

The Eternal Pulse: Creating With Konnakkol in Contemporary Practice

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Introduction:

Commonly described as a sophisticated style of vocal percussion from the *Carnatic* tradition, *konnakkol* is the performance art form of the intoned rhythmic recitation of *solkattu*, the vocalised rhythmic syllables of South Indian classical music and dance. In keeping with the language most often used in my study of *Carnatic* music, the word *konnakkol* is at times used to refer to both *solkattu* language and the *konnakkol* performance art form.

As a musician's companion, *konnakkol* (*solkattu*) has a broad range of creative and practical functions. *Konnakkol* is an individual performance art form, as well as being an integral part of the extensive rhythmic training for musicians, vocalists and dance performers. It is also the language for instructions in percussion lessons, providing the foundation for comprehending the complex rhythmic structures of the *Carnatic* tradition. Both Indian and Western artists fluent in *konnakkol* commonly move beyond its pedagogical role to use it as a creative tool, in which *konnakkol* provides a conceptual framework for metred numerical calculations, improvisation, composition, rhythmic understanding, transference of musical ideas, and expression of musical pulse.

This article discusses the applied integration of *konnakkol* in my performance practice. It includes pulse related research, and investigates the creative uses and evolving nature of the *konnakkol* art form. It reflects my experiences in creative practice, study and conversations with gurus Kaaraikkudi Mani and M. Ravichandhira over many years, and additional conversations for my PhD research with Suresh Vaidyanathan, Rajeswari Sainath and Lori Cotler. The PhD thesis, audio samples and links, are available from lisayoungmusic.com and my Youtube channel [LisaYoungMusic](https://www.youtube.com/channel/LisaYoungMusic). The reader is encouraged to refer to the audio examples listed, to clarify their understanding. Links are provided, and many of the tracks are available from streaming sources.

About the Author:

As an Australian composer and an improvising singer, I am immersed in the development of an expressive vocal language. Having studied *konnakkol* for over twenty years, this sophisticated style of vocal percussion continues to have a profound and continuing influence on my body of creative work.

I began studying *konnakkol* in Melbourne in 1994 with *mridangist* M. Ravichandhira at The Academy of Indian Music and Cultural Studies. Through Ravichandhira, I became a student of his teacher, Guru Kaaraikkudi Mani, founder of the Sruthi Laya Kendra School in Chennai. From 1997 to the present day I have visited India for intensive study periods with Mani Sir, and been inspired by this expressive rhythmic language and its complex systems of musical metre and subdivision. My initial studies in Melbourne also included *Carnatic* vocal, studying *ragas* with Narmatha Ravichandhira. In 1997, with the support of an Asialink residency, I studied North India *ragas* in Mumbai with Dhanashree Pandit-Rai. Thus, in some compositions a range of *Carnatic* musical influences are used.

Over many years I have integrated *konnakkol* language and *Carnatic* techniques in my creative practice, for example; *laya ratna* (akin to metric modulation) and *yati* (a rhythmic calculation designed to represent geometric shape). I often combine Western song form and jazz¹ harmony with *Carnatic* concepts, including *raga* and *solkattu*, as the foundation for melodic composition and improvisation. I continue to compose original *konnakkol* structures - also integrating and adapting those composed by Mani - in a variety of ensemble settings. Over time, the *solkattu* language has become an integral part of my vocal performance, providing an additional rhythmic-based language that augments the melodic jazz-vocal 'scat'² language.

Along with timbral and pitch variations in contemporary *konnakkol* delivery, I use intoned and pitched *konnakkol* as a fully integrated vocal and musical expression in a Western contemporary jazz context, embedding *konnakkol* and wordless lingual 'scat' sounds to create a unique 'vocal sound-bank' as the basis for my vocal expression. This style of pitched *konnakkol* is a distinctive feature of my creative practice. In this process, my compositions integrate *konnakkol* language and concepts as melodies, riffs and the language for improvised passages. Recent works like the song cycle *The Eternal Pulse*, and choral work *Other Plans*, demonstrate the adaptive and evolving use of *konnakkol* in contemporary performance practice.

Many of my compositions and collaborative works are performed by vocal group *Coco's Lunch*, and my jazz/world music group *Lisa Young Quartet*. I also have a keen interest in choral music, composing works that combine Western and *Carnatic* techniques, which are performed by a variety of choirs worldwide. In the creation

¹ The jazz tradition for instance includes the use of: functional harmony, chord scale relationships, voice leading and melodic invention.

² Scat language is the wordless lingual syllables used for vocal improvising in the jazz tradition.

and development of many of the works I gratefully acknowledge my collaborative partnership with double bassist Ben Robertson, and the creative artistry of the ensemble members.

Konnakkol Artistry:

The vocalised accenting of metre in Indian music and dance has evolved over thousands of years, with metred recitation and accentuation of language traced to the sacred Vedic chants and prayers. This accentuation relates to the Sanskrit prosody (language rhythm, pattern and intonation) noted in the *Sama Vedas*, which are dated before 1000 B.C.

Many scholars and musicians like Mani, Ravichandhira, Sankaran, Dineen and Harris suggest the documented evidence of the origin of *solkattu* syllables is traced to the *Natya Sastra* dated in the second century³. In the *Carnatic* tradition, as a means of aiding invention, composition, memorisation, musical ideas and structures are represented with phonetic syllables in drum strokes, dance steps, and melodies.⁴

Solkattu is a complex language, embedded in rhythmic frameworks and numerical calculations, which engages the creative expression of infinite varieties of musical metre and pulse. *Konnakkol* is a recognised art form of principal study, traditionally performed within the *Carnatic* percussion section. As an integral part of the *Carnatic* training, all percussionists learn to recite the structures set to a rhythmic metre that they will play on their instrument. Within a predominantly oral tradition musicians listen, imitate and memorise rhythmic patterns in *solkattu*. The rhythmic metre (*tala*) of the music is outlined using cyclic hand gestures (handclaps, waves and finger taps). The marking of the *tala* in this way is an integral part of the performance of *Carnatic* music.

The *solkattu* vocal language has evolved within this *Carnatic* oral tradition as an integral part of the overall expansion of Indian music and dance, where rhythmic recitations have developed alongside rhythmic patterns and percussion sounds.

Many of the syllables are broadly related onomatopoeically to the sounds of the *mridangam* drum. Players hear the syllables in direct relation to the sounds

³ Sankaran 2010 discusses the origin of *solkattu* stating going back to the *Natya Sastra* (second century) time period. Harris 2014 states that: "The legend that Indian classical music originated from the chanting of the Samaveda is documented as early as the second century CE in the *Natyasastra*".

⁴ Indian melodies are *raga* based, where steps of the tonal system are represented by phonetic sounds known as *swaras*. *Swaras* are the solmization language for the *Carnatic* musical scale, commonly given in their shortened form as - Sa Ri Ga Ma Pa Da Ni Sa.

produced on the *mridangam*. Specific syllables, and a variety of interchangeable syllables, relate to each drum stroke.

Whilst being related to percussion pedagogy, it is well established that *konnakkol* vocabulary and performance is a unique entity, with its own definitive musical expression that has had many influences, far beyond the imitation of the *mridangam* sounds (Mani 2013, Ravichandhira 2010, Dineen 2005).

The *konnakkol* concert language is expanded and influenced by *Bharata natyam* dance *solkattu* language, also referred to as dance *jathis*.⁵ There are many syllables and phrases common to both the dance and drumming traditions. Some exclusive syllables and patterns that are used in dance relate to specific rhythmic movements of the dancers' hand movement and footwork. Commonly a more basic form of *solkattu* is used in dance rehearsals. In performance however, to enhance the effect of the program, the *solkattu* recitation is embellished and the dance steps are accompanied by a more striking vocabulary of syllables (Ravichandhira 2010; Sainath 2014).

Some specific dance syllables have crossed into percussion based *konnakkol* vocabulary. Words like *gu-gu*, *ja nu* and *jham* originated in the dance recitations and are now integrated into percussion-based recitation.⁶ Examples of this influence are heard in phrases like: | **gu gu** ta re ke ta tha ka | (instead of **tha ka** tha re ke ta ta ka) and *ja nu* or *ju nu* in | ta ka thi mi ta ka **ja nu** | (Mani 2013; Ravichandhira 2010, 2014).

As noted by Mani and Ravichandhira, other elements that have shaped the development of the *solkattu* language and performance of *konnakkol* include the influences of Sanskrit and Tamil languages. They explained that Sanskrit language has designated light and heavy syllables, lending it to the rhythmic accentuation of vocalised metre. In my conversations with Mani he emphasised that *konnakkol* is itself a language and that the syllables are related to Tamil language. "We can't say it's exactly Tamil or Telugu or Malayam, or Hindi: every syllable is slightly changed but it's related to Tamil and many other Dravidian languages" (Mani 2013). This research concurs with Sankaran's writings where he states, "the *solkattu* of the drumming tradition for the most part uses syllables and sounds of Tamil. ... The

⁵ *Jathis* or *Jathi* patterns commonly refer to the *solkattu* rhythmic patterns in a structured form used in South Indian classical dance.

⁶ Ravichandhira mentioned that in his lineage, the link to the integration of dance syllables came when his teacher A.S. Ramanathan (from Sri Lanka) spent some months with well-known *Carnatic* percussionist Palani Subramaniam Pillai in South India around the 1950s. Ravichandhira suggested that many of the Pillai percussionists incorporated influences from the *tavil* and dance language, which includes *gu gu* and *ja nu* (Ravichandhira 2014).

combined consonant-vowels of the Tamil language...lend themselves beautifully to the art of *solkattu*” (Sankaran 2010: 2).

As *konnakkol* artistry continues to evolve, a diversity of styles has emerged, due in part to differences in specific lineages and music schools, and also to the personal style of significant, innovative *konnakkol* practitioners who have added their own expressive interpretations to the art form.

In classical music concerts, a *konnakkol* artist performs the *solkattu* recitations, whereas in dance performances, the *Nattuvanar* artist - usually the head teacher of the dance school - recites the *solkattu*; they also play small hand cymbals as part of the accompaniment. Ravichandhira explained that the vocal recitation greatly enriches the dance performance. The voice can provide syncopated and displaced vocal passages, giving an added feature to the dancers’ footwork. The voice also adds enrichment to the *mridangam* accompaniment (Ravichandhira 2010).

Ravichandhira suggested that there have been many recent innovative developments in *solkattu* dance recitations. He explained that there is broad scope for the *jathi* recitations in dance, as it is a visual art form in which the recitations come and go throughout the whole performance. By contrast, in the *Carnatic* concert tradition the *konnakkol* artist is not given as much scope, as there are numerous artists who share the concert platform. Many dance schools and professional dance performers now hire the best *konnakkol* artists for the *nattuvanar* role, as they highly value the sound effects, vocal timbre and skill level brought to the performance by such musicians, leaving the head teacher to add the hand cymbals (Ravichandhira 2010).

Whilst musicians use *konnakkol* initially to learn the *Carnatic* rhythmic system and materials, *konnakkol* is itself a language. Once a musician has grasped the fullness of this language including the groupings, the phrases, structures and techniques of numerical calculation, metric modulation, expansion and reduction, it becomes the backbone of their deep rhythmic knowing and conceptualising. The artists’ thoughts are then occupied by *solkattu* phrases and structures. *Konnakkol* becomes their default system for rhythmic comprehension and the intuitive starting point for composition and improvisation.

Since the 1950s, there has been a gradual flourishing of interest in and respect for the *Carnatic* rhythmic language system abroad. *Solkattu* is recognised worldwide as a system for mastering rhythmic materials and concepts, useful for musicians

wishing to make advancements in this area. This has led to an established dedication by a broad range of musicians to the art of *konnakkol*, which in turn has seen the *Carnatic* system introduced in some Western universities as part of the music materials curriculum, sparking the production of a variety of *konnakkol* manuals and DVDs. There is growing scholarly research into the broad use of *konnakkol* (or *solkattu*) in creative musical practice. A range of vocal artists incorporate *konnakkol* as part of their vocal performance practice. Lori Cotler, Sheila Chandra, Suba Sankaran and myself have each contributed a body of work in this direction, demonstrating the way the *konnakkol* art form continues to evolve and be adapted by a variety of Western and non-Western artists. The performative excellence enjoyed in traditional concerts, and collaborative projects between Indian and Western musicians, continues to fertilise the growth of this art form and demonstrates its suitability for adaptation in contemporary performance practice.

Eternal Pulse and Internal Pulse:

I have been particularly drawn to the *Carnatic* music systems of *tala* and *nadai* where a breadth of attention is given to detailed rhythmic structures and sub-divisions in a wide variety of odd and even metres or metred cycles. This detailed systematic approach to rhythmic materials has enriched my rhythmic knowledge and expression.

My research led me to introduce the umbrella terms of ‘eternal’ and ‘internal’ pulse. These terms are used in the analysis of rhythmic and pulse-related material, as they indicate neither genre nor cultural specificity. They aim to assist the perception and explanation of concepts like metric modulation, polyrhythmic structure, rhythmic feel and groove. This is important, as it is the experience of layered rhythmic complexity that often creates a sense of rhythmic depth in the music.

The terms eternal and internal pulse, are derived from personal interpretation of *Carnatic* concepts of *tala*⁷ and *nadai*.⁸ The eternal pulse refers to the ongoing metre or rhythmic cycle, relating to the *tala*. The internal pulse refers to the internal subdivision of the main beats⁹ of the cyclic metre, relating to the *nadai*, literally meaning flow. Thus the internal pulse is embedded in the eternal pulse.

⁷ *Tala* lit. clap (Sanskrit), also *talam* lit. clap (Telugu). This translates in *Carnatic* music to mean a rhythmic cycle.

⁸ *Nadai*, lit. flow (Tamil), refers to the internal subdivision of the beats of the cyclic metre.

⁹ For example there are 8 main beats in *Adi tala*.

In pulse-based music (as opposed to 'free time' or *alapana*¹⁰ sections) there is usually an ongoing eternal pulse outlining the given metre. This is 'felt' or experienced in conjunction with at least one internal pulse layer sub-dividing the beats. In Indian terms this may be thought of as *tala* and *nadai*. The internal pulse may be altered in certain sections within a composition, or adjusted spontaneously by the improviser. The artist's experience of rhythmic complexity combines an intellectual understanding with an intuitive response in their creative practice. Additionally in the *Carnatic* system (and possibly evident in other music systems not discussed here), subtly embedded within the internal pulse, is a third rhythmic layer dictated by sub-groupings the *solkattu* language itself. The *solkattu* language places the beats into groups, usually in twos, threes and fours for example as - *tha ka | tha ki da | tha ka thi mi* adding an independent layer of rhythmic sub-grouping, integral to understanding the *Carnatic* system. The internal subdivision of 7 may be recited as: 3 + 4 *tha ke da + tha ka thi mi*, or as 4 + 3 *tha , thin, + ke na thom*. Similarly a subdivision of 9 could be thought of as 2+2+2+3 and recited as *tha ka + tha ka + tha ka + tha ki ta* or 4 + 5 as *tha ka thi mi + tha ka tha ki ta*. Thus a subdivision of 7 or 9 is not simply 7 individual septuplets or 9 nonuplets, as the interior language imprints an independent layer of rhythmic sub-groupings.

Switching the internal pulse of a given metre is used to great effect in *Carnatic* music. The technique of *laya ratna*, which literally means 'time' or 'speed shifting' in Tamil, is akin to metric modulation in Western music. When switching the internal pulse of the metre, the *tala* (or eternal pulse) remains steady, but the *nadai* (internal pulse) changes speed. Proficiency with this technique is an important part of a *Carnatic* musician's craft. A common *laya ratna* shifts from a subdivision of 4 to 6 to 8. Performing these metric shifts is a fundamental element of the *Carnatic* tradition; it is a tool used to virtuosic effect in performance. *Laya Ratna* or time shifting is clearly heard in *The Eternal Pulse* in the compositional structures of tracks 2, 6 and 8.

In most Western jazz music, the metre or eternal pulse is given as a time signature, for example 6/8 or 4/4. The internal subdivision - if required - is either written descriptively as, for example: 'swung quavers' or 'straight 16ths', triplets etc, or described as a musical 'feel', such as 'swing' or 'shuffle'. There are many layers of intricate rhythmic complexity that creates rhythmic depth in jazz music, including concepts of metric modulation, polyrhythmic structures, rhythmic feel, and groove.

¹⁰ *Alapana*- the opening rubato section in a *Carnatic* piece, which introduces the *raga*.

Specifically within the *Carnatic* pedagogy there is a fundamental relationship between a musician's instinctive ability to internally subdivide a given metre, and their ability to explore and interpret rhythmic complexity in performance.

Significantly, *solkattu* informs a musician's rhythmic intuition, which can be transferred into any musical situation, aiding comprehension and transference of pre-composed ideas and concepts, and engaging the invention of new music with improvisation and composition.

Creating With *Konnakkol*: Song Cycle - *The Eternal Pulse*:

As part of my PhD research, I created and performed the song cycle *The Eternal Pulse* with jazz musicians Ben Robertson (double bass), Stephen Magnusson (guitar) and Dave Beck (drums). My intention was to create a contemporary song cycle for my quartet, where I compose melodically and rhythmically from a foundation of *konnakkol*, investigating the adaptive use of *konnakkol* in creative performance practice. The aim was to create a comfortable marriage between the *Carnatic* rhythmic system (based on metred cycles and related internal subdivisions) and jazz materials, including elements of African polyrhythm.

In this research jazz means the performance of music which features improvisation with certain stylistic conventions. Thus performance with a large degree of improvisation generated, based on composed melody, chords and form, at times involving freer improvisation. Jazz may also be considered as a process or a mode of creativity. As Sarath writes: "the point is not to endorse jazz as a self-defining destination but as a self-transcending gateway that connects musicians with the central creative and aesthetic pulse of today's musical world" (2013: 9).

The compositional structure of the music was driven by my desire to include a wide variety of rhythmic metre and subdivisions common to the *Carnatic* tradition and adaptable to the jazz framework - namely, the common *Carnatic* cycles¹¹ and the 12/8 jazz rhythm. Alongside the selected metred frameworks, I intended that the *konnakkol* language would generate melodic and structural materials in the music. This article provides examples of these elements and of *konnakkol*'s expanded compositional influence on my work.

¹¹ Common *Carnatic* metres are named in cycles where for example, 8 beats is *adi tala*, 3 beats is *rupaka tala*, 5 beats is *kanda chappu tala*, and 7 beats is *misra chappu tala*.

The Eternal Pulse music is positioned between the South Indian and jazz traditions. The work aims to express, in good faith, a relationship to both musical styles. The music is intended to be a vehicle for improvisation, inviting expressive interpretation by the performers. In discussions with Ben Robertson, he described the process of composing for improvisers stating:

As you write music for improvisers, you in-build into the music the idea that it will change, it's almost an essential part of the way you write it...not just thinking about a written piece as being a 'set' piece, but being a vehicle for improvisation. Once you all play together you have to accept whatever happens between you all as musicians, which is usually unique to [the] meeting of the musicians rather than the writing of the music. It's balancing those two things that I think creates the magic in the music. It's not all about the writing and it's not all about the interpretation, it's how these two things meet. It's particularly successful in *The Eternal Pulse* because of the way these two aspects balance themselves. (Robertson 2012)

In line with Robertson's articulation, the clear intention of the performers of *The Eternal Pulse* is to marry the impulses of composition and improvisation, as they are key themes for creating with *konnakkol*.

The initial vision

The vision for *The Eternal Pulse* began during an intensive *konnakkol* study period in Chennai in 2008. During this period Mani and I discussed how some of the *konnakkol* structures he was sharing might be integrated, interpreted or adapted into my next work. Throughout 2009 I revised these new structures, using my notations and recordings as reference for specific inflections and accents. Whilst I would eventually deliver my own interpretations, I used this period to absorb the structures faithfully as per Mani's lessons. As part of this process I looked for *konnakkol* language and particular rhythmic features that I was inspired to sing and carry forward into the new song cycle. In 2010, at the commencement of this PhD at Monash University, I began formally creating *The Eternal Pulse* song cycle.

Integrated techniques

This next section focuses on various works where *konnakkol* passages, and *Carnatic* techniques are integrated and employed, resulting in the converging of South Indian and jazz styles.

Audio Track 1 The Internal Pulse: Lisa Young Quartet (4:58)

Listen: <https://www.youtube.com/watch?v=ICg1fnYtiZs&t=4s>

The aim of this piece was to explore a shifting internal pulse of the 12/8 metre by accenting different subdivision groupings, particularly with the idea of shifting between the 2, 3 and 4 groupings or feels of the 12/8. Certain sections of the piece are felt in different ways and at times instruments independently imply different internal subdivisions of the 12/8 metre creating a polyrhythmic effect.

In the opening *konnakkol* section of track 1, the voice is heard in a rhythmic duet with Beck on the *cajón*. To engage sonically with the resonance of the wooden *cajón* I used an aspirated, grainy vocal timbre. The syllables *tham*, *thin* and *thom* are given extra breath and thus depth in this way. When employing these vocal techniques I consciously used postural support to keep the vocal sound rounded and warm but lifted in the mouth so as not to tax or damage the larynx. The dynamics, which are partly improvised interactively, and the falling intoned lines heard at 0:40-0:43 and 0:53-0:56 all add varied intensities to the work.

Highlighted rhythmic elements (track 1)

The opening *konnakkol* structure (composed Mani) is set in *adi tala* - double *thisra nadai* - eternal pulse 8, internal pulse 6. Each beat of the *tala* implies a 6-feel - 6 groups of two quavers, or recited as 2 strings of 3 syllables for example; *tha ke ta | tha ke ta*. The *konnakkol* heard in the opening recitation is *tham , , tha ke ta | tham , , tha ke ta | thin , , tha ke ta | thin , , tha ke ta |* etc. Thus 2 beats of the *adi tala* cycle links well with the 12/8 rhythm as notated below.

The image shows two staves of musical notation. The top staff is in 12/8 time, with a treble clef and a key signature of one flat. It contains a sequence of rhythmic patterns represented by 'x' marks on a staff. Below the staff, the syllables are written: 'tham tha ke tha tham tha ke tha thin tha ke tha thin tha ke thadhoma tha ke tha dhoma tha ke tha thakathi na... theketha... tha... ka'. The bottom staff is in 6/8 time, also with a treble clef and one flat. It shows the same rhythmic patterns as the top staff, but with a different grouping. Below it, the syllables are: 'tham tha ke tha tham tha ke tha thin tha ke tha thin tha ke tha dhoma tha ke tha dhoma tha ke tha tha ka thi na... tha ke tha... tha... ka'.

Notated example: The opening *konnakkol* phrase from track 1 *The Internal Pulse* in Western notation. Firstly in 12/8, which is the metre of the composition, and then in 6/8, which is closer to the way it is felt in the *Carnatic* system (*Adi tala*, double *thisra nadai*, cycle of 8 internal subdivision 6). In the 6/8 notation, each bar equals one beat of the cycle of *Adi tala*.

Following on from the *konnakkol* section, the aim of the piece is to explore a shifting internal pulse of the 12/8 metre by accenting different subdivision groupings,

particularly with the idea of shifting between the 2, 3 and 4 groupings or feels of the 12/8 - as demonstrated in Video track 12.

Certain sections of the piece are felt in different ways and at times instruments independently imply different internal subdivisions of the 12/8 metre creating a polyrhythmic effect. The following key listening points, notations and video demonstration direct the listening to some of the intentional and spontaneous rhythmic points of interest in track 1.

Video track 12. 12/8 groupings. Watch:

<https://www.youtube.com/watch?v=ePPAnQIEyt4&feature=youtu.be>

Key listening points for track 1: *The Internal Pulse*

At 0:58 - The vocal melody begins and the double bass outlines the 2-feel as shown in 4 bars of the notation below. The rhythm of the melody (unintentionally) relates to the 12/8 West African bell pattern sung as *zoom doom dah (dah) dah deh ya*.

The image shows a musical score for track 1, *The Internal Pulse*, in 12/8 time. It consists of three staves: vocal melody, guitar, and bass line. The key signature is one sharp (F#). The vocal melody is written in treble clef and includes the lyrics: "zoom dhom dha dha deh ya zoom dhom da dah dwey -ah zoom dhom dha dha deh ya zoh vo et en doh ve et un da - ah". Below the first line of the vocal melody, there is a box labeled "half feel" and the text "(12/8 bell pattern)". The guitar part is written in treble clef and includes the lyrics "ting go go go go go go". The bass line is written in bass clef and includes the lyrics "Emin¹¹ half feel".

Notated example: The opening melody of track 1 *The Internal Pulse* where the bass outlines the half or 2-feel.

At 1:24 - The voice repeats the opening melody and the double bass moves to the 3-feel (3 groups of 4 quavers or 3 beats per bar)

At 2:35 - The bass line implies the 12/8 bell pattern and the guitar partially implies the 4-feel with higher plucked notes.

At 2:48 - As notated below, the voice moves to the high held line of *zah-or* the drums imply the pulse of the 3-feel, while the bass plays 12 8th notes per bar accenting the 6-feel.

3/2 feel C#minb6 C#min
oh or zah
3/2 feel C#minb6 C#min
3/2 feel C#minb6 C#min
arco

Notated example: Track 1 *The Internal Pulse* (2:48 - 3:19) the voice moves to long notes, the drums imply the 3-feel and the bass moves to rapid *arco*.

At 3:19 - As notated below, the vocal pitched *konnakkol* of *thin , thin , tha thi , ki , tha , thom* reflects the West African rhythm *ting go go go go go go*. The drums and the bass also imply the bell pattern.

(pitched *konnakkol* at 3:19)
thin thin tha thi ki tha thom tha tha tha thi ki tha thom thom thom tha thi ki tha thom tha ki tha thom tha tha ki tha thom tha thi tha ki tha thom
(12/8 bell pattern)
ting go go go go go ting go go go go go ting go go go go go ting go go go go go

Notated example: The rhythmic similarity of the vocal pitched *konnakkol* phrase and the 12/8 West African bell pattern.

At 4:13 - The voice pulses the 4-feel (4 groups of 3 quavers) with *thom,, thom,, thom,, thom,,* into the final section where the opening melody is repositioned in a 4-feel. The rhythmic notation of the melody here is the same as in the opening section, but it feels altered as it is weighted now in a 4-feel and has more of a galloping groove outlined by the band. The final section, which is notated below, has a definite 4-feel more like a jazz 12/8. There are numerous rhythmic references to the Afro derived bell pattern throughout the piece, some of which were intentional and many of which were discovered during analysis.

Notated example: The final section at 4:15, which has a definite 4-feel more like a jazz 12/8, this galloping groove is outlined by the whole band.

Audio Track 2 Misra Chappu: Lisa Young Quartet (5:36)

Listen: <https://www.youtube.com/watch?v=jTgPvVX5A4E&t=7s>

This piece is conceived in a cycle of 7 (*misra chappu*). The core of the composition is the basic *misra* (7) *solkattu* phrase - *Thin , Thin , Thanga | Ta Ka Thin ,Thanga*.

In the compositional process, I often used *konnakkol* as a tool to enhance intuitive musical meanderings, allowing it to suggest melodies and structures. In *Misra Chappu* the opening riff - and recurring theme - incorporates the phrases *Thin, thin, thanga | tha ka thin, thanga* pitched in second speed, and augmented with additional vocal sound-bank syllables. Throughout the piece using this vocal cue and the handclaps of the *tala*, the role of the voice is to state and restate the featured rhythmic phrase (riff), which outlines the groove of the 7/4 metre. The *solkattu* language speaks the seven as 2 , 2, 3 = 7 where *Thin,* = 2, *Tha Ka* = 2, and *Thanga* = 3. Interestingly the handclaps outlining the *tala* indicate the reverse numerical arrangement; they are grouped as 3, 2, 2.

The sound-bank syllables are underlined in the example below.

Listen Audio track 2: Misra Chappu (5:36)

Sung at 2nd speed. Each line = 1 cycle of 7 (7 beats)

Thin, thin, thanga | tha ka thin, thanga (14)

Thin, thin, thanga | tha ka thin, thanga

Thin, thin, than(ga) | tha ka thin, thanga

Dhom ,, dho - om dhom ,, ,, k- dwey - ah

Carnatic style notation of motivic idea used in track 2 *Misra Chappu*.

claps + vox riff intro

thin thin than - ga tha ka thin than - ga

thin thin than - ga tha ka thin than - ga thin thin than - (ga) tha ka thin - than - ga thom tho - m thom ka dwe - y

Western style notation Riff/Ostinato from track 2 *Misra Chappu*.

Misra Chappu demonstrates two pitched *konnakkol* vocal solos that use *laya ratna* shifting the *konnakkol* into triplets and then 16ths or semi-quavers. They are noted in the key listening points below.

Key listening points for track 2: *Misra Chappu*

At 0:00 - The riff phrase is introduced as pitched *konnakkol*.

At 1:44 - The pitched *konnakkol* vocal solo uses *laya ratna* shifting the *konnakkol* into triplets - *thisram nadai* (internal pulse 3).

At 2:57 - The pitched *konnakkol* vocal solo uses *laya ratna* shifting the *konnakkol* into 16ths - *chathusram* (internal pulse 4).

At 5:05 - For the coda, the vocal subdivision features *thisram* (internal pulse 3).

D4
13
21:00

w w c c
1 2 - 4 - 6 -

T 14 - Baseline
D4 - Idea
No. 25
Date

All Speeds. Misra Chappu

1st speed
Thin^x Thin^x Thanga^x
Tha Ka Thin^x Thanga^x

2nd speed
Thin^x Thin^x Thanga^x
Tha Ka Thin^x Thanga^x

3rd speed
Thin^x Thin^x Thanga^x
Tha Ka Thin^x Thanga^x
Thin^x Thin^x Thanga^x

21:50
4th Speed
Thin^x Thin^x Thanga^x
Tha Ka Thin^x Thanga^x
(Thin, Tha, Tha Ka Tha, Thanga^x)
Tha Ka Thin^x Thanga^x

(Kandam
Misra Chappu)

5th Speed.
22:14
Thin^x Tha^x Thanga^x
Thin^x Tha^x Thanga^x
Thin^x Tha^x Thanga^x
Thin^x Tha^x Thanga^x

5 x 7 = 35

let me go high

Notated example: Young's Chennai Notebooks 2008 - the 5 speeds of *misra chappu* phrase - *Thin , Thin , Thanga | Tha Ka Thin , Thanga* as demonstrated on video track 11. Watch: <https://www.youtube.com/watch?v=-UV7IjFyUBw>

The image shows five staves of Western musical notation, each representing a different speed of the misra chappu phrase. The notation is written on a grand staff (treble and bass clefs). The lyrics are written below the notes. The first staff is labeled '1st speed' and has the lyrics 'thin thin than - ga tha ka thin than - ga'. The second staff is labeled '2nd speed' and has the lyrics 'thin thin than - ga tha ka thin than - ga'. The third staff is labeled '3rd speed' and has the lyrics 'thin, thin, than ga tha ka thin, than ga thi na thin, than ga'. The fourth staff is labeled '4th speed' and has the lyrics 'thin thin than - ga tha ka thin than - ga thin thin than - ga tha ka thin than - ga'. The fifth staff is labeled '5th speed' and has the lyrics 'thin tha than - ga thin tha than - ga thin tha than - ga thin tha than - ga'. The notation includes various rhythmic markings such as 'claps for lala' and '3' (triplets).

Notated example: Western notation of the 5 speeds of *misra chappu* phrase *Thin , Thin , Thanga | Tha Ka Thin , Thanga*.

Audio Track 3 Tha Thin Tha: Lisa Young Quartet (3:58)

Watch music video: https://www.youtube.com/watch?v=De0fxGpoF_g

This track displays a variety of *konnakkol* expression. Initially the opening *konnakkol* (composed Young) has a more traditional intoned delivery. Then from 0:20 - 0:42 the *konnakkol* is expressed as language for a vocal melody. At 0:43 - 1:05 the *konnakkol* becomes the language for a rhythmic motif as part of the overall sonic mix. Then at 1:26 – 2:04 the *konnakkol* is heard as an interactive section between drums and voice. This section of *konnakkol* comes from an instance in 2008, where Mani played a piece on the *mridangam*, followed by a virtuosic recitation of the *konnakkol*. Mani pointed out that with some of the phrases he had not yet fixed the *konnakkol*, and suggested that I make my own interpretation in those sections, guided by what he had just recited. This is an example of the interpretive, evolving nature of *konnakkol*.

Audio track 5 *The Glide*: Lisa Young Quartet

Listen: <https://www.youtube.com/watch?v=8ajWKDn3MaU>

In this concise *konnakkol* introduction, vocal techniques such as tonal shape, aspiration and vocal placement, are incorporated to create particular aesthetic effects. The sound of the inhalation becomes part of the percussive phrase where it assists the rhythmic outline. For example, we hear the aspiration of the inward breath marking many of the beats in between the *konnakkol* syllables. Also, in this opening passage, the release of breath is used to affect the expression of certain syllables, particularly with words like *thom*, *dhonga* and *jham* that represent the deeper bass sounds of the drum.¹² These syllables are given an extra push of breath combined with a deeper pitch, adding to the effect of the voice emulating a drum sound and giving contour to the phrase. This slower, aspirated and deeply intoned approach, allows the pace of the *konnakkol* to introduce the gliding melody at 0:29. Here the pitched voice switches to use a light aspirated tone, in this instance evoking a sense of gliding above the rhythm section.

Audio Track 6 *The Eternal Pulse*: Lisa Young Quartet (6:25)

¹² Ravichandhira explained that: “The deeper bass sounds are produced on the mridangam bass head [and] can be either a single stroke on the bass head or a modulating stroke namely *Gumuki*, where the portion of palm below the thumb (after pecking the base head skin with middle two fingers to produce the primary sound) is used to modulate it by gliding skilfully over the centre skin of the bass head to sustain the sound to produce a snaring tone preferably one octave below the sound of the right head to enhance the listening pleasure. The two types of deeper sounds produced on the bass head can be stand-alone sounds or combined with strokes on the opposite head. Paradoxically, the centre skin of this bass head is also skilfully used to enhance 'thin' by muting it with sound produced by fingers folded and struck on 'tha' skin. I call it a 'folded tha'. Such strokes are essentially used to enthrall audience with 'val linam' and 'mel linam' which is an important aspect in music to show how a phrase can be delivered alternately with bass and treble modulations in a contrasting manner to suit the melody (as close as possible) similar to what a konakol artist would emulate the same modulations in a pleasing manner with his or her voice” (Ravichandhira 2014).

Listen: <https://www.youtube.com/watch?v=iqAxfKm-yJQ>

Track 6 incorporates both metric modulation and polyrhythmic techniques. The metric modulation moving from 4 to 6 to 9 is an unusual configuration, as it is more common to switch from 4 to 6 to 8. Mani's use of this switch into 9 (*sangeernam*) was challenging to recite and interesting to listen to, thus I was keen to master and incorporate this structure in the new work. The piece is constructed and analysed in two halves. The notated band chart (not printed here) uses a 2/4 metre for the sections subdivided by 4, and a 3/4 metre for the subdivisions of 6 and 9.

The first half of this piece from 0:00 - 2:51, is an adaptation of a structure composed by Mani set in a cycle of 8 where the internal pulse metrically modulates from 4 (*chathusram*) to 6 (*thisram*) to 9 (*sangeernam*).

Video track 15: 4/6/9 (0:56) (notated below) demonstrates a short recitation of sample sections from the 4, 6, 9 subdivision incorporated in track 6. Composed by Mani, adapted Young. **Watch:** <https://www.youtube.com/watch?v=3RY9WI50rI8>

Chathusram (subdivision of 4)

Dhom , ke tha num , ke tha | (Tha) tha ke tha num , ke tha

Dhom , ke tha num , ke tha | (Dhom Dhom) , tha ka thi mi tha ka ju nu tha ka

Thisram (subdivision of 6)

Dhom , ke tha num , ke tha | (Tha) tha ke tha num , ke tha

Dhom , ke tha num , ke tha | (Tha) tha ke tha num , ke tha

Dhom , ke tha num , ke tha | Dhom Dhom ke tha tha ka dhom ,

Thisram (subdivision of 6)

Dhin , dhin , tha thi , ke , tha , thom

Tha , tha , tha thi , ke , tha , thom

Dhom , dhom , tha thi , ke , tha , thom

Tha , ke tha thom | tha Tha , ke tha thom | tha thi Tha , ke tha thom

1st x || tha ke tha | tha ka thina | that thi ke tha thom ||

2nd x || tha thina , | tha thina , | tha thina , ||

Sangeernam (subdivision of 9) sung twice

Dhin , dhin , tha thi , ke , tha , thom

Tha , tha , tha thi , ke , tha , thom

Dhom , dhom , tha thi , ke , tha , thom

Thisram (subdivision of 6)

Dhin , dhin , tha thi , ke , tha , thom

Tha , tha , tha thi , ke , tha , thom

Dhom , dhom , tha thi , ke , tha , thom

| *tha ke tha* | *tha ka thina* | *that thi ke tha thom* | |

Notated example: Edited sections of the structure heard in video track 15. This structure is expanded in track 6 *The Eternal Pulse*.

Key listening points for the first half of track 6: *The Eternal Pulse* (0:01 - 2:51)

At 0:00 – (Letter A) the phrase *Thom , ke ta | nam, ke ta | , tha ke ta | nam, ke ta |* is introduced using a variety of endings. On the repeat at 0:17 the voice alternates *konnakkol* language with vocal sound-bank phrases for example; *zwey vah day ah dor tn day*. These sound-bank phrases supply variation in the melodic and rhythmic vocal contour; the elongated notes stretch the phrases and evoke a sense of vocal meandering.

At 0:34 - (bar 17) We hear the same basic phrase and the metric switch of the internal pulse from 4 to 6. The chart notation moves to 3/4 metre.

At 0:50 - (bar 33) The phrase switches back to an internal pulse of 4.

At 1:07 - (bar 41 Letter C) The internal pulse switches to 6 with the next section of *konnakkol* language. These two extension structures fit together over 2 cycles of 8.¹³

1:07 - 1:13

(9) *Thom thom ke tha tha ka thinga*

(12) *Thom thom , ke tha , tha ka , thinga*

(15) *Thom thonga ke tha , ka tha ka , ka thinga*

The second three lines are sung three times in succession and are heard at Letter D.¹⁴

1:13 - 1:23

(4) *Tha , ke tha thom ,*

(7) *Tha , ke tha thom* *Tha , ke tha thom ,*

(9) *Tha , ke tha thom* *Tha , ke tha thom* *Tha , ke tha thom*

¹³ The first three lines are sung once using 6 beats of the cycle. Each beat of the cycle is subdivided by 6, thus 6 beats have an allocation of 36 internal beats. (9 + 12 + 15 = 36 internal beats divided by 6 = 6 main beats of the cycle)

¹⁴ Each round uses 20 internal beats, totalling 60 beats for 3 rounds, which divided by 6 equals 10 main beats of the cycle. When the two sections are added together they equal 16 cycle beats or 16 bars of the musical notation.

At 1:24 - 1:55 - we hear the following structure sung four times in a subdivision of 6 with numerical variations in the ending as notated below.

Thin , Thin , tha ti , ke , ta , thom

Tha , Tha, tha ti , ke , ta , thom

Thom , Thom , tha ti , ke , ta , thom

Tha ke tha | tha ka thi na | tha thi ke tha thom | first ending 3+4+5

Tha thi na | tha thi na | tha thi na | tha thi na | second/ third ending 3+3+3+3

Tha thi na , | tha thi na , | tha thi na , | fourth ending 4+4+4

At 1:56 - The first three phrases are shifted into a subdivision of 9 (the feel is like 9/8 metre).

Thin , Thin , tha ti , ke , ta , thom

Tha , Tha, tha ti , ke , ta , thom

Thom , Thom , tha ti , ke , ta , thom

It is of musical and compositional interest that the *Carnatic* figure *Thin , Thin , tha ti , ke , tha , thom* which swings in 6 at 1:23 and is overlaid in 9 at 1:56, is the same rhythm as the West African 12/8 bell pattern *ting go go go go go go* discussed in Track 1. In rehearsal the drums and voice used this familiar 12/8 reference to help comprehend and perform this complex section.

At 2:12 - The final section continues in *sangeernam* with a three line extension structure at the end of the section.

Tha, thin, tha thin, tha ya (tha, thing ke na thom)

Tha ka thin, tha thi, tha , ya, (tha, thing ke na thom)

Tha, thin, tha thin, tha ya tha, thing ke na thom

Thin, thanga (5)

Tha thin, thanga (6)

Tha ka thin, thanga (7)

At 2:29 - 2:51, I composed the final section of *konnakkol* as a link to the second half of the piece. The origin of this section is demonstrated on Video track 13: 3/4, shifted into 9/8. Watch: https://www.youtube.com/watch?v=hKZGI_A62RU

The first 6 lines are sung twice then a more spacious coda is added as a 'cool down'. I intentionally began the 3rd line with *ja nu* rather than the more traditional *ta ka ja nu*, to displace the rhythmic placement of the phrase. The *na** has been altered along the way, to become a repeated *thin*.

Musical notation: from the band chart for track 6 *The Eternal Pulse*.

When viewed as a whole, the metric modulation and polyrhythmic layering used in this piece provide the music with a sense of 'shifting time', whether in the first half where the internal pulse is altered by the composer or chosen spontaneously by the improviser in the second half of the track.

Creating With Konnakkol: *Other Plans*

Over many years I have composed a number of vocal or choral works that integrate *konnakkol*. This began with works for vocal group Coco's Lunch for example, *Shifting Time* and *Thanga*, followed by *Other Plans* and *Misra Chappu* for The Australian Voices, and *Tha Thin Tha* for Gondwana Choirs.

Other Plans (composed Young 2009) integrates *konnakkol* and vocal sound-bank language within a Western contemporary vocal context, and demonstrates applied vocal techniques in *konnakkol* delivery. There are two recorded versions to listen to, showing different interpretations of the work. Firstly, 'The Australian Voices' choir in SATB¹⁵ format. The choir's distinct approach to vocal articulation includes explosive consonants, particularly with the attack of *thom* and *tha*. Their high-energy delivery of certain syllables, combined with the use of textural dynamics, provides a distinct atypical interpretation of *konnakkol* delivery throughout the work. *Other Plans*, commissioned and performed by The Australian Voices conducted by Gordon Hamilton (2012). (duration 4:02) **Watch:**

<https://www.youtube.com/watch?v=CLPKYh9C-g4>

Australian female vocal group Coco's Lunch also performs *Other Plans*. This SSAAA arrangement provides a punchy, textural rendering of the work. These singers all have a background in jazz and scat singing, where an aspirated vocal technique is common; thus their percussive, breathy delivery of the *konnakkol* and sound-bank lines present a unique interpretation of the art form. Youtube Coco's Lunch¹⁶ - Other Plans - Official Video **Watch:**

<https://www.youtube.com/watch?v=evPI39Y4eAU>

Conclusion:

¹⁵ SATB represents soprano, alto, tenor, bass voices, which is a common format used in a mixed voice choral arrangement.

¹⁶ Vocal group Coco's Lunch is based in Melbourne, featuring vocalists Nicola Eveleigh, Jacqueline Gawler, Emma Gilmartin, Gabrielle MacGregor and Lisa Young. Coco's Lunch premiered their arrangement of *Other Plans* on their 2013 tour of India for the Hindu November Fest, at concerts in Chennai, Kochi, and Hyderabad.

As a vocalist embracing two musical cultures, I believe that *konnakkol* combines an intellectual and intuitive approach to rhythmic comprehension, acting as a faithful companion to my creative musical undertakings. It is at the foundation of my rhythmic experience and knowledge, assisting my rhythmic analysis and comprehension in both *Carnatic* and cross-cultural projects. I enjoy using timbral variations, atypical syllables, applied vocal techniques and personal interpretation in *konnakkol* recitation. I hope my creative works that integrate *konnakkol* demonstrate the way an artists' aesthetic preferences may influence the evolving adaptations of the *konnakkol* art form and language.

Many *Carnatic* techniques learned as part of my study of *konnakkol* influence my compositional processes. Some *Carnatic* elements are incorporated in the compositional style, and others pre-existed in *konnakkol* sections composed by Mani. As a practitioner it is often difficult for me to define where the *Carnatic* rhythmic influence begins and ends, and where the jazz and African rhythmic influences intersect with the *Carnatic*. My approach is grounded in both the jazz and *Carnatic* traditions to create a form of musical expression that is not simply an 'East meets West' graft. Rather, these processes are a mode of creativity, which involve an understanding of both musical traditions in the development of a performance language and style.

Whilst the role of the solo *konnakkol* artist may be diminishing in India, certainly many musicians and institutions in the West are investigating and including a core study in *konnakkol*. I envisage that this stunning art form will continue to thrive, evolve and be adapted by both *Carnatic* and Western musicians. It is a wonderful default system for rhythmic comprehension and an ideal intuitive starting point for composition and improvisation.

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Related Videos available via Youtube links.

Other Plans performed by Coco's Lunch <https://www.youtube.com/watch?v=evPI39Y4eAU>

Tha Thin Tha performed by Lisa Young Quartet https://www.youtube.com/watch?v=De0fxGpoF_g

Tha Thin Tha choral version performed by Gondwana Choirs

<https://www.youtube.com/watch?v=bf7kDDca10o>

Misra Chappu performed by The Australian Voices choir with guest Lisa Young

<https://www.youtube.com/watch?v=KcqZp9Uotbc>

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