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Exploring *Nadai* – The Concept of Beat Subdivision in South Indian Music

Introduction

This paper aims to explore a rarely-discussed element in Karnatic percussion performance, namely, the concept of beat subdivision, referred to in the Tamil language as *nadai* (*gati* in Sanskrit). One reason for this oversight may be the fact that within the Karnatic tradition, *nadai* is considered a practical and performance element, and as a result little has been written about it in a theoretical or academic context. As a student of the South Indian frame drum, the *kanjira,* the concept of *nadai* is fascinating in its aesthetic and cosmological implications, and, as a performer, the result of practical training in changes in beat subdivision (*nadai bedam*) through various kinds of rhythmic exercises, has brought about a palpable enhancement and improvement in the author's musicianship and rhythmic sensitivity across multiple styles of music. It is hoped that this paper can make a modest contribution to the study of this elusive but significant aspect of South Indian music.

1. Brief Overview of South Indian Classical (Karnatic) Music

Karnatic music, the classical tradition of South India, is generally regarded to have emerged out of the bifurcation of India into the North and South in the 13th century. While music in Northern India was transformed through the permeation of Islamic culture and evolved into the Hindustani tradition, music in the Southern provinces of Karnataka, Andhra Pradesh, Tamil Nadu, and Kerala developed, relatively undisturbed by external influences, into the classical tradition known today as Karnatic music. Although the repertoire, instruments, and aesthetic of Hindustani and Karnatic differ greatly, both traditions are rooted in two grand musical systems, the melodic framework of the *raga* and the rhythmic framework of *tala*. The word *raga,* derived from the Sankrit *Ranj* meaning "to color," is a system of modes which provides structural and aesthetic form to the tradition's melodic realmof musical performance: "In the language of music the arrangement of notes which color or affect certain emotion of the mind is called *Raga*" (Kanhere 1926: 109). The term *tala,* while denoting the rhythmic system as a whole, also refers specifically to rhythmic cycles of various lengths by which compositions are temporally structured.

As the music of both North and South India originated from the sacred and highly ritualized Vedic chants, Karnatic music is essentially devotional in nature. Temporal and melodic units of music are conceived to reflect the order of the cosmos and the ideals of Hindu deities; songs are composed and performed in the worship and adulation of gods. In addition, the symbolism and significance of certain numbers figure prominently across Indian music, religion, and visual art, such as traidic (3), quadratic (4) and pendatic (5) structures. The origin of music itself is mythologized as an emanation from the acts of the most powerful of Hindu deities and their offspring and incarnations: Siva and his consort Parvati, Krishna and Rama, incarnations of Vishnu, and many others (Sankaran 1994: 3–4). The act of making music is considered not only as a form of entertainment, but as one of the legitimate paths towards spiritual salvation and union with the Absolute.

Among the pioneers of Karnatic music, four should be noted here: Purandaradasa (1484–1564), considered the "grandfather of Karnatic music," and the Karnatic Trinity of the 18th century, Thyagaraja, Muthuswami Dikshitar, and Syama Sastri, who ushered in a new era in the tradition through their prolific output of compositions and establishment of new musical and aesthetic conventions (Sankaran 1994: 10).

2. *Laya* and *Tala*

As mentioned above, the musical lineage of India can be traced back to the ritualistic music-making associated with the ancient Vedas, and many of the concepts that form the bedrock of Karnatic music today can be found to derive their significance from the earliest times in India's musical history. Two overarching concepts pertinent to the discussion of Karnatic rhythm are *tala* and *laya*, and warrant a closer examination before delving into the concept of *nadai*. They are also essential terms for the understanding of Karnatic rhythmic theory as a whole.

Tala is a term that encompasses both general and specific definitions in the Indian rhythmic system. In a general sense, *tala* refers to all aspects related to rhythm. Sarngadeva, author of the 13th-century music treatise *Sangitaratnakara,* expresses the idea that *tala* is at the root of all forms of Indian music, including

vocal, instrumental, and dance (Sankaran 1994: 14). In Bharata's *Natya Sastra* (c. 200 BCE – 200 AD), the definitive Indian treatise on the performing arts, one whole chapter is devoted to the concept of *tala,* and in the earliest commentary of the *Natya Sastra,* the *Abhinababharati* by Abhinavagupta, the meaning of *tala* is further articulated as a principle of equilibrium in both musical and cosmological contexts:

> *[T]ala,* of all the musical dimensions, has been assigned the major responsibility for coordinating, integrating, and maintaining control over all aspects of the performance. The correct performance of ritual is obviously no small matter, and the benefits of *tala* were intended to go far beyond the admitted pleasures of musical rhythm. And similarly, the equilibrium that Abhinavagupta praises, visualized in the form of Siva's celebrated pose as Lord of the Dance (Nataraja), is something more than a state of simple physical balance or repose; it is the state of cosmic equilibrium precariously maintained in the midst of the continuous creation, preservation, and destruction of the world, its forms, and its creatures (Rowell 1992: 188–189).

On a more specific structural level, the term *tala* refers to a cycle of traditionally determined rhythmic units. The *talas* in use today include a system called the Suladi Sapta Talas first recorded in the 16th century; *Chapu talas,* originating from historic folk traditions, and *talas* of specific metric schemes, such as those from the Tiruppugazh devotional hymns of the 15th century (Sankaran 1994: 16).

The *tala* is the rhythmic framework over which solos are played. It functions simultaneously as time-keeper, marking the equidistant pulses of the cycle, and as time-marker, by stressing particular beats of the cycle through specific hand gestures. The following transcription excerpt from Trichy Sankaran's *Rhythmic Principles and Practice of South Indian Drumming* (Lalith Publishers, 1994) illustrates, through Western notation, the relationship between the common 8-beat *adi tala* and a composed percussion solo known as a *koraippu.* The gestures and time-markings of the *tala* are indicated by the symbols "X," "I," and "O" above the notated solo, where "X" represents a hand clap, "I" represents finger counts, and "O" represents a wave of the hand.

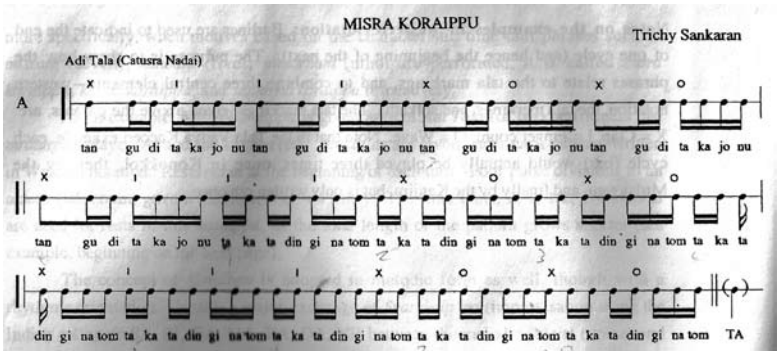

Figure 1. "*Misra Koraippu*" excerpt. From Sankaran, Trichy (1994). *The Principles and Practice of South Indian Drumming.* Toronto: Lalith Publishers, p. 150

Laya, as mentioned, is another important concept in the discussion of *nadai.* It denotes the tempo or speed of a composition, temporal space, and the overall concept of the flow of time. *Laya* also implies degrees and relations of tempi. One common scheme used in Karnatic music is the slow-medium-fast speeds expressed in the ratio of 4:2:1 (*trikalam*). Playing in *trikalam* is used as a training tool for developing a performer's sense of rhythmic flow and temporal relationships, and as an embodiment of the principle of doubling which is used often in composition and improvisation.

On practical level, *laya* also implies keeping and performing at a steady tempo, and this is an important point to remember in the discussion of *nadai* to which the discussion will continually refer – keeping a steady tempo, and maintaining a steady *tala,* is what provides the rhythmic context for changes in beat subdivisions. And she who performs *nadai* changes is also one who must master her internal sense of tempo, sense of *laya.*

In ancient times, the technicalities of chant recitation and its proper performance had religious implications. While today's repertoire is generally detached from ritualistic repercussions (although much of it is still devotional in nature), mastery of *laya* is still a highly regarded skill among all musicians, and one who is considered such a master is known as a *laya vidwan.* Other terms used in Indian music nomenclature include *laya-suddam* (accuracy of tempo), and *layajnanam* (knowledge of time) (Sankaran 2010: 27).

Laya is also one of the ten theoretical principles that comprise the *Tala Dasa Pranas,* the Ten Vital Elements of Tala, which form the theoretical basis of modern Karnatic music. The ten principles are listed below with a brief description:

Kala – the division of time into units; a conceptual unit of time
Marga – measure of the density of musical events; rhythmic construction or poetic setting of a melody
Kriya – method (i.e. gesture) of indicating beats of a *tala* – distinguished as sounded (*sasshabda*, e.g. hand clap) or unsounded (*nisshabda*, e.g. hand wave)
Anga – traditionally describe divisions of a *tala akshara* (1 beat), *drutam* (O - 2 aksharas; clap + wave) *anudrutam* (U - 1 akshara; clap) *laghu* (I - variable aksharas; clap + finger counts);
e.g. Adi Tala = Chatusra Triputa Tala (I4 O O) = 8 beats
Jati – "classification"; basic lengths of rhythmic units:
Chatusra (4) – "ta ka di mi"
Tisra (3) – "ta ki ta"
Khanda (5) – "ta ka ta ki ta"; "ta din gi na tom"; etc.
Misra (7) – "ta ki ta ta ka di mi"; "ta - din - gi na tom"
Sankirna (9) – "ta ka di mi ta ka ta ki ta"; "ta - din - gi - na - tom"; etc.
Graha – position of the beginning of a composition
Kalai – method of stretching a tala cycle exponentially, e.g., 2x, 4x, 8x; related to slower tempo
Laya – the concept of time, tempol the inwardly flow of rhythm; the term under which nadai is found
Yati – geometric shapes that give form to various arrangement of rhythmic patterns; can be applied to text, melody, rhythmic patterns, etc.
Prastara – "to spread out"; method for dealing with logical and mathematical process of permutations and combinations of rhythmic factors, e.g., 9 = 4+5 or 3+6 or 2+2+2+3, etc.

While it must be acknowledged that all these concepts are interrelated and should be viewed as a whole to form a comprehensive understanding of Karnatic rhythmic theory, for the purposes of this discussion, we shall focus on two principles that relate most intimately to *nadai*. We have covered concept of *laya* above, and shall presently take a more in-depth look at *jati*.

The *Jati* classification is an important one, for it is applicable to various levels of the musical structure. These units can be applied to the *tala* itself, by defining the lengths of and expanding the number of *talas* that can be used. The application of five *jati* combined with seven combinations of *anga*s results in the 35 Sapta Talas.

The 35 Talas of the Sapta (Seven) Tala System

Seven Talas	Jathis	Anga Structure	Aksharas
Dhruva Tala	Chatusra	I^4 O I^4 I^4	14
	Tisra	I^3 O I^3 I^3	11
	Misra	I^7 O I^7 I^7	23
	Khanda	I^5 O I^5 I^5	17
	Sankirna	I^9 O I^9 I^9	29
Matya Tala	Chatusra	I^4 O I^4	10
	Tisra	I^3 O I^3	8
	Misra	I^7 O I^7	16
	Khanda	I^5 O I^5	12
	Sankirna	I^9 O I^9	20
Rupaka Tala	Chatusra	O I^4	6
	Tisra	O I^3	5
	Misra	O I^7	9
	Khanda	O I^5	7
	Sankirna	O I^9	11
Triputa Tala	Chatusra	I^4 O O	8
	Tisra	I^3 O O	7
	Misra	I^7 O O	11
	Khanda	I^5 O O	9
	Sankirna	I^9 O O	13
Jhampa Tala	Chatusra	I^4 U O	7
	Tisra	I^3 U O	6
	Misra	I^7 U O	10
	Khanda	I^5 U O	8
	Sankirna	I^9 U O	12
Ata Tala	Chatusra	I^4 I^4 O O	12
	Tisra	I^3 I^3 O O	10
	Misra	I^7 I^7 O O	18
	Khanda	I^5 I^5 O O	14
	Sankirna	I^9 I^9 O O	22
Eka Tala	Chatusra	I^4	4
	Tisra	I^3	3
	Misra	I^7	7
	Khanda	I^5	5
	Sankirna	I^9	9

Figure 2. The Sapta Tala System. From Sankaran, Trichy (2010).
The Art of Konnokol: The Spoken Rhythms of South Indian Music. Toronto: Lalith Publishers, p. 37

Jati groupings also apply directly to *nadai*, providing the five traditionally determined beat subdivisions that are in use today. The five *nadai* on their own can be illustrated below in more familiar Western notation, accompanied by traditional syllabic patterns used to denote each *nadai*:

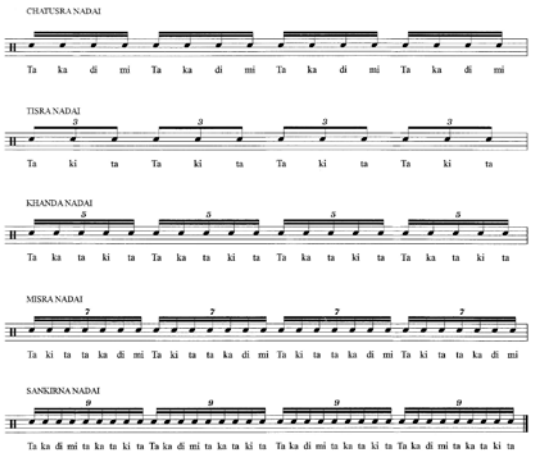

Figure 3. *Nadai* in Western notation

3. The Concept of *Nadai*

The concept of *nadai* essentially refers to the subdivision of a beat into a specific number of isometric pulses. It has been defined as "the number and the rate at which the inner pulse divisions move within the tala beats" (Sankran 2010: 28), where an *akshara* refers to a beat, e.g., *adi tala* has 8 *aksharas.*

Angas	I *laghu*				I *drutam*		I *drutam*	
Aksharas	1	2	3	4	5	6	7	8
Counting	clap	(2)	(3)	(4)	clap	wave	clap	wave

Figure 4. The structure of a *tala*

More pertinent to the Karnatic performance tradition is the act and skill of *changing* beat subdivisions in performance, known as *nadai bedam* (*darja laya* in the Hindustani tradition) and the aesthetic value of using specific *nadai*s during improvisation. Instances of the use of tradition-specific *nadai*s include those found in the Tiruppugazh tradition (Sankaran 1989) and in the temple drumming of Kerala (Groesbeck 2003).

Nadai appears as an extension of the concept of *laya* in the *Tala Dasa Pranas*, where it underscores the significance in Karnatic music of maintaining a sense of steady tempo in performance. Maestro Trichy Sankaran offers further insight into the relationship between *nadai* and the mastery of *laya:* "Perfect sense of *laya,* mathematical precision, and articulation are fully in demand for a command over intricate *nadai* changes... [and m]aintaining a steady tempo for the tala throughout a musical composition is one of the stipulated principles of South Indian performance practice" (Sankaran 1994: 25).

The concept and practice of beat subdivision or pulse modulation is, of course, not unique to Karnatic music. Jazz, popular progressive and fusion styles, and many classical and contemporary works employ changes in beat subdivisions as a display of rhytmic virtuosity. But what is unique is the cultural context in which such practices are found. As Lewis Rowell expresses eloquently in his article for the Music Academy of Madras:

> There is no doubt that most rhythmic phenomena submit readily to precise measurement... I do not dispute the accuracy of the results – I simply fail to find the interesting beyond a point. What I do find deeply, absorbingly interesting are the experiential qualities of rhythm and the conceptual structures man has devised with which to organize his intuitions of the temporal phenomena in music. Some of these concepts may indeed arise from a certain broad class of universal experiences, but it is the cultural interpretation we place upon them, the way in which they embody and express our preferences and values, that gives them meaning (Rowell, 1986: 84).

The five *jati* classifications also not arbitrarily assigned numbers, and evidence of the relationship between numbers and their representation of cosmic principles is abundant, well-documented, and oft-quoted in literature on Indian music. David M. Knipe's highly informative article of the use of numbers in Vedic symbols (1972), in particular the relationships between the numbers three, four, and five (as well as the principle of x plus 1),

offers numerous additional references in the ancient texts, and Lewis Rowell's seminal study of ancient Indian musical thought makes note of similar number symbolisms (1992: 61–64; 218–219). Sankaran (1994: 27) mentions possible mythological/cosmological origins of the *nadai*s, including the origin of the particular order in which the they appear today, i.e., 4, 3, 7, 5, 9, through references to the dances of Lord Shiva as told in the *Bharatarnava of Nandikeshvara,* a compilation of rare texts pertaining to dance and music, and *The Ocean of Rhythm*, a 17th-century work on *tala* by Vanapada Chudamani. Of particular interest here is that *chatusra nadai* (4) is used by Lord Shiva before *tisra nadai* (3), and *misra* (7) being a combination of the first two, appears before *khanda* (5), which literally means "split," being the sum of 3 and half of 4, and *sankirna* literally means "composite" and is believed to encompass several mixed *nadais* until it evolved into referring specifically to 9 in modern usage. This idea of combination and permutation of numbers appears across all levels of Indian musical thinking, especially in the systematization of rhythmic principles, as evident in the *Tala Dasa Pranas,* and also in practical exercises which will be presently discussed.

Let us summarize the features of *nadai* before looking at some examples of its use in exercises and cadential compositions. First, *nadai* is considered a practical, performance aspect. This was explained once in a conversation between the author and Professor Trichy Sankaran, where the latter explained that if one was to only hear a *tala* being played without any additional pattern, there would be no way of discerning the *nadai* of the piece. The conception of *nadai* as a performative aspect also underscores the directness and transience of the musical experience in oral traditions, where music is perceived aurally and orally first and foremost.

Secondly, from the author's experiences as a student of the *kanjira,* training in *nadai bedham* becomes a profound training tool for musicianship and rhythmic stability and versatility. In Karnatic percussion lessons, *nadai* is used as a transposition tool, where one exercise can be modulated to be performed at different beat subdivisions. Transposing an exercise into different *nadai*s also helps reveal varying rhythmic relationships between certain patterns and the underlying *tala.*

As mentioned above, the other essential element in understanding *nadai* and *nadai bedham* is the steady tempo that must be maintained. In other words, modulations in beat subdivision is only possible through the steadiness of the *tala;* modulation in the inner division of a pulse or beat can only be effectively realized when the beats or pulses themselves progress at a steady rate. This one practical aspect of *nadai,* in a way, embodies and conveys many of the aesthetic values of Karnatic rhythm – the musical and ideological implication of keeping steady *laya,* the derivation of musical variety and demonstration of rhythmic virtuosity through rhythmic transposition, and the inseparability of musical methods and ideas from their cosmological and philosophical origins.

4. Examples of *Nadai* – Exercises

The remainder of this discussion focuses on illustrating the practical use of *nadai* through a presentation of rhythmic exercises. The following examples and descriptions are drawn from the author's own training in the *kanjira* with *mrdangam* master Trichy Sankaran, and from Sankaran's own examples in his textbooks. Most of the examples used are short compositions called *korvais,* which literally means "strung together," and is a common cadential form consisting of various phrase structures arranged in sequential order following traditionally used *yati,* or geometric shapes representing the principles of reduction and expansion. The *korvai* is an ingenious musical invention of the Karnatic tradition, which allows almost infinite potential in rhythmic creativity that can be developed within strict formal rules.

Despite the complexity and comprehensiveness of the Karnatic rhythmic system, the beat subdivision by a factor of 4, *chatusra nadai,* is still the most common *nadai* used today, analogous to the Western idea of subdividing a beat into sixteenth notes. This is followed by *tisra nadai,* a subdivision of the beat into 3 or factors of 3, i.e., triplet subdivision. The next two, *khanda* (5) and *misra* (7) *nadai,* is less commonly used as a basic subdivision for entire pieces, and more often as a pulse modulation within improvised or extended percussion solos, as can be found in performance and instructional recordings of Trichy Sankaran (Sankaran 1989, 2006, 2010). On the other hand, the Tirrupugazh tradition mentioned earlier in the discussion has been known to use *khanda nadai* as an essential beat subdivision within its repertoire (Sankaran 1989), and it should be noted that *sankirna* nadai is essentially an extension of *tisra* nadai in that it is also based on the factor of 3.

The following simple *korvai,* realized in the rhythmic context of the 8-beat *adi tala,* illustrates the commonly used *chatusra nadai,* as well as the principle of reduction that is the essence of the *korvai* form, which is traditionally symbolized by the *gopuccha yati*, or the shape of an upside-down triangle. The syllables used here are known as *solkattu* or *konnokol,* the system of spoken rhythms used in Karnatic music as a pedagogical

tool for percussion instruction, where each syllable corresponds to a particular drum stroke on the *mrdangam* or *kanjira*. Having said that, *solkattu* can also be used outside of drumming instruction, as a performance art form in itself, and at times, a musician who strictly performs *solkattu* can be found among a Karnatic percussion ensemble known as a *talavadya kacceri.* The study and art of *solkattu* is a vast subject in itself and many of its features and usage are beyond the scope of this discussion, but suffice to say that it is one of the most distinctive and accomplished rhythm pedagogies of any oral musical tradition. In written form, *solkattu* acts as a effective tool for the delineation of rhythmic patterns and phrases as seen in the following example, in combination with and in relation to the indication of the *tala* notated above the *korvai*. Other elements to note is the starting point of the *korvai.* In the Karnatic tradition, the ending point of any musical structure, whether a cadence or an entire composition, is always *sam,* or the first beat of the *tala.* Therefore, it is essential for the student to know where the *korvai* must start in order for it to end on *sam.* This is essentially a mathematical skill that is developed through such exercises, but, as seen through virtuosic performances of performers such as Sankaran, this skill goes far for percussionists who can calculate the number of beats within which complex *korvais during* an improvisation such that their solos will still end on *sam.* In the case of our small example, the *korvai* begins on beat 5 of the *adi tala* cycle.

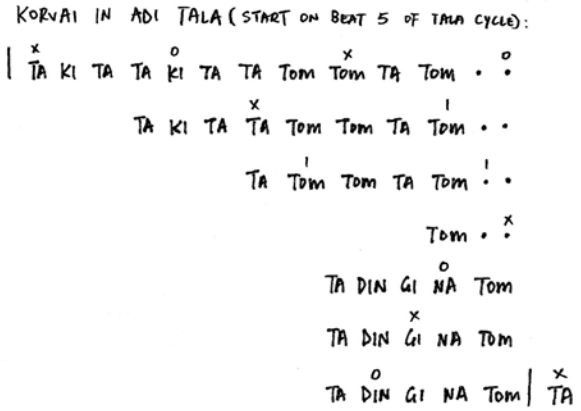

Figure 5. *Korvai* in *adi tala, chatusra nadai*

The next example is a *korvai* similar to the one above in terms of the phrases and method of reduction used, but one quarter-beat rest is added between each of the phrases (represented by a dot), an additional "ta din gi na tom" at half speed is inserted before the the final isometric threefold repetition of the phrase "ta din gi na tom" (a smaller structure known as a *mora*) is performed in *tisra nadai.* Note that these small changes – an additional quarter-beat between phrases, the addition of a single short phrase, and the *nadai bedham* at the end, results in the *korvai* starting on beat 1 instead of beat 5 of the same *tala.* Thus, learning and practicing these two *korvais* enables the student to understand and process how patterns and phrases are shifted within the *tala* as a result of small variations, and the precise starting and ending points within the *tala*, which are extremely important in the culture-specific context.

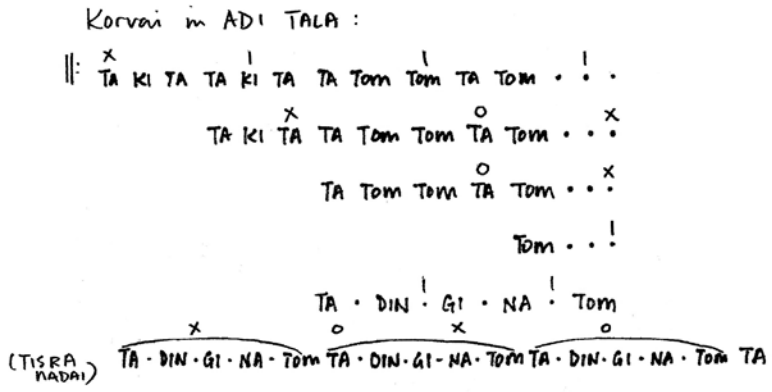

Figure 6. *Korvai* in *adi tala, chatusra nadai*, with end *mora* in *tisra nadai*

Below is a simple and short *korvai*, referred to as the "9-7-5-3" exercise, that can be performed as an exercise in both *chatusra* and *tisra nadai,* and, as indicated in the note above each exercise, in different tempos, i.e., half speed and double speed. Again, the reductive principle is used here on the phrase "tom - ta - tom - ta ki ta". In fact, any exercise can and is encouraged to be practiced in different tempos, as well as from one *nadai* to another as a way to develop one's sense of *laya.*

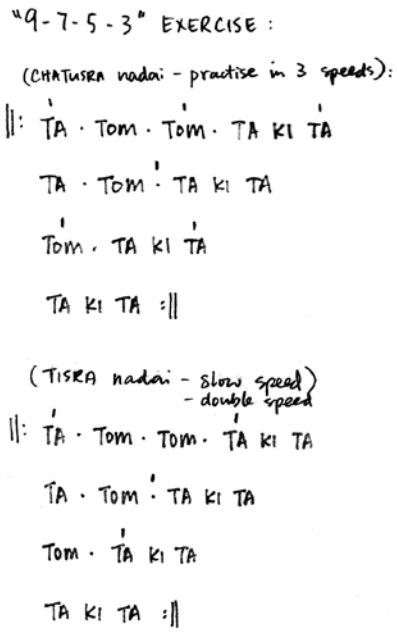

Figure 7. "9-7-5-3" exercise, in *chatusra nadai* and *tisra nadai*

The next example is a *korvai* that has been adapted to a number of lessons in the author's study of the *kanjira*. It was first used as an exercise in playing in the *khanda chapu tala,* a 5-beat folk *tala,* as well as for practicing *nadai* changes between *chatusra* and *tisra*. It was also used for familiarization with the commonly used phrase "ta din gi na tom," which could be replaced in the exercise with variations such as "ta ki ta kita tom" or "kitataka tom taka tom." The exercise in *chatusra* and *tisra* nadai is indicated in Figure 8.

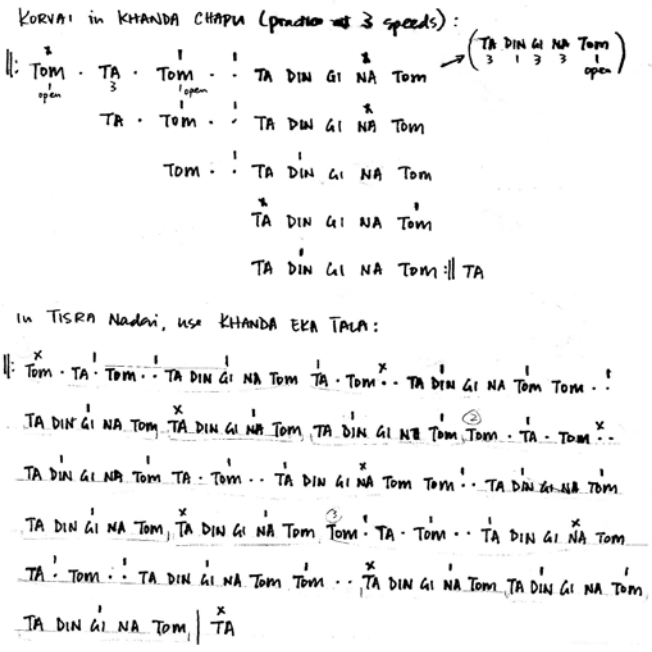

Figure 8. "Tom Ta Tom" *korvai* in *chatusra nadai* and *tisra nadai*

This same *korvai* was later transposed to *khanda nadai*, in which case it fits within one cycle of *adi tala.* The phrase "ta din gi na tom" was then expanded to a 7- and 9-unit phrase, by systematically adding two and four quintuplet beats respectively, resulting in the 7-unit phrase "ta . ta din gi na tom" and 9-unit phrase "ta . di . ta din gi na tom." These expansions were inserted into the exercise, so that the original *korvai* was repeated three times in succession within 4 cycles of *adi tala*, as shown in Figure 9.

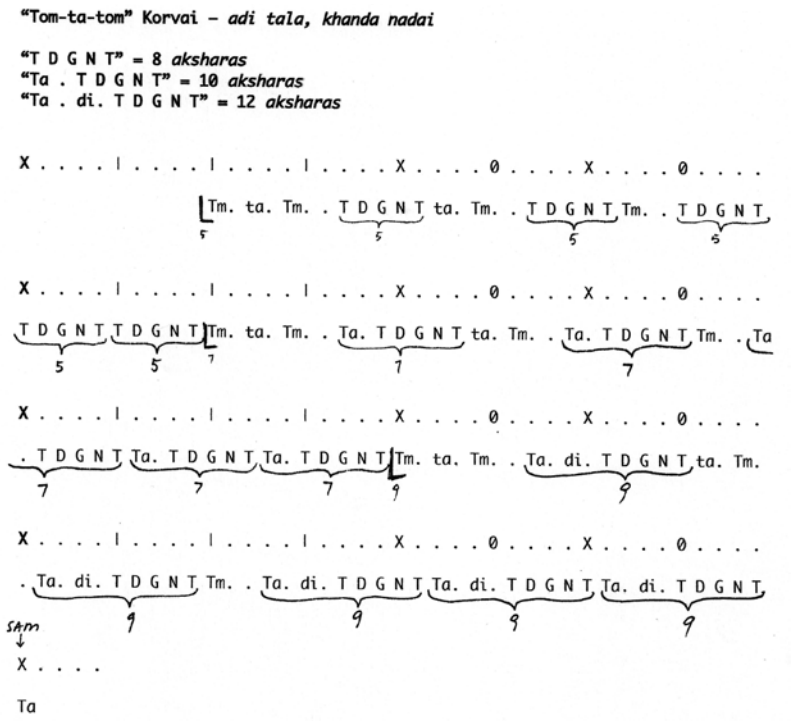

Figure 9. "Tom Ta Tom" *korvai* repeated 3 times in succession,
with expansion of the phrase "ta din gi na tom," in *adi tala, khanda nadai*

Finally, Sankaran offers some simple exercises in the other two *nadai*s, *misra* and *sankirna*, rendered in Western notation in his textbook on *solkattu* (Lalith Publishers 2010) (Figure 10).

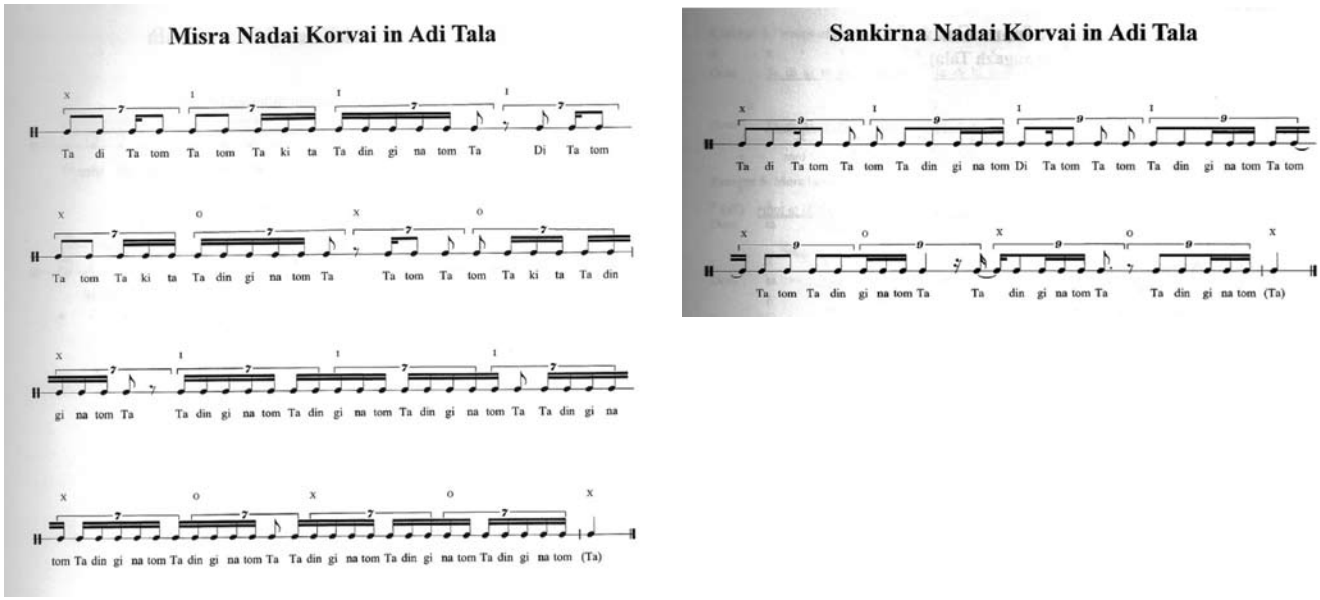

Figure 10. Exercises in *misra* and *sankirna nadai.* From Sankaran, Trichy (2010).
The Art of Konnokol: The Spoken Rhythms of South Indian Music. Toronto: Lalith Publishers, p. 83 & 85

These exercises presented above hopes to demonstrate, if only in an introductory way, the power of applying the concept of *nadai* within the Karnatic context to transform simple phrases, patterns, or sequence of patterns into more complex compositions and rhythmic counterpoint, by integrating the concept of beat subdivision with other transformational principles such as expansion and reduction. Sankaran and many other percussion masters in the Karnatic tradition, the true *laya vidwan*s, have demonstrated in numerous performances their virtuosic command of *laya* and creative use of *nadai* in traditional repertoire, percussion solos, and rhythmic exchanges in *talavadya kacceri* ensembles.

Conclusion

The principle of *nadai* in Karnatic music is firmly rooted in the concepts of *laya* and *tala* within the South Indian rhythmic system. Rhythm and the more general concept of the flow of time in the musical traditions of India have always occupied great cosmological and philosophical significance, for the Indian world view has always engaged in the interplay of diversity in unity, and the juxtaposition of variation with constancy. These dichotomies are represented through the genius of Indian music throughout its history, and the concept of beat subdivision and its modulation within the context of a steady, consistent *tala* is as good a manifestation of this philosophical outlook as one can find in the musical system of South India. *Nadai,* although traditionally regarded as a performative aspect, nevertheless embodies certain aesthetic values and ideals associated with Indian mythologies, through its connection to the concept of *laya* and the challenge of executing the time-keeping function of the *tala* with mastery and consistency. Although the Karnatic rhythmic system is a complex framework of formal principles and structural concepts, an overview of some of the more important ones, namely, *tala, laya,* and *jati,* was helpful in grasping a better understanding of how the concept of *nadai* functions in a culture-specific context. Through examples of rhythmic exercises from the author's own training on the *kanjira, nadai* in fact functions as a versatile transpositional tool for rhythms and enable a performer to create immensely complex rhythmic counterpoint against the all-pervasive *tala.*

References

Arom, Simha (2004/1991). *African Polyphony and Polyrhythm.* Cambridge: Cambridge University Press.

Groesbeck, Rolf (2003). Dhim, Kam, Cappu, Pottu: Timbral Discourses and Performances among Temple Drummers in Kerala, India. In *Yearbook for Traditional Music,* Vol. 35: 39–68.

Kanhere, S.G. (1926). Some Remarks on Indian Music. In: *Bulletin of the School of Oriental Studies, University of London*, No. 1, Vol. 4: 105–120.

Knipe, David M. (1972). One Fire, Three Fires, Five Fires: Vedic Symbols in Transition. In: *History of Religions,* Vol. 12, No. 1: 28–41.

Rowell, Lewis (1992). *Music and Musical Thought in Early India.* Chicago: University of Chicago Press.

----- (1986). The Ancient Tala System: A Comparative Approach. In: *The Journal of the Music Academy*, Vol. LVII: 83–99.

Sankaran, Trichy (1986). Improvisation in Indian (Karnatak) Music with a Special reference to its Rhythmic Aspects. In: *The Journal of the Music Academy*, Vol. LVII: 100–109.

----- (1989). Rhythmic Analysis of Some Selected Tiruppugazh Songs. In: *The Journal of the Music Academy*, Vol. LX: 92–102.

Audio Recordings

Trichy Sankaran, *Laya Vinyas,* Music of the World #120, 1992, compact disc.

-----, *The Art of Konnokol (Solkattu)*, Trichy Sankaran, 2010, compact disc.

-----, *Gaja Leela,* Charsur, 2006, digital album.

Santrauka

Tyrinėjant *nadai* – ritmo subdivizijų koncepcija Pietų Indijos muzikoje

Tamilų terminas *nadai* (arba sanskrito kalba *gati*) randamas Pietų Indijos (Karnatakos regiono) ritminėje sistemoje, apibūdinant muzikinio pulso ritmines subdivizijas. Tai yra ir *laya* koncepcijos komponentas, vienas iš dešimties Pietų Indijos ritmo teorijos principų, *Tala Dasa Pranas*. Pagal platesnę *laya* sampratą (ji pažymi tempo pojūtį ir tvarkingą laiko tėkmę) *nadai* rodo „greičio ar judėjimo tempą" arba „skaičių ir tempą, pagal kurį vidinės pulso divizijos tampa žinomos kiekvienam *ashkara* (metro daliai) ar *tala* (ritminiam ciklui)" (Sankaran 1994: 25). *Nadai* gali būti laikomas Vakarų muzikos metro ir poliritmijos koncepcijų atitikmeniu.

Vis dėlto jeigu muzikinio metro principai Vakaruose tapo daugelio kompozicijų, teorinių diskusijų ir ritmo analizės studijų objektu (Cooper ir Meyer 1960; Magadini 1968; Schillinger 1966), *nadai* koncepcija Karnatakoje nebuvo dažnai nagrinėjama akademinėse ar teorinėse diskusijose. Tai susiję su tuo, kad *nadai bhedam* – vidinio pulso dalijimo kaita – Karnatakoje laikoma labiau praktiniu ir taikomuoju įgūdžiu, o ne teorine koncepcija. Nors moduliavimo tarp metrinės kaitos teorija ir praktika nėra būdinga vien tik Karnatakos tradicijai, šiame straipsnyje siekiama nušviesti estetines ir muzikines *nadai* vertybes Pietų Indijos

muzikos kontekste – jį sudaro muzikos kaip visumos ryšys su kosmologiniais principais ir tam tikrų skaičių svarba išreiškiant tokius idealus.

Straipsnyje siekiama išaiškinti *nadai* koncepciją Karnatakos ritmo sistemos kontekste, ypatingą dėmesį skiriant pamatiniams Karnatakos muzikos klausimams – *tala* ir *laya*, kurie yra neišvengiami aptariant *nadai*. Apžvelgus Karnatakos muziką, susitelkiama į *nadai* kaip performatyvią ir praktinę koncepciją. Ji iliustruojama pavyzdžiais, kuriuos autorė išmoko *kanjira* (Pietų Indijos rėminis būgnas) studijų metu pas Trichy Sankaran, garsų *mrdangam* meistrą, Toronto Yorko universiteto Pietų Indijos muzikos profesorių, novatoriškų knygų apie Karnatakos būgnijimą ir tradicinę kalbamųjų ritminių skiemenų sistemą *solkattu* autorių.