RHYTHMICAL BEAUTIES IN THE COMPOSITIONS OF MUSICAL TRINITY

By
Dr. DWARAM V.K.G. TYAGARAJ
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of Musical Trinity

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Music has been a great passion to me all along my life. I remember to the best of my memory many a great concerts of eminent personalities right from my childhood, thanks to my revered parents who have imbibed the music culture and heritage to us at an early stage. I have learnt some kritis of Saint Tyāgarāja taught by my mother even while travelling to and from attending Āradhana Festivals of Saint Tyāga Brahma at Tiruvaiyyaru. At the same time Percussion instruments have also attracted my attention, and soon I found myself at the feet of great mridanga vidwans, learning mridangam. This, I suppose, is also one of the factors that have influenced me in choosing the present topic of research.

I used to accompany on mrdangam in concerts and regularly so at home on every major puja occasions like Vināyaka Cavithi, etc; which also had given me an opportunity to learn art of understanding the subtle nuances in the compositions of various vāggīyakārās. My revered father has always asserted, that the most effective way of accompanying would be, as the saint composer has put it, 'Sogasugā Mridanga Tālamu'. Mr. George Santāyana has rightly said 'Music is mathematics made audible', the urge for research in this direction has taken a definite shape during my postgraduate study at New Delhi, Prof. T.R.Subrahmanyan along with my revered father have suggested very aptly the title to my research study. Though it quenched my thirst, the quest has just begun.

To my knowledge several comprehensive studies have already been attempted covering the musical, philosophical and literary aspects in the compositions of the Trinity. Hence I became bold to choose the current aspect as my topic of inquiry.

I wish to use this opportunity of a 'Preface' to acknowledge my indebtedness and gratitude to my teachers, friends and acquaintances, who have directly and indirectly helped me and made this work possible. It is both a duty and for me to place on record my sincere thanks to all of them.
To begin with, I invoke the blessings of my grand-parents; My paternal grand-father the late Sangītakalānīdhi, Padmaśri Dr. Dwāram Venketaswāmy Nāidu garu, whose name is etched in golden letters on the annals of Karnātak Music of this century, and my maternal grand-father the late Vidwan Gummuluri Satyanārayana Pantulu, a great Āṅgīraśkrit scholar, generous patron and philanthropist. It is my conviction that the merit I must have acquired over a series of 'Janmas' in the past has enabled me to be their grand-son. I like to believe that from the celestial regions above, they have been indulgently watching my progress and blessing me. It is my good fortune that my father, Sangītakalaprāpoorna, Gāndharvavidyābhūsana, Prof. Dwāram Bhāvanārāyana Rao, and my mother, Vidushi Smt. Venkata Varadamma, have been my teachers of music. They have been as much involved in my research as I am myself. I bow down to them in gratitude.

It is very difficult for me to express in words my gratitude to my research guide Sangita Vidwān (Dr.) Sri G. Mohan Rao garu, Head of the Department, Vocal Music, S.V. College of music and Dance, Tirupati. He is a unique Personality and a rare combination of the intellectual, aesthetic, philosophical and spiritual. Few are steeped in Indian tradition and culture like him. As my research supervisor, he has been meticulous, searching and penetrating in his questions as well as insights, impatient of superficial views and adhoc judgements. He taught me Research - Methodology, Chapter Alignment and gone through each and every aspect showing great care and affection for me. He has been more than an academic guide to me. Association with him has enabled me to grow inwardly. To him I can only say in all humility, 'Thank You' for what I have received. I'm also thankful to the members of my Guide's family, Smt.G. Mohan Rao garu, Chy.Kum. Lavanya and Chy.Kum. Vasavi.

I have had the opportunity to learn from a number of great and distinguished vidwans from time to who have enable me to grow and develop as a student of both Karnatic and Hindustani style of Indian classical music. To Sangītacārya J.V. Subba Rao, Sangīta Vidwān Sri Pemmarāju Sūrya Rao, Sangīta mahāmahopādhyāya, Śri T.R. Subrahmanyan, Sangītakalānīdhi Śri Nēduṇūri
Krishnamūrti, the late Sangītakalānīdhi Sri D.K. Jayaraman and others from whom I have valuable insights into music, I pay my humble tribute of thanks.

In the Department of Music Dr. Gauri Rāma Mōhan (Coordinator) and other Teaching Faculty deserve my thanks for their sympathy, cooperation and encouragement.

The Librarians of Andhara university, S.P.M. Viswavidyalam, Śri Venkaṭēśwara University, S.V.U. Oriental Institute, Rashtriya Sanskrit vidyapeetha, Tirupati, Govt. Oriental Research Institute (Chennai), Madras University Library (Chennai), and Central University, Hyderabad, readily made available to me several books, and periodicals required for my studies. I remember their invaluable help with gratitude.

I am greatly indebted to (Late) Śri Pērāla Lakshmania Rao, Smt. & Dr. V. Chandrasekharan, Smt. & Srī K.T. Sastry, Smt. & Sri Dr. G. Iswara Prasad, Smt. & Sri G.M.B. Prasad and Smt. & Sri G.R.K. Prasad and their families for sustaining me with their moral support.

I have intentionally waited till to express my gratitude to the members of my family. They have been at the back of every one of my efforts, always encouraging and supporting. To all of them Smt. Dwaram (Nemani) V.J. Lakshmi & Sri Nemani Venkataramana, Smt. Dwaram (Silamsetty) Padmasree and Sri Silamsetty Prabhakar (USA) Sri Dwaram A.V. Swami and Smt. Dwaram (Battula) Manisree, and my betterhalf Smt. Dwaram (Kandula) Nagamani, and Chy. Sunil Selamsetty, Chy. Anil Kaivalya, Chy. Bhavana Dwaram, Chy. Tej Bhavan Silamsetty Chy. Sai Dwaram and Chy. Varada Narayani Priya Bhavana Dwaram. I convey loving thanks. My respects are also to my uncle (late) Sri Dwaram Satya Narayana garu, who had always encouraged me both in my professional and personal matters.

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It is appropriate to end this preface expressing with a humble and devout gratitude to God for the many blessings He has showered on me. I have known from experience that not even a blade of grass can stir without His 'sankalpa'. 
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Introduction
CHAPTER - 1
INTRODUCTION

Music pleases all is a simple statement of fact universally accepted. The pleasure is experienced by not only human beings, but also believed to influence all creatures in this universe. Further, music possesses the power to influence even inanimate things. The following Popular aphorism in Music:

'Sisurveti pasurveti vetti ganarasam phanih'

It means that the child, the animal and the serpent enjoy music. It may be interpreted, in other words, that music is enjoyed by the ignorant, the brute and even poisonous. Both Indian, and European support, if not confirm the afore-said views.

'...Jantra gatramula ralgaragincu
vimala gandharavambu vidyamadi...'

meaning, our music is such that it melts even stones. This speaks of the supernatural power of music even on the inanimate things.

Literature-pauranic, poetic, historical etc; since ancient times to date, abounds in references to the greatness and supreme powers of music.

In India, music is regarded as a from of God.

'Kavyalapascya Kecitgtani sakalanica
sabda murti dharaisyeti Visnoramsa mahatmanah'.

-Visnu Puranam

Kavyas and music which are forms of sadba(nada) are the forms of God. Nada(sound) is the very body of God. God is 'nadatanu'

'Nadatanum anisam Sankaram namami' says Tyagaraja.'

'Nadamadhye Sadasivah' meaning Lord Siva is in the centre of the sound.

'... Nada tanum tamuddhura jagatgitam mude sankaram'

-Sangita Ratnakaram

Worship of Nada is worship of God. According to the ancient musicologists, Nada is of two varieties, namely Ahata and Anahata.
Ahata nada is music that could be heard and practised by the common man whereas Anahata Nada is that sound which risis[saints] can hear and practise. That is to say sound that within the audibility of human eara is Ahata Nada; and that sound which is beyond the capacity of the human ear to hear is Anahata Nada. Thus, it is that Ahata Nada could be heard and cultivated is widely known as Sangita.

Originally the Song, Vocal and Instrumental, and Dance - all the three have been said to constitute Sangita.

' Gitam Vadaym tatha Nrityam trayam Sangitamucyate' 

In the course of evolution, Music in India has been evolved as a separate and individual branch of fine art, with its theory and practice, and, yet continues to be an important constituent of Dance.

It is a universally accepted fact that Rhythm is the basis for all natural phenomena and that all world-processes follow the Law of Rhythm. And thus the ultimate basis of everything is vibration. Vibration in its turn involves the idea of time, space and movement. And Rhythm is only ordered movement in time and space. We thus see the basic value and significance of Rhythm. Ordered movement in any kind of phenomena is the fundamental basis. We thus realise the basic value of Rhythm: Laya, vibration, ordered movement. There may be all Kinds of movement, but only ordered, disciplined, well planned movement can fit in with the basic laws of Nature.

The study of the evolution of music in India as both Science and Art makes it very interesting and absorbing. A great deal of scientific approach and always with an eye and ear for 'ranjakatva', 'pleasing effect' has gone into making Indian music and its systems what it is today unique, great and outstanding-among all the systems of music the world over.

Many a reference to music are found in the ancient Puranic lore. Music in India has its beginning in the Vedic period. It is said to have been derived from Sama Veda and grasped by Brahma, the God of Creation.
'Samavedadidam Gitam Sanjagrahapitamahah'
- Sangitaratnakara of Sarngadeva

Available literature on Music, however, dates back to the time of Bharata (which is regarded to be between the 2nd cent. B.C. and 4th cent A.D). Treatise, of great importance continued to be written up to the 18th cent. A.D. Tracing and recording the developments that took place from time during the centuries of its progress.

At the time of Bharata itself scientific experiment of sorts was conducted to find out, and confirm the minutest intervals called 'Srutis' amidst the svaras (notes) of the first scale known as sadja Grama or Sama gana murcana. Further experiments on the basis of Modal Shift of Tonic resulted in more melas which, in course of time, and with some specified characteristics or lakshanas were named 'jatis'. By then, notes(svaras) other than those of the gramas-sadja and later Madhyama gramas till then called 'Suddha Svaras', came to be sung and be in vogue.

The term 'jati' is regarded as the ancient equivalent of the modern 'Raga'. Thought the word, 'Raga' has been found used in a general or literary sense much earlier, it was Matanga, in his Brihaddesi, defined the Raga in the modern sense of the term in music, as follows:

'Yoasau dhwani visesastu svara varna vibhusitah'

'Ranjako jana cittanam sa ca. raga udahritah'

With the groupings, permutations and combinations of svaras ranges, also called meals, came to be sung, and compositions in the ancient Melas had been created. In the ancient period in music such composition termed Prabandhas were in vogue and quite a large number of their varieties are found mentioned in the earlier musical works, Sarngadeva's Sangitaratnakaram(13th cent. A.D).

The 15th cent. A.D. marks the beginning of the speedy development of music composition in South India, with the songs called padas of Purandaradas known as 'Dasara Padagalu', and the
Adhyatma and Srinagara Sankirtanas of Tallapaka Annamacaryulu, their compositions running into thousands, and lakhs. Annamacarya senior in age to Purandaradas is credited with having composed 32,000 songs, while Purandaradas on one of his songs, mentioned having composed four lakhs, seventy five thousand songs.

Besides composing the fantastic number of songs, the credit of systematizing the course of learning Carnatic music goes to Purandaradas; and he is rightly called the Carnataka Sangita Pitamaha.

It may also be noted that the sankirtanas of Annamacarya having been kept hidden in a very small room-like place known as 'Sankirtana Bhandaram' in the premises and by the side of what is called 'Bangaru Logili' of the temple of Lord Sri Venkateswara, even though composed in the 15th cent. A.D., saw the light of day about four centuries later!

Great devotees and saint-musicians, like Ramadas, Narayana Tirtha, Munipalle Subrahmanya Kave and others composed kirtanas of devotional import, while Kshetrayya, and Sarangapani, in the 17th century composed beautiful songs of Sringara Bhava (regarded as of Madhura Bhakti).

What had, up to this stage in the course of development in South Indian or Carnatic music mainly, devotional, simple compositions, called 'Kirtanas' henceforth came to be enriched by more musical content with richer fragrance of the unique product of the amalgamation of melody and rhythm, and had blossomed into 'Kritis' and have since attracted, more and more, the composers, musicians, the connoisseurs, the learned as well as the laity. Kritis have become the mainstay in the musical concerts today.

Kritis, at the hands of the great composers-trio, have attained perfection as 'musical compositions' from the view-points of artistic, lyrical, literary, philosophical, technical and aesthetic content. The three great composers Tyagaraja, Muthuswamy Dikshitar and Syama Sastri are together revered as the Musical Trinity.

The excellencies in the compositions of the Musical Trinity are
varied and innumerable. Of them, the rhythmic and melody aspects render the technical and aesthetic aspects form the subject of study and analysis for this thesis. The subject of rhythm is, in fact, by far technical than melodic. But when rhythm amalgamizes with melody, it becomes a rare beauty. The compositions of the Musical Trinity abound in such beauties. That is the reason for the title of this thesis.

The relationship between the Laya and Melody is discussed in the course of this thesis. This thesis, in short, is a humble but genuine attempt to understand, find, analyze the rhythmic beauties this in the compositions of the Musical Trinity. Towards achieving this aim, the thesis is divided into nine chapters, including this 'Introduction'.

In the Second chapter titled: 'The Importance of Laya in Indian Music', the absolute importance bestowed on Laya along with Sruti, the genre of Svara as found in the ancient works on music will be illustrated.

Many important treatises on ancient times are seen to expound the Tala, in general. The Third chapter deals with the topic of 'The Exposition of Laya in Ancient Treatises on Music'.

Laya or rhythm indicates, broadly, the tempo or speed in which the music runs along-fast, middle or slow. But Tala, fixes up or pins down the rate of speed in terms of its angas, kriyas or units called aksarakalas. Tala, in fact, has been regarded as of divine origin, and being invariably linked with all types of musical compositions compounded in the ancient musical works, under ten branches each of which is held as important as life itself. They are known as Tala Dasas Pranas. In the Fourth Chapter 'The Application and Explanation of Tala Dasas pranas' is given a detailed treatment.

While some features of Laya are seen in common in the musical compositions, yet some are seen different in some of the compositions. Such aspects are discussed in the Chapter five under the heading, 'The Aspects of Laya in Musical Compositions'.

The next three chapters form the main content of subject of this
thesis. Differently titled though, they together bring out the essential beauties of rhythm in common, as also individual, in the compositions of the Musical Trinity.

Chapter Six exposes 'The Variety of Laya-Patterns in the Compositions of Tyagaraja; the chapter Seven shows 'The Treatment of Rhythmical Aspects in Sri Muttuswami Dikshitar’s Compositions'. And 'Special flair for rhythmical exercises in the compositions of Syama Sastri' is expounded in the Chapter Eight.

As afore-said the three chapters VI to VIII are aimed at revealing the technical as well as aesthetic excellences together constituting the rhythmical beauties in the Musical Trinity's compositions.

Chapter Nine, the 'Conclusion' is a review of sorts summing up all the accounts given in the preceding chapters. It stresses, further, the necessity to make an analytical study of rhythmical aspects in the immortal compositions of the three great Vaggeyakaras, so that an all round or comprehensive greatness can be appreciated. This chapter concludes with expressing, in all humility and sincerity the scholar's venturesome attempt at a topic which is both sublime and deep, and indicates the possible channels of further enquiry.

NOTE AND REFERENCES


2. Nada madhye Sadasivah - Siva sarvasvam.

Chapter - II

The Importance of Laya in Indian Music
CHAPTER - II
THE IMPORTANCE OF LAYA IN INDIAN MUSIC

It needs but an understanding of the Laya and its ramification (i.e; the rhythm and its patterns and varieties) and a sense of the appreciation of the melodic beauty. It demands, as it were, a good deal of both intellectual and aesthetic understanding, which means that one should be a Vidwan as well as a rasika. This dual combination in one and the same person is rare and well nigh impossible. Thus, this attempt at nothing down the factors involved in the rhythmic beauties no doubt is venture-some but richly deserves deep understanding of the ultimate purpose of diverting a superficial appreciation of either music or rhythm, separately, towards a worthy cause or ideal of a comprehensive idea and the very profound purpose of Indian music, as a whole.

Aiswaryam ganapurnetu vadya sphurtau subhavaham
Dirghayusyam nrittapuratal tala sphurtau tu rajyadam

To make a beginning it is proposed to deal with the rhythmic aspect of music, rhythm as understood in Indian music, its place therein, its variety etc.,

**Rhythm**, in the parlance of popular terms of **Indian music**, connotes **Laya**. The terms **Rhythm** and **Laya** are regarded synonymous. Laya is a comprehensive term used to indicate the general speed or movement. Likewise, also the laya and tala are loosely used to convey the time or speed of music.

Laya occupies a prominent place in music. It is one of the ten important aspects of Tala, each of which has been regarded as important as 'Life'. They are known as **Tala Dasa Pranas**.

In musical composition **laya** has the utmost Importance; the very speed in which a particular composition has to be sung is indicated by laya. Traditionally Laya is of three varieties **Druta, Madhyama** and **Vilambita**. They indicate, respectively, the fast, middle and slow tempos. All compositions set to music maintain specific units of time, uniformly, in the angas of Tala. Compositions
vary in the speed or tempo in which they have to be rendered. To sing a song or composition of a Vaggeyakara in a degree of speed other than it is intended for by him is not only improper but it surely miscarries or loses its innate flavour. For example, the kritis in kalyani raga, E tavunara of Tyagaraja and kamalamam bhajare of Muttuswami Disksitar should never be rendered, in Druta laya, not even in madhya laya. They should be sung only in Vilamba laya. Likewise, the kriti, 'Sara sara samaraikasura' of Tyagaraja in Kuntalavarali ragam Adi tala should be sung in druta laya, or else it certainly fails to have its impact on the listener, as intended by the composer.

Any composer worth the name will surely have in his mind the laya of the song he conceives creating. The tempo or laya will have bearing on the bhava of its sahitya too. For instance, if a song of soulstirring appeal or intensive feeling of the tempo, technically known as druta laya, such song not only fails in its appeal, and purpose, but tends to be ridiculous. Every musician is expected to understand the laya of the song as possibly conceived or meant by its composer. Besides following the traditional manner in which this song has been sung, the musician should be able to follow the sense and tenor of its musical setting. Only then will he be able to produce the effect, and do justice to the song, and its composer, as well.

While the rendering of songs set in Vialmbita laya requires, on the part of the musician, more proficiency in keeping up steady, accurate and uniform laya, songs in druta laya demand facility of voice or command over his instrument for the vocalist or instrumentalist, respectively, for speedy renderings. Songs composed in madhyamakala lend themselves for rendering comparatively easier and more facile for the average singer.

Thus, laya attains a great deal of importance in music. It may be mentioned that in the common usage, or colloquially, the word Kala is spoken for laya, it is common usage to say, the song is in druta kala, cauka kala or madhya kala for druta layam Vilmabita laya or madhya laya respectively.
Kala, however, has an altogether different meaning, as a Tala prana. The difference will be explained in the next Chapter which deals exclusively with Tala dasa Pranas.

Now to quote but a few instances from the kritis of great composers, denoting the place and order of importance of laya in music, here are:

'Vara raga layajnulu' - Tyagaraja
'Bhava raga layadi saukhyamuce - Tyagaraja
'Raga layadula bhajiyincu' - Tyagaraja
'... tantri laya svara gana viloluru' - Tyagaraja
'Svara raga laya sudharasa'... - Tyagaraja
'Nada layanandakaram' - Muttuswami Diksitar

and so on.

In fine, the very famous aphorism 'Srutir mata layah pita' giving laya the status of a parent itself declares in unmistakable words, the place of prominence given to the aspect of laya in music.

NOTE AND REFERENCES

Chapter - III

The Exposition of Laya in Ancient Tratises on Music
CHAPTER - III
THE EXPOSITION OF LAYA IN ANCIENT TREATISES ON MUSIC

In the previous Chapter, it has been clearly shown how great importance has been given to Laya in Indian music. The very age-old aphorism stating Sruti and Laya are the mother and father is self explanatory.

The comparison is very significant. The mother nourishes the child, pours all her love on it, and makes it grow. But if all this is in disciplined, the result may be very disastrous to the child. The father comes in to discipline the process of growth, thereby ensuring safe and ordered growth. In Music, Tala comes in to discharge the function of the father and ensure fulfilling its true purpose.

Laya or rhythm has a rather loose import in terms of time measure. It is not constrained by any specific bonds in keeping musical time. Laya restricted by certain specified rules, and confined within the bounds of musical laws takes the form of Tala system. Tala tends strength of support for the various branches of Indian music. Music (vocal and instrumental), and Dance have their deep and firm roots in Tala.

'Gitam vadyam tatha nrityam yatastale Pratisthitam'

Like in all aspects of music, Tala, too, has been associated with divine beings.

According to the traditional belief, the letters 'ta' and 'la' in the word tala represent the powers of the Siva and His consort Goddess Parvati and Tala is the product of their divine union.

'Takare Sankarah prokto lakare parvati smrita ! |
Siva sakti samayoge tala ityabhidhiyate ! ||

Tala regulates the flow and course of music. So, tala is as important to music as chandas or meter is to poetry.

And one who is proficient in tala has been placed on a par with the expert in Vina playing and scholar in the knowledge of Sruti and
jati who attain Salvation (Moksa margam), without strain (which is the ultimate aim of the Indian philosopher or saint). Thus speaks the sloka:

Vinavadana tattvajnah srutijati visaradah |
Talajnascaprayasena moksamaramg sa gaccati ||

Tala having been regarded as of such practical as well as philosophical importance in Indian music, it is no wonder that many a treatise on music, since ancient times, included a special Chapter on the subject in their works.

From Natya Sastra (2nd Cent. B.C. - 4th A.D.) to Raga Tala Cintamani of Govinda (18th Cent. A.D.) several treatises on music have allotted a Chapter on Tala.

Somanatha (12th-13th Cent. A.D.) in his Panditaradhya Caritra dealt with 108 talas, and Salaga talas. The names of the talas mentioned by Somanatha tally with or are similar as those given by Sarngadeva in his Sangita Ratnakara.

Sarngadeva (13th Cent. A.D.) in the Taladhyaya of his Sangita Ratnakaram treated the subject extensively. Tala is inseparable from kala and is measured in units like Drutam, Laghu, Guru and Plutam.

Talas were broadly marked as Margi and Desi. Margi talas were complex. From the smallest unit, namely Nimesa up to the largest unit, i.e., Daksina having duration of forty nimesas, the various constituents of the tala were divided as follows:

5 Nimesas made up a Matra or Laghu
1 Druta took half the units of Laghu
2 Laghus were equal to a Guru
3 Laghus formed a Vartika and
2 Vartikas were equal to a Daksina;

besides these were kasta and Kala equal to 18 and 30 Nimesas respectively.

Desi talas were, comparatively, simple and almost all of them continue to be in use even today. They were reckoned by Kriyaswhich were of two kinds - Sasabda (which produce sound), and
nissabda (without sound). For example, Pata (later termed Ghata), a beat is a sasabda kriya. It is reckoned by hitting the palm of the left hand with that of the right hand and Visarjita its mode of reckoning being, lifting up the palm (of the right hand) and dropping it down to the right side with the palm upwards and, also, counting of fingers are nissabda kriyas. Both the sasabda and nissabda kriyas are, again, of four varieties each Dhruva, Cholika, Tala and Sannipata were the Sasabda Ktiyas. Nissabda Kriyas were Avapa, Niskrama, Viksepa and Pravesaka (the term later changed its name). The modes of reckoning all the kriyas - Dhruvakam, Sarpini, Krisya, Padmini, Visarjita Viksipta, Pataka and Patita were explained.

Caccatputa, Cacaputa and Shatpitapatruka and Udghatta talas with their constituent angas were given next. It may be mentioned here that all these went out of vogue in the later centuries. Yet, they left their imprint on the history of tala (or rhythmic) aspects of Indian music.

It may, however, be noted that both the Talavidhana and Taladhyaya in Bharata’s Natya Sastra and Sarngadeva’s Sangita Ratnakaram respectively, did not make as much progress in the rhythmic or tala aspects as, thereafter i.e., since the 15th century, the Suladi Sapta Talas Alankaras enumerated by Purandaradas made. As is but natural even the terminology changed with times.

The angas - Anudrutam, Drutam and Laghu took all the importance in them, and with the varieties of Jati (of laghu) and Gati (the count of aksaras in each kriya in the tala), and expanded the tala system commendably.

In Desi talas the three degrees of speed - Druta, Madhya and Vilambita, and the relationship of dvigunatva between them has been established. Madhyakala takes twice the speed of Vilambakala, and the Druta Kala twice that of madhya kala, i.e., four times the speed of Vilamba Kala. They were termed the Daksina, Vartika, Citra margas.

The three varieties of Yati - Sama, Srotogata and Gopuccha were explained. Graha regarded as the starting point music or musical composition was said to be of three kinds - Sama, Atita and Anagata.
as the starting point coincided, began before, or after the commencement of Tala, respectively.

A total of one hundred and twenty Desi ralas were enumerated with their angas - Viramam, Drutam, Laughu, Guru, and Plutam were attributed to, or regarded as God Siva, Goddess Parvati and Sama Veda respectively as mentioned in Sarngadeva's Sangitaratnakaram.

Tala Chapter of Ratnakara dealt with Prastara in detail about Nasta - Uddista, Druta Meru, Laugh Meru, Guru Meru & Pluta Meru and Samyoga Meru. Chart had also been drawn thereof.

Vema Bhupala, who ruled Kondavidu (1402-1420 A.D.) wrote Sangita Cintamani the manuscript so far available contained the following chapters : Nritta vibhagam, Tala Vibhagam, Vadya Vibhagam, Marga, Desi talas, the lakanas of Susira, Avanaddha, Ghana vadyas & Gita. Among others who wrote treatises on music was Bhandaru Lakshmi Narayana (16th cent A.D.). He wrote Sangita Suryodayam in sanskrit which contained chapters on Tala, Nritya, Svara, Gita, Raga, Jati, and Prabandha. But the work has not been credited with anything special. It may be mentioned in this connection, that except a few of the treatises such as Sangita Ratnakaram, for instance, written in the ancient times, most of the treatises had not given new or fresh information on topics like Talas but merely either quoted from the treatises or repeated the same old matter in their words.

Damodara, the court musician of Tirumala Raya, who ruled the Vijayanagar Kingdom (1570-73 A.D.) and the son of Bhandaru Lakshmi Narayana, author of Sangira Suryodayam) wrote Sangita Darpanam. His work had Adhyayas on : Svara, Raga, Raga - Raginyudaharanam, Prakirnaka, prabandha, Vadya, Vadyaprabandha, Tala Dasa prana, Nritya.

The importance of this work in the Chapters on Raga, wherein he treated the topic of Raga, its origin, etc., in entirely different way from that of Sarngadeva and others. He enumerated the system of Raga - Ragini - Putra - Parivara, which was held as standard in the
North Indian (Hindustani) Music system, and according to which the total number of the ragas was given as 132. **Govinda Diksita** (16th - 17th Cent. A.D.) was said to be the real author of the musical treatise, **Sangita Sudha**, the authorship of which was, however, attributed to king Raghunatha Naik of Tanjore. This fact was revealed by Venkatamakhi, son of Govinda Diksita in a sloka in his **Caturdandi Prakasika**. The **Sangita Sudha** contained the Chapters or adhyayas: Svara, Raga Viveka, Prakirnaka, Prabandha, Tala, Vadya and Nartana. It is strange and rather surprising that the author even while criticising Sarngadeva, copied the slokas in Sarngadeva's Sangita Ratnakara along with Kallinatha's commentary on it, but with the change of meter in the verses, as observed in the critical preface therein. So, obviously no new or additional information on any of the topics including the one on Tala could be found in this treatise too. Now, Caturdandiprakasika, a well known and important work on music was written by Venкатamakhin, son of Govinda Diksita (17th Cent A.D.). It declared to consist of ten prakaranas - namely, Sruti, Svara, Mela, Raga, Alapa, Thaya, Gita, Prabandha and Tala. But, unfortunately, the last Prakarana, that is, on Tala had been lost and not traced so far.

This brings us to the treatise, **Sangita Saramritam** purported to be a work of Tulajendra, ruler of Tanjore on the Maharatta dynasty between 1729-1735 A.D. Tulajaji was credited with authoring several scholarly works on Jyotisa, Mantra, Dharma and Vaidya, Natya and Sangita sastras, besides, composing a hymn on Rama, a curnika in Marathi and paddas in Sanskrit, Marathi and Telugu and also a Yaksagana in Telugu, namely Sivakamasundrariparinaya.

It has been observed by historians of music that most of the works written after Sangita Ratnakara either recast it or referred to, and profusely quoted from the earlier work and/or its commentaries by Catura Kallinatha or Simhabhuapala (and also from Matanaga's Brihaddesi), even as the Ratnakara itself but versified and reproduced large portions of, chiefly, **Abhinavagupta's** commentary on Bharata's **Natya Sastra** and **Nanyadeva's Bharatabhasya**.
Thus, it is seen how extensively the laya - aspect had been expounded in the ancient musical treatises. Besides, the 108 or 120 Margi and other talas mentioned in them, there are many talas used in folk music, and also mentioned in the treatises, like for example, Kurujhampe, Navasandhi talas rendered in ritual music, etc.,.
Chapter - IV

The Application and Explanation of Tala Dasa Pranas
NOTE AND REFERENCES

1. 'Vinavadana...' Yajmnavalkya smriti.
CHAPTER - IV
THE APPLICATION AND EXPLANATION OF TALA DASA PRANAS

Almost all ancient treatises on music carried in them Chapters on laya (rhythm) or, in its restricted sense, tala, and expounded the importance of laya in music, along with Svara, which is the offshoot of Sruti.

'Sravanendriya grahatvat dhvanireva srutirbhayet'
(.... Srutih svara prasadoyam....)

- Brihaddesi of Matanga

**Sruti** and **Laya** regarded, rightly, as the **mother** and **father**, have been at the very root and origin of all Music Sruti gives birth, as it were, to Svara - which pleases by itself.

'Svayam yo rajite yasmadesa svara smritisah'

- Sangita Ratnakara

'Svato ranjayati srotrucittam sa svara ucyate'

- Brihaddesi

And that sound who is adorned by svara groups and pleases the minds and hearts of people is called the **Raga** ('Yo + sau dhvani visesastu svara varna vibhusitau ranjako janacittanam sa caraga udahritah')

- Brihaddesi

The very concept of **Raga** is uniquely Indian. Nowhere else in the music of world is there such a concept. It is therefore the invaluable and incomparable contribution of the music of India to that of the world! Raga - the melody has the supreme power to lift the minds of the listeners to ethereal worlds of Happiness and Bliss! And when the melody unites with Rhythm, they together form a rare combination of the intellect and aesthetics to produce joy - a rhythmical beauty - too beautiful to express!

The prominence of laya (rhythm) as also its restricted from Tala in music is quite obvious by their inclusion among the chapters in the ancient works; laya had been exposed in many a treatise on
music. In this context, a few lines on the subtle difference between the words Rhythm and Tala should be appropriate.

There is rhythm in all systems of the music in the world. But, only Indian music has the tala. There is rhythm, in fact, in every facet of nature. The sun, and the planets move in perfect rhythm and even a slightest dislocation would mean nothing short of a universal deluge. Watches and clocks work on rhythm, and scientists say that there is a phenomenon called 'Body Clock'. The rhythm involved in all these natural phenomena can be likened to a pulse rate of sorts. The human heart is considered strong and healthy if the heart beats are rhythmically sound. The pulse rate rhythm goes on throughout human life. Rhythm is the unit, if tala is a measure. If a soldier walks in perfect rhythm, we will appreciate. If the same soldier makes a right turn on every 11th step and reaches the starting place on the 41st step, he would have walked not merely perfect in rhythm, but also in tangible cycles reaching the starting place, repeatedly in the 41st, 81st and 121st step, each cycle of reaching the starting place can be called a Tala while the rhythm is only the pace at which he operates tala each step. It should be clear now that perfect rhythm and perfect tala need not always go together. The soldier might have crossed 40 steps and reached 41st step in a tala cycle, but the 40 steps in one direction. He might have done 9.75 in one direction and 10.25 in another making the total 20 and not perfectly 20x1. He might similarly reach the starting place promptly without maintaining the total number of steps at a perfect 40x1. Here we can call the soldier as he maintained the tala correctly but not the rhythm. Thought the minute difference in the durations of one step to another need be isolatable for everybody. He cannot be called one up in good laya, ideally speaking. In world famous orchestras of West, the percussionists contribute only to maintain the rhythm and this symphony itself symphony of scores of instrumentalists. Beating the drum is a mere physical function not requiring any art. A machine can do the drum beating more perfectly but we in India, are far advanced in this world of rhythm and the monarch among the percussion instruments has no parallel or
corresponding instrument anywhere in the world. Ours is the only country where even the Mridangam is tuned to the pitch of the requirement of the performance. Only in the culturally richest advanced systems of music do we have the consciousness of not rhythm alone, but also its manifestation as a tala.

Even here we have a big number of talas only a minority among them are in active vogue. There are many talas in which not even a single composition exists. In this context a special mention must be made about Muttuswami Diksitar, who employed the Suladi sapta talas and made their presence felt through his immortal Navagraha Kritis. Aesthetically speaking, a tala by itself has no charm or beauty. Beauty arises only when music and lyric are incorporated into a tala in a particular manner generating aesthetic pleasure.

Apart from the musical treatises providing a chapter on the Tala subject, there had been works exclusively devoted to the topic of Tala. Some such are 'Tala Laksana', Tala Visaya', 'Tala dipika', Tala samudra', Tala laksana sangraha', 'Raga tala prastaram'. It is interesting to note that in the famous ancient Tamil works, which, however, were not concerned with Music, like Silappadikaram, Pattuppattu, Kalladam, there were references to, and discussions about Tala. Such has been the significance and importance of Tala in music.

'Chandohino na sabdosti na chandassabda varjitah'

There is no sabda without Chandas nor in there Chandas without sabda said Bharata.

Tala has been further subjected to a through treatment, divided into ten aspects each of which has been regarded as its life known as 'Tala Das Pranas'.

Kalo margah kriyangani graho jatih kalalayah |
Yatih prastarakam ceti tala prana dasasmritih ||

Thus the tala dasa pranas are: Kala, Margam Kriya, Anaga, Graha, Jati, kala, Laya, Yati and Prastara.

Among these, again, the former five Pranas have been held more important than the latter, and called Mahapranas and
Upapranas respectively. Talas have angas and are reckoned by the movements of hands, and fingers.

Hasta dvaya samyogl viyogicapi nartate
Vyaptim an yodasah pranaissakalah tala sangnyatah

In this chapter it is aimed at explaining the Tala Das Prana to the required extent, and mainly to show how far they are applied in music. Before getting into the details of their application in music, it is already made sure that they are a part of the history of music in India since its inception to date. After all rhythm moved the earliest man earlier than the music did. In movements of ecstasy, joy and pleasure man danced to rhythm in the from of vibration. It is, thus the scientific, cultural and artistic development of these fundamentals that are being subjected now to analytical discussion understanding.

Kala

To get the topic, first, is taken, i.e., Kala. It denotes the time units of all the parts of a Tala. It is divided into Suksma Kala and Sthula Kalas. Ksana, Lava, kastha, Nimisa, Kala and Caturbhaga are Suksma Kalas so minute and subtle that they did not count for any practical use, except of academic interest in music. The time taken by a needle to pierce through a layer of 100 or 108 petals of a lotus is said to be Ksana. The above description of ksana, it may be seen, is too vogue to be worthy of any practical consideration. Then follows:

8 Ksanas are equal to 1 Lava.
8 Lavas are equal to 1 Kastha.
8 Kastahs constitute 1 Nimisa.
8 Nimishas make 1 kala.
2 Kalas make a Caturbhaga.
2 Caturbhagas are equal to 1 Anudratam.

Upto this point i.e., from ksana to Caturbhaga, the six kalas are known as Suksma Kalas, and practically, of no use. Now begin the sthula kalas which are of practical utility. Their time units are as follows:
2 Anudrutams are equal to 1 Druta.
2 Drutams = Laghu
2 Laghus = Guru
3 Laghus = 1 Plutam and
4 Laghus = 1 Kakapadam

Among the above six angas, Anudrutam, Drutam and Laghu have been of utmost practical application in music while the three kalas, in the form of Angas are found in Margi talas of rare use.

Marga

Marga. the second mentioned of the Tala Dasa pranas represents the actual number of aksarakalas taken by a kriya in terms of Talaksaras, i.e., making clear the number of svaras for a talaksara. It does not vary with a change in the tempo. It helps writing down in notation the dhatu parts of the musical composition which run in the different kalas i.e., prathama or madhyamakala. It, therefore, enables one to render the composition in its correct layas, and thus, is one of the Tala Dasa Pranas the application of which is very useful in music.

Margas are of six varieties, hence termed Sanmargas. They are: Daksina, Vartika, Citra, Citratara, Citratama, Aticitratama. There are, however, a few changes in the names in some works.

This Tala prana is of great help in understanding the correct tempo of the composed by the composer. These margas are said to be when there are 8,4,2,1, ½ and ¼ matras, respectively, for a talaksara, or 32, 16, 8, 4, 2 and 1 aksarakalas, also, respectively. A composition may have to be rendered in Madhyama Laya (middle tempo), or Vilamba Laya (slow tempo), yet in both the case the aksarakalas for a kriya may have be the same. It makes it clear that the Marga does not necessarily vary according to the speed, tempo or laya of the composition. A few examples of the Kritis which belong to different categories of Marga are given below:
i) **Citratara Marga** (i.e., each kriya has four aksarakalas)

*Minaksi me mudam dehi*

- Purvikalyani - Adi - Muttuswami Diksitar

*O! Rangasayi*

- Kambhoji - Adi - Tyagaraja

*Sarojadalanetri*

- Sankarabharanam - Adi - Syama - Sasri

ii) Citratama Marga: (Where Kriya has two aksarakalas)

*Vatapiganapatim bhajeham*

- Hamsadwani - Adi - Tyagaraja

iii) Aticitratama Marga (one aksarakala for a kriya)

*Manasa etulortune*

- Malayamarutam - Rupaka - Tyagaraja

*Sri Mahaganapatiravatumam*

- Gaula - Capu - Muttuswami Diksitar

All musical compositions belong to one or the other of the mentioned Margas only. Other Margas i.e., Daksina, Vartika, Citramarga are employed in special items like pallavi on rare occasions. Therefore, Marga prana, also, is of importance on its application to practical music.

**Kriya**

The third Tala prana among the Dasa pranas is Kriya. The manner by which time is counted is indicated by Kriya. Kriyas constitute angas. The reckoning of Kriyas is the beating of the hands, counting by the fingers, raising and dropping up of the hands to the right or left. etc., The two varieties of the Kriyas - *Sasabda* and *Nissabda*, the former producing sound like beating the left plam with the left plam, and the latter with out producing sound like, for example, counting of fingers and dropping of the plam to the side, (called *Visarjita*), etc., have already been referred to in earlier chapter of this thesis.
Kriyas are also divided into two kinds - Marga and Desya - each of which admits of 8 varieties. The 8 Marga Kriyas are: Avapa, Viksepa, Niskarama, Pravesa, Dhruva, Samya, Tala and Sannipata. Of the above eight, the former four are nissabda kriyas and the latter are Sasabda Kriyas.

The 8 Desya Kriyas are: Dhruvaka, Sarpini, Krisya, Padmini, Visarjita, Viksipta, Pataka and Patita. Of the eight kriyas, Dhruvaka along is side to be a Sasadba Kriya.

The manner of reckoning all the Kriyas were described in the ancient treatises where the subject of Kriya was dealt with in detail.

Along with the prominence of Tala to music goes, too the importance of Kriyas through which the aksarakalas of a Tala are counted. But, it is be noted, not all the Marga and Desya kriyas are in Practical use in music. Only those reckoned in rendering the Suladi talas are in use.

Anga

Anga, literally means a limb. In Tala, too, Anga is its limb. Angas constitute Tala. Angas are six, known as Sadangas. They are Anudruta, Druta, Laghu, Guru, Plutam and kakapadam of these the first three angas are used in the Suladi Sapta talas, and the remaining angas are seen in the 108 talas. Amoung the Suladi Sapta talas, Dhruva tala has four angas - laghu, Drutam and two more Laghus. Mathya tala has three angas - Laghu, Drutam and, again, Laghu. Rupaka tala has only two angas - Drutham followed by Laghu. Jhampu tala takes three angas - Laghu, Anudrutam and Drutam - this is the only tala which has Anudruta in it. One Laghu followed by two Drutams constitute the Triputa tala. Ata tala is the only other tala among Suladi talas to have four angas: two laghus succeeded by two Drutams. Lastly, Eka tala has only one anga, i.e., Laghu. All the sadangas were given symbols. They are as given below.

Anudruta

Anudruta is indicated by the symbol 'U' (crescent), 'O' (purnanusvar) indicates Druta. A straight line '|' stands for Laghu.
Guru is indicated by the symbol '8'. Plutam has the symbol '; and '+' is the symbol of Kakapadam. While Andurutam has only kriya i.e., ghata; and Drutam two kriyas - ghata and Visarjitam, Laghu, generally, has four Kriyas ( | Laghu and three finger counts).

In addition to the Sadangas, Drutaviramam, Laghuviramam, Laghudrutam, Lughudrutaviramam, Guruviramam, Gurudritam, Gridrutaviramam, Plutaviramam, Plutadrutam and Plutadrutaviramam making a total of 16 angas, known as sadasangas were also mentioned in the treatises.

**Graha**

The next important Tala prana is Graha. Graha denotes the place of commencement of music in Tala.

'Samostiti nagatasea grahastalo tridha matah'

-Sangita Ratnakaram

That is, Graha is of three kinds - Sama, Atita and Anagata. If music commences at the beginning of the avarta, it is called the Samagraha; Otherwise it is Visama graha which, again, is of two kinds. If music commences after the tala avarta begins, it is known as Anagata; and if music commences even before the Avarta(tala) starts it’s called Atita graha. In musical compositions wherein the Sama graha is not observed, then the Anagata kind of Visama graha is more commonly noticed. Atita graha is rarely seen in musical compositions.

Here below are given examples of the compositions where the three different grahas are observed:

**Sama graha:**

Marubalka

- Sriranjani Raga - Adi Tala - Tyagaraja

Sri Mahaganapatiravatumam

- Gaula Raga - Capu Tala - Muttuswami Diksitar

Gitas, Svarajatis and Tana Varnas begin on Sama graha.
Visama graha:

i) Anagata graha
   Evarimata
   - kambhoji Raja - Adi Tala - Tyagaraja
   Svararaga Sudharasa
   - Sankarabharanam - Tyagaraja
   kanjadalayatakasi
   - Kamalamaharangi Raga - Aditala - Muttuswami Diksitar

The Pallavi, Anupallavi and Caranas of Atatala Varnas commence on Anagata graha.

ii) Atita graha
   The Anupallavis of the kritis
   Venugananaloluni
   - Kedargaula Raga - Rupaka Tala - Tyagaraja
   and
   Ksinamai tiruga
   - Mukhari Raga - Adi Tala - Tyagaraja

As already mentioned, instances of Atita graha are not as common as those of Anagata graha; they are used in complicated pallavis (after Ragalapana and Tanam).

In some compositions, the prosody of the sahitya necessitates the taking up of Atita graha.

Some examples of musical compositions which start on atita graha are -

Apaduruku lonaitine - Khamas Raga - Adi Tala - Javali
Cedebuddhi manura - Athana Raga - Adi Tala - Kriti
Kumarantal paninde tudi - Yadukulakambhoji Raga

- Adi Tala

Jati

Jati concerns only the laghu. It indicates the total number of kriyas the tala has. Since laghu is reckoned by beat (Ghata) and counting of fingers. Jati, therefore, varies according as the total
number of kriyas of the laghu, and is of five kinds - Caturasra jati laghu means, the laghu having the total number of 4 kriyas (i.e., a beat followed by counting of three fingers). Likewise, Trisra, Misra, khanda and Sankirna jati laghus have a total number of 3, 7, 5 and 9 kriyas, respectively. Counting of fingers begins from the little finger to the thumb, and if the total number six, the counting continues the same way, again, without break.

Jatis give scope for the expansion of the Suladi Spata talas into 35 talas. It is so because all the 7 talas have laghu, in common, and since laghu varies into 5 jatis, the 7 talas become 35 talas. For example, Caturasra jati Dharuva tala, Trisra jati Dhruva tala, Misrajati Dhruva tala, khandajati Dhruva tala and Sankirna jati Dhruva tala. Similarly, the rest of the Sapta talas, too, develop into 5 varieties each. The total number of tala - aksaras for an avarta each also change, as given below:

<table>
<thead>
<tr>
<th>Name of the Tala</th>
<th>Angas (Symbols)</th>
<th>Jati</th>
<th>Total number of (for an avarta) aksaras</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dhruva</td>
<td></td>
<td>Caturasra</td>
<td>4 + 2 + 4 + 4 = 14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trisra</td>
<td>3 + 2 + 3 + 3 = 11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Misra</td>
<td>7 + 2 + 7 + 7 = 23</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Khanda</td>
<td>5 + 2 + 5 + 5 = 17</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Snakirna</td>
<td>9 + 2 + 9 + 9 = 29</td>
</tr>
</tbody>
</table>

A table showing the Sapta talas with their jati-variations and total number of aksaras they contain may be found in the Appendix.

If the jati is not specifically mentioned, if should mean that Dhruva, Matya, Rupaka and Eka talas are of Caturasra jati, Triputa is of Trisra jati, jhampa tala is of Misra jati and Ata tala of khanda jati.

In addition to the Suladi talas - which became most popular since the time of Purandaradas, Venkatamakhin added one more tala, Jhompata tala and mentioned eight talas in his Caturdandi Prakasika. The Jhompata talas is the present Caturasrajati Triputa tala i.e., Adi tala. It is called Sempata tala in Kerala.
The Caturasra jati laghu is called as Manusi laghu.

Likewise the Trisra, Misra, Khanda and Sankirna Laghus are named Svara, Hamsa, Desya and Citra laughs respectively.

- In some of the ancient treatises are given laghus of advanced nature carrying 6, 8, 10, 12 and 16 Aksarakalas, and termed Divya sankirna, Misra sankirna, Desya sankirna, Misra desya sankirna and Desya suddha sankirna'laghus, respectively. Further, the above laghus are also known as, in the above order, Divya laugha, Simha laghu, Varna laghu, Vadya laghu and Karnataka laghu. These laghus are found in the songs of Tiruppurugazh.

_Kala_

_Kala_ stands for the unit or the fractional unit taken for a talaksara.

When each talaksara takes only one small or minor unit, it is called _Eka kala_; when there are two units, it is _Dvi kala_ and it is called _Catuskala_ when these are four units for a talaksara.

Since in Tana Varnas the talaksara takes four units as the standard minimum, it is said to be _Eka kala_, eventhough it takes four aksarakalas, for a Kriya. _Dvi kala_ takes twice the unit aksara of the _Eka kala_, and so also, _Catuskala_ takes twice that of _Dvikala_.

_Kala_, thus, is a variable unit matra and aksara which are fixed units of time-measure.

_Laya_

As already explained in the earlier Chapter, _Laya_ indicates the speed with which music runs. It gives a general idea of a musical composition, or music being rendered in fast, middle or slow tempo. The three degrees of tempo are known as _Druta_ (fast), _Madhya_ (middle) and _Vilamba_ (slow). These had been mentioned in all musical treatises which had dealt with the rhythmic aspects. Even the sub divisions of - _Vilamba_, _Vilamba Madhya_, _Vilamba druta_; _Madhya_ - _Vilamba_, _Madhya-madhya_, _Madhya-druta_: _Druta-druta_, _Druta-Madhya_, _Druta-Vilamba_ layas. In fact these sub-divisions do
not carry any special significance because there is no specific time-measure in the aspect of Laya. Laya is not concerned with tala which alone has specifications like Anga, Kriya and the unit or units of time-measure the Kriya takes in the Tala. For instance, two Kritis rendered in different layas may yet have the same aksarakalas for a kriya;

Ex: Evarimata - Kambhoji raga - Aditala
Enduku peddala - Sankarabharanam - Adi

While the former runs in madhya laya and the latter in Vilamba laya, both are in Citratara Marga. Similarly, both the Kritis, 'Anandanatana Prakasam' (Raga kedaram - Capu tala) and Ninnuvinaga (purvikalyani raga - Viloma Capu tala) are in Ati Citratama marga; but the former has to be rendered in Vilamba laya and the latter in madhya laya.

This makes it clear that laya and marga do not bear any mutual relationship between them.

The particular Laya or Marga in Which a composition has to be rendered will be conceived by its composer himself. If such a composition is rendered in any other way, the composition loses its very form and effect.

It is, therefore, obvious that the two Tala pranas - marga and laya have much importance in their application in practical music.

Yati

Among the Tala Dasa pranas, Yati shows the sequential order of the angas. Only three kinds of Yati - Sama, Gopuccha, and Srotovaha Yatis are mentioned in the Sangita Ratnakaram of Sarmngadeva (13th Cent A.D.). In later works are mentioned, in addition Damaru Yati and Mridanga Yati.

Where the angas are of same kind or equal in size or value, the sequence is called Sama Yati, as for example: | | | | or 0000 or UUUU, so on.
In terms of Dhatu, it is like this: S S S S or P P P P

_Sama Yati_ is also known as _Pipilika Yati_.

_Gopuccha Yati_ is so named after the cow’s tail - to indicate the state of succeeding in less and less length or duration. That is the angas are broad at the beginning and are narrow as they proceed.

Ex: + | O U

It may be shown in dhatu as: P; P, P, p or S; S, S

The angas proceed in diminishing order in size or magnitude.

_Srotovaha or Srotogata Yati_ is that order of the angas which are narrow at the beginning and go wider as they proceed. This is so termed to suggest the flow of a river which becomes wider and wider in it flow. Ex: 0 | + or s S S, S;S;

It may be mentioned, in this connection, that one of the Musical trinity, Muttuswamy Diksitar had applied the underlying principle behind both the Gopuccha and Srotogata Yatis in the Matu (saññ̄ṭya) of one and the same kriti of his, namely **Tyagaraja Yoga Vaibhavam - Anandabhairavi raga, - Trisrajas.** Eka tala as give below:

_Gopuccha Yati_

_Tyagaraja Yoga Vaibhavam_
_Agaraja Yoga Vaibhavam_
_Raja Yoga Vaibhavam_
_Yoga Vaibhavam_
_Vaibhavam_
_Vam_

and

_Srotovaha Yati_

_Sam_
_Prakasam_
_Svarupa Prakasam_
_Tattva Svarupa Prakasam_
_Sakala Tattva Svarupa Prakasam_
_Siva Saktyadi Sakala Tat̄ṭva Svarupa Prakasam_
Damaru Yati

As the name itself suggests the angas in the middle are narrow and wide at the two ends, resembling, picturesquely, the damaru;

Ex: \[ + | 0 U 0 | + \]

\[ P;, M; G r G M ; P; \]

This is also known as Vedamadhya Yati.

Mridanga Yati

All the names of the Yatis were so coined as to suggest the shape or from of the order or sequence of angas in magnitude. So also, in Mridanga yati, the angas are wide in the centre and narrow at the two ends.

Ex: \[ U 0 | | 0 U ; \]

\[ R G, M; G, R s \]

Visama Yati

Contradictory to all other Yatis, angas in Visama Yati will defy any order.

Ex: \[ 0 + | U | 0 \]

\[ G; m P M, g g r S; , p \]

Fine examples may be noticed in some compositions which will be illustrated in the Chapters VI, VII & VIII dealing with the rhythmic beauties.

Prastara

Prastara prana is the tenth in the Tala dasa pranas. Prastara literally means elaboration or permutation. This Prana has been considered mainly of much academic interest and not of practical use in music. The fact that the Prana had been extensively treated in ancient treatises on music only reveals the rare intellect of the man in the realm of rhythm.
Prastara enables the splitting of the tala anga into all the varieties of its constituent of Prastara had been mentioned in the works on the subject. They are Nasta, Uddista, patala, Mahapatala, Anudruta meru, kakapada meru, Samyoga meru, Khanda prastara and Yati prastara, etc.

The general rule observed in Prastara: is the constituent angas are taken in their diminishing order of values, the last being the least among them. Thus, for instance, taking a Caturasrajati laghu, the constitute angas Druta virama (U), Druta (0) and Anudruta (u), the prastaras should be

\[
\begin{align*}
(i) & \quad (ii) & 0 & U & (iii) & 0 & 0 & (iv) & 0 & U & U \\
& & (3 + 1) & & (2 + 2) & & (2 + 1 + 1) & \\
(v) & 0 & (vi) & UUVO & (vii) & U & U & 0 & (viii) & U & U & U & U \\
& (1 + 3) & & (1 + 2 + 1) & & (1 + 1 + 2) & & (1 + 1 + 1 + 1) & 
\end{align*}
\]

Through the prastaras are applicable to the practice of music, they are more of academic interest. Chapters on Tala Prastara are given both in the Sangita Ratnakara of Sarngadeva and Nartana Nirnaya of Pundarika Vithala. Also are the prastaras dealt with in Bhandaru Lakshminarayana's Suryodayam and Poluri Govinda Kavi's Tala-Dasa Prana Pradipika.

While Caturanga prastara deals with the four angas - Laghu, Guru, Plutam and Kakapadam and Sadanga prastara employs all the Sodasangas i.e., from the Anudrutam to kakapadam.

Among the most renowned composers of music, the Musical Trinity Syama Sastri alone is known to have worked out the prastaras in detail. A few charts worked on by him have been preserved.
Chapter - V

The Aspect of Laya in Musical Compositions
CHAPTER - V

THE ASPECTS OF LAYA
IN MUSIC COMPOSITIONS

In no other aspect or branch of music are Laya and Music so inseparably knit together than in musical composition. Tala, the restricted from of Laya does lend from and shape, and disciplines the flow of music in compositions. Within its bounds the Tala helps the content or substance of music in the composition get due stress where and as is intended by the composer. Laya lays down the very speed or tempo in which the composition has to be rendered. It conveys the spirit, mood or emotion the composition carries inherently. A song meant to convey exhilaration, overjoyousness, or thrill fails to deliver the mood, if it is set in Vilamba laya (slow tempo). It, in such a case, dampens the very spirit of the content of the composition. Likewise, the feeling of a song of pathos, sorrowfulness, or agony cannot be conveyed, if set in druta laya (speedy tempo). A song of heavy feeling or deep important, be it sorrow, serence, introspective, or appealing, has necessarily to be set in slow tempo (vilamba laya), if it is to be faithful in communicating the relevant mood or meaning to the listeners. Similarly, a song of emotional exuberance or excessive happiness if set in Vilamba laya is bound to water down the spirit of ecstasy. Songs of great composers like Tyagaraja, Syama Sastri or a devotee like Ramadas abound in such propriety. Here are few instances to substantiate the afore-said points.

Vilambita Laya:

Eti Janma midi
- Varali Raga - Capu Tala - Tyagaraja

Santamuleka
- Sama raga - Adi Tala - Syama Sastri

Brovamma tamasamele
- Manji Raga - Syama Sastri
E Triugananu
    - Nadanamakriya Raga - Adi Tala - Ramadas

Nanu brovamani ceppave
    - Kalyani Raga - Capu Tala - Ramadas

Karunajaladhe
    - Nadanamakriya Raga - Adi Tala - Ramadas

Druta laya
Sara sara samaraika sura
    - Kuntalavarali Raga - Adi Tala - Tyagaraja

Kanugontini
    - Bilahari Raga - Adi Tala - Tyagaraja

O Rama! ni namamoto rucira
    - Pantuvarali Raga - Adi Tala - Ramadas

Adigo Bhadradi
    - Varali Raga - Adi Tala - Ramadas

The choice of the tala has a say in the matter of composition. If the composition is lengthy i.e., if the parts of the composition like, for instance, is a kriti, the pallavi, Anupallavi, Caranas are long, a tala with more number of Kriyas such as Aditala, or Capu/Triputa tala shall be chosen. Small talas like Rupaka tala or Eka tala, if employed instead will take far more number of avartas than the former talas. The composition does mostly likely tend to be tedious, and certainly fail to be crisp or brisk.

As has been already pointed, tala is to music what metre is to poetry. In musical compositions, too, certain rules of prosody are strictly observed. The Yati-prasas in the padas (lines) of the pallavi and Anupallavi are to be observed If there are several in number of the lines of pallavi, and Anupallavi individually, then this rule of common prosody is be followed in the lines of both. The prasa in the Carana may not be the same as in the pallavi and Anupallavi, but this prosodical rule shall be observed in the lines of the Caranas among them. This aspect has bearing on the tala of the composition.
The Yati or prasa in the lines has to coincide with, or over coincidentally at the same point or tala aksara, as in the first line (pada).

Also, if the number of tala avarta exceeds one, the avartas shall be in even number but not in odd numbers.

Another point to be considered in the rendering of a composition is the Marga - the Citratara, Citratama or Aticitratama in which the composition is meant to be rendered, and the laya - Druta, Madhya or Vilamba laya. This can be known not only by the traditional following but is given in correct notation. Correct notation also helps to indicate the intervening madhyamakala passages, if any, in the composition.

The tala angas are to be clearly marked in the notation of the composition. The conclusions of the avartas of the tala as well as those of the angas within each are to be correctly noted to guide the musician.

A vertical line ( | ) at the end of an anga - be it a laghu, druta or anudruta, and two vertical lines ( | | ) at the conclusion of each avarta will guide correct rendering of the song.

The higher (or second) degree of tempo [popularly known as paikala (in Telugu)] and the next higher (or third) degree of tempo in which a portion or portions of the compositions are to be rendered, are to be indicated by by marking one and two horizontal lines, respectively, beneath the dhatu's (svaras) of the relevant portions afore-said.

Ex:

I Degree . 

\[s r g m \mid p d \mid n \breve{s} \mid \]

\[s n d p \mid m g \mid r s \mid \]

II Degree 

\[s r g m p d n \breve{s} \mid s n d p \mid m g r s \mid \]

III Degree of speed 

\[s r g m p d n \breve{s} \breve{s} n d p m g r s \mid \]

\[s r g m p d n s \mid s n d p m g r s \mid \]

In this the first single line (1) shows the completion of the laghu,
second single line indicates the completion of durta and the two lines mark the completion of the avarta.

Graha is another important aspect in musical composition. Most of the musical compositions commence on the Sama Graha i.e., they begin at the commencement of tala avarta. All gitas, Jati swaras, Swarajatis, Tana varnas begin on Sama graha. Most of the kritis are, however, found to take either sama graha or Anagata graha.

Also, the pallâvi, Anupallavi and Caranas of Ata Tala Varnas also are in Anagata graha.

Ex:  
Bhairavi Raga - Paccimiriyam Adi Appayya

Anagata Graha

\[ \begin{align*}
&; ; \\
&; ; \\
&NS \quad R,g \quad SR \\
&srgg \quad R; \quad ggrg \quad m pdbm \quad pgrs \\
&pgs \quad rsps \quad | \\
&rgsr \quad NDp \\
&sgspdp + \\
\end{align*} \]

The anupallavis of quite a few kritis are, however, found to start to start in Atita graha.

Ex:  
Ksinamai tiruga - Mukhari raga - Tyagaraja

and

Venugana loluni gana - kedaragula - Tyagaraja

Also, in the middle of some kritis, a part of the sahitya is seen to take Atita graha.

Ex:  
Anupallavi of Kriti 'Aragimpave' of Tyagaraja - Rupaka Tala

Raghuvira Janakajakara

However, such cases are rare. It is to meet the exigency of adjusting the sahitya to the prosodical rules, such an arrangement is
resorted to. As an instance thereof may be cited in the kriti Siddhi Vinakayam of Muttuswami Diksitar in the raga Camaram in Rupaka tala.

Ex:  Siddhayaksakinnaradi sevitam akhila jagatpra
Siddha mulapankaja madhyastham modaka hastam

Musical compositions are generally composed in popular talas like Caturasra jati Triputa (i.e., Adi) tala, Tisrajati Triputa tala, Caturasrajati Rupaka, Tisrajati Rupaka, (Misra Capu, Khanda Capu), Caturasrajati Eka, and Tisrajati Eka and Jhampa tala (Misra jati).

Muttuswami Diksitar composed Nava Graha Kritis in all the well known Seven Sapta talas.

Tyagaraja extensively used Adi, Rupaka, Triputa talas and also Madhyadi, and Desadi talas for his kritis. Tana varnas are found mostly in Adi tala quite a few in Jhampa, and other talas.

It is noteworthy, therefore, that the aspect of jati as applied in the case of various talas, too, plays important part in the musical compositions.

In the general parlance of music, kriti, or other compositions are regarded in terms of Dvikala, and Catuskala, when they take two aksara kalas, or four aksaras kalas for a kriya.

Yati as has been explained in Chapter IV describes the sequential order of the angas. If the order of angas is uniform in magnitude it is said to be sama yati. If the angas, in the beginning are small and proceed to be big at the end like the river which at its origin is narrow and becomes wider as it flows on, the yati is called SROTOGATA yati. Conversely, if the angas at the beginning grow wide in the beginning and narrow down at the end, like the cow's tail, it is known as GOPUCCHA yati. Two more yatis are also mentioned in the ancient treatises. They are Damaru yati where in the order of angas are wide at the two ends but narrow in the middle, like the Damaru vadya, and Mridanga yati, in which the converse is the order of angas i.e., they are narrow at the ends and wide at the centre like Mridanga vadya.
Even though this yati belongs to the aspect of the sequential order of the constituent angas in a tala, the principle behind it, namely, the order of magnitude has been applied to music - both in dhatu and matu. There is a shining example of the application of the Gopuchcha yati in the sahitya of one and the same kriti, 'Tyagaraja yoga vaibhavam' (Anandabhairavi raga, Tisrajati Eka tala). The example has already been shown in the Chapter on the Tala dasa pranas.

Finally, the principals of permuting and combining the angas have been freely applied in music, especially in rendering kalpana svaras, and such rhythmic patterns taken as muktayis or jatis have been composed in terms of svara-groupings on the musical composition.

From all the foregoing passages it is crystal clear that all the aspects or ramifications of laya are seen applied or utilized in one from or the other, and directly or in a transformed manner in musical compositions.

In India, the very word composition means rhythm. Composition in Europe os different. It is understood, that it is set to rhythm. There are composition like Tiruppugazh which are 100% rhythm-based. Next comes the Tillana. Ragam Tanam pallavi of course. Pallavi is a composition where rhythm is highlighted first. In Tiruppugazh, every syllable contributes to sustain the tala. By going deeper in to this aspect, it must have been found that the number of talas under the various schemes are not enough, and so new and newer talas had to be discovered. We therefore have do not conform to any tala available in the 35 and 108 tala schemes. With the result that many of the Tiruppuagazhs are sung in Talas called Tiruppugazh talas (chandam). It can even be said that the composer of the Tiruppugazhs Arunagirinathar would have first visualised a particular rhythmic words. Naturally lot of compromise had to be made in the flow and choice of the lyric. Arunagirinathar is believed to have been necessary for producing such a large number of light rhythmic structures made of words.
For instance the Tirupugazh, Caranakamalalaya popularly sung in Kalyani is made of 3 segments of unequal length. The first one in 5 units and the subsequent two in 3, making a total of 11 units. Two in 3 making a total of 11 units. This structure of $5 + 3 + 3$ is maintained in all the 24 ilnes of this Tiruppugazh.

To perform 'Dhyanam' for half a minute at least the Lotus-feet of the Muruga, how can I get punyam! If, we thus take Tiruppugazhs as compositions that are totally rhythm-oriented, we have at the other extreme the popular versions of Ksetrayya padas attributed to Smt. Vina Dhanammala's school where rhythmic tightness is very difficult to trace. The Padams have a meandering music that would not readily reveal their rhythmic structure. The music of padas can be likened to the flow of a river while that of the Tiruppugazhs can be viewed as water flowing in a man-made canan. (The raga of the Indian music is like a flow of a river while the symphony of Western music is water passing through a tube).

Having seen the two extremes in the rhythm-orientedness of musical compositions, the Tiruppugazhs at one end the Padams of Ksetrayya's at the other end - it should be of interest to us to study the various types of compositions in stages in between. As already mentioned above, a pallavi sung after Ragam and Tanam, is a composition deeply concerned with rhythm, sometimes even at the cost of other aspects like melody and lyric. Pallavis can be placed in the neighbourhood of padams, at the other end. Kritis can easily be voted as compositions in widest circulation. Obviously because they occupy a happy central place in this series of classification. A kriti is certainly not so tightly rhythm-oriented nor is it so loosely as a Padam or slokamsinging. What is taken for granted here is the fact that the compositions mall stages of this spectrum are all structured over some tala or other with different leaves of rhythmic tightness.

Awareness for rhythm had dawned in the history of human Civilization very much earlier before mankind could become sensitive to melody and lyric. Any composition in Indian Music should inevitably have the 3 components, melody, lyric and rhythm.
In what proportion these 3 are admixed is the factor that decides the type to which any particular composition belongs. We have taken for granted, that there intrinsic beauty in all the 3 attributes. In today's level of growth of civilization, and literacy, we can assume that the lyric is about the first arrest the attention of an average listener. Any person of an average level of education and knowledge of the language can react to the lyric the music to which he is exposed to.

A certain higher level of cultural growth would be needed in a lisitener to enable him enjoy the medoly in any music. When so Highlighted the impact of rhythm on the minds of human beings is surely instant and universal and this is the obvious reason for the universal popularity of pop and such other varieties of music. A composition of classical seriousness is not supposed to draw the attention of the commoner and lure him to intoxication as Pop music does. The very word 'classical' carries with it a certain amount of sobriety, restrain and discernment. It is therefore expected that a classical music composition should be melody, rhythm, or lyric oriented in such an optimum proportion by which it should first draw the attention of a listener and then sustain his interest without kindling any baser instincts that are always threatening to take over in man.

The kritis have multifarious purposes. Any composition in India is traditionally expected to be sacred in nature and kritis are no exception. In addition a good kriti is expected to be a modern guide for others to launch on Alapanas in particular. Apart from this, Kritis are composed under rules and regulations like prosody, meter and other embellishments. Like any other composition, kritis are also set to talas and the rhythmic control thereby.

The kriti from of a music composition is believed ti have come into vogue in the decades preceding the Trinity era. The form was nurtured and consolidated by the Trinity whose patterns are being followed even today. The place of the Trinity in the historian growth of Karnatic music can be compared only with Jesus Christ in Christianity. World historians have divided the history of the world
into two major parts BC and AD, with the period of Jesus Christ dividing middle. The history of Karnatic music is similarly being studied by scholars as one of the Pre-Trinity and the Post-Trinity period. Lot more of the things have happened to Karnatic music in the few decades of Trinity era that what did in ever so many centuries before them. The value and importance of the Trinity can therefore never be oversaid. It should therefore be appropriate to give due focuss to the composition of Trinity rather than others before or after them.

The present thesis endeavors to dwell on rhythmic beauties and not rhythm-orientedness. The latter may lead to mere entertainment delitilation and that is certainly not the aim of kritis.

Kritis do employ rhythm, but only to a level which would assure maintaining the level of sanctity, profoundity or even divinity, expected of them. To highlight the beauty of the rhythm is not a task intended for a common man. Only gifted and blessed souls like Trinity can achieve this. And here we are in the laudable cause of analysing how they done it. Scholars like Prof. P. Sambamurthy and Dr. V. Raghavan have pointed out in their books that appreciation for classical music was one of closed and conservative minds in the Pre-Trinity periods. Slowness was considered the hall-mark for classisim, slowness does possess merits but it should also be accepted that total eschewal (removal) of fastness of speed is also not for the good. A happy synthesis of the slow and fast tempi should be the answer and this seems to have first dawned only upon the great Trinitrarian Tyagaraja and he was the person to have discovered the instant appeal of Madhyamakala, the accelerated pace. We have enough instances of mankind refusing to accept anything new and innovative.
Chapter - VI

The Variety of Laya Patterns in the Compositions of Sri Tyagaraja
CHAPTER - VI

THE VARIETY OF LAYA PATTERNS IN THE COMPOSITIONS OF SRI TYAGARAJA

In this Chapter, and the succeeding two Chapters the substantial content is the subject of laya as viewed, expressed and implemented in the compositions by Tyagaraja, Muttuswami Diksitar and Syama Sastri in that order, in the Chapters.

Before we involve ourselves into a detailed study in the above regard it is essential to keep in view the individual inclination and preference of the composer for the place of laya in their compositions. All the three composers are incomparable masters in the treatment of the triple aspects of Bhava, Raga and Tala in their songs - which together breathe the very life of music into, and manifest the true glory of their compositions, to the world of music - especially Indian (Carnatic) music.

Even as their compositions, truely, consist of the three life-like elements in abundant measure, it is equally true that stress or greater consideration, relatively shown to one or the other, varied with the individual composer among the three all time great composers. This speaks of, if not reveals their individual intellectual and aesthetic tastes, in general. The same and strong thread that passes binding together the three aspects through the beautiful garlands of their musical compositions is the composer's Bhakti or steadfast devotion to the deities of their worship.

Tyagaraja conceived his favourite from of God, istadaiva, Rama as the personification of the ambrosial essence of sound (Omkara or Pranava Nada). He says, in his Arabhi raga (Rupaka tala) kriti thus: 

Pranava nada sudharasambilanu narakriti aye' - His conception, thus leads him to worship of Nada, ('Nadopasana') being the body of Sankara, Nada tanum.... Sankaram', 'anisam' always with 'me manasa sirasa' (representation the 'Trikarana suddhi' i.e., the purity of the body and mind through word, deed and thought).

Also, it is quite probable that Tyagaraja was aware of the significance of the famous sloka in the 'Svaranavam' which runs as follows:

---

55
'Atma madhya gatah pranah
Prana madhya gato dhwanih
Dhavani madhya gato nadah
Nada madhye Sada Sivah'

(The last line of the above sloka may kindly be noted). It may also be mentioned, in this connection, that Tyagaraja composed several kritis extolling the divine from and power of Nada.

The important of Tyagaraja's sahitya is Bhakti bhava. His devotion to God, however, is so deep and intimate that he addresses Rama in multifarious ways such as, for instance, earnest appeal, beseeching, anger, despair, sorrow, joy, disappointment, ecstasy and so on and so forth. For the Various moods and emotions, an unrivalled master of music that he is, Tyagaraja chooses appropriate and suitable ragas to carry the relevant feelings. This fact brings to the fore Tyagaraja's preference to Bhava of Sahitya and Raga; and then Laya assumes importance next. And that makes it clear beyond doubt that Bhava Raga Laya (or tala) is the sequence of importance in his compositions.

This preferential order in Tyagaraja's compositions, however, shall not, and in fact, cannot mislead any discerner to think of less proficiency or importance in the matter of laya or tala of the great composer.

Tyagaraja says in the last carana of his Pancaratna Kriti in Sriraga (Adi tala) that such of those who know the secrets of the srutis, sastras and puranas, and understand the deep significance behind the different religions and the soul of the multiple forms of Gods, and adds further, significantly, (those who) derive comfort (joy) from, or through bhava, Raga and Laya will live long, enjoy endless happiness at heart, are dearest to him:

'Bhagavata Ramayana Gitadi srutisastra
Puranapu marmamulan
Sivadi sanmatamula gudhamulan muppadi mukkoti
surantarangamula bhavammula nerigi
bhava raga layadi saukhyamuce cirayuvulgali
niravadhi sukhatmulai Tyagarajap tulainavaru'
In the Kalyani raga kriti [Adi tala], Vasudevayani, Tyagaraja describes the entering of the story-teller [Dauvarika] on to the stage in the geyanatakam as with singing the glory of God thus:

'Raga tala gatulace baducunu  
patita pavanuni da veducunu 
Tyagaraja sannutuni pogaducunu 
Vasudevayani Vedralina dauvarikuni ganare ! 
Sri Vasudeva !

The word Tala gatula is noteworthy since it may imply the ramifications of talas.

Words like 'Vara raga layajnulu' (Kriti in Cencukambhoji - Adi);
'Tantrilaya svara gana viloluru Tyagaraja Vandyulu'
[in the kriti 'Nadopasana' Begada raga - Aditala]
'Raga layadula bhajiynice'

[in the Kriti 'Ananda sagara midani' - Garudadhwani raga - Adi tala etc., are some more instances to illustrate the prominence given by Tyagaraja to Ragam laya-tala. In fact, apart from the references to those particular aspects in the sahitya of his songs, the whole music of Tyagaraja is a brilliant and unique combination of the aspects.

Tyagaraja questions: Does playing Mridangan without knowing its tala gatis give happiness? He condemns Bhagavatas who do not know what Raga, Tala, Rakti, devotion, knowledge of Yoga are.

Not only does Tyagaraja possess profound knowledge of Tala and know its important in music, but also, he is a rasika, a connoisseur in the true sense of the term, who appreciates the beauty of Mridangam playing. His reference, in his Sriranjani raga kriti (Adi tala),

'Sogasuga Mridanga talamu jata gurci ninu  
sokka jeyu dhirudevvado 
Nigamasirotthamu galgina nijavakkulato 
svarasuddhamuto!! 
Yati visrama sadbhakti virati draksaras navarasayuta
Kritice bhajiycinu yukti Tyagarajuni tarama?
'Srirama!'

Where is that great man who, to, the accompaniment of Mridanga and Tala, brings you delight and adores you with the songs which have words that convey the spirit of the upanisads, have correctness of the notes, rhythmic pauses, true devotion, dispassion, simplicity and elegance and the nine Rasas? Is it possible for Tyagaraja to do it ?

Who is the fortunate one who by Co-ordinationg the talam and Mridangam - playing beautifully pleases you immensely!

The above sahitya is clearly reflective not only of Tyagaraja's deep rhythmic knowledge of Mridangam playing but his superb aesthetic sense, as well. The laya should follow so smoothly as to enhance or add to richness of melody. Rhythm achieves beauty only when it unites entirely with the melodic excellence. Thus in Tyagaraja's musical compositions Bhava, Raga and Tala unite to flow like the proverbial Triveni Sangamam of the pious rivers Ganga, Yamuna and Saraswati. Of these three rivers the former two are visible whereas the river Saraswati is believed to flow unseen by the naked eye from beneath the other two. The comparison aptly applies to Bhava, Raga and Tala, too! It may be interesting to mention, here, that Tyagaraja, indeed, is a 'Rasika' in the true sense of the term as is testified by his reference to his Lord as 'Sarasudu', and his description of his gait as hoyalu miranadalu galgu sarasuni' (gait excitingly graceful and charming. In fact, such charming and graceful svaram-sancaras can be amply found in his various compositions.

1. 'Uyyala Lugavayya'

Nilambari raga & banda capu tala pallavi [Sangati 1]

; S | s r G M | | P ; | p p m g r g |
u yya -- la lu ga va --
M ; , || r g m p | m g r g S |
yya . Sri ra ma
We can thoroughly enjoy and experience the rhythmical beauty as we listen to this lullaby of Srirama. All the sangatis picturize the swinging of the Cradle.

2. 'Endaro Mahanubhavalu'

Sriraga Pancaratna Adi Tala Carana 'Hoyalu mira nadalu galgu' is another instance of rhythmical beauty.

\[ p n \hat{s} P n m p m R m p m p m \]

Ho ya lu mi ra na da lu ga lgu sa ra su ni
\[ r R g r s N g r s \]

sa da ga nu la ju - - cu cu nu

3. 'Caldkani raja margamu yundaga'

- kharaharapriya raga Adi tala

the sangatis of the pallavi picturize the great Rajamarga and as
they are sung, we get a feeling as of the sangatis themselves are building the Kajamanga.

The varieties of rhythm are many and include those among the Dasapranas of Tala. No other composer had composed his songs, so extensively in all the three layas - Vilamba, Madhya and Druta, as Tyagaraja did. The variety is beauty in itself. To cite a few examples are:

Vilamba laya: E tavunara - Kalyani raga - Adi tala

Madhya laya: O Rangasai - Kambhoji raga - Adi tala
              Brocevarevare - Sriranjani raga - Adi tala

Druta laya: Sara Sara samaraika sura
              - kuntalavarali raga - Adi tala
              Vara raga layajnulu
              - Cencukambhoji Raga - Adi tala

According to scholars like Justice Anantanarayanan and G.N.Balasubrahmanyam (popularly known to the music circles as GNB) even Tyagaraja was not spared by elders of his time who called his music unclassically fast. But the fact of the matter is that Carnatic music would not have been brought to the main stream of human life as it is today but for the catching & racy rhythmic structure of the single kalai kritis of Tyagaraja.

The first merit one should identify in the rhythmic beauty of the Trinities is the fact that beauty was achieved by Tyagaraja, in the very pace of the song. One great innovation in achieving rhythmic beauty is that of Tyagaraja and only of Tyagaraja, in the these kritis which have the eduppu (graha) of the song in the middle of the little finger.

Single Kalai Caukam Kritis with 3 aksarakala anagata eduppu [Aditala]

1. 'Enta Veedukondu Raghava'

- Saraswati manohari raga

| ; , d n P m | G, r | m g r S r ||
| en ta ve du | kon du | — Ra — — gha ||

G, *

Va

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2. 'Toli neny jesina puja phalamilage'

; s r G m | D, n d | D S; s n ||
to li ne nu je si - - na pu ||
d n p m g r *
- - ja - - -

3. Ma janaki cetta battaga

- kambhoji raga

; , P P d | m G M, g |
 Ma Ja na | ki - - ce
M, P, D || P, *
tta ba tta ga

4. 'Manasutoni marmamulu delusuko'

- Hindola raga

; , m G s M g | M, m d | ,d d d
 Ma na su to ni marmamu nu de lu
d n s n D*
ko - - - - .

5. 'Sitapate na manasuna'

- Khamas raga

; , M mg G m | P, m | n d n d ||
 Si ta - - Pa te na - ma na su
P ; n d *
na - -
6. 'Enta bhagyamu mapala galgitivu'
- Saranga raga

\[ \begin{array}{cccc}
; & r & s & P & m \mid P, & P, & d & n \mid \\
& & \text{en ta bha gya} & \text{mu ma pa} & - \\
S & s & n & D & p & m \mid r & g & m & R, & * \\
& & \text{la ga - lgi - ti - vi} & \end{array} \]

7. 'Nanu ganna talli'

\[ \begin{array}{cccc}
; & s & m & G & m \mid R, & G, & g & m \mid P \\
& \text{Na nu ga nna} & \text{ta lli na-} & - \\
& p & m & G & m \mid R, & * \\
& \text{bha - gya ma} & \end{array} \]

8. 'Enta nercina enta jucina'
- Suddha Dhanyasi raga

\[ \begin{array}{cccc}
; & n & s & g & m P & m \mid P, & m \mid \\
& \text{en ta ne - - rci na en} & \end{array} \]

\[ \begin{array}{cccc}
& p n M; & m g \mid p & m & m & g & G & * \\
& \text{ta- ju ci- na - - -} & \end{array} \]

9. 'Kanta judumi oka pari kriganta'......
- Vacaspati Raga

\[ \begin{array}{cccc}
; & s & s & R & r \mid G, & g & m \mid P & P & m & G & R \mid \\
& \text{kan ta ju du mi o - ka pa - ri} & \end{array} \]

R, S, *
kri -
10. 'Sari yevuare Sri Janaki ni'
- Sriranjani raga

\[
\begin{align*}
\text{Sari ye} & \quad \text{ma re sri} & \quad \text{Jana} \\
\text{n DM} & & \\
\text{ki} & & \text{ni}
\end{align*}
\]

11. Makelara vicarama
- Ravi Candrika Raga

\[
\begin{align*}
\text{Ma ke la} & \quad \text{ra vi} & \quad \text{ca} & \quad \text{ra} \\
\text{G,} & & & \text{mu}
\end{align*}
\]

12. 'Banturiti Koluviyavayya Rama !'
- Hamsanadham raga

\[
\begin{align*}
\text{Ban tu ri} & \quad \text{ti ko- lu vi ya} & \quad \text{va yy} \\
\text{Pn N} & & \\
\text{Ra - ma}
\end{align*}
\]

13. 'Cinnanade na ceyi battitivi'
- Kalanidhi Raga

\[
\begin{align*}
\text{Cin na na de} & \quad \text{na ce yi ba thi} \\
\text{ti} & & \text{vi}
\end{align*}
\]
14. 'Smarane sukhamo Rama ni'

- Janaranjani raga

; , s r g m P m | R, s | , s d P p ||

sma ra ne - - su kha mo Ra - - ma

n s R ; *

ni - -

15. 'Atukaradani balka nikabhimanamu tekapoyena'

- manoranjani raga

; , s r M p | D, d p | M G g ||

A tu ka - ra da - ni ba ika

r r s S n *

ni - - - -

16. 'Sukhiyevuaro'

- Kanada Raga

; , n s R p | G, g | m r s s ||

Su khi ye vua ro Ra - - - ma

Sn N d

na - ma

17. 'Manavi alakimparadate'

- Nalinakanti Raga

; , m M m m g g r S |

Mu na vi a - - - la

G, r | G, r || G r

kim pa ra da te - *

and thus these kritis usually have Pallavis of one avarta, Anupallavi of 2 avartas & Caranams of 4 avartas - totalling to 7 avartas.
Examples of kritanas with 7 avarta structure:

1. Simhavahini Raga - 'Nenaruncara'
   - Adi Tala
   pallavi [1 avarta]: Nenaruncara na paini cala ||
   Anupallavi [2 avarta]: Sanakadimuni vinuta vandyama pada
   Saketavasa sadbhakta posha
   Carana [4 avarta]: Talli tandri guru daivamu niv
   Taracuganu ninnu nammiyunna
   Talladillucunte dari jupavemi
   Tyagaraja paripala sugunasila

2. 'Kanugontini 'Sriramuni nedu'
   - Bilahari ragan
   pallavi [1 avarta]: kanugontini 'Sriramuni nedu'
   Anupallavi [2 avarta]: Inakulamandu yimpuga butti
   Ilalona Sitanayakuni nedu ||
   Carana [4 avartas]: Bharata Lakshmana 'Satrughnulu koluva
   Pavamana sutudu Padamula batta
   Dhirulaina Sugriva pramukhulu
   Vinutiseya Tyagarajanutuni nedu ||

Thus, they have 14 half-avartas of identical structures with stress on almost every other beat of the tala and must be easy to understand, anticipate and accompany, even for beginners among percussionists. Even the sangatis in the songs are usually of the same kind and easily anticipatable. These kritis have thus a rhythmic catchiness and beauty of their own while they are easy and pleasing to all concerned, the singers, the listeners and accompanists. No wonder these kritis are extremely popular with instrumental soloists, too.
compositions that have been often played in Carnatic classical instrumental concerts.

Ex: Raghuvamsa sudhambudi candra
    - Kadanakutuhalam Raga Adi Tala - Patnam Subrahmanya Iyear

1) 'Raghuvasma sudhambudi'
    - kadanakutuhalam Raja
      ; , s r M m | G, m g r s | s s n D P ||
      R a g h u v a m s a | s u d h a m - - b u | d h i c a n - - d r a
      S, *
    Sri

2) 'Brova bharama'
    - Tyagaraja kriti - Bahudari raga
      ; , p d N P, m | G ; ; g m | P d n S ||
      B r o - v a b h a r a m a R a g h u r a - - -

The credit of having invented this rhythmic appeal (beauty) without compromising much in the level of classicism should go entirely to Sri Tyagaraja.

Dr. Balantrapu Rajanikanta Rao writes that Tyagaraja used Adi Tala for about 80% of his compositions (available so far). He gives the number of compositions set to Adi Tala are 310. A table showing various Talas and number of compositions of Tyagaraja (available so far) according to Dr. Balantrapu Rajanikanta Rao may be found in the Appendix.

Kritis that carry a built-in rhythmic beauty:
    Ex. Cede buddhi manura!
    - Athana Raga - Adi Tala
    'Chastizing the not to entertain bad ideas' - is the meaning and message of the composition.

    In Atita graha, where the music starts before beat there is a stress on the first beat itself.
\[ * \tilde{r} || s n p D N P p p m g M | p c e \ de - - \ bu - ddhi ma - - - n u r a \]

The graha or eduppu is reckoned only with reference to that beat. Even in songs where the music starts after the beat [Anagata graha], the stress is usually on the second beat of the middle of the tala.

**Ex. Siva Siva Siva yanarada - Pantuvarali**

- Aditala

\[
; n S n D P M G M | P ; p m G... \\
\]

*stress on the second beat of the tala.*

Tyagaraja's command over swarna prastara is simply marvellous, and his setting them to his sahitya is amazingly superb; and, hence, the greatness of his Kritis. His rhythmic sense in the combinations of sahitya and sangitya and sangita surprisingly reveals itself at many a place in his compositions.

There is no need for rare or complicated tala for his brilliance to reflect. A simple tala like Tala is enough to contain easy, smooth, attractive, pleasing flow of svaras, and the varieties of combinations of units, in one and the same group. Here-below are given some such svaras of rhythmic patterns set, in absolute fusion, to sahitya which, together, at once create a felling of joy at their beauty in the listeners 5th carana of the Sriraga pancaratna Kriti (Caturasram).

\[ \text{pmmp-rrgr-psrg-rrsp} | \]

Hari guna - mani maya - saramulu - gala muna |
(Note the hrasva akshara sahitya to sarva laghu svaras)

\[ \text{p} \text{ps R r - r , | g g r s r m P | |} \]

so.... bhillu bhak ta kotu li lalo

In the notation in Sangita Sampradaya Pradarsini 'rirri' for 'Rr'.

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'gagga' for 'Gg' and the like are published to facilitate proper expression of the stress of the dvitvaksaras at such places in the sahitya like: 'bhillu' and 'bhakta'.

\[ p \ p \ s \ \hat{R} - r \ m \ p \ N - m \ p \ n \ \hat{S} - \hat{r} \ |
\]

telivi to - che li mi to - ka run ra gal gi

g\hat{r}\hat{R}g\hat{r}\hat{r}s | \hat{s}n\ p\ p\ m\ rg | | \hat{r}rs\ p

jaga mel la nu sudha | drishti che - chu va – (render)

A sangita rasika feels the sound of the trotting of horses (in the four-unit svara groups consisting of janta svaras) in the first avarta, and as through he is being taken in a double-horse-cart gradually upwards to the top to show the entire world(jagamellanu) being saved by the countless great persons by their gracious look(brings them, in the musical sense, down to significance of sobriety by returning to the burden of the song).

5th carana : Sriraga pancaratna kriti, Adi Tala

Trisra-svara groups may be seen in-between some caranas. For eg 'p n p' - 'p n p' - 'm p m' - 'r p m' - in the 9th caranas of Gaula Pancaratna Kriti.

The panca svara pattern: \[ p \ n \ s \ \hat{R} - r \ m \ p \ \hat{N} - m \ p \ n \ \hat{S} \]
in perfect coordination with the words in the sahitya:

'telivito - chelimito - karunagalgi

is noteworthy in the carana.

In the second sangati of the second half of the pallavi of Natapancaratna Kriti, the three-unit rhythmic pattern'(3 + 3),

\[ \hat{s}n\ p - \hat{s}n\ p - m\ r\ s - m\ r\ s', \]
Ja na.... ki....

the sahitya be seen divided as (2 + 4) m r - s m r s.

na. Ki.....

In Tyagaraja kritis rhythmic patterns of svaras flow so naturally, effortlessly and suitably with the words, in his sahitya that their
synthesis produces spontaneous pleasure to the listeners.

His compositions consist not only a variety of rhythmic patterns, but also, the distribution of the constituent svaras among the same pattern is surprising beyond measure. Example are quoted below:

Total of 8 aksaras forming a pattern like the mridanga jati 'Dhima
ta-dhim takita'.

3rd carana in the Nataraga - Aditala Pancaratna Kriti

'Pn - Pn p m' - Mp - Mp m r' - G m - G m r s'

'Indra-Nilamani' - 'Sanni-bhapaghana' - 'candra surya nayā'

'Ns - GmP'

'natra - meya Va, from here Tyagaraja has also
shown some variations within the same 8 adsaras pattern.

'Pn - p s n r s, - Mr - s n p M-

gendra - janaka saka' - lesa - subhra Na
g m p - s n p n - p m r - S S r g m
gendra - sa ya na sama - na vai - ri san - nuta.

(Jagadanandakaraka)

Yet another variation in the same 8 aksara group (pattern) may
be seen in the 7th carana of the Nataraga (Adi) pancaratna kriti as
follows:

'p P n - p m n p', m M p - m g m r', 's R s - m g p m'

'n P m - g m p n', p s s - r s m r' - 's R s - s n p m'

'g G m - p s n p' - 'm R s - s r g m'.

Another instance of similar pattern (8 aksara unit) may be seen,
again, in 'Jagadanandakaraka' the Nataraga (Adi tala) Pancaratna Kriti
as follows:

'ś n p - M n p', 'm r s - N r S', 'ś p p - S s R', 's r s - P m n p'

'ś n p - R r S', 'p s n - p m gm, 'p p s' - 'ś n P', 'm r s - S r g m'.
In the Anupallavi, and also at the end of the 10th carana of 'Dudukugala' the Gaula Raga (Aditala) Pancaratna Kriti may be seen a similar passage of Dhatu with different Matu like this:

**Dhatu** : ṛ Ṛ ś - ś Ṛ ś n - n ś n p -

**Anupallavi** : ga - di - ya - ga - di

**10th Carana** : Tya .... ga...... ra....

In the above illustrations are seen the caturasra svara patterns (4 or 8). Tyagaraja has also shwon rhythmic patterns of different number of units. Here is an instance of a five-unit svara prastara in the seventh carana of the Gaula raga Pancaratna kriti (Adi tala):

p ś n p - r ś n p - ś n p M - n p m R -
s p s Ṣ - n p m r s

Another example for the Pancasvara pattern can be seen in the 7th carana of the Arabhi raga Pancaratna kriti, 'Sadhincene O Manasa!'

d d p P - m g r R - r s s d

po ga da ga - Tya - ga ra - ja ge yu du

In the 5th carana of 'Endaro mahanubhavulu, Sriraga Pancaratna kriti in Adi tala, also may be seen a similar panceasvara pattern.

p n s R - r m p N - m p n Ṣ - ī ī R -
te li vi to - ce li mi to - ka ru na ga - lgi ja ga me

 ī ī ī Ṣ - ś n p p m
lla mu su dha - dri - sti ce -

Given below are the Satsvara-jatis (six aksara laya patterns).

**Nata Pancaratna kriti** : 9th carana :

'ṅ Ṣ r g m - ṛ G m p n - p Ṡ Ṣ n p - Ṣ Ṣ m ī m ī - Ṣ ī N Ṣ

When the prastaras in musical compositions in the form of groups or patterns are rendered vocally or on instrument, and accompanied by the percussionist in the same jati (pattern), the music gives the listeners feeling of thrill and suspense in the first instance and, then, when such groups (which are muktayis or their like) at
the conclusion join the pallavi or burden of the composition, they
bring spontaneous joy and satisfaction for them (listeners).

Some examples in Tyagaraja's Pancaratna kritis wherein, occur
such rhythmic patterns like 'muktayis' (or the like of them, bringing
spontaneous exhilaration to the audience are shown below:

i) Arabhi raga pancaratna kriti : 6th carana

Dhatu : (m g r) S i S s S - d d p P p -
ru ha da ta ksa ya nu cu ve du
m g r R s S
ko - nna na nnu ta
Sahitya (sarasi) ruhadalaksa - yanucu vedu - konna nannuta
brovakanu
(5th - pause of 4 aksarakalas) and
P , d p m
bro va ka nu [Samayaniki]

ii) Sriraga kriti (6th carana)

Dhatu : (P n m p n s r)
g R s n p - S N p m r - p m p r g r (s p)
Sahitya ni ma ghu lai - mu dam bu na nu - ya sa mu ga la va
[rendaro]

iii) (a) also, in Sriraga kriti : (8th carana)

(Trisram) : g R - r S - S N - n p m (Dhatu)
ne rin - gi san - ta tam - bu na nu
followed by caturasra group with vinyasam :

(Caturasra - pattern)

r m p n - S , n - P , m - R , g - r s p p -
gu na bha ja na - han da - ki rta - na mu se - r S n yu va [rendaro]
b) In the 6th carana of the Gaula raga kriti a wonderful svara prastara consisting of four-aksara units, followed by 3 and 6 aksara rhythmic phrases with a thrilling muktyai-jatis for the connoisseur's pleasure inexpressible in words.

Here it is:

\[rrpprrmmsssrpm\]
\[rsnspmps\]
\[rnsmr\]
\[snm\]
\[rnsn\]
\[rnspn\]
\[snp]\n
(c) 9th Carana (Trisram)

\[sSPPR\]
\[gpstn\]

Khandam

\[SSPPRR\]

In the above passage, the beautiful combination of svaras bering the most pleasing consonant relationships between them - Sadja - Pancama bhava in the arohana (ascent), S-P-R, and the Sadja Madhyama bhava in avarohana (descent), S-P-R employed in the course of the carana as set by Tyagaraja is bound to cast a rather hypnotic effect, so to say, of immense joy on the listeners; and when accompanied with understanding of the inherent rhythmical beauty enhances it boundlessly. Here is a sample of the great musical genius that is Tyagaraja! Six aksara units (patterns) are also seen in the Varali raga pancaratna kriti, kanakana rucira (Adi tala).

\[\text{Eg. i) in the carana 'Sapatni matayau'[4th]}\]
\[S, Pm\]
\[Saptni\]

\[\text{ii) in the carana 'Kamina' [7th]}\]
\[gmpdmdP; srgR\]
\[sadanudasaksiamarinyuana\]
Here is, yet another noteworthy feature. The following passages in the same kriti (varali raga) reflect the two branches of sthayi prastara in the Raga alapana paddhati of Manodhrma sangira - namely, Aroha sthayi prastara, and Avaroha sthayi prastara.

**Aroha Sthayi Prastara (6th carana)**

'\( m \ d \ m \ G \ r ' - ' s \ N \ p \ m ' \\
'\( g \ r \ G \ r ' \\

(It is stipulated that in the Aroha sthayi prastara the sthayi svaras will be in the ascending order(n, s, g as above), whereas the prastara will be, mainly, below the sthayi svara. Contrary to this is the laksana of Avaroha Sthayi Prastara.)

**Avaroha Sthayi Prastara** (in the same carana as the above).

\( s \ r \ s \ r \ N \ d \ n \ p \ d \ M \ p \ d \ m \ G \ r \ s \ r \ g \ R \ s \\

It may be noticed that, as per the laksana, the sthayi svaras are in the descending order i.e., s, d, p and s.

Again, it may be observed that this carana, at the end, has rhythmic patterns like muktayis.

Tyagaraja, through has not extensively employed svara - phrases or groups on the yati patterns instances are not wanting wherein occur in both srotogara yati and Gopuccha yati. To illustrate a few such:

I. **Srotogata (or Srotovaha) yati**

i) \( ' n \ P - s \ n \ P - r \ s \ n \ p - m \ r \ s \ n \ p ' \\
(in the 8th carana of Nara raga kriti, Jagadanandakaraka)

ii) (a) \( ' m \ r \ s \ S , - p \ m \ r \ S - n \ P \ p \ m \ r \ S ' \\
in the 4ht carana of Nata raga kriti - Jagadanandakaraka. 

(b) in the 10th carana of the same kriti (a)

\( ' p \ M - n \ p \ M - s \ n \ p \ M ' - a n d \\
' m \ r \ s - p \ m \ r \ s - n \ p \ m \ r \ s ' \\

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II. Gopuccha yati: (in 5th carana of Gaula kriti - Dudukula gala)

(a) 'rmphon - mp N - p n'
(b) 'ddppm g R - ppm g R - m g R'

in the later half of the Anubandham of the Arabhi raga kriti Sadhincene.

It may be noted their all the illustrations, examples, etc., are taken from Tyagaraja's Pancaratna Kritis. It is done so, for the simple and sole reason that they are veritable mines of gold and gems of all varieties of rhythmical beauties. Truely, all the kriti compositions of Tyagaraja excel in melodical content.

In the pancaratna kritis the svara and sahitya combinationi.e., Svara-Sahitya melanam' reaches the peak of beauty in music. Keen observer may find the two different ways of the combination. The svara and sahitya going hand in hand like, for instance in the Sriraga Kriti 6th Carana.

i) ง R s n p - s N p m r - p m p r g r s n
   ni ma gnu lai - mu dam bu na nu - ya sa mu ga la va ..
   [rendaro]

ii) p m m p - r r g r - n r g - r r s n
   Ha ri gu na - ma ni ma ya - sa ra mu lu - ga la mu na

For those who understand the meaning of the words, it will be clear that the words 'Amita kamita', 'Asamana gatra', 'Sacipati', 'Abdhimadahara', 'Anuraga raga rajita' are tagged on to the musically idiomatic phrases at the end of the latter. Singing the above carana correctly, perfect understanding of the sahitya, together with that of the musical idiom the singer should be proficient enough to render faithfully the links connecting the dhatu and matu. Loss proficiency or lack of absolute attention to singing the sahitya in its proper dhatu will mar the beauty as well as the meaning of the sahitya. For example, in singing the words - 'Anuraga raga rajita', in particular, if one does not pay sufficient attention what should 'raga raga' would sound 'gara gara', striking harsh to the ears of connoisseurs!
Such 'Sangira-Sahitya pada vinyasas' may be observed in the 7th and 8th caranas, too. Brief cross-rhythms, here and there, in the middle of soft and smooth rhythms add a peculiar beauty to the sequence.

Sanskrit Kirtanas of Tyagaraja

Tyagaraja's compositions in Sanskrit language are equally attractive with naturally built in catchy rhythm.

Ex : Samajavaragamana - Hindola Raga - Adi Tala

p : Samajavaragamana sadhu hrit sarasabjapala kalatita vikhyata !!

AP : Samanigamaja sudhamaya gana vi - caksana gunasila dayalavala mampalaya !!

C : Veda siromatrija sapta swara nadacaladvipa svikrita
   Yadavakula muralivadana vi
   noda mohanakara Tyagaraja vandaniya !!

Kanada Raga - Adi Tala

P : Sri Narada nada sarasiruhu bhringa subhanga !!

AP : Dina manarakasaka Jagadisa bhisa samkasa !!

C : Vendajanitavara Vinavadana tattvajmna
   bhedakara triparahita kecaravinuta !!

REFERENCE OF LAYA / TALA / TALA VADYAS IN
TYAGARAJA'S COMPOSITIONS

1. 'Ragamu talamu rakti bakti jmnanayogamu mari yanuragamu leni bhagavatulu darasayanulegani
   - Mariyadagadura - Sankarabharana Ragam - Adi Talam

2. 'Teliyani nata vita ksdruulu nanitalu svavasamouta kupadesinci santasilli svaralayambu lerungakanu silatmulai subhaktutulku samanamanu'
   - Dudukugala - Gaularagapancaratnakriti - Aditalam
3. 'Vararagalayajmnu tamanucu vadarrayya'
   - Cencukambhoji Ragam - Adi Talam

4. 'Maddelatalagatulanu teliyaka mardincuta sukhama
   'Suddhamanasu leka bhajana ceyuta sukaravri ttira manasa'
   - 'Svararagasudha rasayutabhakti' Kriti
   - 'Sankarabharana Ragam - Adi Talam

5. 'Sogasuga mridangatalamunu jata cesi cokkajeyu
dhirudevvado'
   - 'Sogasuga mridangatalamu' Kriti
   - 'Sriranjani Ragam - Adi Talam

6. 'Patitapavanudane paratparuni gurinci paramardhamagu
   nijamargamutonupaducunu sallapamuto
   svaralayadiragamulu teliyuvaru'
   - Endaromahanubhavulu - Sri Ragapancaratna Kriti
   - Adi Talam

7. Bhagavara Ramayana Gitadi Sriti Sastra Puranapu
   marmamulan
   'Sivadisanmatamulagudhamulamupadi mukkoti suranta
   rangamula bhavammulanerigi bhavaragalayadi
   saukhyamucha Cirayuvul galigi niravadhi sukhatmulai
   Tyagarajaptulainavaru'

8. Ananda sagaramidani dehamu bhubharame Rama
   Srinayakakhila naiganasrita sangitajmnamanamu Brahma
   Sri Visvanatha Srikantha vidhulu pavanamurt. ulupasincleda
   bhavinciragalayadulabhajince Sri Tyagarajanuta'
   - 'Anandasagaramidani dehamu' - Garudadhvani Ragam
   - Adi Talam

9. 'Svararagalaya sudharasamandu
   vararamanamamane kandacakkeru misramu jesi
   bhujince Sankarunikedelusunu Tyagarajavinuta'
   - 'Intasaukyamani' Kriti - Ragam - Adi Talam

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10. 'Manratmulu Yantra tantratmulu mari
manvantramulennno galavaralu
tantrilaya svaragana viloluru
Tyagarajavandyulu svatrantrulu'
   - 'Nadopasance' Kriti - Begada Ragam - Adi Talam

11. 'Bagumira natanamu seyucunu
patita pavanuni ta veducunu
ragatalagatulanu paducunu
Tyagarajasannutini pogaducunu'
   - 'Vasudevayani' Kriti - Kalyani Ragam - Adi Talam

12. 'Vikasitapankajavadanalu vividhagatulanadaga'
   - 'Venuganalolunigana' Kriti - Kedaragaula Ragam
     - Rupaka Talam

13. Sangatiganu mridanga ghosamulace
    pongucu vidhulakegucu merayucu'
   'Dittamuga nudukattuto nudugulu
   bettucu talumubatti galgalanaga'
   - 'Haridasulu vedale' Kriti - Yamunakalyani Ragam
     - Adi Talam

In the foregoing passages an attempt has been made to illustrate
the large variety of laya patterns in the compositions of Tyagaraja.
While is true that in his compositions Bhava and Raga takes priority
over the laya aspect, it is equally true that the three are not separate
in his compositions. As has been shown earlier in his chapters all
the three are inseparably woven together to produce totally an
absorbing musical effect indescribable in words. There is perfect
balance in the very from of his compositions.

There does not seem to be any the least deliberate attempt at
coining or weaving svaras in to rhythmic patterns. They come to
him most naturally. The laya patterns from effortlessly in his
compositions. It surpasses one's power of understanding how such
varied laya patterns so casually and at the same time so effectively
occur in his compositions. Be his kritis are set in Vilamba Laya or
Madhya Laya there are fine laya patterns in them. Some such
examples have been given in the Varali Pancaratna Kriti which is rendered in Vilamba Laya, and in other kritis in Arabhi Raga or Sriraga of Madhya Laya.

The special beauty in the rhythmic patterns in Tyagaraja's composition is that they share equal excellence in the lyric as well as music.

**NOTE AND REFERENCES**

1. Sriraga Pancaratna Kriti Endaro mahanubhavulu - Aditala
2. 'The Spiritual Heritage of Tyagaraja' by C.Ramanjacari with Dr. V. Raghavan's Introductory Thesis.
3. The origin, evolution and future of music concerts by Dr.Radha Venkatacalam, Ph.D. Thesis (Unpublished), Delhi University.
4. One of kritis of Patnam Subrahmanya Iyer made extremely popular with the audiences by the masterly and superb playing on Violin by the Violin - Wizard, Sangita Kalanidhi, Padmasri(Late) Dr. Dwaram Venkataswamy Naidu garu.
Chapter - VII

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The Treatment of Rhythmical Aspects in Sri Muttuswami Diksitar's Compositions
CHAPTER VII
THE TREATMENT OF RHYTHMICAL ASPECTS IN SRI MUTTUSWAMI DIKSIKAR’S COMPOSITIONS

Muttuswami Diksitar was a profound scholar in the Sanskrit language besides Telugu and several sastras like Sangita, Vyakarana, Jyotisa, Mantra, Tantra. He mastered kavya, Nataka, Alankarasastras at a very early age. He was a great devotee, and being a staunch follower of Advaita Philosophy, he worshipped all gods irrespective of the religion which are revealed in all his compositions. Diksitar’s delineation of the Raga svarupa is comprehensive, with all its laksana.

A profound scholar in the Sanskrit language as said earlier and its grammar, an eminent linguist, and an excellent master of the theory and practice of music, Muttuswami Diksitar synthesized, as it were, his command over sahitya and sangita to produce an amalgam of rare musical beauty confining in itself melody and rhythm in his compositions.

In the Trinity, Muttuswami Diksitar seems to have been a believer of the tent that classicism goes only with slowness and he specialized in compositions of the slow gait known as cauka kala. As if to avoid the dullness, usual in Cauka kala, Muttuswami Diksitar does not lay behind in his magic of leaving the researchers thrilled with his achievements in rhythm. That he has been a composer out of the ordinary is proved by the fact that he has given us beautiful kritis in praise of the 7 planets in the 7 talas (list of the Navagraha Kirtanas of Muttuswami Diksitar may be found in the appendix) - in that order, with slowness. Diksitar took care to always crown his compositions with passages in the faster pace. He was indeed a master in this. Changing the pace from slow to fast is done different ways in different systems of music.

In western music, the practice of both increase and decrease of speeds exist. The former is called Acceleration and the latter Retardation. Though there is no tala Western music, the shifting of pace by increasing and decreasing the speed of the on going music, is resorted to create effects of different nature.
Even within India, the Hindustani music does not employ the
classical theme in speeds as scientifically as it is done in Carnatic music.
In a Hindustani music concert, the pace of music is increased to
faster tempi not in any traceable arithmetic measures, step by step,
but gradually at random rates. In Carnatic music, the change of the
pace of the music is almost always governed by rules of geometric
progression.

Muttuswami Diksitar has maintained this rather difficult trait
by always maintaining the length of the Madhyamakala portion to
arithmetically half the length of the avaritas. Doing this, in Adi tala,
where the unit are in the fashion 8, 4, 2, 1 this might be easy, but
Diksitar has achieved this even in talas of 7, 10 & 14 etc.,

Ex. In the kriti Daksinamurte, in Misrajati Jhampe tala of 10
aksaras, the Madhyamakala sahitya portion 'Sukhakaraprawritte', is
made of 4 parts of perfect 5 aksarakalas totalling to 20 aksaras of 2
avaratas of the tala.

(sa..............raga)
smgMpmN
Su khs traraprintrte-
Šn ϱ N P N N Š Š N
Sm jmnana ni vrittte
šš Š d n s n d n ϱ m
Sva gu ru gu - hadpattte
Š n s n P Š P R S
Sva nu bho ga triple
Similar is the case of the other famous song in the same tala
'Budhamasrayami'.

'Budhamasrayami Satatam'

- Natakuranji Raga - Misrajati

Jhampa Tala
More astonishing is the instance of Kamalambikayani (Navavarana kriti) in kambhoji Raga set to Khanda jati Ata Tala 14 kriyas.

Kambhoji Navavarna Kriti - Khandajati Ata Tala
14 Kriyas 4
x 14 = 56 aksara kala.

Sa kum ku ma di le pa na yai
Ca. ra Ca. ra di ka lpa na yai
m g g r r s s r N D d r N D d p
li ku ra vi ji ta ni - - la gha - na - yai -
r S, r n d d p d r s n d m M
Ci da nan - da pn - - - ma gha na

'yamalambikayani'

Diksitar has been able to maintain this even in talas of odd number of aksaras.
Ex. 'Sridundurge' in Khandajati Ekam of 5 kriyas - 'Sriranjani raga.

'Sundari Srirajani Niranjani Jayajanani'

S s s S n d n s
Sun da ri Sri ran ja ni - Half of the avarta

d N d m g m r g s
Ni ram ja ni Ja ya Ja na ni

The crowning passage of madhyamakala is very beautiful.

One should not fail to notice that even in all these intrinsic weavings of lyric rhythm, Diksitar has achieved the miracle of maintaining the 'Antyanuprasa' and other such beauties.

Exs. of Antyaprasa

1. Arabhi Raja - Adi Tala

P : Sivakameswaram cintayamyaham
Cidanandapujitambhorham !!

AP : Sivakameswarimanooram
Sri guruguha bhakta vasamkaram

C : Nadabindu kala rupamanisam
Nateswaram bhanukoti sadrusam
Nandi turagarohitam guruguha mahitam
Cidambarapuri vilasitam !!

2. Sama Raga - Adi Tala

P : Guruguhaya bhaktanugrahaya kumaraya namo namaste !

AP : Guruguhaya bhaktanugrahaya gunatitaya ruparahitaya !!

MKS : Harihara virincirupaya
saccidanandasvarupaya sivaya !!

C : Sakalagama mantrasarajmnya
satsampradaya sarvajmnya
Sakala nikalaprakasakaya samarasya
sampradayakaya !!
MKS: Vikalebara kaivalyadanaya vikalpahinaya Vijmnanaya
     Sukavamadeva vanditapadaya
     Sukavamadeva mukti bhedaya

Anandabhairavi Raga - Tisra Eka Tala
P: Manasa guruguharupam bhajarere
   Mayamaya hrittapam tyajarere !
AP: Manavajanmani samprapte sati paramatmuni
    niritasayuskham vrajare !

Balahamsa Raga - Jhampe Tala
P: Gurughadanyam najaneaham
   guptagamardha tattva prabodhino
AP: Arunodayananta koti brahmandakara sivadi`
    dharanta tattva svarupino !
C: Sahasradala sarasija madhya nivasino
   Sakala candra bhaskara tejah prakasino
   Saccitsukhatmaka svavilasino !
MKS: Aharahah prabala hamsa prakasatmano
    dahara vidyapradayaka paramatmano
    jahadajahallahsanaya jivaikyatmano
    rahah pujita cidananda nathatmano !

Ex. of Vrityanuprasa

Tarangini Raga - Adi Tala
P: Maye tvam yahi mam badhitum Kahi !
AP: Dhyeya deya tnamehi mudam dehi mam pahi !!
C₁: Gaye geya yahi kahi yohi pahi !!
C₂: Paya peye sarasakaye rasakaye sakaye aye !!
C₃: Maye tvam yahi samudaye guruguhodaye

Ex. for Yamakam: Sudhataragini antarangini
Vrityanuprasa:
Madhyamakala Sahityam:
Daksa siksana daksatara suraraksana vidhivilaksana
laksa laksana bahu vicaksana subhabhaksana gurukatakasa
viksana !!

REFERENCES TO TALA VADYAS

Akhilandeswari - Jujavanti Raga - Adi Tala
1. 'Jalli Mardala Jarjhara vadya nada mudite'
2. 'Giti cakra ratha sthitayai

Kannada Raga - Misra Capu Tala
Samasthicharana 'Nanavidha vadyakarayai

Sridundurge - Sriranjani Raga - Khandajati Eka Tala
AP : Sridundubhivadya bheda nada vinodini

Ex. for Gopucca yati

Sri Varalaksmi namastubhyam

Vasuprade - Sri Raga - Caturasrajati Rupaka Tala

Sri sarasa pade
Rasa pade
Sapade
pade
pade

Purna candrabimba - Sadragamalika - Rupaka Tala

In the end of the Madhyamakala sahitya
Naga dhuani sahite
Dhuani sahite
Hite

References to Laya/Tala/Tala Vadyas in Sri Muttuswami Diksitar's Compositions
1. Uccistaganapatau bhaktim kritva
   Kasiramakriya Raga - Adi Tala.

   In the carana - 'Bheri vina vadane' is the beautiful phrase.

2. 'Bhajare re citta balambikam' -
   'Santa Kalyani Raga - Misra Eka Tala.

   In the Madhyamakala sahitya set after the carana, the phrase,
   'Bhava Raga Tala Modini' occurs.

   Muttsuwami Diksitar composed in rare talas (i.e., other than
   the most commonly used Adi, Rupaka, Capu, Triputa and Jhampa
   talas) some examples are hereunder:

   1. 'Sri Guruguhaswamini bhaktim karomi'
      - Bhanumati Raga - Khandajati Triputa Tala

   2. 'Ganesakumara pahimam' - Janjhuti Raga

   3. 'Saravati' - 'Saravati Raga - Tisra eka Tala

   4. 'Brihadisa kataksena pranino jivanti ahamahamityatmarupa' !!
Chapter-VIII

Special Flair for Rhythmical Exercise in the Compositions of Sri Syama Sastri
CHAPTER - VIII
SPECIAL FLAIR FOR RHYTHMICAL EXERCISES
IN THE COMPOSITIONS OF SRI SYAMA SASTRI

The commencement of the Trinity period heralded the dawn of the Golden Era in Carnatic Music. In the kritis composed by the Trinity, the melodic and rhythmic structures reached the acme of precision and perfection. The varied combinations of melody and rhythm, versatility in the blending of sahitya and sangita, innovative sancaras, amazing adaption of talas with a remarkable and though provoking treatment of Kalapramanas are a few of the hall marks of the compositions of the Trinity. In the particular, the present thesis attempts at the rhythmical beauties of the kritis composed by the Trinity.

The versatility of music and rhythm combinations, the acute sense of musical grammar, extra-ordinary fore-sight.

And the musicologists' level in the game of classifications, tabulations and compartmentalization as it would be there won't they have listed the musical trinity too as specialists in the three aspects, Bhavam Raga and Tala/Laya. This classification may not be of totally valid but it has come to stay and there is a belief that it was Syama Sastri who specialized in rhythm.

It starts after five of the 7 units of Misra Capu. It is widely accepted that the dasabda kriya, the beat enjoys a special status in his talam. And almost all the talas begin only with the beat.

It must have struck to Syama Sastri that employing Atita eduppu(graha) in Misra Capu also can give a welcome stress on the first movement of the tala. This rhythmic beauty can be seen in the Anupallavi & Carana of the kriti, Minalocana.

Anupallavi:
*p n || S , ; n r ||
Ga - na vi -
s n D P | p m P || p P m m GG||
no - - - di - - ni - - am
P , ; ; ||
ba

88
* Carana:

\[ s \quad s \quad || \quad s \quad n \quad D \quad P \quad \ldots \quad \]

\[ \text{Kan} \quad nna \quad \text{ta} \quad - \quad - \quad \text{lli} \]

He must have explored the process further by employing other grahas also like 3/7 (Ex. Ninnu vinagamari - Purvakalyani)

5/7 (Ex. Talli ninnunera namminanu - Kalyani)

*Ninnavinaga mari*

- Purvikalyani Raga

\[ s \quad r \quad s \quad r \quad D \quad || \quad r \quad S \quad ; \quad s \quad n \quad D \quad || \]

\[ \text{ni} \quad - \quad - \quad \text{nnu} \quad - \quad - \quad \text{vina} \quad \text{ga} \quad - \quad - \]

\[ r \quad R \quad G \quad g \quad r \quad || \quad g \quad g \quad m \quad p \quad m \]

\[ \text{mari} \quad \text{di} \quad \text{kke} \quad \text{vva} \quad \text{ru} \quad - \quad - \quad \]

\[ \text{gm} \quad G \quad R \quad S \quad \]

\[ \text{nn}a \quad - \quad - \quad \text{ru} \quad \]

'Talli ninnu nera namminanu'

- Kalyani Raga

*G \quad || \quad S \quad R \quad s \quad r \quad G \quad || \quad g \quad G \quad g \quad r \quad

\[ \text{Ta} \quad \text{lli} \quad \text{ni} \quad \text{nnu} \quad - \quad - \quad \text{ne} \quad \text{ra} \quad - \quad - \quad \]

It is observed that, in some of these kritis there is more than one version and the application of different eduppu is Syama Sastri kritis. It is not uniform throughout.

Musicologists have called the talas of 3/7 eduppu as Viloma Capu. The explanation give is that the usual takita takadhimi structure of Misra Capu becomes a cycle of Takadhimi takita. If the music starts at 3/7 after the Takita. According to musicologists 'Viloma' is the process of reversal and so 'Takita takadhimi' is Capu and 'Takadhimitakita' is Viloma Capu. In the purvikalyani song of Viloma
Capu 'Ninu vinagamari', many musicians start the Anupallavi and Carana in 2/7 and calling the tala as Viloma Capu just for the sake of eduppu of the pallavi is not probably, warranted. All said and done, one can not but appreciate the rhythmic variety and charm in the experiments of Syama Sastri in the Misra Capu compositions.

There is one more possible reason for classifying Syama Sastri as a Tala specialist, among the total of about 150 available kritis of Syama Sastri, there are famous songs in Tisra gati also.

<table>
<thead>
<tr>
<th>Kirtana</th>
<th>Raga</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birana varalicci</td>
<td>Kalyani Raga</td>
</tr>
<tr>
<td>Himadrisute</td>
<td>Kalyani Raga</td>
</tr>
<tr>
<td>Sankarisankuru</td>
<td>Saveri Raga</td>
</tr>
<tr>
<td>Parvatininu</td>
<td>Kalagada Raga</td>
</tr>
<tr>
<td>Karunanidhi ilalo</td>
<td>Todi Raga</td>
</tr>
<tr>
<td>Ninnuvina marigalada</td>
<td>Ririgaula Raga</td>
</tr>
</tbody>
</table>

Prof. P. Sambamurti has said that Syama Sastri has composed the Trisra gati Adi Tala kritis in such a way that they could accommodate Caturasra gati Rupaka tala also. One however wonders that Syama Sastri should have taken pains to compose sets of lyric to one and the same music.

**Ex : Himadrisute - Biranavaralicci....**

<table>
<thead>
<tr>
<th>Himadri sute pahimam</th>
<th>Kalyani Raga</th>
<th>kirtana 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birana varalicci brovumu</td>
<td>Kalyani Raga</td>
<td>kirtana 2</td>
</tr>
</tbody>
</table>

Pallavi : 

\[
\text{Kirtana 1} \\
; g S s n r R g p m P,\; p m g r s r \\
\text{Hi madri} - s n t e p a - h i m a m A m - b a - - - \\
; g S n r R g p m p ; ; p m g g \\
\text{B i r a ne va r a li cci} - b r o v u m u n i n u \\
\text{g m P p m G g r s r} \\
\text{n e} - \text{r a n a} - - n m i - t i -
\]
Su me ru madhyavasi ni Sri kamaksi - Kirtana 1
Pu ra ri manoharini Sri Kamaksi - Kirtana 2
Syamakrisna sodari gauri - Same sahitya &
Parameswari griya music setting for both
the kritis

Kirtana 1
Anatha raksanambu salpi devi nanu ||

Kirtana 2
Ala Nilaveni Kiravani Sri Lalite ||

'Akhilandeswari Sambhavi
sarasijabhava vandite gauri ||
G r Sd d p m | G r
Vandite gau - - - ri -

In the place 'vandite Gauri' he has beautified the gait by employing the syllabus 'te' and 'Gau' with equal length of 3 units each to occupy one full kriya of 6 units.

G r Sd d p m | m
Vandi te- gau - - | ri -

One must remember that such beautification have occurred in the mind of Syama Sastri about 2 centuries back. When the environment was barren with no possibility of any artistic prompting around to have through of such rhythmic beautifications and experimentations in an uninspiring ambience of those days, this is something worthy of all praise and appreciation. Credit is surely due in no mean measure to the laya explorer and inspirer, Syama Sastri.

Of the compositions of Musical Trinity Syama Sastri's reveal
particular flair for rhythmical aspects. He composed kriti so that it can be rendered in two different talas. As for instance.

**Sankari Sankaru** - in Saveri Raga in both Tisra Eka (Tisra Gati and in caturasra rupaka tala). Similarly the kriti Birana Varalicci in Kalyani Raga are instances of his love for rhythmic exercise. His Capu Tala of the misra variety seems to have had a fascination for him. His compositions in the tala contain rhythmical beauties. His kritis carry intense emotional feelings of a child appealing to its mother. The manner in which he has composed kritis in the tala Capu, Triputa, Rupaka, offers an interesting study of his excellence. There is rhythmic beauty, for instance : in Capu, Tala kriti in Ananda Bhairavi. In the passage there in the rhythmic pattern is shown below:

<table>
<thead>
<tr>
<th>r</th>
<th>S</th>
<th>n</th>
<th>d</th>
<th>p</th>
<th>d</th>
<th>P</th>
<th>m</th>
<th>g</th>
<th>r</th>
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<tbody>
<tr>
<td>ko</td>
<td>ri</td>
<td>vi</td>
<td>nu</td>
<td>tim</td>
<td>pa</td>
<td>nu</td>
<td>va</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S,</td>
<td>m</td>
<td>g</td>
<td>m</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>rambo</td>
<td>sa</td>
<td>gi</td>
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<td></td>
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</tr>
</tbody>
</table>

O Jagadamba Kriti - Anandabhairavi raga

Adi tala (canka kala kriti)

His treatment of laya aspect in his composition reveal his extraordinarily brilliance and highlights a blend of rhythmic and melodic aspects. The laya aspect gets prominence while Raga and Bhava do not lag behind. His favorable inclination for the misra capu tala more than the most common talas like Adi and Rupaka reveal his supreme command over the saptaksara units.

In his composition in the tala he has shown a marvelous variety in the laya patterns. He has composed kritis in the Misra Capu of 3 + 4 units and also 4 + 3 units. His kritis 'Ninnu vinaga mari' (Parva kalyani) Trilokamata (Pharaj) and Talli Ninnu nera (kalyani) in Viloma Capu Tala are most popular. There seems to be something mistic about his svara patterns. In one of his kritis namely 'Nannu brovu lalita in Lalita Raga is an intricate laya pattern of Mridanga Yati in the carana.
In the Misra Capu Tala he has exhibited different combination of units like not only $3 + 4$ and $4 + 3$ but also $2 + 5$ and $5 + 2$.

His swarajatis in Bhairavi and Yadukula kambhoji are famous for beautiful laya pattern and received the status of concert items in his hands. Most of the sahitya words in Bhairavi Svarajati commence in the atita graha of 2 aksarakalas. His interest as revealed in his tala prastara exercises are well known and his inventing new tala named 'Sarabhanandana' tala to defeat Bobbili kesavayya in a pallavi contest. Misra Capu appears to be a ground for his intellectual play. The most surprising aspect of his indulgence in rhythmic patterns and laya intricacies as that he has not asserted in the least his soulful appeal in the lyric of his songs through their raga bhava.
CHAPTER - IX
CONCLUSION

of such availability needs to be borne in mind while evaluating a work of this kind. It is, indeed, unfortunate that the existing situation and circumstances in the field of music, seem to be very much preoccupied with the professional careerism with all its rather undesirable ramifications, and compulsions, most, if not all, of with distort and distract a comprehensive understanding and appreciation of aesthetic appeal, along with a virtuosic values in the musical personalities. Eminent musical compositions to train and guide properly towards such a comprehensive understanding are, indeed, rare, and also, few within one's easy reach. This is yet another big handicap for a complete indepth study for scholastic pursuit.

Despite the known handicaps and hurdles, this thesis is written with the strong and irrepressible desire, and earnest purpose of focussing light on the excellencies or beauties in rhythm in all the comprehensive, compositional genius of the great Trinity of music - Tyagaraja, Muttuswami Diksitar and Syama Sastri. The purpose and aim behind this work is the hope that future scholars may delve deeper in to the realm of rhythm-cum-melodic beauties and find invaluable diamonds of such beauties in musical compositions.

Thus, this thesis fervently hopes to be a genuine and worthy attempt to draw pointed attention to, and appreciation of the brilliane petals of rhythmic specialities, intricacies and excellencies in the flowers of compositions among the beautiful gardens of the great musical Trio ever spreading their divine fragrance of joy, peace and pleasure to humanity! Things of such undescribable beauty are, indeed, a joy for Ever!
Journals of the Historical Research Society.

Music Academy Journals, Madras.

Music Magazines of Ganakala, Kakinada.

Journals of Indian Musicological Society, Boroda.

Journals of Sangir Natak, Delhi.

Music Magazines of Sruti, Madras.
## APPENDIX
### Table showing Sadangas

<table>
<thead>
<tr>
<th>Name</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In aksarakala</td>
</tr>
<tr>
<td>Anudruta</td>
<td>1</td>
</tr>
<tr>
<td>Druta</td>
<td>2</td>
</tr>
<tr>
<td>Druta Virama</td>
<td>3</td>
</tr>
<tr>
<td>Laghu</td>
<td>4</td>
</tr>
<tr>
<td>Laguhu</td>
<td>5</td>
</tr>
<tr>
<td>Laghadruta</td>
<td>6</td>
</tr>
<tr>
<td>Laghadruta virama</td>
<td>7</td>
</tr>
<tr>
<td>Guru</td>
<td>8</td>
</tr>
<tr>
<td>Guru virama</td>
<td>9</td>
</tr>
<tr>
<td>Gurudruta</td>
<td>10</td>
</tr>
<tr>
<td>Gurudruta virama</td>
<td>11</td>
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<td>Pluta</td>
<td>12</td>
</tr>
<tr>
<td>Pluta virama</td>
<td>13</td>
</tr>
<tr>
<td>Plutadruta</td>
<td>14</td>
</tr>
<tr>
<td>Kakapada</td>
<td>16</td>
</tr>
</tbody>
</table>

## APPENDIX
### Table showing Sadangas

<table>
<thead>
<tr>
<th>Name of the Anga</th>
<th>Aksaras</th>
<th>Matras</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anudruta</td>
<td>1</td>
<td>¼</td>
</tr>
<tr>
<td>Druta</td>
<td>2</td>
<td>½</td>
</tr>
<tr>
<td>Laghu</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
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<td>12</td>
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</tr>
<tr>
<td>Kakapada</td>
<td>16</td>
<td>4</td>
</tr>
</tbody>
</table>
# APPENDIX

*The Tala (gati bheda) Chart*

25 varieties on account of the change of gati. Rupaka tala is taken as an example and worked out here.

<table>
<thead>
<tr>
<th>Jati</th>
<th>Constituent angas and the total aksarakalas for an avarta</th>
<th>Gati bheda</th>
<th>The resulting total minor units of time for an avarta on account of the change of the change of gati.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trisra</td>
<td></td>
<td>Trisra</td>
<td>5x3 = 15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Caturasra</td>
<td>5x4 = 20</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>5</td>
<td>Khanda</td>
</tr>
<tr>
<td></td>
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<td>5x7 = 35</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sankirna</td>
<td>5x9 = 45</td>
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<td>Trisra</td>
<td>5x3 = 18</td>
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<td></td>
<td></td>
<td>Caturasra</td>
<td>5x4 = 24</td>
</tr>
<tr>
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<td>6</td>
<td>Khanda</td>
</tr>
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<td></td>
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<tr>
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<td></td>
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<td>Caturasra</td>
<td>5x4 = 28</td>
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<tr>
<td></td>
<td>0</td>
<td>7</td>
<td>Khanda</td>
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<td>Misra</td>
<td>5x7 = 49</td>
</tr>
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<td></td>
<td></td>
<td>Sankirna</td>
<td>5x9 = 63</td>
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<td></td>
<td>Trisra</td>
<td>5x3 = 27</td>
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<td>Caturasra</td>
<td>5x4 = 36</td>
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<td></td>
<td></td>
<td>Khanda</td>
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<td>Misra</td>
<td>5x7 = 63</td>
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<td></td>
<td></td>
<td>Sankirna</td>
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<td></td>
<td>Trisra</td>
<td>5x3 = 33</td>
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<td></td>
<td></td>
<td>Caturasra</td>
<td>5x4 = 44</td>
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<td></td>
<td></td>
<td>Khanda</td>
<td>5x5 = 55</td>
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<td></td>
<td></td>
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<td>5x7 = 77</td>
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<td></td>
<td>Sankirna</td>
<td>5x9 = 99</td>
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## APPENDIX
Table showing Navasandhi Talas

<table>
<thead>
<tr>
<th>Name of the Sandhi</th>
<th>The direction</th>
<th>The tala used</th>
<th>Its constituent angas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brahma</td>
<td>Centre</td>
<td>Brahma</td>
<td>8</td>
</tr>
<tr>
<td>Indra</td>
<td>East</td>
<td>Indra(sama)</td>
<td>8</td>
</tr>
<tr>
<td>Agni</td>
<td>South-East</td>
<td>Mattapana</td>
<td>0</td>
</tr>
<tr>
<td>Yama</td>
<td>South</td>
<td>Bhringi (Asama)</td>
<td>8</td>
</tr>
<tr>
<td>Niruruti</td>
<td>South-west</td>
<td>Nairuti (Brahmara &amp; Malla)</td>
<td>0 0 0</td>
</tr>
<tr>
<td>Varuna</td>
<td>West</td>
<td>Nava</td>
<td>0 0 0</td>
</tr>
<tr>
<td>Vayu</td>
<td>North-West</td>
<td>Bali</td>
<td>0 0 0</td>
</tr>
<tr>
<td>Kubera</td>
<td>North</td>
<td>Kottari</td>
<td>8 8 1/8</td>
</tr>
<tr>
<td>Isana</td>
<td>North-East</td>
<td>Takkiri</td>
<td>8</td>
</tr>
</tbody>
</table>
## APPENDIX

**Chart of 35 Talas**

| Sl. No. | Tala | Angas | Caturasra | Trisra | Misra | Khanda | Sankirna
<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Dhruva</td>
<td>0</td>
<td>4+2+4+4 = 14</td>
<td>3+2+3+3 = 11</td>
<td>7+2+7+7 = 23</td>
<td>5+2+5+5 = 17</td>
<td>9+2+9+9 = 29</td>
</tr>
<tr>
<td>2.</td>
<td>Matya</td>
<td>0</td>
<td>4+2+4 = 0</td>
<td>3+2+3 = 8</td>
<td>7+2+7 = 16</td>
<td>5+2+5+ = 12</td>
<td>9+2+9 = 20</td>
</tr>
<tr>
<td>3.</td>
<td>Rupaka</td>
<td>0</td>
<td>2+4 = 6</td>
<td>2+3 = 5</td>
<td>2+7 = 9</td>
<td>2+5 = 7</td>
<td>2+9 = 11</td>
</tr>
<tr>
<td>4.</td>
<td>Jhampa</td>
<td>U0</td>
<td>4+1+2 = 7</td>
<td>3+1+2 = 6</td>
<td>7+1+2 = 10</td>
<td>5+1+2 = 8</td>
<td>9+1+2 = 12</td>
</tr>
<tr>
<td>5.</td>
<td>Triputa</td>
<td>00</td>
<td>4+2+2 = 8</td>
<td>3+2+2 = 7</td>
<td>7+2+2 = 11</td>
<td>5+2+2 = 9</td>
<td>9+2+2 = 13</td>
</tr>
<tr>
<td>6.</td>
<td>Ata</td>
<td>00</td>
<td>4+4+2+2 = 12</td>
<td>3+3+2+2 = 10</td>
<td>7+7+2+2 = 18</td>
<td>5+5+2+2 = 14</td>
<td>9+9+2+2 = 22</td>
</tr>
<tr>
<td>7.</td>
<td>Eka</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>7</td>
<td>5</td>
<td>9</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Caturasra</th>
<th>Trisra</th>
<th>Misra</th>
<th>Khanda</th>
<th>Sankirna</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caturasra</td>
<td>Trisra</td>
<td>Misra</td>
<td>Khanda</td>
<td>Sankirna</td>
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</tbody>
</table>
### APPENDIX

**Table showing Navasandhi Talas**

<table>
<thead>
<tr>
<th>Name of the Aanga</th>
<th>Synonyms</th>
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</thead>
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<tr>
<td>Anudruta</td>
<td>Ardhacandra, Virama</td>
</tr>
<tr>
<td>Druta</td>
<td>Bindu, Cakra</td>
</tr>
<tr>
<td>Laghu</td>
<td>Codya, Bana, Sara</td>
</tr>
<tr>
<td>Guru</td>
<td>Yamala, Vakra, Kana</td>
</tr>
<tr>
<td>Pluta</td>
<td>Tripura, Dipta, Vadya</td>
</tr>
<tr>
<td>Kakapadam</td>
<td>Nissabda, Hamsapada</td>
</tr>
</tbody>
</table>

### APPENDIX

**Table showing the details of Talas to which Tyagaraja's compositions are set to**

<table>
<thead>
<tr>
<th>Tala</th>
<th>Number of compositions available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adi</td>
<td>310</td>
</tr>
<tr>
<td>Rupaka</td>
<td>93</td>
</tr>
<tr>
<td>Desadi</td>
<td>86</td>
</tr>
<tr>
<td>Capu</td>
<td>78</td>
</tr>
<tr>
<td>Jhampe</td>
<td>33</td>
</tr>
<tr>
<td>Triputa</td>
<td>18</td>
</tr>
<tr>
<td>Tisra Laghu (Adi Tala-Tisra gati)</td>
<td>8</td>
</tr>
</tbody>
</table>

**Source**: Andhra Vaggeyakara Caritra by 'Dr. Balantrapu Rajanikanta Rao', pp. 362.
# APPENDIX

*Chart showing details about the 2nd set of Laghu-Jatis*

<table>
<thead>
<tr>
<th>Name of the Laghu</th>
<th>Duration in</th>
<th>Mode of Reckoning</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Matras</td>
<td>Akshara Kalas</td>
</tr>
<tr>
<td>Divya sankirna laghu</td>
<td>1½</td>
<td>6</td>
</tr>
<tr>
<td>Misra sankirna laghu</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Desya sankirna laghu</td>
<td>2½</td>
<td>10</td>
</tr>
<tr>
<td>Misra desya sankirna</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>Jesya suddha sankirna laghu</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>Sl.No</td>
<td>Name of the Tala</td>
<td>Constituent Angas</td>
</tr>
<tr>
<td>-------</td>
<td>------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>65.</td>
<td>Dipaka</td>
<td></td>
</tr>
<tr>
<td>66.</td>
<td>Ananga</td>
<td></td>
</tr>
<tr>
<td>67.</td>
<td>Visama</td>
<td></td>
</tr>
<tr>
<td>68.</td>
<td>Nandi</td>
<td></td>
</tr>
<tr>
<td>69.</td>
<td>Mukunda</td>
<td></td>
</tr>
<tr>
<td>70.</td>
<td>Kanduka</td>
<td></td>
</tr>
<tr>
<td>71.</td>
<td>Eka Tala</td>
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<tr>
<td>72.</td>
<td>Ata Tala</td>
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</tr>
<tr>
<td>73.</td>
<td>Purna Kankala</td>
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</tr>
<tr>
<td>74.</td>
<td>Khanda Kankala</td>
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<tr>
<td>75.</td>
<td>Sama Kankala</td>
<td></td>
</tr>
<tr>
<td>76.</td>
<td>Visama Kankala</td>
<td></td>
</tr>
<tr>
<td>Name of the Tala</td>
<td>Constituent Angas in Aksarakalas</td>
<td>Total number of angas</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Catus Tala</td>
<td>14</td>
<td>4</td>
</tr>
<tr>
<td>Dombuli</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>Abhangha</td>
<td>16</td>
<td>2</td>
</tr>
<tr>
<td>Raya Vankola</td>
<td>24</td>
<td>5</td>
</tr>
<tr>
<td>Laghu Sekhara</td>
<td>1 1/4</td>
<td>5</td>
</tr>
<tr>
<td>Pratapa Sekhara</td>
<td>17</td>
<td>4</td>
</tr>
<tr>
<td>Jagaihampa</td>
<td>15 3/4</td>
<td>4</td>
</tr>
<tr>
<td>Caturmuka</td>
<td>28</td>
<td>4</td>
</tr>
<tr>
<td>Jhampa</td>
<td>9 2/4</td>
<td>6</td>
</tr>
<tr>
<td>Pratimahya</td>
<td>11 2/4</td>
<td>6</td>
</tr>
<tr>
<td>Garugi</td>
<td>36</td>
<td>6</td>
</tr>
<tr>
<td>Vasanta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sl. No</td>
<td>Name of the Tala</td>
<td>Total number of angas in Matras</td>
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<tr>
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<tr>
<td>89.</td>
<td>Lalita</td>
<td>4</td>
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<tr>
<td>90.</td>
<td>Rati Tala</td>
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<td>Karana Yati</td>
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<tr>
<td>92.</td>
<td>Yati</td>
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<tr>
<td>93.</td>
<td>Sat Tala</td>
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<td>94.</td>
<td>Vardhana</td>
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<td>Varna Yati</td>
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<td>Rajanarayana</td>
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<td>97.</td>
<td>Madana</td>
<td>4</td>
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<td>98.</td>
<td>Karika</td>
<td>21/4</td>
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<tr>
<td>100.</td>
<td>Srinandana</td>
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<tr>
<td>Sl.No</td>
<td>Name of the Tala</td>
<td>Constituent Angas</td>
</tr>
<tr>
<td>-------</td>
<td>------------------</td>
<td>------------------</td>
</tr>
<tr>
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<tr>
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<td>104.</td>
<td>Jhallaka</td>
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<td>108.</td>
<td>Utsava</td>
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</table>
# APPENDIX

*The Tala (gati bheda) Chart*

<table>
<thead>
<tr>
<th>Tala</th>
<th>Sl.No. in the scheme of the 35 talas</th>
<th>Jati</th>
<th>Total aksarakalas for an avarta</th>
<th>Change of gati and the resulting number of minor units for an avarta in each case</th>
<th>Sl.No. in the scheme of the 175 talas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>Caturasra</td>
</tr>
<tr>
<td>Dhruva</td>
<td>1</td>
<td>Trisra</td>
<td>11</td>
<td>33</td>
<td>44</td>
</tr>
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<td>Caturasra</td>
<td>14</td>
<td>42</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Khanda</td>
<td>17</td>
<td>51</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Misra</td>
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<td>69</td>
<td>92</td>
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<td>5</td>
<td>Sankirna</td>
<td>29</td>
<td>87</td>
<td>116</td>
</tr>
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<td>Trisra</td>
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<td>Caturasra</td>
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<td>30</td>
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<td>80</td>
</tr>
<tr>
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<td>Jati</td>
<td>Total aksarakalas for an avarta</td>
<td>Change of gati and the resulting number of minor units for an avarta in each case</td>
<td>Sl.No. in the scheme of the 175 talas</td>
</tr>
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<tr>
<td></td>
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</tr>
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<td>Rupaka</td>
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<td></td>
<td>56-60</td>
</tr>
<tr>
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<td>91-95</td>
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<td>Jati</td>
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<td>Change of gati and the resulting number of minor units for an avarta in each case</td>
<td>Sl.No. in the scheme of the 175 talas</td>
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## APPENDIX

**List of Navagraha Kritis of Muttuswami Diksitar**

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<th>Sl.No.</th>
<th>Kirtana</th>
<th>Raga</th>
<th>Tala</th>
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<td>Asaveri</td>
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<td>Caturasraja Rupaka Tala</td>
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<td>Natakuranji</td>
<td>Misrajati Jhampe Tala</td>
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<td>Athana</td>
<td>Tisrajati Triputs Tala</td>
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<td>Pharajuraga</td>
<td>Khandajati Ata Tala</td>
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<td>Yadukulambhoji Raga</td>
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# APPENDIX

*The 35 Talas: Analysed*

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</table>
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Paternal Grand Father: 'Padmasree' 'Sangita Kalanidhi' Dr. Dwaram Venkata Swamy Naidu garu

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