

KONNAKOL

**The History and Development of
Solkattu - the Vocal Syllables - of the Mridangam.**

Lisa Young

ADDENDUM

This thesis was originally submitted in 1998 as partial fulfillment for the Degree of Master in Music Performance, School of Music, Victorian College of the Arts, University of Melbourne.

Recently I have received many requests from people wishing to read and listen to the research online.

In 2010 I updated the work by revising the biographic material, editing some of the written examples and adding audio excerpts of more recent works.

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All accompanying audio tracks are copyrighted by their respective performers as indicated and must not be reproduced without permission. I wish to sincerely acknowledge Karakudi Mani and Ravi Ravichandhira for allowing their performances to be published online.

For more information and future research, please visit www.lisayoung.com.au

Lisa Young

May 2010

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STATEMENT OF AUTHENTICITY

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university, and to the best of the writer's knowledge and belief, it contains no material previously published or written by another person except when due reference is made in the text.

Lisa Young, October 1998

ACKNOWLEDGEMENTS

I am deeply indebted to both my gurus M. (Ravi) Ravichandhira (Melbourne) and Karaikudi R. Mani (Madras) for their encouragement and generosity in sharing this wonderful music with me. They are both not only extraordinary musicians but wonderful teachers and mentors. I am grateful to Dr. Tony Gould and Ravi for their supervision and advice, and to all the musicians who performed on the accompanying CD. I am also grateful to Nicola Eveleigh for her photographic assistance, Adam Dempsey for CD mastering and Ben Robertson for proof reading.

NOTES TO THE READER

As part of the celebration of India's 50 years of independence from Britain, the Indian Government decided to revert to the use of original indigenous names of many Indian cities. Consequently Madras and Bombay are now officially called Chennai and Mumbai respectively. In keeping with the desire to use the language of the people with whom I have spent time researching and studying this music, the body of this thesis uses old names and the reference map includes both old and new names.

In the translation of Tamil (and Hindustani) to English many key words used in the Karnatic tradition have acquired numerous spellings in different regions. For example a word like *Talam* - rhythmic cycle - is originally a Tamil word and is cited in reference books as Tala, Talam or Thalam. The variation Tala is predominantly used in the Northern tradition. Similarly *Ragam* is originally a Tamil word and many regions use the variation Raga. There appears to be no officially correct spelling but rather, across regions there are many accepted spellings. Other examples include Mridangam/ Mrdangam/Mrudangam, Adi/Aathi, Konnakol/Konakkol/Konugol and Karnatic/Karnatak/Carnatic. I have used advice from my gurus in making spelling choices for this thesis, and have tried where possible to use consistent spellings throughout the text. Alternate spellings and also some misspelt English words will be found when quotations from other references are used.

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- Track 16 (1:23)** Chathusram Thisram Sangeernam (4, 6, 9) Performed by Lisa Young Melbourne 1998
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- Track 18 (2:59)** Chathusram Thisram Double Chathusram (4, 6, 8) Performed by Lisa Young Melbourne 1998
- Track 19 (2:47)** Chathusram Kandam Double Chathusram (4, 5, 8) Performed by Karaikudi R. Mani Madras 1998
- Track 20 (4:40)** Chathusram Kandam (4, 5) Performed by Karaikudi R. Mani Madras 1997.
- Track 21 (2:01)** *'Thanga'*(excerpt) Composed by Lisa Young, Performed by Coco's Lunch Melbourne 2006. From CD 'Blueprint'. Full track uses

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- Track 22 (2:01)** *'Grace'* (excerpt) Composed by Lisa Young. Arranged Young and Robertson. Performed Lisa Young Quartet 2006. From CD *'Grace'* Kanda Chappu Talam (cycle 5). Lisa Young – voice, Ben Robertson – double bass, Stephen Magnusson – guitar and Dave Beck – drums.
- Track 23 (2:33)** *'Sa Ri Ga'* (excerpt) Composed by Lisa Young. Performed by Lisa Young Quartet 2006, From CD *'Grace'* Adhi Thalam (cycle 8), Konnakol breaks in Chathusram, Kadam, Thisram, Double Chathusram (4,5,6,8). Lisa Young – voice, Ben Robertson – double bass, Stephen Magnusson – guitar and Dave Beck – drums.
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- Track 25 (2:34)** *'Deep In Madras'* (excerpt) Composed by Lisa Young. Arranged Young and Robertson. Performed by Lisa Young Quartet 1999. Opening konnakol in Thisram and Double Chathusram. From CD *'Speak'*, Lisa Young Quartet. Performed by Lisa Young – voice, Ben Robertson – double bass, Colin Hopkins – piano and Darryn Farrugia – drums.
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The above tracks are available to listen online at:

<http://www.lisayoung.com.au/info/research.html#MastersAudio>

GLOSSARY OF COMMONLY USED TERMS

Where possible this glossary of terms gives the relative meaning of the Indian word, not always the literal one.

Akshara/Aksharam	a beat within a talam
Aruthi	short ending
Gathi/Gadi	the subdivision of each aksharam or of each beat within a talam. Thus Tisra Gathi subdivides each beat of a talam by 3.
Jathi/Jati	Jathis or Jathi patterns are the strings of vocal syllables recited in Konnakol.
Karvai	space, denoted by commas or full stops to show the space between syllables.
Korvai	cadence or coda
Laya	rhythm
Mantra	repetitious religious chant
Matra	sub divisions of time (ancient)
Mohara	cadence section
Ragam/Raga	Indian scale
Sabdham/Santham	Sanskrit for sound
Solkattu	vocal syllables Sol - syllable, kattu - bunch or group
Sruthi	melody
Talam/Tala	rhythmic cycle
Thani Avarthanam	percussion solo

INTRODUCTION

This thesis researches and analyses some of the basic structures and concepts employed in the musical artform from the Karnatic tradition of South India known as 'Konnakol'. Konnakol is the recitation of *solkattu* - the vocal syllables related to the sounds of the Mridangam drum. The thesis also examines the origin and development of *solkattu* including contemporary developments in this artform. The inspiration for research into this topic has come from a personal passion for vocal percussion and rhythmic complexity. The opportunity to study and be inspired by this music has been made possible by my teachers M. Ravichandhira (Melbourne) and Karaikudi R. Mani (Madras). It is worthwhile here to give brief biographical notes introducing them.

M. RAVICHANDHIRA was born on March 5th 1956 in Sri Lanka. He was first inspired by the Tavil drumming of Yalpanam Dakshanamoorthy and began playing the Mridangam at the age of eight. His initial training was with his first guru A. S. Ramanathan, who in turn learnt from Mylattor Sami Iyer and Palani Pallai, from the Tanjore and Pudhukkottat Schools respectively. Since 1986 he has been a student of his second guru Karaikudi R. Mani from Madras. Ravi has been a concert artist since 1966, and moved to London in 1975 to study engineering where he also played many fine concerts accompanying visiting artists from India. He was a gold medallist with Radio Sri Lanka in 1968 and the winner of the first prize for concert playing during the Madras Music Academy Festival in 1989. Since moving to Australia he has been the recipient of several awards from The Australia Council, the Australian Federal Government's arts funding and advisory body. He has composed for classical dance performances, and in 1987 founded the Academy for Indian Music in Melbourne which propagates a lively and informed interest in Indian Arts to Australian audiences. Ravi also worked as a lecturer in Mridangam in the Department of Music, Monash University, Melbourne.

KARAIKUDI R. MANI was born on September 11th 1945 at Karaikudi in Tamil Nadu, South India. He learnt Karnatic vocal music from his father from the age of three, and began his mridangam training with Karaikudi Rangu Iyengar from the age of five until his eighteenth year. He then moved to Madras where he changed to the Tanjore style studying first under T. R. Harihara Sharma, and then moved to advanced studies with K. M. Vaidyanathan. He began playing concerts at the age of ten. His distinct tonal clarity and sound production have enabled him to develop a unique style in Karnatic music, establishing himself as a revolutionary artist who is highly regarded by his peers. He has set his own extensive syllabus developing a unique approach to composition structures and Korvais (cadences), and has composed for many ensembles and performed throughout the world. His own percussion ensemble called *Sruthi Laya* - meaning melody and rhythm - originally consisted of sixteen musicians playing both melodic and percussion instruments. The four main percussion artists play Mridangam, Kanjira, Ghatam, and Morsing and often tour internationally. In Madras Mani has founded the *Sruthi Laya Kendra Trust* (formerly *Sruthi Laya Seva Trust*). Primarily a teaching school to train advanced Mridangam students, the school has branches in Chennai, Mysore, London, and Melbourne. He regularly tours nationally and internationally, and has collaborated abroad with many western musicians including *The Australian Art Orchestra*, He is also the Editor in Chief of the trusts Bi-monthly English magazine *Layamani Layam*. Visit www.karaikudimani.com.

The following lineage chart shows how the music I have studied has come to Australia.

MASTER - DISCIPLE DIRECT LINEAGE
MUSICAL LINEAGE OF PRASANNA

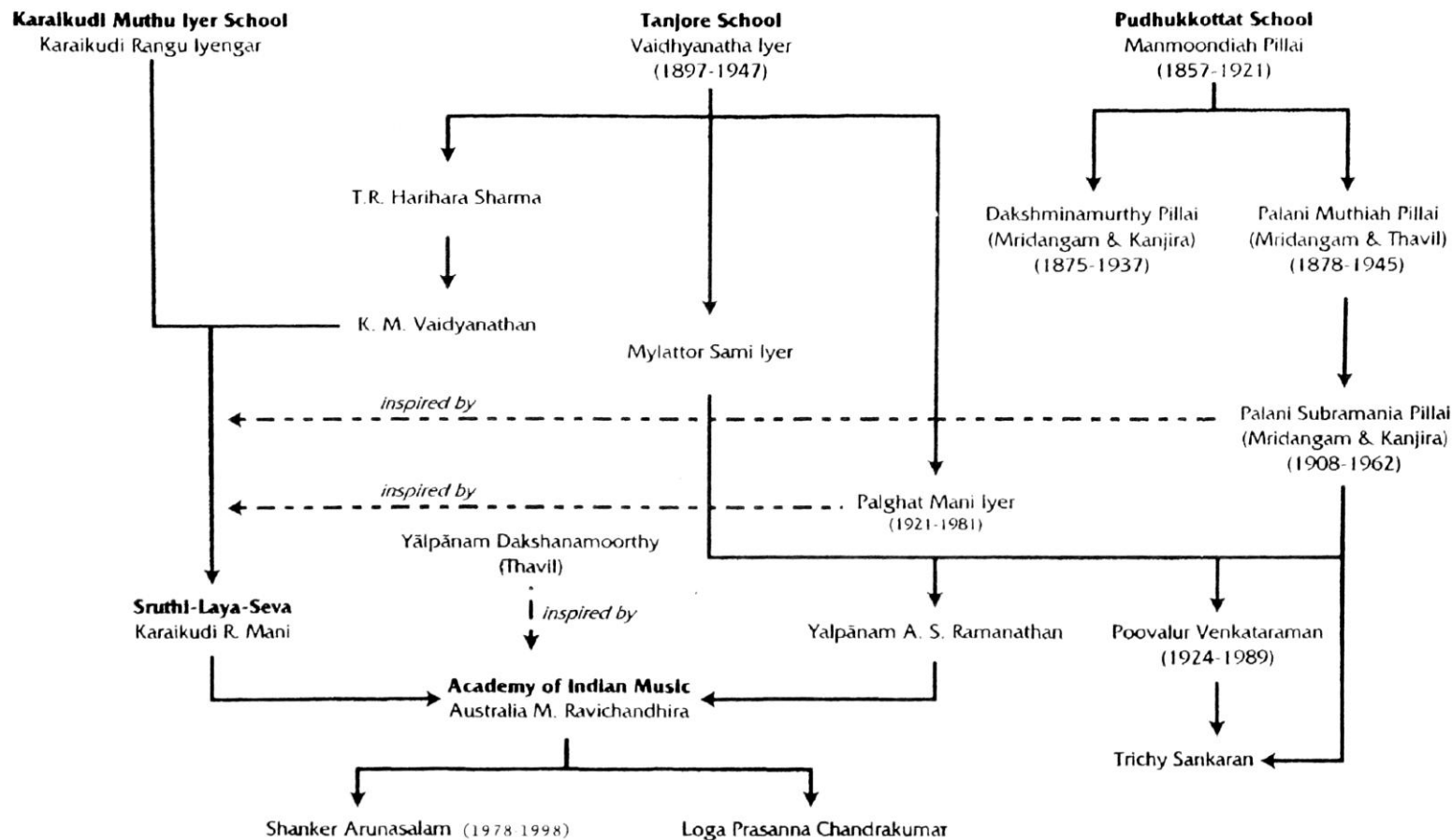


Chart compiled by M. Ravichandhira in 1996, provided courtesy of Loga Prasanna Chandrakumar

Figure 1 Chart – Lineage from India to Australia

ABOUT THE AUTHOR

As a singer of Jazz and Improvised music based in Melbourne Australia, I have always enjoyed exploring ways of using my voice as an instrument. In the Jazz genre the vocalist often takes 'scat' solos, inventing melodies which are sung using onomatopoeic or nonsense syllables, improvising vocal lines that suit the harmonic progression of the song. Along with melodic invention I have explored vocal percussion and rhythmic ideas as part of my vocal solos and compositions. I have for many years experimented with using my voice as a percussive instrument, both emulating percussion sounds, studying different rhythmic structures both Western and Non-Western and developing a personalised vocal 'scat' language.

In 1993 I began exploring the modal and rhythmic complexity in Indian classical music, beginning lessons in Karnatic vocal music with Narmatha Ravichandhira in Melbourne. These classes introduced me to the basic concepts and nuances of the Karnatic tradition. In 1994, I began my journey into the study of the sounds and structures of Konnakol, learning from Master Mridangam player M. (Ravi) Ravichandhira.

In January 1997, with the assistance of an Australian Government 'Asialink' residency and 'Jazz India', I spent two months in Bombay (Mumbai) furthering my study of Indian vocal music (Hindustani) with Dhanashree Pandit Rai and Tabla 'Bols' with Samay Cholker. During this residency Ravi arranged for me to visit Madras (Chennai) for classes with his guru Karaikudi R. Mani at the Sruthi Laya Kendra School (formerly Sruthi Laya Seva Trust. The rhythms and sounds of konnakol were steadily moving into my vocal language and I knew then, that I would gladly commit to many years of study, hoping to master the various talas and subdivisions.

In January 1998 with Australian Council assistance I returned to Chennai to take advanced Konnakol studies with Karaikudi R. Mani. In 2008 I received an Australia Council Project Fellowship to return to Chennai for more study and to compose new works for my quartet.

Over the years I have developed a long and rewarding relationship with Kaaraikkudi Mani, and lasting friendships and appreciation of my earlier studies with Ravi and Narmatha and Dhanashree.

I have on occasion been guest konnakkol artist for various Indian ensembles, including Ravi's Sruthi-Laya Ensemble in Melbourne, Mani's ensemble at the George Wood Performing Arts Centre, Melbourne, and with the esteemed South Indian flautist Dr. N. Ramani for The Melbourne International Festival.

Indian music has become a major influence in my composing and performance work, integrating the heritages of Indian classical music with both the jazz/improvisation tradition and contemporary vocal music.

My compositions have been performed and recorded with vocal group 'Coco's Lunch' and jazz/world music ensemble the 'Lisa Young Quartet'. Some excerpts of these works are included in the accompanying audio files.

In 2008 I completed a commission for The Australian Voices Choir in Brisbane. The resulting composition 'Other Plans' featuring extensive use of konnakol was performed at the Taipei Concert Hall during their 2009 concert tour.

It should be noted that there are limited texts available on the topic of Konnakol and particularly limited are those written in English or translated to English from Tamil. With the exception of Trichy Sankaran's book '*South Indian Drumming*' (Sankaran 1994)- which dedicates a chapter to *Solkattu* recitation - most Karnatic music 'texts' (in my experience) refer to Konnakol for a brief paragraph or two. Robert Brown's PhD Thesis '*The Mrdanga: A Study of Drumming in South India*' (Brown 1965) also has a chapter on *Solkattu*.

There are many schools across Southern India practicing variations of the Konnakol I have researched and am presenting here. I wish to acknowledge that due to the space limitations of this thesis and the personal angle of the research I have undertaken, what follows is an analytical study and a personal observation of Konnakol in the Karnatic tradition. Visit www.lisayoung.com.au.

CHAPTER ONE: THE KARNATIC TRADITION

HISTORICAL PERSPECTIVE AND ORIGINS OF TALAM

Music and the arts have played a prominent role in the manifestation of Indian culture. Since ancient times Indian music been associated with religious devotion and been connected to temple rituals and social functions. The origins of Indian music can be traced to the four 'Vedas', an ancient compilation of sacred and religious texts, prayers, hymns, chants and rituals dedicated to various Gods. The Vedas have been successfully preserved and passed on by oral tradition, and have been documented in Sanskrit the classical language of India. The Vedas date from approximately 4,000 B.C. - 1,000 B.C. and are divided into four sections the Rig Veda, Sama Veda, Yajur Veda and Atharva Veda (Subramaniam 1990; Sankaran 1994; Karaikudi R. Mani, 1998).

Vedic literature refers to the use of percussion instruments and the use of odd and even metres. The texts and chants were first recited as monotone and then later developed to three notes - a main tone with one tone higher and one below. This development enabled a greater accentuation of words and thus begun the development of the use of meter in Indian music. In the Yajur Veda, the chants developed to four notes - two main notes and two accents. The Sama Veda is thought of as the most significant in relation to the development of music. It added three more notes and formed the basis of the seven note scale, thus providing the foundation for Ragam in the development of Indian music (Sankaran 1994; Subramaniam 1990).

In the Samagana -a part of the Sama Vedas - importance was given to tempo using Druta (fast), Laghu (short) Guru (long) and Pluta (lengthened). There is also reference in Samagana to accentuation and embellishment of words or notes, including rules for the uttering of text to be stressed, lengthened, oscillated, sung, or skipped over. A pause was indicated by use of a bar sign - I (Kumar Sen 1994).

The following quote from 'Indian Concept of Rhythm' by Arun Kumar Sen, supports the historic importance given to rhythmic development in Indian music.

'From the 6th Century B.C., Kinnaras and Apsaras (dancers in the court of the Gods according to Indian Mythology) were systematically studying laya forms. The tradition of keeping time by counting the matras (time measures) with the hand, in accompaniment to music and dance was prevalent. The women of Yajurvedic times were expert in the science of rhythm (tala) and they displayed it in music and dance.'
(Kumar Sen, 1994, p. 2-3)

The music of the Vedas was prevalent throughout India. Over time, and with great dedication from scholars, the music made great advancements. There is mention in many history books (cited in reference section) of various 'Golden Ages' in Indian music and dance, times when the arts flourished, when great developments were made and '*...when the imagination of a kingdom without dance, music and the playing of percussion instruments was impossible.*' (Kumar Sen, 1994, p. 4)

It is important to acknowledge the long and rich history of this highly sophisticated system of music. For thousands of years at the core of its growth there has been a dedicated and almost scientific approach applied to the development of Indian music.

It is also important to remember that throughout this development not only did the science of Talam develop but also that of Ragam. Indian classical music is modal and each composition is set to a Ragam, a selected set of ascending and descending pitches based around the tonic (Sa). The vocal delivery of each Ragam has its own characteristic phrases and interpretation. Each Ragam also has a related emotion, a suitable time of day to be performed and sometimes an appropriate season for performance.

NORTH AND SOUTH

Whilst all Indian classical music shares a fundamental set of principles of melody and rhythm, there are two distinct styles which present their own colours and

characteristics. The North Indian style is called Hindustani. The word Hindustan is the 'Hindi' word for India - thus implying the 'Music of India'. The South Indian tradition is called Karnatic - meaning 'traditional' in Tamil.

The distinction between North and South began around the 12th and 13th century A.D. when after many invasions, the Moguls conquered the North of India and established Muslim rule. The Muslim musicians introduced Persian and Arabic elements into the Indian music and as a result added new melodic and rhythmic forms. The music in the South mainly developed in the temples and kingdoms in a more traditional manner without outside influence (Sankaran 1994; Subramaniam 1990).

In the Hindustani tradition, instead of Konnakol the vocal percussion is the vocalising of the tabla strokes and patterns, called tabla 'Bols'. There are many similarities between Konnakol and Bols, for example - 'Dhin' in Konnakol is used similarly to 'Thin' in Tabla Bols. The Bols are very nice to listen to, their delivery is often a little lighter than Konnakol, and whilst they are rhythmically enchanting they are not as rhythmically complex as Konnakol.

LEARNING THE KARNATIC TRADITION

Classical Indian music is predominantly an oral traditional with students listening, imitating and then committing the syllabus to memory. Students rarely ask questions during lessons, rather they are devoted listeners. In the last 100 years or so, note books have been used as a memory aid for students, but they are not used in performance. Today, if students own a recording device they also record lessons to assist their progress.

Traditionally in the study of Indian classical music there is a highly formal relationship between guru and student and it is considered an honour to receive lessons in music. Historically the system of gurukula existed, where the student would live with the guru as part of the family during the years of study. Today students rarely live with gurus (unless they are relatives) but the relationship remains formal and Indian teachers are very much revered.

The guru is often thought of as a spiritual guide as well as a musical one. Particularly in India, students often travel long distances to learn from a particular guru teaching a favoured tradition.

Mridangam is a very popular instrument for young boys to learn. They start classes around the age of seven, and usually have two or three half hour lessons per week. As with all classical Indian musical traditions, it takes many years of study to be able to understand and perform the complex variations of the music. When interviewing M. Ravichandhira he suggested that in the non-traditional setting in foreign countries there was a minimum of 10 years study for proficiency to be reached, but in the traditional setting in India it is achievable in 5 years.

The research for this thesis shows that Karnatic music was popularised particularly by members of the Brahmin and Pillai casts. Teachers often wouldn't accept payment for tuition, rather they were content to see their tradition continued by select gifted students. Outstanding musicians were supported by a system of patronage by Maharajas (kings) and wealthy landlords holding private concerts.

Over the last 300 years the teaching of Karnatic music has broadened and gradually people from many casts have been able to make their mark as performers either through the guru/disciple system or by being self taught.

Today, most outstanding musicians earn their living giving public concerts

where many people can enjoy the music by paying an entrance admission. There are government scholarships awarded to highly regarded musicians, and salaried positions for outstanding artists to work as performers with establishments like All India Radio. It is acceptable now for teachers to receive remuneration for providing lessons. Today students from many casts are permitted tuition and in some cases scholarships are given to students who may be unable to pay for tuition but show 'promise' and dedication.

In Madras, Karaikudi R. Mani's school ('Sruthi Laya Kendra') provides tuition that is paid for by the students families, but the school provides scholarships for young

musically gifted students from local areas and also from interstate. To receive an interstate scholarship the student must be keen to learn as the scholarship requires that they leave their family, board near the music school in Madras, attend 3 or 4 lessons per week and go home only during school holidays. In some cases, it may also mean that the teacher and student only have the language of Konnakol in common, as the student comes from a different state and speaks a language other than Tamil or English.

Students work towards an '*Arangetrum*' - a debut recital - where they have the opportunity to display their talents in a formal concert setting. In many ways this is a celebration of all their hard work and announces them as an artist of concert standard to the community. Families go to great personal expense to make this an exquisite and memorable event, inviting hundreds of people and including the most highly respected artists as associate performers and guests of honour. In Australia it is commonplace to 'fly in' the associate artists and revered guests of honour from India.

Whilst Konnakol is a recognised artform of principle study and has its own position within the percussion section of the Karnatic ensemble, over the last 100 years there has been a diminishing number of artists pursuing principle study in Konnakol. This is probably due to the diminished employment prospects for Konnakol artists as they are seen as an extra - rather than essential - member of the percussion section. Due to the diminishing number of Konnakol artists, some percussion artists intersperse Konnakol with their percussion playing to add variation in solo sections.

THE KARNATIC ENSEMBLE

The Konnakol artist performs in the *Talavadya Kacceri* - the percussion section-of the Karnatic ensemble. The other instruments found in the section are the *Mridangam*, *Kanjira* - a small tambourine, *Ghatam* - a clay pot, *Tavil* - a two headed drum played with sticks at one end and thimbles at the other, and *Morsing* - a mouth harp or 'Jew's' harp.

The melodic instruments in the Karnatic ensemble are *Violin*, *Vina* - a fretted stringed instrument, *Bamboo Flute*, *Nagasvaram* - a double-reed wind instrument. The fundamental pitch or key centre from which the ensemble tunes is the *Tambura*, a four stringed long necked drone instrument.

The concert soloist chooses a fixed pitch to use as the tonic (Sa) for the entire performance. The standard tuning for the tambura is tonic (Sa), fifth (Pa) and two upper octave strings (Sa Sa). Alternate tunings may be used to give emphasis to different notes in the Ragam, for example - the fifth (Pa) may be tuned to the fourth (Ma), or one of the upper octaves (Sa) tuned to the seventh (Ni). Male vocal soloists usually use a tonic (Sa) of D below middle C. A larger mridangam is used to accompany them with the right head tuned to D below middle C - and the left head tuned an octave below, providing a bass sound. A slightly smaller drum is used for accompanying female singers and is tuned to the tonic (Sa) around G or G# below middle C for the right head and one octave lower for the left bass head. Instrumentalists usually use a D# or E for the tonic (Sa).

The four strings of the tambura are played smoothly and continuously throughout the performance. The rhythmic plucking of the tambura bears no relation to the *talam* or *tempos* being played by the ensemble. In addition to traditional acoustic tamburas, it is common for modern electric tamburas to be used in performance. These are small radio-like boxes that produce an electronic drone.

CHAPTER TWO: ORIGINS AND DEVELOPMENT OF KONNAKOL

The origin of the Tamil word 'Konnakol' comes from the Telugu word (another Dravidian language) 'Koni' which means 'to recite' or 'to say'. This word was adopted in the Tamil language and put with the word 'Kol' which means 'to rule' or 'to reign'. Thus the word 'Konnakol' can be seen to imply that the manifestation of rhythmic intricacies by vocal recitation is the 'King' of all the percussion instruments. Although this is a subjective point of view, there is no doubt that as an artform Konnakol can demonstrate with great strength, elegance and timbral variation, the intense beauty of *Laya* (rhythm) (Venkataram 1994).

THE ROLE OF KONNAKOL IN KARNATIC MUSIC

Konnakol is used as a vocal reference for all Karnatic percussion instruments. However, it is usual and appropriate to refer to Konnakol in relation to the mridangam, as the mridangam is considered the principle percussion instrument in Karnatic Music.

As a language Konnakol has developed in vocal imitation of the percussion sounds and patterns played thus - each drum stroke has a corresponding vocal sound. Naturally the recited sounds of the human voice are different to the sounds produced by the percussion instrument. Over time and with the influence of many innovative artists, Konnakol has developed a language well beyond the scope of the sounds of the Mridangam.

Aside from its merits as an individual artform, Konnakol is an integral part of the extensive training required to master the Mridangam -and all percussion instruments - providing the basis for understanding the rhythmic complexities of the Karnatic tradition. Musicians communicate rhythmic ideas to each other using Konnakol and they also use the vocal patterns to practice ideas whilst clapping the talam with their hands. Konnakol is the medium used for giving teaching instructions in percussion lessons, with corrections in lessons given vocally. The student then repeats the syllabus, both in Konnakol and on the drum. It is the basic

language for percussion composition, and artists often first conceive ideas in Konnakol, and then transfer the piece to the instruments.

Whilst no precise pitches are given for the reciting of Konnakol, the drone of the tambura functions as a referred tonal centre for the recitation. The patterns are learnt orally and the inflections and accents are mimicked in connection with the drum sounds. Traditionally, well known phrases have common accents embellishments and dynamics, but there is plenty of scope for an advanced artist to develop a personal interpretation and to use improvisation.

LANGUAGE DEVELOPMENT

'*Sabdham or Santham*' - the sound effect of language, has been an important element in Indian music since ancient times. A correlation can be made between the syllables in the mantras and chants used by priests today and the ancient Sanskrit language. The seven names of the scale notes of the ragam - Sa Re Ga Ma Pa Dha Ni Sa - are referred to in the Vedas and have a direct relationship to Sanskrit as they are shortened forms of Sanskrit words (Ravichandhira 1998).

It is well established that the vocalising of rhythmic syllables began in the sounds of Sanskrit, where the vowels and consonants were combined to make sounds that assisted the development of metre or laya in the ancient Sanskrit texts. In ancient times, the four syllables thought to be most prevalent were ta, dit, thu, and nna. The reciting of syllables was developed to assist students' practice of talam. Syllables like ta, khita, tha, nna, kita, tri, tre, ga, ti, di were recited using matras - subdivisions of time - and rhythms were developed by combining and/or separating different vowels and consonants (Kumar Sen 1994).

The sixteen consonants (syllables) of the Devnagari script verses (from the ancient Sanskrit text '*Sangita Ratnakara*' written by Sarangadeva) - '*Ka, Kha, Ga, Gha, Ta, Tha, Da, Dha, Na, Ta, tha, Da/Dha, Na, Ra and Ha*' (Kumar Sen, 1994, p. 63) - are viewed as a major source of the origins of the vocal syllables. These sounds are thought to be seminal in vocal syllable development throughout India, and from these origins developed innumerable rhythmic patterns (Ravichandhira 1998). Using the text of

'Sangita Ratnakara' as a source, Arun Kumar Sen's book 'Indian Concept of Rhythm' (1994) gives extensive tables of mnemonic (assisting memory) syllables arising from these Sanskrit origins.

For example :

<i>'Samskrta Word</i>	<i>Apabhramsa (mnemonic syllables)</i>
Dang	Din
Tadhik	Takhik
Thodhi	Dhidhi
Disyang	Dintan
Tadatang	Tadatang
Tagi	Tagi
Danta	Dinta
Tatho	Tadhe
Dankha	Dinta
Tata	Tata
Thuthunaki	Tatinaki
Khabatang	Khitinag
Kinga	Tin
Tadha	Tata

(Kumar Sen, 1994, p. 64)

A further 21 phrases from Sangita Ratnakara are listed, for example:

<i>'Samskrta Word</i>	<i>Apabhramsa (mnemonic syllables)</i>
1. Utphulla	kanhe kanhe
2. Khalaka	dangida gidadagida
4. Dandagasta	datarikita dan kharikharidan
5. Pindahasta	tharikatajhen tharikatajhem
10. Parsvapani	thaagida dagida dagida dagida
12. Kartari	tiri tiri tiri kit thom digidantiri tiri kitajhemjhe takikita
20. Svastika	takita takitataki
21. Samagraha	takit kitataka

(Kumar Sen, 1994, p. 64)

It is tempting to draw parallels between the sounds listed above and the basic solkattu sounds heard in Konnakol today. Links could also be made with the four common ancient sounds mentioned earlier ta, dit, thu, and nna, and the common four beat rhythm played on mridangam today - 'Tha The Thom Num'.

However, suggestions of direct links of this kind are on the whole too simple, and probably inaccurate. It is fair to say that the ancient sounds previously mentioned would have influenced the development of the solkattus as the recitations, rhythmic patterns and percussion sounds developed side by side over thousands of years. However, to make a direct link between the sounds mentioned and listed above with the solkattus heard today, is over simplifying the very rich, complex and scientific history of Indian rhythm. The ancient syllables assisted the development of metre and rhythm in Indian music and the strokes of the mridangam along with the recitations used in Indian dance assisted the development of the sounds of Konnakol (Ravichandhira 1998; Karaikudi R. Mani 1998; Kumar Sen 1994).

Melbourne musician and Karnatic scholar Adrian Sheriff has suggested that possibly the best way to view these links is to see the ancient syllables as influencing the theoretical aspects of the modern Konnakol ie: - the rhythms and patterns performed - whereas in practical terms the sounds of the Konnakol are influenced by the strokes/sounds of the Mridangam (Sheriff 1998).

INFLUENCE OF NATTUVANGAM AND CONTEMPORARY DEVELOPMENTS

Additional words and variations have been added to develop the language aesthetically and contemporary Konnakol artists continue to incorporate other influences into the Jathi (strings of syllables) vocabulary. When interviewing M. Ravichandhira he suggested that the words of the Jathi patterns we hear today have been developed over the last 500 years.

Alongside the influence of the mridangam and percussion sounds, much credit is given to the development of the vocal syllables in the reciting of Jathis as accompaniment for Indian dance, known as *Nattuvangam*. The addition of words

like Ju-Nu have not come from mridangam strokes but rather from South Indian dance Jathi repertoire, and have been incorporated into the Konnakol syllabus because of their pleasing variation in vocal aesthetic. Phrases like | Dha Di Ku | Dhi Dhi Ku | Tha Ka Thin | Gu Gu Ju Du Thin Gu Gu | are from the dance repertoire and add great colour to the recitations (Ravichandhira 1998).

In examining the recent history of the performance of Konnakol, it is suggested in Venkataram's book '*Talavadya Seminar 1*' that Mannargudi Pakkiri Pillai (1867-1937) was the first person to take the art of Konnakol to the concert stage. Pakkiri Pillai was a master of both Nattuvangam (Dance Jathis) and Taval (drum) before he mastered and developed the art of Konnakol. After his death the mastery of Konnakol was continued by his son Vaidyalingam Pillai (1900-1974).

' The concerts in which Pakkiri Pillai and later Vaidyalingam Pillai took part, were sumptuous feasts to listeners'. (Venkataram, 1994, p. 67)

Other artists regarded as fine performers of Konnakol are Mannargudi Aruugam Pillai, Villore Gopalachari and Dharmapuram Abkirasundaram Pillai (Venkataram 1994).

More recently T.S. Subashchandra has been regarded highly as a Konnakol performer and there are some fine recordings by him listed in the recommended discography.

In western contemporary music there have been many artists who have been influenced by the sounds of solkattu. Vocalist Sheila Chandra has recorded pieces influenced by Tabla Bols and Konnakol (entitled 'Speaking In Tongues') on two of her albums. US vocalist Lauri Cotler is performing many konnakol works. Guitarist John McLaughlin has incorporated the reciting of Jathis in his jazz compositions and improvisations. Maria Pia De Vito on her recording 'Phoné' with jazz pianist John Taylor recites Tabla Bols with percussionist Federico Sanesi. In my own work I have incorporated both traditional and original Konnakol pieces in my compositions. Examples of these works are provided on the accompanying recording.

JATHI NOTATION

Methods of notation are a personal preference, and once a consistent system is established, it is relatively simple to understand and notate Konnakol. It is important to remember that the syllables are not strung together at random, rather there are many common phrases which even with variations across regions remain part of a basic familiar language.

With regard to the spelling of the Konnakol language, various systems of notation have developed across different schools and regions. Student notebooks are usually written in Tamil in India or English in the West. My research shows that there are not so many discrepancies when Konnakol is written in Tamil, but as with the translation of most Indian words into English, there are many acceptable ways of writing the Jathi patterns in English.

One of the main variances in English Konnakol, is the use or not of the letter 'h' and the interchange of Dh and Th. The following examples are all acceptable -

| Dom - Dhom - Thom |, | Din - Dhin - Thin |, | Ta - Tha |, | Te -The |.

The use of 'Dh' as in Dhom and Dhin, is usually found in the North of India. Different texts and schools use variations of upper and lower case, syllable choice and spelling, for example -

|| ta din gi na tom || may be written || Tha Thin Ke Na Thom ||.

|| Tha Di , Ke Ta Dom || may be written || Tha Re , Ta Na Gum ||

When notating the allocation of karvai (space) in Konnakol, some schools use commas while others use full stops, semi-colons or a raised numeral to indicate the length of the syllable, for example - | Tha , , | Tha . . | Tha ; | Tha 3 | are all equal to Tha plus 2 karvai. Similarly there are many ways of writing the extended values of syllables, for example -

|Thin | equals 1

|Thina | Thine | Thin , | all equal 2

|Thinga | Thingu | Thing , |Thin , , | Thing 3 | all equal 3

| Thom | equals 1
 | Thom , | equals 2 may be pronounced Dhom m
 | Thom , , | equals 3 may be pronounced Dhom m m
 | Thom , , , | equals 4 may be pronounced Dhom m m m
 Brackets are used for repeated phrases, for example -
 (Thin ,)2 or (Thin , Ta Thin ,) 3.

There are many interchangeable syllables and phrases, for example -

Dhom-Thom | Da - Ta | Ke - Ka -(Di) | Cha - Lam || Talanga - Talanga. ||.

Examples of phrases which are interchangeable are -

| Thom Te Gu Gu --- Thom Tha Ke Da --- Thom Tha Ke Ta |
 | Tha Thin Ke Na Thom --- Tha The Ke Ta Thom |
 | Thin , Tha Ke Ta --- Tha Ka Tha Ke Ta --- Thina Tha Ke Ta |

When notating a composition or exercise the student needs to have a system which denotes where the pulse falls. There are many ways to show this. The following examples show different ways to highlight the first and fifth syllable of a 4+ 4 phrase.

- a) in bold | **Tha** Ka Thina | **Tham** , , , |
- b) in capitals | THA ka thina | THAM , , , | or | Tha ka thina | Tham , , , |
- c) placing a cross or asterix above the syllable | *Tha Ka Thina | *Tham , , , |

A line drawn underneath a group of sounds indicates that it is sung at second speed (double). A double line indicates 3rd speed (quadruple), for example -

|| Tha Ka Thi Mi || Tha Ka Ju Nu || = 8 Beats
 || Tha Ka Thi Mi || Tha Ka Ju Nu || = 4 Beats
|| Tha Ka Thi Mi || Tha Ka Ju Nu || = 2 Beats

Underlining is used to great effect when a string of Jathis is recited at speed as a 'pick-up' or 'lead' into a phrase starting on the Samam (first beat). See also 'Laya Rathna' pages 26 -27.

CHAPTER THREE: TALAM AND GATHI

THE COMMON TALAM

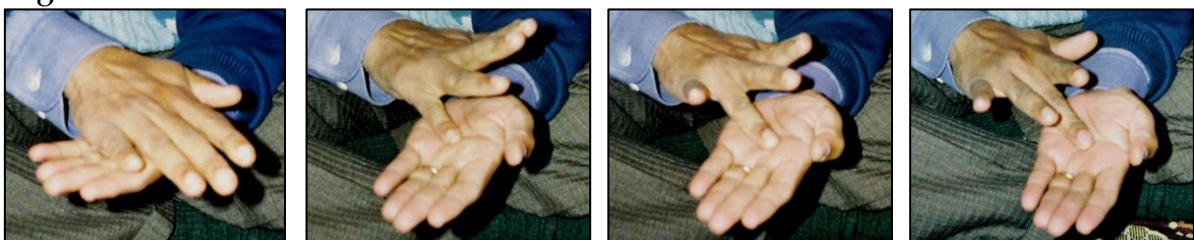
The Talam is a highly sophisticated system of rhythm, and with each composition there is a nominated Talam and Gathi (also called Nadai). There are at least 35 variations of Talam which determine the number of pulses or beats per cycle to be repeated throughout the composition. There are 7 basic Talam and the 4 most common are Aathi Talam - 8 beats, Rupaka Talam 6 or 3 beats, Misra Chappu Talam 7 beats, and Kanda Chappu Talam 5 beats. (Chappu denotes cross rhythm and is used for the cycles of 5, 7 and 9.)

The Talam beats are counted using different configurations of *Laghu* - hand claps and finger counts, and *Drutham* - hand claps and waves (turning the hand over). Aathi Talam is the most common and is counted by 1 Laghu + 2 Drutham as charted below.

(BEATS)	1	2	3	4	5	6	7	8
	LAGHU.....				DRUTHAM.....DRUTHAM.....			
	CLAP	2	3	4	CLAP	WAVE	CLAP	WAVE

The following photos show the Laghu and Drutham counts for Aathi Talam –

Laghu



Drutham



Figure 2 Hand positions of Laghu and Drutham for Aathi Talam

Kanda Chappu Talam is counted as 1 2 3 4 5 or 1 (and) 2 (and) 1/2. It is clapped as Anu Drutham (one clap) and 2 Veechu (waves) as charted below.

(BEATS)	1	2	3	4	5
or	1	and	2	and	1/2
	CLAP		WAVE	WAVE	



Beats	1	3	4
or	1	2	and

Figure 3 Hand positions of Laghu and Drutham for Kanda Chappu Talam

THE FIVE BASIC GATHIS

The Gathi determines the subdivision of each pulse, or the subdivision between 2 consecutive aksharam (beats) within a cycle. A piece may shift between more than one Gathi in a composition or improvisation, and this is called '*Laya Rathna*' or time shifting. The common ways of vocalising the five Gathis are listed below. Bar lines | are used to show different phrases or to show that within one phrase there may be two or more subgroups.

Thisram – 3

- | Tha Ke Da |
- | Thang , Ga | pronounced -Tha ng ga
- | Tha Ke Ta |

Chathusram – 4

| Tha Ka Di Na |
| Ke Tha Ta Ka |
| Tha Ka Thi Mi |
| Tha Ka Ja Nu |

Kandam – 5

| Tha Ka | Tha Ke Da |
2 + 3 = 5
| Tha The Ke Ta Thom |

Misram – 7

| Tha , Ding , | Ke Na Thom |
4 + 3 = 7
| Tha Ke Da | Tha Ka Thi Mi |
3 + 4 = 7

Sangeernam – 9

| Tha , Ding , Ke , Na , Thom |
2 + 2 + 2 + 2 + 1 = 9
| Ta , De , | Tha The Ke Ta Thom |
4 + 5 = 9
| Tha Ka Thi Mi | Tha Ka Tha Ke Da |
4 + 5 = 9
| Tha Ka | Tha Ka | Tha Ka | Tha Ke Ta |
2 + 2 + 2 + 3 = 9

There is also

Double Thisram - 6

| Tha Thing , | Ke Na Thom |

$$3 + 3 = 6$$

| Tha Ke Da | Tha Ke Da |

$$3 + 3 = 6$$

| Tha Ka Thi Me | Tha Ka |

$$4 + 2 = 6$$

Double Chathusram - 8

| Tha Ding , Ke , Tha , Thom |

$$1 + 2 + 2 + 2 + 1 = 8$$

| Thang , Ga | Tha The Ke Tha Thom |

$$3 + 5 = 8$$

| Tha Ka Thi Mi | Tha Ka Ja Nu |

$$4 + 4 = 8$$

Double Kadam - 10

| Tha Ke Ta Thom , | Tha The Ke Tha Thom |

$$5 + 5 = 10$$

| Ta , , Thom , | Tha The Ke Tha Thom |

$$3 + 2 + 5 = 10$$

In practice when announcing a composition, a performer tells the audience the name of the Ragam and then the Talam. For example if the composition is set to 'Aathi Talam - Thisra Gathi', then each repeated cycle is 8 beats, and each beat in the cycle is subdivided by 3 (as in Western triplets).

THE THANI AVARTHANAM AND CADENCES

The Ragam and Talam are set for the composition by the composer. Normally each piece has at least three sections, Pallavi, Ana pallavi, and Charanam. The extended third section is called Niraval, followed by Swara Kallpana (this translates as notes

improvising) which is a section for extended improvisation. There are opportunities for melodic or rhythmic embellishment and improvisation within the performance, but the Thani Avarthanam is the main feature for the percussion artists. It is usually played after the Swara Kallpana - the main section for the soloist.

In the Thani Avarthanam members of the percussion section take turns to play solos and then play together to build a climax at the end. The performance of Thani Avarthanam may take from 20 minutes to an hour, however in a typical two and a half hour concert program it lasts twelve minutes. Traditionally the mridangist is thought of as an accompanist to the soloist, however those of outstanding ability have found their own place on the concert platform. Mridangam artists like Karaikudi R. Mani perform as a featured concert soloist or provide a forty-five minute prelude to a main concert artist.

Cadential sections that occur throughout a performance are of great importance as they allow an artist to show individual skill and expression, and display creative expertise and composition. The two major cadential forms, Mohara and Korvai, are structured particularly to create dynamic cross rhythms against the talam. Moharas are played at the end of sections throughout the performance and function as a conclusion to a particular rhythmic development or motif. Korvai literally means 'strung together' and is a complex cadence played at the end of a percussion solo. Korvais often use phrases structured in Yati patterns (having geometric shape). There are many well known Korvais which are continually reinterpreted and reworked as artists put their own 'stamp' on them. Aruthi is a short ending played in simple syllabus (Sankaran 1994; Ravichandhira 1998; Karaikudi R. Mani 1998).

CHAPTER FOUR: FEATURES OF THE JATHI PATTERNS

Aside from the superb vocal dexterity of Konnakol artists, there are many distinctive recurring features within the phrases and structures of the Jathi patterns.

COLOUR, CONTOUR AND INTENSITY

Konnakol is an intense language of aesthetics and phonetics. The creation of colour and contour requires excellence in manipulation of vocal timbre and pitch inflection. The larynx is bounced low in the throat to create depth of colour, particularly in the Gumuki sounds - Thin and Thom - which imitate the glide across the left head (bass) of the drum. Some artists - like T. H. Subashchandran - use a more constant shrill sound, created by using high pitched forward vocal placement which makes the Jathis sound explosive. This practice probably developed from the need to make the Konnakol heard without amplification, as well as to add intensity. The use of dynamics helps to create intimacy and intensity when building climaxes. Konnakol artists use a variety of pitches and inflections to create their own array of vocal colours, and often utilise a 'semi-pitched' contour with long ascending or descending lines - see Track 4. (0:27)

MOTIVE REPETITION, ACCENTS AND DISPLACEMENT

Motive repetition is one of the main features of the Jathis and integral to the language of Konnakol. Repeated patterns create a recognisable conversation and an opportunity for contour variation. The accenting and displacement of different beats and phrases is used to great effect in the recitation. Whilst individual artists develop their own use of accents, the pre-composed structures are rich with rhythmic complexity and provide familiar yet exciting accented patterns.

'LAYA RATHNA' - TIME SHIFTING.

'Laya Rathna', known in western music as metric modulation, occurs when the subdivision of a given pulse is shifted or altered. Up to six speeds may be used, a common example being 3 speeds across the same pulse. In this case the syllabus is

performed three times, but as the subdivision speed increases the beats needed to complete the section are reduced. The use of different speeds creates an increased sense of tension and excitement. The introduction of each new speed 'recolours' the recitation against the pulse. There are many examples of Laya Rathna on the CD provided. See page 39-40 for program details.

The following example demonstrated on track 16, shows the same Jathi recited in Chathusram(4) Thisram(6) and Sangeernam(9). The asterisk shows where the pulse falls in each speed.

Track 16

1ST SPEED Chathusram(4)

*Tha , Ta , *Ke Ta Tha Ka *Thine , Ta *Ke Ta , Ta *Ka , Tha , *Ding , Ke Na
*Thom Thang , , *Ta , Ta , *Di , , ,

2nd Speed Thisram(6)

*Tha , Ta , Ke Ta *Tha Ka Thine , Ta *Ke Ta , Ta Ka , *Tha , Ding , Ke Na
*Thom Thang , , Ta , *Ta , Di , , ,

3rd Speed Sangeernam(9)

*Tha , Ta , Ke Ta Tha Ka Thi*Ne , Ta Ke Ta , Ta Ka , *Tha , Ding , Ke Na Thom
Thang , * , Ta , Ta , Di , , ,

The following example uses western rhythmic notation to demonstrate the three speed exercise in Track 16.

laya rathna (time shifting) metric modulation

As performed on Track 16 of accompanying audio
Bar time duration remains constant

© Karaikudi Mani
notated by Lisa Young

♩ = 120 *first speed chathusram (4)*

tha, ta, ke ta tha ka thi-ne, ta ke ta ta ka, ta, ding, ke na thom than - ga tha, ta, di,,

10 ♩ = 180 *second speed thisram (6)*

tha, ta, ke ta tha ka thi-ne, ta ke ta ta ka, ta, ding, ke na thom than- ga tha, ta, di,,

16 ♩ = 270 *third speed sangeernam (9)*

tha, ta, ke ta tha ka thi - ne, ta ke ta ta ka, ta, ding, ke na thom than_ ga tha, ta, di,,

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Figure 4 Using western rhythmic notation for three speed exercise of Track 16

POLYRHYTHMIC IDEAS

Polyrhythmic ideas are used to imply, overlay or accent a different subdivision to that of a given tempo, for example - track 10 demonstrates implied Chathusram(4) in Kandam(5). Polyrhythmic ideas are also used to avoid playing or reciting the most obvious subdivision of the chosen tempo. For example - in Thisram (6) rather than using even phrases like –

$$| *Tha Ke Ta \quad Tha Ke Ta \quad | *Tha Ke Ta \quad Tha Ke Ta \\ 6 \qquad \qquad \qquad + \qquad \qquad \qquad 6 \qquad \qquad \qquad = 12$$

a composer may use phrases of 5 + 7 to give a sense of syncopation and displacement, for example -

| *Tha The Ke Tha Thom | Tha *, Thom , Thanga , , |
 5 + 7

OR | *Thin , Tha Ke Ta | Tha *Ka Thina Tha Ke Ta |
 5 + 7

The second pulse now falls in a space or on the second syllable of a phrase - Ka. This concept is an important feature of Konnakol composition, in that an obvious rhythm is rarely chosen unless it is used as a resting passage.

EXTENSION AND REDUCTION STRUCTURES AND YATI

Extension structure - Starting with a shorter phrase, an extra syllable or 'string' of Jathis are added to each additional line. The extra syllable is joined to the beginning or the end of the phrase, and is structured so that eventually it completes the required cycle of the Talam. For example - the Korvai on Track 14 is an extension structure in Kandan. Notated below from Track 21 'Deep In Madras' this Korvai uses an extension section in Double Chathusram (8) followed by a reduction structure. The asterisk shows where the pulse falls whilst the underlining denotes double speed. This Korvai uses 8 beats or one cycle of Aathi Talam with each repetition.

KORVAI (Double Chathusram)

*Tha Ka Ju Nu || Thang , , Dhing * , , , Dhong , ,
Tha Re Ke Da *Tha Ka Ju Nu || Thang , , Dhing * , , , Dhong ,
Tha Re Ke Da *Tha Ka Tha Ka Ju Nu || Thang , * , Dhing , , , Dhong , ,
 *Tha Re Ke Da Tha Re Ke Da Tha Re Ke Da Thom ,
 *Tha Re Ke Da Tha Re Ke Da Thom,
 Tha Ka (Tha Re Ke Da)

A reduction structure (Koraippu) starts with a long phrase then with each additional line reduces by one syllable. Reductions create clever displacements of the phrase across the pulse, particularly if the performer continues to emphasise the first

syllable in the line. The following Korvai section heard in the Konnakol section of Track 23 is a Koraippu.

KORVAI (3 times)

*Tha Di Tha Ka Thin Na *Thom Ka Thom ,
 *Di Tha Ka Thin Na Thom *Ka Thom ,
Tha Ka *Thin Na Thom Ka Thom * ,
Tha Ka Thin Ka *Thom ,
 Thin Ka *Thom ,
 Ka Thom * ,
 Thom ,
Tha Di * , Ke Ta Dom Tha Di , Ke *Ta Dom Tha Di , Ke Ta Dom * ,
Tha Di , Ke Ta Dom *Tha Di , Ke Ta Dom Tha Di * , Ke Ta Dom ,
Tha Di * , Ke Ta Dom Tha Di , Ke *Ta Dom Tha Di , Ke Ta Dom

Yati is the name given to rhythmic cadence patterns based on 'geometric shape'. Traditionally there are six different Yatis and some excellent variations are given in the Trichy Sankaran's book 'South Indian Drumming' (1994, p. 29-32). For example in Mrdanga Yati the pattern follows the shape of the Mridangam drum.

Example: Mrdanga-yati

TOM
NA TOM
GI NA TOM
DIN GI NA TOM
TA DIN GI NA TOM
DIN GI NA TOM
GI NA TOM
NA TOM
TOM

(Sankaran, 1994, p. 31)

THE USE OF KARVAI - (Space or Pause)

The use of space or silence is effectively employed in Konnakol as a clever way of avoiding the 'obvious' in rhythmic structures. Although it is common for an artist to learn a structure by reciting or playing the complete strings of syllables, in performance many are omitted increasing the sense of rhythmic surprise.

The following extension structure (Kandam) is learnt by reciting the full three syllables of Thanga (Tha ng ga) and Thinga (Thi ng ga). In performance it is common to recite only the first syllables Tha and Thi leaving 2 karvais where the ng and ga fall. This use of space increases the sense of displacement as some of the pulses now fall in silence or immediately following silence. The following transcriptions show the two variations of the structure - the asterisk shows the pulse. The performance of this piece on Track 20 uses a combination of the A and B variations.

A - Kandam (5) using Thang and Thinga

*Tha Thom , Tha , *Thom , Thanga *Thom , ,
Tha Ka *Tha Thom , Tha , *Thom , Thanga *Thom , ,
Tha Ka *Ti Ku Tha Thom , *Tha , Thom , Tha*nga Thom , ,
*Thanga Tha The *Ke Ta Thom ,
Tha*nga Thinga *Tha The Ke Ta Thom * ,
Thanga Thi*nga Thanga *Tha The Ke Ta Thom

B - Kandam using Tha , , and Thi , ,

*Tha Thom , Tha , *Thom , Tha , , *Thom , ,
Tha Ka *Tha Thom , Tha , *Thom , Tha , , *Thom , ,
Tha Ka *Ti Ku Tha Thom , *Tha , Thom , Tha* , , Thom , ,
*Tha , , Tha The *Ke Ta Thom ,
Tha* , , Thi , , *Tha The Ke Ta Thom * ,
Tha , , Thi* , , Tha , , *Tha The Ke Ta Thom

CHAPTER FIVE: MRIDANGAM AND KONNAKOL -THE BASIC STROKES AND SOUNDS

THE MRIDANGAM DRUM



Figure 5 Position for playing Mridangam Drum -artist M. Ravichandhira

The Mridangam is played lengthways across the lap of the drummer. Ancient forms of the Mridangam were made of clay (mrit - clay, anga - body in Sanskrit), whereas the modern drum is made from a hollow cylindrical piece of jack wood.

The two heads are covered with buffalo hide and held together with leather runners. On the right head there is a layer of calf skin which contains a permanent central black patch made of rice paste mixed with iron filings and manganese. This results in a melodic high pitched sound. The left head sounds an octave below the right. A sticky dough made of semolina is applied to the centre of the left head to adjust the bass tone. The dough helps to achieve a rich bass sound, and is moistened throughout the performance and removed at the end of the concert. Nowadays some Mridangam artists use a water based silicon paste instead of semolina.

The pitch for tuning the mridangam is taken from the tambura (drone). The ends of the drum are adjusted using a stone to alter the pitch. They are tapped down - into the drum - to raise the pitch, or extended out to lower the pitch.



Figure 6 Left and right heads of the Mridangam

PLAYING THE BASIC STROKES

To give the reader a 'feel' for the style of mridangam drumming, photos and descriptions of the main strokes have been included. Mridangam playing requires enormous stamina, strength and co-ordination from all parts of the hands and wrists. Due to the limitations of this thesis only basic information is provided describing the drum strokes and their variations. The basic mridangam strokes and related Konnakol sounds are recorded on tracks 1 -6 of the accompanying CD. The information and the photographs have come from interviews with M. Ravichandhira and Karaikudi R. Mani.

BASIC STROKES - RIGHT HEAD

The also Thi/Ke/Dhi/Di

also Da/Tha/Ta - Tha Ke Da | Tha Ke Tha | Tha Ke Ta | variations. 3 fingers of the right hand - middle ring and little - slap the centre of the black spot and hold, index finger points up away from drum.

Can be **Ke** as in | Tha Thing **Ke** Na Thom | Also can be **Tha** in | **Tha** Ka Ja Nu |

played R L L R or | **Tha** Re Ke Da | There are two other variations of **The**. One alters the resonance of the sound and is made by allowing a slight gap between each of the 3 fingers. The other variation is produced by applying pressure to the Left head to give a bass response.

Num /Nam/Na

Ring finger hits the groove between the black spot and outer rim. The index finger hits the centre of the outer rim. The drummer can really slap this stroke.

Thin

Makes a clear ringing sound caused by the quick release of the fingers. Ring finger hits the groove between black spot and outer rim - the same place as Num- but the stroke is executed more subtly with a quicker release. Index finger hits at the edge of the black spot and releases. To create a sharp ring in Thin, pressure is applied on the ring finger.

The



Num



Thin



Figure 7 Mridangam stroke hand positions
(The, Num, Thin)

Re

Also **Ta** in | Ke Tha **Ta** Ka | (LRRL)

Index finger hits the centre of the black spot. The other 3 fingers are held away. It can also be played on the middle finger. The gap between the thumb and index finger closes at the time of contact. There are times when **Thom** (LH) and **Re** (RH) are combined to make **Ja**.

Mi

Drop the middle finger on to the black circle. In fast tempos (to assist with the ease of playing the stroke), the ring and middle fingers are dropped onto the outer edge of the black circle.

Chappu or Cha also Tham and La(ng)

Little finger hits the groove between the black spot and outer rim causing a ringing sound. The other 3 fingers are stretched away. The overtone ring created is top Sa.

Sliced Chappu or Tham

The two joints of the little finger are played with the edge of the hand across the right head. It produces a sharper sound than Chappu, and has a greater chance of sounding the top Sa overtone.

Re



Chappu



Sliced Chappu



Figure 8 Mridangam stroke hand positions
(Re, Chappu, Sliced Chappu)

Dheem

1st three fingers hit the black spot and are drawn back towards the player. The harmonic ring is ideally the 3rd Re or the 9th in relation to the right head Sa. To assist the ringing, sound pressure is applied to the left head.

BASIC STROKES - LEFT HEAD

Tha

All four fingers relaxed.

Slap across the middle flat of fingers and hold to produce a sharp mid-range sound.

Flat Tha, (variation)

This variation uses the finger tips on the periphery of the drum and produces a tik effect. The thumb presses against the hand.

Thom (Gu, Gum, Ju or Ja, Ku, Ka)

Ring and middle finger strike the centre of the outer circle using the underside of the knuckles (finger joints). The index finger may also be included if using 3 fingers. Thom can also be **Gu** as in **Gu Gu** also **Ju** or **Ja** in **Ja Nu** or **Ka** and **Ju** in |Tha Ka Ju Nu |(RLLR).

Dheem



Tha



Flat Tha



Thom



Figure 9 Mridangam stroke hand positions
(Dheem, Tha, Flat Tha, Thom)

Gumuki or Thom m (elongated Thom)

Rubbing the base of the thumb at the wrist across the LH and back, creating a bass inflection. Gumuki includes the use of modulation, particularly in ascending and descending lines. A line of seven notes (one octave below the right head) are created by varying the pressure to the skin at the base of the thumb (near the wrist).

Folded Tha. (Ka)

A variation of Tha and gives a deep impact in the mid range. It can also be Ka as in | Na Ka Tha Re | Ta Ka Ju Nu. | It gives a higher pitch than normal Tha.

Gumuki



Folded Tha



Figure 10 Mridangam stroke hand positions
(Gumuki, Folded Tha)

THE ACCOMPANYING CD RECORDING

The CD recording accompanying this thesis has been constructed in four sections. **Tracks 1-6** demonstrate the basic mridangam strokes and Konnakol sounds. **Tracks 7-12** demonstrate the strokes and sounds of the 5 Gathis (tempos) used in the Karnatic tradition. **Tracks 13-17** include variations of the Gathis demonstrating Double Chathusram, Kandam and a sections of 'Laya Rathna' (metric modulation). **Tracks 18-26** demonstrate longer pieces and contemporary compositions. In Tracks 1 - 6 the asterix (pulse) markings are not always given, as most of these examples are not set to a fixed Talam. Complete notations are usually provided on Tracks 7 - 16 and on the longer pieces on Tracks 17-26.

Tracks 1 -15 are performed by M. Ravichandhira, 1998. The patterns are recited in Konnakol and then played on the G# mridangam. Performers on Tracks 16 - 26 are individually listed below.

PROGRAM INFORMATION

These tracks are available to listen online at:

<http://www.lisayoung.com.au/info/research.html#MastersAudio>

- Track 1 (1:05)** Sounds and Strokes on the Right Head
- Track 2 (0:35)** Variations on the Right Head
- Track 3 (0:58)** Variations on the Right Head
- Track 4 (1:37)** Sounds and Strokes of the Left Head
- Track 5 (0:37)** Gumuki Variations For Sustaining Longer Works
- Track 6 (0:40)** Two Handed Playing
- Track 7 (0:33)** Introducing The Five Gathis
- Track 8 (1:36)** Thisram
- Track 9 (0:58)** Chathusram
- Track 10 (1:29)** Kandam
- Track 11 (1:22)** Misram
- Track 12 (1:59)** Sangeernam
- Track 13 (1:28)** Double Chathusram
- Track 14 (0:37)** Kandam variation
- Track 15 (2:09)** Chathusram Thisram Double Chathusram (4, 6, 8) Konnakol and Mridangam
- Track 16 (1:23)** Chathusram Thisram Sangeernam (4, 6, 9) Performed by Lisa Young Melbourne 1998
- Track 17 (1:51)** Chathusram Kandam Thisram Misram Double Chathusram(4,5,6,7,8) Performed by Karaikudi R. Mani Madras 1997
- Track 18 (2:59)** Chathusram Thisram Double Chathusram (4, 6, 8) Performed by Lisa Young Melbourne 1998
- Track 19 (2:47)** Chathusram Kandam Double Chathusram (4, 5, 8) Performed by Karaikudi R. Mani Madras 1998
- Track 20 (4:40)** Chathusram Kandam (4, 5) Performed by Karaikudi R. Mani Madras 1997.

- Track 21 (2:01)** *'Thanga'* (excerpt) Composed by Lisa Young, Performed by Coco's Lunch Melbourne 2006. From CD 'Blueprint'. Full track uses Chathusram, Kadam, Thisram, Double Chathusram. Vocalists – Lisa Young, Gabrielle MacGregor, Sue Johnson, Jacqueline Gawler and Nicola Eveleigh.
- Track 22 (2:01)** *'Grace'* (excerpt) Composed by Lisa Young. Arranged Young and Robertson. Performed Lisa Young Quartet 2006. From CD *'Grace'* Kanda Chappu Talam (cycle 5). Lisa Young – voice, Ben Robertson – double bass, Stephen Magnusson – guitar and Dave Beck – drums.
- Track 23 (2:33)** *'Sa Ri Ga'*(excerpt) Composed by Lisa Young. Performed by Lisa Young Quartet 2006, From CD *'Grace'* Adhi Thalam (cycle 8), Konnakol breaks in Chathusram, Kadam, Thisram, Double Chathusram (4,5,6,8). Lisa Young – voice, Ben Robertson – double bass, Stephen Magnusson – guitar and Dave Beck – drums.
- Track 24 (1:04)** *'The Moon Has Made Other Plans'* (excerpt) Composed by Lisa Young. Performed by Lisa Young Quartet 2006. From CD *'Grace'* Rupaka Talam(cycle 3) Konnakol in Chathusrum, Thisram and Double Chathusram (4,6,8). Lisa Young – voice, Ben Robertson – double bass, Stephen Magnusson – guitar and Dave Beck – drums.
- Track 25 (2:34)** *'Deep In Madras'* (excerpt) Composed by Lisa Young. Arranged Young and Robertson. Performed by Lisa Young Quartet 1999. Opening konnakol in Thisram and Double Chathusram. From CD *'Speak'* , Lisa Young Quartet. Performed by Lisa Young – voice, Ben Robertson – double bass, Colin Hopkins – piano and Darryn Farrugia – drums.
- Track 26 (3:33)** *'Shifting Time'* Composed by Lisa Young 1994 Performed by Coco's Lunch 1998. Sections in Chathusrum, Thisram and Double Chathusram (4,6,8) From *'A Whole New Way of Getting Dressed'* CD 2002 Vocalists - Lisa Young, Sue Johnson, Nicola Eveleigh, Jacqueline Gawler, and Gabrielle MacGregor

THE SOUNDS AND STROKES OF THE RIGHT HEAD

Track 1 (1:05) Right Head (RH)

The Num Thin The (recited with high pitch for variation) | Ke Tha |
| Tha Re | Chappu Cha (played the same as Chappu) Dheem (Chappu
played but not recited) Chappu Cha Tham (full chappu) Dheem | Tha Dheem |
| Ke Ta Dheem | Tha Ke Ta Dheem | Tha Ke Ta Thin | Na Ka Ju Nu Thin |

Track 2 (0:35) Variations Of Na Ka Na Ka Thin Right Head 3 Speed Variations

Na Ka Na Ka Thin ,	Na Ka Na Ka Thin ,		
Na Ka Na Ka Thin ,	Na Ka Na Ka Thin ,	Na Ka Na Ka Dheem ,	
Na Ka Na Ka Thin	Na Ka Na Ka Dheem	Na Ka Na Ka Tham	Na Ka Na KaThin
Na Ka Tham | Na KaThin | Na KaDheem |

Track 3 (0:58)

Num Thin Thin Thin X4
Thim , Num Thin | Mi Thin Na Ka X2
Thim Num Thin | Mi Thin Na Ka X2 variation high inflection of Mi
Ke Ta Num Thin Mi Thin Na Ka X2
Ta Re Ke Da (sounds as Dru -Ka) Ta Num Thin Mi Thin Na Ka X2
Na Ka Na Ka Num Thi Mi Thin Na Ka X2

THE SOUNDS AND STROKES OF THE LEFT HEAD

Track 4 (1:37) Left Head (LH)

Tha Thom Thom m Thom m Thom Thom Thom Thom Thom
Tha Tha Tha Thom Thom Thom
played with accents (not recited)
Thom Thom m Thom Thom m Thom Thom m Thom Thom m Thom Thom Thom
Thom Thom Thom Thom Thom ascending
Thom Thom Thom Thom Thom Thom Thom Thom descending
Thom Thom m Thom Thom m Thom Thom m Thom Thom m with accents
explanation of short Thom and elongated Thom m played together

Num Thin Thin Thin (Mridangam Words)

OR Na Dhin Dhin Na (Tabla Words - Bols)

Num Thin Thin Num 9 Cycles played Thom and Thom m

Track 5 (0:37)

When playing for longer periods the drummer cannot sustain the elongated Thom m (gumuki) sound. (as demonstrated on track 4).

Using two handed playing it can be varied as - | Na Thin, -Gu Num , Thin , |

| Ta Thin ,-Gu Num , Thin , |

Listen for the elongated Thom (Thom m) within the phrase.

Track 6 (0:40) Further Variations - Two Handed Playing

Note that Tha is LH, La(ng)is chappu RH, gu is The RH, Thom is Thin and Thom played together.

Tha La(ng)-gu Thom

Tha La(ng)-gu Thom

Tha The Tha La(ng)-gu Thom

Tha Ke Ta Tha La(ng)-gu Thom

Tha Ka Ju Nu Tha La(ng)-gu

Tha Ka Ju Nu Tha La(ng)-gu

Tha Ka Ju Nu Tha La(ng)-gu

THE FIVE COMMON GATHIS OF KARNATIC MUSIC

Track 7 (0:33) Introduction

This track introduces the five common Gathis of the Karnatic tradition. The Gathis are the sub-divisions allocated to each beat of a Talam. The 5 common Gathis are Thisram(3), Chathusram(4), Kandam (5), Misram (7), Sangeernam (9).

Tha Ke Ta -Thisra Gathi (Ta used here can be Ta Tha or Da)

Tha Ka Thi Mi -Chathusram

Tha Ka Tha Ke Da - Kandam

Tha Ke Ta Tha Ka Thi Mi - Misram

Tha Ka Thi Mi Tha Ka Ju Nu - Chathusram Multiple (Double)

Tha Ka Thi Mi Tha Ka Tha Ke Ta - Sangeernam

Track 8 (1:36) Thisram

*Tha Ke Ta | *Tha Ke Ta | *Tha Ke Ta | *Tha Ke Ta (All played on the RH)

Repeated with pitch modulation. The modulation is produced by pressing on the LH during the pitch of Tha.

*Num Thin Num | *Num Thin Num | *Num Thin Num | (played RH)

Using Tha (LH) , Folded Tha (LH)(on beat 2 of second bar) and Num Thin Num (RH) together, the two heads are combined and the pattern is played in first and second speed.

Listen for the RH accents on *1 2 3 | *1 2 3 | *1 2 3 | *1 2 3

Listen for the LH bass accents on *1 , 3 | *1 2 , | * , , 3 | *1 2 ,

Track 9 (0:58) Chathusram

Konnakol

*Tha Ka Thi Mi | *Tha Ka Ju Nu | *Tha Ka Thi Mi | *Tha Ka Ju Nu

Mridangam - listen for the deep Ju sounds

*Tha Ka Thi Mi | *Tha Ka Ju Nu | *Tha Ka Thi Mi | *Tha Ka Ju Nu

*Tha Ka Thi Mi | *Tha Ka Ju Nu | *Tha Ka Thi Mi | *Tha Ka Ju Nu

(0:12)

*Thang Ke Ta | Thin , Ke Ta | *Tha Ka Ju Nu | Thin , Ke Ta

*Thang Ke Ta | *Thin , Ke Ta | *Tha Ka Ju Nu | *Thin , Ke Ta

*Thang Ke Ta | *Thin , Ke Ta | *Tha Ka Ju Nu | *Thin , Ke Ta

*Thang Ke Ta | *Thin , Ke Ta | *Tha Ka Ju Nu | *Thin , Ke Ta

Konnakol

*Thang Ke Ta | *Thin , Ke Ta | *Tha Ka Ju Nu | *Thin , Ke Ta

*Thang Ke Ta | *Thin , Ke Ta | *Tha Ka Ju Nu | *Thin , Ke Ta

*Thin , Thin Ke Ta | *Tha Ka Ja Nu Thin ,

Mridangam

*Thin , Thin Ke Ta | *Tha Ka Ja Nu Thin ,

*Thin , Thin Ke Ta | *Tha Ka Ja Nu Thin ,

*Thin , Thin Ke Ta | *Tha Ka Ja Nu Thin ,

*Thin Ke Tha | Ta Ka Ju Nu | *Thin Ke Tha | Ta Ka Ju Nu

*Thin Ke Tha | Ta Ka Ju Nu | *Thin Ke Tha | Ta Ka Ju Nu
*Thin Ke Tha | Ta Ka Ju Nu | *Thin Ke Tha | Ta Ka Ju Nu
*Thin Ke Tha | Ta Ka Ju Nu | *Te Gu Cha Ka | Ta Re Ke Da
*Tha Ka Thi Mi | Tha Ka Ju Nu | *Tha Ka Thi Mi | Tha Ka Ju Nu
*Tha Ka Thi Mi | Tha Ka Thi Mi | *The Ka Thi Mi | Tha Ka Ju Nu

Konnakol and Mridangam together

*Tha Ka Thi Mi | Tha Ka Thi Mi | *The Ka Thi Mi | Tha Ka Ju Nu
*Tha Ka Thi Mi | Tha Ka Thi Mi | *The Ka Thi Mi | Tha Ka Ju Nu

Mridangam

*Thin Ke Tha | Ta Ka Ju Nu | *Thin Ke Tha | Ta Ka Ju Nu
*Thin Ke Tha | Ta Ka Ju Nu | *Te Gu Cha Ka | Ta Re Ke Da

Konnakol and Mridangam

*Thin Ke Tha | Ta Ka Ju Nu | *Thin Ke Tha | Ta Ka Ju Nu
*Thin Ke Tha | Ta Ka Ju Nu | *Te Gu Cha Ka | Ta Re Ke Da
*Thin Ke Tha | Ta Ka Ju Nu | *Te Gu Cha Ka | Ta Re Ke Da
*Te Gu Cha Ka | Ta Re Ke Da
*Thin Ta Ka Te Gu | Cha Ka *Ta Re Ke Da

Thin Ta Ka *Te Gu | Cha Ka Ta Re Ke Da/*Thim

Track 10 (1:29) Kandan

*Tham , Tha Thin, | * Num , Tha Thin , | *Num , Tha Thin, | *Num ,Tha Thin ,
*Tha Ka Tha Ke Ta | *Tha Ka Tha Ke Ta | *Tha Ka Tha Ke Ta | *Tha Ka Tha Ke Ta

Listen for the left hand pitch variations added, starting with low Sa (tonic) then Pa (fifth) then high Sa (tonic octave) in *Num , Num Thin ,

Konnakol

Low Sa *Num , Num Thin , | *Num , Num Thin ,

Pa *Num , Num Thin , | *Num , Num Thin ,

High Sa *Num , Num Thin , | *Num , Num Thin ,

Mridangam

Low Sa *Num , Num Thin , | *Num , Num Thin , |

Pa *Num , Num Thin , | *Num , Num Thin , |

High Sa *Num , Num Thin , | *Num , Num Thin , |

Pa *Num , Num Thin , | *Num , Num Thin , |

Low Sa *Num , Num Thin , | *Num , Num Thin , |

(0:33) Mridangam variation implying Chathusram (4) in Kandan

*Num , Num Thin | Num *, Num Thin | Num , *Num Thin | Num , Num *Thin |
Num , Num Thin |

The earlier example of Num , Num Thin, (Kandan) is reduced by one karvai to become Num , Num Thin (Chathusram). Instead of playing the usual 4 cycles of Kandan (5) $4 \times 5 = 20$, Ravi introduces 5 cycles of Chathusram (4) $5 \times 4 = 20$ The asterisk shows the Kandan pulse (as above).

Ravi recites (Chathusram in Kandan) 10 cycles of $4 = 40 = 8$ pulses of Kandan

(0:39)

*Num , Num Thin | Num *, Num Thin | Num , *Num Thin | Num , Num *Thin |
Num , Num Thin | *Num , Num Thin | Num *, Num Thin | Num , *Num Thin |
Num , Num *Thin | Num , Num Thin

Mridangam (no Konnakol)

(0:50)

*Thin , Tha Thin , *Tha Ka Tha Thin, *Tha Ka Tha Thin,

*Num Tha Re Ke Da Ke Da Tha Ka

*Thin , Tha Thin , *Tha Ka Tha Thin, *Tha Ka Tha Thin, *Tha Ka Tha Thin,

is an introduction to the following Kandam variations

Konnakol Kandam variations

(0:57)

*Tha Ka Tha Thin , *Tha Ka Tha Thin, *Tha Ka Tha Thin,

*Num Tha Re Ke Da Ke Da Tha Ka

*Tha Ka Tha Thin , *Tha Ka Tha Thin, *Tha Ka Tha Thin,

*Ke Da Ke Da Na Ka Tha Re Ke Da

*Na Ka Tha Thin , *Tha Ka Tha Thimi *Tha Ka Tha Thimi

*Num Tha Re Ke Da Ke Da Tha Ka

*Tha Ka Tha Thin , *Tha Ka Tha Thin, *Num Tha Re Ke Da Ke Da Ke Da

*Ke Da Ke Da Na Ka Tha Re Ke Da

*Na Ka Tha Thin , | *Na Ka Tha Thin ,

The next section of playing is similar to the Konnakol written below

(1:11)

*Ke Da Ke Da | Ke Da Ke Da | Num *Tha Re Ke Da Na Ka | Tha Re Ke Da |

*Na Ka Num Thin , | *Na Ka Num Thin ,

*Tha Ka Tha Thin , *Tha Ka Tha Thin, *Num Tha Re Ke Da Ke Da Ke Da

*Ke Da Ke Da Na Ka Tha Re Ke Da

*Na Ka Num Thin , | *Na Ka Num Thin ,

*Ke Da Ke Da | Ke Da Ke Da | Num *Tha Re Ke Da Na Ka | Tha Re Ke Da |

*Na Ka Num Thin , | *Na Ka Num Thin ,

Finishing with the Konnakol of the final phrase

*Ke Da Ke Da | Ke Da Ke Da | Num *Tha Re Ke Da Na Ka | Tha Re Ke Da |

*Na Ka Num Thin , | *Na Ka Num Thin ,

Track 11 (1:22) Misram

This pattern is thought of as 3+4=7 Da and Ta are interchangeable vocally.

|Tha Ke Ta | Tha Ka Thi Mi | Tha Ke Ta | Tha Ka Thi Mi |

|Tha Ke Da | Tha Ka Thi Mi | Tha Ke da | Tha Ka Thi Mi |

Listen for ascending and descending bass tones.

This leads into the phrase Ke Da Ke Da Thin Num | Num Thin Thin Num | heard 4 times. Listen for the high tik sound on Num, then the recitation of the following Konnakol.

(0:40)

*Ke Da Ke Da Thin Num | Num Thin Thin Num |

*Ke Da Ke Da Thin Num | Num Thin Thin Num |

*Tha Re Ke Da Thin Num | Num Thin Thin Num |

*Tha Ka Ja Nu Thin Num | Num Thin Thin Num |

Variations of the phrases above are played similar to the following patterns -

*Num Thin Num Tha Ka Ja Nu Thin Tha Ka Ja Nu Tha Ka Ja Nu

*Num Thin Num Tha Ka Ja Nu Tha Ka Ja Nu Tha Ka Ja Nu Tha Ka Ja Nu

This leads to the following phrases being recited and played.

(1:09)

*Tha Dhi Dhi Ta Tha Ka Ja Nu Num Thin Num |

*Thom Dhi Dhi Ta Tha Ka Ja Nu Num Thin Num |

*Thom Tha Re Ke Da Ta Tha Ka Ja Nu Num Thin Num |

Note that Tha Re Ke Da at 3rd speed is pronounced Druka

Track 12 (1:59) Sangeernam

First example -

| Tha Ka Thi Mi | Tha Ka Tha Ke Da | 4+5 =9

The second example -

| Num Thin Thin Thin | Num Thin | Num Thin Thin| is recited and played with bass modulations and variations.

Third variation is 2+2+2+2+1=9

The following combinations are some of the variations recited and played

Thom , Tha , Thin , Na ,(ng) Gu Thin , Tha , Thin , Na,(ng) Gu

Thi Mi Tha , Thin , Na,(ng) Gu

Gu-Gu Tha , Thin , Na,(ng) Gu

Tha Re Ka Da Tha , Thin , Na,(ng) Gu

Dru Ka Tha , Thin , Na,(ng) Gu

Track 13 (1:28) Double Chathusram

The following examples are recited and played (some are played more than once).

*Tha Ka Thi Mi Tha Ka Ju Nu | *Tha Ka Thi Mi Tha Ka Ju Nu |

*Num Tha Ka Tha Ka Thi Mi Tha Thin , Tha | *Tha Thin ,Tha Tha Thin ,Tha

*Tha Ke Da Tha Ka Tha Ke Da Num Thin ,Tha *Tha Thin ,Tha Tha Thin ,Tha

*Num Tha Ka Tha Ka Thi Mi Tha Ke Da Tha Ka Tha Ke Da *Num Thin ,Tha Tha Thin ,Tha

*Tha Thin, Tha Tha Thin , Tha *Tha Thin , Tha Num Gu Gu Tha Re Ke Da

etc. etc. (variation ending)

Track 14 (0:37) Kandam variation

The following patterns and the extension are mainly constructed of groups of 3, 4 and 6. It suppresses some of the syllables to create gaps. Many of the beats fall in the space just before a new syllable. This aspect continually 'kicks' the rhythm along which makes for great listening.

Tha Thin , Thina , | Ke Ta Thin , * , Thin , Thina * , Ke Ta Thin ,
 *Tha Thin , Thi na * , Ke Ta Thin , * , Thin , Thina * , Ke Ta Thin ,
 *Tha Thin , Thi na * , Ke Ta Thin , * , Thin , Thina * , Ke Ta Thin ,
 *Tha Thin , Thi na * , Ke Ta Thin , * , Thin , Thina * , Ke Ta Thin ,

(0:23)

*Tha Thin , Thi na * , Ke Ta Thin , accenting low Sa

*Tha Thin , Thina * , Ke Ta Thin , accenting low Sa

*Tha Thin , Thina * , Ke Ta Thin , accenting high Sa

*Tha Thin , Thina * , Ke Ta Thin , accenting high Sa

Extension structure -

[*Tha Re Ke Da Thom] ,

[Tha Re *Ke Da Thom] [Tha Re Ke Da Thom] * ,

[Tha Re Ke Da Thom] [Tha Re *Ke Da Thom] [Tha Re Ke Da Thom]

| *Tha Thin , Thina * , Ke Ta Thin , | * , Thin , Thina * , Ke Ta Thin ,

COMBINATIONS OF THE GATHIS

Track 15 (2:09) Chathusram(4) Thisram(6) Double Chathusram(8) Composed by Karaikudi R. Mani. Performed by M. Ravichandhira.

This track demonstrates with both Mridangam and Konnakol 'Laya Rathna' or metric modulation in Chathusram (4) Thisram (6) and Double Chathusram(8). In simple Jathi language these tempos would be recited as -

Chathusram (4)

*Tha Ka Thi Mi | *Tha Ka Thi Mi | *Tha Ka Thi Mi | *Tha Ka Thi Mi |

Thisram (6)

*Tha Ke Da Tha Ke Da | *Tha Ke Da Tha Ke Da | *Tha Ke Da Tha Ke Da | *Tha Ke Da Tha Ke Da |

Double Chathusram (8)

*Tha Ka Thi Mi Tha Ka Ja Nu | *Tha Ka Thi Mi Tha Ka Ja Nu

*Tha Ka Thi Mi Tha Ka Ja Nu | *Tha Ka Thi Mi Tha Ka Ja Nu

Ravi recites and plays the first section in Chathusram and Thisram. When he moves to Double Chathusram he adds the other sections of the piece. I have notated the piece using the syllables and notation I first learnt from Ravi. Listen for slight variations (within the syllables) to this original form. Sometimes syllables are omitted for effect. Druka is played as a variation using a fast ripple of 3 fingers on the right hand. You will also hear that occasionally | The Gu Gum | is replaced by Tha Ke Da. Section One is recited and played in each of the 3 speeds twice, allowing for variations.

SECTION ONE - original notation

Tha , , The Tha Ka Thin , (Thin ,)2 Na ,

Tha Re Ke Da Thom The Gu Gum Tha Ka Thin , (Thin , Tha Thin ,)3

Tha-Tha Ka Ja Nu Thom , , ,

SECTION ONE - long hand for denoting pulse

first speed (0:00)*Tha , , The *Tha Ka Thin , (*Thin ,)2 *Na ,

Tha Re Ke Da *Thom The Gu Gum *Tha Ka Thin ,

(*Thin , Tha Thin ,) (Thin , Tha *Thin ,) (Thin, *Tha Thin ,)

Tha-*Tha Ka Ja Nu *Thom , , ,

second speed (0:36)*Tha , , The Tha Ka *Thin , (Thin ,)2 *Na ,

Tha Re Ke Da Thom The *Gu Gum Tha Ka Thin ,

(*Thin , Tha Thin ,) (Thin * , Tha Thin ,)(Thin , *Tha Thin ,)

Tha-Tha Ka *Ja Nu Thom , , ,

third speed (1:00)*Tha , , The Tha Ka Thin , (*Thin ,)2 Na ,

Tha Re Ke Da *Thom The Gu Gum Tha Ka Thin ,

(*Thin , Tha Thin ,) (Thin , Tha *Thin ,)(Thin , Tha Thin ,)

Tha-*Tha Ka Ja Nu Thom , , ,

SECTION TWO A - recited and played in 3rd speed

(1:19)*Tha , , The Tha Ka Thin , (*Thin ,)2
Thin , Tha Thin * , Tha-Tha Ka Ja Nu Thom ,

SECTION TWO B - recited and played in 3rd speed

(1:24)*Thom The Gu Gum Tha Ka Thin , (*Thin ,)2
Thin , Tha Thin * , Tha -Tha Ka Ja Nu Thom ,

SECTION THREE - recited and played in 3rd speed each line separately

(1 and 1/2 phrases)

(1:29)*Tha , , Tha Tha Ka Thin , *Tha-Thin (ng)

(1 and 1/2 phrases)

(1:31)*Thom-The Gu Gum Tha Ka Thin , *Tha The (ng)

SECTION FOUR - played 3 times in 3rd speed only

(1:34)*Tha , , Tha Tha Ka Ja Nu

(don-am) *Thom-The Gu Gum Tha Ka Ja Nu *Thin , The , Thom ,
Tha Re * , Tha Na Gum ,

Na Ka Tha *Re , Tha Na Gum ,

Na Ka *The Ku Tha Re , Tha Na Gum

The complete piece is performed in 3 speeds is recorded by the author on Track 18.

Track 16 (1:23) Chathusram(4) Misram(6) Sangeernam(9)

The basic patterns (first half) are traditional, the syllabus is Composed by Karaikudi R. Mani. Performed by Lisa Young

The following example demonstrates a more unusual shift of 4 to 6 to 9. The asterisk shows where the pulse falls in each speed.

The recorded example first demonstrates the basic Jathi patterns which define Chathusram (4) Misram (6) and Sangeernam (9) followed by the syllabus written by Karaikudi R. Mani. There are some variations used with the first and second syllables of some of the phrases.

Basic patterns

Chathusram	*Tha Ka Thi Mi * Tha Ka Thi Mi (4+4)
Misram	*Tha Ke Ta Tha Ke Ta *Tha Ke Ta Thang , , (6+6)
Sangeernam	*Tha Ka Tha Ka Tha Ka Tha Ke Ta *Tha Ka Tha Ka Tha Ka Tha Ke Ta (9+9)
Misram	*Tha Ke Ta Tha Ke Ta *Tha Ke Ta Tha Ke Ta (6+6)
Chathusram	*Tha Ka Thi Mi * Tha Ka Thi Mi (4+4) (Tham is Samam)

Syllabus

1st Speed (0:14)

Chathusram *Tha , Ta , *Ke Ta Tha Ka *Thine , Ta *Ke Ta , Ta *Ka , Tha , *Ding,
Ke Na *Thom Thang , , *Ta , Ta , *Di , , ,

2nd Speed

Thisram *Tha , Ta , Ke Ta *Tha Ka Thine , Ta *Ke Ta , Ta Ka , *Tha , Ding ,
Ke Na *Thom Thang , , Ta , *Ta , Di , , ,

3rd Speed

Sangeernam *Tha , Ta , Ke Ta Tha Ka Thi*Ne , Ta Ke Ta , Ta Ka , Tha * , Ding ,
Ke Na Thom Thang , * , Ta , Ta , Di , , ,

Track 17 (1:51) Chathusram(4) Kandam(5) Thisram(6) Misram(7) Double Chathusram(8) Composed and Performed by Karaikudi R. Mani.

This syllabus modulates through 4 5 6 7 8 and then in reverse. It uses various repeats of the basic 4 syllables Tha Ding , , (pronounced Tha Dhi-ng-ga) and | Tha Dom Ke Ta Tha Ka | as a consistent end phrase. Because of the repetition of the language it initially appears to be a simple structure. However, it is a very complex syllabus to recite accurately. It 'sits' easily in Chathusram as the main phrase is in 4, however with each shift in speed the 4 syllable phrase is displaced. For example in Kandam (5) every repetition of Tha Ding , , places the pulse falls one syllable further along the phrase. Therefore to recite this piece one needs to not

only be comfortable with subdividing by 4,5,6,7 and 8, but also to accurately connect a different syllable in the phrase with each pulse in every speed.

Chathusram(4) (0:14) and (1:42 on the return)

*Tha Ding,, *Tha Ding,, *Tha Ding,, *Tha dom Ke Ta Tha Ka

Kandam(5) (0:27) and (1:36)

*Tha Ding,, Tha *Ding,, Tha Ding*,, Tha Ding*,, Tha dom Ke Ta Tha Ka

Thisram(6)(0:40) and (1:29)

Tha Ding,, Tha Ding,, Tha Ding,, *Tha Ding,, Tha Ding*,, Tha dom Ke Ta Tha Ka

Misram(7) (0:52) and (1:17)

Tha Ding,, Tha Ding,, Tha Ding,, Tha Ding*,, Tha Ding,, Tha *Ding,,
Tha Dom Ke Ta Tha Ka

Double Chathusram(8) (1:05)

*Tha Ding,, Tha Ding,, *Tha Ding,, Tha Ding,, *Tha Ding,, Tha Ding,,
*Tha Ding,, Tha dom Ke Ta Tha Ka

CHAPTER SIX: KONNAKOL PIECES

Tracks 18 -26 demonstrate longer works, including pieces by Karaikudi R. Mani and two original pieces. In this chapter focus is given to particular sections of rhythmic analysis, thus providing the necessary calculations within sections and pieces to show the links with the cycles of the Talam and Gathi. The pieces have been chosen because they provide a variety of structures and textures and the analysis attempts to highlight and draw the listeners attention to specific motifs, structures and displacements.

TRACK 18 (2:59) Chathusram(4) Thisram(6) Double Chathusram(8) Composed by Karaikudi R. Mani Performed by Lisa Young

Track 18 is the complete piece of the excerpt given on Track 15. The structure was composed by Karaikudi R. Mani, and taught to me by M. Ravichandhira. Of interest are the interchangeable syllables used in the two different performances (Track 15 and 18). This piece can be set to Aathi Talam(8) or Rupaka Talam(6) but for the purpose of this thesis it is set to Aathi Talam.

First speed - Chathusram - each pulse is divided by 4.

Second speed - Thisram - each pulse is divided by 6.

Third speed - Double Chathusram - each pulse is divided by 8.

First speed - Chathusram (4)

Section One recited twice (0:00) (1:13) (2:03)

*Tha , , The *Tha Ka Thin , (*Thin ,)2 *Na ,

Tha Re Ke Da *Thom The Gu Gum | *Tha Ka Thin , |(Thin , Tha Thin ,)3

Tha *Tha Ka Ja Nu *Thom , , ,

Section 2 recited twice (0:19) (1:25)(2:13)

*Tha , , The *Tha Ka Thin , (*Thin ,)2

*Thin , Tha Thin *, Tha-Tha Ka *Ja Nu Thom ,

*Thom The Gu Gum | *Tha Ka Thin , (*Thin ,)2

*Thin , Tha Thin *, Tha -Tha Ka *Ja Nu Thom ,

Section Three recited twice (0:37) (1:37)(2:22)

*Tha , , Tha *Tha Ka Thin , *Tha-Thin (ng) (gu)

*Thom-The Gu Gum | *Tha Ka Thin , | *Tha The (ng) (gu)

Section Four recited thrice (0:46) (1:44)(2:27)

*Tha , , Tha *Tha Ka Ja Nu

(don-am) *Thom-The Gu Gum | *Tha Ka Ja Nu | *Thin , The , *Thom ,

Tha Re * , Tha Na Gum * ,

Na Ka Tha *Re , Tha Na *Gum ,

Na Ka *The Ku Tha Re * , Tha Na Gum

Aruthi (Short Ending) (2:42)

Limited notation - Jathi syllables only

Tha /Tha Tha Tha Tha Re Tha Tha Ka Ja Nu

Thin Tha Ka Tha Thom | Dom Tha Ka Ta Thom

Na Thom Tha Ka Tha | Thin Tha Ka Tha Thom

Da Nom Tha Ka Tha Thom | Thom Tha Ka Tha

Thin Tha Ka Tha Thom | Thin Tha Ke Tha Donam

Tha Ka Tha Thom | Tha Ka Tha Thom

Listen for the phrase | Thin , Tha Thin , | which uses 5 sub-divisions of the beat and is a repeated motif in section one. It is always repeated 3 times and as it is a 5 phrase it never sits evenly with the subdivisions of 4, 6 and 8. When repeated the pulse shifts along the phrase. Listen also for the underlined (double speed) 'lead in' or 'pick up' lines like Tha Re Ke Da in the second line of section 1. They provide great inertia leading to the down beat. Listen for the extension structure in section 4. In all 3 speeds the section repetitions are the same. Sections 1, 2 and 3 are repeated twice and section 4 is repeated 3 times. This sounds simple and logical but because the piece is shifting across subdivisions the Samam does not always fall at the beginning of a section.

FIRST SPEED - Chathusram

Section One (0:00)

*Tha , , The *Tha Ka Thin , (*Thin ,)2 *Na ,
Tha Re Ke Da *Thom The Gu Gum | *Tha Ka Thin , |(Thin , Tha Thin ,)
(Thin , Tha Thin ,)
(Thin , Tha Thin ,)
Tha *Tha Ka Ja Nu *Thom , , ,

There are 48 syllables (or commas) in the first section. In Chathusram (4) each syllable or comma represents a quarter of a pulse/beat thereby using a total of 12 beats in the first section. To fit the first section to Aathi Talam (it must be sung twice = 24 pulses. This completes 3 cycles of Aathi Talam.

Section Two (0:19)

*Tha , , The *Tha Ka Thin , (*Thin ,)2
*Thin , Tha Thin * , Tha-Tha Ka *Ja Nu Thom ,
*Thom The Gu Gum *Tha Ka Thin , (*Thin ,)2
*Thin , Tha Thin * , Tha -Tha Ka *Ja Nu Thom ,

In section 2 there are also 48 syllables using 12 beats recited in 2 phrases of 6 beats. The combination used in performance is to sing the whole section twice, thus 12 X 2 = 24 beats which equals 3 cycles of Aathi Talam.

Section Three (0:37)

*Tha , , Tha *Tha Ka Thin , *Tha-Thin (ng) (gu)
*Thom-The Gu Gum | *Tha Ka Thin , | *Tha The (ng) (gu)

Section 3 uses 6 beats and is recited twice 6 X 2 = 12 which uses one and a half cycles of Aathi Talam leading the final section to start half way through the cycle.

Section Four (0:46)

*Tha , , Tha *Tha Ka Ja Nu
 (don-am) *Thom-The Gu Gum *Tha Ka Ja Nu *Thin , The , *Thom ,
 Tha Re * , Tha Na Gum * ,
 Na Ka Tha *Re , Tha Na *Gum ,
 Na Ka *The Ku Tha Re * , Tha Na Gum

Section four requires 12 beats. Starting half way through the Talam thus it recited thrice $12 \times 3 = 36$ using 4 and 1/2 cycles of the Talam to return to the Samam.

FIRST SPEED - 96 BEATS OR 13 Cycles of Aathi Talam

This grid shows where the sections fit in relation to the Talam. Notice that there are many times when the beginning of a section falls midway through the talam.

1	2	3	4	5	6	7	8 (8 beats of Aathi Talam)
1	,	,	,	,	,	,	,
,	,	,	,	1	,	,	,
,	,	,	,	,	,	,	,
2a	,	,	,	,	,	2b	,
,	,	,	,	2a	,	,	,
,	,	2b	,	,	,	,	,
3	,	,	,	,	,	3	,
,	,	,	,	4	,	,	,
,	,	,	,	,	,	,	,
4	,	,	,	,	,	,	,
,	,	,	,	4	,	,	,
,	,	,	,	,	,	,	,

SECOND SPEED Thisram

Section 1 recited twice (1:13)

*Tha , , The Tha Ka *Thin , Thin , Thin , *Na ,
Tha Re Ke Da Thom The *Gu Gum | Tha Ka Thin , | *Thin , Tha Thin , |
Thin * , Tha Thin , | Thin , *Tha Thin , |
Tha Tha Ka *Ja Nu Thom , , ,

Section 2 recited twice (1:25)

*Tha , , The Tha Ka *Thin , (Thin ,)2
*Thin , Tha Thin , Tha-*Tha Ka Ja Nu Thom ,
*Thom The Gu Gum | Tha Ka *Thin , (Thin ,)2
*Thin , Tha Thin , Tha-*Tha Ka Ja Nu Thom ,

Section 3 recited twice (1:37)

*Tha , , Tha Tha Ka *Thin , Tha-Thin (ng) (gu)
*Thom-The Gu Gum | Tha Ka *Thin , | Tha The (ng) (gu)

Section 4 recited thrice (1:44)

*Tha , , Tha Tha Ka *Ja Nu
(don-am) Thom-The Gu Gum | * Tha Ka Ja Nu | Thin , *The , Thom,
Tha Re * , Tha Na Gum ,
Na *Ka Tha Re , Tha Na *Gum ,
Na Ka The Ku *Tha Re , Tha Na Gum

At second speed the subdivision of the pulse changes to 6, and the piece moves at 1 and 1/2 times the first speed. Section 1 and 2 which were each 12 beats now become 8 beats and fit evenly into the 8 beat Talam and are sung twice.

Section 3 which was 6 beats becomes 4 beats and is sung twice to complete one talam cycle. Section 4 which was 12 beats is now 8 beats and is repeated 3 times completing 3 cycles of Aathi Talam. Note that there are fewer instances where the beginning of a section occurs midway through the Talam.

SECOND SPEED - 64 BEATS 8 cycles of Aathi Talam

1	2	3	4	5	6	7	8 (8 beats of Aathi Talam)
1	,	,	,	,	,	,	,
1	,	,	,	,	,	,	,
2a	,	,	,	2b	,	,	,
2a	,	,	,	2b	,	,	,
3	,	,	,	3	,	,	,
4	,	,	,	,	,	,	,
4	,	,	,	,	,	,	,
4	,	,	,	,	,	,	,

THIRD SPEED 2 X Chathusram

Section 1 recited twice (2:03)

*Tha , , The Tha Ka Thin , (*Thin ,)2 Na ,
Tha Re Ke Da *Thom The Gu Gum | Tha Ka Thin , | *Thin , Tha Thin ,
 | Thin , Tha *Thin , | Thin , Tha Thin ,
 | Tha *Tha Ka Ja Nu Thom , , ,

Section 2 recited twice (2:13)

*Tha , , The Tha Ka Thin , (*Thin ,)2
 Thin , Tha Thin * , | Tha-Tha Ka Ja Nu Thom ,
 *Thom The Gu Gum | Tha Ka Thin , (*Thin ,)2
 Thin , Tha Thin * , | Tha -Tha Ka Ja Nu Thom ,

Section 3 recited twice (2:22)

*Tha , , Tha Tha Ka Thin , *Tha-Thin (ng) (gu)
 Thom-The Gu Gum | *Tha Ka Thin , | Tha The (ng) (gu)

Section 4 recited thrice (2:27)

*Tha , , Tha Tha Ka Ja Nu
 (don-am) *Thom-The Gu Gum | Tha Ka Ja Nu | *Thin , The , Thom ,
 Tha Re * , Tha Na Gum ,
 Na Ka Tha *Re , Tha Na Gum ,
 Na Ka *The Ku Tha Re , Tha Na Gum

At third speed the pulse is subdivided by 8. Section 1 requires 6 pulses. It is sung twice using 12 beats -one and a half cycles

Section 2 begins on the fifth beat - half cycle - of the second cycle of the Talam, and requires 6 beats. The repeat of section 2 starts on beat 3 of the third cycle and completes this cycle of the Talam.

Section 3 begins on the 7th beat of the 5th cycle and requires 6 beats and is sung three time using 18 beats - two and a quarter cycles. Then the Korvai is added. It begins on the 3 beat of the 6th cycle and requires 14 beats which completes the 7 cycles.

THIRD SPEED - 48 BEATS 6 cycles of Aathi Talam

1	2	3	4	5	6	7	8 (8 beats of Aathi Talam)
1	,	,	,	,	,	1	,
	,	,	,	2a	,	,	2b
	,	2a	,	,	2b	,	,
3	,	,	3	,	,	4	,
	,	,	,	4	,	,	,
	,	4	,	,	,	,	,

It is interesting to observe what happens to the repetitive 5 beat motive in Section One (Thin, Tha Thin,) as it is repeated 3 times and shifted across the different speeds.

First Speed

*Thin , Tha Thin * , | Thin , Tha *Thin , | Thin , *Tha Thin , |
| Tha *Tha Ka Ja Nu *Thom , , ,

At first speed the pulse lands one beat earlier as each of the repetition is added.

Second Speed

*Thin , Tha Thin , | Thin * , Tha Thin , | Thin , *Tha Thin , |
Tha Tha Ka *Ja Nu Thom , , ,

At second speed the pulse lands one beat later in the following pulse.

Third Speed

(*Thin , Tha Thin ,) (Thin , Tha *Thin ,)
(Thin , Tha Thin ,) Tha *Tha Ka Ja Nu Thom , , ,

At third speed the recitation moves very fast and pulse is only found in the first two of the repeated phrase.

Track 19 (2:47) Chathusram(4) Kandam(5) Double Chathusram(8) Composed and Performed by Karaikudi R. Mani.

Set to Aathi Talam - it is based on a cycle of 10 Aksharam.

I have included this piece because it uses many similar phrases to the syllabus on track 15 and 18 but the shift into Kandam (rather than Thisram - Tracks 15 and 18) changes the displacement of the phrases that occurs.

The first line uses 10 beats in Chathusram 8 beats Kandam and 5 beats in Double Chathusram.

CHATHUSRAM

2X *Tha , Ke Ta *Tha Ka Thin , *Thin , Thin, *Tham, Ke Ta Tha Ka

*Tha Tha Ke Ta *Tha Ka Thin , *Tha Thin , Tha *Thin , Tha Thin * , Tha
Thin , *Tha , , ,

(0:35) starts on the half cycle (beat 5)

2X *Tha , Ke Ta *Tha Ka Thin , | | *Thin , Thin ,

*Tha Thin , Tha *Thin , Tha ,

*Tha Tha Ke Ta *Tha Ka Thin , | | *Thin , Thin ,

*Tha Thin , Tha *Thin , Tha ,

(0:50) starts on the Samam

2X *Tha , Ke Ta *Tha Ka Tha Thing * , ,
Tha *Ke Tha Ka *Tha Thing , ,

(0:58) ARUTHI (10 beats) (3 times) starts on half cycle

*Tha , Ke Ta *Tha Ka Thina
*Tha Ta Ke Ta *Tha Ka Thina
*Thin , Ka , *Thom ,
Tha Thing * , Ke Na Thom
*Tha Thing , Ke *Na Thom
Tha Thing * , Ke Na Thom

(1:19) KANDAM starts all section start on the Samam

2X *Tha , Ke Ta Tha *Ka Thin , Thin , *Thin, Tham, Ke *Ta
Tha Tha Ke Ta *Tha Ka Thin , Tha *Thin , Tha Thin ,
*Tha Thin , Tha Thin * , Tha , , ,

4X *Tha , Ke Ta Tha *Ka Thin , || Thin , *Thin ,
Tha Thin , *Tha Thin , Tha ,

2X *Tha , Ke Ta Tha *Ka Tha Thing , ,
*Ta Ta , Ke Ta Tha Ka Tha Thing , ,

(1:48) ARUTHI 3 Times - starts on Samam

*Tha , Ke Tha Ta *Ka Thina (= Thin ,)
Tha Ta *Ke Ta Tha Ka Thi*na
Thin , Ka , *Thom ,
Tha Thing , *Ke Na Thom
Tha Thing * , Ke Na Thom
Tha *Thing , Ke Na Thom

(2:11) DOUBLE CHATHUSRAM starts on Samam

2X *Tha , Ke Ta Tha Ka Thin , *Thin , Thin, Tham, Ke Ta Tha Ka

*Tha Tha Ke Ta Tha Ka Thin , *Tha Thin , Tha Thin , Tha Thin * , Tha
Thin , Tha , , ,

2X *Tha , Ke Ta Tha Ka Thin , || *Thin , Thin ,

Tha Thin , Tha *Thin , Tha ,

Tha , Ke Ta *Tha Ka Thin , || Thin , Thin ,

*Tha Thin , Tha Thin , Tha ,

1 X *Tha , Ke Ta Tha Ka Tha Thing * , ,

Tha Tha Ke Tha Tha Ka *Tha Thing , ,

Tha , Ke Ta *Tha Ka Tha Thing , ,

Tha Tha *Ke Tha Tha Ka Tha Thing , ,

(2:32) ARUTHI 3 TIMES (10 beat Aruthi)

*Tha , Ke Ta Tha Ka Thina

*Tha Ta Ke Ta Tha Ka Thina

*Thin , Ka , Thom ,

Tha Thing * , Ke Na Thom

Tha Thing , Ke *Na Thom

Tha Thing * , Ke Na Thom / *Tha (Samam)

Track 20 (4:40) Chathusram(4) to Kandam(5) Composed and Performed by

Karaikudi R. Mani

This piece begins in Chathusram but is predominantly set in Kandam. It begins with the five syllable phrase [Tha Thine, Tha Ka] set in Chathusram | *Tha Thine, Tha *Ka | Tha Thine *Tha Ka | Tha Thi*ne Thang Ke Ta Ta Ka. When the shift occurs from Chathusram(4) to Kandam(5) the phrase sits easily in Kandam *Tha Thine, Tha Ka | *Tha Thine Tha Ka | *Tha Thine Tha Ka | *Thine Thang Ke Ta Ta Ka

Listen for the section that begins at (1:10). It is repeated 3 times and uses very effective displacement. On the third repeat the endings of the last 3 phrases use fast but succinct variations (1:49).

*Thanga Ta Ti *Ke Tha Thom ,
 (Ke Ta Ta Ka Ta Re Ke Ta Thom) 3rd time variation.

Listen for the aural deception in the section that follows which begins at (1:56). The repeated | , , Tha Thin , | gives a sense of shifting into 6 but it really remains in 5. The next section of [Tha Ka Thin,] (2:20) uses a displacement of 4 against 5. The phrase [Tha Ka Thin,] uses 4 karvai and when sung in Kadam the pulse falls one syllable further in the phrase with every beat.

*Tha Ka Thin , Tha *Ka Thin , Tha Ka *Thin , Tha Ka Thi*n , Tha Re Ke Ta Thom

The next phrase of [Tha Ka Thin , Tha Re Ke Ta Thom ,] (2:45) uses 8 beats and does a similar shift when cyclically repeated. The Kadam Korvai is exceptionally beautiful and complex. In this piece Thanga , , equals (Tha-ng-ga)(3). The first syllables Tha Thine, are not recorded.

Chat 3x *(Tha Thine,) Tha *Ka Tha Thine, *Tha Ka Tha Thi*ne, Tha(ng)
Ke Ta Ta Ka

Kadam 1x *Tha Thine, Ta Ka *Tha Thine, Tha Ka *Tha Thine, Tha Ka *Thine,
 Thang Ke Ta Ta Ka

2x next 2 phrases

Chat x1 *Tha Thine, Tha *Ka Tha Thine, *Tha Ka Tha Thi*ne, Tha(ng) Ke
Ta Ta Ka

Kadam x1 *Tha Thine, Ta Ka *Tha Thine, Tha Ka *Tha Thine, Tha Ka *Thine,
 Thang Ke Ta Ta Ka

(0:31)

Kandam from here

2x *Tha Thine, Ta Ka *Tha Thine, Tha Ka *Tha Thine, Tha Ka *Thine,
Thom (Thang) Ke Ta Ta Ka

4x *Tha Thin, Tha Ka *Thin, Thang Ke Ta Ta Ka

2x 3x *Tha Thin, Tha Ka *Thin, Thang Ke Ta Ta Ka

1x *Tha Thom, Tha, *Thom, Tha-(a-am) (Tha-ng-ga)

2x 1x *Tha Thin, Tha Ka *Thin, Thang Ke Ta Ta Ka

1x *Tha Thom, Tha, *Thom, Tha-(a-am) (Thang)

(1:10)

3x *Tha Thom, Tha, *Thom, Thanga, , *Thom , ,

Tha Ka - *Tha Thom, Tha, *Thom, Thanga, , *Thom , ,

Tha Ka *Te Gu - Tha Thom, *Tha, Thom, Thang * , , Thom , ,

*Thanga , , Ta Ti *Ke Tha Thom ,

(1:49)(Ke Ta Ta Ka Ta Re Ke Ta Thom) 3rd time variation

Tha*nga , , Thinga , , *Ta Ti Ke Tha Thom* ,

(Ke Ta Ta Ka Ta Re Ke Ta Thom) 3rd time variation

Thanga , , Thi*nga , , Thanga , , *Ta Ti Ke Tha Thom ,

(Ke Ta Ta Ka Ta Re Ke Ta Thom) 3rd time variation

(1:56)

2x *Thin, Tha Thin, * , , Tha Thin, * , , Tha Thin, * , , Tha Thin,

*Ta Ka Ta Thin, * , , Tha Thin, * , , Tha Thin, * , , Tha Thin,

8X *Tha Ka Tha Ke Ta (Tha Ka Tha Thin,)

3X *Tha Ka Tha Ke Ta *Tha Ka Tha Ke Ta *Tha Ka Tha Ke Ta *Tha
Ka Tha Ke Ta

1x *Tha Ka Thin,Tha *Ka Thin,Tha Ka *Thin, Tha Ka Thi*n,
Tha Re Ke Tha Thom
 *Tha Ka Thin,Tha *Ka Thin,Tha Ka *Thin,Tha Ka Thi*n,
Tha Re Ke Ta Thom
 *Tha Ka Thin,Tha *Ka Thin,Tha Ka *Thin,Tha Ka Thi*n,
Tha Re Ke Ta Thom

(2:45) *Tha Ka Thin , Tha Re *Ke Ta Thom ,
 Tha Ka *Thin , Tha Re Ke Ta Thom * ,
 Tha Ka Thin , *Tha Re Ke Ta Thom ,
 Tha *Ka Thin , Tha Re Ke Ta *Thom ,
 Tha Ka Thin * , Tha Re Ke Ta Thom ,
 *Tha Ka Thin , Tha Re *Ke Ta Thom ,
 Tha Ka *Thin , Tha Re Ke Ta Thom * ,
 Tha Ka Thin , *Tha Re Ke Ta Thom ,
 Tha *Ka Thin , Tha Re Ke Ta *Thom ,
 Tha Ka Thin * , Tha Re Ke Ta Thom ,

2 X *Tha Re Ke Ta Thom , Tha Re *Ke Ta Thom , Tha Re Ke Ta *Thom ,
Tha Re Ke Ta Thom * , Tha Re Ke Ta Thom , *Tha Re Ke Ta Thom ,
Tha Re *Ke Ta Thom , Tha Re Ke Ta *Thom ,
Tha Re Ke Ta Tha Re *Ke Ta Tha Re Ke Ta Thom ,

2X *Tha Re Ke Ta Thom ,
Tha Re *Ke Ta Thom , Tha Re Ke Ta *Thom ,
Tha Re Ke Ta Tha Re *Ke Ta Tha Re Ke Ta Thom ,

2X *Tha Re Ke Ta Thom , Tha Re* Ke Ta Thom , Tha Re Ke Ta *Thom ,
 Di, Tham *Ke Ta Tha Ka Ta Ri De Ta Ta Ka

(3:26)

KORVAI (3 times)

*Di, Tham Ke Ta Tha Ka *Ta Ri De Ta Ta Ka Doom , *Ka Thong , ,

*Di, Tham Ke Ta Tha Ka *Ta Ri De Ta Ta Ka

Doom, *Ka, Thong, , *Doom, Ka , Thong * , ,

Di, Tham *Ke Ta Tha Ka Ta Ri De Ta Ta Ka

*Doom, Ka, Thong * , , Doom, Ka * , Thong , , Doom * , Ka , Thong , * ,

Ta Ti Ke Ta *Thom || Ta Ti Ke Ta *Thom || Ta Ti Ke Ta *Thom

Ta Thi(ng), Ke *Tha Thom || Ta Thi(ng), *Ke Tha Thom || Ta

Thi(ng)*, Ke Tha Thom

Ta*, Thi(ng), Ke Ta *Thom || Ta, Thi(ng), *Ke Ta Thom || Ta,

*Thi(ng), Ke Ta Thom (*tham -samam)

Track 21 (2:01) *'Thanga'* (excerpt) Composed by Lisa Young, Performed by Coco's Lunch Melbourne 2006. From CD 'Blueprint'. Full track uses Chathusram, Kadam, Thisram, Double Chathusram. Vocalists – Lisa Young, Gabrielle MacGregor, Sue Johnson, Jacqueline Gawler and Nicola Eveleigh.

Track 22 (2:01) *'Grace'* (excerpt) Composed by Lisa Young. Arranged Young and Robertson. Performed Lisa Young Quartet 2006. From CD *'Grace'* Kanda Chappu Talam (cycle 5). Lisa Young – voice, Ben Robertson – double bass, Stephen Magnusson – guitar and Dave Beck – drums.

Track 23 (2:33) *'Sa Ri Ga'* (excerpt) Composed by Lisa Young. Performed by Lisa Young Quartet 2006, From CD *'Grace'* Adhi Thalam (cycle 8), Konnakol breaks in Chathusram, Kadam, Thisram, Double Chathusram (4,5,6,8). Lisa Young – voice, Ben Robertson – double bass, Stephen Magnusson – guitar and Dave Beck – drums.

Track 24 (1:04) *'The Moon Has Made Other Plans'* (excerpt) Composed by Lisa Young. Performed by Lisa Young Quartet 2006. From CD *'Grace'* Rupaka Talam(cycle 3) Konnakol in Chathusrum, Thisram and Double Chathusram (4,6,8). Lisa Young – voice, Ben Robertson – double bass, Stephen Magnusson – guitar and Dave Beck – drums.

Track 25 (2:34) *'Deep In Madras (excerpt)'*- Thisram(6) to Double Chathusram(8) and Reverse. Composed and Performed by Lisa Young Quartet from CD *'Speak'* 1999. Full track performed by Colin Hopkins piano, Ben Robertson double bass, Darryn Farrugia drums.

I composed this Konnakol section whilst in Madras in February 1998. The intent was to use the language of the Solkattu combined with one or two favoured words from my own *'scat'* language. Originally the composition was recited in Single Chathusram, Thisram and Double Chathusram, but for performance I felt that including the first section of Chathusram made the piece too long and that it was more effective to start in Thisram. This meant the piece would finish in Thisram and word well as a vocal introduction lead into the 6/8 rhythm for the quartet's performance of *'Deep In Madras'*. It comprises Three Sections and a Korvai. The words and ideas that are introduced - not common to Jathi language - are *'Dway'* in Section One, and also the accents *'Ta , Ka , Ka'* used in Section Three line 2. Listen for the effect of the asymmetric 5 +7 phrases in Section One. They keep the rhythm moving forward. Notice the difference in Section Three when the phrases become symmetrical for a moment (6+6) providing a moment of rest. Listen also for the Reduction Structure in Section Two and the Extension Structure in the Korvai. It is set to Aathi Talam.

First Speed - Thisram

Section One

- *Dhin , Tha Ke Ta || Tha *Ka Dhina Tha Ke Ta (5 + 7)
- *Dway , Tha Ke Ta || Tha *Ka Dhina Tha Ke Ta (5 + 7)
- *Dhin , Tha Ke Ta || Tha *Ka Dhina Tha Ke Ta (5 + 7)
- *Tha The Ke Ta Thom || Tha *Thom Tha Thom Tha Thom , (5 +(2 + 2+ 3))

Section Two - Reduction Structure

- *Tha The Ke Ta Thom || Tha *, Thom , Thang ,, (12)
- *Ke Ta Thom || Tha , Thom *, Thang ,, (10)
- Thom || Tha *, Thom , Thang ,, (8)
- *Tha , Thom , Thang ,, (6)
- *Tha Thang ,, (4)
- Tham , *, , (4)
- (Tha Thang ,,) (4)

Section Three

- *Dhin , Tha Ka Ju Nu | *Dway , Ta Ka Ju Nu | (6 + 6)
- *Thang ,, | Dhing ,, *, | Ta , Ka , Ka | (3 + 4 + (2 + 2 + 1=)5)
- *Dhin , Tha Ka Ju Nu | *Dway , Ta Ka Ju Nu | (6 + 6)
- *Thang ,, | Dhing ,, *, | Dhong ,, , , | (3 +4 +5)
- (variation for last line) | , Thang ,, | Dhing ,, , | Dhong ,, , | (1 +3) + (4 +4)

(0:43)

Second Speed - Double Chathusram

Section One

- *Dhin , Tha Ke Ta || Tha Ka Dhi*na Tha Ke Ta (5 + 7)
- Dway , Tha Ke *Ta || Tha Ka Dhina Tha Ke Ta (5 + 7)
- *Dhin , Tha Ke Ta || Tha Ka Dhi*na Tha Ke Ta (5 + 7)
- Tha The Ke Ta *Thom || Tha Thom Tha Thom Tha Thom , (5 +(2 + 2+ 3))

Section Two - Reduction Structure

*Tha The Ke Ta Thom || Tha , Thom *, Thang,, (12)

Ke Ta Thom || Tha *, Thom , Thang,, (10)

Thom || Tha *, Thom , Thang,, (8)

Tha Thom *, Thang,, (6)

Tha Thang,, (4)

*Tham ,,, (4)

(Tha Thang,,) (4)

Section Three

*Dhin , Tha Ka Ju Nu | Dway , *Ta Ka Ju Nu | (6 + 6)

Thang,, | Dhing *,, , | Ta , Ka , Ka | (3 + 4 + 5)

*Dhin , Tha Ka Ju Nu | Dway , *Ta Ka Ju Nu | (6 + 6)

Thang,, | Dhing *,, , | Dhong,,,, | (3 + 4 + 5)

(variation for last line) | , Thang,, | *Dhing,,,, | Dhong,,,, | (1 + 3) + (4 + 4)

(1:16) KORVAI - (Double Chathusram) Extension Structure

Dhing,,,, is recited as Dhi-ng-ga-ah

*Tha Ka Ju Nu Thang,, Dhing *,,, Dhong,,

Tha Re Ke Da *Tha Ka Ju Nu Thang,, Dhing *,,, Dhong,,

Tha Re Ke Da *Tha Ka Tha Ka Ju Nu Thang , *, Dhing,,,, Dhong,,

*Tha Re Ke Da Tha Re Ke Da Tha Re Ke Da Thom ,

*Tha Re Ke Da Tha Re Ke Da Thom , Tha Ka

(1:38)

Section Three

*Dhin , Tha Ka Ju Nu | *Dway , Ta Ka Ju Nu | (6 + 6)

*Thang,, | Dhing,, *, | Ta , Ka , Ka | (3 + 4 + (2 + 2 + 1)=5)

*Dhin , Tha Ka Ju Nu | *Dway , Ta Ka Ju Nu | (6 + 6)

3x *Thang,, | Dhing,, *, | Dhong,,,, | (3 + 4 + 5)/Tham equals Samam

(possible variation for last line) | *, Thang,, | Dhing *,,, | Dhong,,,, | (1 + 3) +

(4 + 4)

Track 26 (3:33) 'Shifting Time' Written by Lisa Young Performed by 'Coco's Lunch' CD 'A Whole New Way of Getting Dressed' 2002 Vocalists Lisa Young, Sue Johnson, Nicola Eveleigh, Jacqueline Gawler, Gabrielle MacGregor

This piece was written in 1994 and was my first attempt at composing 'under the influence' of the Jathis, employing 'Laya Rathna'. The piece relates specifically to the structure of Track 18 employing Chathusram, Thisram and Double Chathusram, and also uses a melodic structure. Rather than using the language of the solkattus I have used predominantly my own 'scat' language which has developed over many years of improvised singing. This language has had many influences rather than any specific one. In 'Coco's Lunch' the piece is performed over a constant clap rather than a set Talam. When performed with a Karnatic ensemble the held notes in between the sections are adjusted to fit Aathi Talam.

The piece is written as two sections of equal length. At first speed each section uses $10 + \frac{1}{2}$ beats and needs to be played twice to cycle to a down beat. At second speed each section uses 7 beats and always cycles with the beat. At third speed each section uses $5 + \frac{1}{4}$ beats and needs to be played 4 times to cycle to a down beat. Because of the asymmetric forms, when recited in first and third speeds the structures are displaced on the repeats. In first speed it is fairly simple to follow as the repeat causes the displacement to be on the half beat. In third speed when the sections use 5 and $\frac{1}{4}$ beats, the repeats cause the phrase to be displaced by a quarter beat and the pulses fall in more difficult places for the performer. In contrast, at second speed where the sections are evenly repeated in 7 beats (and the subdivision is 6) there is a relaxed almost 'swing feel' to the patterns.

After completing 'Shifting Time' I had the opportunity to harmonise it for my colleagues who were keen to learn it. The harmonic language is fundamentally tonal and the recording provided is in three part harmony.

SECTION A

(0:00)(1:32)(3:28) 1st speed (Chathusram) - pulse is subdivided by 4
each section uses 10 and 1/2 beats (played twice)

*Dway , , ee *yo-oh , yeh * , d d yoh-oh * ,
Ung ,-ga *dway , ya ,-ah ,
Dway , * ,-ee yo-oh * , yeh , d d *yoh-oh ,
Ung* ,-ga dway , *ya-ah

Dway , * , ee yo-oh * , yeh , d d *yoh-oh ,
Ung * ,-ga dway , *ya ,-ah ,
*Dway , , -ee *yo-oh , yeh * , d d yoh-oh * ,
Ung ,-ga *dway , ya-ah

(0:45)(1:19) 2nd Speed (Thisram) pulse is subdivided by 6
each section uses 7 beats (played twice)

*Dway , , -ee yo-oh * , yeh , d d yoh-oh * ,
Ung ,-ga dway , *ya ,-ah ,
Dway , * ,-ee yo-oh , yeh * , d d yoh-oh ,
Ung * ,-ga dway , ya-ah

*Dway , , -ee yo-oh * , yeh , d d yoh-oh * ,
Ung ,-ga dway , *ya ,-ah ,
Dway , * ,-ee yo-oh , yeh * , d d yoh-oh ,
Ung * ,-ga dway , ya-ah

(0:59) 3rd Speed (Double Chathusram) pulse is subdivided by 8
each section uses 5 1/4 beats (played 4 times)

*Dway , , ee yo-oh , yeh * , d d yoh-oh ,
Ung ,-ga *dway , ya ,-ah ,
Dway , * ,-ee yo-oh , yeh , d d *yoh-oh ,
Ung ,-ga dway , *ya-ah

Dway , , ee yo-oh * , yeh , d d yoh-oh ,
Ung *,-ga dway , ya ,-ah ,
*Dway , , -ee yo-oh , yeh * , d d yoh-oh ,
Ung ,-ga *dway , ya-ah

Dway , , -ee *yo-oh , yeh , d d yoh-oh * ,
Ung ,-ga dway , ya ,- *ah ,
Dway , , -ee yo-oh * , yeh , d d yoh-oh ,
Ung *,-ga dway , ya-ah

Dway , *,-ee yo-oh , yeh , d d *yoh-oh ,
Ung ,-ga dway , *ya ,-ah ,
Dway , , -ee *yo-oh , yeh , d d yoh-oh* ,
Ung ,-ga dway , ya-ah

SECTION B

(2:04)(3:08) 1st Speed (Chathusram - 4)

*Dway , , ee *yo-oh , ah *,-heh ,-heh * , z d yo-oh *oh oh-ah , * ,
Ta-ka-gung *dung-geh , geh * , gu duware , * ,
Ta-ka-gung *dung-geh , geh * , gu

Dway , * , ee yo-oh * , ah ,-heh *,-heh , z d *yo-oh oh oh-*ah , ,
Ta-*ka-gung dung-geh * , geh , gu *duware , ,
Ta-*ka-gung dung-geh * , geh , gu

(2:22)(2:56) 2nd Speed (Thisram - 6)

Dway , , ee yo-oh , ah ,-heh ,-heh* , z d yo-oh oh oh-*ah , ,
Ta-ka-gung *dung-geh , geh , gu *duware , ,
Ta-ka-gung *dung-geh , geh , gu

*Dway ,, ee yo-oh *, ah ,-heh ,-heh *, z d yo-oh oh oh-*ah ,,
Ta-ka-gung *dung-geh , geh , gu *duware ,,
Ta-ka-gung *dung-geh , geh , gu

(2:35) 3rd Speed (Double Chathusram - 8)

*Dway ,, ee yo-oh , ah *, -heh ,-heh , z d yo-oh *oh oh-ah ,,
Ta-ka-gung *dung-geh , geh , gu duware *,
Ta-ka-gung dung-geh , geh *, gu
Dway ,, ee yo-oh *, ah ,-heh ,-heh , z d *yo-oh oh oh-ah ,,
Ta-*ka-gung dung-geh , geh , gu *duware ,,
Ta-ka-gung dung-geh* , geh , gu

Dway ,, ee *yo-oh , ah ,-heh ,-heh *, z d yo-oh oh oh-ah , *,
Ta-ka-gung dung-geh , geh *, gu duware ,,
Ta-ka-gung *dung-geh , geh , gu

Dway , *, ee yo-oh , ah ,-heh *, -heh , z d yo-oh oh oh*-ah ,,
Ta-ka-gung dung-geh* , geh , gu duware ,,
Ta-*ka-gung dung-geh , geh , gu

(1:53)(3:48) Coda - Chathusram

*Dway , , , * , , , , * ,
Ung ,-ga *dway , ya-ah
*Dway , , , * , , , , * ,
Ung , ga *dway , ya , * , , , , * , , , , * , , , , * , , , , * !

CONCLUSION

The intention of this research was to provide the author with further insight into the study and history of this art form.

'Konnakol, ...is one art that exemplifies (sic) the beauties of Laya with superb grandeur and graceful elegance. It may, as well be compared to the elegant gait of the elephants (Mattagaja) during the 'Arattu' rituals of Kerala.'

(Vendataram, 1994, p. 65-66)

This connection to grace, strength and tradition best summarises the essential mood of this research. The research has provided inspiration for the performance of both traditional and original works, and provided a platform for the role of konnakol as an area of principal study.

Much of the research information regarding the history and pedagogy of konnakol came from the oral interviews, which included valuable recorded examples giving an aural immediacy to the research.

The research also gave the opportunity for detailed transcriptions of both traditional and original works, and includes many examples of how this research has continued to be a major influence in my composition and performance practice.

Given that there are very few written works on the art of konnakol, this research is a valuable contribution to the documentation of this fine art-form. It documents the basic pedagogy and provides examples of the lineage of the 'Sruthi Laya Kendra School'.

There are many possible directions for future research, including a detailed study of various lineages. Also of interest would be an investigation into konnakol performance practice in contemporary voice; this could include examining modern-day traditional konnakol practice alongside the integration of konnakol in the performance practice of various contemporary artists.

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