beginning is varied (Zadeh 2012, 35–37). So there is a shift from “new” to “old” musical information.

[35] In addition to end-rhyme, additional strategies are utilized by Karnatak musicians to create cohesion. For example, sometimes musicians will switch to what we may call “initial rhyme” (see fig. 19 on page 20). That is, instead of moving from new to old information (as in end-rhyme strategy) the musician may present a group of phrases that conversely repeats a motif at the beginning and changes the ending. The new-to-old and old-to-new approaches are ways to keep an anchor on a pitch-focus while also creating variation when Karnatak musicians are slowly climbing up the *rāga* for *rāgavardhani*.

meant that the tempo doubled in speech. Two horizontal lines above svaras meant that the tempo was four times as fast (Viswanathan 1974a, 10–11). Viswanathan’s recordings are located in the World Music Archive at Wesleyan University’s Music Library.

Cohesion in U. Srinivas's Ālāpana

[36] One crucial way to study cohesion in Srinivas's ālāpana is to analyze how he marked phrases with end rhyme or initial rhyme. We can begin with a basic example of “end-rhyme strategy.” Consider this transcription (fig. 14) of phrases 15–21 in U. Srinivas's Bahudari ālāpana. The end-rhyme is from n to P. (The slash / between n and P represents the slide.)

15. nP D DSnSnGSG Sn/P
 16. D n GSmSmGmGDmmS n/P
 17. D, nSPnDnDSP nPSnSn/P
 18. P, nDnDSn n/P
 19. (S)mGm P, nDnDSn n/P
 20. PnDn SMGMGPS GSGMP P, nDnDSP nPSnSn/P

 21. D, (n)D SDSn/P

Figure 14. End-rhyme on n/P in Srinivas's Bahudari ālāpana (Srinivas 1986, 0:59–1:21). Click [here](#) to listen.

[37] Phrases 18–20 (fig. 15) are instances in which Srinivas clearly sets up the end rhyme (n/P) and then in each successive phrase he started lower in range. In Figure 15, I draw your attention to how Srinivas commenced phrase 18 on P, dropped to S (a grace note) in phrase 19, and then in phrase 20 plunged even lower to P in the lower range. This is an example of end-rhyme with phrases increasing in length and starting successively lower in range.

18. P, nDnDSn n/P
 19. (S)mGm P, nDnDSn n/P
 20. PnDn SMGMGPS GSGMP P, nDnDSP nPSnS n/P

-

Figure 15. End rhyme with phrases that start lower in range (Srinivas 1986: 0:59–1:21). Click [here](#) to listen.

[38] Often topic phrases are followed by more complicated variations. Figure 16 is a transcription of phrases 18–23 in Srinivas’s Hēmavati ālāpana. The end-rhyme pitch focus is on R (bolded). I would classify phrase 18 as the “topic phrase” since it is the first instance when Srinivas sustained R.

18. [octaves] (S)PMP MDM Pgg [pause] **R**----

19. SnnD DPPM PDSDSRg **R R**

20. PgRgRSnDnDS DnDP D/MPMP PnDnD/g **R R**

21. PRSgRgRgS nDnPDnDgRgRs nDnPnDnDgSgS DnDP MPMDPMPgRS gR/nD/g **R**

22. RgRPMPMPM PMDM Mgg**R**---

23. DSDnDnP/**R R R**

Figure 16. Srinivas’s end-rhyme on R in his Hēmavati ālāpana (Srinivas 1992, 1:46–2:30). Click [here](#) to listen.

[39] Phrases 18–23 reveal how end rhyme is really just the tip of the iceberg for elaborate types of cohesion. For example, in figure 17, I draw your attention to only phrases 20 and 21. One could argue that when Srinivas performed phrase 21 he had an abstract outline of the four previous subphrases in phrase 20 and then expanded on each subphrase. I have sought to point this out with the use of brackets:

20. $\left(\begin{array}{l} \text{PgRgRS} \\ \cdot \end{array} \right) \left(\begin{array}{l} \text{nDnDS DnDP} \\ \cdot \cdot \cdot \cdot \end{array} \right) \left(\begin{array}{l} \text{D/MPMP} \\ \cdot \cdot \cdot \cdot \end{array} \right) \left(\begin{array}{l} \text{PnDnD/g R R} \\ \cdot \cdot \cdot \cdot \end{array} \right)$

21. $\left(\begin{array}{l} \text{PRSgRgRgS} \\ \cdot \end{array} \right) \left(\begin{array}{l} \text{nDnPDnDgRgRs} \\ \cdot \cdot \cdot \cdot \cdot \cdot \end{array} \right) \left(\begin{array}{l} \text{nDnPnDnDgSgS} \\ \cdot \cdot \cdot \cdot \cdot \cdot \end{array} \right) \left(\begin{array}{l} \text{DnDP} \\ \cdot \cdot \cdot \cdot \end{array} \right) \left(\begin{array}{l} \text{MPMDPMPgRS} \\ \cdot \cdot \cdot \cdot \cdot \cdot \end{array} \right) \left(\begin{array}{l} \text{gR/nD/g R} \\ \cdot \cdot \cdot \cdot \end{array} \right)$

Figure 17. Expansion of each subphrase in phrases 20 and 21 of the Hēmavati ālāpana. Click [here](#) to listen.

[40] Similarly, consider another example of cohesion (fig. 18). Srinivas developed subphrases in phrases 3–7 in the Hēlavati ālāpana. In each successive phrase he introduced a new subphrase that he then grabbed a hold of in the next phrases. First, in phrases 3, he introduced the tag phrase of Snn D and repeated it in phrases 4, 5, 6, and 7. Second, in phrase 4 he played nP nDnDS and repeated it in phrases 5, 6, and 7. Third, in phrase 5 he introduced DPMP and then expanded on that in phrases 6 and 7. Finally, in phrase 6 he performed the subphrase PMPM and then repeated it in phrase 7. So to create musical cohesion he recycled subphrases as he progressed. Notice how the end rhyme here is not the only type of cohesive glue. Another cohesive glue is the way Srinivas expanded upon just played subphrases.

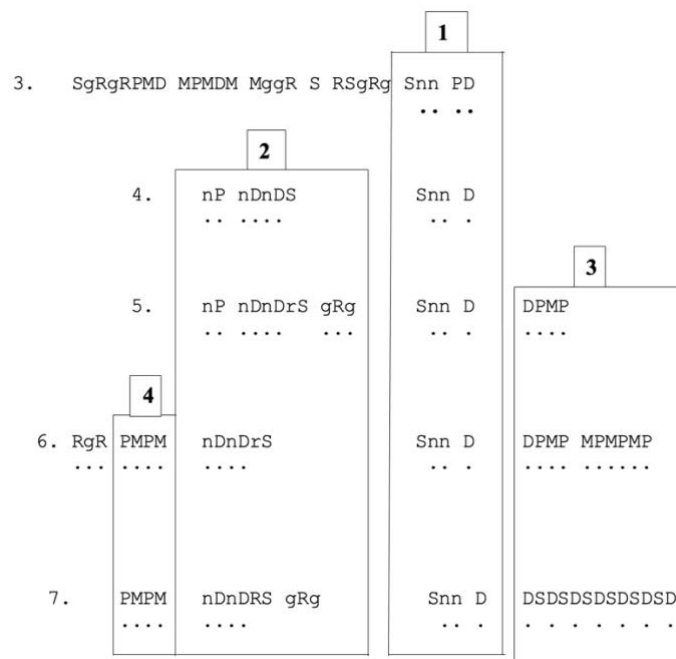


Figure 18. Expansion of subphrases in phrases 3–7 of the Hēlavati ālāpana (Srinivas 1992, 0:15 – 0:53). Click [here](#) to listen.

[41] Another way to create cohesion in ālāpana is to use “initial rhyme,” that is, to begin in the same way but end in different ways. For example, consider phrases 5–11 in Srinivas’s Todi ālāpana (fig. 19). In phrases 5, 6, and 7 Srinivas started and ended the phrases on d (bolded), but then in phrases 8, 9, and 10 he anchored the pitch-focus on d at the *start* of the phrase and varied the end of each phrase:

5. **d d** dSnSrSn **d d**

6. **dSnSrS** DsDsDs**d**

7. **d n** dn S nS r nrnrS nSnSn SrSdn dnDn**d**

8. **d** ggrSrgRgr
 .
9. **d** g(m) rSrgRr
 .
10. **dn**SdpdnDn**d**

11. **d** SDSDSDSDSDS--s--s|--

Figure 19. Initial rhyme in Srinivas’s Todi ālāpana (Srinivas 1986, 00:19-00:48). Click [here](#) to listen.

[42] In these phrases the initial rhyme was d, the flat sixth, and the successive phrases did not increase lengthwise in any significant way. However, sometimes Srinivas would create initial rhyme with subphrases that successively increases in length. For example, figure 20 is a transcription of phrases 59–62 in his Hēmavati ālāpana:

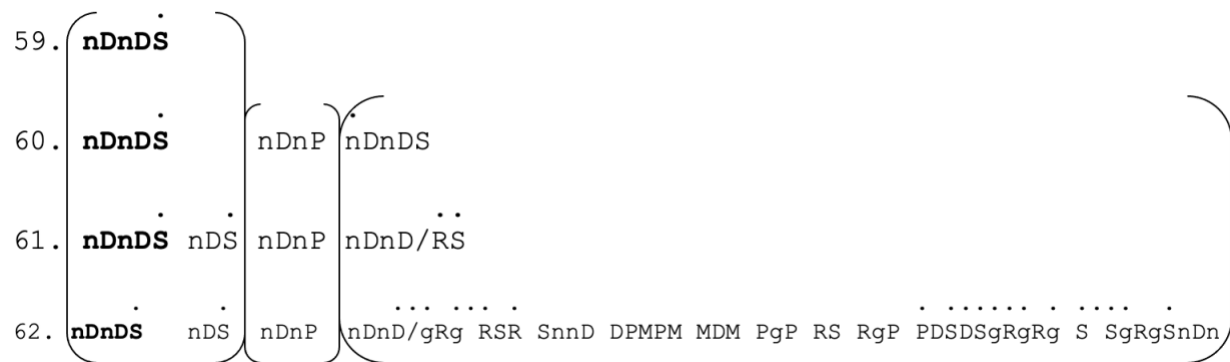


Figure 20. Initial rhyme in Srinivas’s Hēmavati ālāpana (Srinivas 1992, 07:00-07:20). Click [here](#) to listen.

[43] Notice how each phrase here increased in length. He performed nDnDS as the initial rhyme for all four phrases. But then he created cohesion by repeating the subphrase nDnP in phrases 60, 61, and 62. Likewise, he creatively expanded the tag phrase from nDnDS in phrase 60 to nDnD/RS in phrase 61 and finally to the longest phrase in 62. I have attempted to reveal here that initial rhyme or end rhyme are only one aspect of cohesion. The recycling of subphrases is another key aspect.

CLIMAX

[44] The issue of how climax is constructed is surprisingly underexplored in scholarship about Karnatak ālāpana.¹⁸ Widdess and Zadeh’s recent groundbreaking formalist analyses of *alāp* and *thumri* do not mention the word climax since the authors are focused on identifying formulas or schemas. Despite the lack of scholarship in Karnatak music it is common knowledge that climax is essential to ālāpana.

[45] The issue of climax has received attention in music theory. For example, in the article, “Climax Building in Verismo Opera: Archetype and Variants” (2020), Ji Yeon Lee suggests that composers of Verismo opera used musical strategies to construct climaxes in the stages of initiation, intensification, delay, highpoint, and abatement (Lee 2020). This idea works also for ālāpana. One could persuasively suggest that an entire ālāpana moves from a stage of initiation (the approach to the octave), to intensification (development of higher octave), to the highpoint of *brikka*, and finally the abatement or conclusion. However, I do not wish to provide evidence for this because, in my opinion, it is obvious to anyone who often listens to Karnatak ālāpana. Rather, I prefer to focus on a less-obvious phenomenon: how Srinivas

18. William Tallotte’s scholarship is a welcome exception. Tallotte has written an article about creativity and agency in ālāpana in the context of nāgasvaram music performed in the temple. Tallotte writes, “The *bhāva* (tamilized *bāvam*, state, emotion, attitude) can be described as the intense feeling that emanates from a performance in which the musician captures the emotional quintessence of the *rāga* and conducts it to its climax.” He also describes the climax of an ālāpana as, “where the musical texture becomes denser and the highest note of the performance (the third of the upper octave) is reached several times (phrases 27 and 32)” (Tallotte 2017, 40). Tallotte notes that “nāgasvaram masters conduct their ālāpana performances in such a way that the most expressive and moving melodic-rhythmic phrases or sequences come as long-awaited climaxes of ingeniously conducted modal developments” (Tallotte 2018, 102).

created a feeling of mounting intensity in the *rāgavardhani* in the higher octave as well as two climaxes in *brikka* sections.

Climax in U. Srinivas's Ālāpana

[46] Climax was an essential aspect of Srinivas's ālāpana. Sometimes in climactic moments Srinivas would treat the listeners to *tanam* phrases. *Tanam* is considered a separate improvisatory genre in Karnatak music, but Karnatak musicians sometimes input tanam phrases into *ālāpana* at climactic moments. Ethnomusicologist David Reck described *tanam* as:

Tanam itself is built from constantly changing rhythmic units of relatively fast two's and three's, setting up note-groups and phrase-groups of (usually) asymmetrical length which are superimposed over the background pulse... Because of these factors—limited note-groups appearing in various permutations and rhythmic configurations—the tonal working in tanam tends to have a certain static quality, a quality which, however, is offset by the energy and sometimes unpredictability of the rhythms. (314)

[47] Tanam rhythms thus sound “unpredictable.” For example, consider Srinivas's tanam-like phrases in phrase 42 of his Hēmavati ālāpana (fig. 21). Notice how he created a sense of rhythmic unpredictability by playing six groups of six (P,MPMD P,MPMn P,MPMD P,MPMP RgRPMP RgRPMP) and then suddenly added two notes on to the seventh group RgRPMPgP. The macron diacritic represents moments when Srinivas plucked the string.

42. $\overline{\text{RPM}}\overline{\text{D}} \quad \overline{\text{P}},\overline{\text{MP}}\overline{\text{MD}} \quad \overline{\text{P}},\overline{\text{MP}}\overline{\text{Mn}} \quad \overline{\text{P}},\overline{\text{MP}}\overline{\text{MD}} \quad \overline{\text{P}},\overline{\text{MP}}\overline{\text{MP}}$

$\overline{\text{Rg}}\overline{\text{RP}}\overline{\text{MP}} \quad \overline{\text{Rg}}\overline{\text{RP}}\overline{\text{MP}} \quad \overline{\text{Rg}}\overline{\text{RP}}\overline{\text{MP}}\overline{\text{g}}\overline{\text{P}} \quad [\leftarrow \text{unpredictable extra pulses}]$

$\overline{\text{g}},\overline{\text{Rg}}\overline{\text{RM}} \quad \overline{\text{g}},\overline{\text{Rg}}\overline{\text{RM}} \quad \overline{\text{g}},\overline{\text{Rg}}\overline{\text{Rg}}$

$\overline{\text{S}},\overline{\text{g}} \quad \overline{\text{Rg}}\overline{\text{SRS}}\overline{\text{g}} \quad \overline{\text{R}},\overline{\text{SR}}$

$\overline{\text{S}},\overline{\text{DSD}}\overline{\text{R}} \quad \overline{\text{S}},\overline{\text{DSD}}\overline{\text{R}} \quad \overline{\text{S}},\overline{\text{DS}}$
 $\cdot \quad \cdot \quad \cdot$

$\overline{\text{Dn}}\overline{\text{Dn}}\overline{\text{DS}} \quad \overline{\text{Dn}}\overline{\text{Dn}}\overline{\text{P}}$
 $\cdot \cdot \cdot \cdot \cdot \quad \cdot \cdot \cdot \cdot \cdot$

Figure 21. Srinivas’s tanam-like phrases in Hēlavati ālāpana (Srinivas 1992, 4:49–5:06). Click [here](#) to listen.

[48] Figure 22 is a transcription of a climactic moment that reveals how Srinivas employed tanam-like phrases for a climactic moment:

63. $\overline{\text{g}}\overline{\text{R}}\overline{\text{g}} \quad \overline{\text{Sn}}\overline{\text{Dn}}\overline{\text{S}}$

64. $\overline{\text{g}}\overline{\text{R}}\overline{\text{g}}(\text{S}) \quad \overline{\text{g}}\overline{\text{R}}\overline{\text{g}} \quad \overline{\text{Sn}}\overline{\text{Dn}}\overline{\text{S}}$

65. $\overline{\text{g}}\overline{\text{R}}\overline{\text{g}}\overline{\text{RS}}\overline{\text{g}}\overline{\text{SD}} \quad \overline{\text{Sn}}\overline{\text{Dn}}\overline{\text{S}}$

66. S--
 \cdot

$\cdot \cdot \cdot \cdot \cdot \quad \cdot \cdot \cdot \cdot \cdot \quad \cdot \cdot \cdot \cdot \cdot \quad \cdot \cdot \cdot \cdot \cdot$
 $\text{gRgRSgSg} \quad \text{RgRgSgSg} \quad \text{RgRgSgSg} \quad \text{RgRgSR}$

$\cdot \cdot \cdot \cdot \cdot \quad \cdot \cdot \cdot \cdot \cdot \quad \cdot \cdot \cdot$
 $\text{SDSDRSg} \quad \text{SDSDRSg} \quad \text{SDS}$

$\cdot \cdot \quad \cdot \cdot \quad \cdot \cdot \cdot \cdot \cdot \quad \cdot \cdot \cdot$
 $\text{DnDnDSDS} \quad \text{DnDnDRSg} \quad \text{SDS}$

$\cdot \cdot \cdot \cdot \cdot \quad \cdot \cdot \cdot$
 $\text{DnDnDgRgRgSG} \quad \text{SDS}$

$\cdot \cdot \cdot \quad \cdot \cdot \cdot \cdot \cdot \quad \cdot \cdot \cdot$
 $\text{nDnD/MRM} \quad \text{gRgRgSg} \quad \text{SDS}$

$\cdot \cdot \cdot \cdot \cdot \quad \cdot \cdot \quad \cdot \cdot \quad \cdot \cdot \cdot \cdot \cdot \quad \cdot \cdot \cdot \cdot \cdot \quad \cdot \cdot \cdot$
 $\text{nDnD/PMPMP} \quad \text{RMRgR} \quad \text{Sg} \quad \text{SDS} \quad \text{DnD} \quad \text{SDSgRg} \quad \text{R} \quad \text{R---}$

Figure 22. Climactic moment with tanam-like phrases (Srinivas 1992, 07:20-07:46). Click [here](#) to listen.

[49] Srinivas performed these phrases during the *rāgavardhani* in the higher range with a pitch-focus on S. Phrases 63, 64, and 65 thus ended on Ś with the subphrase of ŚnDnŚ. The flow of ideas in this entire moment is a juxtaposition of three short similar ideas (phrases 63, 64, 65) to an extremely long idea (phrase 66) that seemed to grow out of the three short ideas. Further, the flow of ideas also moved from free rhythm (phrases 63, 64, 65) to *tanam* rhythms (phrase 66). After Srinivas sustained the lowest note on the mandolin Ś (as if to remind us that this is the overall pitch-focus) he began performing *tanam* phrases with the characteristic note-groups having a beat-sense and asymmetrical unpredictability (Reck 1983, 304). Here I show how the *tanam* phrases overall moved downwards from ġĠġĠ to ŚDŚD and to DnDn:

66. S--
 .

ġRġRSgSg RġRġSgSg RġRġSgSg RġRġSR

SDSDRSg SDSDRSg SDS

DnDnDSDS DnDnDRSg SDS

Figure 23. Tanam phrases in the climax with overall descending gesture.

[50] After these *tanam* phrases Srinivas created a rising pattern within the subphrases that moved from DŚ to ġĠ to ĠĠ and finally to ĠĠ (figure 24). Srinivas concluded the climax on Ġ to signal that the upcoming phrases would have Ġ as the next pitch-focus.

DnDn**DSDS** DnDnDRSg SDS
 DnDnD**ġRġRġSG** SDS
 nDnD/**ĠĠĠ** ġRġRġSg SDS
 nDnD/**ĠĠĠĠĠ** RĠRġR Sg SDS DnD SDSġRġ R R---

Figure 24. Tanam phrases in the climax with ascending gesture.

[51] My discussion of climax has thus far focused on a moment in the *rāgavardhani* in the higher range. Another key moment in *ālāpana* when Srinivas tended to display his virtuosity was his climax in the *brikka* section. Consider this transcription of phrases 87–93 in the *brikka* section of his Kambhōji *ālāpana* (fig. 25).

87. $\dot{S}\dot{D}\dot{S}\dot{D}\dot{n}\dot{D}\dot{n}\dot{P}\dot{D}\dot{S}$ S
 88. $\dot{S}\dot{D}\dot{S}\dot{D}\dot{n}\dot{D}\dot{n}\dot{P}\dot{D}\dot{S}$
 89. $\dot{S}\dot{n}\dot{D}\dot{n}\dot{P}\dot{D}\dot{S}$
 90. $\dot{S}\dot{D}\dot{n}\dot{D}\dot{n}\dot{P}\dot{D}/(\dot{G})$ \dot{S} $\dot{S}\dot{D}\dot{n}\dot{D}\dot{n}\dot{P}\dot{D}\dot{S}$
 91. $\dot{S}\dot{D}\dot{S}\dot{D}\dot{n}\dot{D}\dot{n}\dot{P}\dot{D}/(\dot{G})$ $\dot{S}\dot{D}\dot{n}\dot{D}\dot{n}\dot{P}\dot{D}\dot{S}$ $\dot{R}\dot{m}\dot{R}\dot{S}$ $\dot{D}\dot{n}\dot{D}\dot{n}\dot{P}\dot{D}\dot{S}$
 92. $\dot{P}\dot{S}\dot{D}\dot{S}\dot{m}\dot{G}\dot{m}\dot{G}\dot{m}\dot{R}$ $\dot{S}\dot{D}\dot{n}\dot{D}\dot{n}\dot{P}\dot{D}\dot{S}$
 93. $\dot{P}\dot{S}\dot{D}\dot{S}\dot{G}\dot{R}\dot{m}\dot{G}\dot{m}\dot{G}\dot{m}\dot{R}$ $\dot{S}\dot{n}\dot{D}\dot{n}\dot{D}\dot{P}\dot{D}\dot{S}$ $\dot{R}\dot{m}\dot{R}$ $\dot{S}\dot{D}\dot{n}\dot{D}\dot{n}\dot{P}\dot{D}\dot{S}(\dot{G})$
 $\dot{S}\dot{n}\dot{D}\dot{P}\dot{D}\dot{S}(\dot{G})$
 $\dot{S}\dot{n}\dot{D}\dot{P}\dot{D}\dot{S}$ $\dot{n}\dot{D}\dot{n}\dot{P}\dot{D}\dot{S}(\dot{G})$
 $\dot{S}\dot{n}\dot{D}\dot{P}\dot{D}$ $\dot{R}\dot{m}\dot{R}\dot{S}$ $\dot{n}\dot{D}\dot{P}\dot{D}\dot{S}$ $\dot{G}\dot{R}\dot{m}\dot{G}\dot{m}\dot{G}\dot{m}\dot{R}$
 $\dot{S}\dot{n}\dot{D}\dot{n}\dot{D}\dot{P}\dot{D}\dot{S}/\dot{P}$ $\dot{S}\dot{D}\dot{S}\dot{G}\dot{R}$
 $\dot{G}\dot{m}$ $\dot{R}\dot{G}$ $\dot{S}\dot{R}$ $\dot{D}\dot{S}$ $\dot{D}\dot{n}$ $\dot{P}\dot{D}$ $\dot{G}\dot{P}\dot{S}$ $\dot{P}\dot{m}\dot{G}$
 $\dot{P}\dot{S}\dot{D}\dot{S}\dot{D}$ $\dot{G}\dot{m}\dot{m}\dot{R}\dot{S}$
 $\dot{S}\dot{D}\dot{S}\dot{D}\dot{n}\dot{D}\dot{n}\dot{P}$ $\dot{P}\dot{S}\dot{D}\dot{S}\dot{D}$

Figure 25. Climactic moment in Kambhōji rāga (Srinivas 1995, 08:21-08:59). Click [here](#) to listen.

[52] Srinivas constructed climax here in a strikingly similar way as he did in the previous example. Notice that he again began by repeating shorter ideas in phrases 87-92 before the long phrase. The repetition of these short phrases was a way to build intensity before the long “liftoff” phrase. Consider also how in the liftoff phrase (phrase 93) he enthusiastically recycled the subphrase $\dot{S}\dot{n}\dot{D}\dot{p}\dot{D}\dot{S}$ (bolded) as a kind of pivot point (fig. 26). One could compare this to what Williams and Colomb call “echoing salience,” where,

“readers hear special emphasis when a stressed word or phrase balances the sound or meaning of an earlier one” (Williams and Colomb 2012, 98).

87. $\overset{\cdot}{S}\overset{\cdot}{D}\overset{\cdot}{S}\overset{\cdot}{D}\overset{\cdot}{n}\overset{\cdot}{D}\overset{\cdot}{n}\overset{\cdot}{P}\overset{\cdot}{D}\overset{\cdot}{S}$ S
 $\overset{\cdot}{S}\overset{\cdot}{D}\overset{\cdot}{S}\overset{\cdot}{D}\overset{\cdot}{n}\overset{\cdot}{D}\overset{\cdot}{n}\overset{\cdot}{P}\overset{\cdot}{D}\overset{\cdot}{S}$
88. $\overset{\cdot}{S}\overset{\cdot}{D}\overset{\cdot}{S}\overset{\cdot}{D}\overset{\cdot}{n}\overset{\cdot}{D}\overset{\cdot}{n}\overset{\cdot}{P}\overset{\cdot}{D}\overset{\cdot}{S}$
89. $\overset{\cdot}{S}\overset{\cdot}{n}\overset{\cdot}{D}\overset{\cdot}{n}\overset{\cdot}{P}\overset{\cdot}{D}\overset{\cdot}{S}$
90. $\overset{\cdot}{S}\overset{\cdot}{D}\overset{\cdot}{n}\overset{\cdot}{D}\overset{\cdot}{n}\overset{\cdot}{P}\overset{\cdot}{D}/(G)$ S $\overset{\cdot}{S}\overset{\cdot}{D}\overset{\cdot}{n}\overset{\cdot}{D}\overset{\cdot}{n}\overset{\cdot}{P}\overset{\cdot}{D}\overset{\cdot}{S}$
91. $\overset{\cdot}{S}\overset{\cdot}{D}\overset{\cdot}{S}\overset{\cdot}{D}\overset{\cdot}{n}\overset{\cdot}{D}\overset{\cdot}{n}\overset{\cdot}{P}\overset{\cdot}{D}/(G)$ $\overset{\cdot}{S}\overset{\cdot}{D}\overset{\cdot}{n}\overset{\cdot}{D}\overset{\cdot}{n}\overset{\cdot}{P}\overset{\cdot}{D}\overset{\cdot}{S}$ RmRS $\overset{\cdot}{D}\overset{\cdot}{n}\overset{\cdot}{D}\overset{\cdot}{n}\overset{\cdot}{P}\overset{\cdot}{D}\overset{\cdot}{S}$
92. $\overset{\cdot}{P}\overset{\cdot}{S}\overset{\cdot}{D}\overset{\cdot}{S}\overset{\cdot}{G}\overset{\cdot}{R}\overset{\cdot}{m}\overset{\cdot}{G}\overset{\cdot}{m}\overset{\cdot}{G}\overset{\cdot}{m}\overset{\cdot}{R}$ $\overset{\cdot}{S}\overset{\cdot}{D}\overset{\cdot}{n}\overset{\cdot}{D}\overset{\cdot}{n}\overset{\cdot}{P}\overset{\cdot}{D}\overset{\cdot}{S}$
93. $\overset{\cdot}{P}\overset{\cdot}{S}\overset{\cdot}{D}\overset{\cdot}{S}\overset{\cdot}{G}\overset{\cdot}{R}\overset{\cdot}{m}\overset{\cdot}{G}\overset{\cdot}{m}\overset{\cdot}{G}\overset{\cdot}{m}\overset{\cdot}{R}$ $\overset{\cdot}{S}\overset{\cdot}{n}\overset{\cdot}{D}\overset{\cdot}{n}\overset{\cdot}{D}\overset{\cdot}{P}\overset{\cdot}{D}\overset{\cdot}{S}$ RmR $\overset{\cdot}{S}\overset{\cdot}{D}\overset{\cdot}{n}\overset{\cdot}{D}\overset{\cdot}{n}\overset{\cdot}{P}\overset{\cdot}{D}\overset{\cdot}{S}$ (G)
- $\overset{\cdot}{S}\overset{\cdot}{n}\overset{\cdot}{D}\overset{\cdot}{P}\overset{\cdot}{D}\overset{\cdot}{S}$ (G)
- $\overset{\cdot}{S}\overset{\cdot}{n}\overset{\cdot}{D}\overset{\cdot}{P}\overset{\cdot}{D}\overset{\cdot}{S}$ $\overset{\cdot}{n}\overset{\cdot}{D}\overset{\cdot}{n}\overset{\cdot}{P}\overset{\cdot}{D}\overset{\cdot}{S}$ (G)
- $\overset{\cdot}{S}\overset{\cdot}{n}\overset{\cdot}{D}\overset{\cdot}{P}\overset{\cdot}{D}$ RmRS $\overset{\cdot}{n}\overset{\cdot}{D}\overset{\cdot}{P}\overset{\cdot}{D}\overset{\cdot}{S}$ GRmGmGmR
- $\overset{\cdot}{S}\overset{\cdot}{n}\overset{\cdot}{D}\overset{\cdot}{n}\overset{\cdot}{D}\overset{\cdot}{P}\overset{\cdot}{D}\overset{\cdot}{S}/P$ SDSGR
- Gm RG SR DS Dn PD GPS PmG
- $\overset{\cdot}{P}\overset{\cdot}{S}\overset{\cdot}{D}\overset{\cdot}{S}\overset{\cdot}{D}$ GmmRS
- $\overset{\cdot}{S}\overset{\cdot}{D}\overset{\cdot}{S}\overset{\cdot}{D}\overset{\cdot}{n}\overset{\cdot}{D}\overset{\cdot}{n}\overset{\cdot}{P}$ $\overset{\cdot}{P}\overset{\cdot}{S}\overset{\cdot}{D}\overset{\cdot}{S}\overset{\cdot}{D}$

Figure 26. Recycling of a musical idea in the Kambhōji climax (Srinivas 1995, 08:21-08:59).

[53] Consider one last climactic moment (fig. 27). It was so enthralling that it compelled the audience to burst out in applause, a somewhat rare occurrence at live performances of Karnatak ālāpana.

120. /mGPmGmRG

121. /mGPmGmRG

122. DSDSDSD/PGmGmRG

123. DSDSDSD/PGmGmRG

124. DSDSDSD/PGmGmR GR PGmGmR

GRmGmGmR GRmGmGmR GRmGmGmR GRmGmGmR GRmGmGmR GRmGmGmR GRmGmGmR

RmR SRSRmR SRSRmR SRSRmR SRSRmR SRSRmR SR

SDSDS (R) SDSDS (R) SDSDS (G)

SDS-DnDnDn PDSDS-DnDnDn

PDRSRSDS-DnDnDn PDRSRSDS-DnDnDn

PDmRmRSGSDS-DnDnDn PSDmGmGRmRSDS-DnDnDn

PDS/D PDS/D

PDSR/P PDSR/P

PSDSRG/P PSDSRG/P

PSDSRGm--**[applause]**--GmRSnDPmG PSDS (P)mmG--

Figure 27. Climax of Kambhōji ālāpana (Srinivas 1995, 11:16–11:58). Click [here](#) to listen.

[54] Here I have numbered what I feel are the subsections of this climax. Again, like the previous two climactic moments he started with quick repetition with free-rhythmic phrases (phrases 120, 121, 122, and 123) before the long liftoff phrase of 124, which incorporated tanam-like phrasing. In the liftoff phrase again Srinivas constructed extremely melismatic subphrases that focused on a group of notes that overall descended from \dot{G} to \dot{R} to \dot{S} (bolded in fig. 28):

124. DSDSDSD/PGPGmGmR GR PGmGmR

.....
GRm**G**m**G**mR **G**Rm**G**m**G**mR **G**Rm**G**m**G**mR **G**Rm**G**m**G**mR **G**Rm**G**m**G**mR **G**Rm**G**m**G**mR **G**Rm**G**m**G**mR

Rm**R** **S**R**S**R**R**m**R** **S**R**S**R**R**m**R** **S**R**S**R**R**m**R** **S**R**S**R**R**m**R** **S**R**S**R**R**m**R** **S**R

SD**S**D**S** (R) **S**D**S**D**S** (R) **S**D**S**D**S** (G)

Figure 28. Overall descent in section 2 of the climax in Kambhōji.

[55] In the third section of the liftoff phrase he created expanding phrases that all concluded with DnDnDn:

SDS-**DnDnDn** PDSDS-**DnDnDn**
 PDRSRSDS-**DnDnDn** PDRSRSDS-**DnDnDn**
 PDMRmRSGSDS-**DnDnDn** PSDmGmGRmRSRSDS-**DnDnDn**

Figure 29. Section 3 in the climax.

[56] In the fourth section of the liftoff phrase he constructed three repeated phrases that rose up and then descended with a glissando, each time rising up one note higher. When he reached all the way up to ṛiṅ the audience began to applaud (fig. 30):

PDS/D PDS/D
 PDSR/P PDSR/P
 PSDSRG/P PSDSRG/P
 PSDSRGm--**[applause]**--GmRSnDPmG PSDS (P)mmG--

Figure 30. Section 4 in the climax that sparked applause.

CONCLUSION: MUSICAL IMPROVISATION, SPEECH, AND WRITING

[57] The chief argument of this article is that that underlying principles of *ālāpana* are coherence, cohesion, and climax. To bear out my argument I analyzed coherence, cohesion, and climax in four *ālāpana* performed by Karnatak mandolinist U. Srinivas.

[58] This article has sought to contribute to a topic within scholarship about music-and-language that Harold Powers described as, “linguisticity and extempore musical discourse” (Powers 1980, 42). In this strand of scholarship, it is common for scholars to explore how musical improvisation is like spontaneous speech (see Powers 1980, 42–46; Sawyer 1996, 272, 277–80; 287–91; Berkowitz 2010, 145–49; Zadeh 2012, 11–17). For example, both spontaneous speech and musical improvisation require mechanical skills (tongue, mouth, larynx for speech, and hands for the Karnatak mandolin). Both the Karnatak musician and the speaker of spontaneous speech must, “master the underlying syntax of music and language in order to communicate in a fashion that is comprehensible” (Berkowitz 2010, 146). Both speakers and musical improvisers plan ideas behind messages in a preverbal fashion, formulate and articulate messages, and self-monitor (*ibid.*). Both spontaneous speech and musical improvisation involves the usage of formulas (Zadeh 2012).

[59] However, the scholarship that compares everyday speech with musical improvisation has tended to overlook ways in which the musical improvisation is dissimilar from spontaneous speech. For example, it is common to compare musicians who learn to improvise with children who learn to speak. However, scholars seldom point out that children learn to speak before they learn to write. Likewise, students of Karnatak music first learn to correctly sing the *svaras* of *Māyāmālavagowla rāga*. Then they learn the basic exercises (*sarali varisai*). Then they learn small compositions called *gītams* and basic *gamaka*. Next is *varnam*. Then *kriti*. When the students are at a more advanced level they start to comprehend how to perform *ālāpana*. Thus, one learns to perform *ālāpana* after the basics have been grasped. This is similar to the way that one learns to write only after one learns speech, phonics, and how to write individual letters. In this sense, the progression from basic musical exercises to *ālāpana* is similar to the progression from speech to writing.

[60] Scholars who compare musical improvisation to spontaneous speech have also overlooked the occurrence of linguistic fillers, sounds made in everyday speech to signal that

the speaker is thinking. When people speak in English it is common to say, “um...” or “like...” In Sinhala, people say, “*mē*...” (මේ...). In Dhivehi, people say, “*anē*” (އަނެ) or “*mī*” (މީ). However, in the four *ālāpana* that I analyzed I did not find a musical equivalent for linguistic fillers of spontaneous speech. Instead, I would contend, that the clarity in the presentation of U. Srinivas’s *ālāpana* is more similar to clarity of written language.

[61] Another component of spontaneous speech is the phenomenon of dialects. The Tamil-language dialect spoken by a person from Jaffna, Sri Lanka sounds quite different from the Tamil dialect spoken by someone from Madurai, Tamil Nadu. Imagine a Karnatak musician from Jaffna performs an extended *ālāpana* in Tōdi rāga. The performance is followed by a Karnatak musician from Madurai, who also performs an extended *ālāpana* in Tōdi rāga. Admittedly, their musical improvisations may vary slightly in structure and according to their guru’s teachings and their own stylistic preferences. But characteristic phrases of a rāga are the characteristic phrases—the Karnatak musician from Jaffna should not perform any characteristic phrases in such a way that reveals that individual is from Jaffna and not Madurai. Likewise, in the realm of writing, when one writes an academic essay for a peer-reviewed journal that person is not supposed to use their dialect in the academic writing. Of course, there are British and American spellings and British and American orthographic practices, but that does not mean that an American will spell the word “water” as “wader” because they pronounce it in that way. I would thus argue that in this sense *ālāpana* aligns more closely with written language than spontaneous speech.

[62] Consider, also, the issue of the formula. Chloe Zadeh compared the co-presence of formulas in improvised music with formulas in everyday speech (see Zadeh 2012, 7–19). Zadeh argued that formulas are the “building blocks of *ṭhumrī*” (Zadeh 2012, 6), and she defined formula as “any musical pattern which occurs repeatedly in *ṭhumrī* performances” (Zadeh 2012: 20). Zadeh also characterized different types of formula as ranging from those that are repeated exactly to more abstract gestures and strategies (Zadeh 2012, 21).

[63] As is common in scholarship about “linguisticity and extempore musical discourse” Zadeh did not broach the question of how formulas might be similar to templates of written language. In *They Say / I Say*, Gerald Graff and Cathy Birkenstein sought to demystify how to write literature reviews by offering writing templates to the reader. Graff and Birkenstein suggest, “In our view, this template represents the deep, underlying structure, the internal

DNA as it were, of all effective argument” (Graff and Berkenstein 2014, xix). It is true that Graff and Birkenstein supply already-made templates (ex. “Although I concede that _____, I still insist that _____.”). Thus, a writer can repeat these templates verbatim. However, if an individual has internalized such templates the templates become more like what Zadeh called “abstract strategies” (Zadeh 2012, 21). For example, sentences that put forward scholarly arguments or sentences that point out gaps in the knowledge can be phrased in an infinite number of ways. Thus, it is possible that there is some cognitive overlap between templates for academic writing and formula found in musical improvisation.

[64] I conclude with a point made by Stephen L. Berkowitz, who explored links between musical improvisation and spontaneous speech in his book *The Improvising Mind: Cognition and Creativity in the Musical Moments* (2010). According to Berkowitz, recent brain imaging studies regarding spontaneous speech discovered activity in the three brain regions that Berkowitz found to be involved in musical improvisation (dorsal premotor cortex, anterior cingulate cortex, and inferior frontal gyrus). However Berkowitz admitted that,

...it cannot be stated with certainty that the active brain areas are involved specifically in spontaneous speech as opposed to non-spontaneous speech (e.g., reading, repeating, reciting a memorized text), or merely in important but non-specific functions (e.g., attention, working memory). Comparing their sentence generation task to a reading or repetition task could have yielded more precise insights (Berkowitz 2010, 151).

[65] In other words, just because three areas of the brain are involved in both spontaneous speech and musical improvisation does not mean that these brain areas are not also involved with forms of non-spontaneous language like writing. Thus, one would need to conduct a neurobiological study of the brain areas that get activated when a writer writes. Perhaps those areas corresponded to those that are activated during the performance of an ālāpana.

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References

- Auerbach, Brent. 2021. *Musical Motives: A Theory and Method for Analyzing Shape in Music*. Oxford: Oxford University Press.
- Berkowitz, Stephen L. 2010. *The Improvising Mind: Cognition and Creativity in the Musical Moments*. Oxford: Oxford University Press.
- Csikszentmihalyi, Mihaly. 1991. *Flow: The Psychology of Optimal Experience*. New York: Harper Perennial.
- Graff, Gerald, and Cathy Berkenstein. 2014. *They Say / I Say: The Moves that Matter in Academic Writing*. New York: W.W. Norton & Company.
- Janakiraman, S.R. 2008. *Essentials of Musicology in South Indian Music*. Chennai: The Indian Music Publishing House.
- Lee, Ji Yeon. 2020. "Climax Building in Verismo Opera: Archetype and Variants." *Music Theory Online* 26(2).
- Merriam-Webster Online. "Merriam-Webster's Online Dictionary." 11th ed., Merriam-Webster, 2023. <https://www.merriam-webster.com/dictionary/topic%20sentence>
- Pearson, Laura. 2013. "Gesture and the Sonic Event in Karnatak Music." *Empirical Musicology Review*, 8(1): 2–14.
- Pearson, Laura. 2016. "Gesture in Karnatak Music: Pedagogy and Musical Structure in South India." Ph.D. diss. University of Durham.
- Powers., Harold S. 1958. "The Background of the South Indian Raga-System." Ph.D. diss., Princeton University.
- Powers, Harold. S.1980. "Language Models and Musical Analysis." *Ethnomusicology* 24(1): 1–60.
- Reck, David.1983. "A Musician's Tool-Kit: A Study of Five Performances by Thirugokarnam Ramachandra Iyer." Ph.D. diss., Wesleyan University.
- Sambamoorthy, P. 1963. *South Indian Music: Book IV*. Madras: The Indian Music Publishing House.

- Sawyer, R. Keith. 1996. "The Semiotics of Improvisation: The Pragmatics of Musical and Verbal Performance." *Semiotica* 108(3/4): 269–306.
- Schachter, Michael. 2015. "Structural Levels in South Indian Music." *Music Theory Online* 24 (4).
- Tallotte, William. 2017. "Improvisation, Creativity, and Agency in South Indian Temple *Rāga* Performance." *Asian Music* 48(2): 24–61.
- Tallotte, William. 2018. "Improvisation as Devotion: *Nāgasvaram* Music and Ritual Communication in Hindu Temple Festival Processions." *Ethnomusicology Forum* 27(1): 88–108.
- Viswanathan, Tanjore. 1974a. "Raga Alapana in South Indian Music." Volume I: Text. Ph.D. diss. Wesleyan University.
- Viswanathan, Tanjore. 1974b. "Raga Alapana in South Indian Music." Volume II: Transcriptions and Taped Recordings. Ph.D. diss., Wesleyan University.
- Viswanathan, T. and Matthew Harp Allen. 2004. *Music in South India*. Oxford: Oxford University Press.
- Weidman, Amanda. 2006. *Singing the Classical, Voicing the Modern: The Postcolonial Politics of Music in South India*. Durham: Duke University Press.
- Widdess, Richard. 2011. "Dynamics of Melodic Discourse in Indian Music: Budhaditya Mukherjee's Alap in Rag Puriya Kalyan." In *Analytical and Cross-Cultural Studies in World Music*, ed. Michael Tenzer and John Roeder, 187–224. New York: Oxford University Press.
- Williams, Joseph M. and Gregory G. Colomb. 2012. *Style: The Basics of Clarity and Grace* 4th ed. Boston: Longman.
- Zadeh, Chloe. 2012. "Formulas and the Building Blocks of *Ṭhumrī* Style—A Study in "Improvised" Music." *Analytical Approaches to World Music* 2(1): 1–48.

Discography

- Srinivas. U. 1986. *Mandolin Ecstasy*. Oriental Records, CD111
- . 1992. *Dikshitar Masterpieces Volume One*. Music Today; CD-C92048
- . 1995. Live Performance at the Cleveland Thyagaraja Aradhana. Unreleased.